

# FRAME WORLD

## Aluminum Structural Framing Components



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### **Compare the steps required to complete a project; Aluminum vs. Steel Weldment**

#### **Welded Steel**

1. Planning
2. Purchasing
3. Cutting
4. Layout
5. Welding
6. Straightening
7. Chipping and Sanding
8. Priming and Painting
9. Delivery
10. Maintenance

#### **Aluminum Extrusion**

1. Planning
2. Purchasing
3. Cutting
4. Assembly

### **Welding steel is expensive**

Steel is less costly than aluminum. However, welding steel is an expensive and time consuming process. Welding requires skilled labor and extensive safety precautions to protect personnel from dangerous light and smoke during the welding process. Priming and painting have an environmental impact to be considered and spray booths are a governmental agency concern. The welding is usually done either off-site or in another area of the building, away from the project site. Any changes required later are difficult to make, and often look like a patch or obvious fix.

### **Assembling aluminum extrusions is fast and simple**

Aluminum extrusions have nearly the same tensile strength as mild steel with a much higher strength to weight ratio. A few simple tools and low-tech labor are all that is required for most projects. Aluminum extrusion assembly can easily be done right at the project site, with no special safety equipment required. Construction or design changes or adjustments can be easily and immediately implemented. Even "design as you go" projects have a finished professional look. With great visual aesthetics. The anodized aluminum does not need painting. As soon as the last extrusion is in place, that part of the project is ready for use. The T-slot concept easily accom-

modates later additions or revisions to the project, without looking patched. Finished projects are inherently square, so the need for shimming or leveling is reduced. The nonporous, hollow extrusions are ideal for use as air reservoirs and manifolds for both pressure and valve exhaust collection. Covered extrusion T-slots can be used as conduits for protecting sensor and control wiring.

### **The true cost of steel fixtures includes the cost of welding**

The true cost of steel includes the cost and special needs of the welding process, special equipment, safety concerns, painting and delivery to the site. Once completed, the project is difficult to modify.

### **Aluminum extrusion fixtures are easier than steel fixtures**

Assembly of aluminum extrusions is fast, requires simple tools and labor. It requires no painting, is clean, reusable, easily modified and looks good.

T-Slot technology is widely utilized in industrial structural components.

**FRAME-WORLD** extruded aluminum profiles utilize these longitudinal slots for inserting T-bolts and nuts anywhere along its length to attach connection brackets and accessories.

Threading and machining the ends allows for end joint connections.

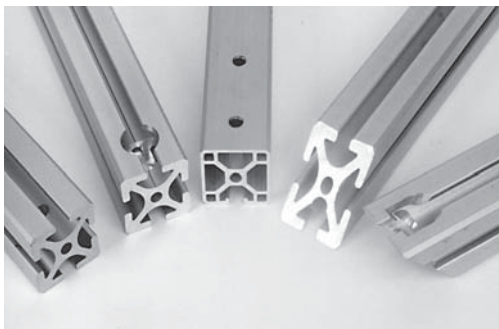
No welding or painting is required. All joint connections are screwed together to provide extensive flexibility and allow for conversions, extensions and are separable.

**ALWAYS WEAR SAFETY GLASSES**



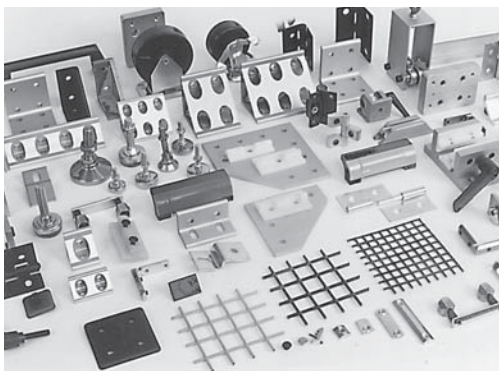
## Bulk Profiles

- Standard 8', 12', 16' lengths. (other lengths can be furnished in quantity)
- Available in standard and **SMOOTH-Series** (slotless) designs
- 1/4" and 5/16" slot sizes
- Standard anodized or optional powder coat finishes
- Skidded, wrapped, padded and banded for shipping



## Cut/Machined Profiles

- Extrusions cut to specified lengths (including miter cuts)
- Custom machining available: drilled holes, tapped holes, counterbores, milling, etc.

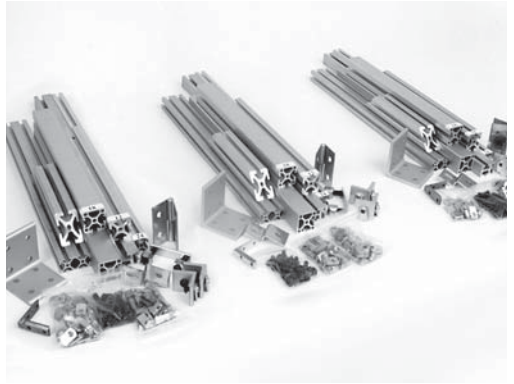


## Components & Accessories

- Wide range of brackets, joining plates, gussets, fasteners, handles, end caps, angles, panel material, bolts, etc.
- Special hinges for ultra-strong doors
- Custom accessories available

**Kits & I.D. Kits**

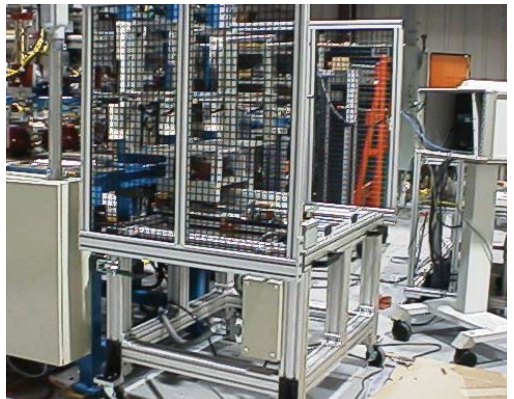
- **Kits** for multiple frame orders, profiles and accessories are bundled and packaged for each individual frame
- **I.D. Kits** indicate lengths on each extrusion (eliminates profile measuring during assembly)
- Saves you time, money and labor

**FastFrames  
Pre-engineered  
Modules and  
Sub Assemblies**

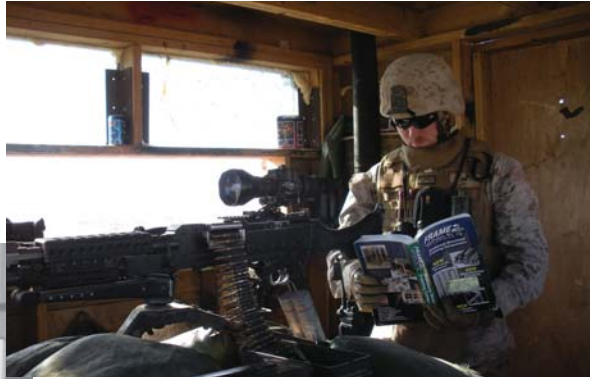
- Includes panels, doors, bases, carts
- All necessary hardware is included
- Available assembled or in kit form
- Greatly simplifies design, ordering and assembly
- Single part number ordering

**Complete Solutions**

- Complete turnkey solutions for machine guards, bases, frames, enclosures, racks, workstations & more
- Tremendous labor (cost) savings
- The simplest solution available



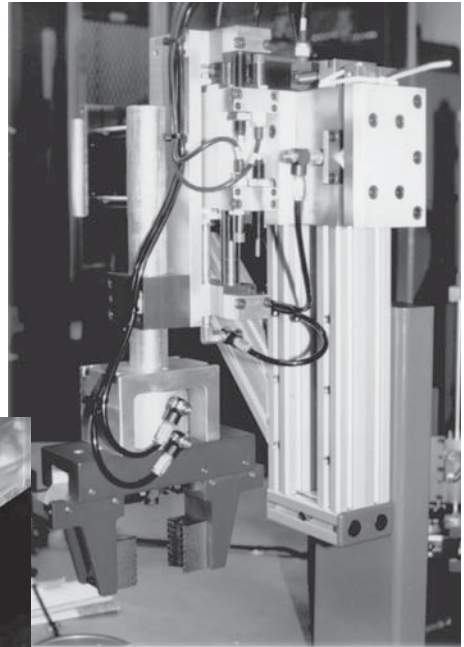
**FRAME-WORLD's** Aluminum Extrusions can be used in any industrial setting, for any purpose!



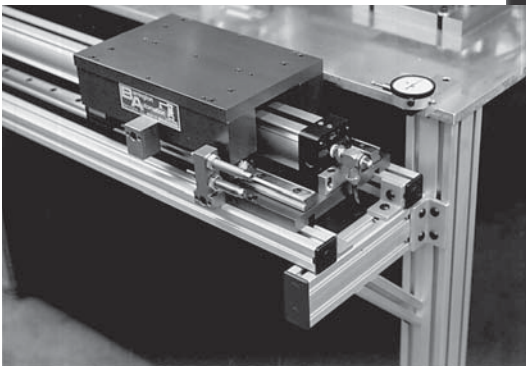
Any setting, Any purpose



Machining & Parts



Machine Fixturing



Slide Mount



as Carts



as Racks



Work Stations



Stands





Enclosures

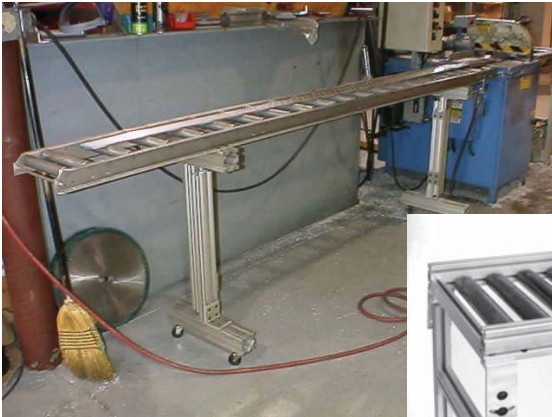


Support brackets



Staging carts





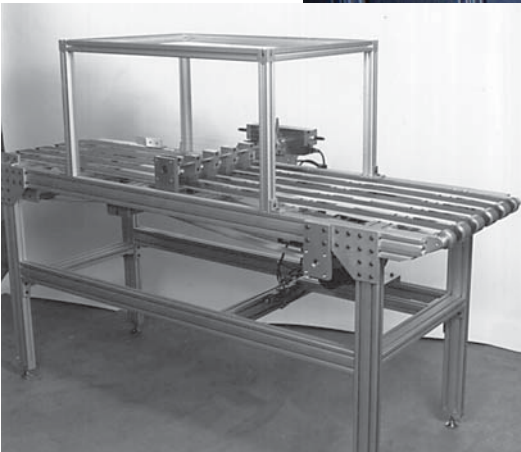
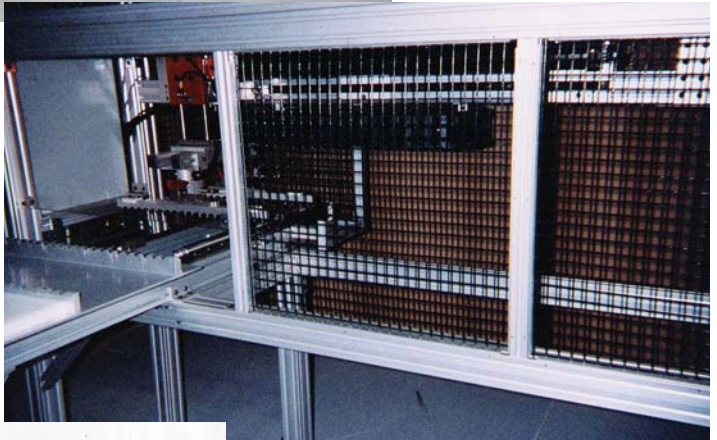
Conveyors



Production Staging



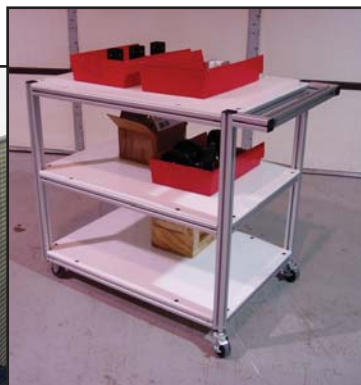
But most importantly, **FRAME-WORLD's** extrusions are a cost effective, low maintenance way to make machine safety guards.



# FastFrames

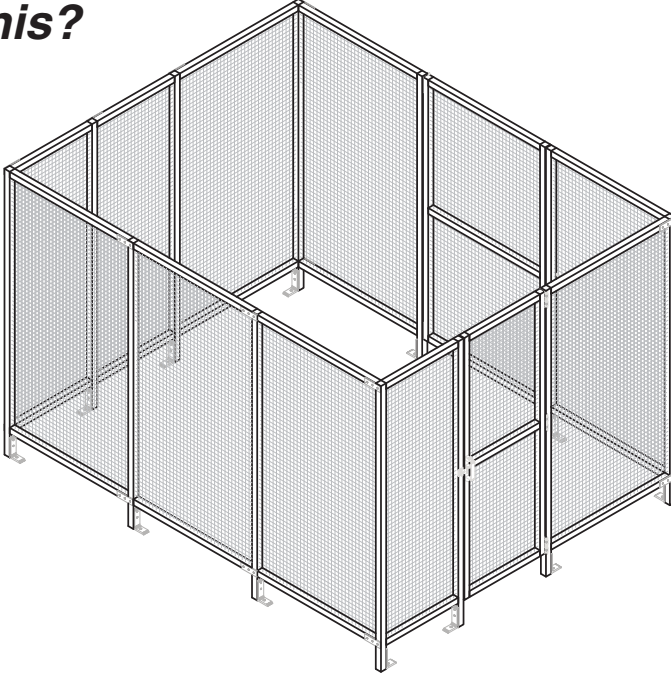
The fastest and easiest way to develop frames, machine guards, enclosures, carts and conveyor systems.

- Order panels, doors, carts, bases and conveyors with a single part number!
- Each is available pre-assembled or in kit form
- All necessary hardware is included

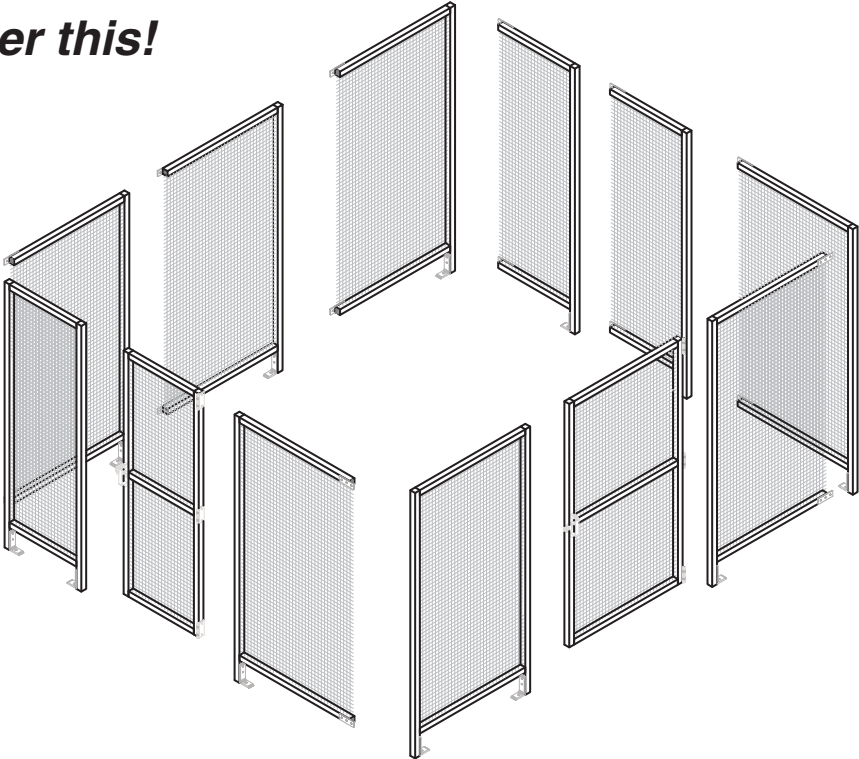


# FastFrames

*Want this?*



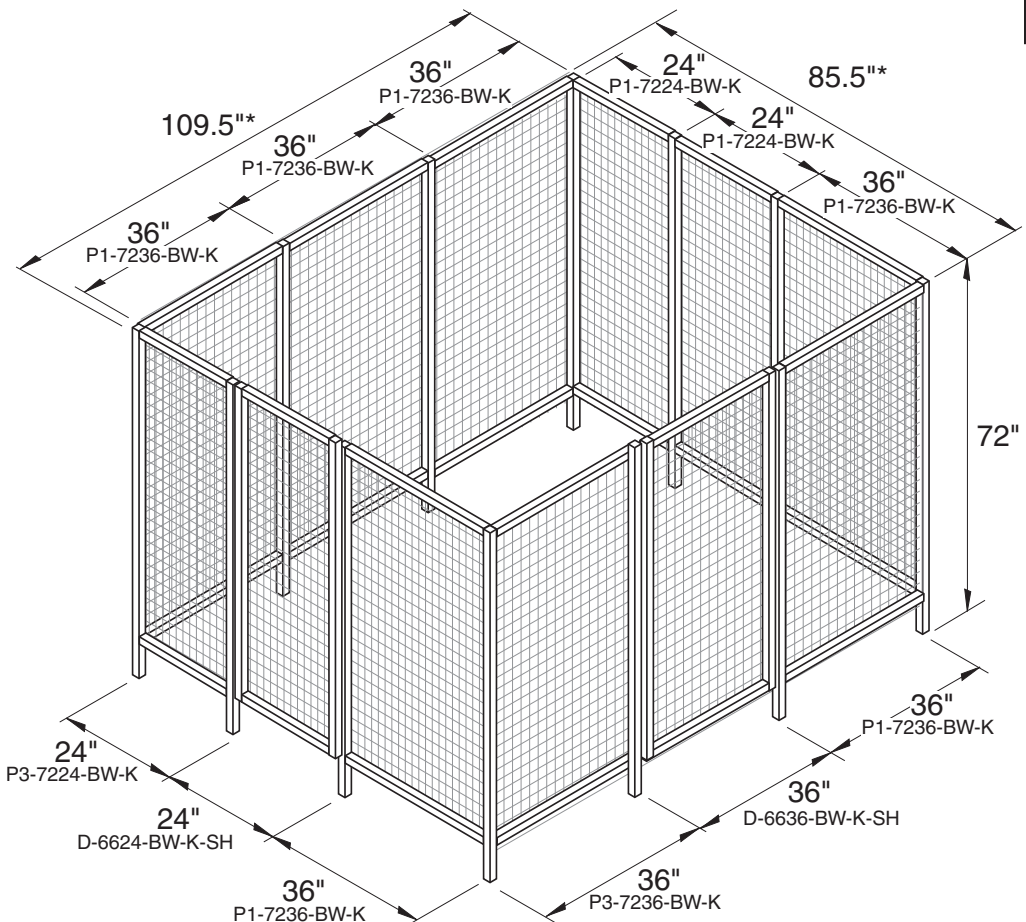
*Order this!*



# FastFrames

## Example

Build this entire safety enclosure with only 12 ordered parts, instead of 567 individual components.



### Bill of Material

(1) D-6636-BW-K-SH	36" Opening Door
(1) D-6624-BW-K-SH	24" Opening Door
(1) P3-7236-BW-K	36" Panel
(1) P3-7224-BW-K	24" Panel
(6) P1-7236-BW-K	36" Panel
(2) P1-7224-BW-K	24" Panel

These dimensions achieved using standard sized panels.

If desired enclosure height, width or depth cannot be achieved with standard sized panels, FRAME-WORLD can add additional panels and adjust the height to do so.

**Please contact your distributor or the factory for custom sizes.**

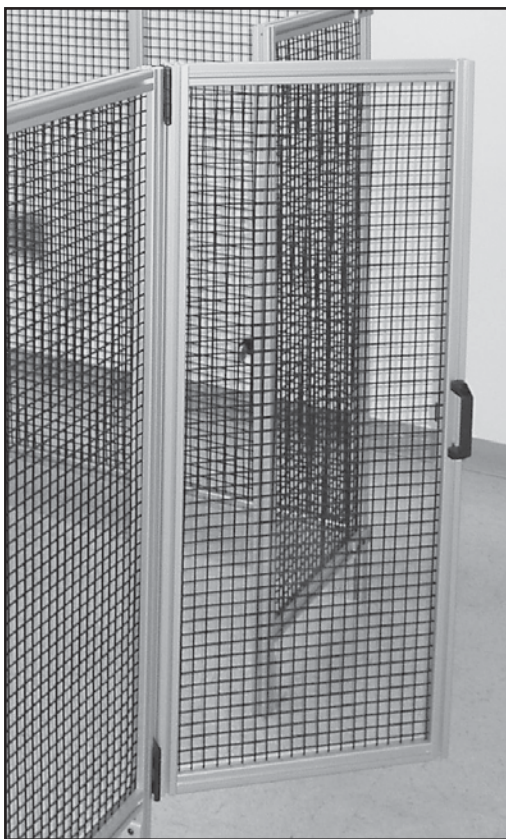
## Standard Enclosure Panels

- **FastFrames** standard enclosure panels can be purchased pre-assembled or in kit form.
- Frame construction:
  - **Panels**
    - Extrusion frame is EX-9 (page 30) .
    - Corner connectors are EF-29A universal fasteners (page 106).
    - Floor mounting brackets are EB-15AL (page 175).
- Inside panel construction options:
  - 2" x 2" black PVC coated wire mesh is EB-38-2 (page 182)
  - 1" x 1" black PVC coated wire mesh is EB-38-1 (page 182).
  - 1" x 1" yellow PVC coated wire mesh is EB-38-1Y (page 182).
  - 1/4" thick Lexan is EB-160 (page 189).
  - Wire mesh brackets are EB-49B/EB49Y (page 185).
  - Lexan Gasket is EB-40A (page 199).
- Standard panel widths are 18", 24", 30", 36", 48".
- Standard panel heights are 40", 60", 72" & 84".
- Panel to panel connecting brackets and hardware are included.
- Floor anchors are furnished and installed by customer.
- Smooth Series extrusion panels are available.
- **Custom sizes available**



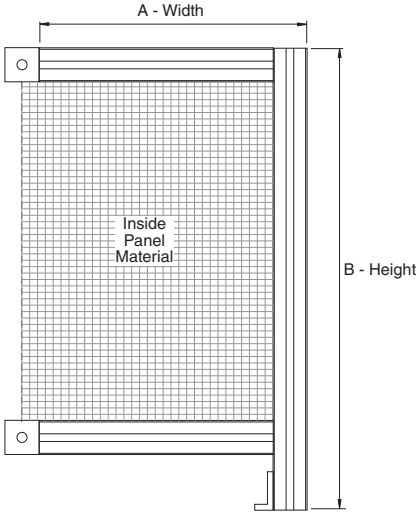
## Standard Enclosure Doors

- **FastFrames** standard doors can be purchased pre-assembled or in kit form.
- Frame construction:
  - **Doors**
    - Extrusion frame is EX-9 (page 30).
    - Corner connectors are EF-29A (page 106).
    - Hinges are EF-70 (page 216).
    - Handle is EF-15B (page 225).
    - Latch is EF-22HD (page 240).
- Inside panel construction options:
  - 2" x 2" black PVC coated wire mesh is EB-38-2 (page 182)
  - 1" x 1" black PVC coated wire mesh is EB-38-1 (page 182).
  - 1" x 1" yellow PVC coated wire mesh is EB-38-1Y (page 182).
  - 1/4" thick Lexan is EB-160 (page 189).
  - Wire mesh brackets are EB-49B/EB49Y (page 185).
  - Lexan Gasket is EB-40A (page 199).
- Standard door widths are 24", 30", 36" & 48" opening.
- Standard door heights are 34", 54", 66", & 78".
- Smooth Series extrusion panels are available.
- **Custom sizes available**

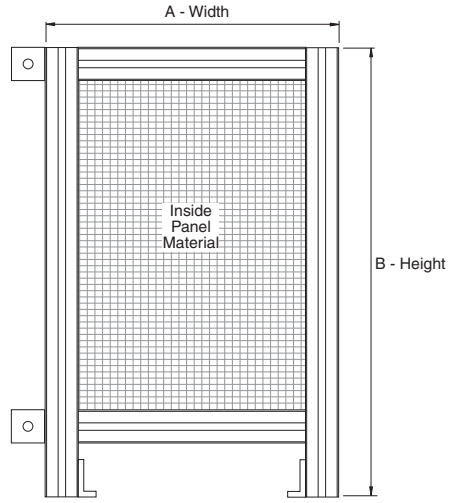




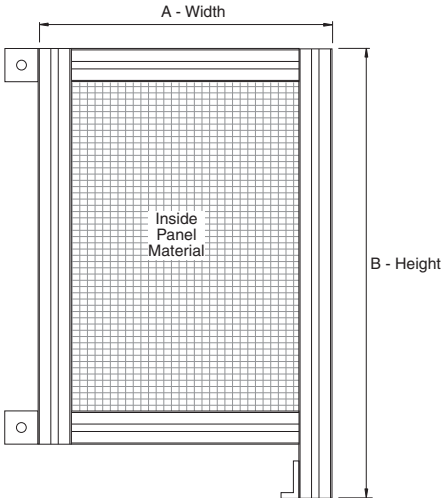
**Standard Enclosure Panels**



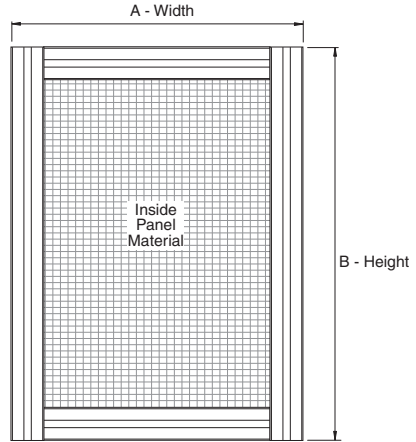
**Standard (1) Leg Panel  
Model P1**



**Standard (2) Leg Panel  
Model P3**



**Standard (1) Leg Panel  
Model P2**



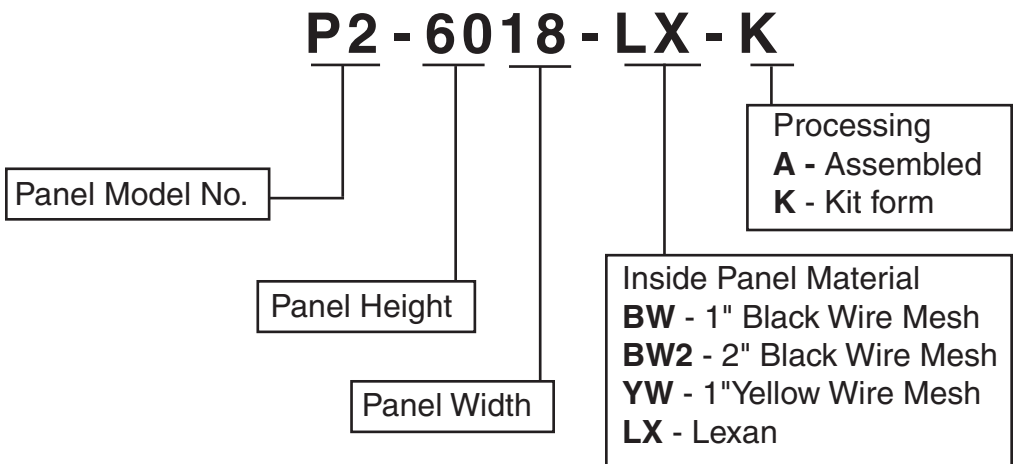
**Standard Basic Panel  
Model P4**

Note: Mounting Hardware Not Included

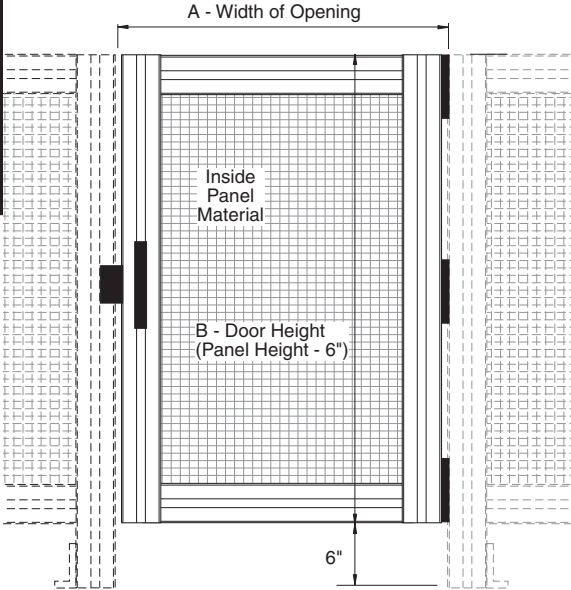
## Standard Enclosure Panels

- Standard panel heights are 40", 60", 72" & 84".
- Standard panel widths are 18", 24", 30", 36" & 48".
- Smooth Series extrusion panels are available.
- **Custom sizes available** - consult the factory

## Panel Ordering Example



**Standard Enclosure Doors**

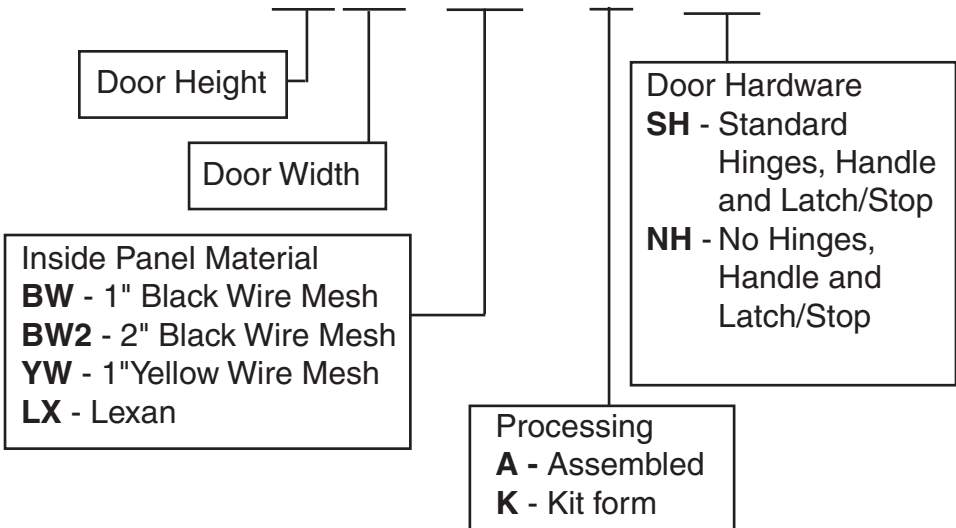


- Standard door heights are 30", 34", 54", 66", & 78".
- Standard door widths are 24", 30", 36" & 48" opening.
- Smooth Series extrusion panels are available.
- **Custom sizes are available** - consult the factory

Note: Part Nos. D-5436, D-6636, & D-7836 have a center extrusion bar.

**Door Ordering Example**

**D- 6624 -BW -A - SH**

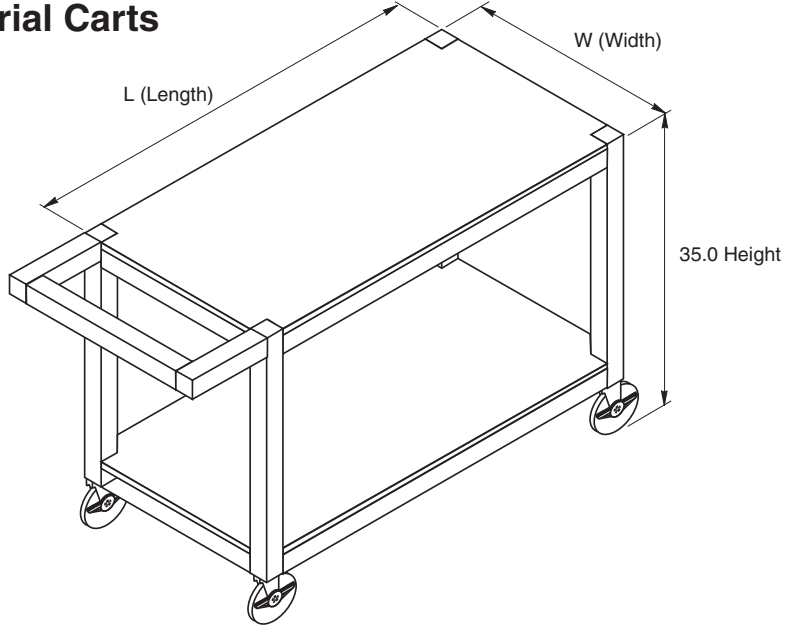


## Standard Material Carts



- 1 1/2" x 1 1/2" extrusion frame
- 3/8" thick high density polyethylene top and shelf material
- 3" diameter casters with brake, 1" wide rubber wheels
- Standard height: 35.0"
- All shelves are height adjustable
- Carts are shipped as kits or assembled
- Shelf sides are achieved by turning shelf upside down
- All hardware included
- 300 pound total capacity
- **Custom sizes available**

**Standard Material Carts**



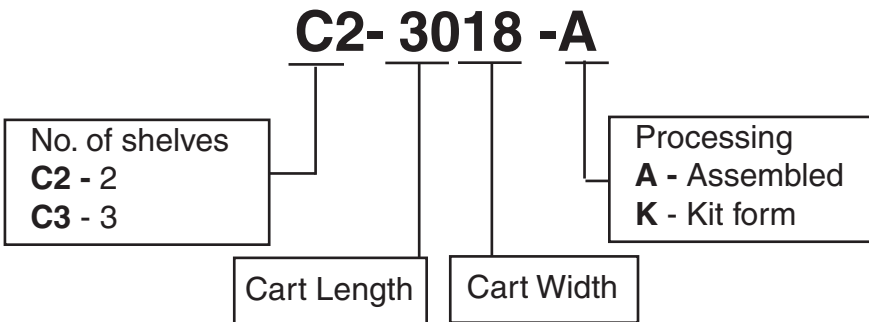
**Model C2 Shelf Cart - (2) shelves**

Length (L)	18"	22"	Width (W)	
			26"	30"
<b>30</b>	C2-3018	C2-3022	C2-3026	C2-3030
<b>36</b>	C2-3618	C2-3622	C2-3626	C2-3630

**Model C3 Shelf Cart- (3) shelves**

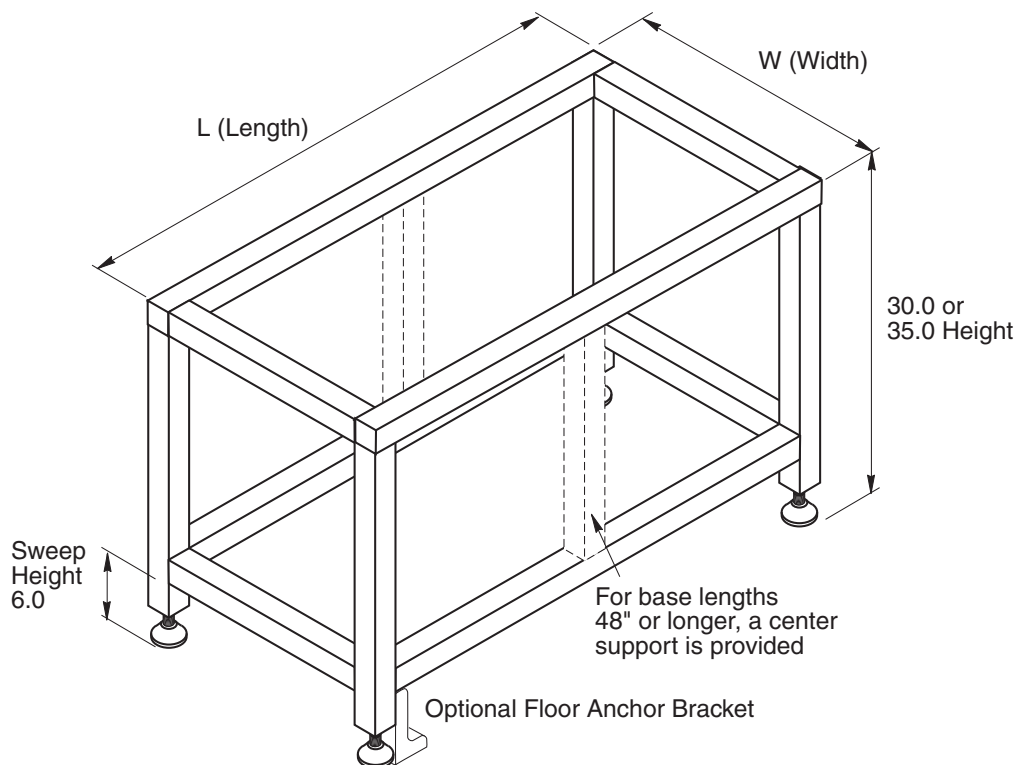
Length (L)	18"	22"	Width (W)	
			26"	30"
<b>30</b>	C3-3018	C3-3022	C3-3026	C3-3030
<b>36</b>	C3-3618	C3-3622	C3-3626	C3-3630

**Material Cart Ordering Example**



**Custom sizes are available - consult the factory**

## Standard Bases and Tables



- Available in kit form or assembled
- Includes adjustable legs
- Floor Anchor Brackets available on request
- Choice of Light, Standard or Heavy Duty
- Standard Heights of 30" or 35"
- Tops and enclosure panels available on request - consult factory
- Sweep height = 6.00"
- Light Duty is EX-1
- Standard Duty is EX-2
- Heavy Duty is EX-3
- **Custom sizes available**

**Model L Light Duty**

Length (L)	Width (W)			Max Load
	24"	30"	36"	
36"	L-3624	L-3630	L-3636	400
48"	L-4824	L-4830	L-4836	360
60"	L-6024	L-6030	L-6036	300
72"	L-7224	L-7230	L-7236	240

**Model S Standard Duty**

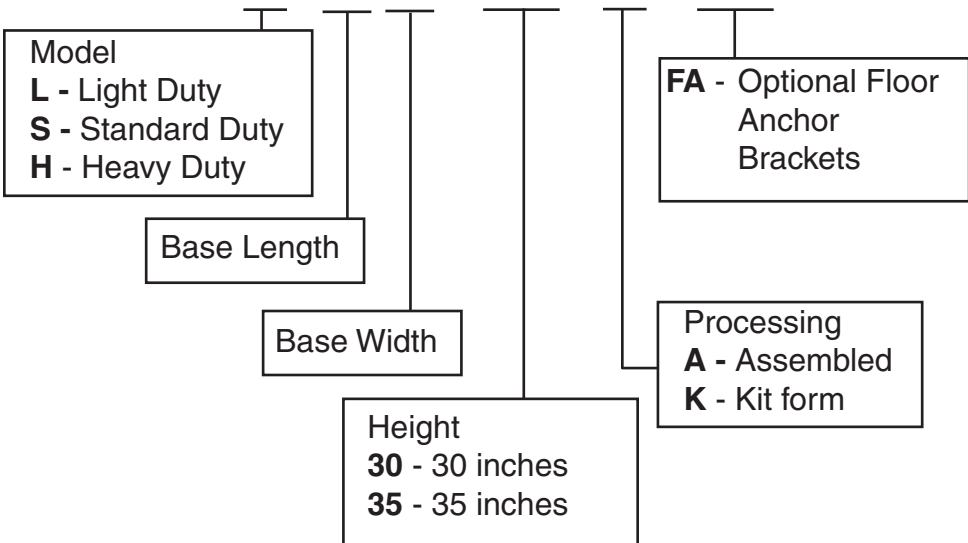
Length (L)	Width (W)			Max Load
	24"	30"	36"	
36"	S-3624	S-3630	S-3636	2800
48"	S-4824	S-4830	S-4836	2000
60"	S-6024	S-6030	S-6036	1720
72"	S-7224	S-7230	S-7236	1480

**Model H Heavy Duty**

Length (L)	Width (W)			Max Load
	24"	30"	36"	
36"	H-3624	H-3630	H-3636	5400
48"	H-4824	H-4830	H-4836	3800
60"	H-6024	H-6030	H-6036	3300
72"	H-7224	H-7230	H-7236	3000

**Standard Base Ordering Example**

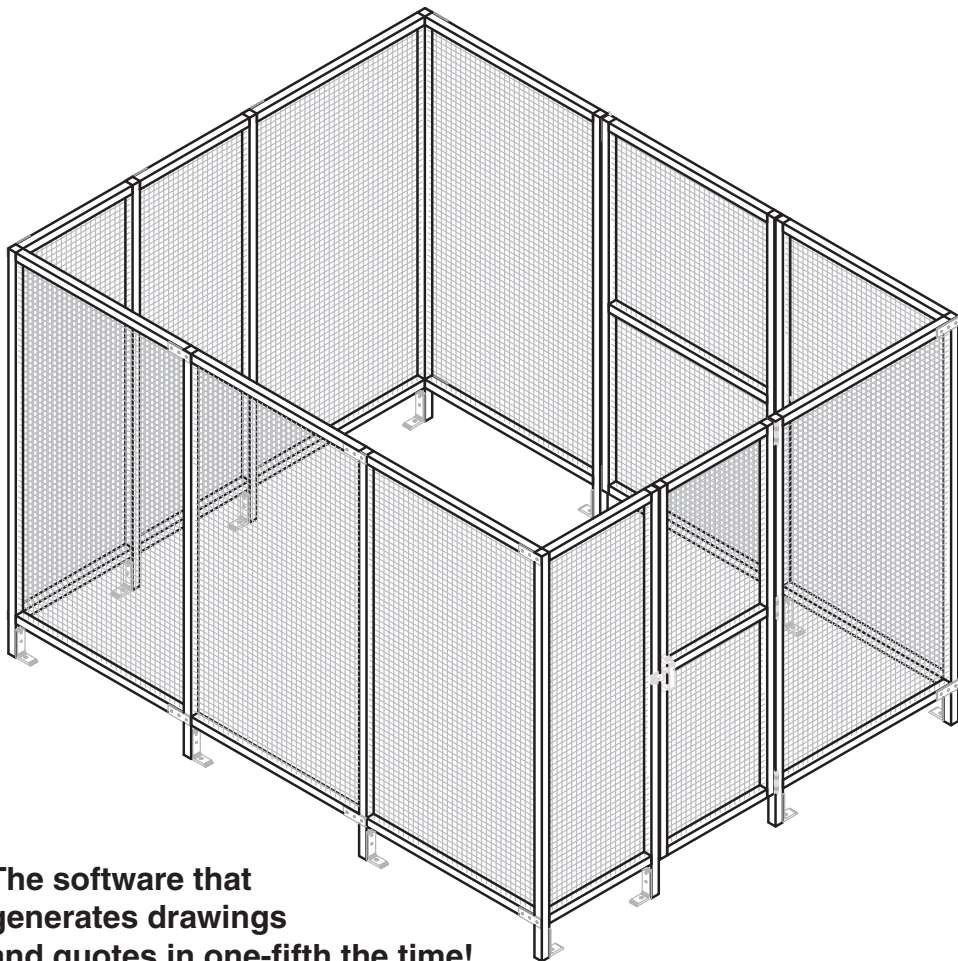
**S - 4824 - 30 - A - FA**



**Custom sizes are available - consult the factory**

# FrameQuoter

Aluminum Extrusion Design Software

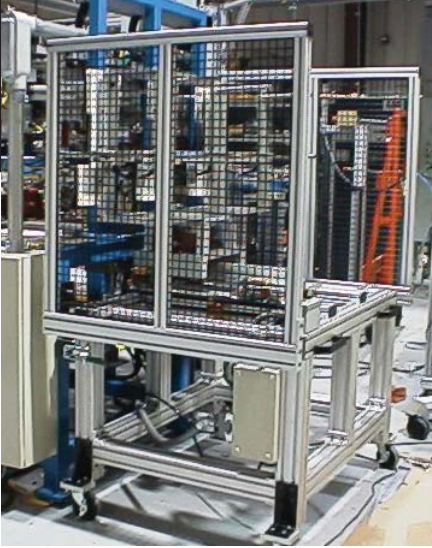


**The software that  
generates drawings  
and quotes in one-fifth the time!**

**FrameQuoter** is the most advanced and easiest to use aluminum profile design and quote software available today! It will enable you to quickly and easily produce professional looking 3D drawings with bills of materials and quotations that are detailed and accurate, 5 times faster than doing them by hand! **FrameQuoter** will increase your efficiency and confidence.



## You Can Design This Machine Guard In 2 ½ Hours...



Or In Just 14 Minutes.

### Try Our **FREE Design Software And See For Yourself.**

Designing a machine guard, frame or enclosure can be a very time-consuming and frustrating experience. Any errors, omissions or miscalculations can result in a structure which is cumbersome to use, doesn't fit the application, or is totally useless. Our **FrameQuoter** design software eliminates these problems, and helps you create the ideal structure, quickly and easily.

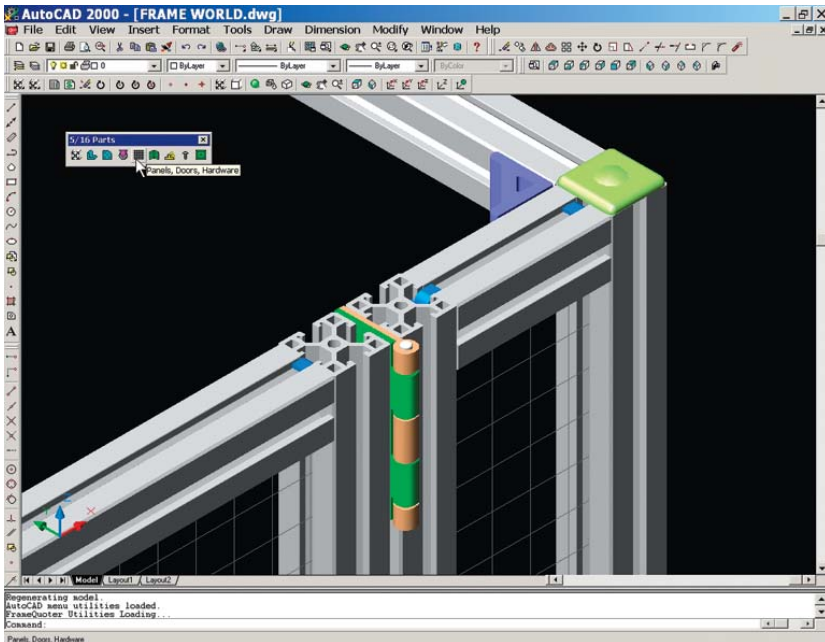
## **FrameQuoter Software Decreases Design Time By Up To 92% And Eliminates Errors, Omissions and Hassles**

Actual field studies have shown that our **FrameQuoter** design software will drastically reduce the amount of time required to design a machine guard or frame. And because we have simplified and/or automated many functions ("snap-in-place" corner brackets, automatically includes necessary machining, nuts, bolts, etc.), you will have less errors, mistakes or hassles. You can be assured that every structure you design will be right the first time, every time.

## **Easy To Learn, Easy To Use**

This was the #1 design criteria. With even a basic knowledge of AutoCAD, you will quickly master **FrameQuoter**. We have shortened and/or eliminated many of the steps necessary with other design software packages by using simple icons and drop-down menus. A complete Bill of Materials is also only one mouse click away.

## **Incredible Life-Like Full-Color Graphics**



**FrameQuoter** is the only design software package that enables you to develop wireframe, hidden and shaded drawings in 2D and 3D, in both simplified and detailed views. The “Detailed-Shaded” view shows you the final assembly with incredible detail & clarity:

## The Possibilities Are Endless

If you can build it with aluminum extrusions, you can design it with **FrameQuoter**. People have designed wall racks, workstations, tables, machine bases, machining stations, clean room enclosures, tool fixtures, and much more. Unlike other design packages, **FrameQuoter** enables you to employ every FRAME-WORLD extrusion, and every bracket and accessory into any drawing. You can even add non-FRAME-WORLD parts to the Bill of Materials!

## Solidworks Library Available

FRAME-WORLD offers a full Solidworks (TM) parasolid library of all our products. Additional CAD formats of our part library, including .igs, .dwg, and .dxf, are also available. All CAD files are available for download at [www.frame-world.com](http://www.frame-world.com)

# Metric Sizes for FRAME-WORLD T-slot Extrusions and Accessories

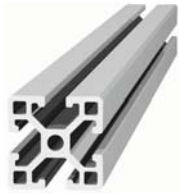


Part No.	Extrusion Size		Fastener Size	
	Inches	Nearest Metric	Inches	Metric
EX-1	1.5" x 1.5"	38 x 38 mm	5/16-18	m8
EX-2	1.5" x 3"	38 x 76 mm	5/16-18	m8
EX-3	3" x 3"	76 x 76 mm	5/16-18	m8
EX-6	1.5" x 1.5"	38 x 38 mm	5/16-18	m8
EX-7	1.5" corner	38 x 38 mm	5/16-18	m8
EX-8	1.5" round	38 x 38 mm	5/16-18	m8
EX-9	1.5" x 1.5"	38 x 38 mm	5/16-18	m8
EX-11	1" x 1"	25 x 25 mm	1/4-20	m6
EX-12	1" x 2"	25 x 50 mm	1/4-20	m6
EX-13	1" x 3"	25 x 76 mm	1/4-20	m6
EX-22	2" x 2"	50 x 50 mm	1/4-20	m6
EX-24	2.0" x 4.0"	50 x 100 mm	1/4-20	m6
EX-26	1.5" x 4.5"	38 x 174 mm	5/16-18	m8
EX-36	3" x 6"	76 x 152 mm	5/16-18	m8
EX-37	3.0" x 3.0"	76 x 76 mm	5/16-18	m8
EX-45HD	4.5" x 4.5"	114 x 114 mm	5/16-18	m8
EX-52	1" x 1.5"	25 x 38 mm	5/16-18	m8
EX-54	1" x 1.5"	25 x 38 mm	5/16-18	m8
EX-60	2.38" x 2.38"	60 x 60 mm	5/16-18	m8
EX-61	1.5" x 1.5"	38 x 38 mm	5/16-18	m8
EX-63	1.5" x 1.5"	38 x 38 mm	5/16-18	m8
EX-64	1.5" x 1.5"	38 x 38 mm	5/16-18	m8
EX-65	1.5" x 1.5"	38 x 38 mm	5/16-18	m8
EX-66	1.5" x 3"	38 x 76 mm	5/16-18	m8
EX-67	1.5" x 3"	38 x 76 mm	5/16-18	m8
EX-68	1.5" x 3"	38 x 76 mm	5/16-18	m8
EX-69	1.5" x 3"	38 x 76 mm	5/16-18	m8
EX-70	1" x 1"	25 x 25 mm	1/4-20	m6
EX-71	1" x 1"	25 x 25 mm	1/4-20	m6
EX-72	1" x 1"	25 x 25 mm	1/4-20	m6
EX-73	1" x 1"	25 x 25 mm	1/4-20	m6
EX-82	1.5" angle	38 x 38 mm	5/16-18	m8
EX-83	1.5" x 3.0"	38 x 76 mm	5/16-18	m8

5/16" SLOTS



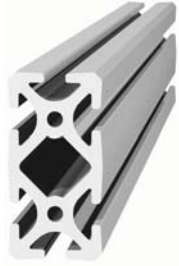
**EX-1**  
1.5" x 1.5"



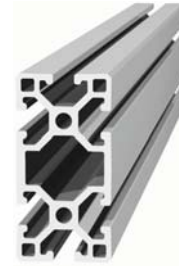
**EX-6**  
1.5" x 1.5"



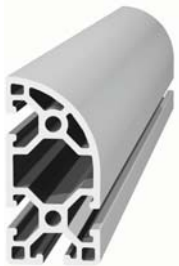
**EX-9**  
1.5" x 1.5"



**EX-2**  
1.5" x 3.0"



**EX-67**  
1.5" x 3.0"



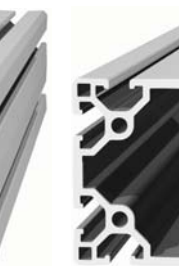
**EX-83**  
1.5" x 3.0"



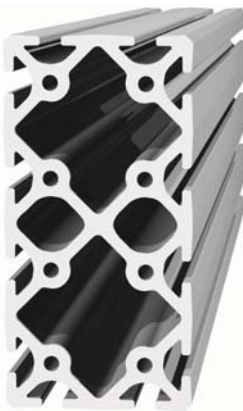
**EX-26**  
1.5" x 4.5"



**EX-3**  
3.0" x 3.0"



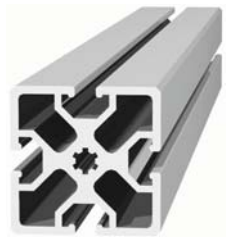
**EX-37**  
3.0" x 3.0"



**EX-36**  
3.0" x 6.0"



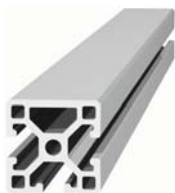
**EX-45HD**  
4.5" x 4.5"



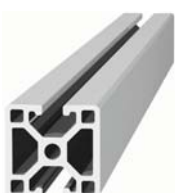
**EX-60**  
2.38" x 2.38"

**5/16" SLOTS**

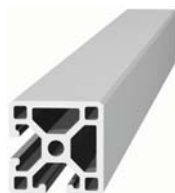
**SMOOTH-Series**



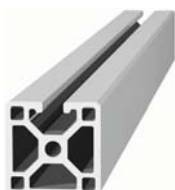
**EX-63**  
1.5" x 1.5"



**EX-64**  
1.5" x 1.5"



**EX-65**  
1.5" x 1.5"



**EX-61**  
1.5" x 1.5"



**EX-7**  
1.5" x 1.5"



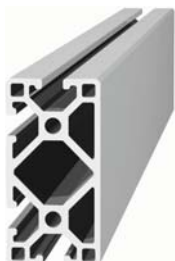
**EX-8**  
1.5" x 1.5"



**EX-68**  
1.5" x 3.0"



**EX-66**  
1.5" x 3.0"



**EX-69**  
1.5" x 3.0"



**EX-52**  
1.0" x 1.5"



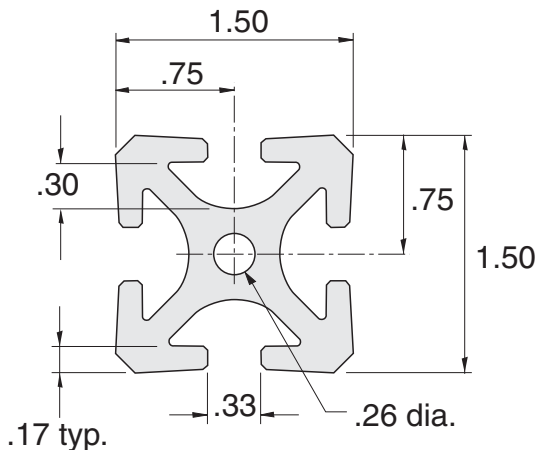
**EX-54**  
1.0" x 1.5"



**EX-82**  
1.5" x 1.5"  
45 deg.

5/16" SLOTS

**EX-1**



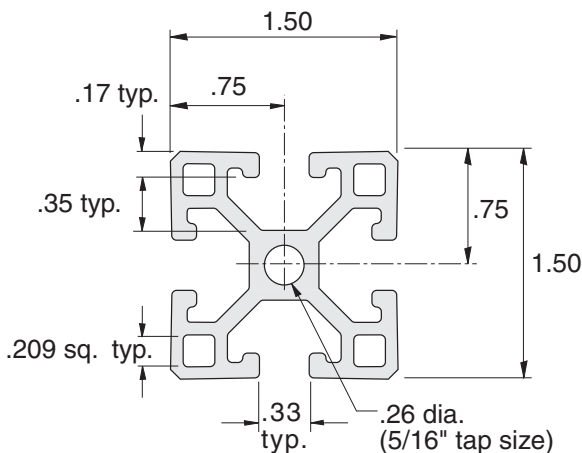
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.164 Sq. In.
- Weight/ft = 1.4522 lbs.
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	.242
Section modulus in <sup>3</sup>	.323

5/16" SLOTS

**EX-6**

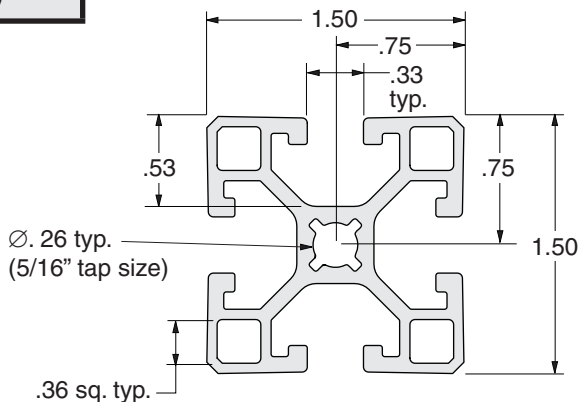


- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .878 Sq. In.
- Weight/ft = 1.029 lbs.
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

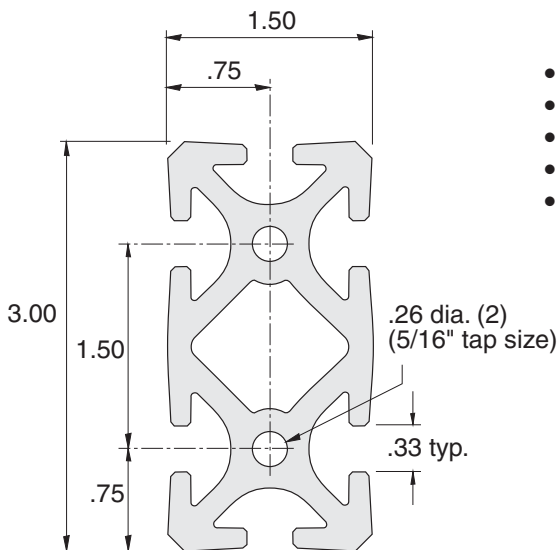
Moment of Intertia in <sup>4</sup>	.199
Section modulus in <sup>3</sup>	.265

**EX-9**



- 5/16" Slot Size
- Weight/Ft = .85 lbs.
- Est. Area = .73 Sq. In.
- Finish = Clear Anodized
- Material = 6105-T5 Aluminum
- 96", 192.63" Standard Lengths

**EX-2**



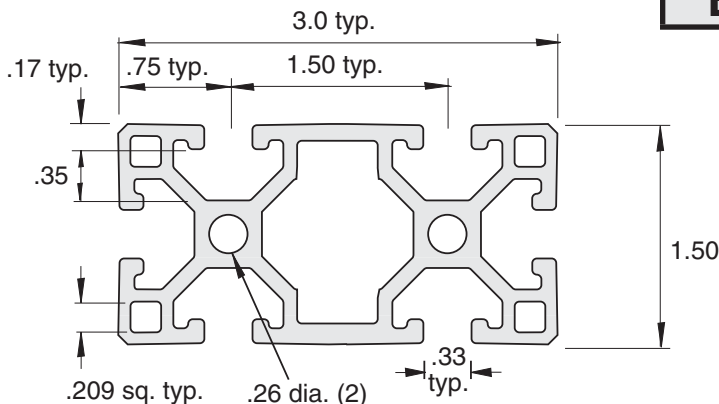
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 2.051 Sq. In.
- Weight/ft = 2.471 lbs.
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	1.76	.481
Section modulus in <sup>3</sup>	1.173	.641



**EX-67**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.569 Sq. In.

- Weight/ft = 1.845 lbs
- 96", 144.25", 192.63" Lengths standard.

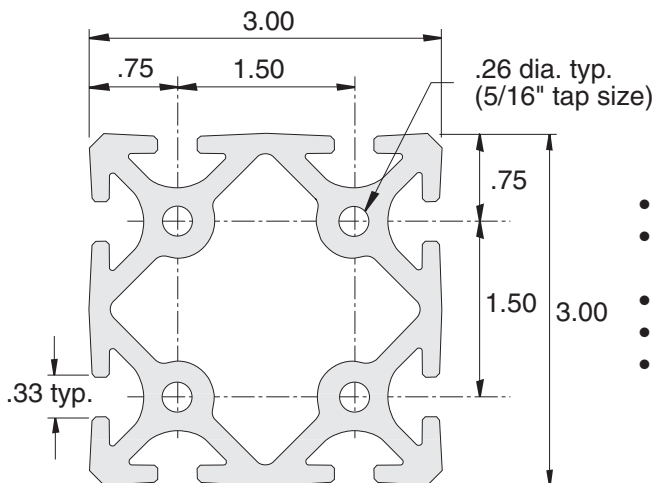
**Section Properties:**

Moment of Intertia in <sup>4</sup>	1.376	0.387
Section modulus in <sup>3</sup>	0.917	0.516



**5/16" SLOTS**

**EX-3**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 3.188 Sq. In.
- Weight/ft = 4.037 lbs.
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

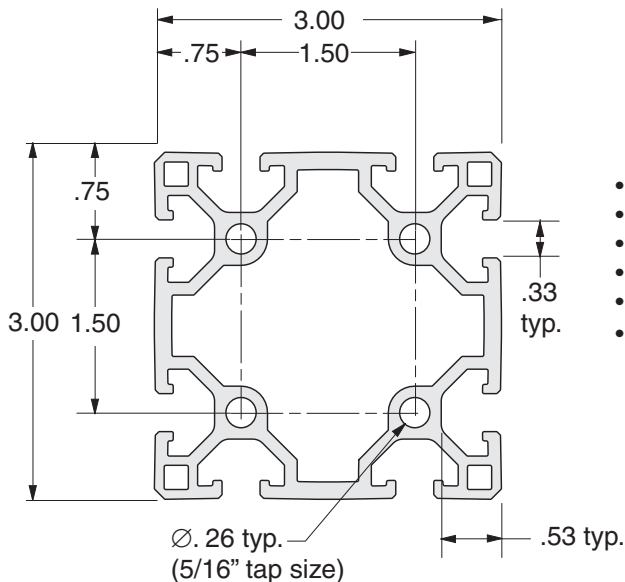
Moment of Intertia in <sup>4</sup>	3.26
Section modulus in <sup>3</sup>	2.173





**EX-37**

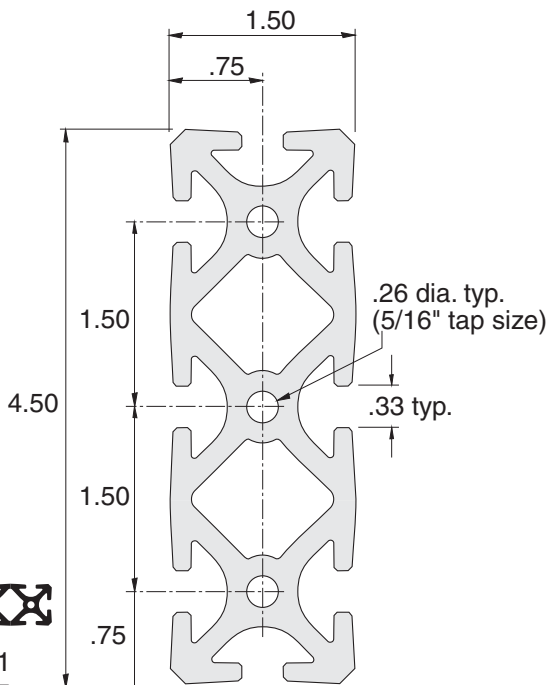
**5/16" SLOTS**





- 5/16" Slot Size
- Weight/Ft = 2.81 lbs.
- Est. Area = 2.35 Sq. In.
- Finish = Clear Anodized
- Material = 6105-T5 Aluminum
- 96", 192.63" Standard Lengths

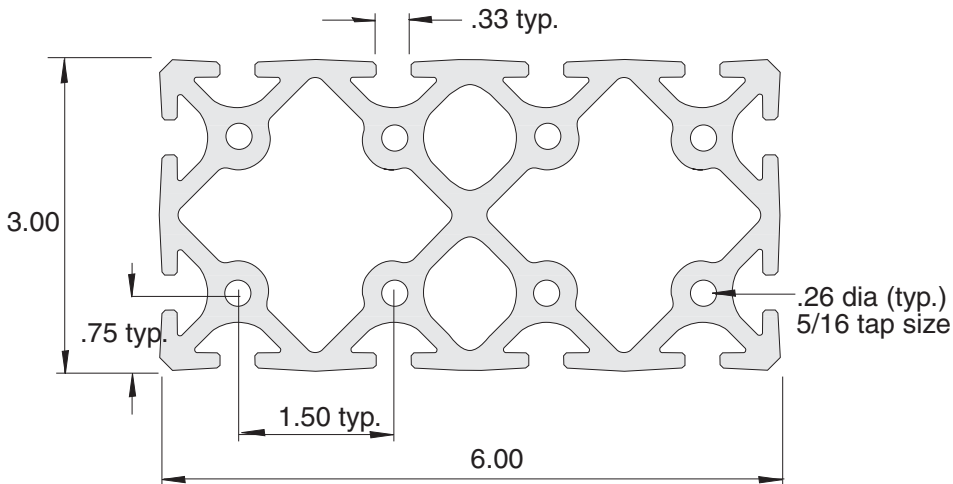
**EX-26**

- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 3.02 Sq. In.
- Weight/ft = 3.552 lbs.
- 96", 192.63" Lengths standard.



<b>Section Properties:</b>		
	Moment of Intertia in <sup>4</sup>	5.6781
Section modulus in <sup>3</sup>	2.5236	.9215

## EX-36



- Finish = Clear anodized
- Material = 6063-T6 Aluminum
- Est. Area = 5.924 Sq. In.
- Weight/ft = 6.967 lbs.
- 96", 192.63"
- Lengths standard.

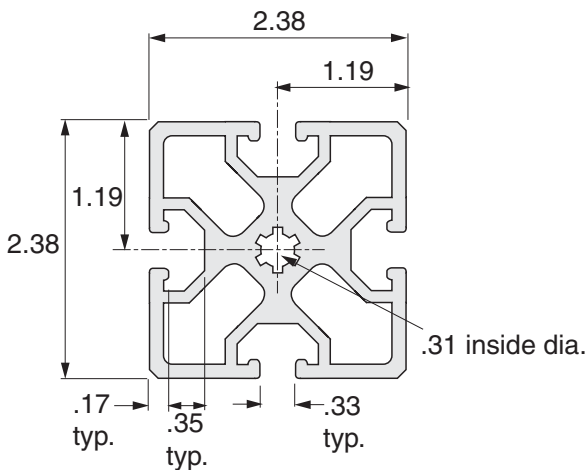
### Section Properties:

Moment of Intertia in <sup>4</sup>	22.05	6.41
Section modulus in <sup>3</sup>	7.35	4.28



5/16" SLOTS

## EX-60



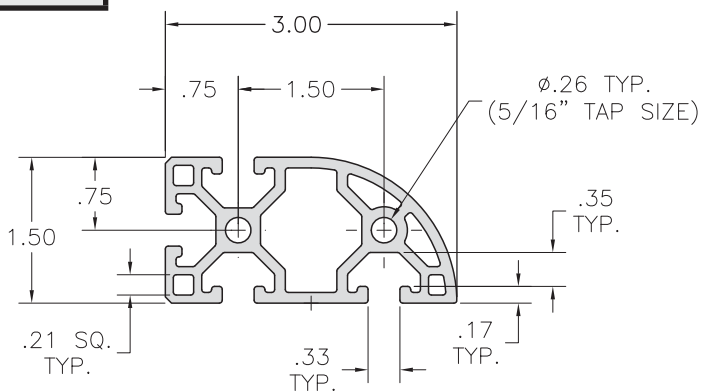
- Finish = Clear anodized
- Material = 6105-T6 Aluminum
- Est. Area = 2.041 Sq. In.
- Weight/ft = 2.400 lbs
- 96", 192.63" Lengths standard.

### Section Properties:

Moment of Intertia in <sup>4</sup>	1.021
Section modulus in <sup>3</sup>	0.860



## EX-83



5/16" SLOTS

Finish: Clear Anodize  
 Material: 6105-T6 Aluminum  
 Est. Area: 1.464 Sq In.  
 Wt./Ft: 1.722 lbs.  
 Std. Length: 144"

Section Properties:  
 Moment of Inertia in<sup>4</sup>  
 Section Modulus in<sup>3</sup>

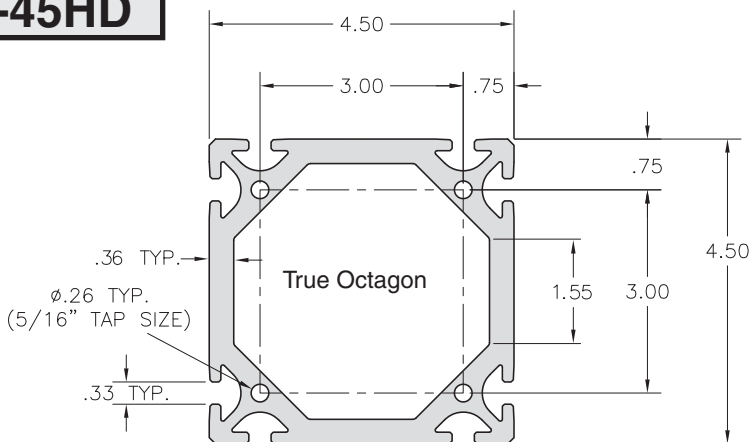


1.229  
 0.779



0.338  
 0.424

## EX-45HD



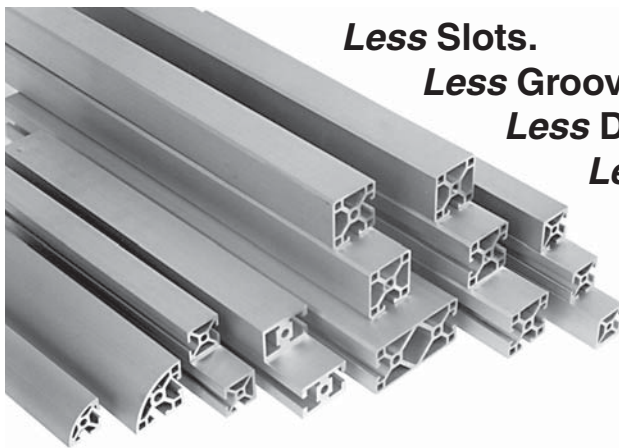
Finish: Mill Finish  
 Material: 6105-T6 Aluminum  
 Est. Area: 6.330 Sq In.  
 Wt./Ft: 7.445 lbs.  
 Std. Length: 192.63"  
 Special cut charge required for non-standard length (EM-1-EX45)

Section Properties:  
 Moment of Inertia in<sup>4</sup>  
 Section Modulus in<sup>3</sup>



16.4  
 6.56

## SMOOTH-Series Aluminum Profiles Give You *Less*:



***Less Slots.***

***Less Grooves.***

***Less Dirt.***

***Less Germs.***

***Less Maintenance.***

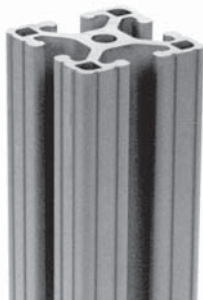
***And Less  
Headaches.***

***For Less Money.***

5/16" SLOTS

Aluminum extrusions are the ideal choice when building protective machine guards, machine frames or enclosures for any industrial environment. Unfortunately, traditional aluminum profiles are also a breeding ground for dirt, oil, grease, mold, mildew, germs and bacteria to accumulate and grow. They have up to 22 places to hide (3 exposed T-slots and 19 grooves, per length of extrusion). This makes maintenance and cleaning difficult, ongoing and very expensive. Health and safety issues are a huge concern.

How do you stop the maintenance nightmare? Our **SMOOTH-Series** profiles eliminate all the dirt catching grooves, and provide you only the number of T-slots required for your assembly. The **SMOOTH surfaces** wipe clean easily, without the toothbrush-scrubbing, knuckle-breaking cleaning required for exposed slots and grooves. Dirt, germs and other contaminants don't have a place to hide.



Traditional Aluminum  
Extrusion  
4 Slots & 16 Grooves



FRAME-WORLD's  
**SMOOTH-Series**  
1 Slot, NO Grooves

5/16" SLOTS

Suitable for clean rooms, tough enough for steel mills  
*SMOOTH-Series* profiles are ideal for any manufacturing facility where dirt, germs, mold, mildew and bacteria build-up can result in critical health and safety issues:

- Clean Rooms
- Food & Beverage
- Packaging
- Pharmaceutical
- Medical and Biotechnology
- Electronics

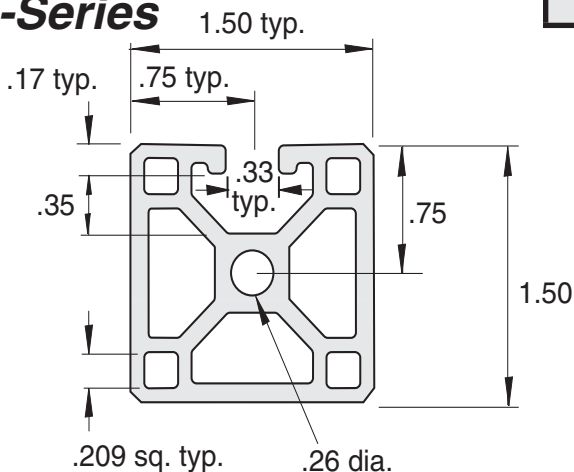
The same *SMOOTH-Series* profiles can also withstand harsh industrial environments where dirt, oil, grease and chemicals are a daily fact of life.

***In stock and available for immediate delivery.***

This is the only full range of truly smooth profiles in U.S. fractional sizes on the market. All models and versions are available for same-day shipment. For your convenience, *SMOOTH-Series* profiles are also available as kits, engineered sub-assemblies, or as complete turnkey solutions (machine guards, frames, enclosures, etc.).

**EX-61**

**SMOOTH-Series**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .866 Sq. In.
- Weight/ft = 1.018 lbs
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

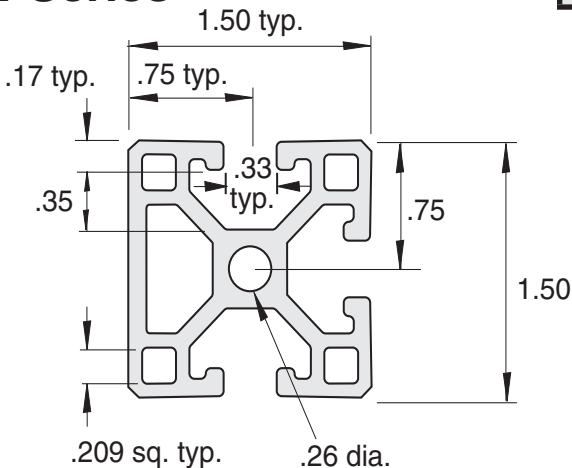
Moment of Intertia in <sup>4</sup>	0.200	0.210
Section modulus in <sup>3</sup>	0.267	0.276



**5/16" SLOTS**

**SMOOTH-Series**

**EX-63**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .833 Sq. In.
- Weight/ft = .980 lbs.
- 96", 144.25", 192.63" Lengths standard.

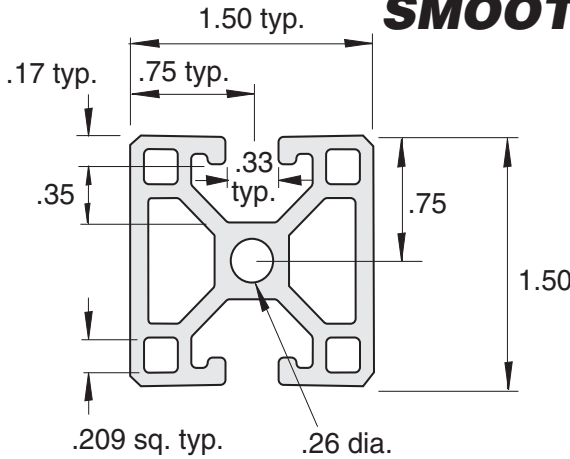
**Section Properties:**

Moment of Intertia in <sup>4</sup>	0.195	0.203
Section modulus in <sup>3</sup>	0.260	0.267



**EX-64**

**SMOOTH-Series**



5/16" SLOTS

- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .849 Sq. In.
- Weight/ft = .998 lbs
- 96", 144.25", 192.63" Lengths standard.

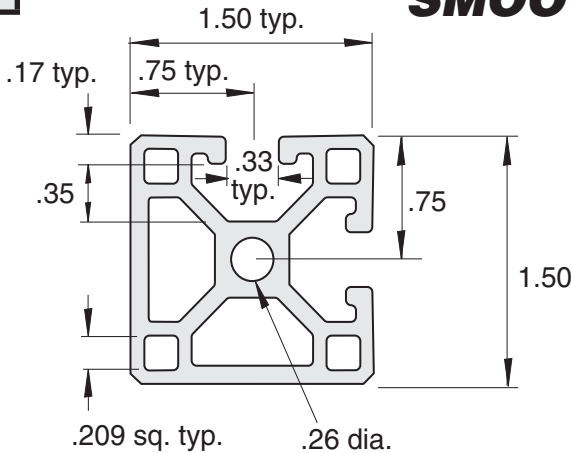


**Section Properties:**

Moment of Inertia in <sup>4</sup>	0.190	0.210
Section modulus in <sup>3</sup>	0.253	0.280

**EX-65**

**SMOOTH-Series**



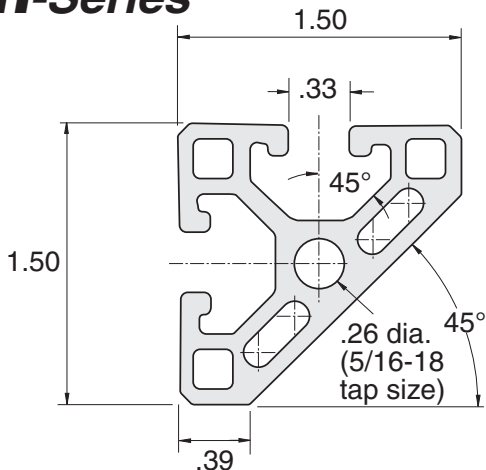
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .849 Sq. In.
- Weight/ft = .998 lbs.
- 96", 144.25", 192.63" Lengths standard.



**Section Properties:**

Moment of Inertia in <sup>4</sup>	0.200
Section modulus in <sup>3</sup>	0.267

**SMOOTH-Series**



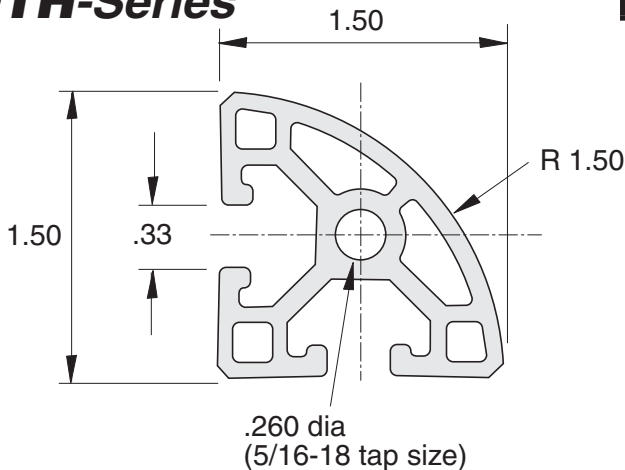
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .729 Sq. In.
- Weight/ft = .854 lbs.
- 96", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	.137
Section modulus in <sup>3</sup>	.195

**5/16" SLOTS**

**SMOOTH-Series**



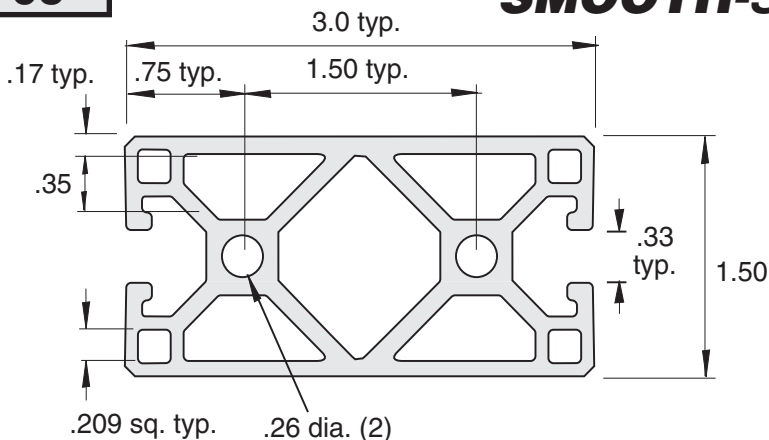
- Finish = Clear anodized
- Material = 6105-T6 Aluminum
- Est. Area = .803 Sq. In.
- Weight/ft = .945 lbs.
- 96", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	.156
Section modulus in <sup>3</sup>	.188



**EX-68**



5/16" SLOTS

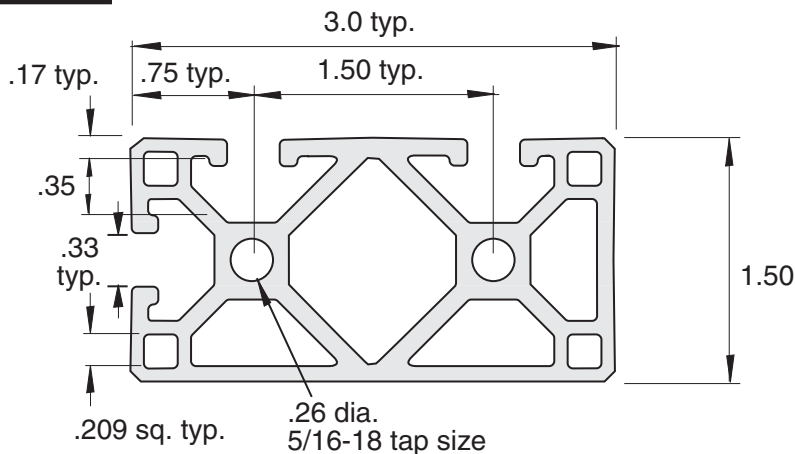
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.599 Sq. In.
- Weight/ft = 1.880 lbs.
- 96", 144.25", 192.63"  
Lengths standard.

**Section Properties:**

Moment of Inertia in <sup>4</sup>	1.385	0.401
Section modulus in <sup>3</sup>	0.923	0.535



**EX-66**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.599 Sq. In.
- Weight/ft = 1.880 lbs.
- 96", 144.25", 192.63"  
Lengths standard.

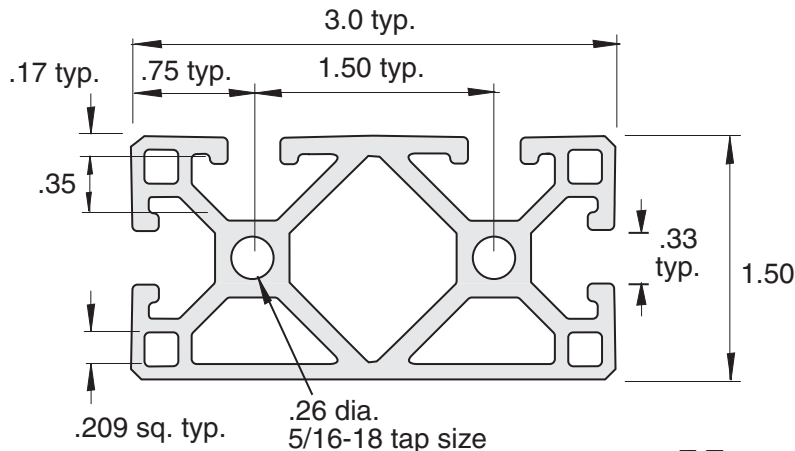
**Section Properties:**

Moment of Inertia in <sup>4</sup>	1.385	0.401
Section modulus in <sup>3</sup>	0.923	0.535



**EX-69**

**SMOOTH-Series**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.599 Sq. In.
- Weight/ft = 1.880 lbs.
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

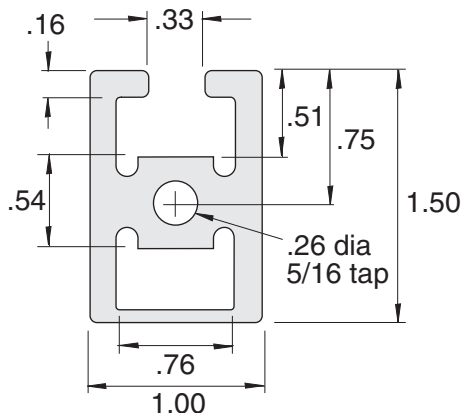
Moment of Intertia in <sup>4</sup>	1.385	0.401
Section modulus in <sup>3</sup>	0.923	0.535



**5/16" SLOTS**

**SMOOTH-Series**

**EX-52**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .818 Sq. In.
- Weight/ft = .954 lbs.
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

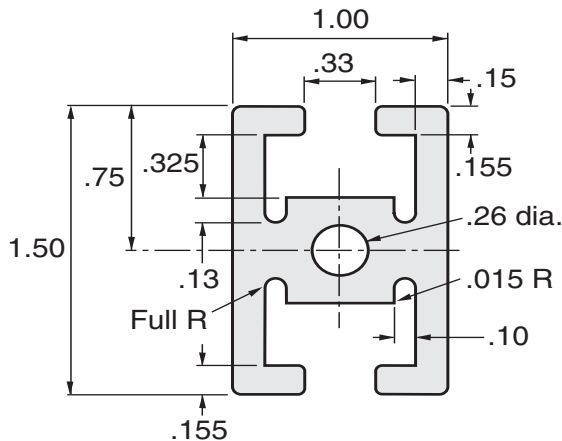
Moment of Intertia in <sup>4</sup>	0.417	0.099
Section modulus in <sup>3</sup>	0.549	0.198



**EX-54**

**SMOOTH-Series**

**5/16" SLOTS**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .840 Sq. In.
- Weight/ft = 1.008 lbs.
- 96", 144.25", 192.63" Lengths standard.

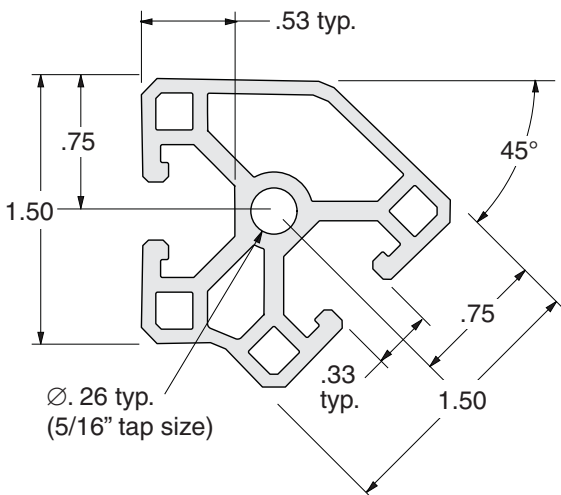


**Section Properties:**

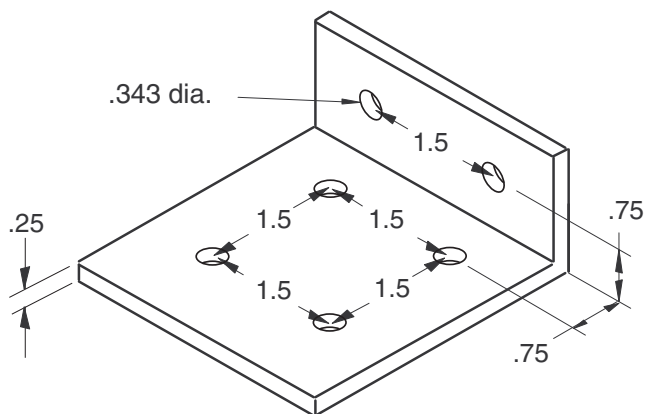
Moment of Intertia in <sup>4</sup>	0.142	0.100
Section modulus in <sup>3</sup>	0.189	0.200

**EX-82**

**SMOOTH-Series**



- 5/16" Slot Size
- Weight/Ft = 1.02 lbs.
- Est. Area = .85 Sq. In.
- Finish = Clear Anodized
- Material = 6105-T5 Aluminum
- 96", 192.63" Standard Lengths



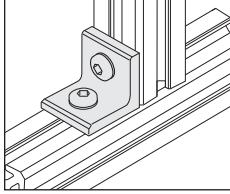
Mounting and connecting brackets have clearance holes for 5/16" (8 mm) dia. connecting screws which are all on .75" and 1.5" centers.

FRAME-WORLD designed fastener brackets, extrusions, hardware and accessories provide an unlimited system for structural design and assembly.

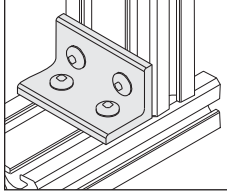
Note: Mounting brackets and plates are made of clear anodized aluminum unless otherwise specified

Recommended torque for 5/16-18 or m8 fasteners is 15 to 20 ft lbs

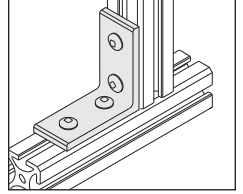
**Section C.1**  
**Corner Angle**  
**Brackets**



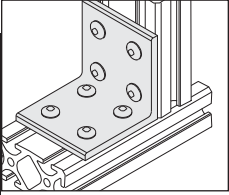
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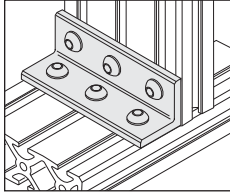
page 57



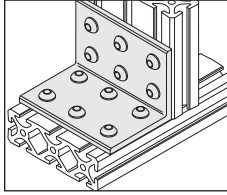
page 58



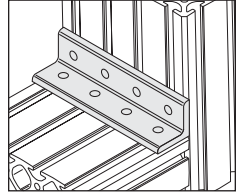
page 59



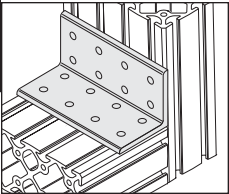
page 60



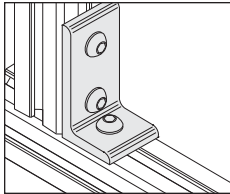
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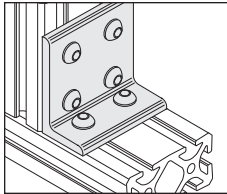
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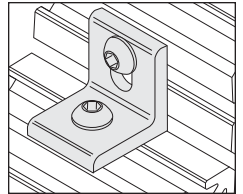
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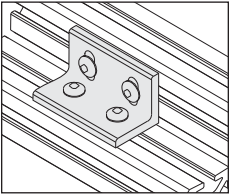
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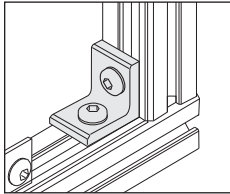
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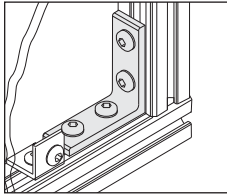
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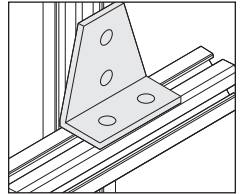
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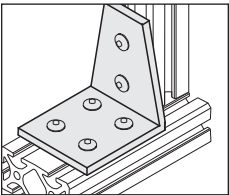
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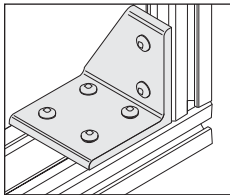
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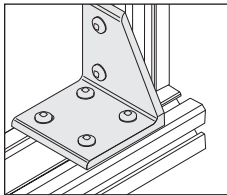
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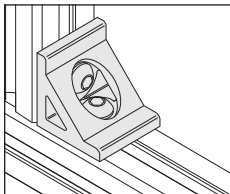


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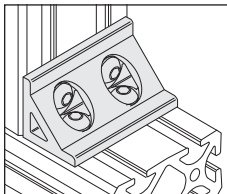


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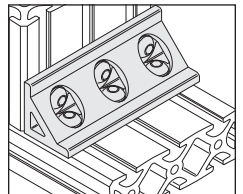
**Section C.2**  
**Gusseted**  
**Corner Angle**  
**Brackets**



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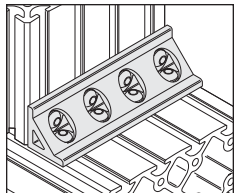


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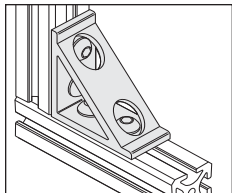


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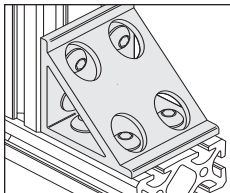
5/16" SLOTS



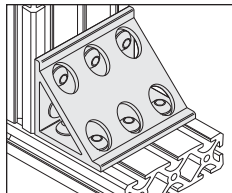
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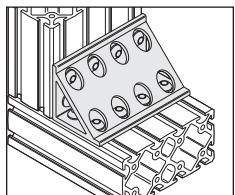
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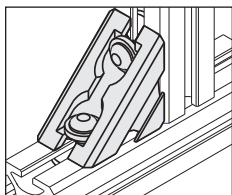
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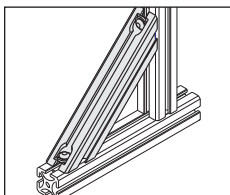
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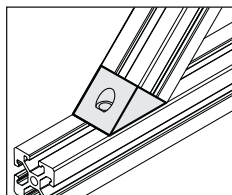
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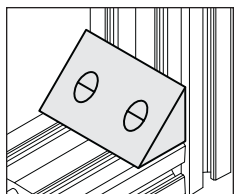
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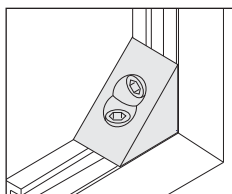
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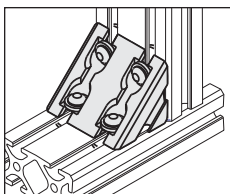
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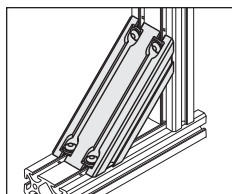
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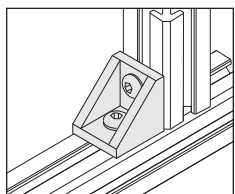
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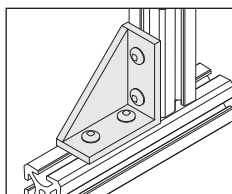
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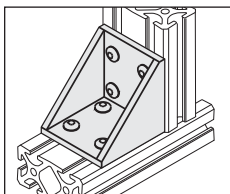
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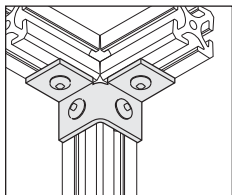
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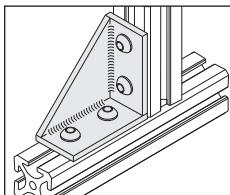
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## Section C.3

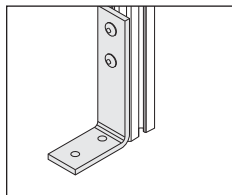
### Steel Corner Angle Brackets



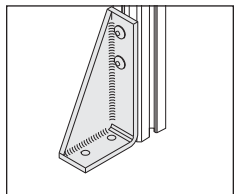
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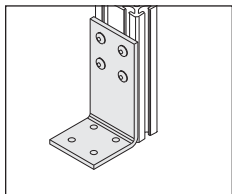
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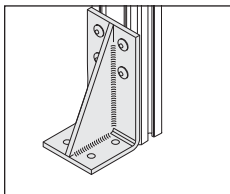
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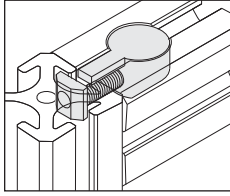


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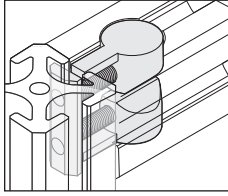
5/16" SLOTS

## Section C.4

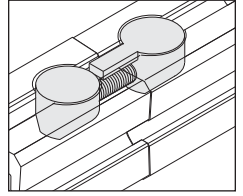
### Internal & Adjustable Corner Brackets



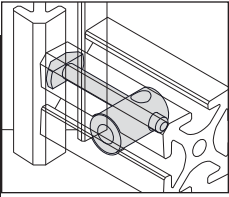
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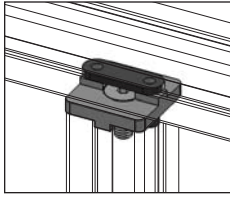
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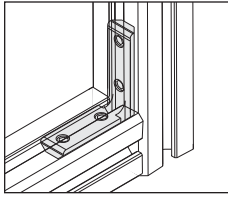
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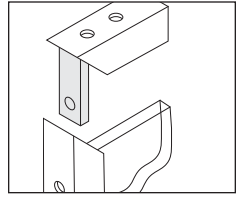
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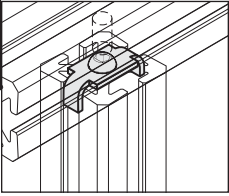
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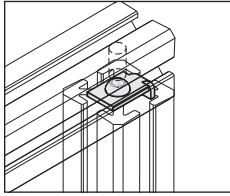
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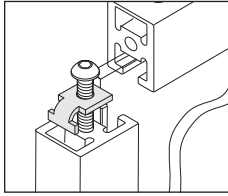
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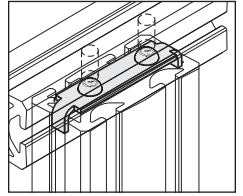
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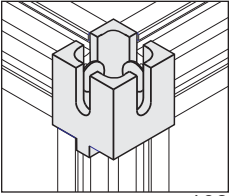
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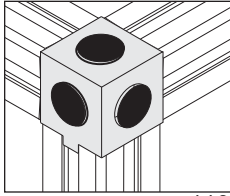
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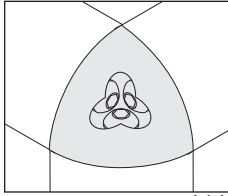
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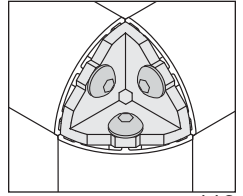
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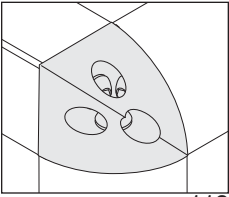
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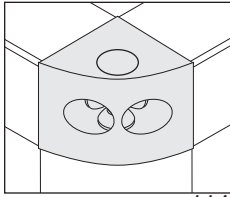
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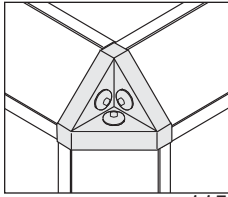
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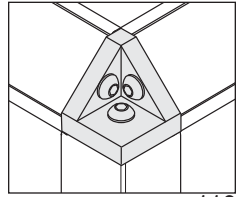
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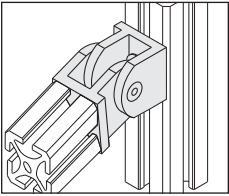
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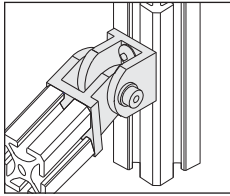
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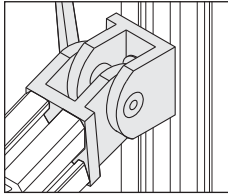
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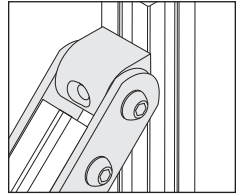
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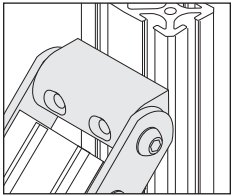


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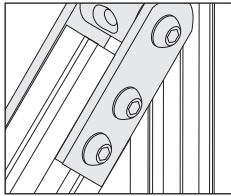


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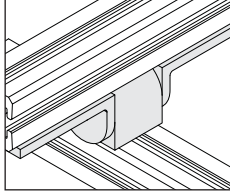
5/16" SLOTS



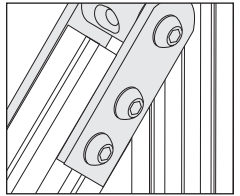
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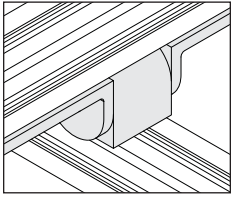
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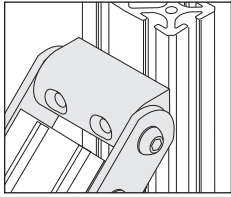
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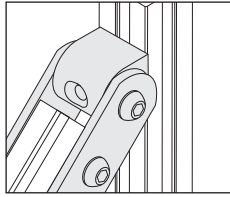
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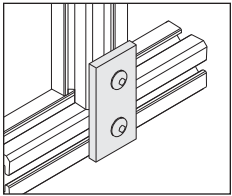


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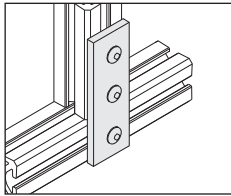
## Section C.5

### Joining Plates

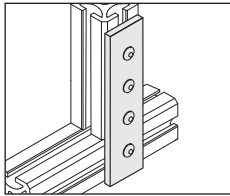
5/16" SLOTS



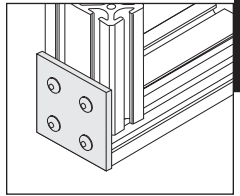
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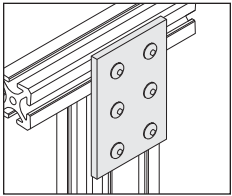
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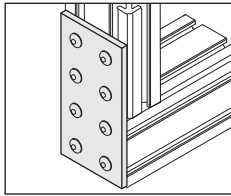
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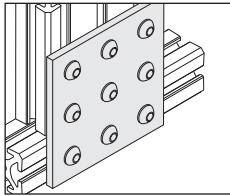
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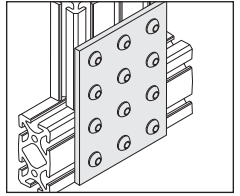
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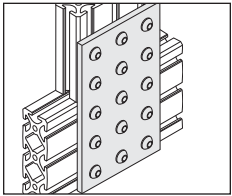
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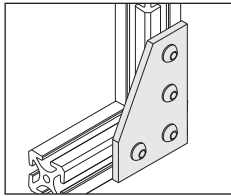
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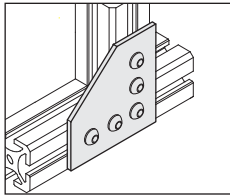
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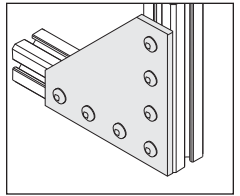
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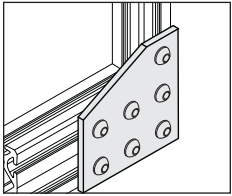
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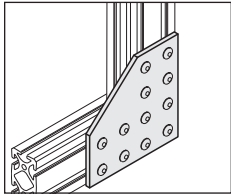
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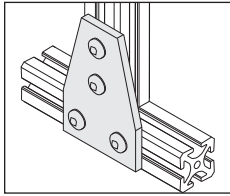
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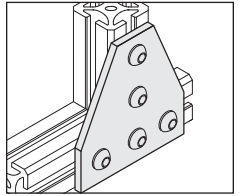
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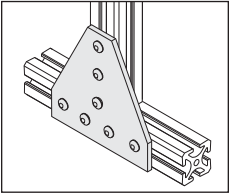


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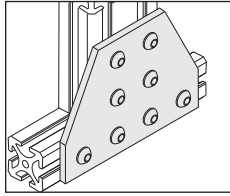


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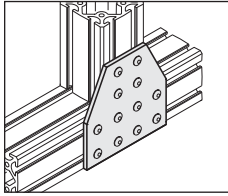




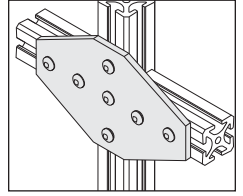
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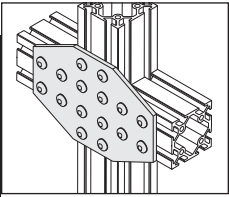
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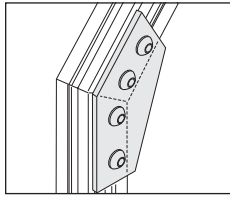
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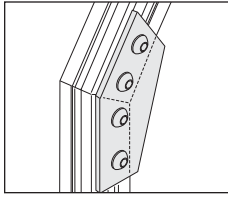
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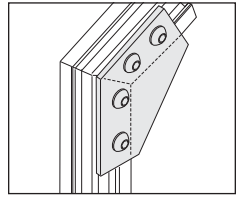
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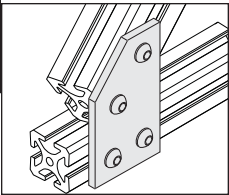
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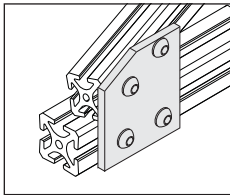
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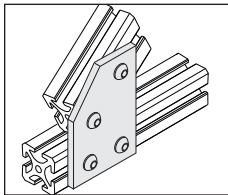
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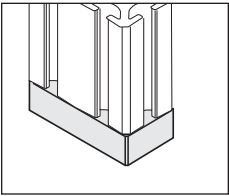


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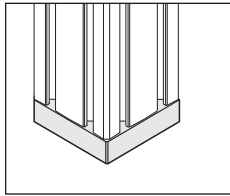


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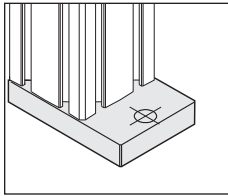
**Section C.6**  
**Floor Mounts,  
 Casters and  
 Adjustable  
 Feet**



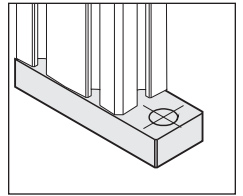
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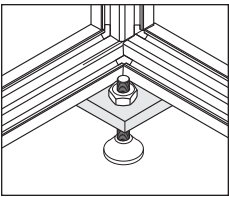
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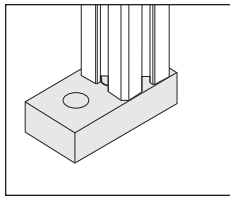
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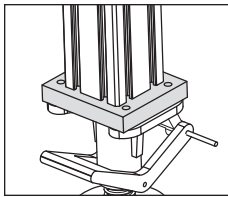
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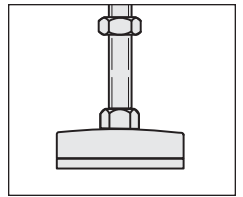
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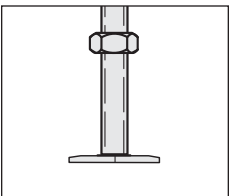
page 160



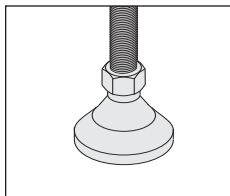
page 161, 162



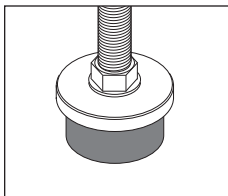
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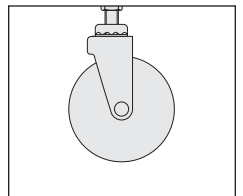
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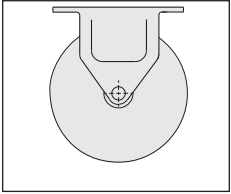


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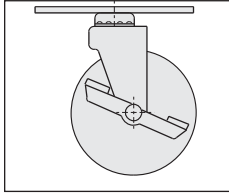


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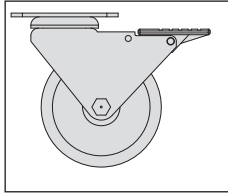
5/16" SLOTS



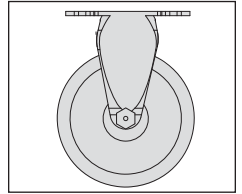
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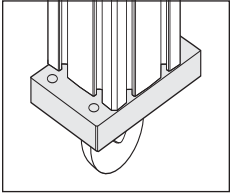
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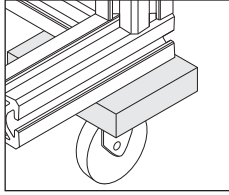
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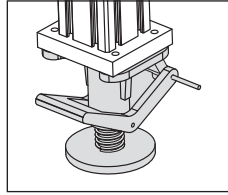
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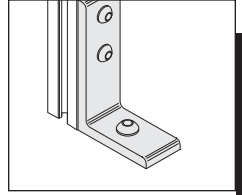
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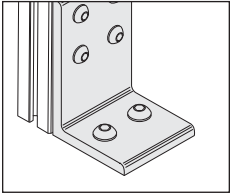
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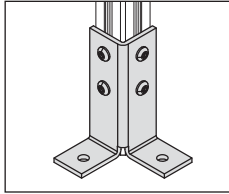
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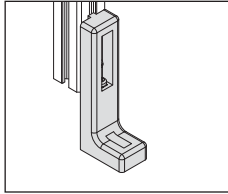
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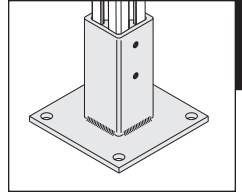
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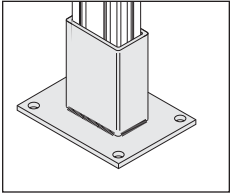
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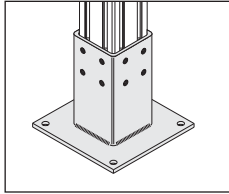
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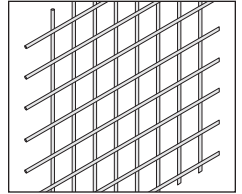


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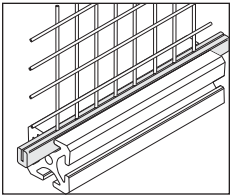


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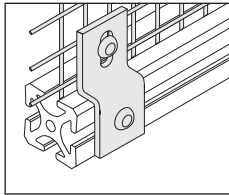
**Section C.7**  
**Panels, Doors**  
**and Hardware**



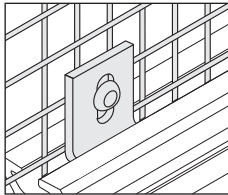
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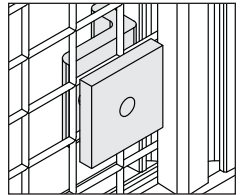
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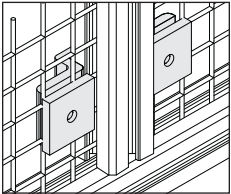
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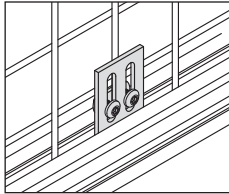
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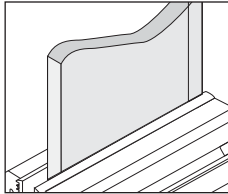
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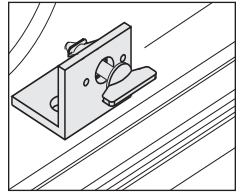
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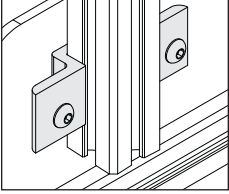


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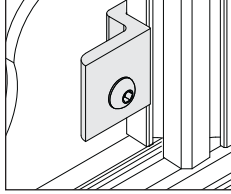


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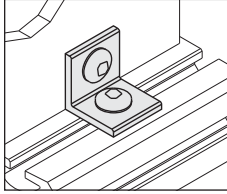
5/16" SLOTS



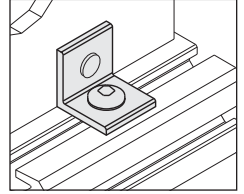
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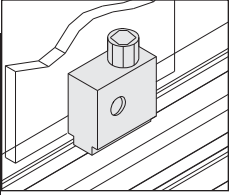
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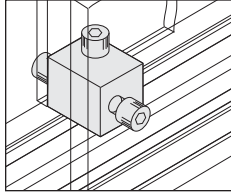
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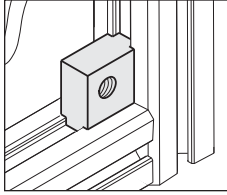
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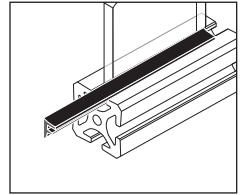
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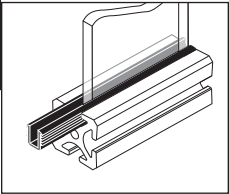
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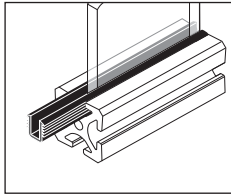
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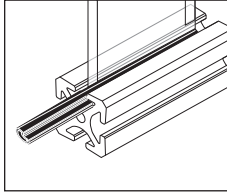
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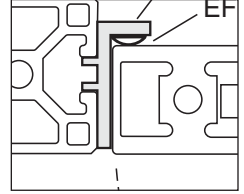
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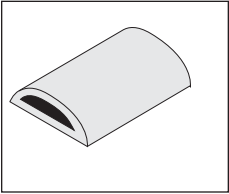
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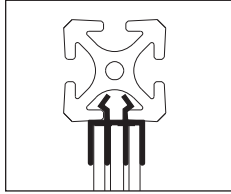
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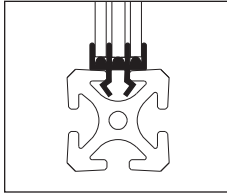
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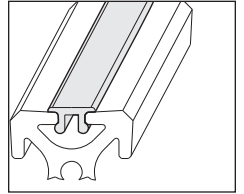
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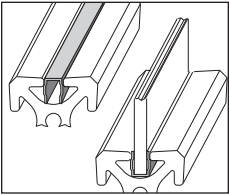
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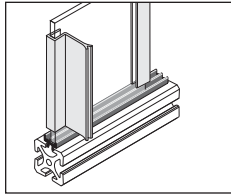
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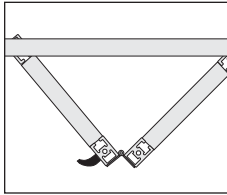
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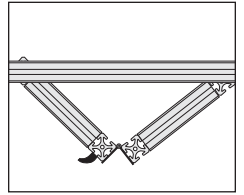
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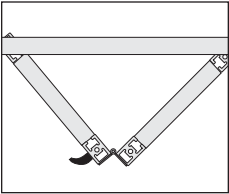
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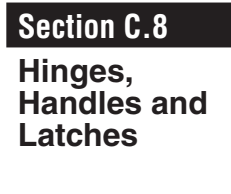
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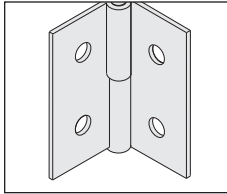


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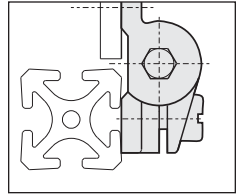


**Section C.8**

**Hinges,  
Handles and  
Latches**

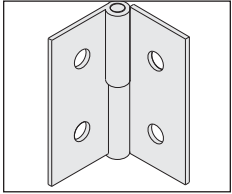


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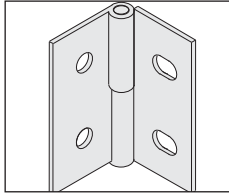


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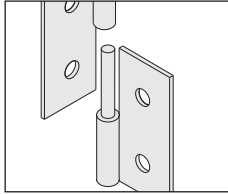
5/16" SLOTS



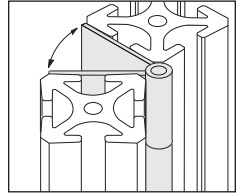
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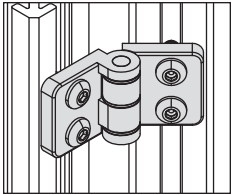
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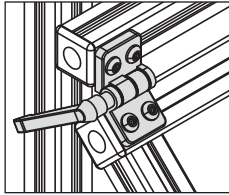
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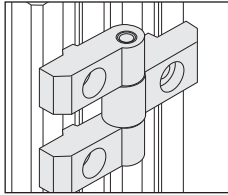
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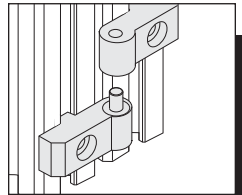
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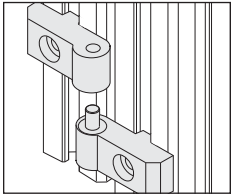
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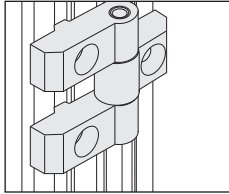
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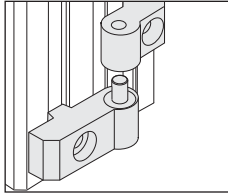
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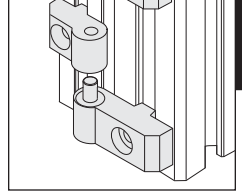
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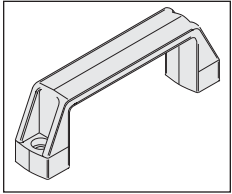
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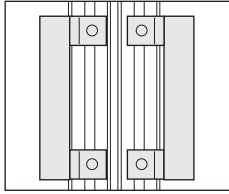
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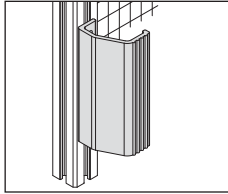
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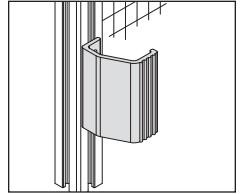
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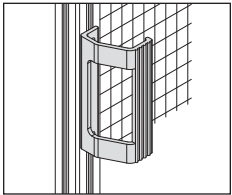
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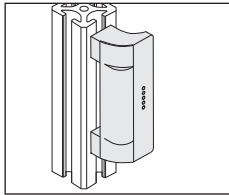
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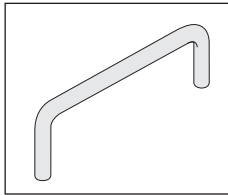
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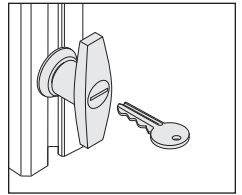
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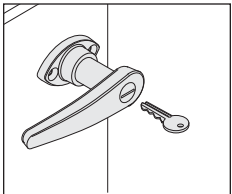
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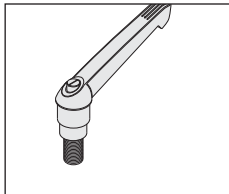
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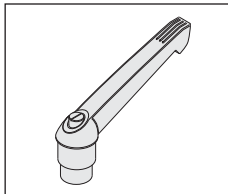
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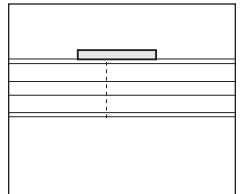
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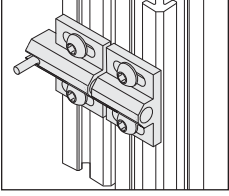
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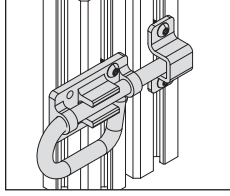
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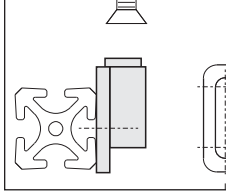
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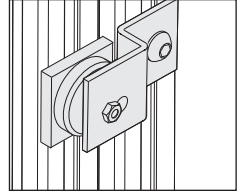
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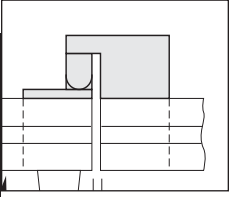
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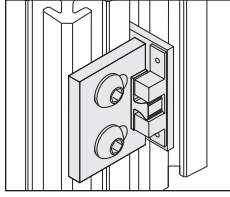
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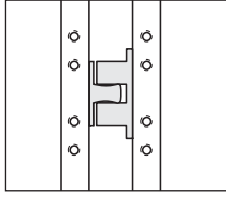
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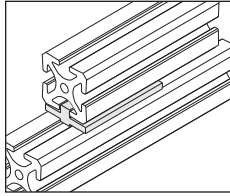
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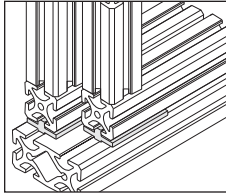
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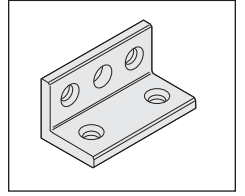
page 243



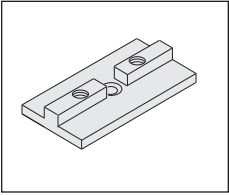
page 244



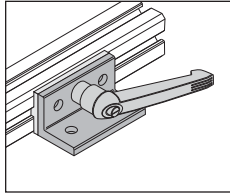
page 245



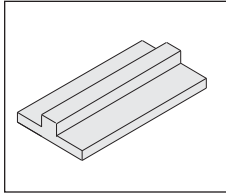
page 246



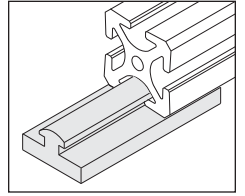
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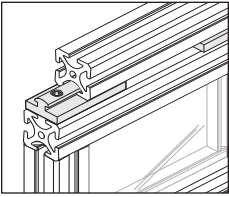
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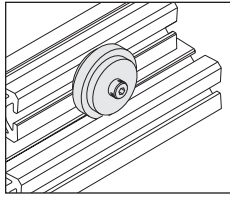
page 249



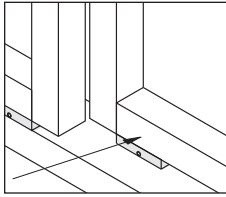
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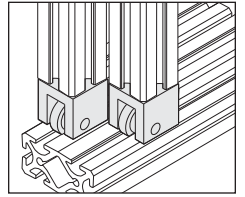
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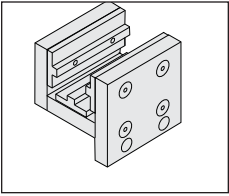
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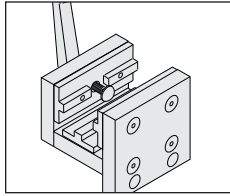
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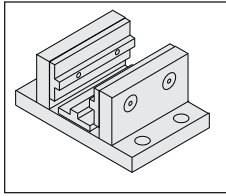
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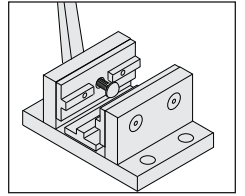
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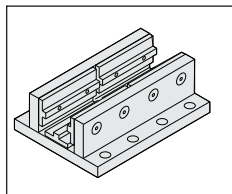
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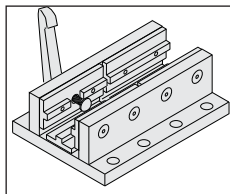
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5/16" SLOTS

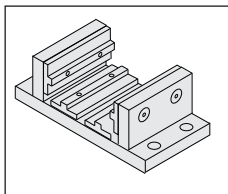
## Section C.9 Sliding Components and Bearings



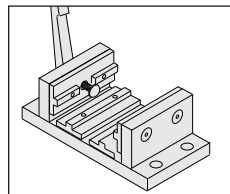
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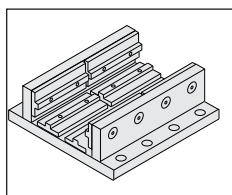
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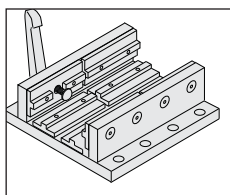
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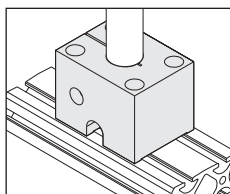


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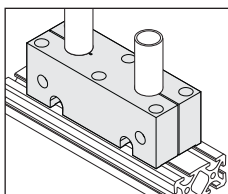


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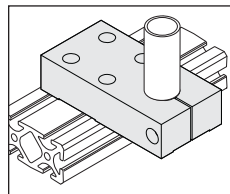
## Section C.10 Stanchions



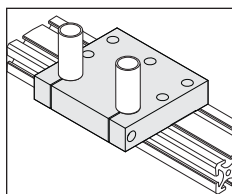
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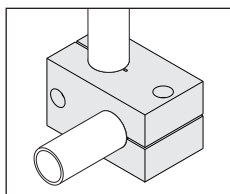
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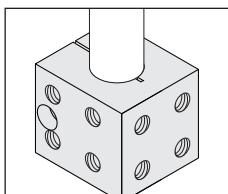
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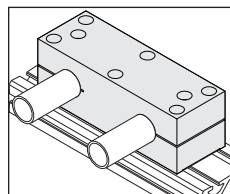
page 269



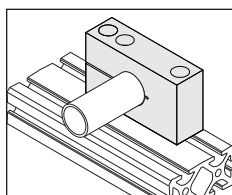
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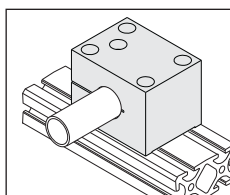
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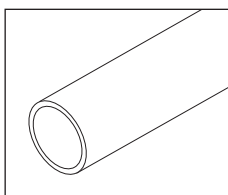
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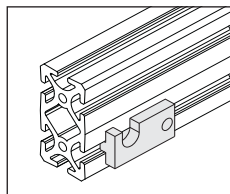


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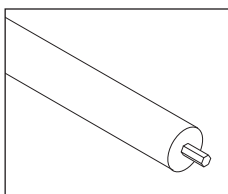


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## Section C.11 Conveyor



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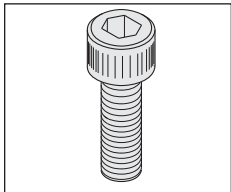


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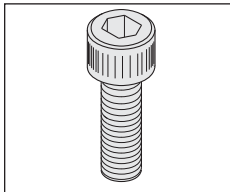
**Section C.12**

**Screws,  
Nuts &  
Fasteners**

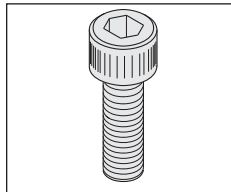
**5/16" SLOTS**



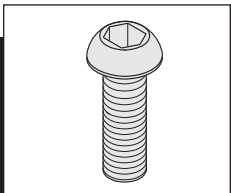
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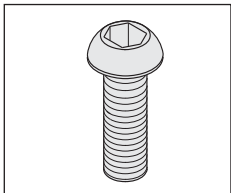
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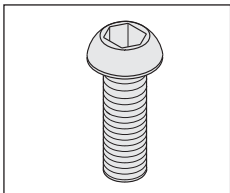
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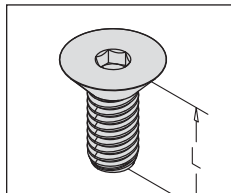
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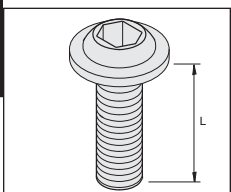
page 280



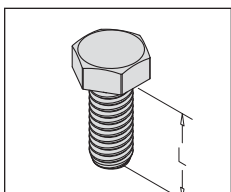
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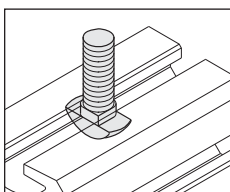
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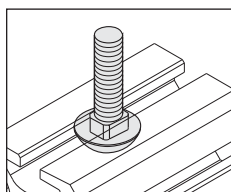
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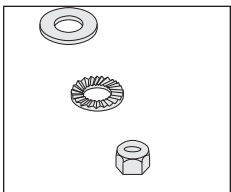
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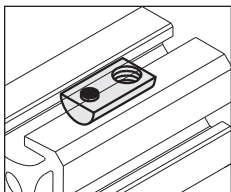
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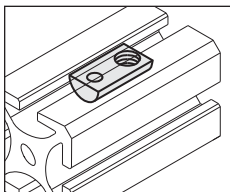
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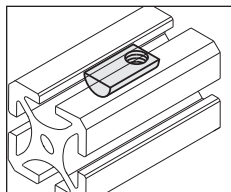
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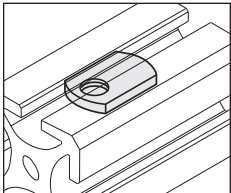
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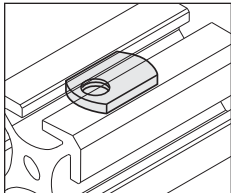
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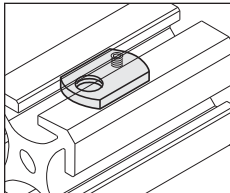
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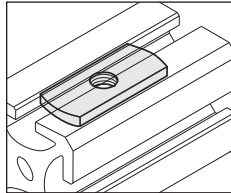
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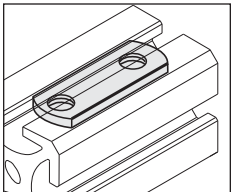
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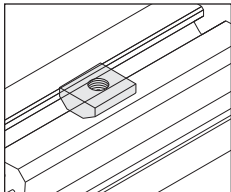
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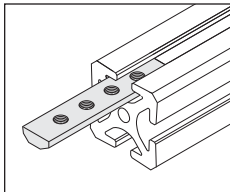
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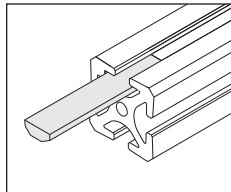
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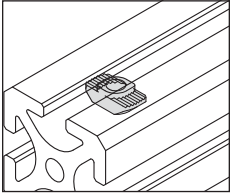
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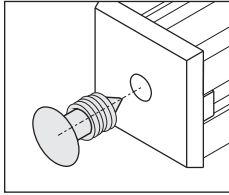


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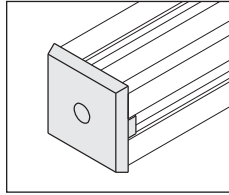


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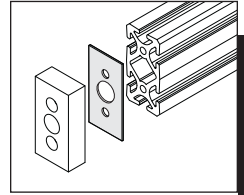
**Section C.13**  
**Miscellaneous**  
**Components**



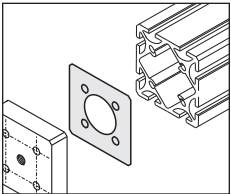
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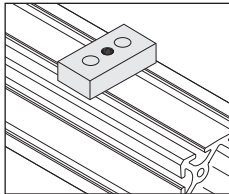
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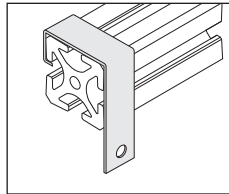
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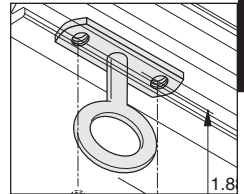
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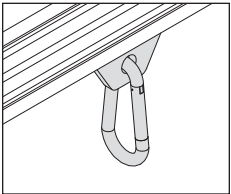
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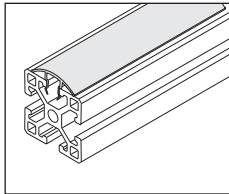
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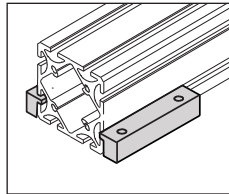
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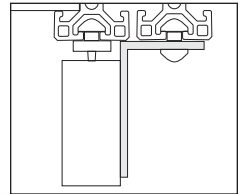
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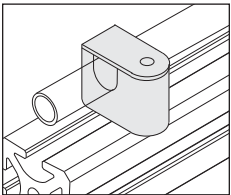
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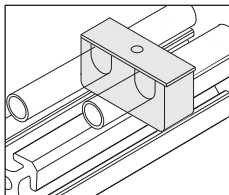
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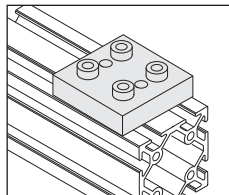
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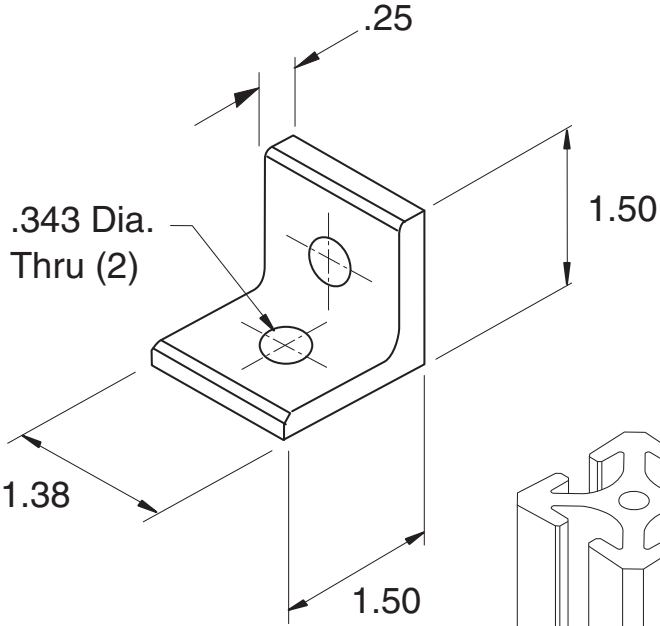
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**5/16" SLOTS**

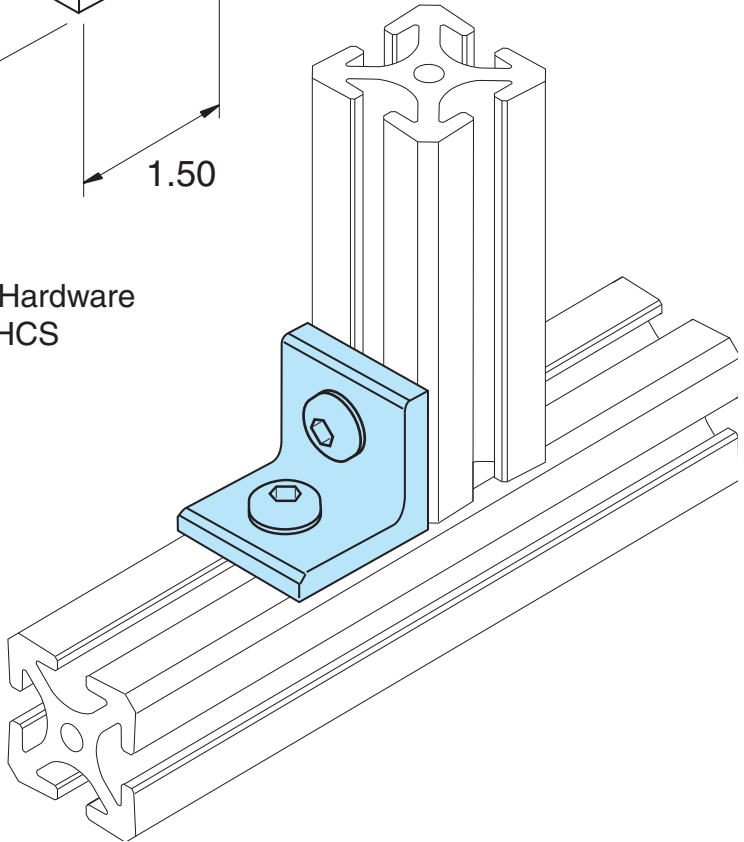


**EB-1**

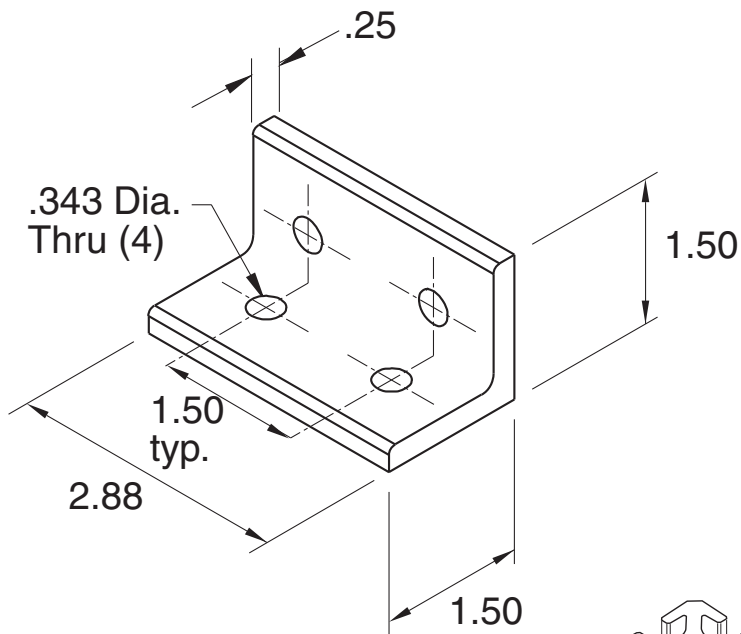
5/16" SLOTS



Recommended Hardware  
(2) EF-12-.63 BHCS  
(2) EF-2 T-nut

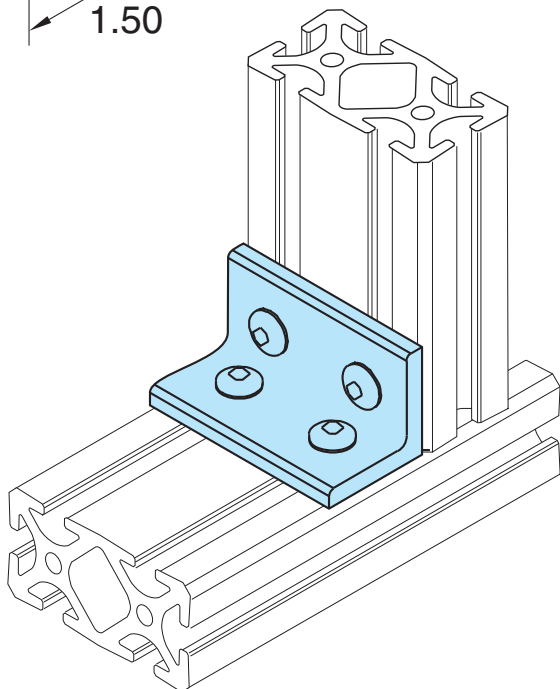


Material - Aluminum  
Finish - Clear Anodize



5/16" SLOTS

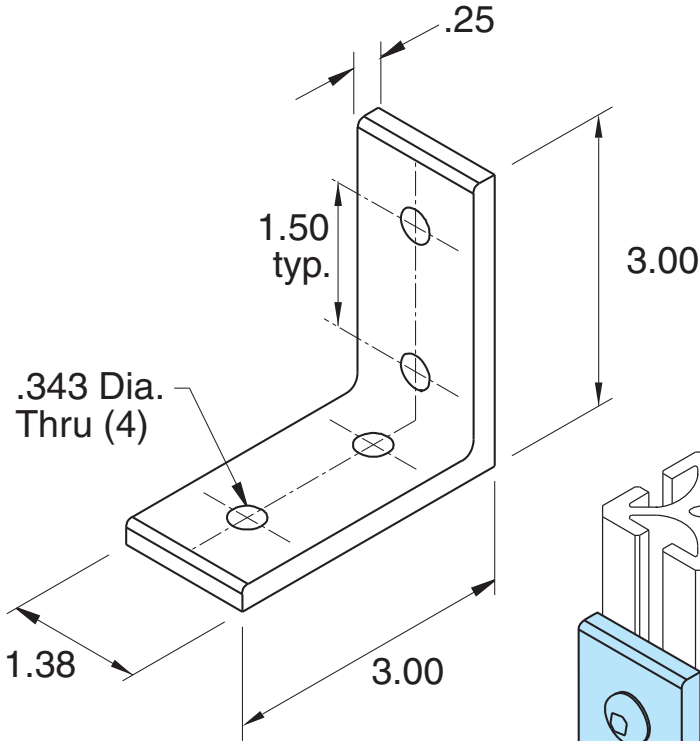
Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut



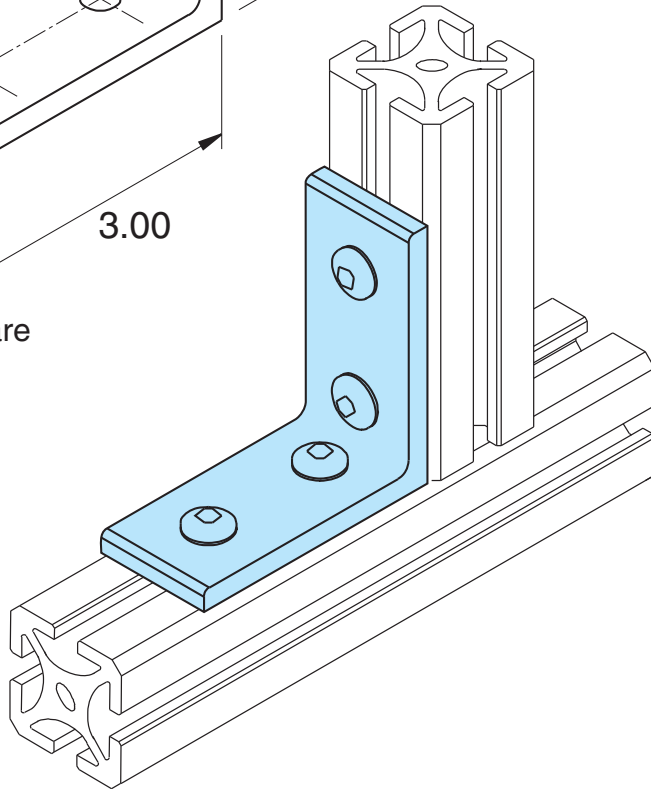
Material - Aluminum  
Finish - Clear Anodize

**EB-3**

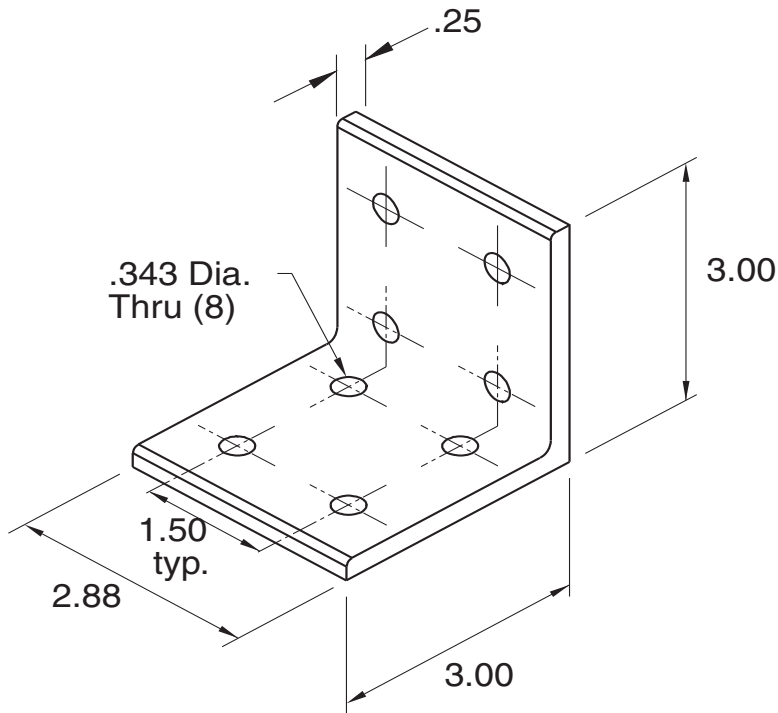
5/16" SLOTS



Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

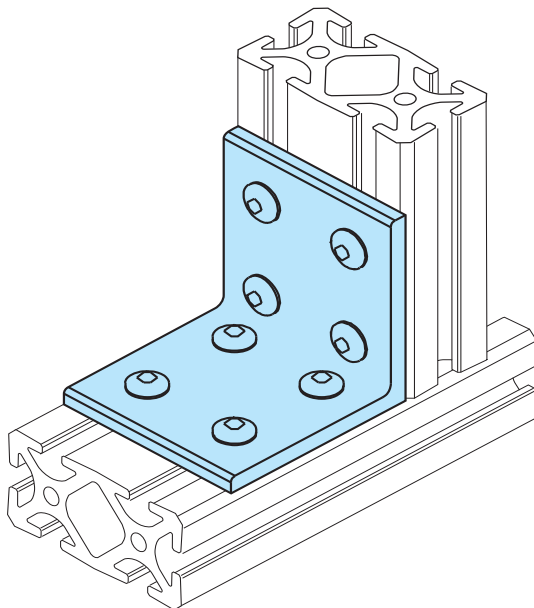


Material - Aluminum  
Finish - Clear Anodize



5/16" SLOTS

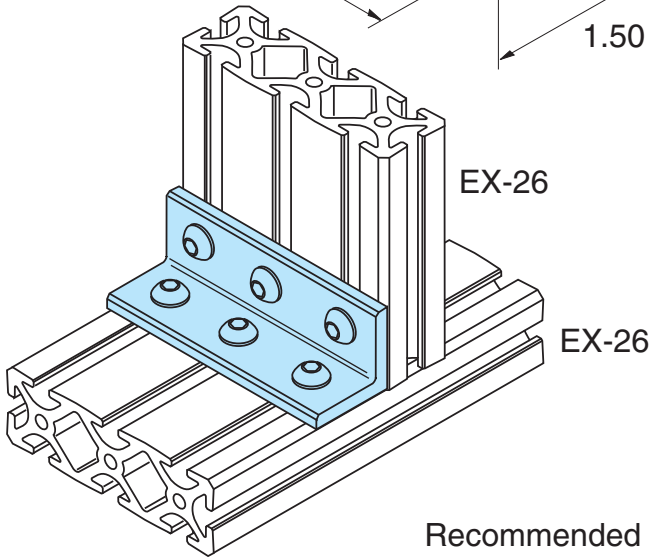
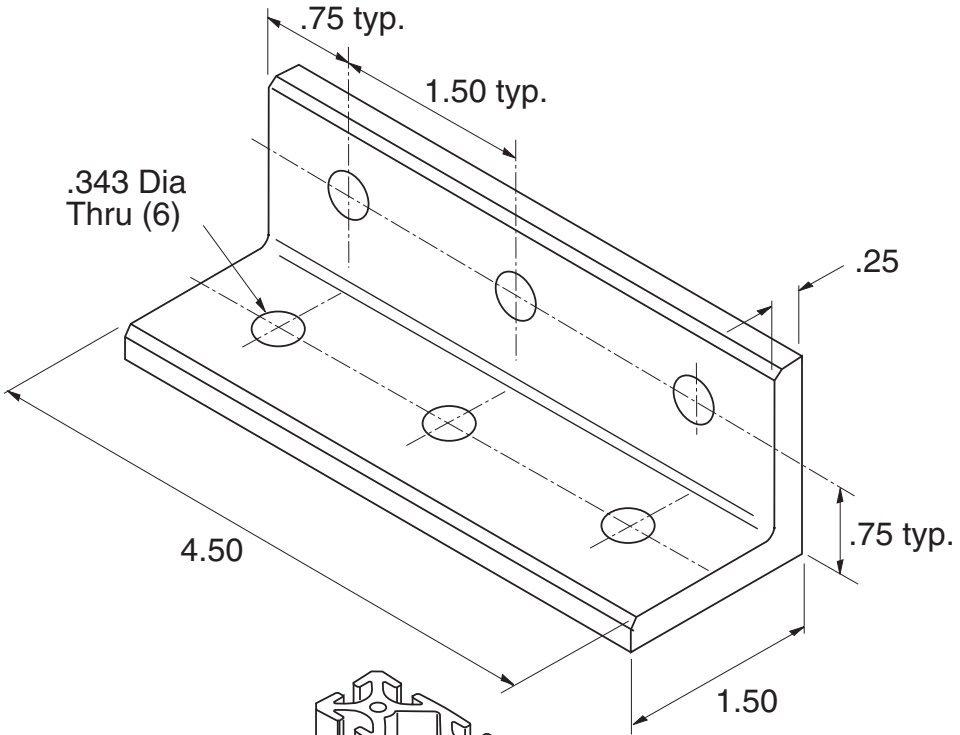
Recommended Hardware  
(8) EF-12-.63 BHCS  
(8) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize

**EB-59**

5/16" SLOTS

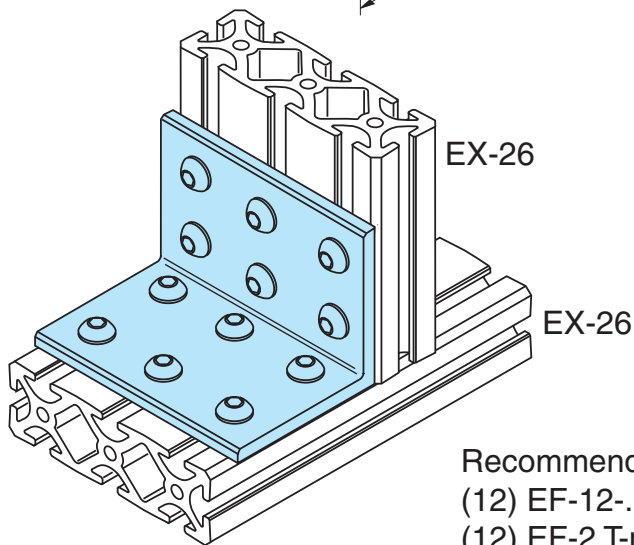
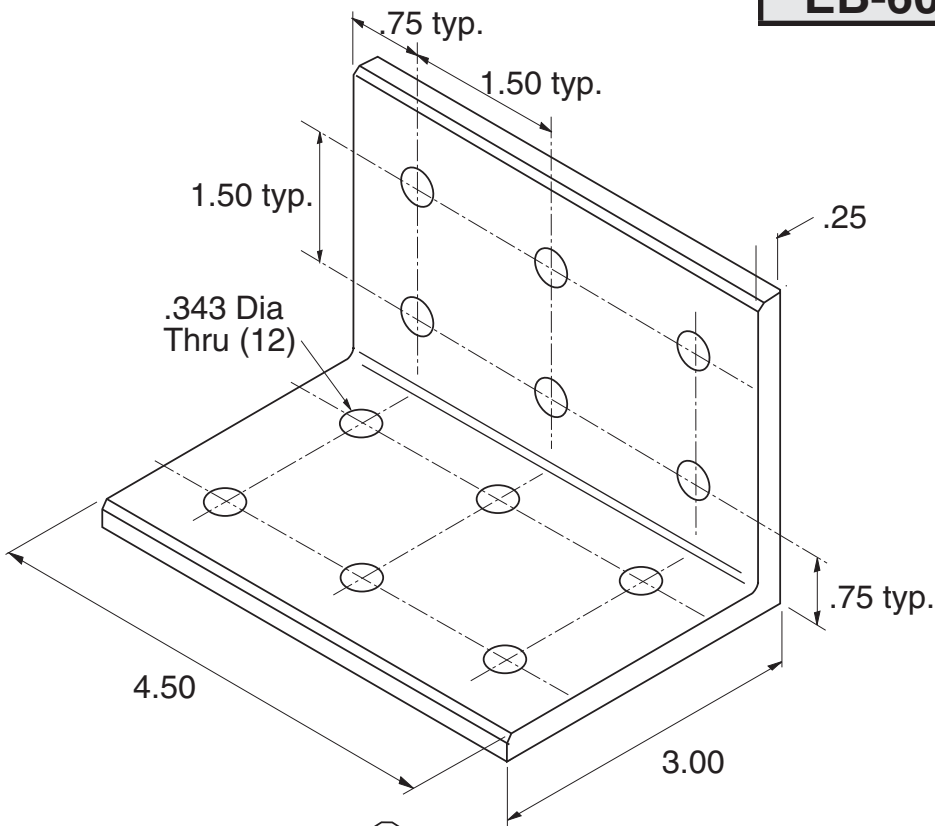


Recommended Hardware  
(6) EF-12-.63 BHCS  
(6) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

**EB-60**

**5/16" SLOTS**

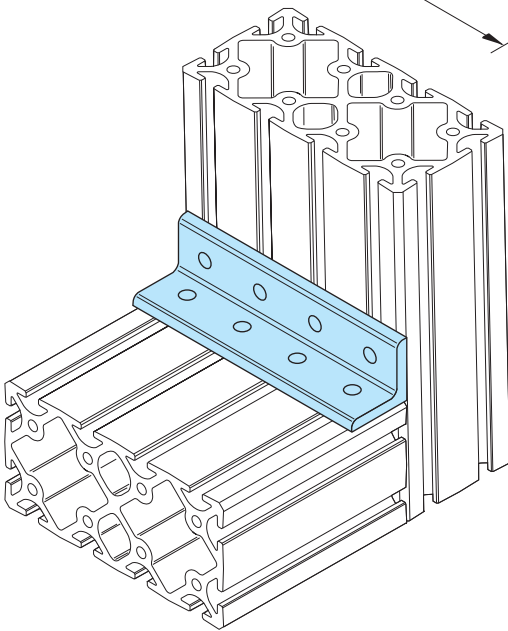
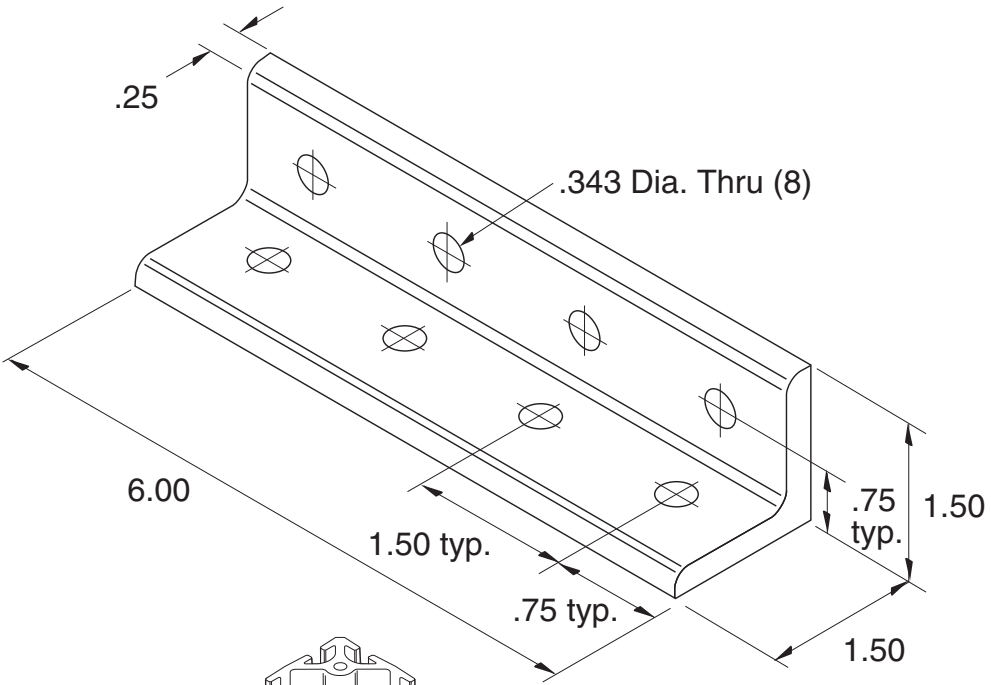


**Recommended Hardware**  
 (12) EF-12-.63 BHCS  
 (12) EF-2 T-nut

**Material - Aluminum**  
**Finish - Clear Anodize**

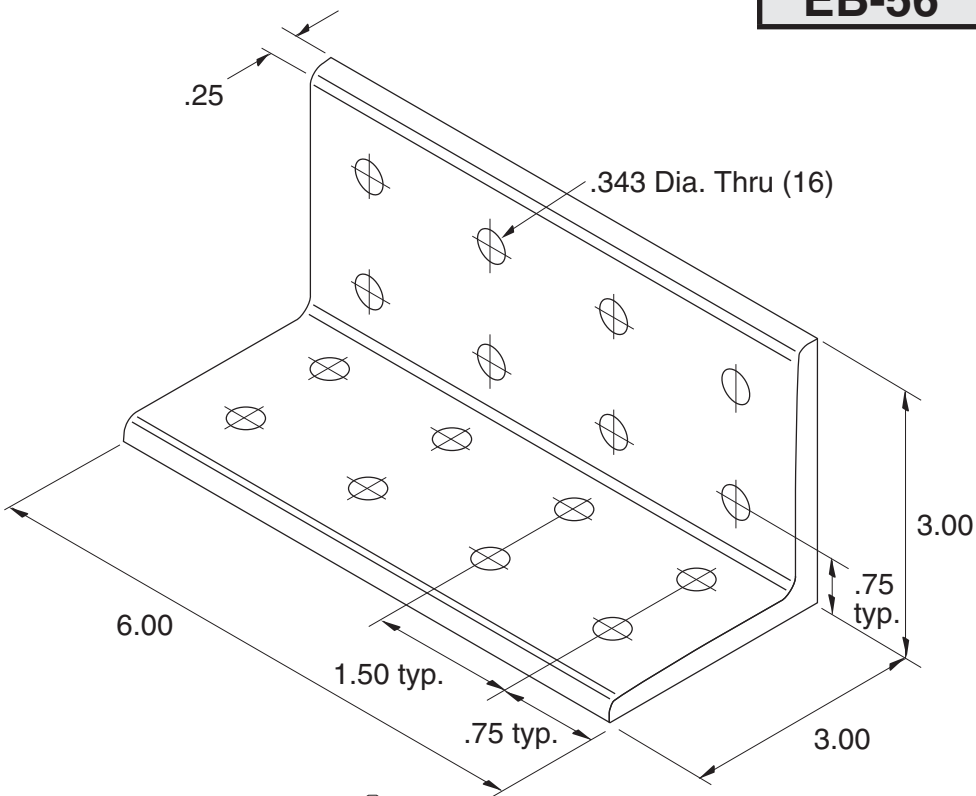
**EB-55**

5/16" SLOTS

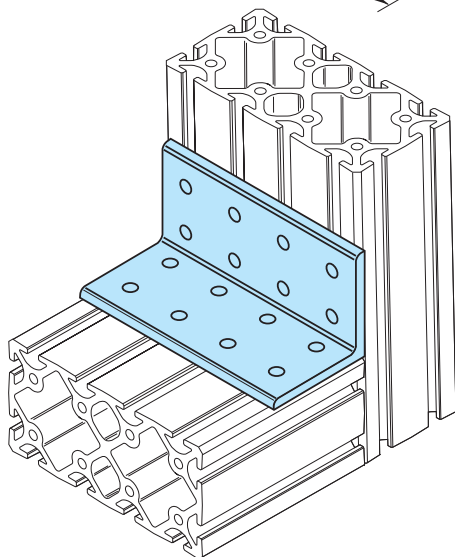


Recommended  
Hardware  
(8) EF-12-.63 BHCS  
(8) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**



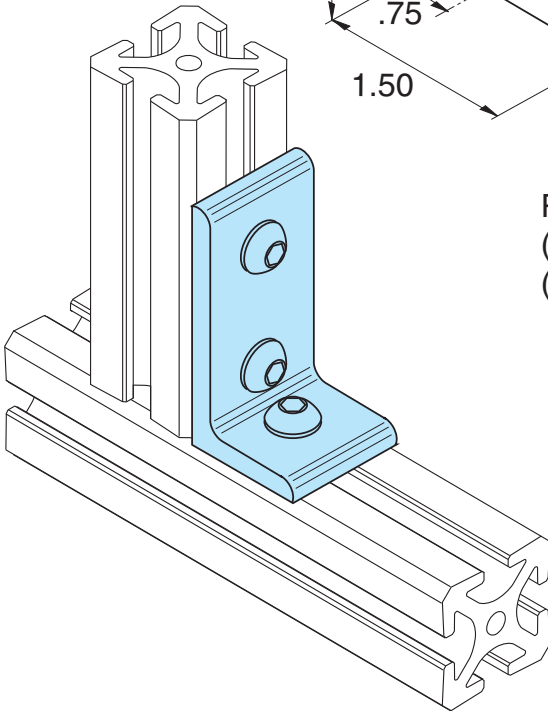
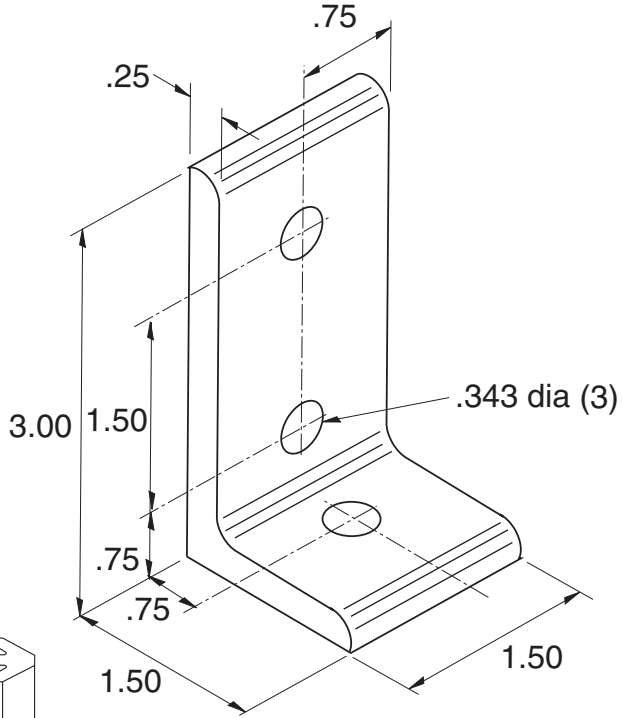
Recommended  
Hardware  
(16) EF-12-.63 BHCS  
(16) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



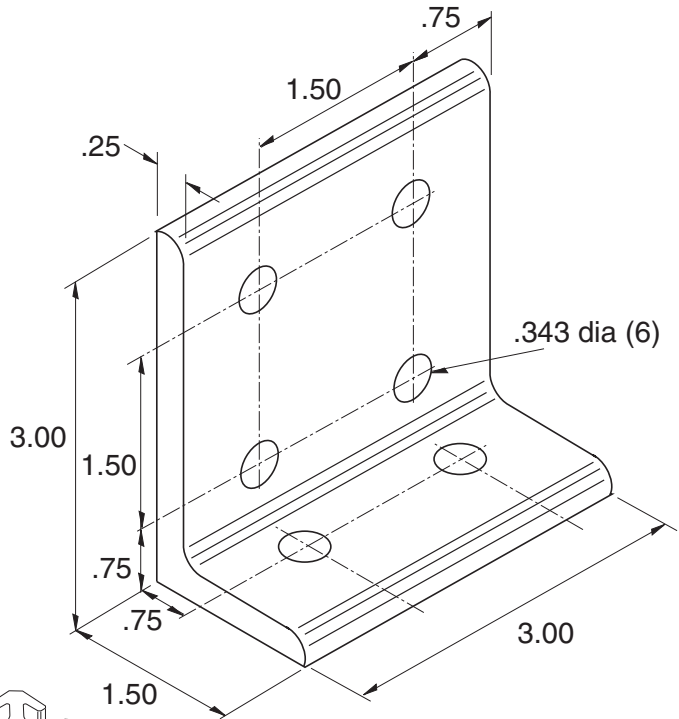
**EB-100**

5/16" SLOTS

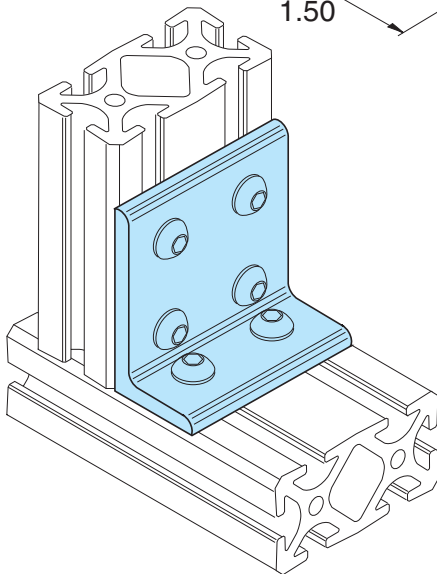


Recommended Hardware  
(3) EF-12-.63 BHCS  
(3) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



5/16" SLOTS

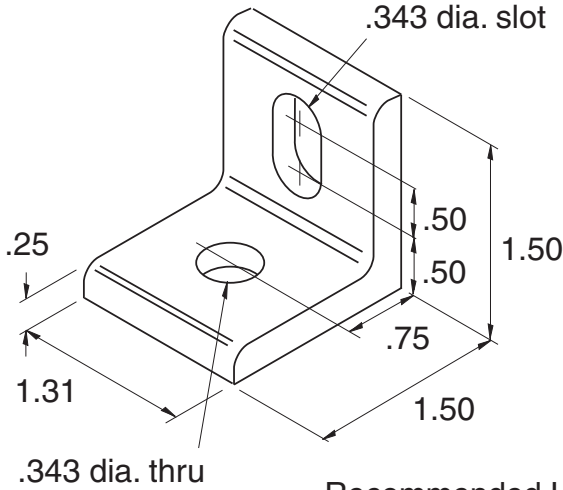


Recommended Hardware  
 (6) EF-12-.63 BHCS  
 (6) EF-2 T-nut

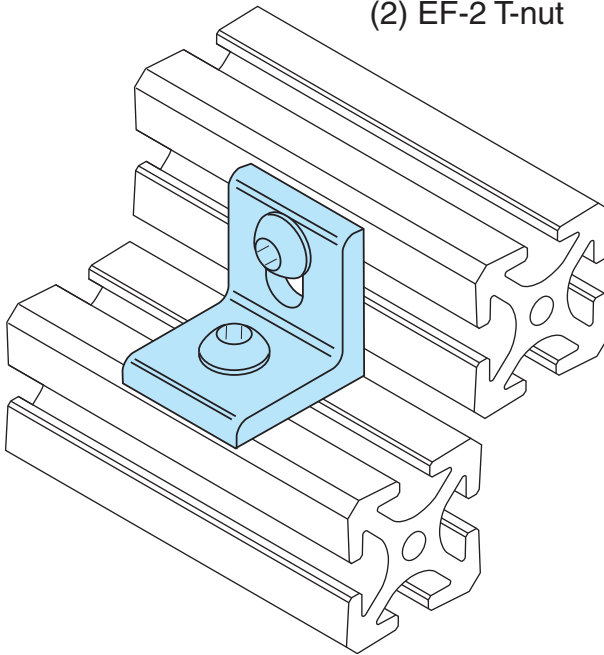
Material - Aluminum  
 Finish - Clear Anodize

**EB-102**

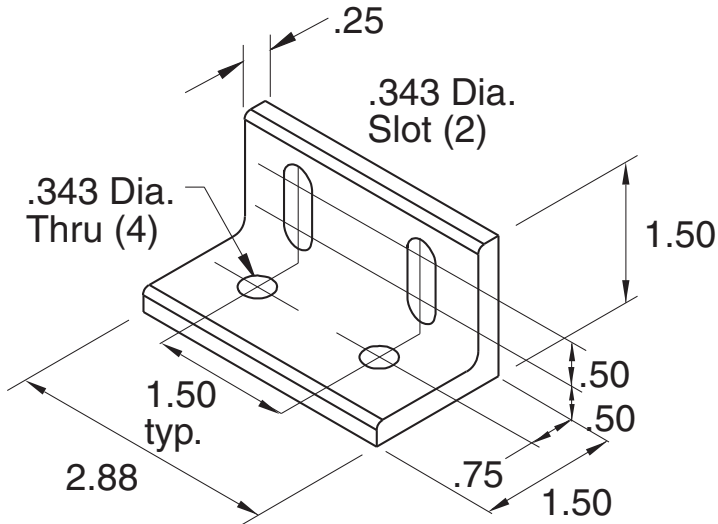
5/16" SLOTS



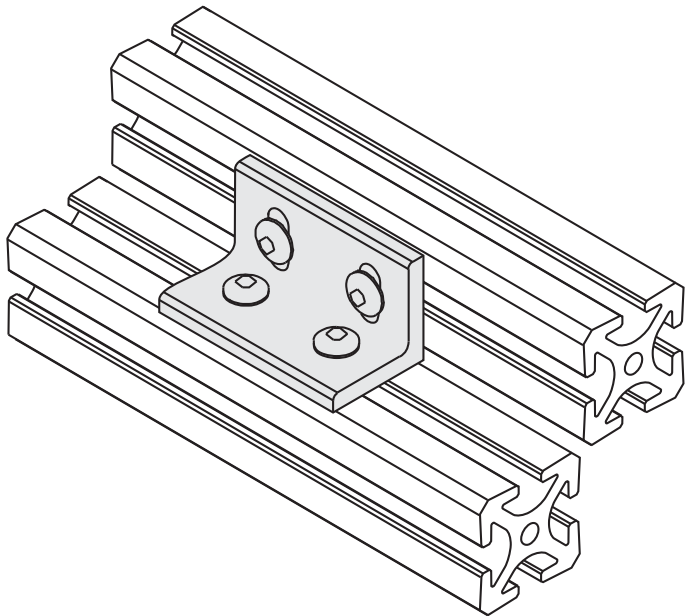
Recommended Hardware  
(2) EF-12-.63 BHCS  
(2) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize



Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

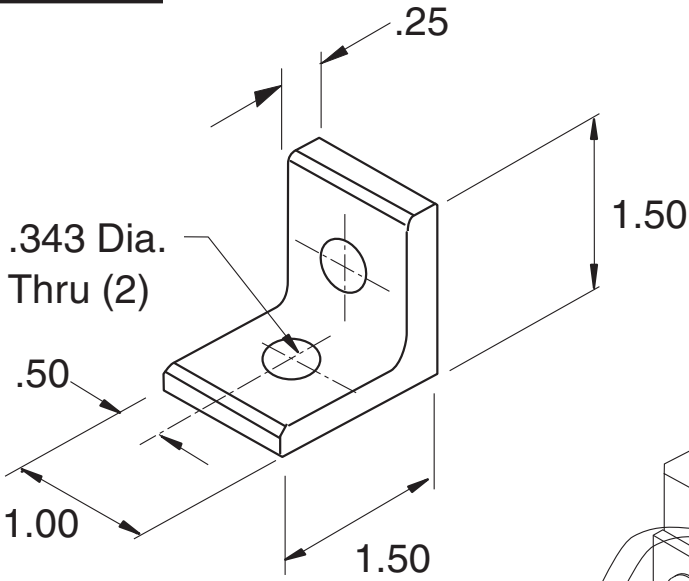


Material - Aluminum  
Finish - Clear Anodize

**5/16" SLOTS**

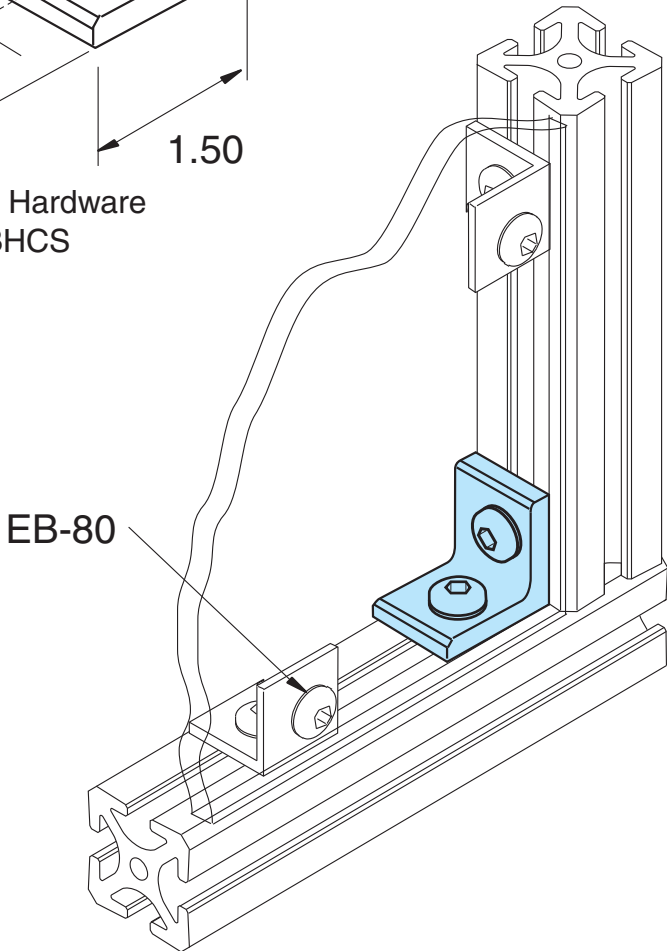
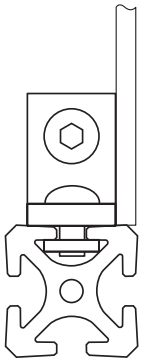
**EB-81**

5/16" SLOTS

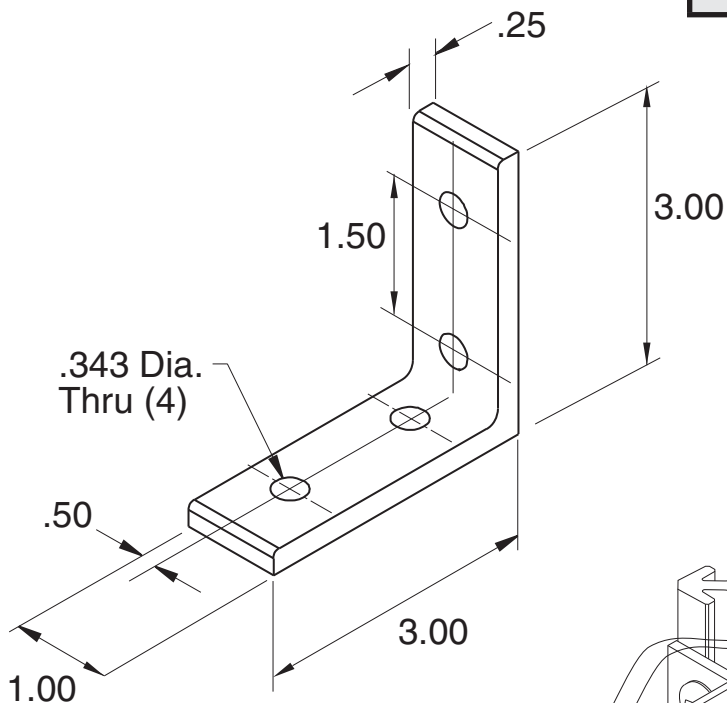


Recommended Hardware

- (2) EF-12-.63 BHCS
- (2) EF-2 T-nut

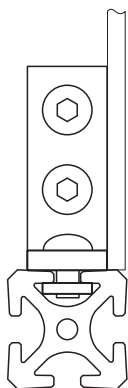


Material - Aluminum  
Finish - Clear Anodize

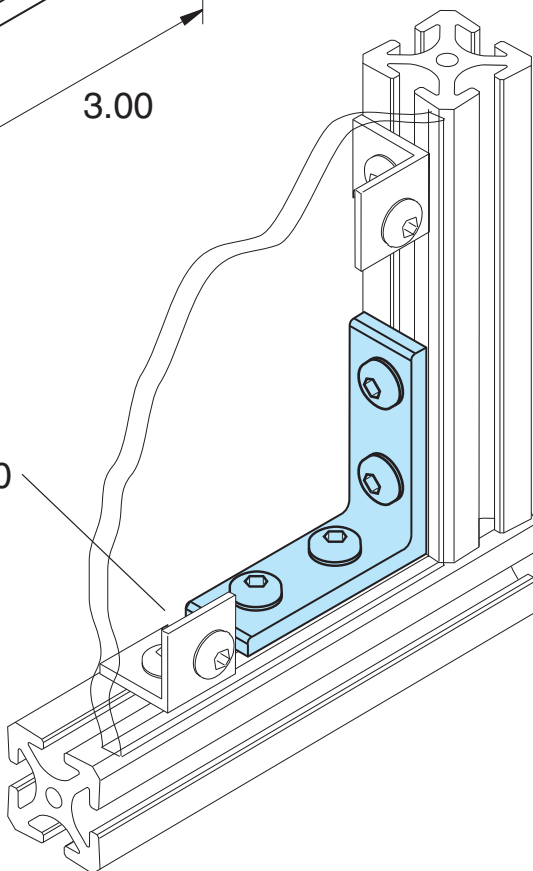


**5/16" SLOTS**

**Recommended Hardware**  
 (4) EF-12-.63 BHCS  
 (4) EF-2 T-nut



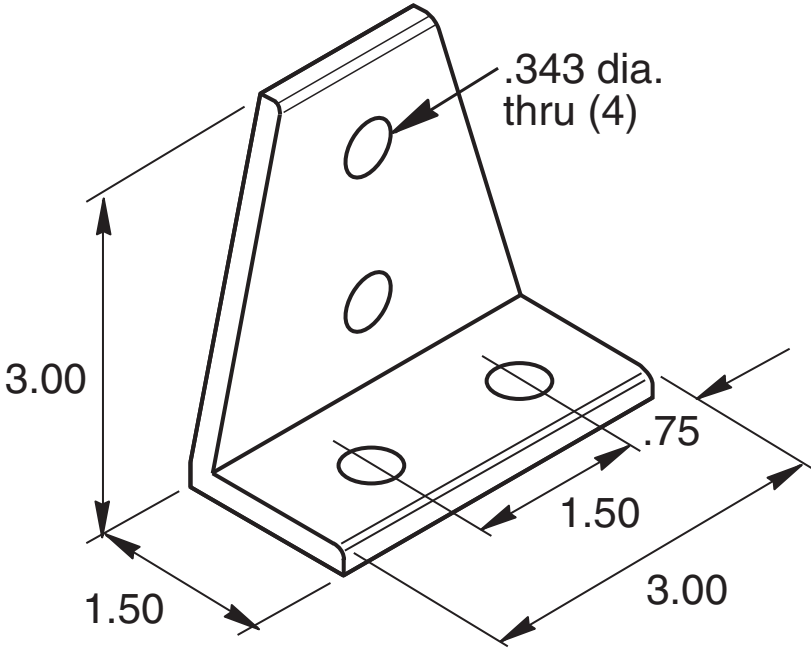
**EB-82**



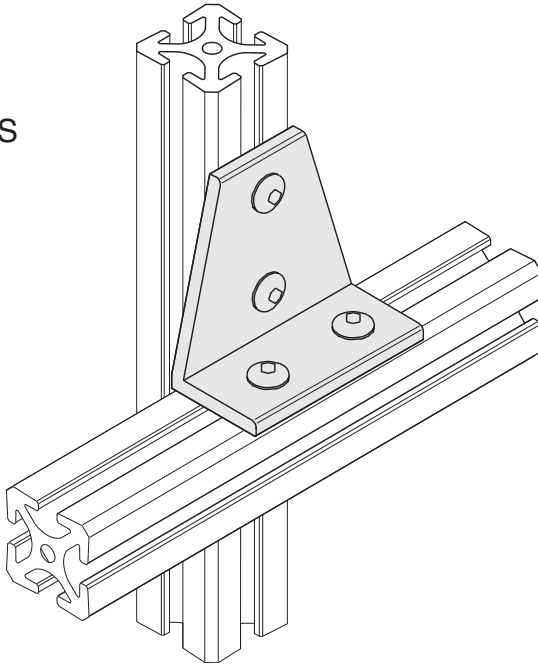
**Material - Aluminum**  
**Finish - Clear Anodize**

**EB-30**

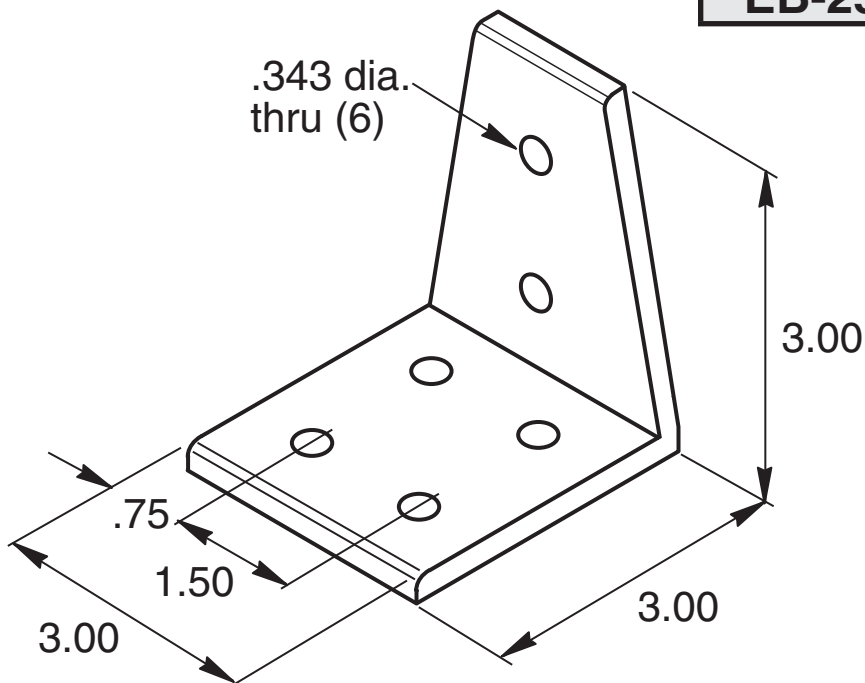
**5/16" SLOTS**



Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

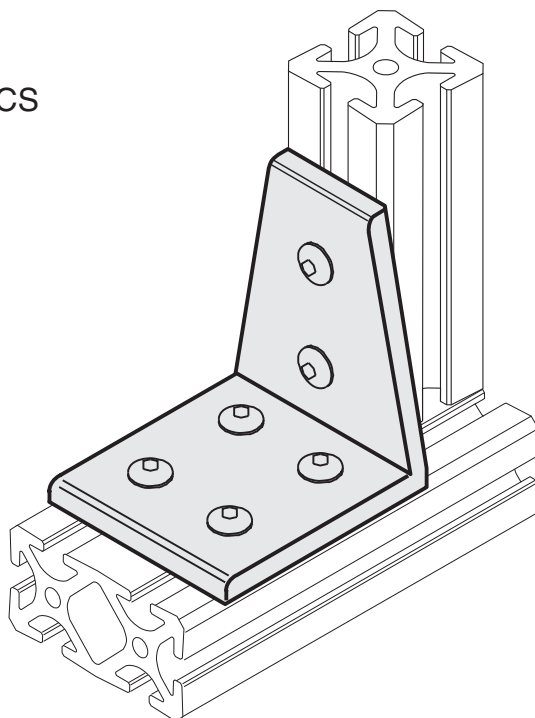


Material - Aluminum  
Finish - Clear Anodize



5/16" SLOTS

Recommended  
Hardware  
(6) EF-12-.63 BHCS  
(6) EF-2 T-nut

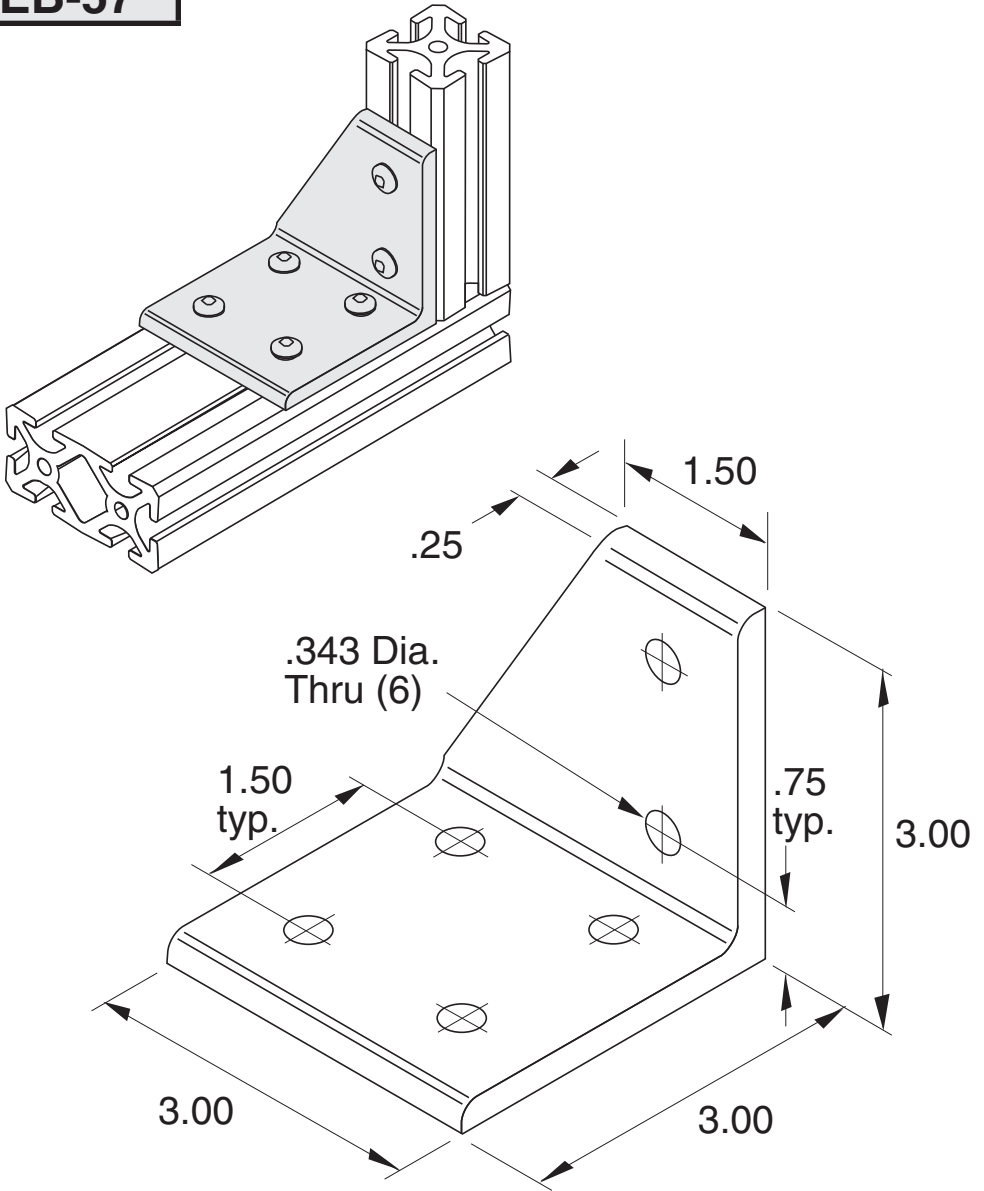


Material - Aluminum  
Finish - Clear Anodize



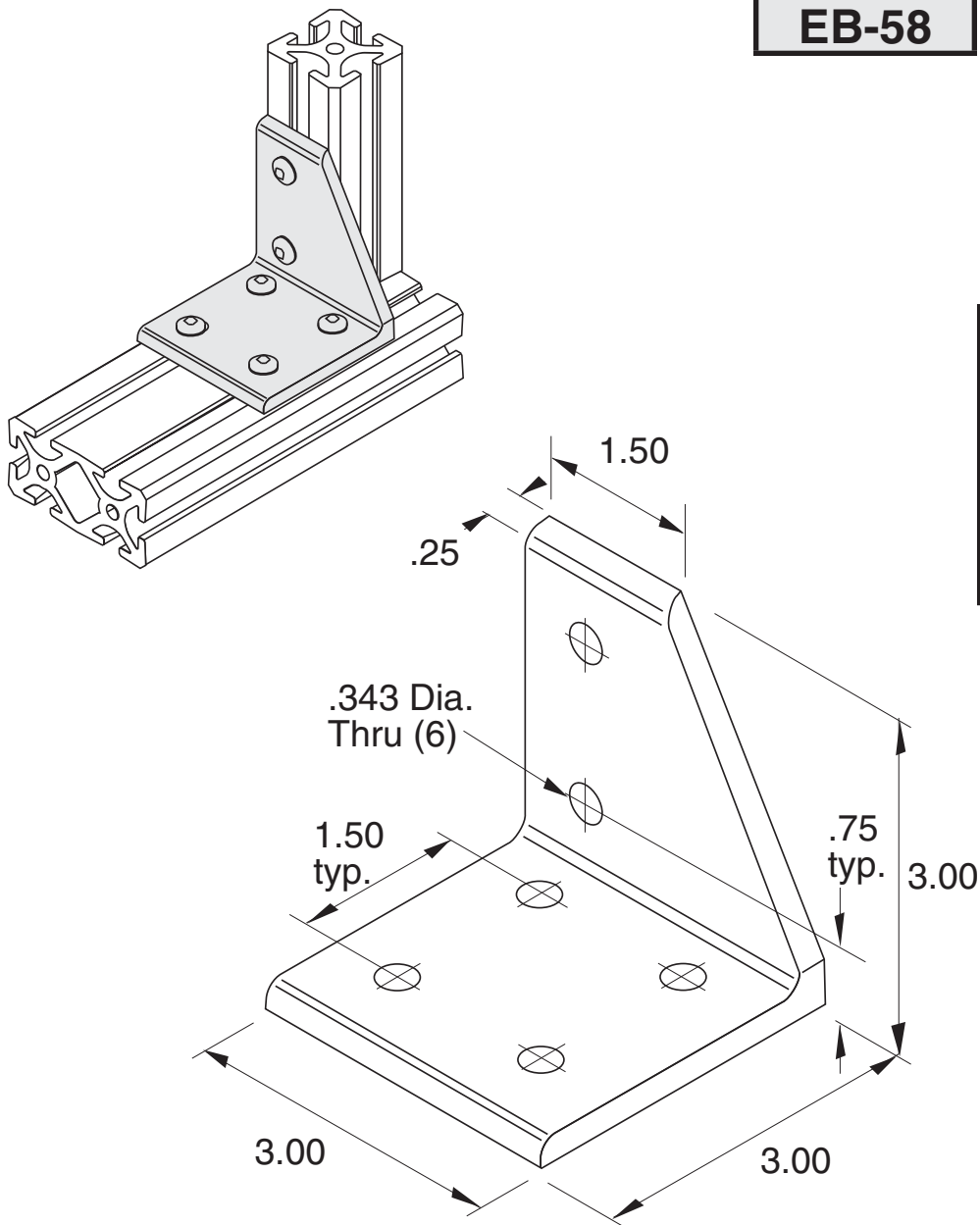
**EB-57**

5/16" SLOTS



Recommended Hardware  
(6) EF-12-.63 BHCS  
(6) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

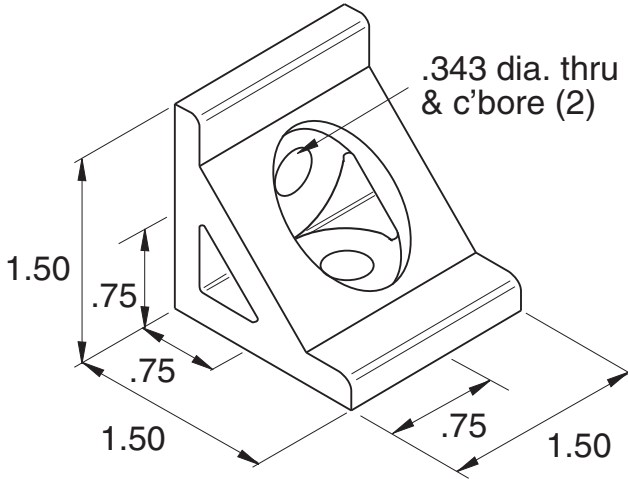


Recommended Hardware  
(6) EF-12-.63 BHCS  
(6) EF-2 T-nut

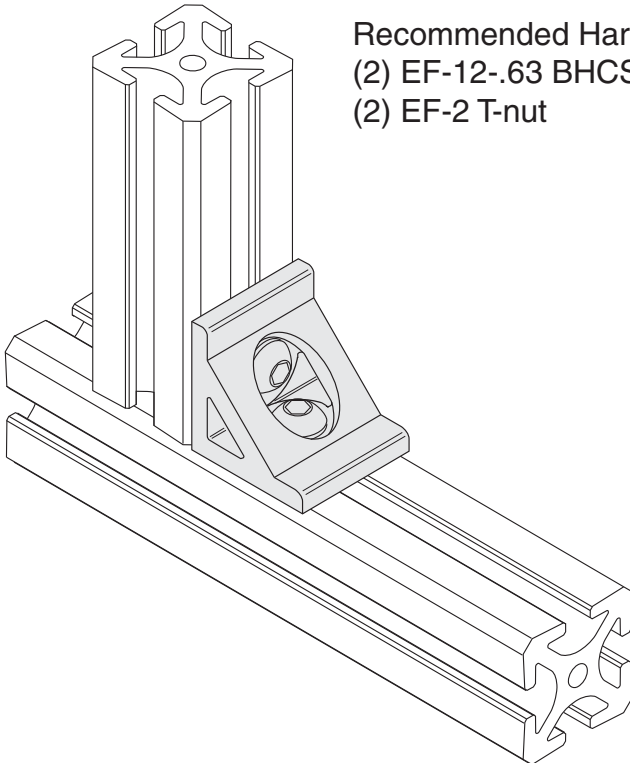
Material - Aluminum  
Finish - Clear Anodize

**EB-111**

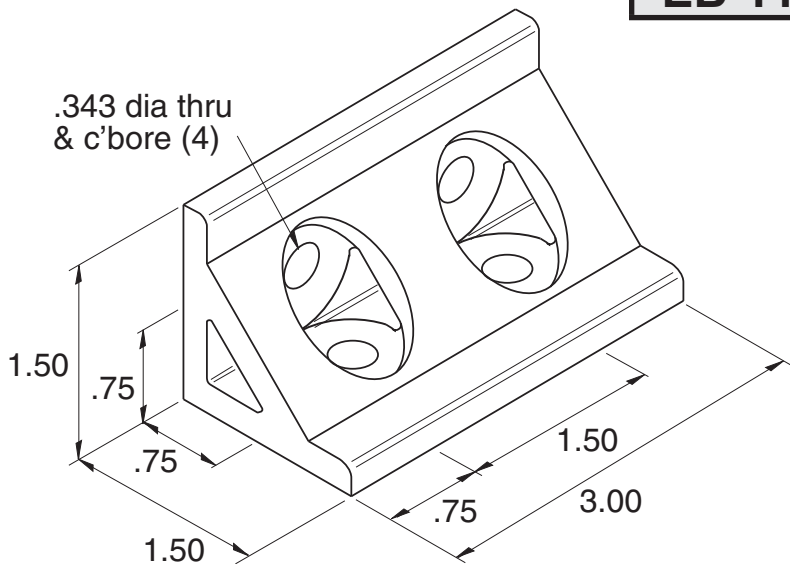
5/16" SLOTS



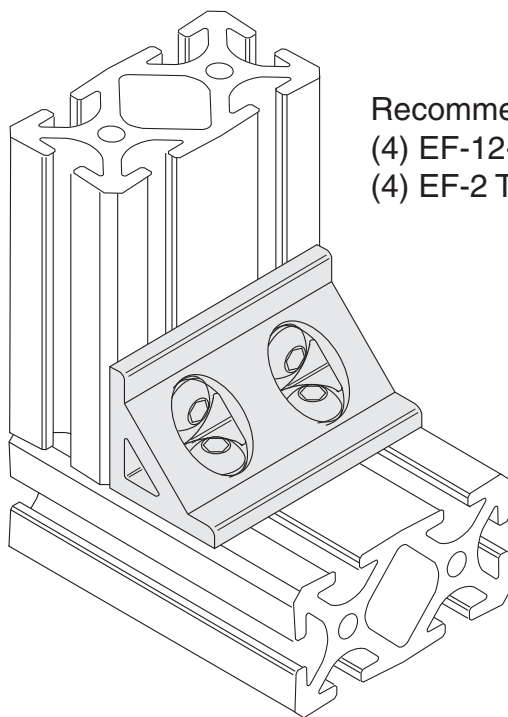
Recommended Hardware  
(2) EF-12-.63 BHCS  
(2) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

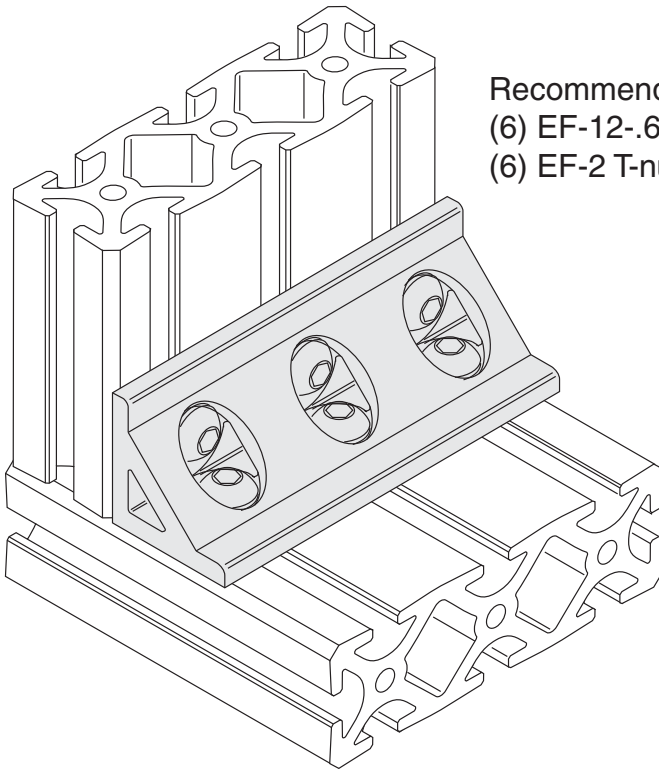
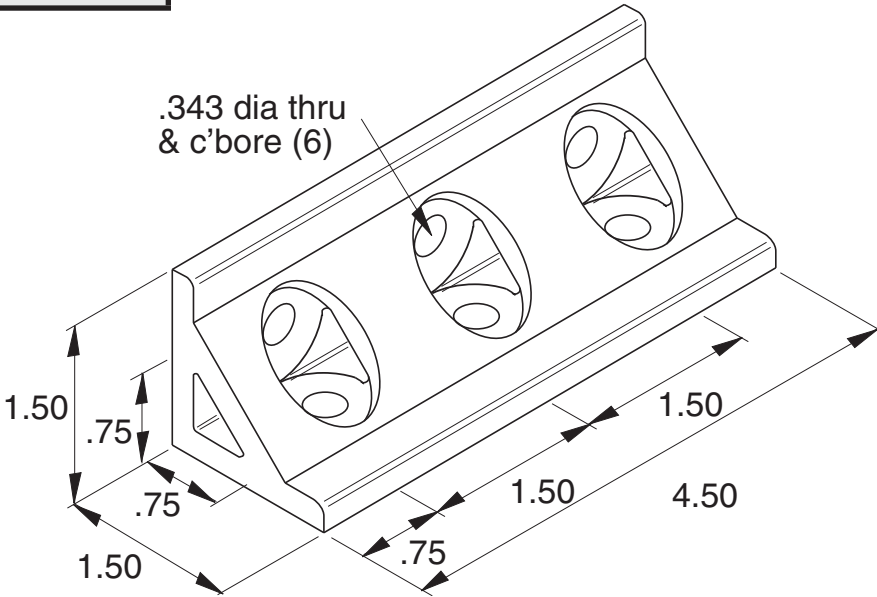


**Recommended Hardware**  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

**Material - Aluminum**  
**Finish - Clear Anodize**

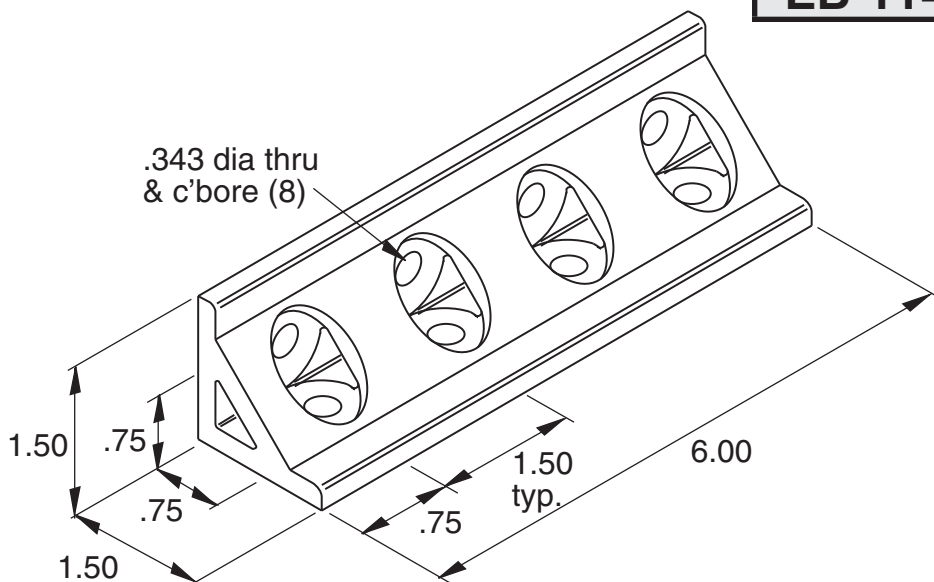
**EB-113**

5/16" SLOTS

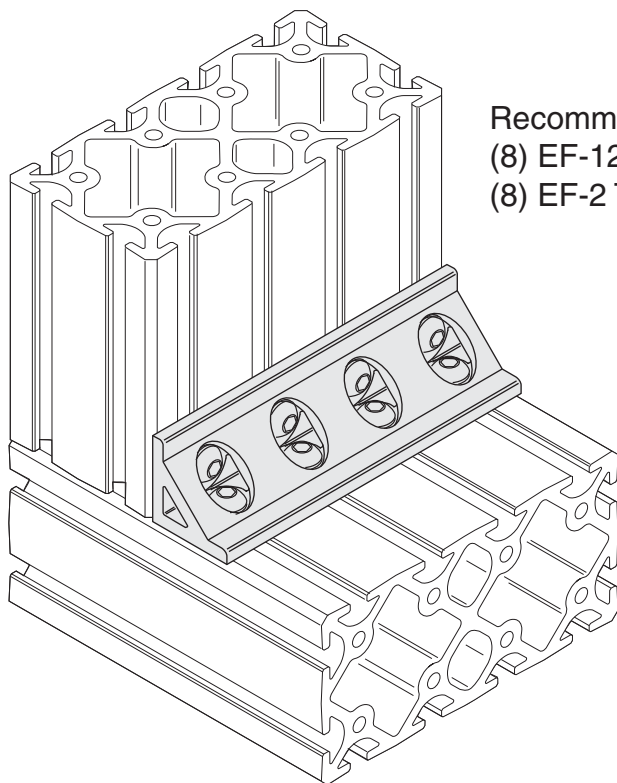


Recommended Hardware  
(6) EF-12-.63 BHCS  
(6) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

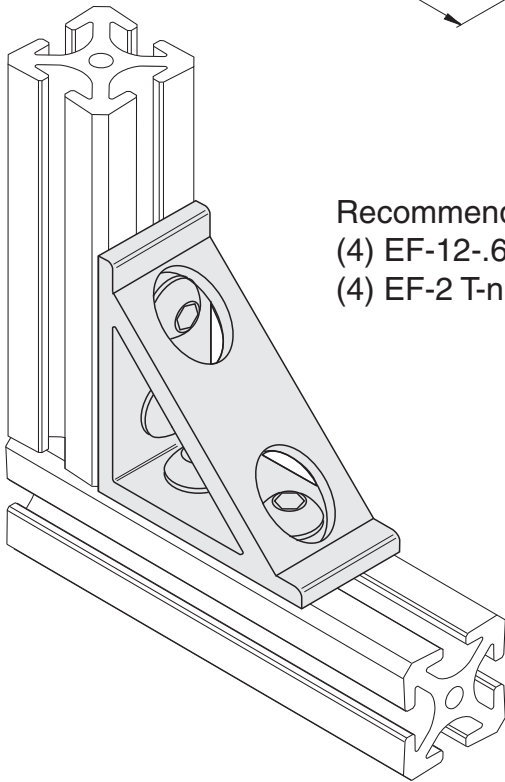
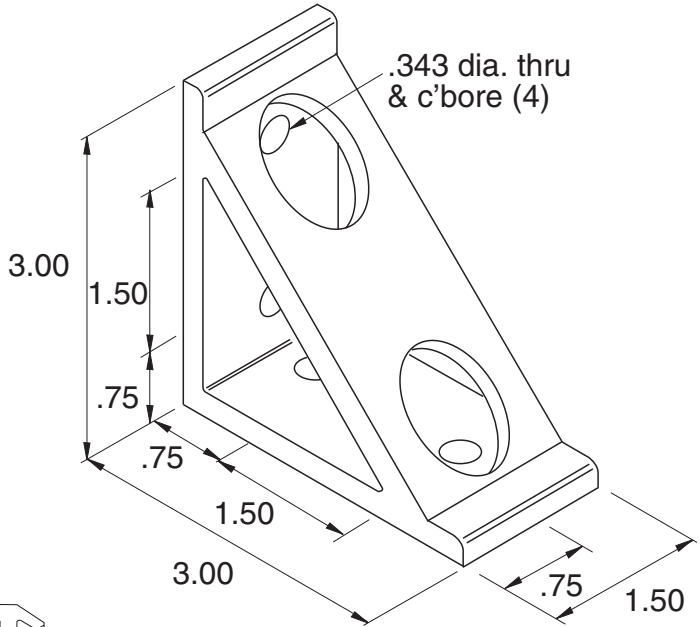


**Recommended Hardware**  
(8) EF-12-.63 BHCS  
(8) EF-2 T-nut

**Material - Aluminum**  
**Finish - Clear Anodize**

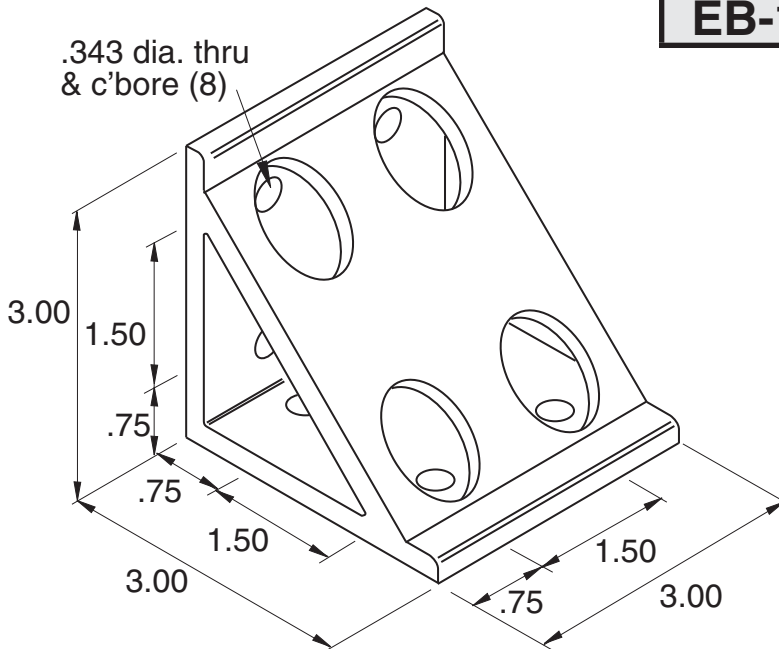
**EB-121**

**5/16" SLOTS**

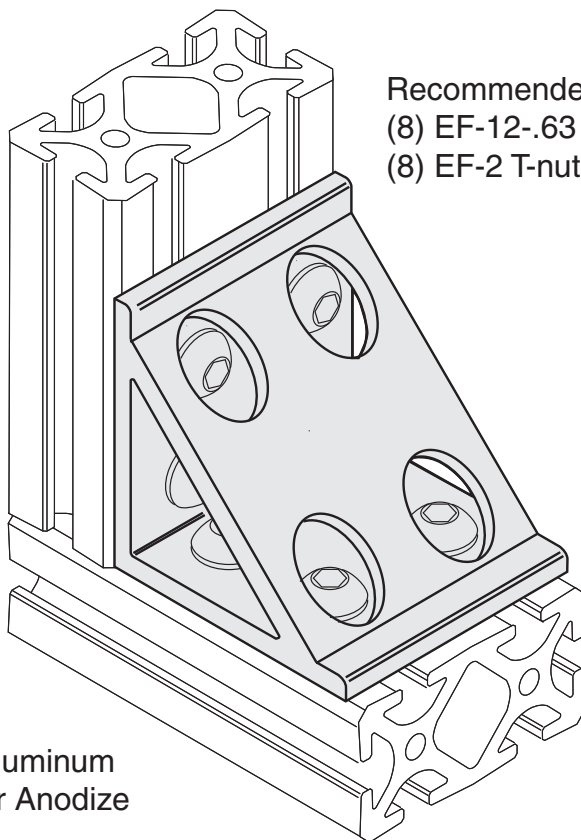


Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**



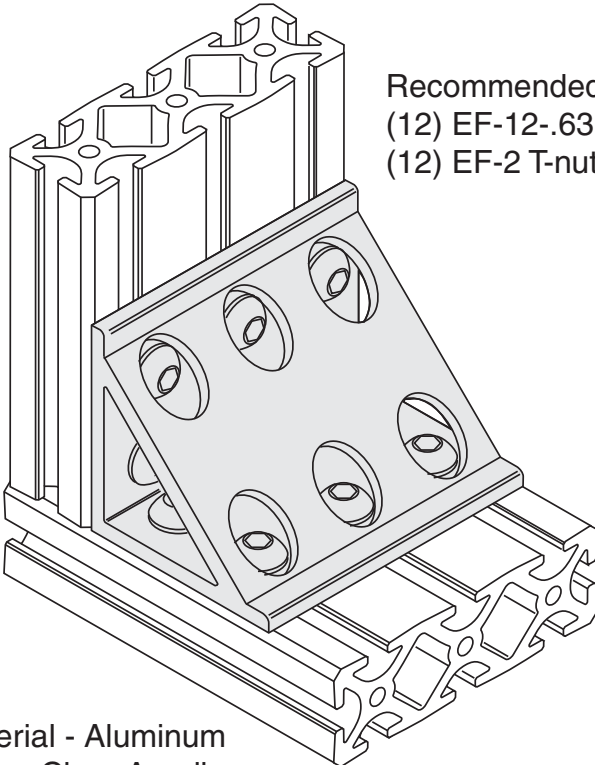
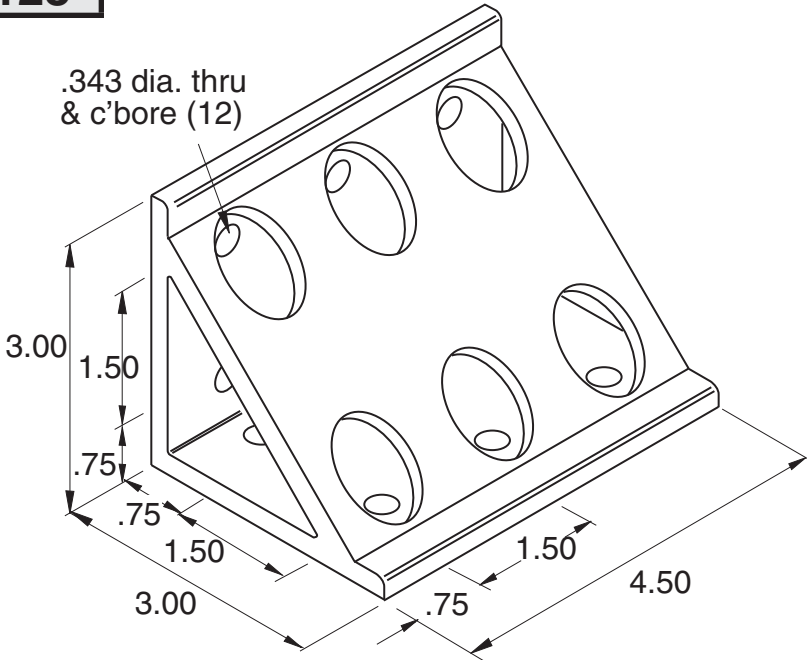
**Recommended Hardware**  
 (8) EF-12-.63 BHCS  
 (8) EF-2 T-nut

**Material - Aluminum**  
**Finish - Clear Anodize**



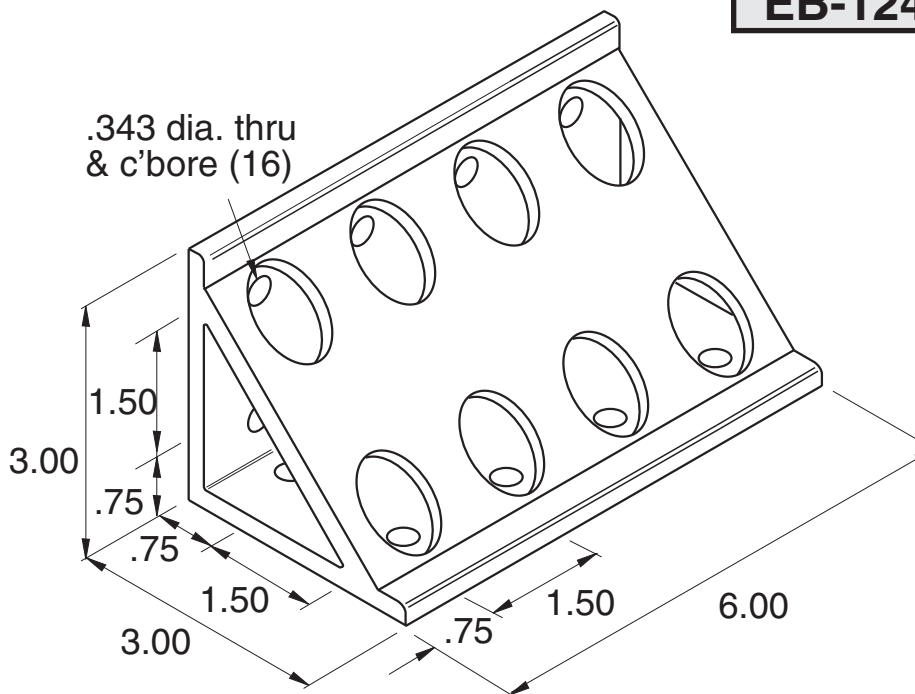
**EB-123**

5/16" SLOTS

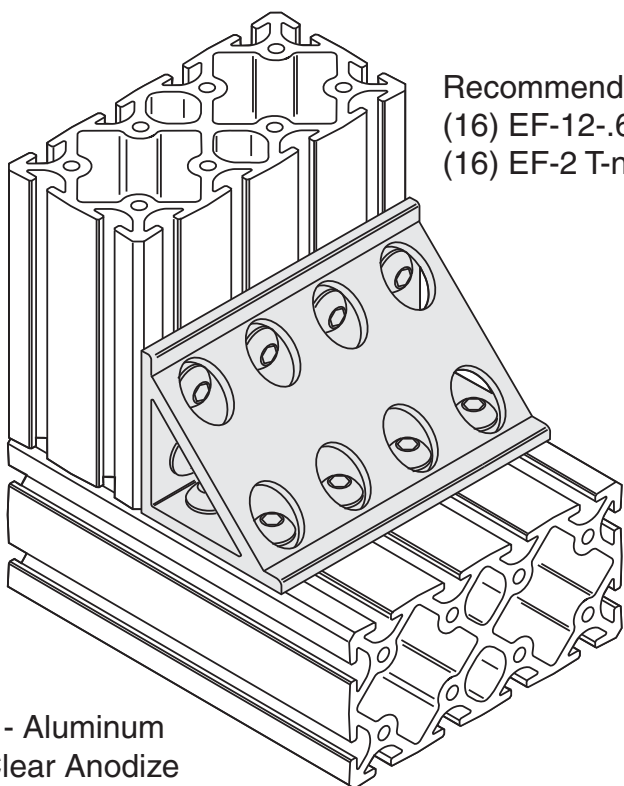


Recommended Hardware  
(12) EF-12-.63 BHCS  
(12) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**



**Recommended Hardware**  
 (16) EF-12-.63 BHCS  
 (16) EF-2 T-nut

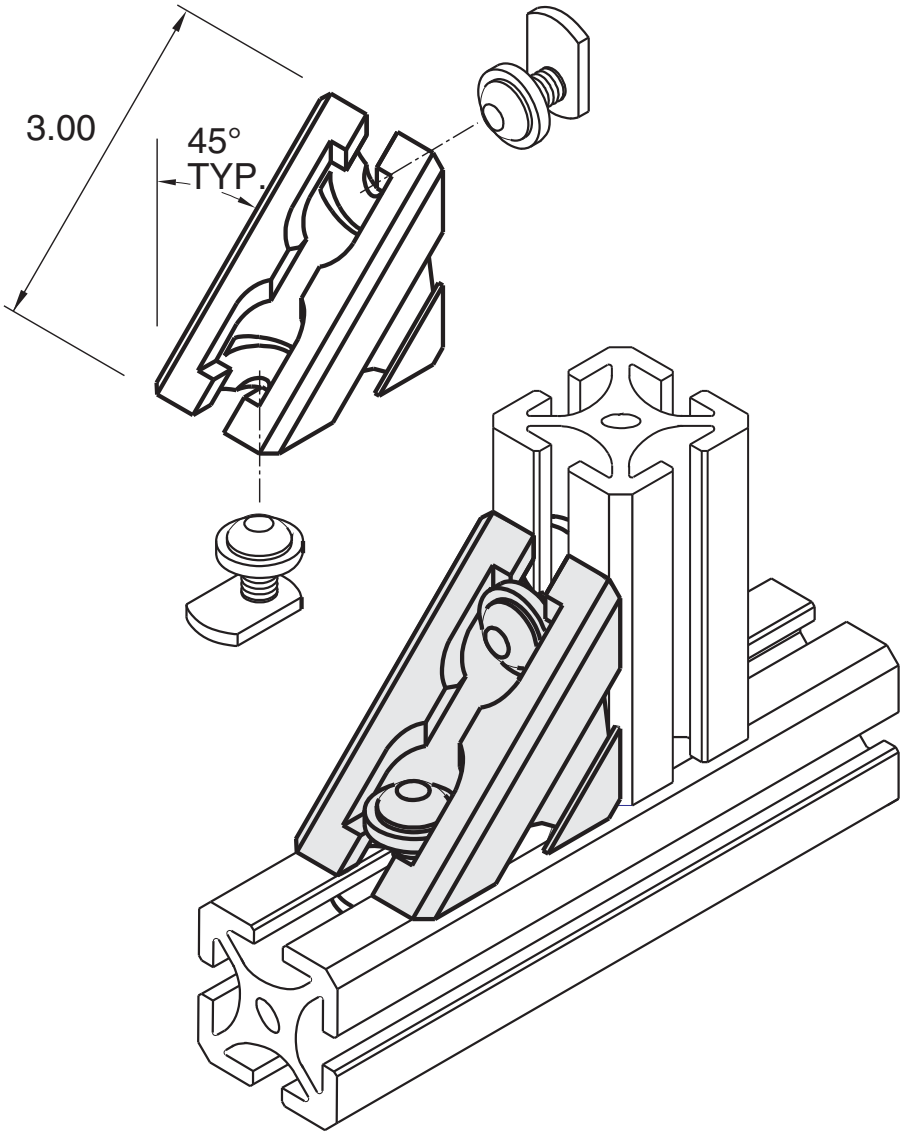
**Material - Aluminum**  
**Finish - Clear Anodize**

1.5 x 1.5 Extrusion  
Corner Gusset



**EB-6**

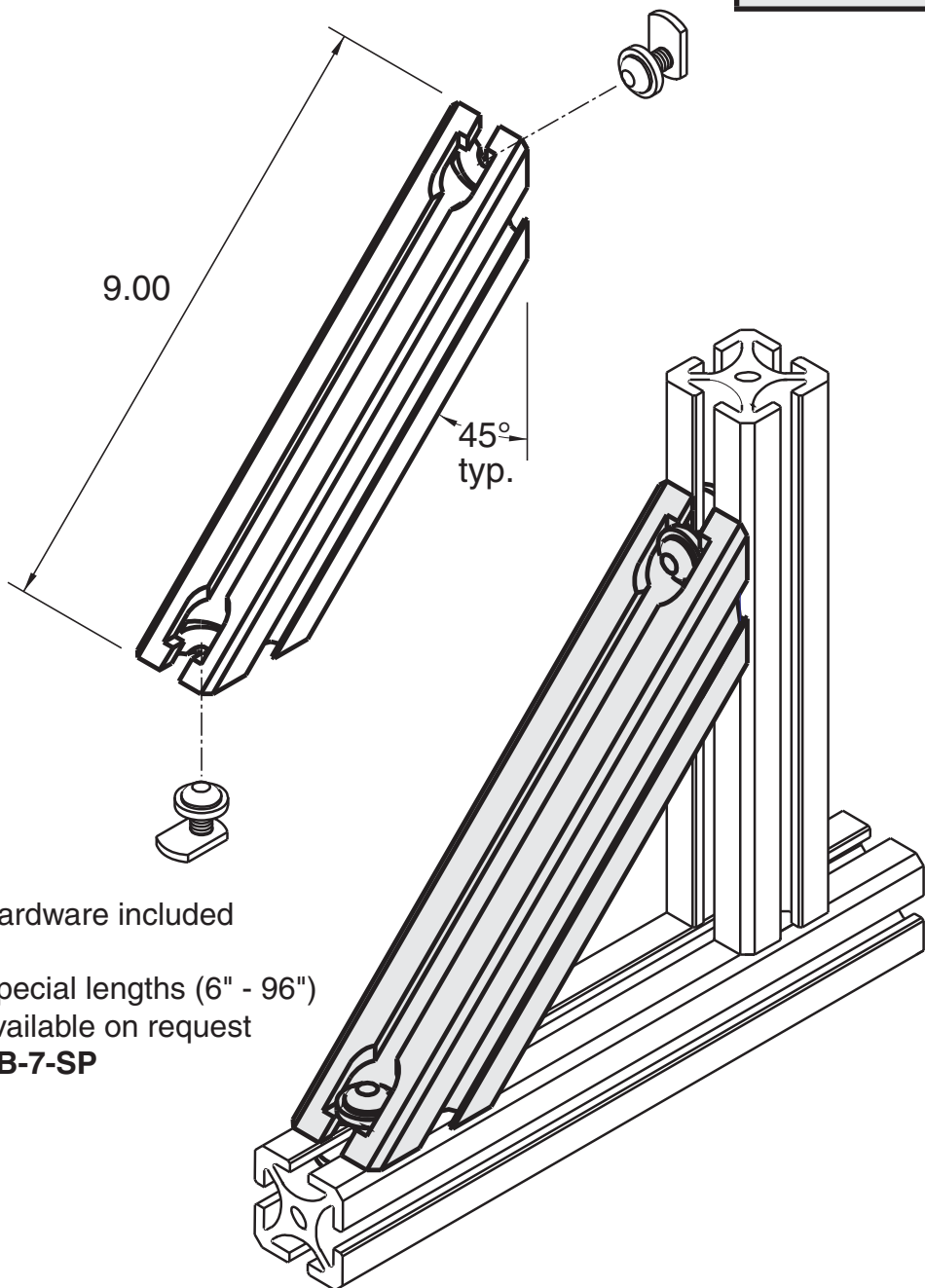
5/16" SLOTS



Hardware included

Material - Aluminum (EX-1)  
Finish - Clear Anodize

**5/16" SLOTS**



Hardware included

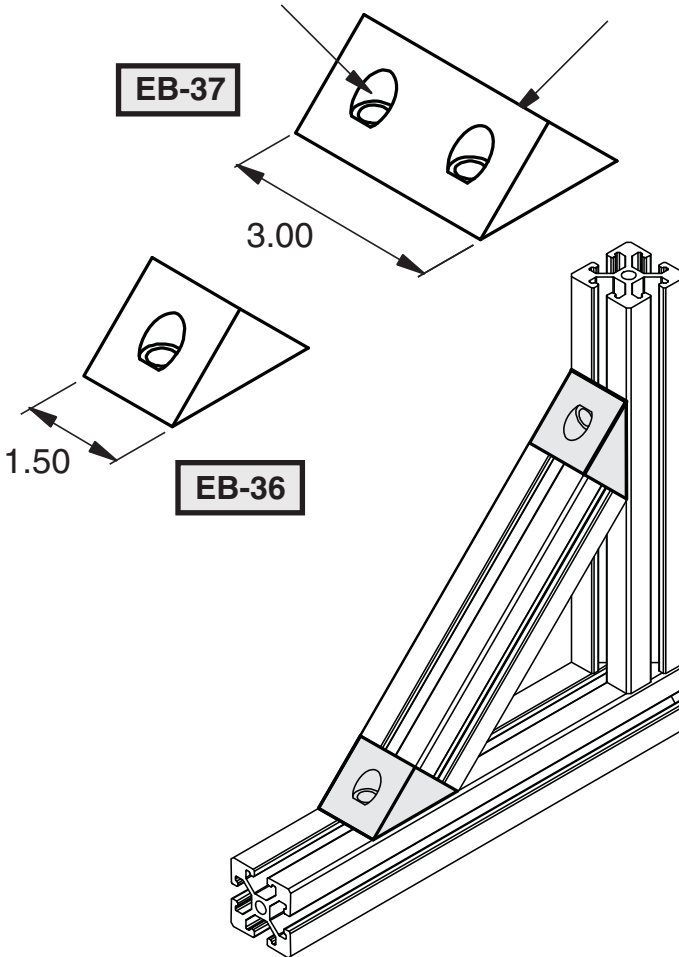
Special lengths (6" - 96")  
available on request  
**EB-7-SP**

Material - Aluminum (EX-1)  
Finish - Clear Anodize

<b>EB-36</b>
<b>EB-37</b>

drilled and c'bored  
for EF-11-.63 SHCS

drilled and c'bored  
for EF-11-.75 SHCS



5/16" SLOTS

### EB-36

#### Recommended Hardware

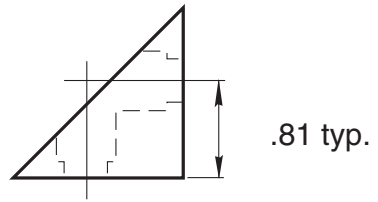
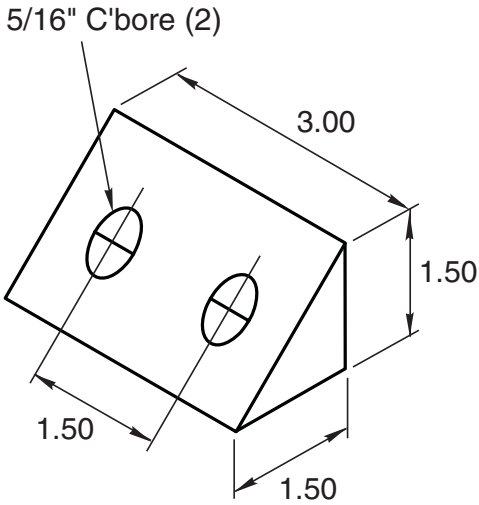
- (1) EF-11-.75 SHCS
- (1) EF-11-.63 SHCS
- (1) EF-2 T-nut

### EB-37

#### Recommended Hardware

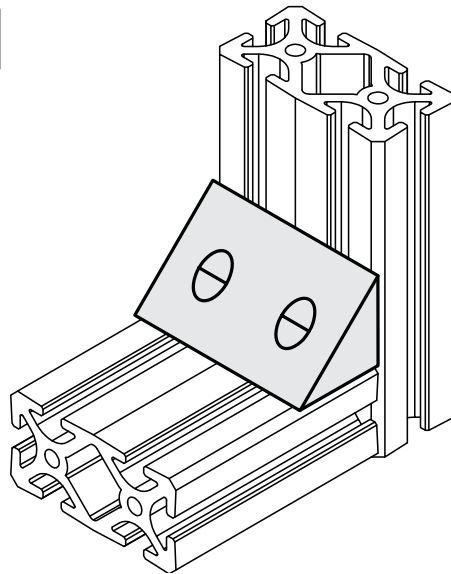
- (2) EF-11-.75 SHCS
- (2) EF-11-.63 SHCS
- (2) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



5/16" SLOTS

Recommended Hardware  
(4) EF-11-.63 SHCS  
(4) EF-2 T-nut



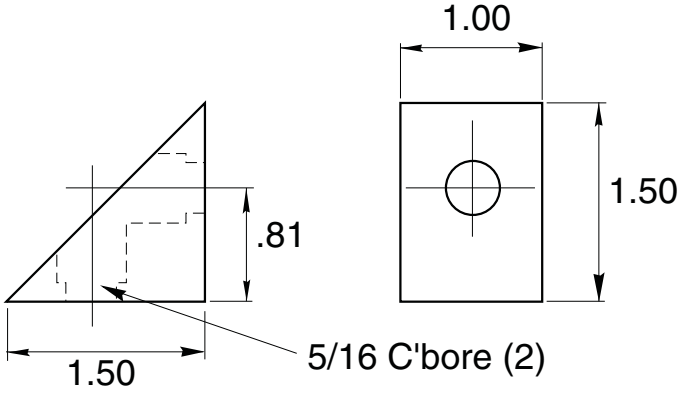
Material - Aluminum  
Finish - Clear Anodize

**Corner Gusset**  
(used with EX-52 and EX-54)

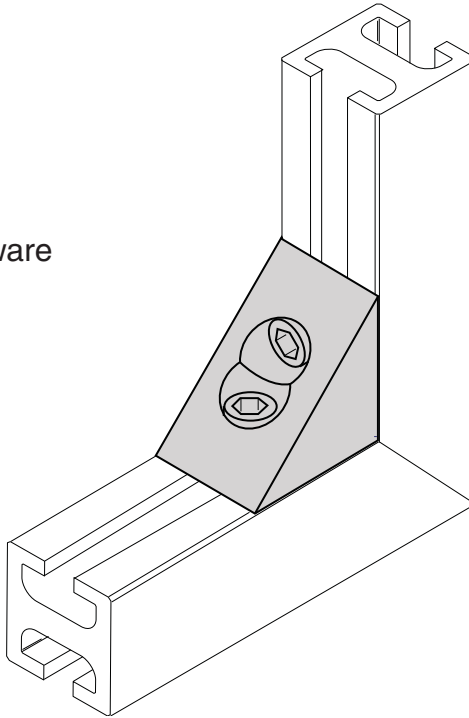


**EB-20**

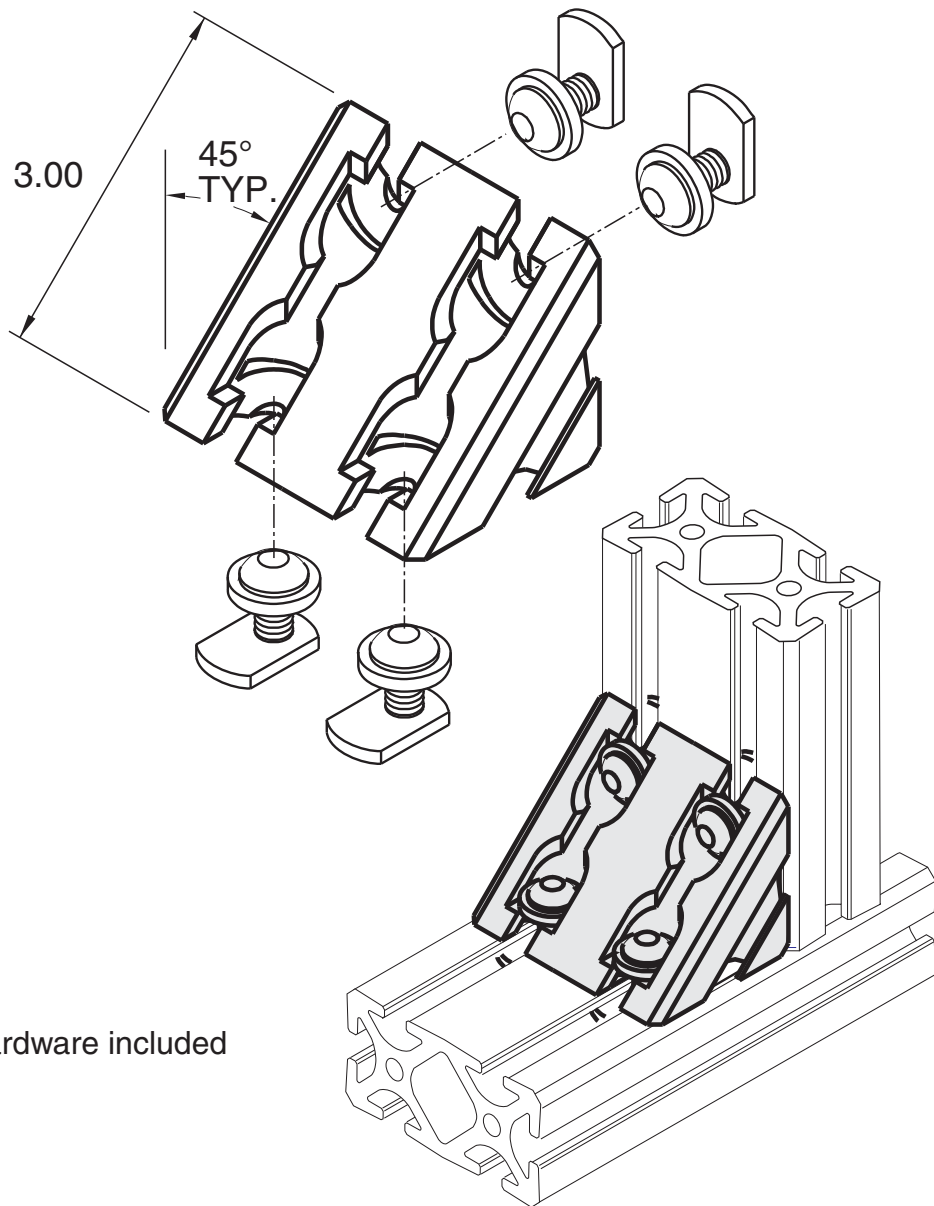
5/16" SLOTS



Recommended Hardware  
(4) EF-11-.63 SHCS  
(4) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize



Hardware included

Material - Aluminum (EX-2)  
Finish - Clear Anodize

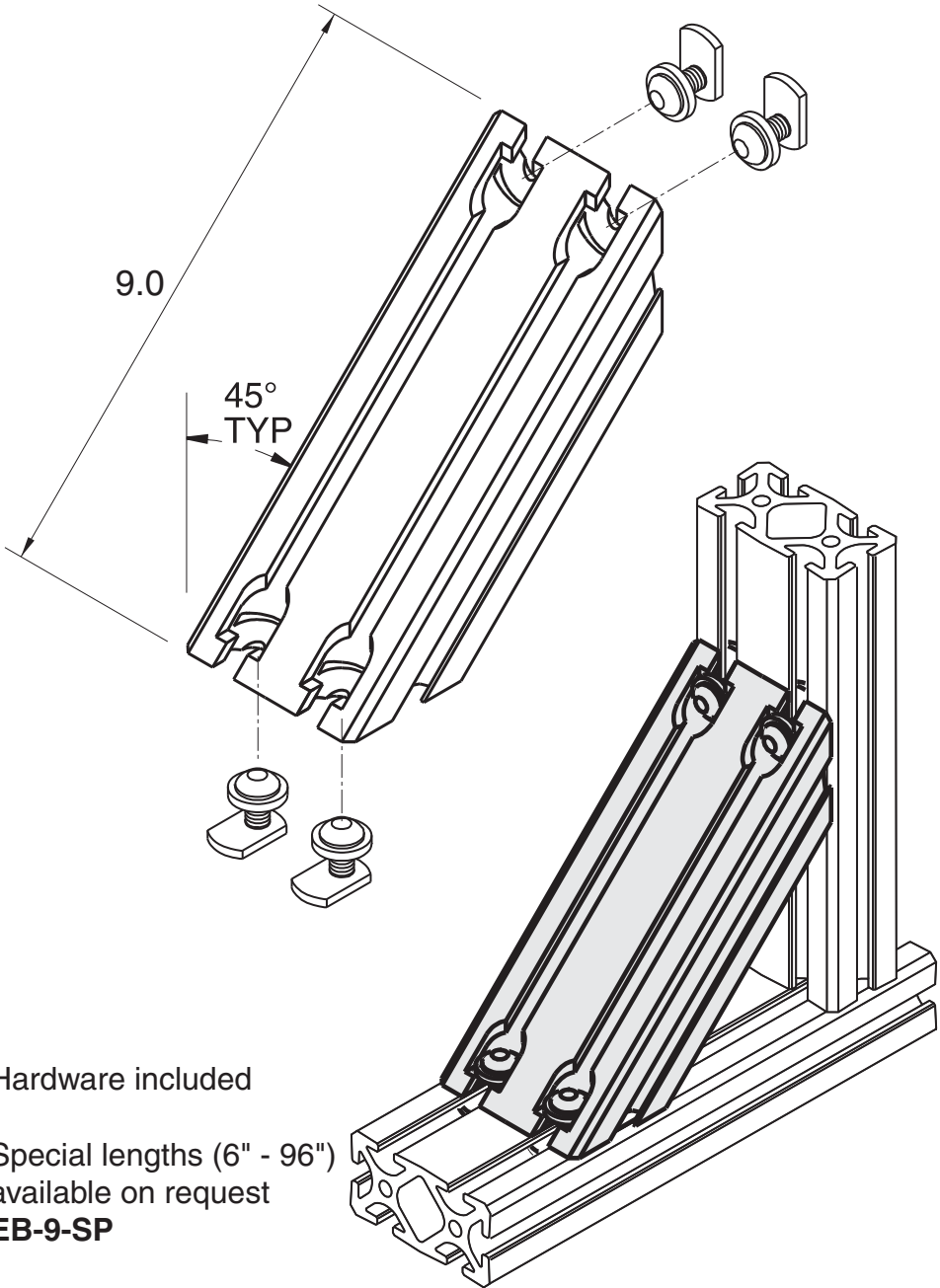


1.5 x 3.0 Extrusion  
Corner Gusset



**EB-9**

**5/16" SLOTS**



Hardware included

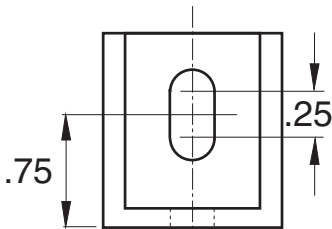
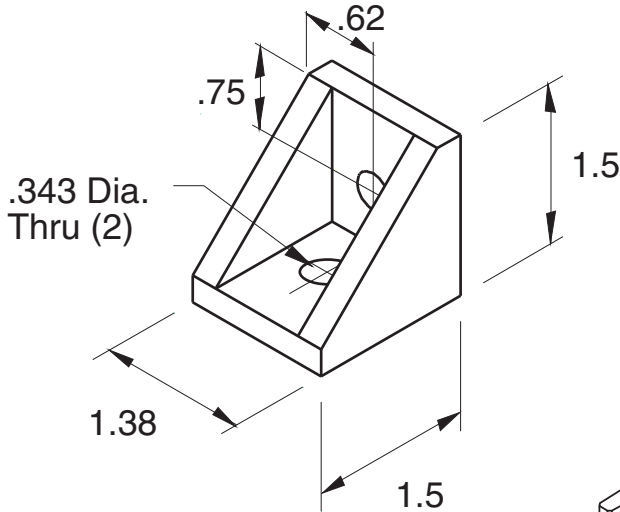
Special lengths (6" - 96")  
available on request  
**EB-9-SP**

Material - Aluminum (EX-2)  
Finish - Clear Anodize

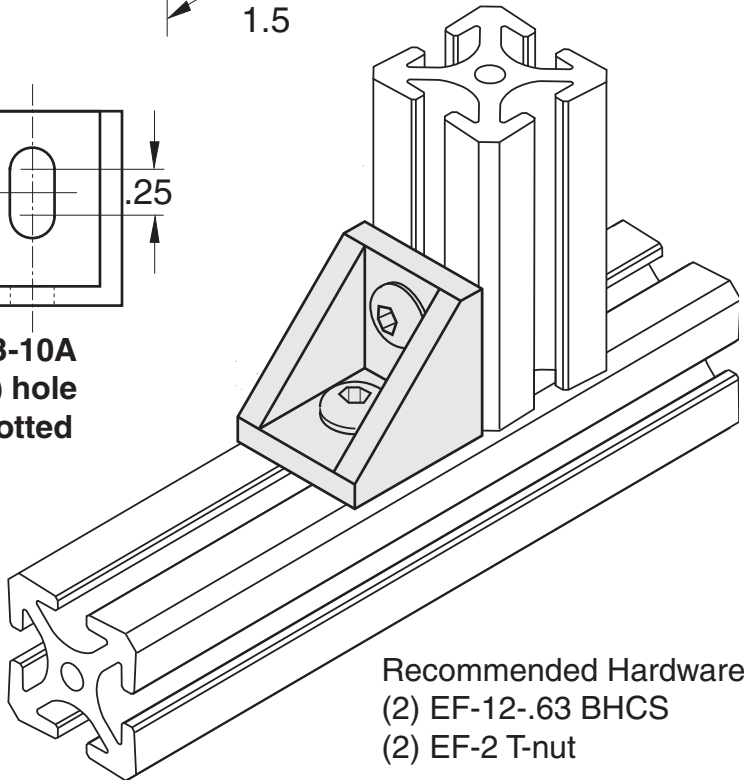
**EB-10**

Slotted

**EB-10A**



**EB-10A  
(1) hole  
slotted**



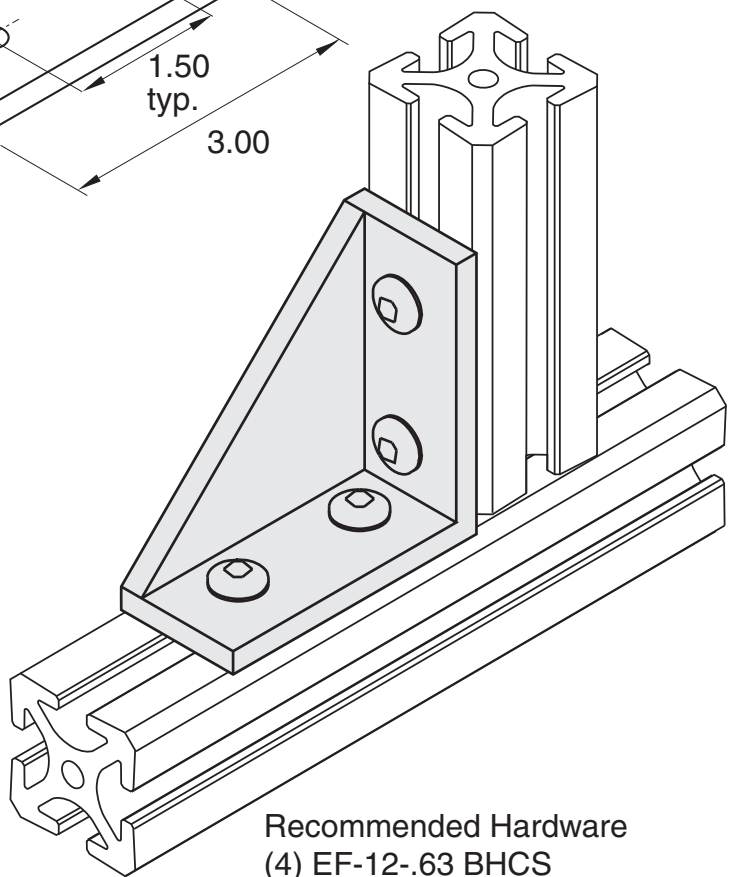
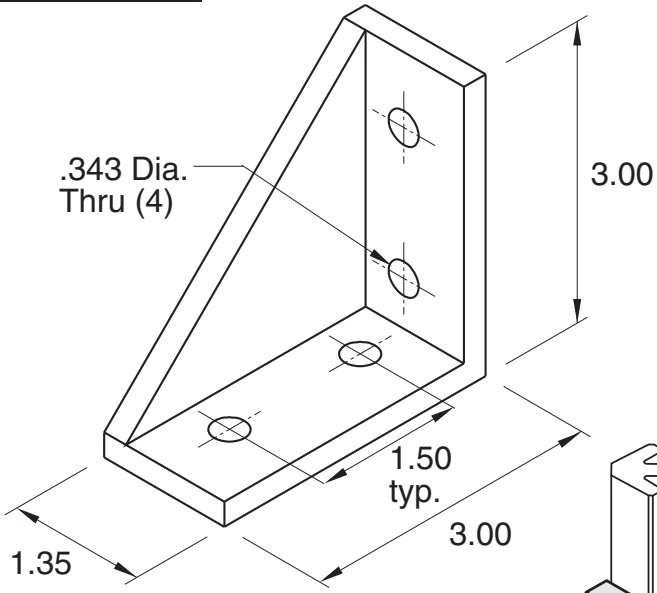
**Recommended Hardware**  
(2) EF-12-.63 BHCS  
(2) EF-2 T-nut

**Material - Aluminum**  
**Finish - Grey Powder Coat**

**5/16" SLOTS**

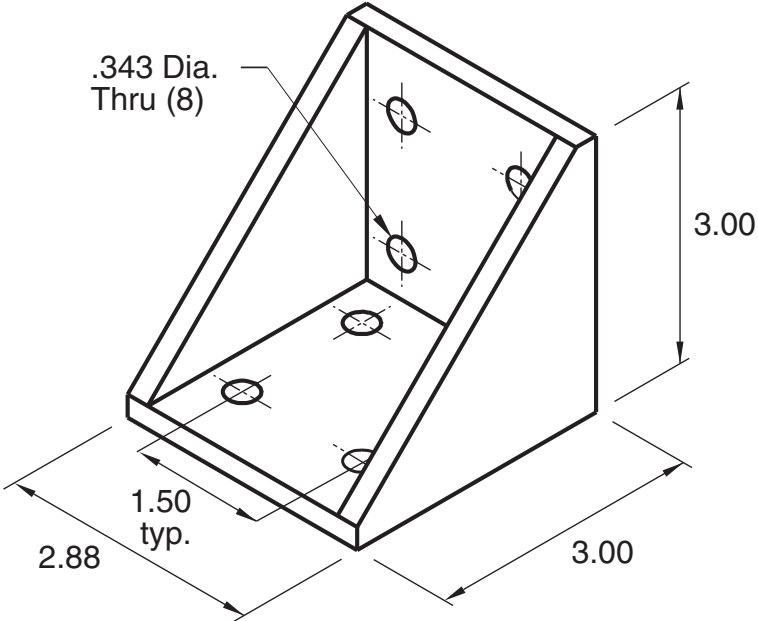
**EB-11**

**5/16" SLOTS**



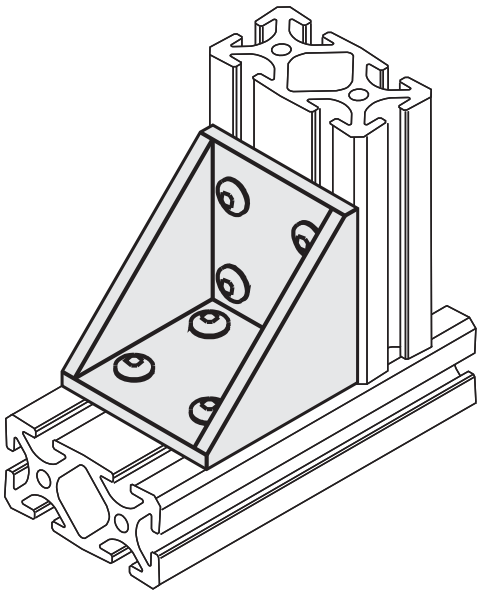
Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

Material - Aluminum  
Finish - Grey Powder Coat



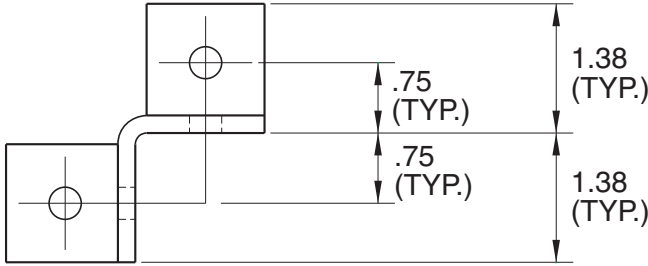
5/16" SLOTS

Recommended Hardware  
(8) EF-12-.63 BHCS  
(8) EF-2 T-nut

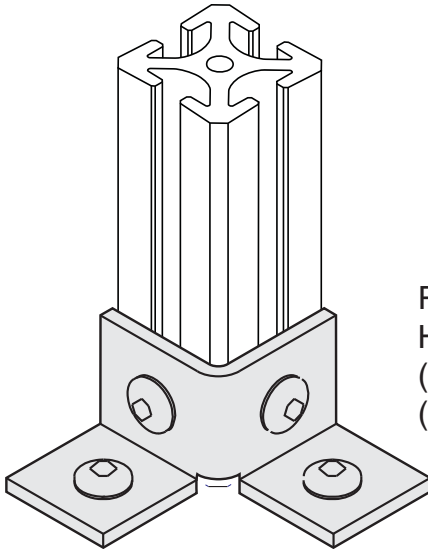
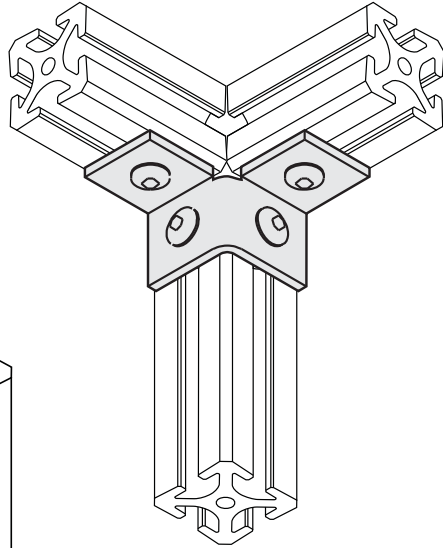
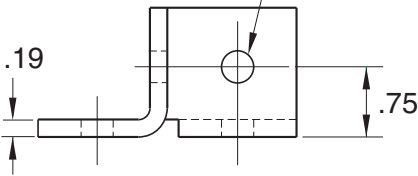


Material - Aluminum  
Finish - Grey Powder Coat

**EB-17**



.343 Dia.  
Thru (4)

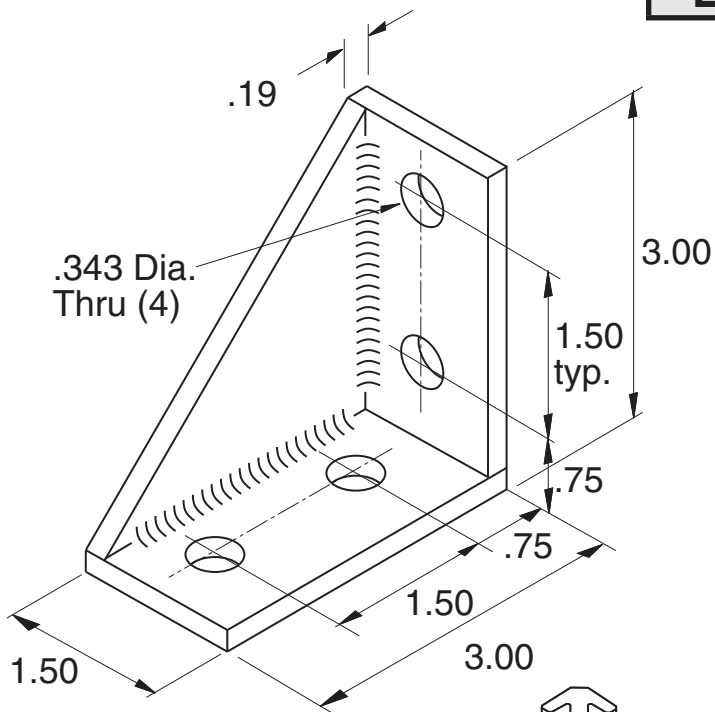


Recommended  
Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

Material - Steel  
Finish - Zinc Plated

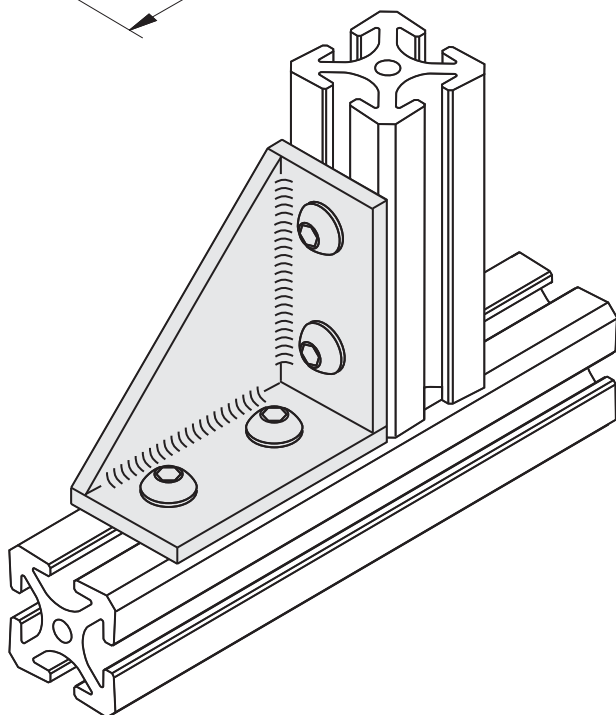
5/16" SLOTS

**EB-16**



**5/16" SLOTS**

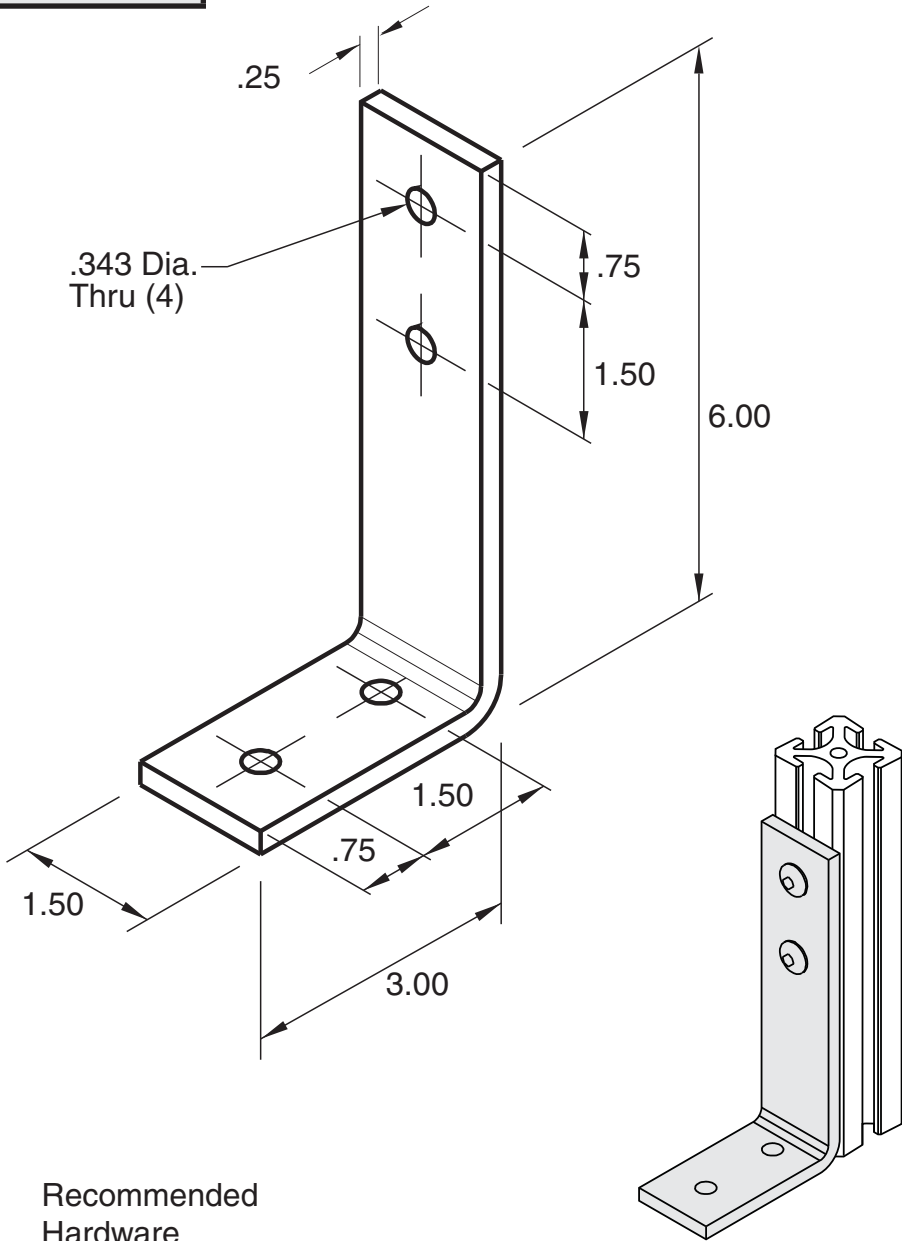
Recommended  
Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut



**Material - Steel**  
**Finish - Black Powder Coat**

**EB-15P**

5/16" SLOTS

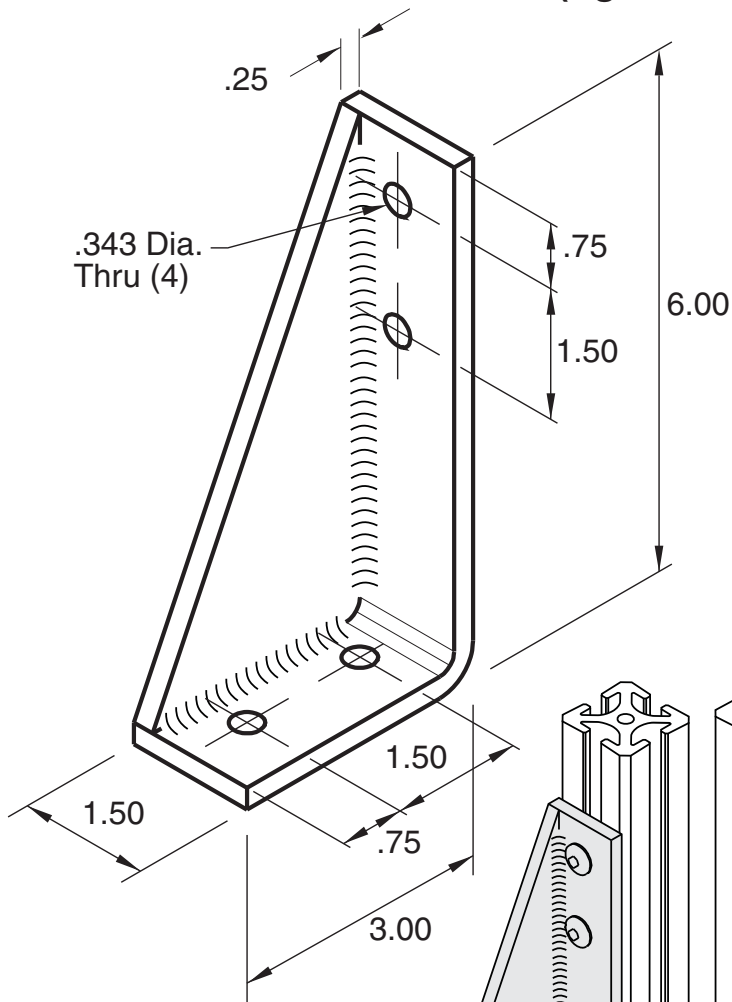


Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

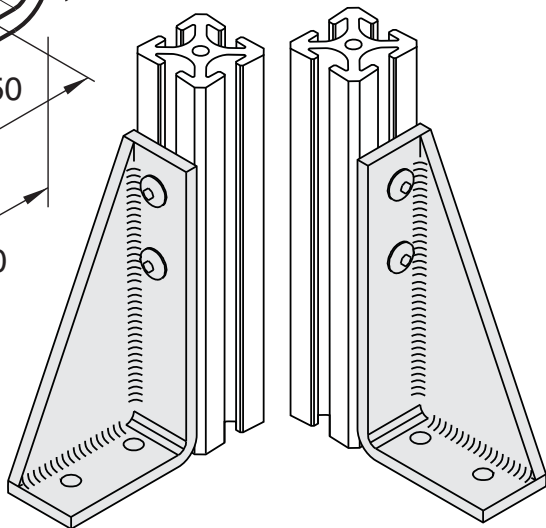
Material - Steel  
Finish - Black Powder Coat

**EB-15LH (left hand )  
EB-15RH (right hand )**

**EB-15**



5/16" SLOTS



**EB-15LH  
(left hand)**

**EB-15RH  
(right hand)**

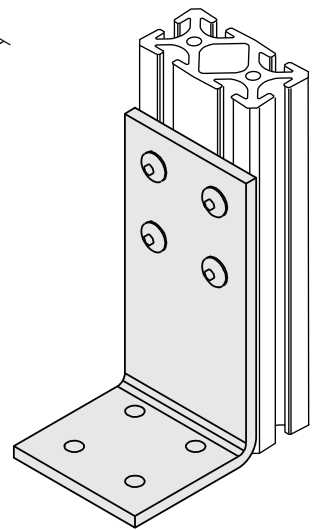
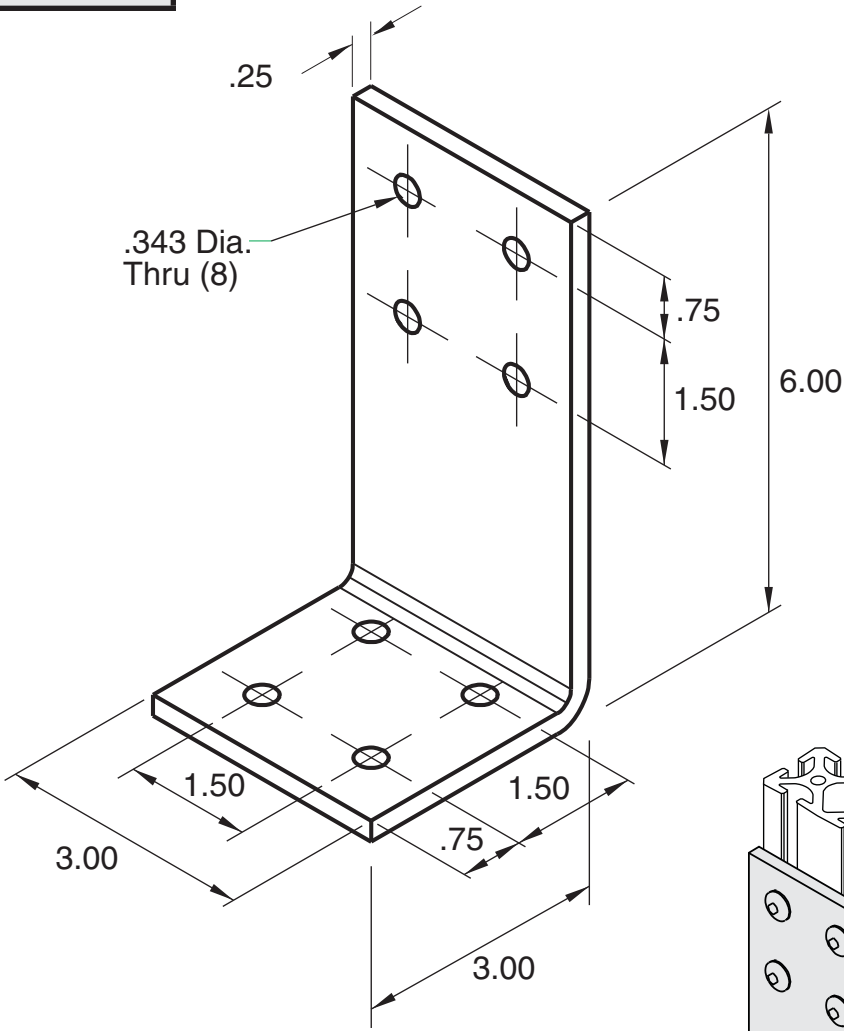
Recommended  
Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

Material - Steel  
Finish - Black Powder Coat



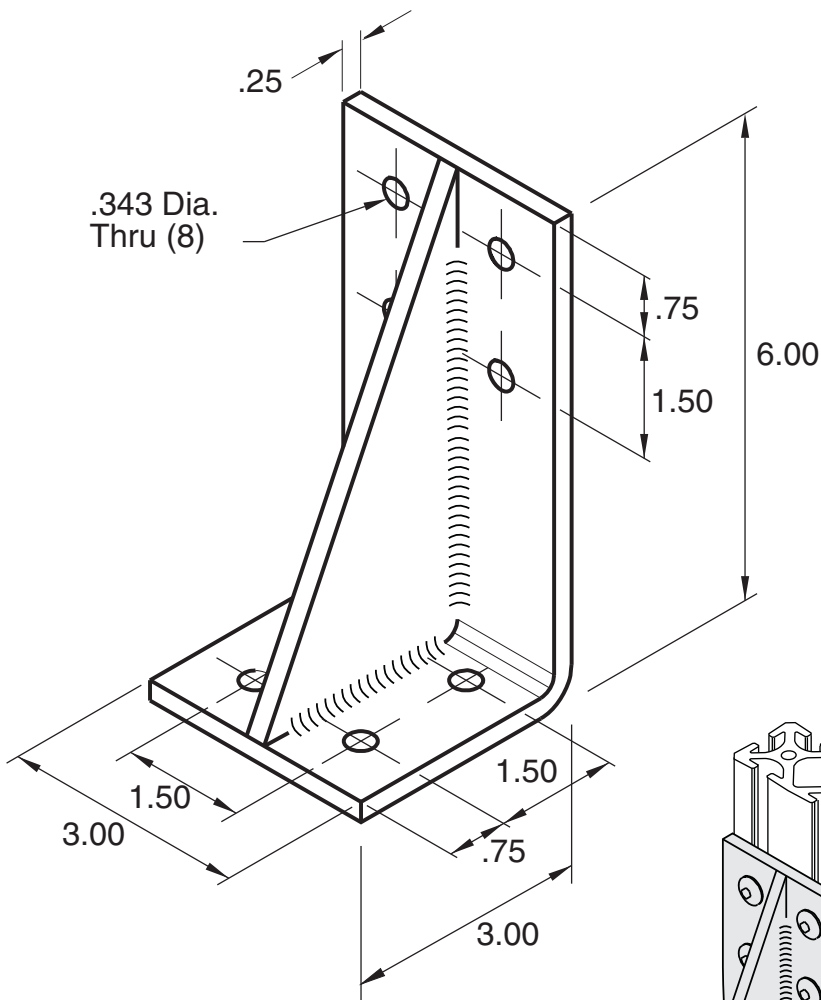
**EB-14P**

5/16" SLOTS



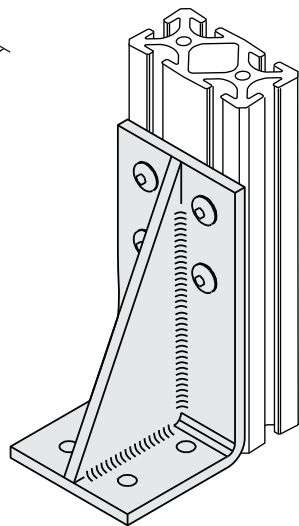
Recommended Hardware  
(8) EF-12-.63 BHCS  
(8) EF-2 T-nut

Material - Steel  
Finish - Black Powder Coat



**5/16" SLOTS**

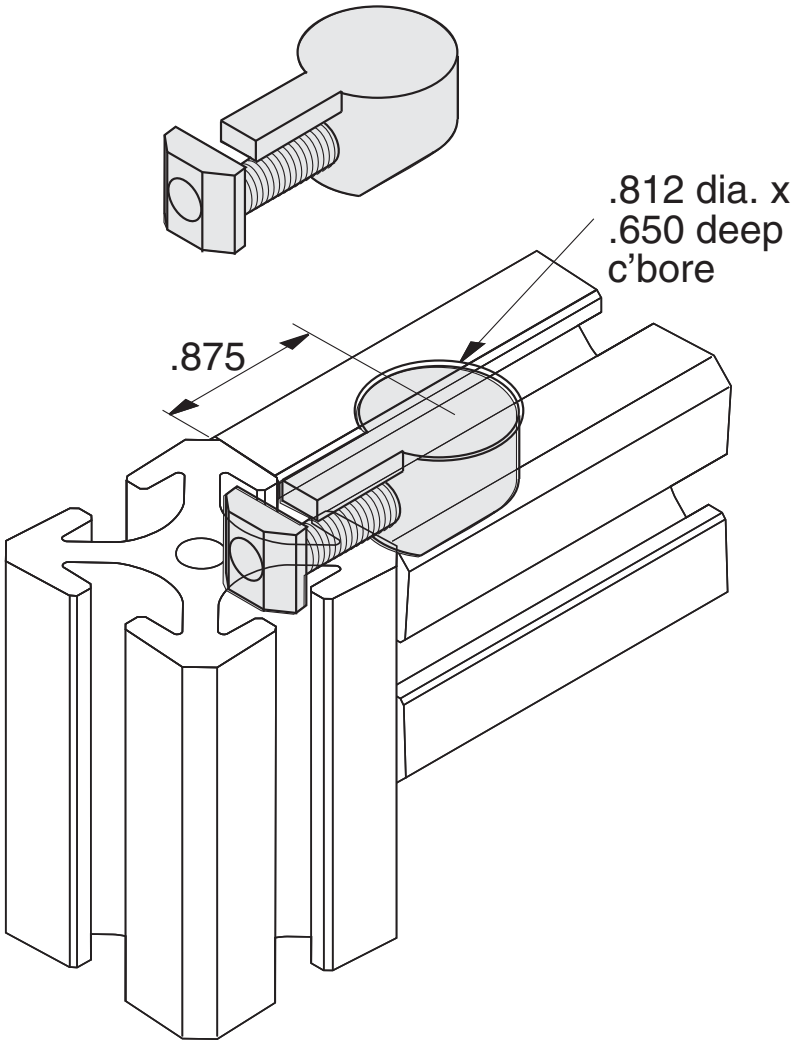
Recommended  
Hardware  
(8) EF-12-.63 BHCS  
(8) EF-2 T-nut



Material - Steel  
Finish - Black Powder Coat

<b>EF-62</b>	with hardware
<b>EF-62P</b>	without hardware
<b>EF-62M</b>	with metric hardware
<b>EF-62SS</b>	with stainless steel bolt

5/16" SLOTS

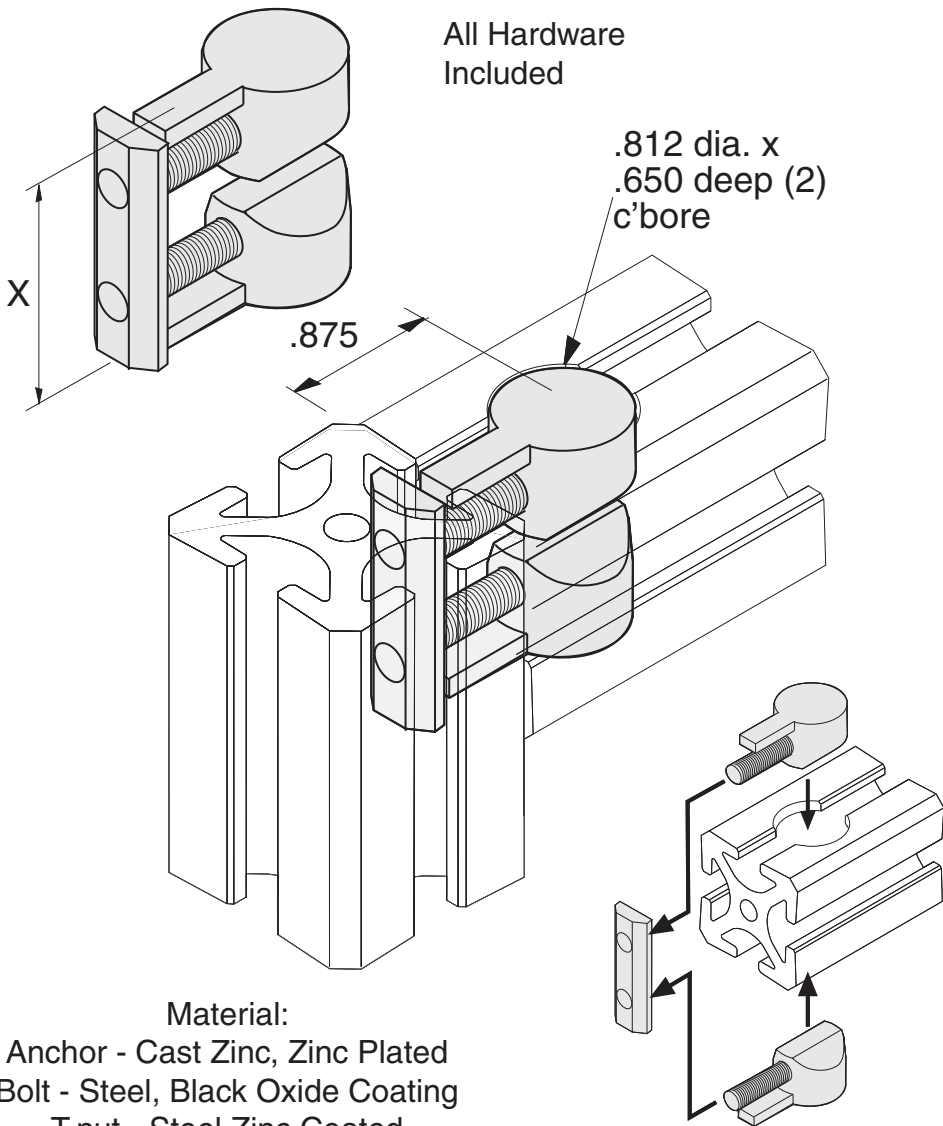


**Material:**  
Anchor - Cast Zinc, Zinc Plated  
Bolt - Steel, Black Oxide Coating  
T-nut - Steel Zinc Coated

X = 1.50 in.	<b>EF-63</b>
X = 1.50 in. with metric hardware	<b>EF-63M</b>
X = 1.50 in. with stainless steel bolt	<b>EF-63SS</b>
X = 3.0 in.	<b>EF-64</b>
X = 3.0 in. with metric hardware	<b>EF-64M</b>
X = 3.0 in. with stainless steel bolt	<b>EF-64SS</b>

**5/16" SLOTS**

All Hardware Included



**Material:**  
 Anchor - Cast Zinc, Zinc Plated  
 Bolt - Steel, Black Oxide Coating  
 T-nut - Steel Zinc Coated

# Anchor Butt Fastener

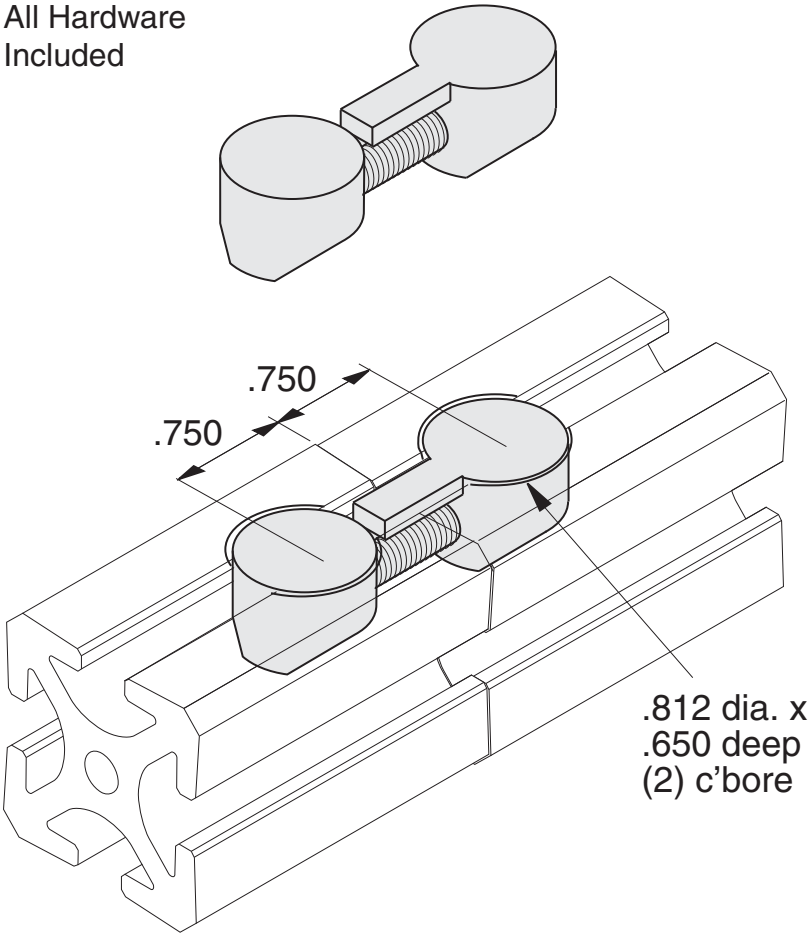


<b>EF-61</b>
<b>EF-61M</b>
<b>EF-61SS</b>

with metric hardware

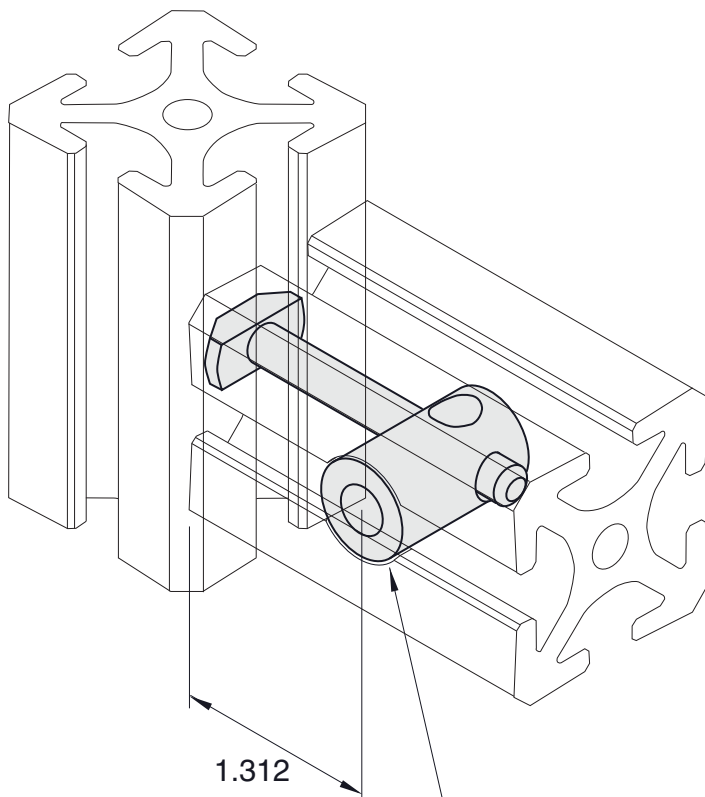
with stainless steel bolt

All Hardware  
Included



### Material:

Anchor - Cast Zinc, Zinc Plated  
Bolt - Steel, Black Oxide Coating  
T-nut - Steel Zinc Coated

**5/16" SLOTS****DRILL  $\varnothing$  5/8" X 1.00 DEEP**

Hardware Included

Use with 5/16" Slot Extrusions Only

**Material**

Anchor - Cold Rolled Steel

Bolt - Cold Rolled Steel

Set Screw - Steel, Black Oxide Coating

# Plate Connector

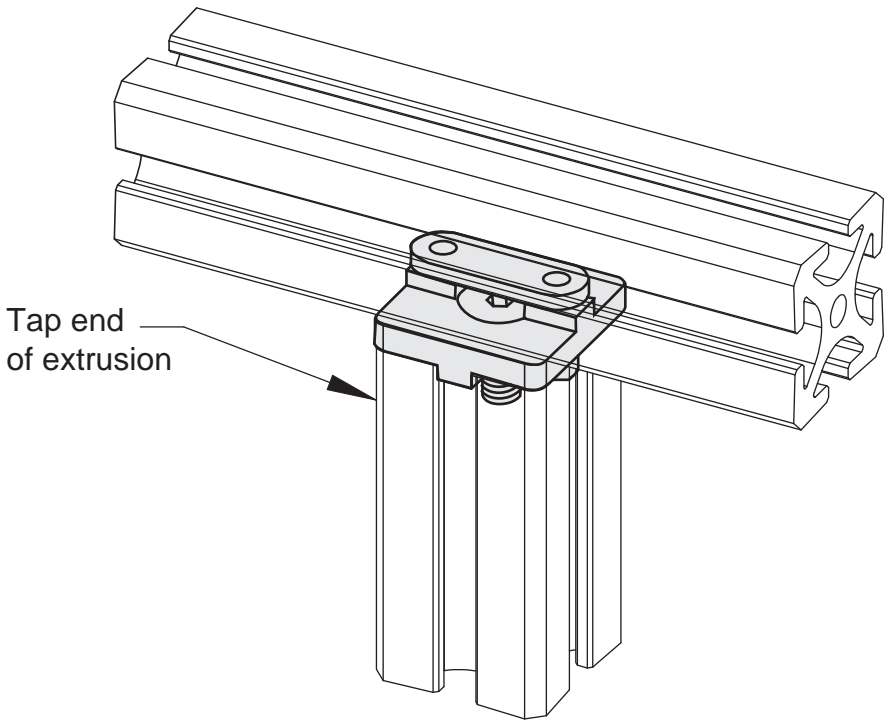
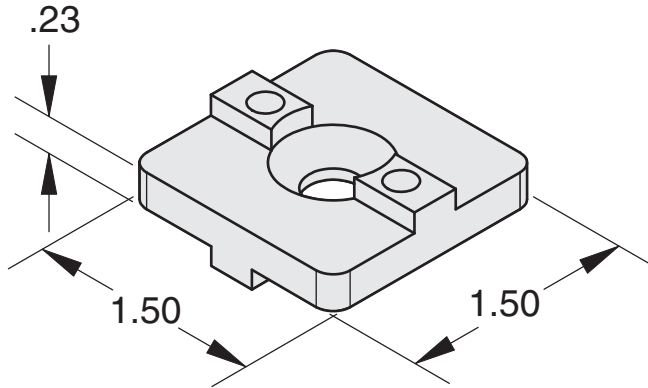


<b>EF-100</b>
<b>EF-100M</b>

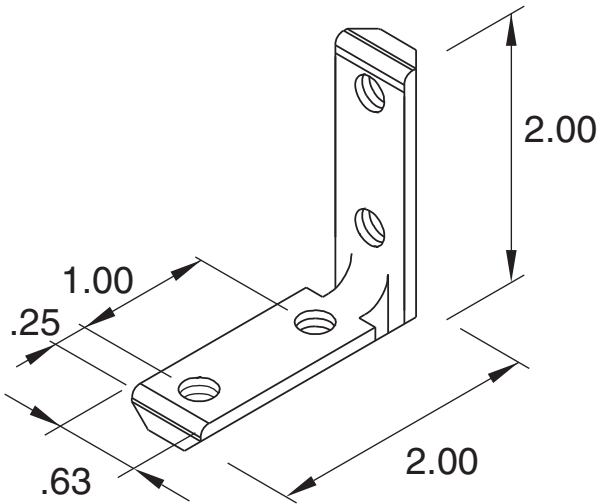
hardware included

metric hardware included

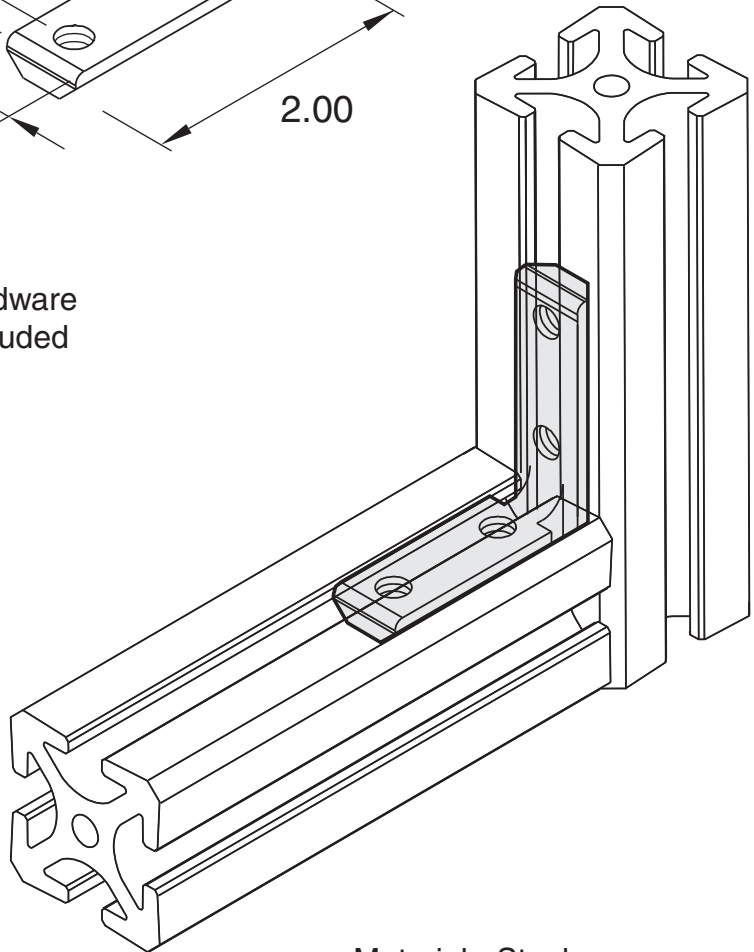
5/16" SLOTS



Material - Cast Zinc  
Finish - Zinc Plated



Hardware  
Included



**5/16" SLOTS**

Material - Steel  
Finish - Zinc Plated

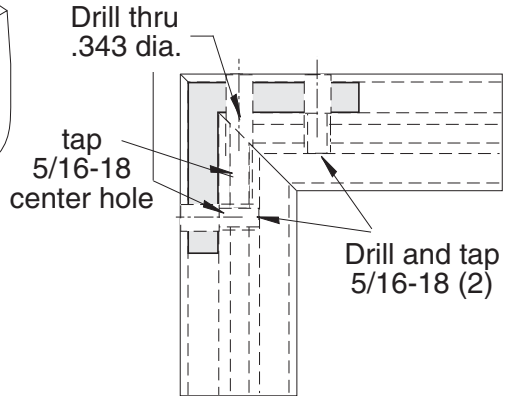
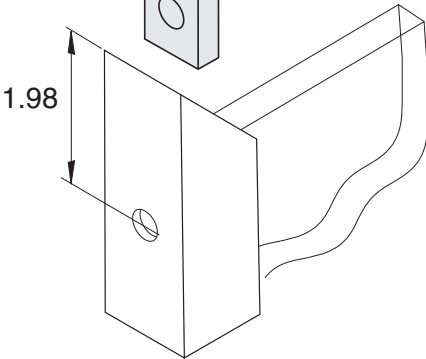
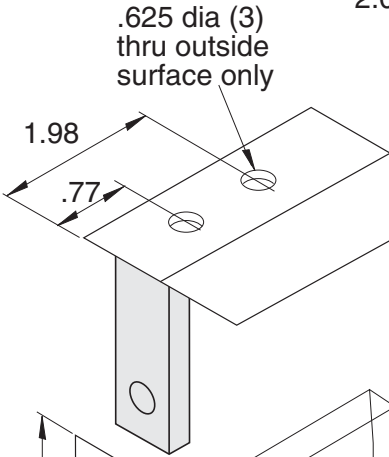
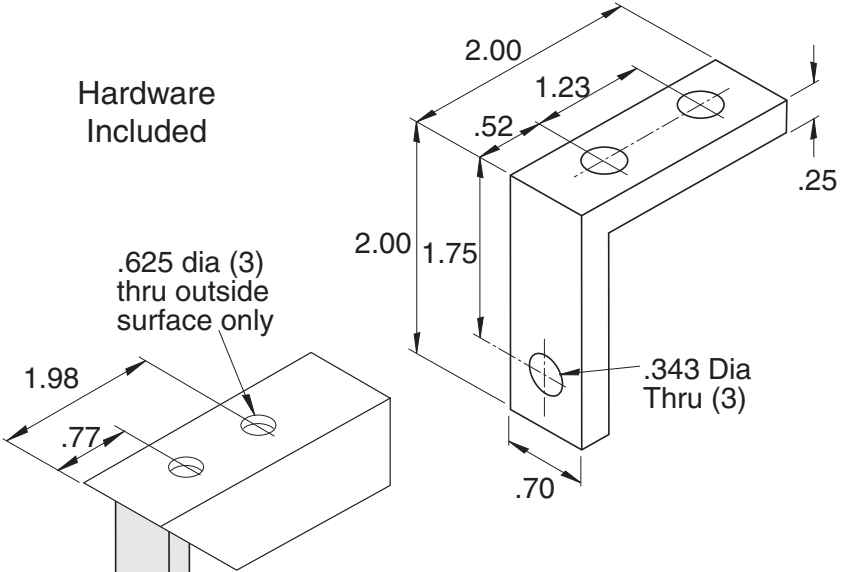


# Internal Corner Bracket



**EF-27A** use with EX-52 and EX-54

Hardware  
Included



Note: This is the strongest door corner available anywhere.

Material - Steel  
Finish - Zinc Plated

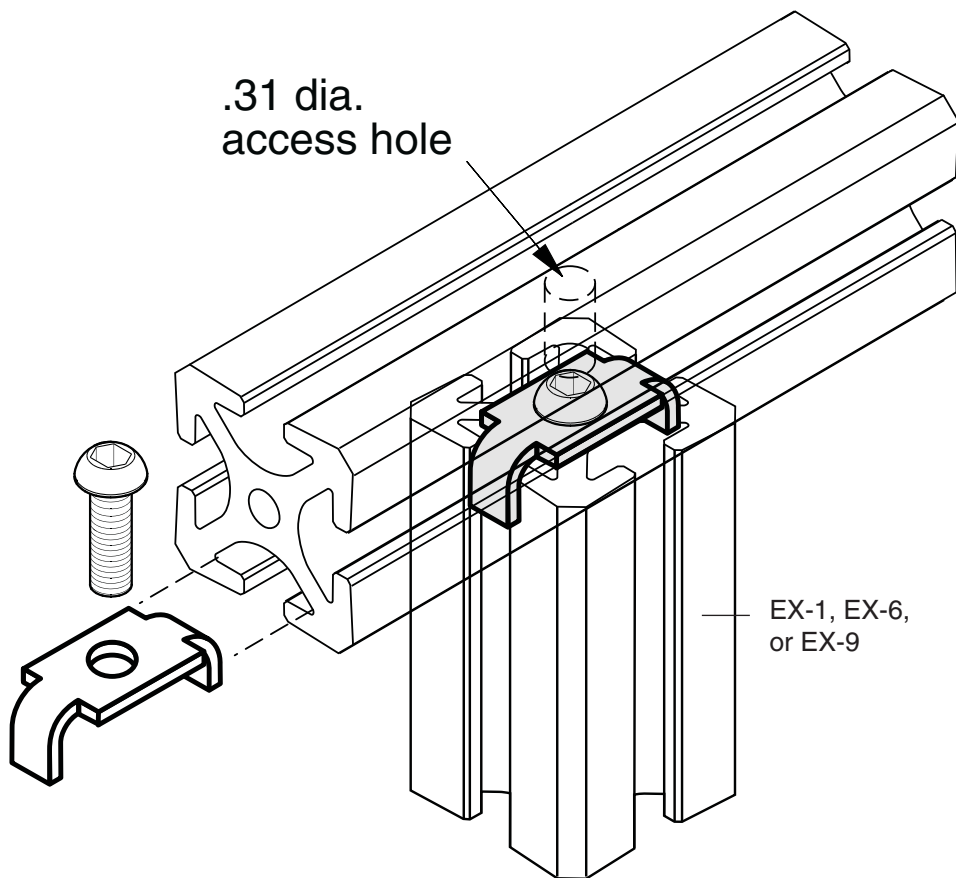
5/16" SLOTS

zinc plated steel

**EF-29**

stainless steel

**EF-SS29**



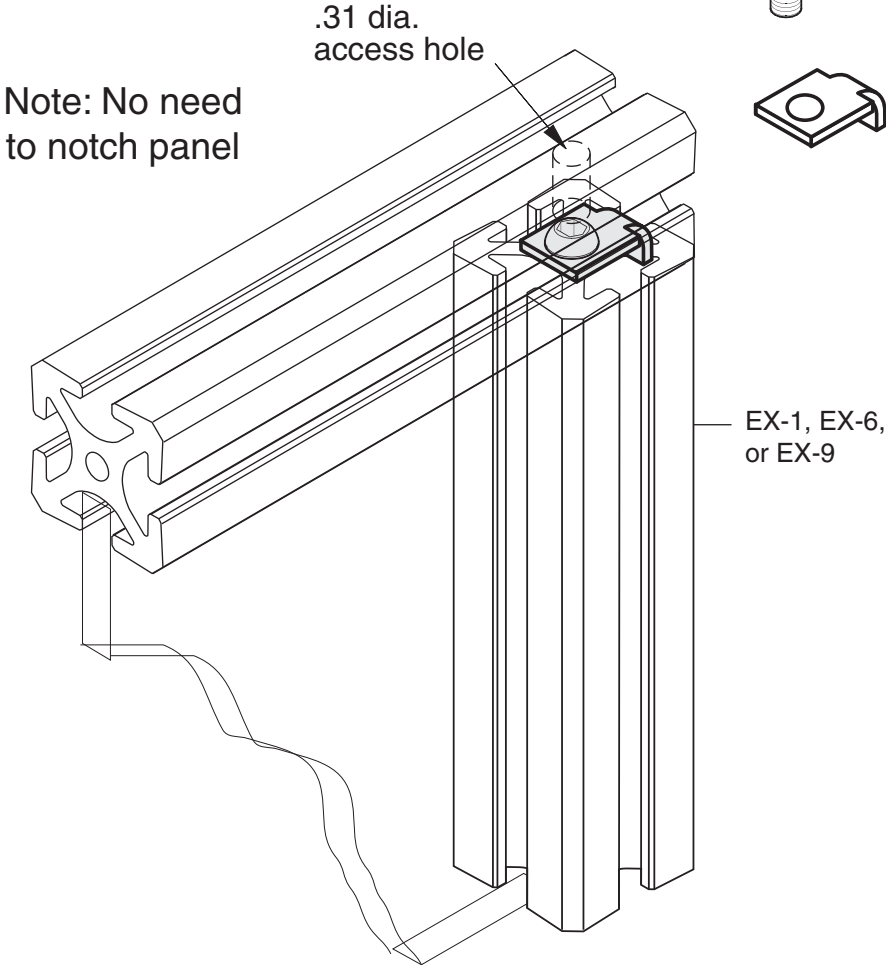
Requires (1) EF-12-1.0 BHCS

# Universal Connector



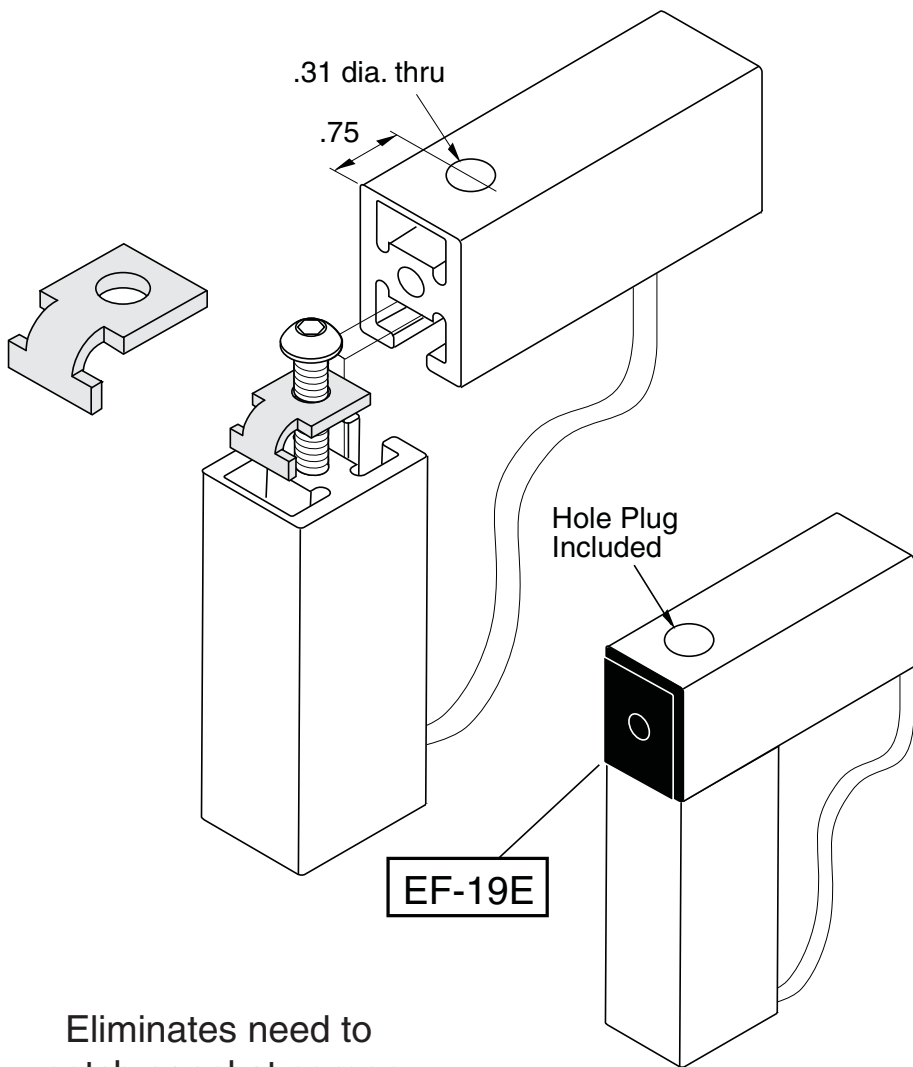
<b>EF-29A</b>	zinc plated steel
<b>EF-SS29A</b>	stainless steel

5/16" SLOTS



Requires (1) EF-12-1.0 BHCS

Use with *SMOOTH-Series* profiles  
EX-52, EX-54, EX-61, EX-63, EX-64, EX-65

**EF-29B****5/16" SLOTS**

Eliminates need to  
notch panel at corner

Requires (1) EF-12-1.0 BHCS

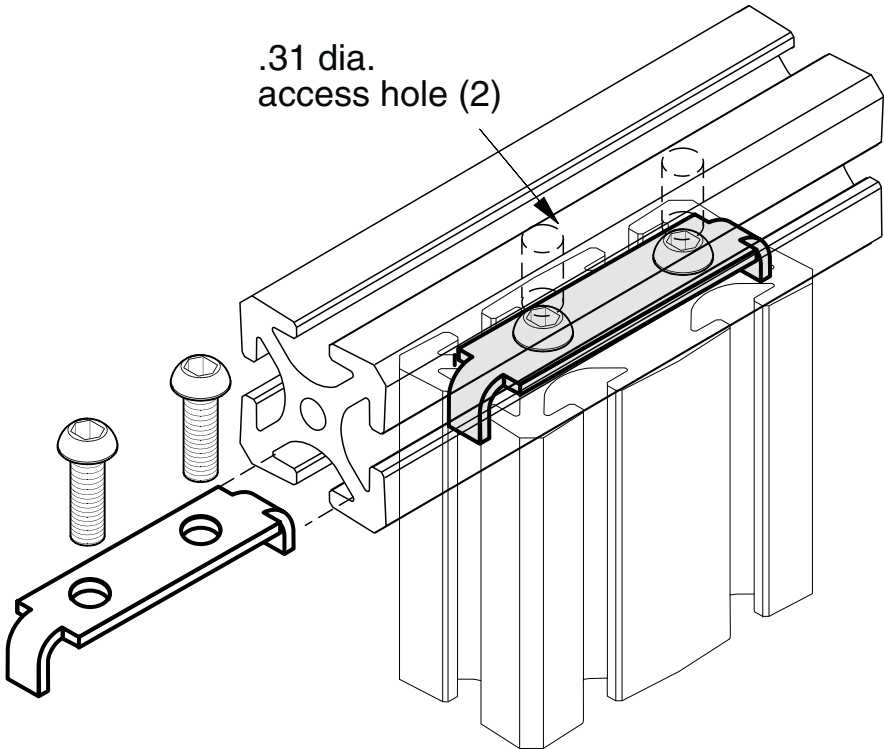
Material - Steel  
Finish - Zinc Plated

# Double Universal Connector



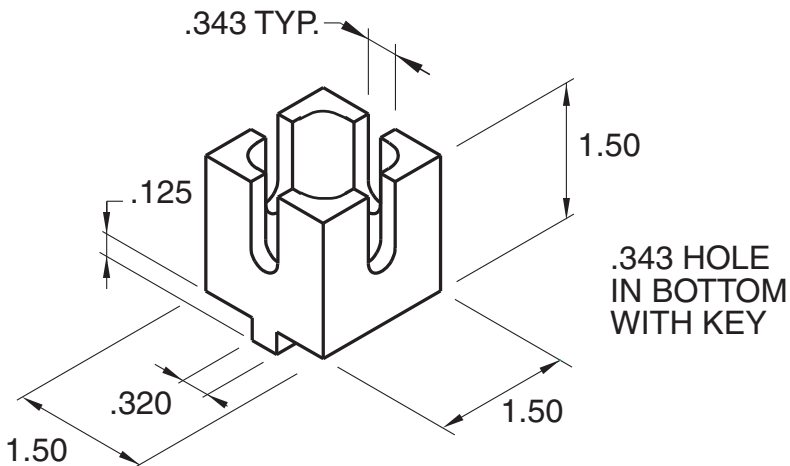
**EF-29D** .33 wide slot

5/16" SLOTS

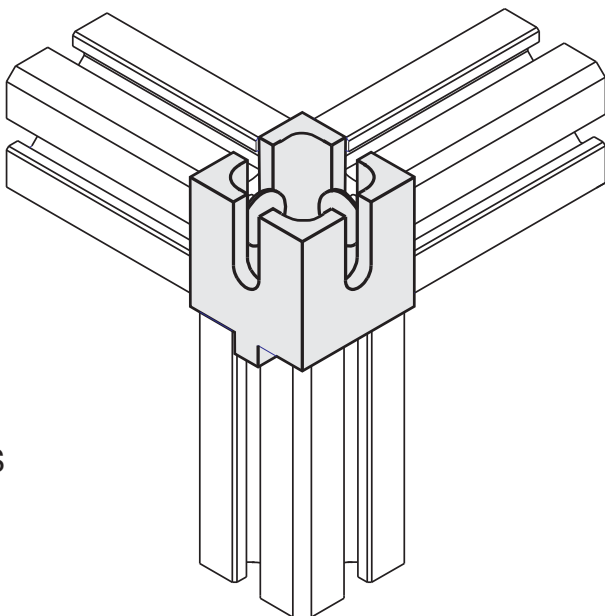


Requires (2) EF-12-1.0 BHCS

Material - Steel  
Finish - Zinc Plated



5/16" SLOTS

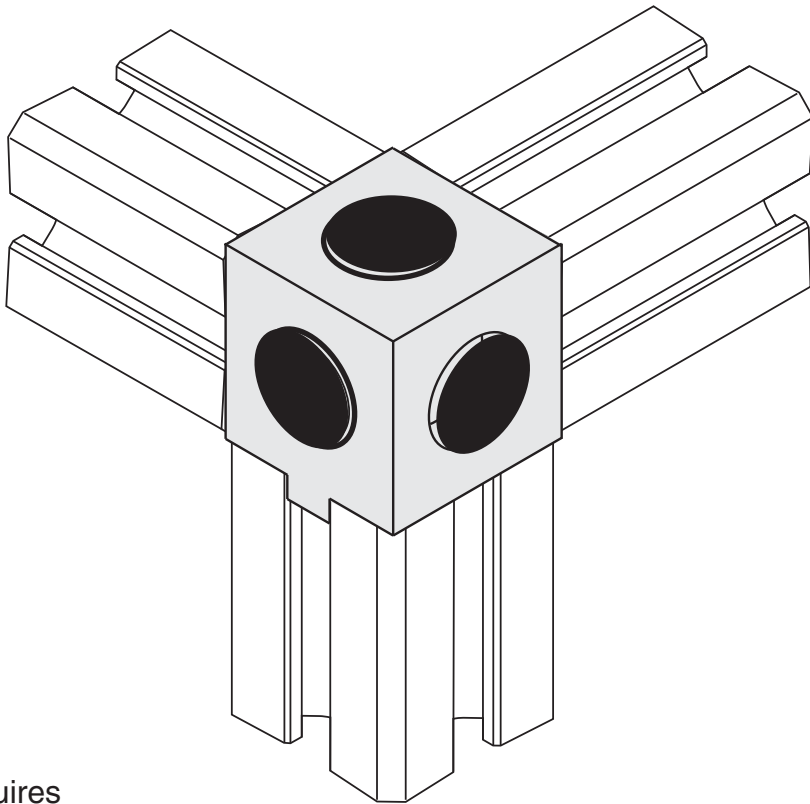


Requires  
(3) EF-12-.75 BHCS

Material - Aluminum  
Finish - Clear Anodize

**ECC-A**

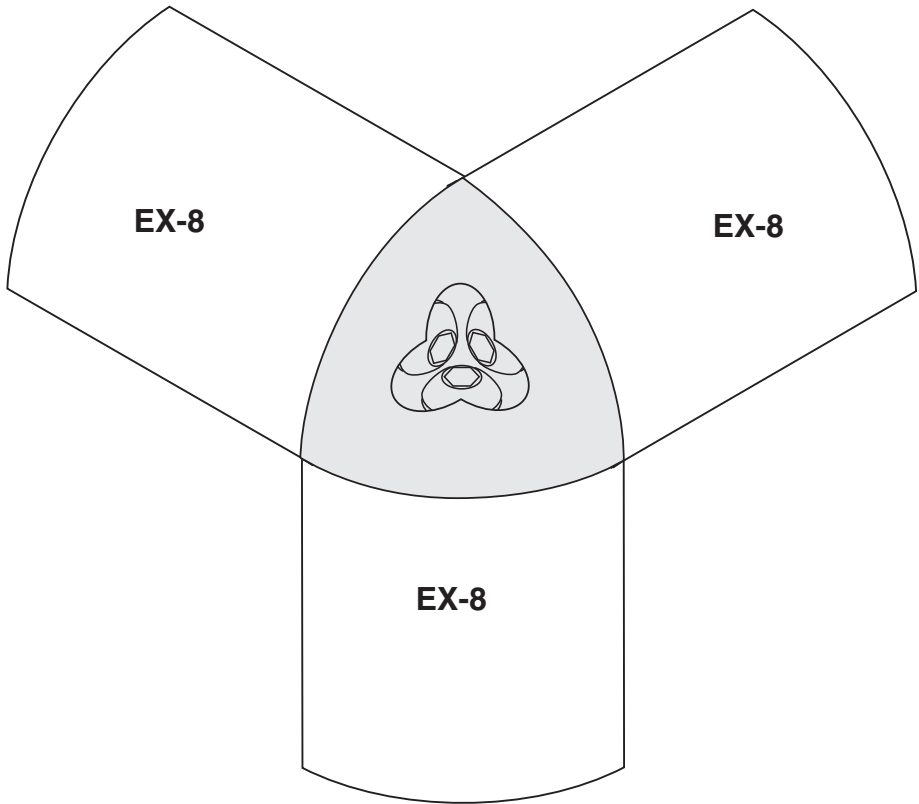
5/16" SLOTS



Requires  
(3) EF-12-.75 BHCS

Hole plugs included

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

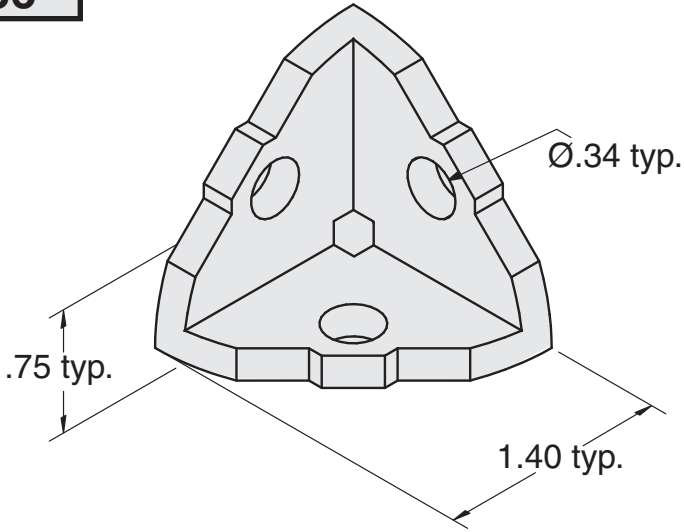
Hardware Included

Material - Aluminum  
Finish - Clear Anodize

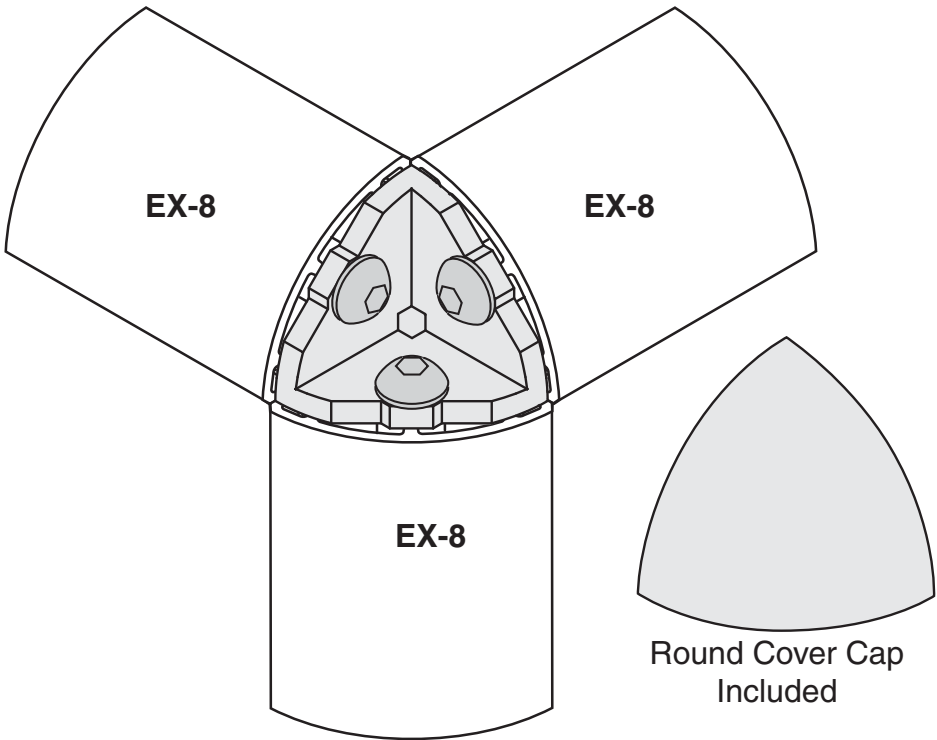


**EB-86**

5/16" SLOTS

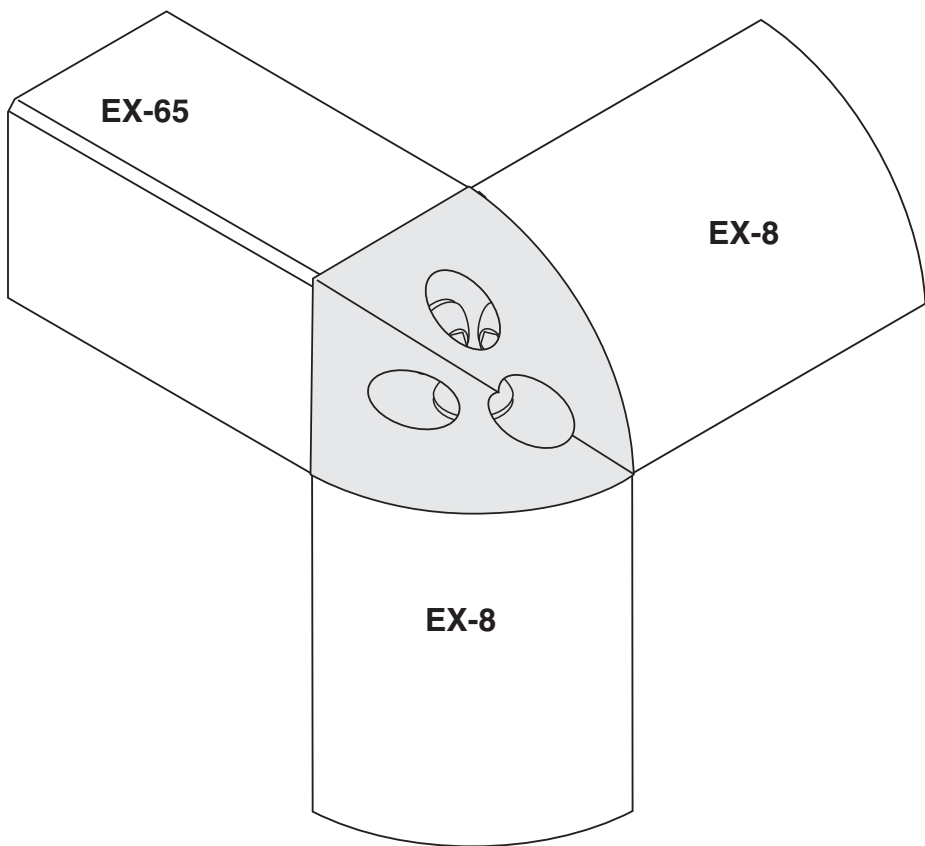


Hardware Included



Material -Bracket: Die Cast Zinc  
Cap: Reinforced Nylon

**5/16" SLOTS**

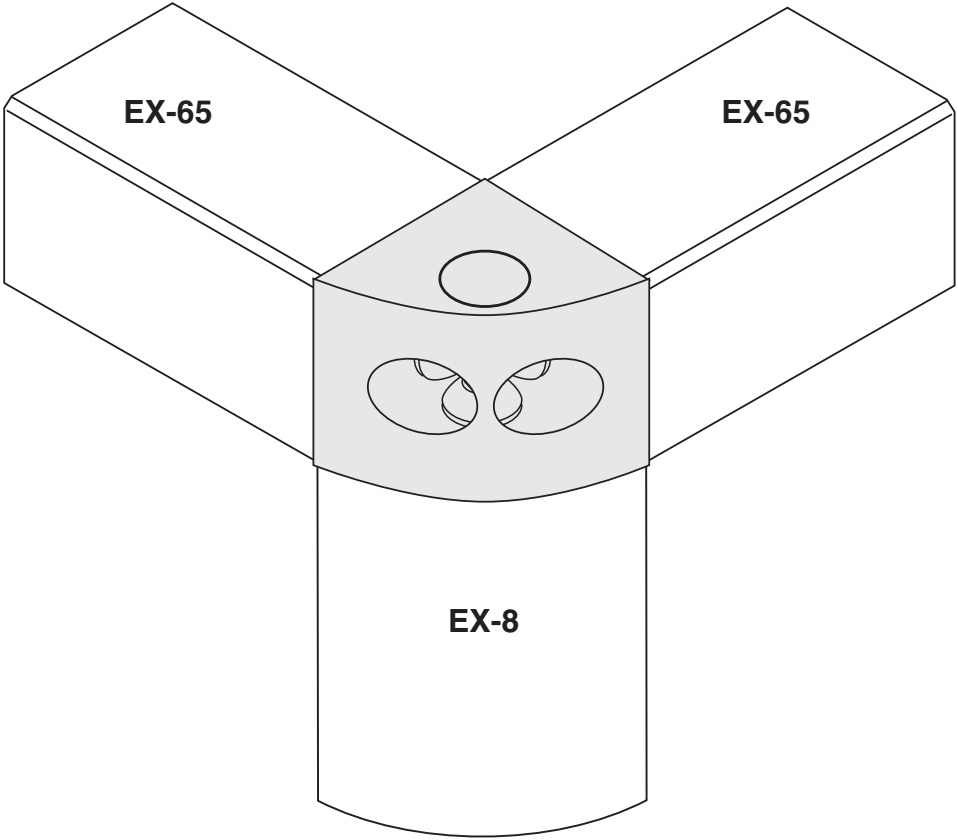


Hardware Included

Material - Aluminum  
Finish - Clear Anodize

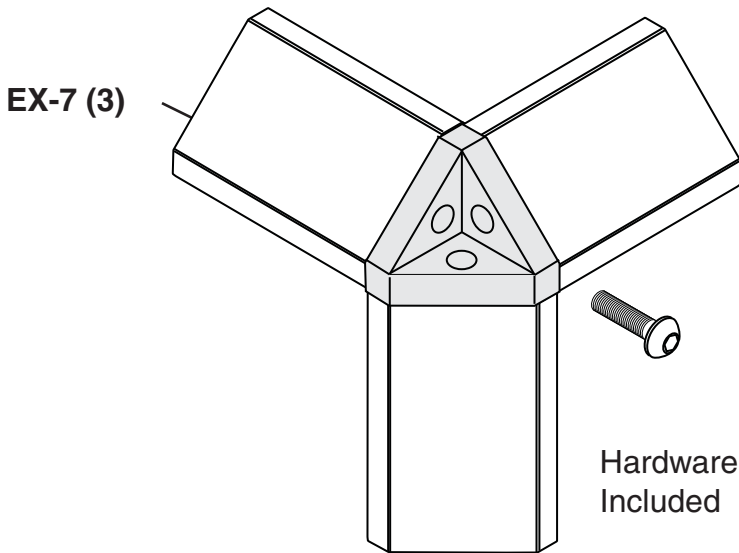
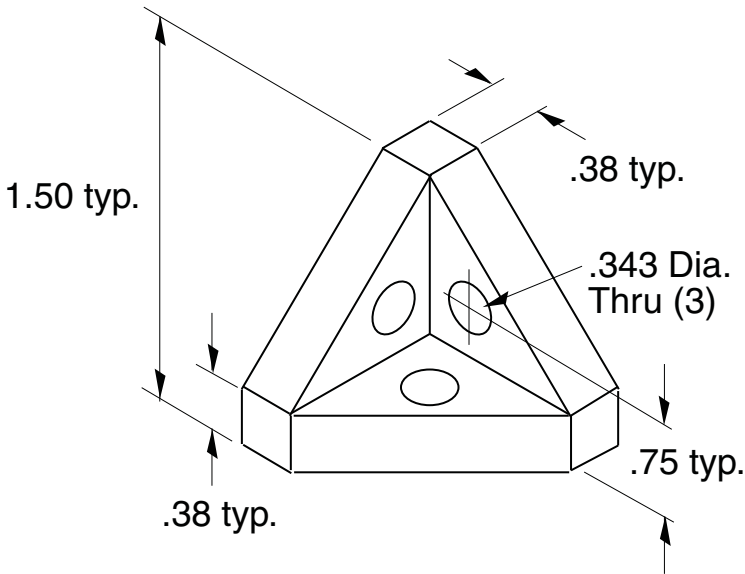
**EB-54**

**5/16" SLOTS**



Hardware Included

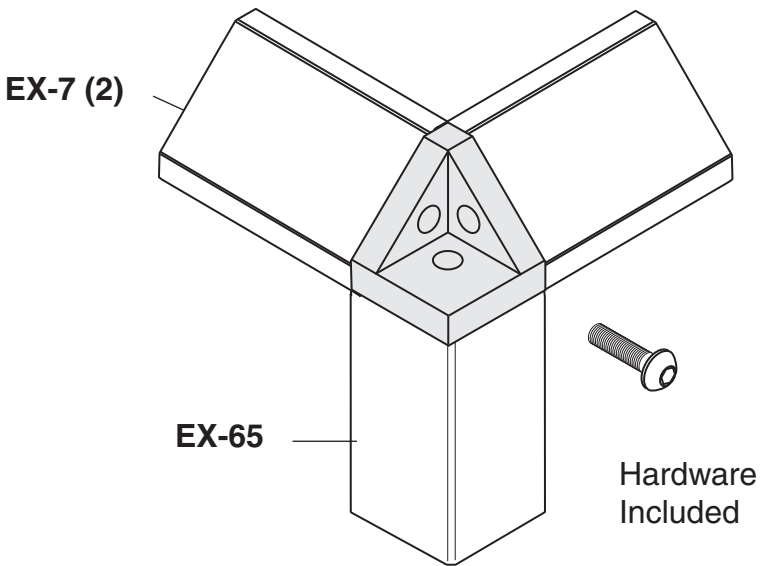
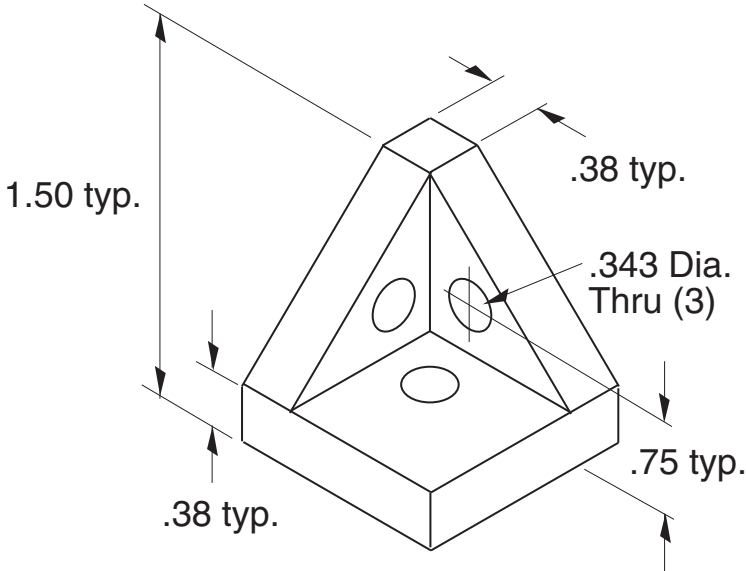
Material - Aluminum  
Finish - Clear Anodize



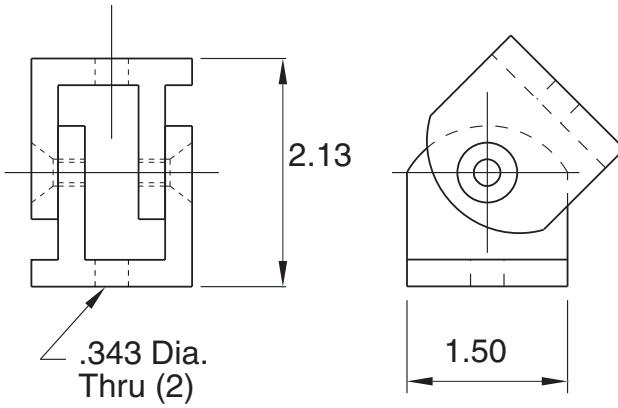
Material - Aluminum  
Finish - Clear Anodize

**EB-51**

5/16" SLOTS

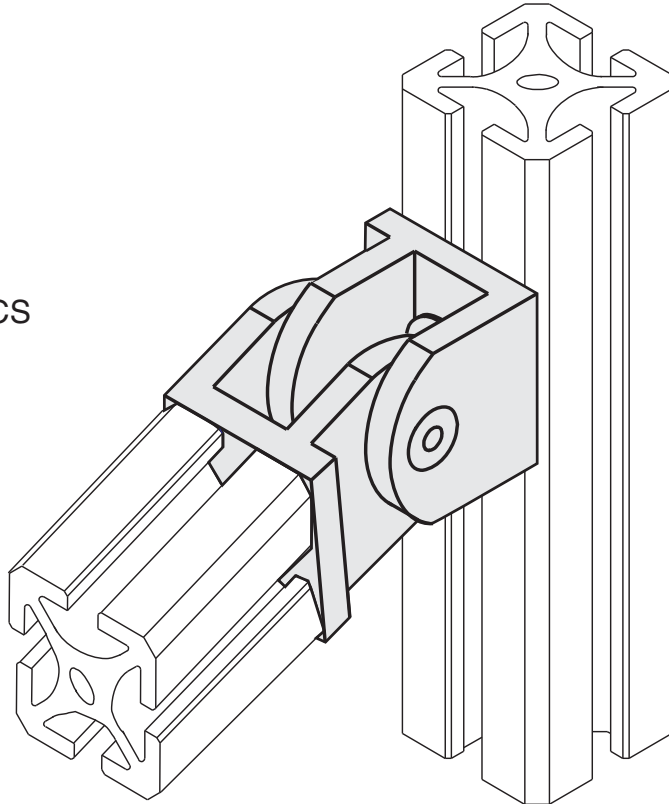


Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

Requires  
(2) EF-11-.63 SHCS  
(1) EF-2 T-nut



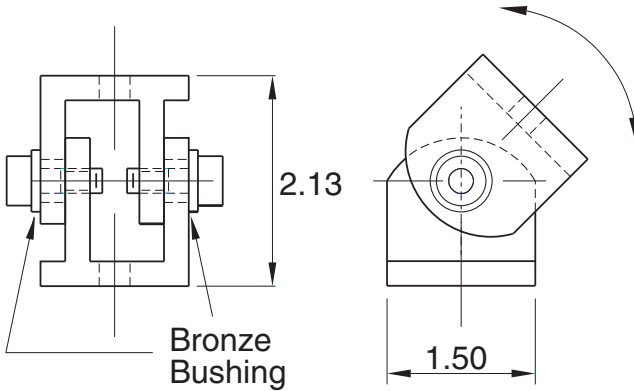
**Material - Aluminum**  
**Finish - Grey Powder Coat**

# Pivoting Hinge

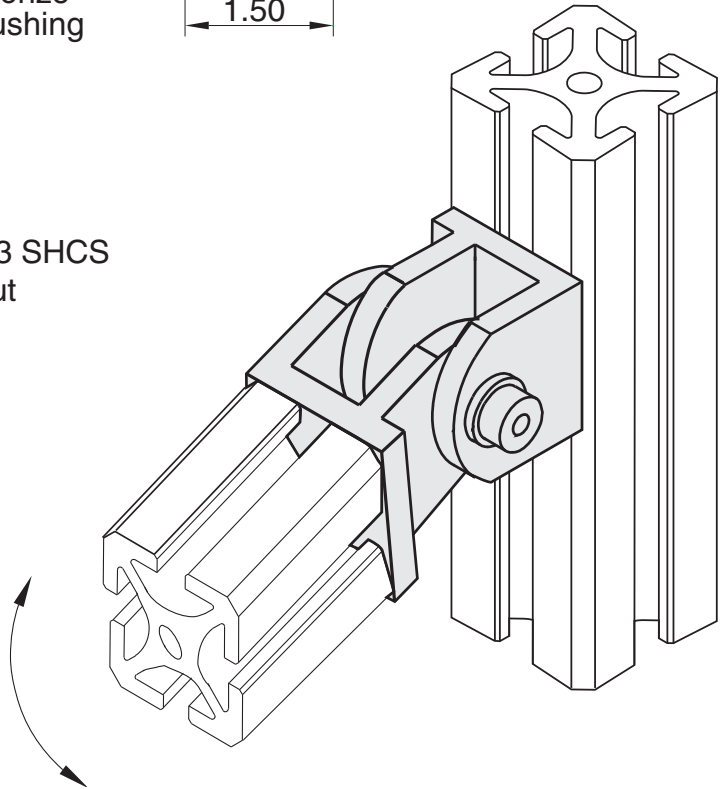


## EB-13P

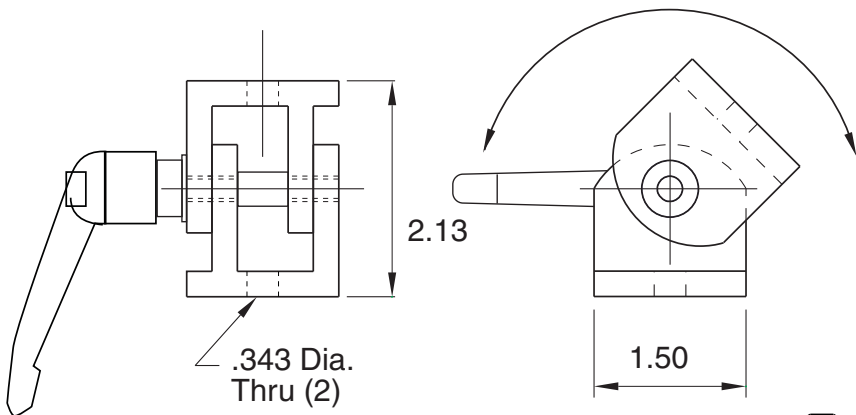
5/16" SLOTS



- Requires  
(2) EF-11-.63 SHCS  
(1) EF-2 T-nut

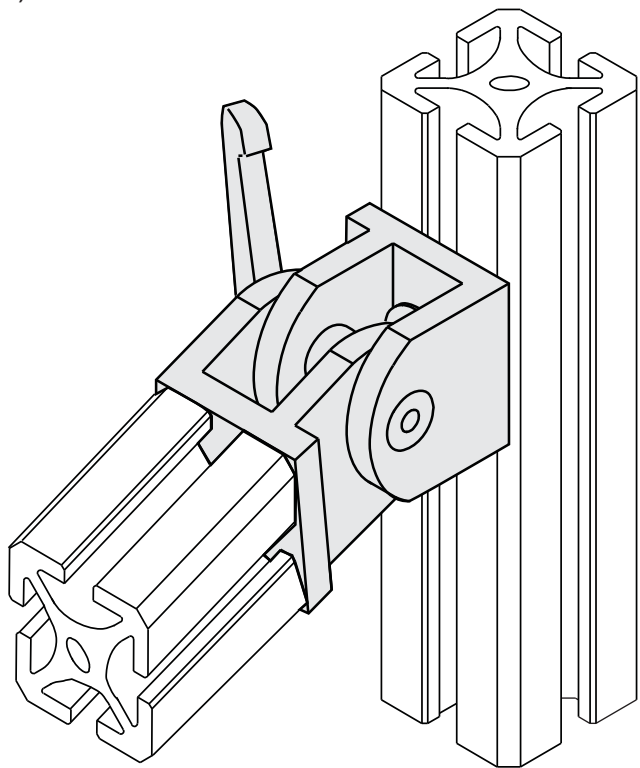


Material - Aluminum  
Finish - Grey Powder Coat



**5/16" SLOTS**

- Requires  
 (2) EF-11-.63 SHCS  
 (1) EF-2 T-nut

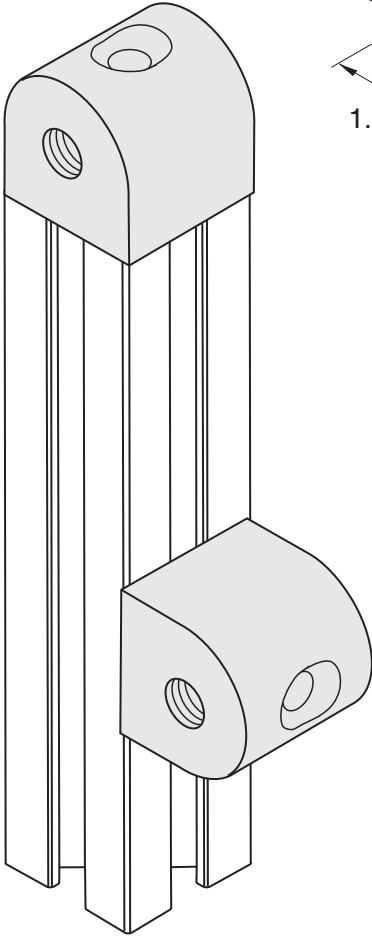
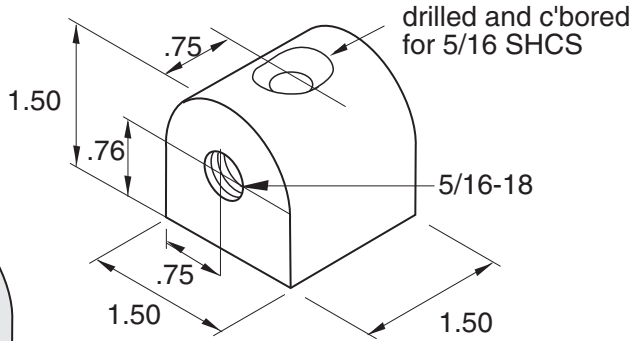


**Material - Aluminum**  
**Finish - Grey Powder Coat**

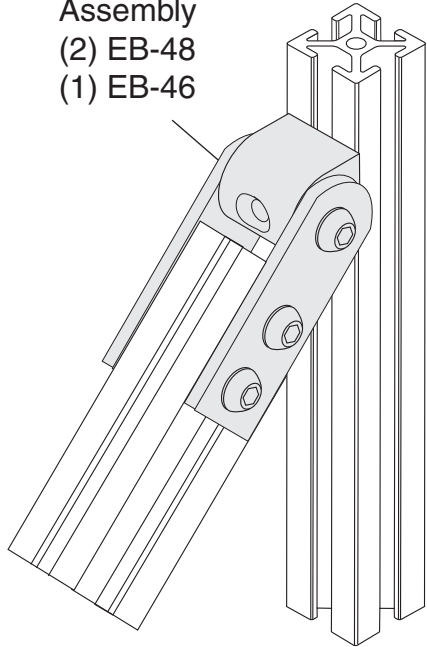


**EB-46**

5/16" SLOTS



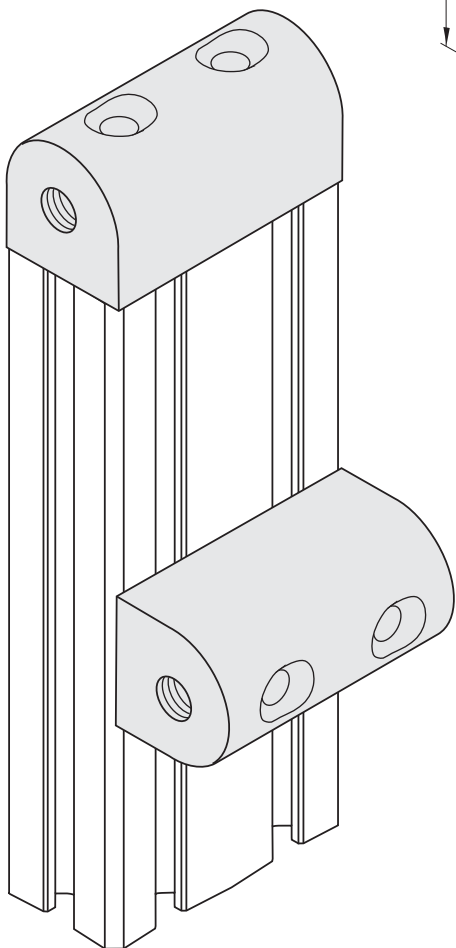
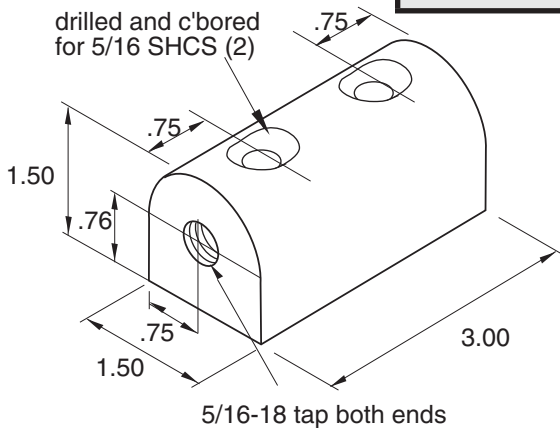
Assembly  
(2) EB-48  
(1) EB-46



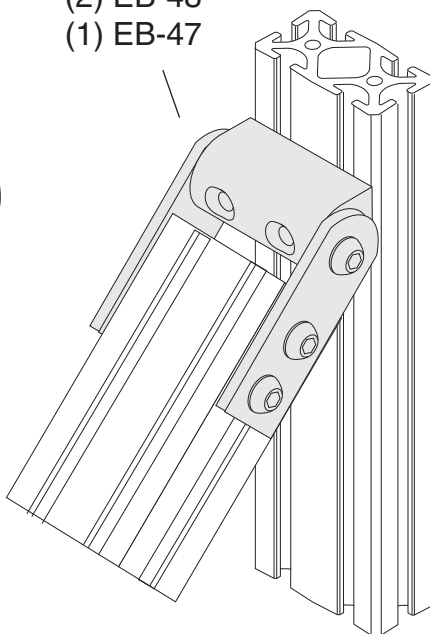
Requires  
(1) EF-11-1.25 SHCS  
(1) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

**EB-47**



Assembly  
(2) EB-48  
(1) EB-47



**5/16" SLOTS**

**Requires**  
(2) EF-11-1.25 SHCS  
(2) EF-2 T-nut

**Material - Aluminum**  
**Finish - Clear Anodize**

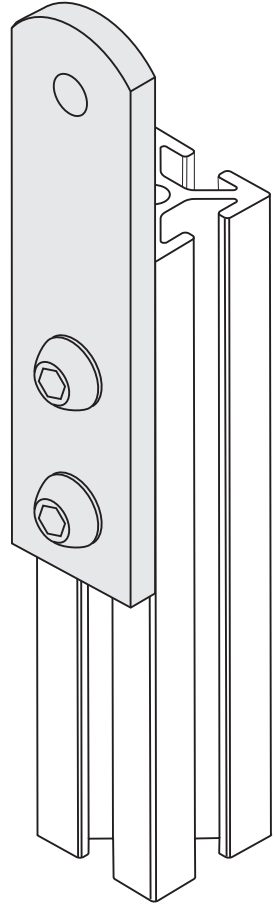
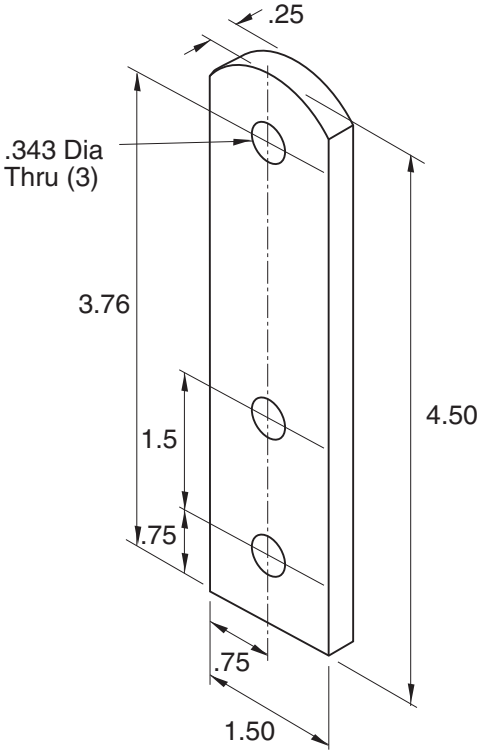
# Adjustable Arm Post



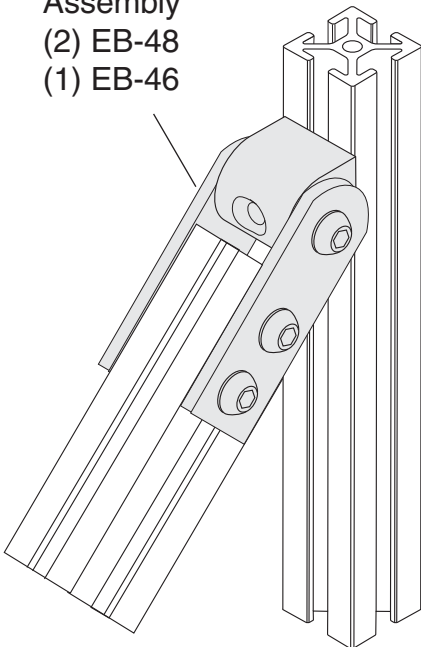
**EB-48**

use with EB-46 & EB-47

5/16" SLOTS



Assembly  
(2) EB-48  
(1) EB-46

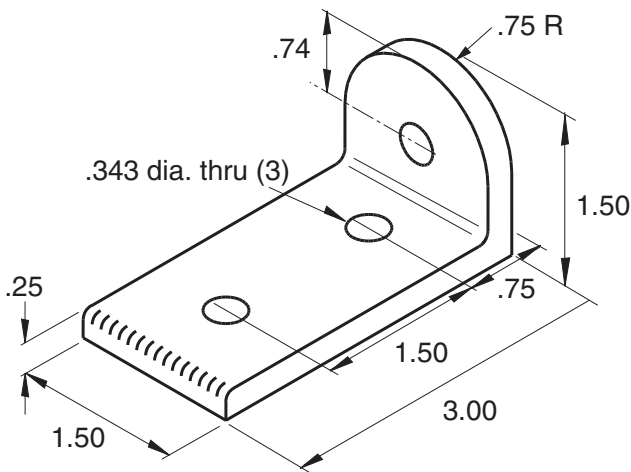


Requires  
(3) EF-12-.63 BHCS  
(2) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

Use with EB-46, EB-47

**EB-66**

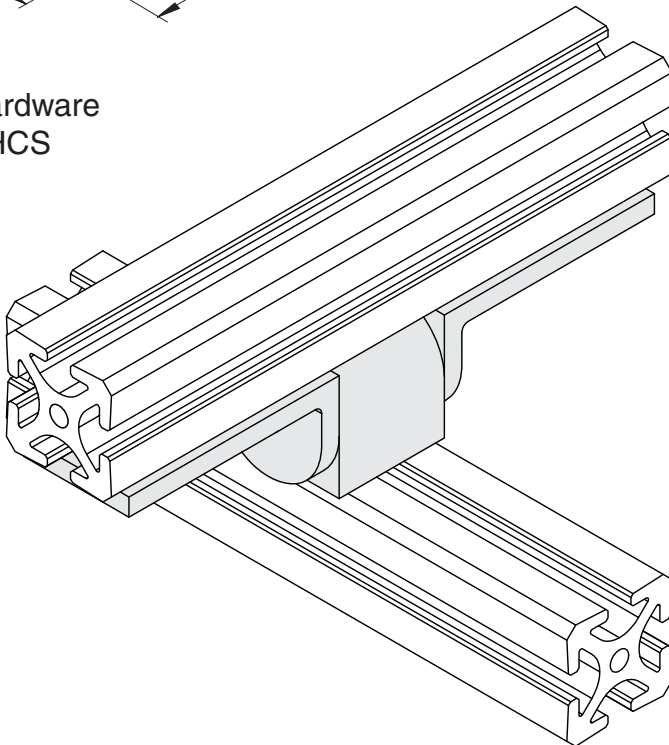


**5/16" SLOTS**

**Recomended Hardware**

(3) EF-12-.63 SHCS

(2) EF-2 T-nut



**Material - Aluminum**  
**Finish - Clear Anodize**

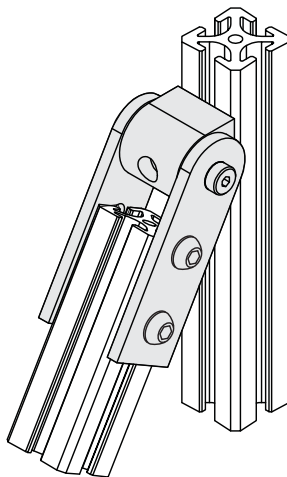
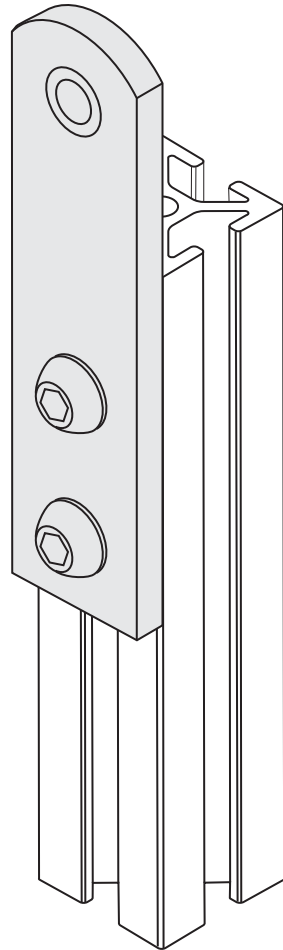
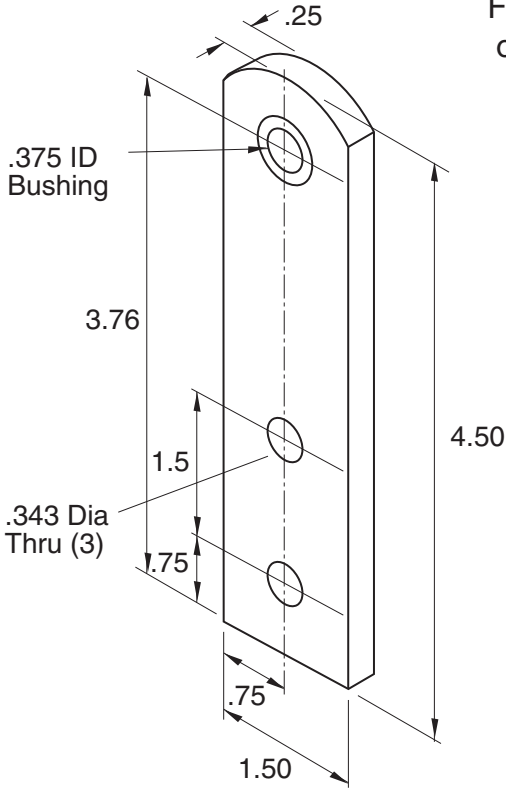
# Pivoting Post Arm with Bushing



**EB-65**

Use with EB-68, EB-69

For Shoulder Bolt  
order (1) EF-46



Recommended Hardware  
(2) EF-12-.63 BHCS  
(2) EF-2 T-nut  
(1) EF-46

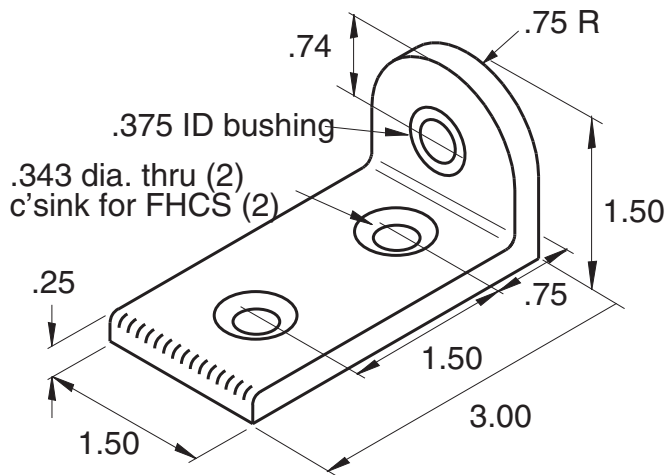
Material - Aluminum  
Finish - Clear Anodize

5/16" SLOTS

Use with EB-68, EB-69

**EB-67**

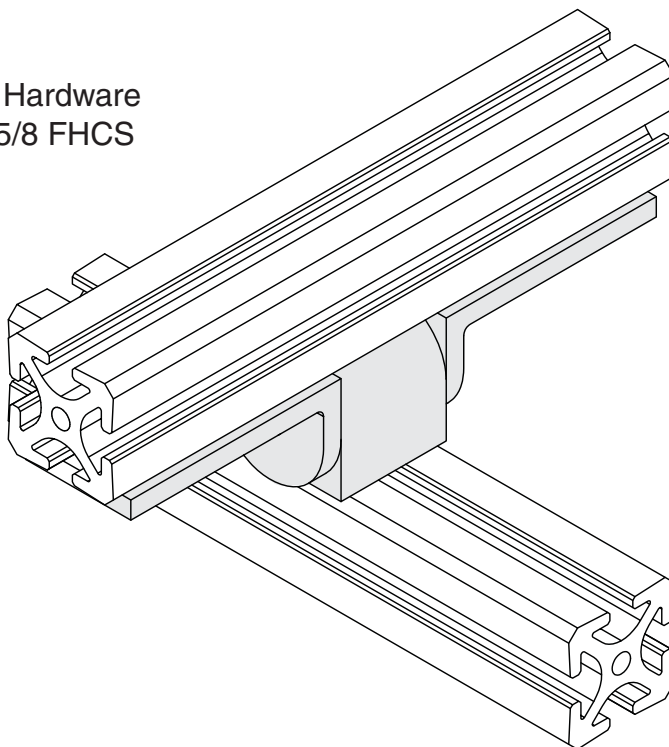
For Shoulder  
Bolt order (1) EF-46



5/16" SLOTS

**Recommended Hardware**

- (2) 5/16-18 x 5/8 FHCS
- (2) EF-2 T-nut
- (1) EF-46



Material - Aluminum  
Finish - Clear Anodize

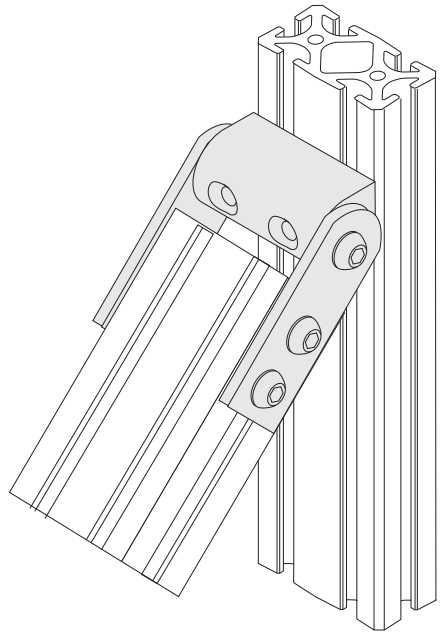
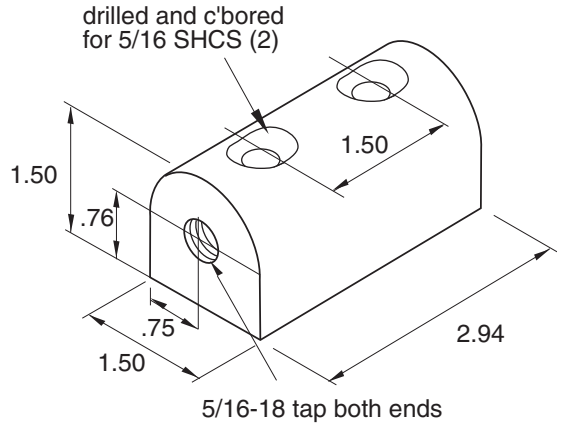
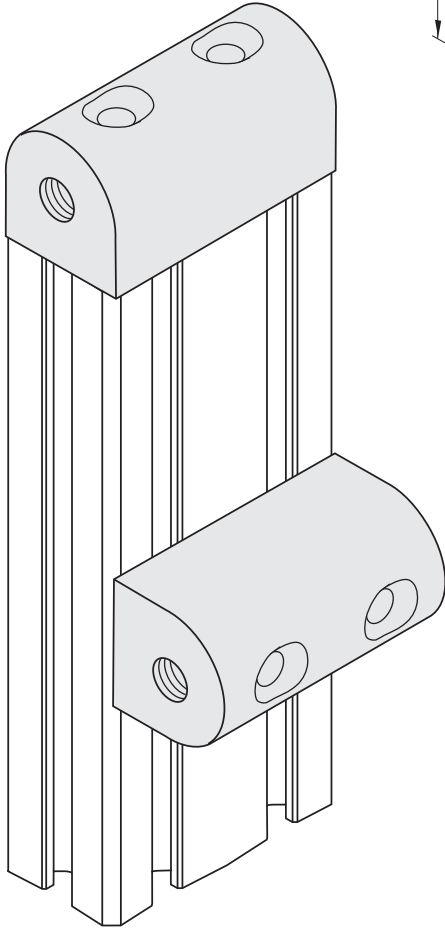
# Pivoting Corner Post



**EB-68**

Use with (2) EB-65 or (2) EB-67

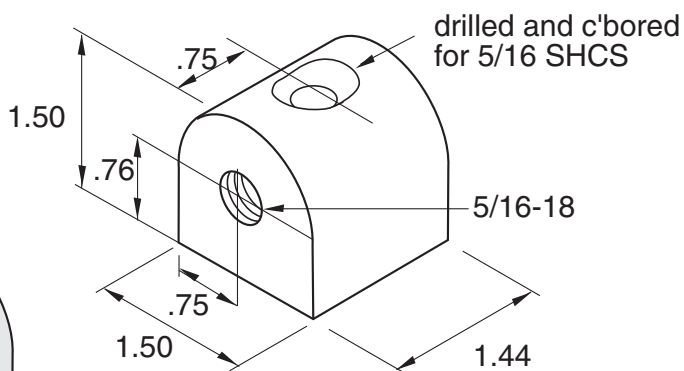
5/16" SLOTS



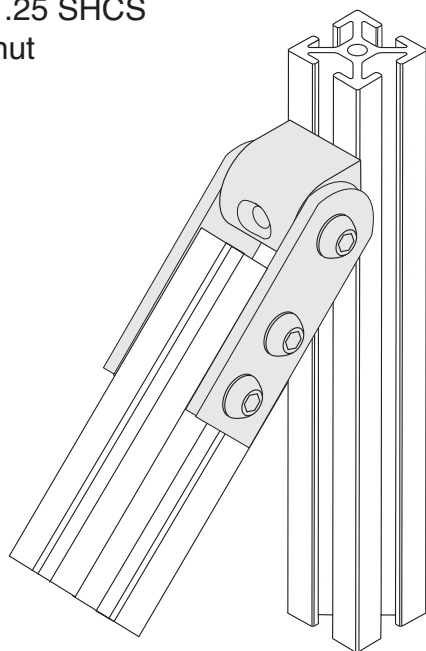
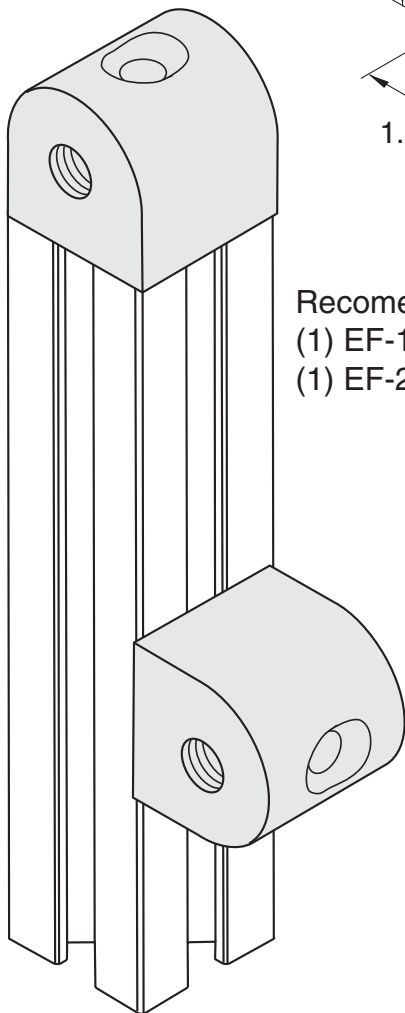
Recomended Hardware  
(2) EF-11-1.25 SHCS  
(2) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

Use with (2) EB-65 or (2) EB-67

**EB-69****5/16" SLOTS**

Recomended Hardware  
(1) EF-11-1.25 SHCS  
(1) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize

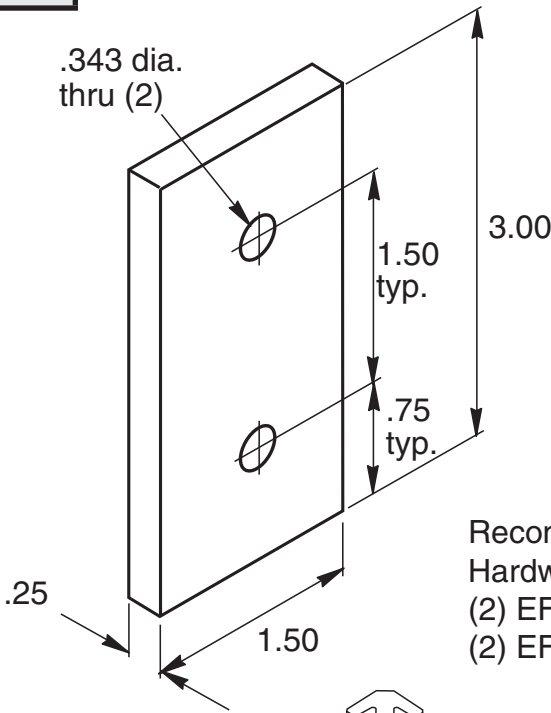


# Joining Plate

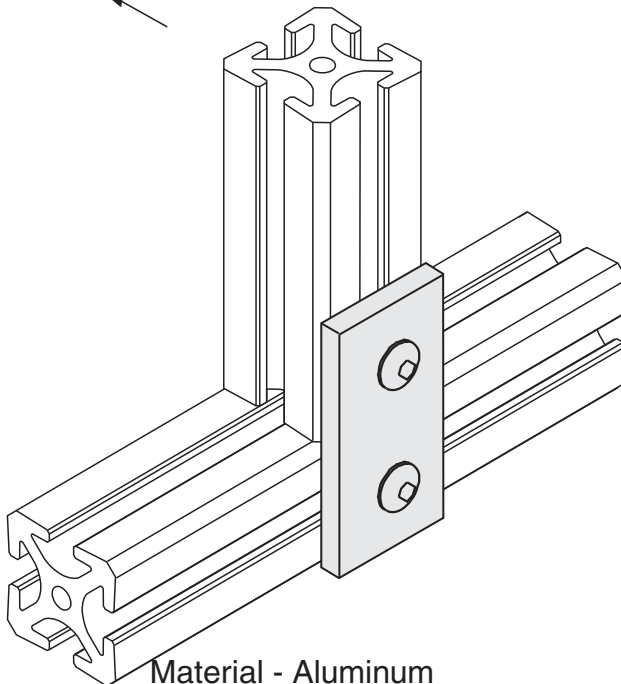


**EB-33**  
**EB-33-S**

1 hole is slotted

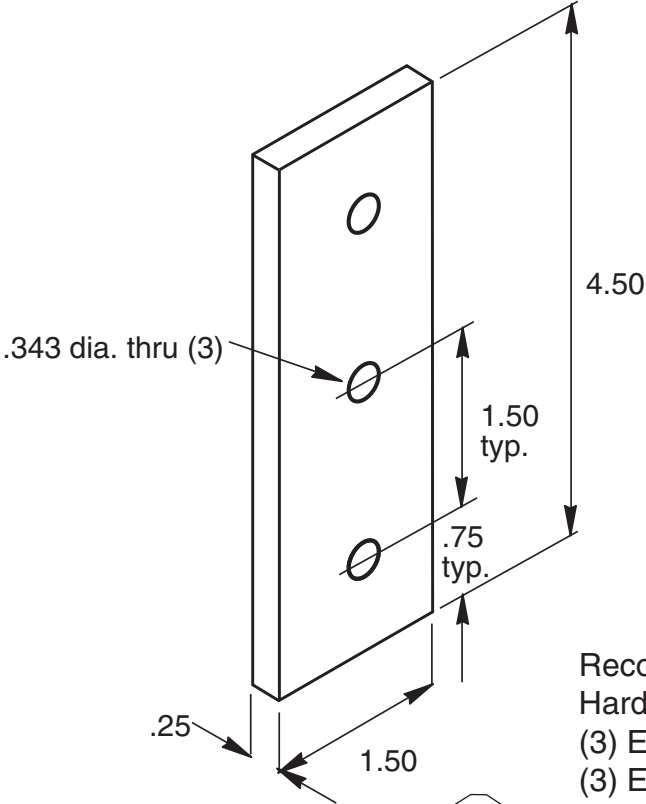


Recommended Hardware  
(2) EF-12-.63 BHCS  
(2) EF-2 T-nut

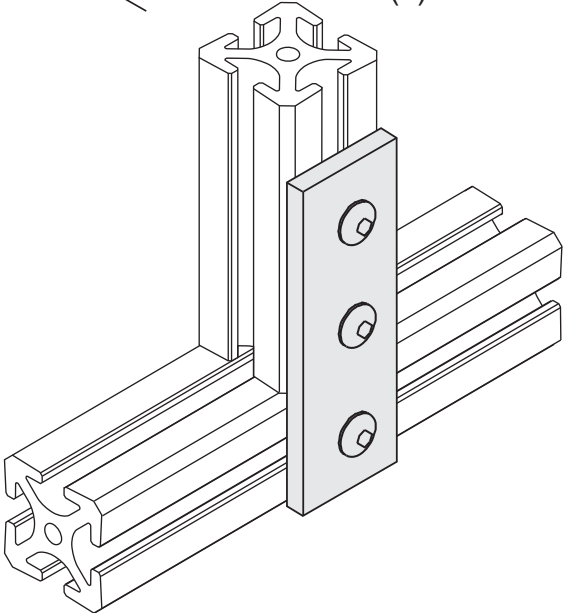


Material - Aluminum  
Finish - Clear Anodize

5/16" SLOTS



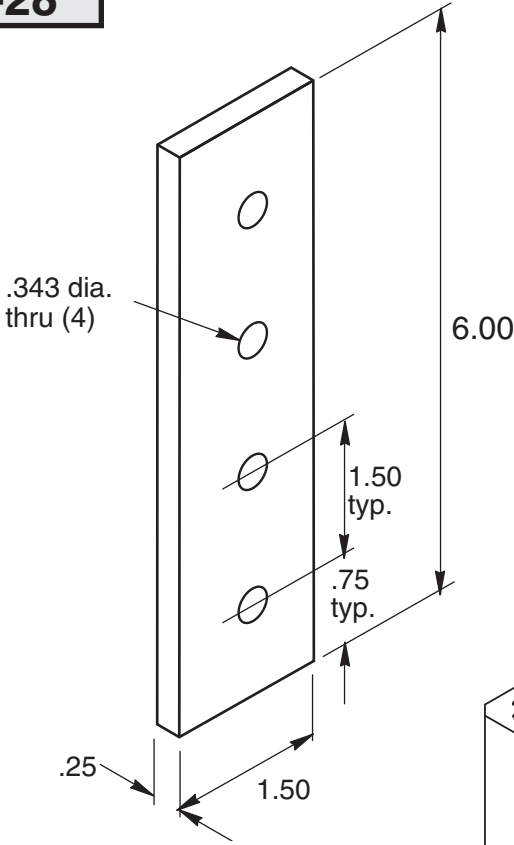
Recommended  
Hardware  
(3) EF-12-.63 BHCS  
(3) EF-2 T-nut



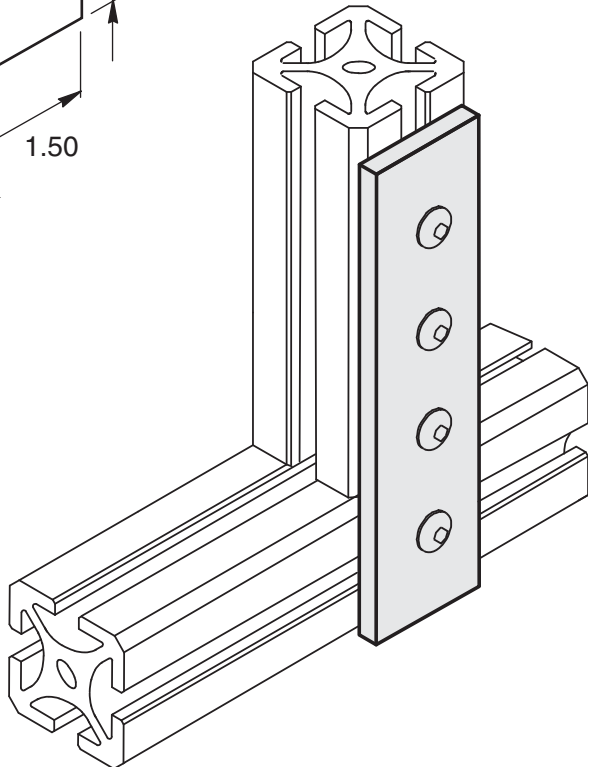
Material - Aluminum  
Finish - Clear Anodize

**EB-28**

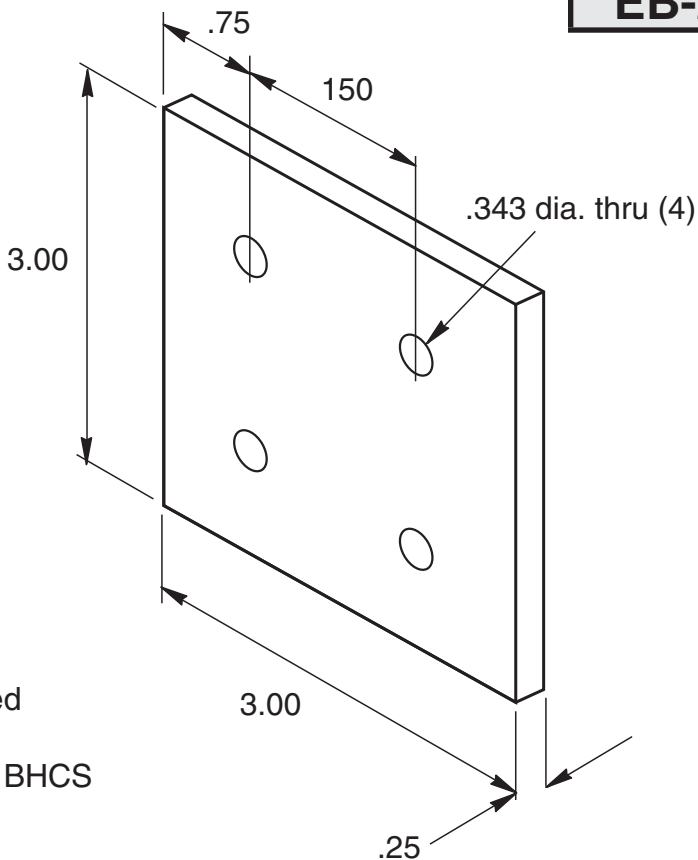
5/16" SLOTS



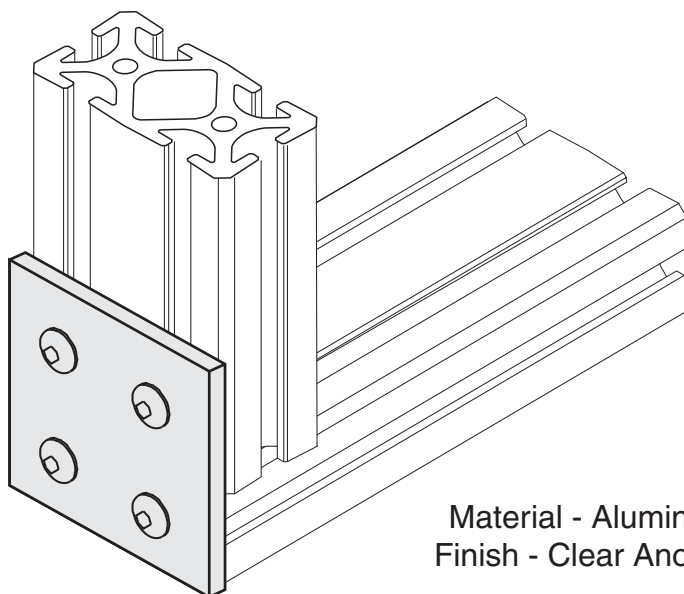
Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

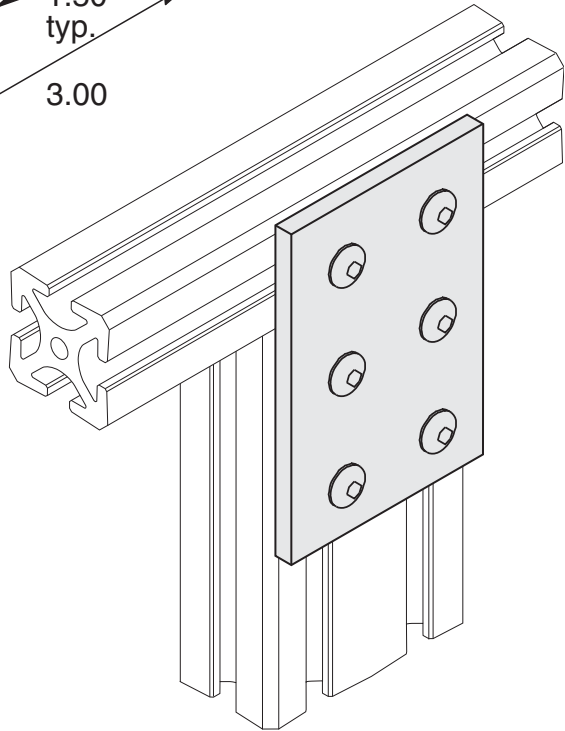
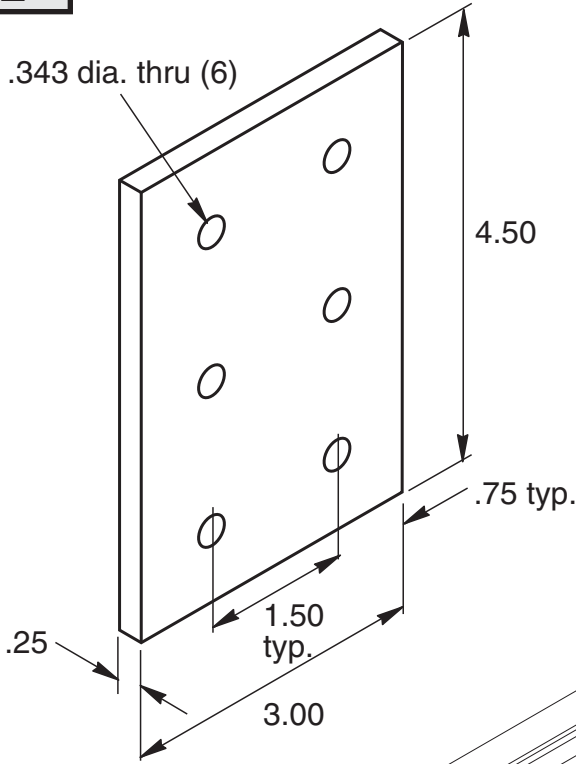


Material - Aluminum  
Finish - Clear Anodize

**5/16" SLOTS**

**EB-32**

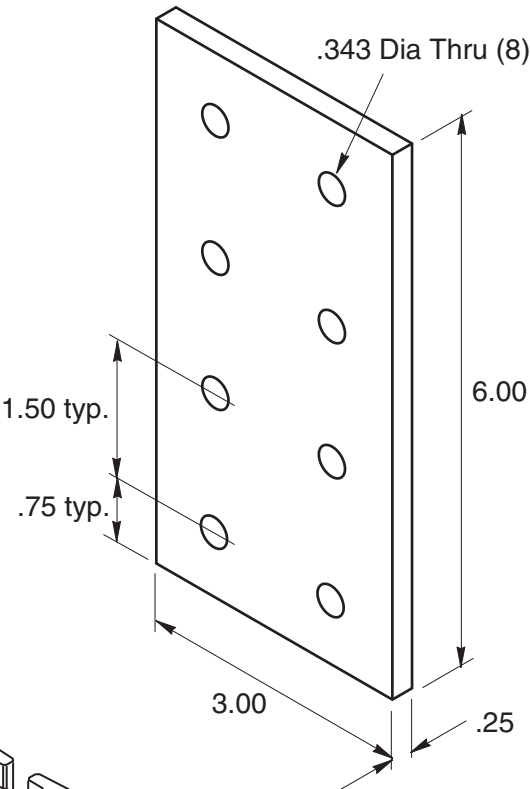
5/16" SLOTS



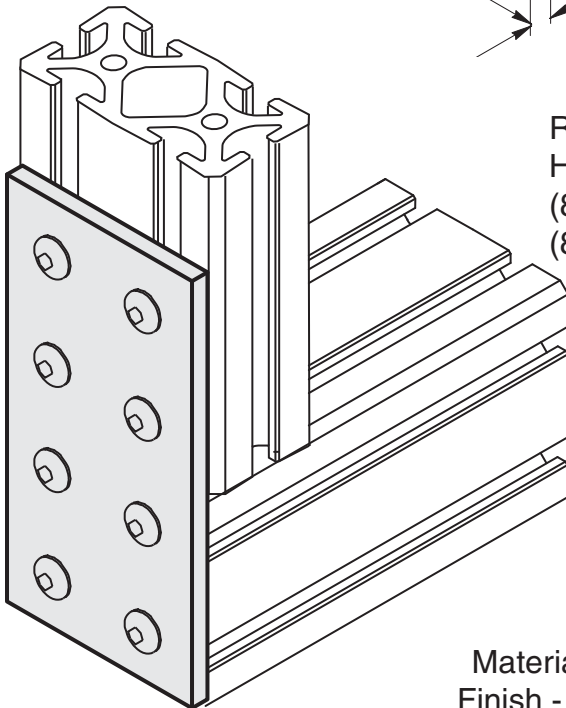
Recommended  
Hardware  
(6) EF-12-.63 BHCS  
(6) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

**EB-26**



**5/16" SLOTS**



**Recommended  
Hardware**  
(8) EF-12- .63 BHCS  
(8) EF-2 T-nut

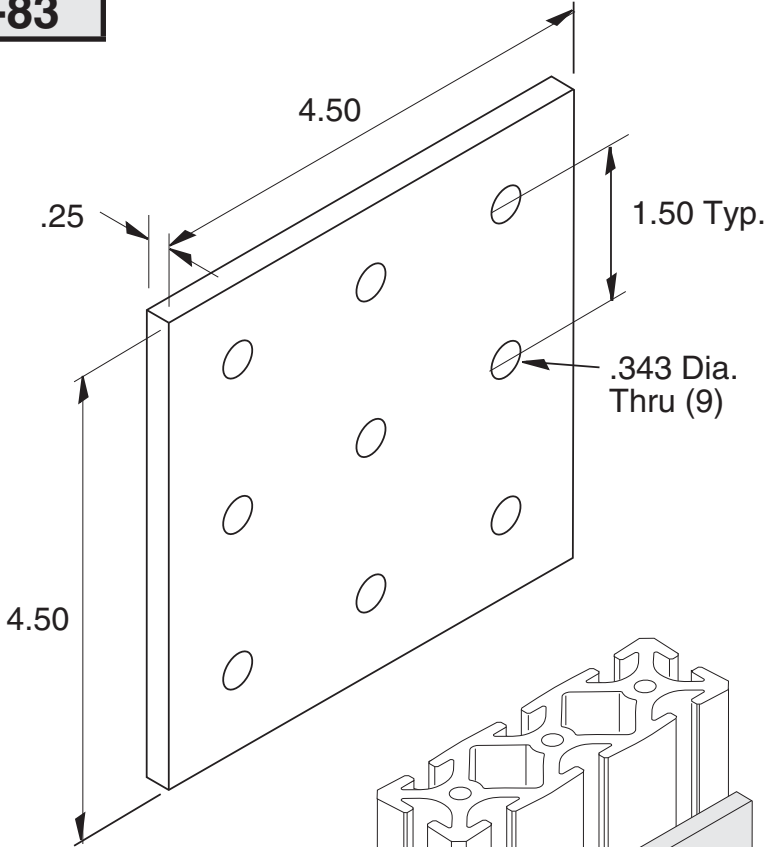
**Material - Aluminum  
Finish - Clear Anodize**

# Joining Plate

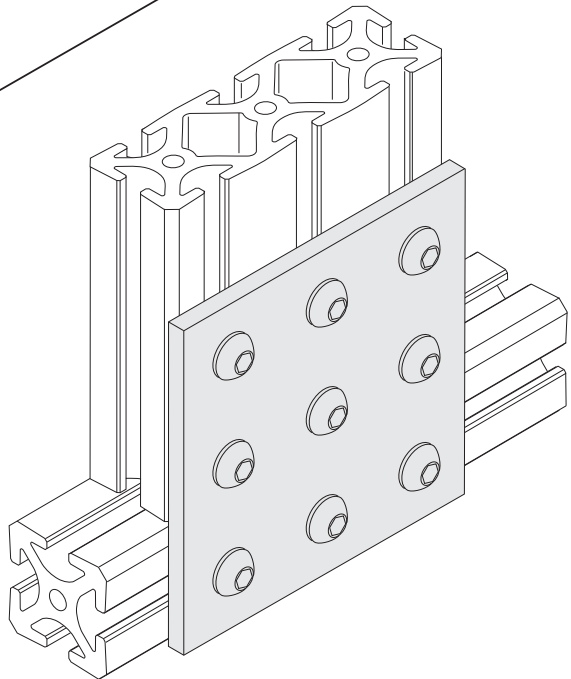


**EB-83**

**5/16" SLOTS**

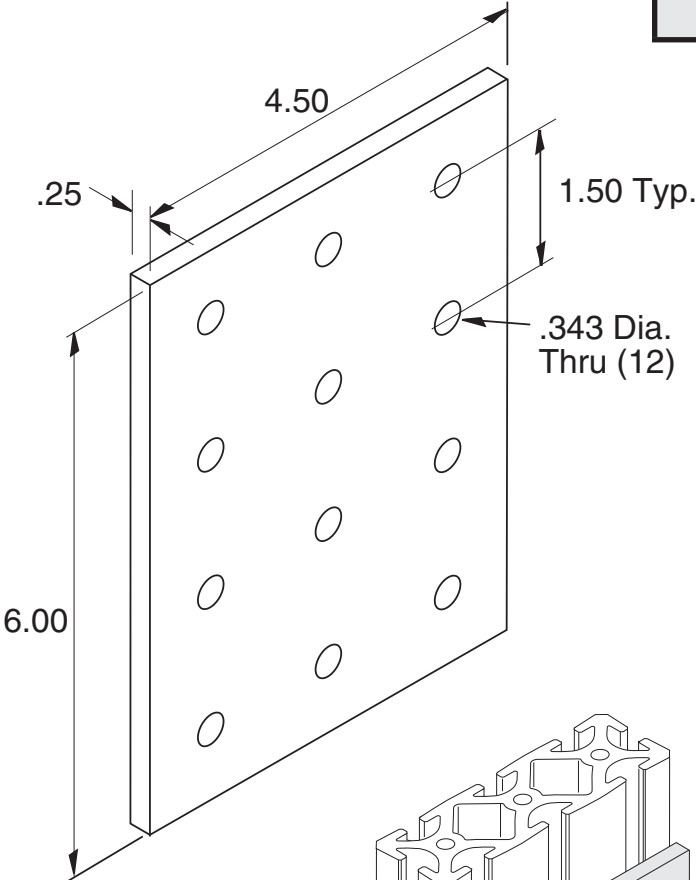


Recommended Hardware  
(9) EF-12-.63 BHCS  
(9) EF-2 T-nut



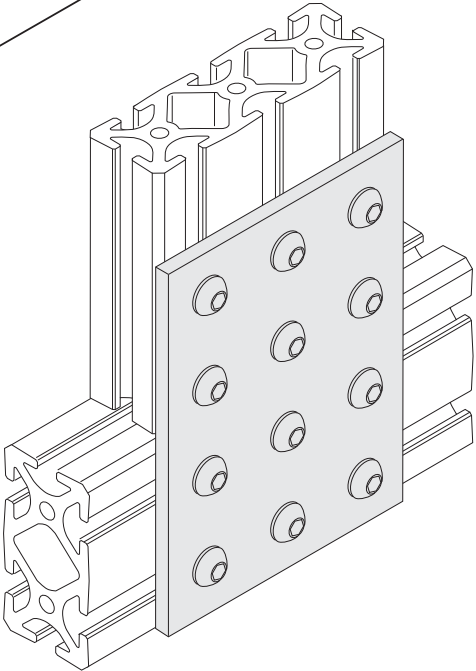
Material - Aluminum  
Finish - Clear Anodize

**EB-84**



**5/16" SLOTS**

Recommended  
Hardware  
(12) EF-12- .63 BHCS  
(12) EF-2 T-nut

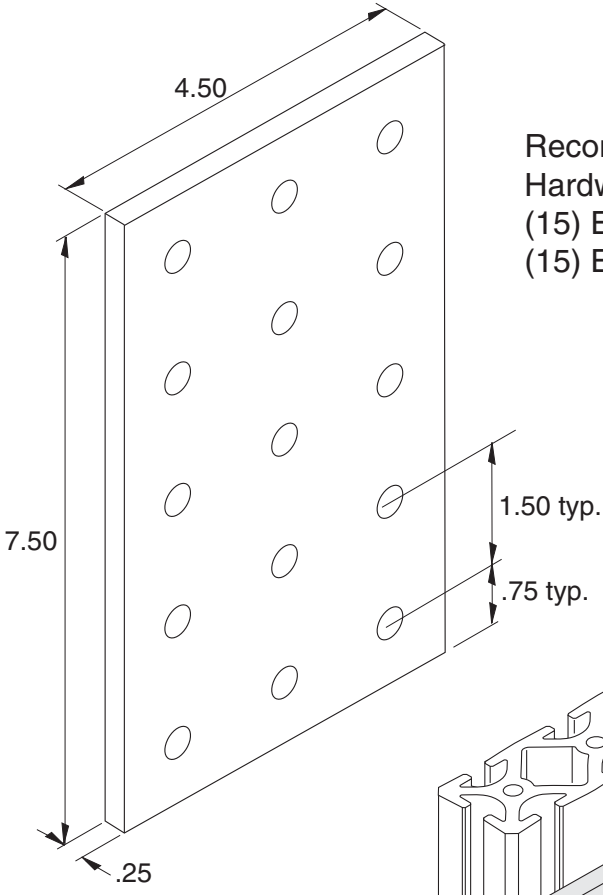


**Material - Aluminum  
Finish - Clear Anodize**



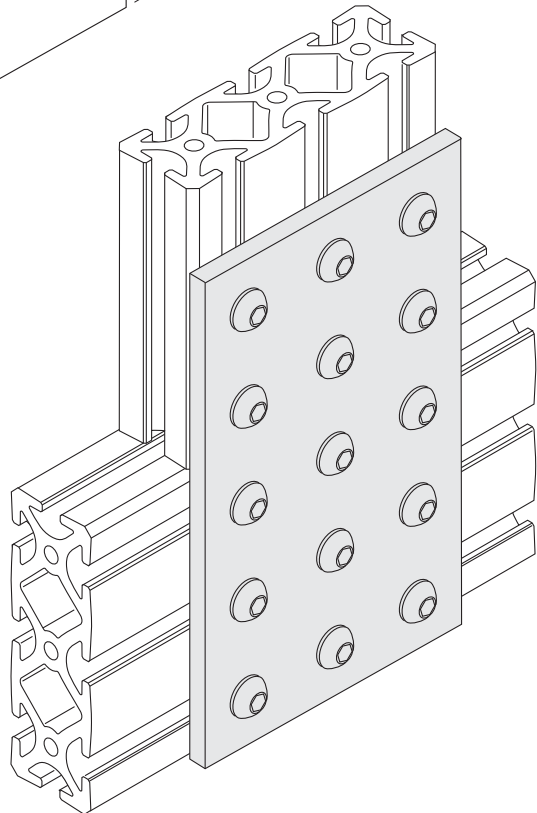
**EB-85**

**5/16" SLOTS**

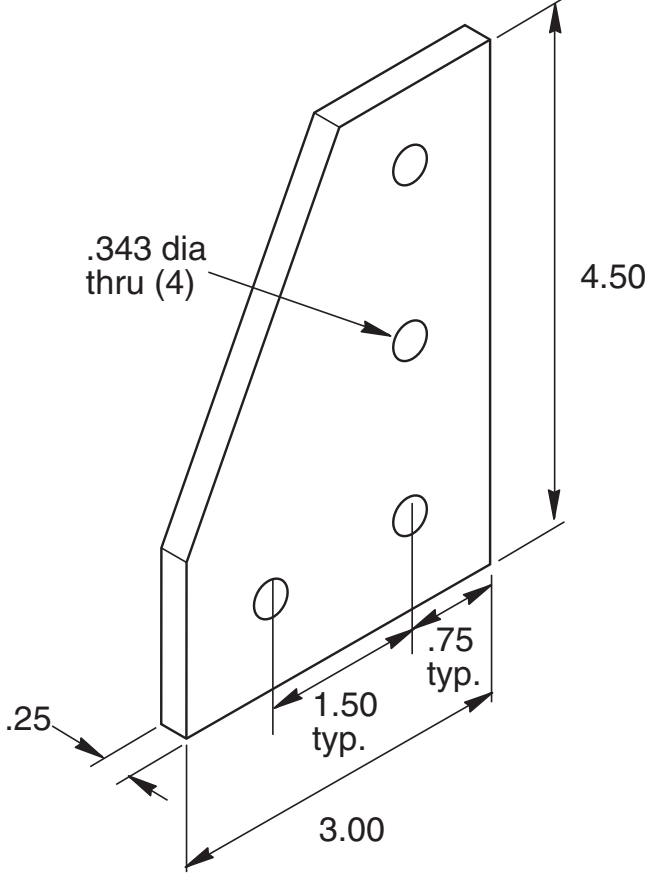


Recommended  
Hardware  
(15) EF-12-.63 BHCS  
(15) EF-2 T-nut

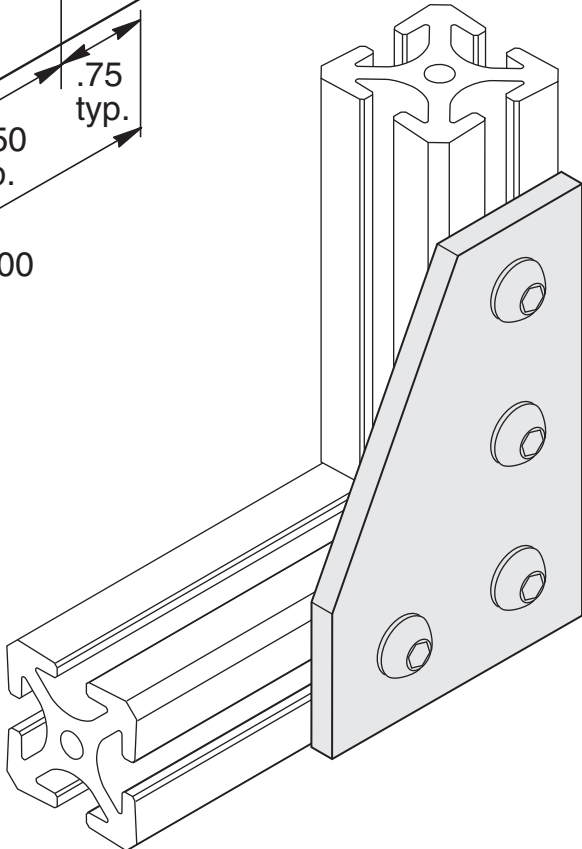
Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**



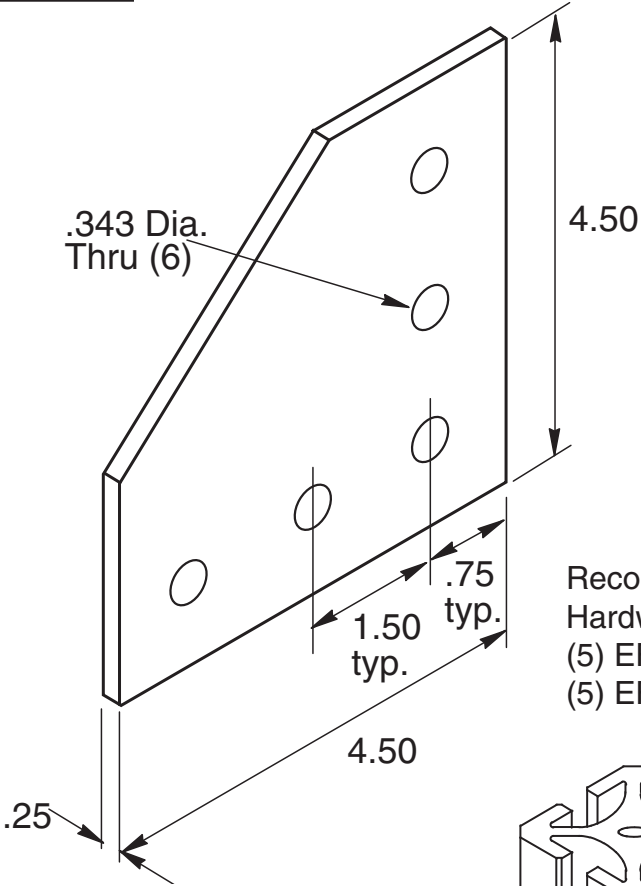
Recommended Hardware  
 (4) EF-12-.63 BHCS  
 (4) EF-2 T-nut



**Material - Aluminum**  
**Finish - Clear Anodize**

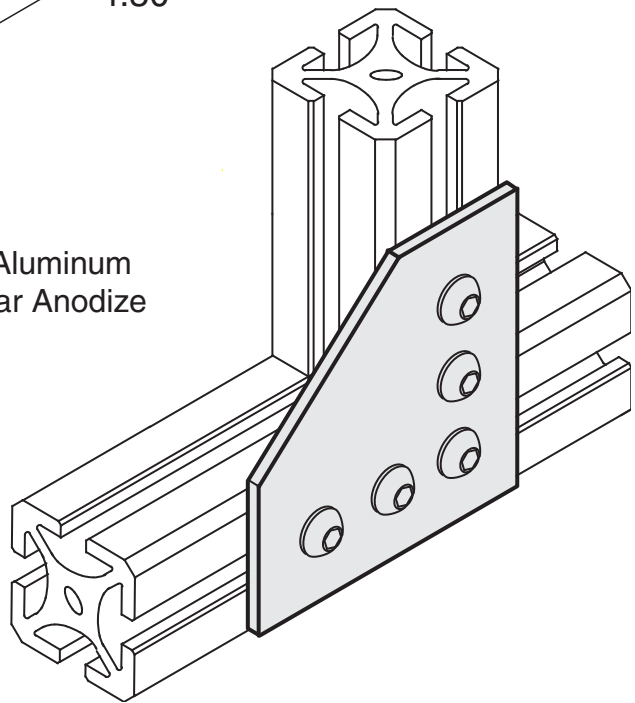
**EB-22**

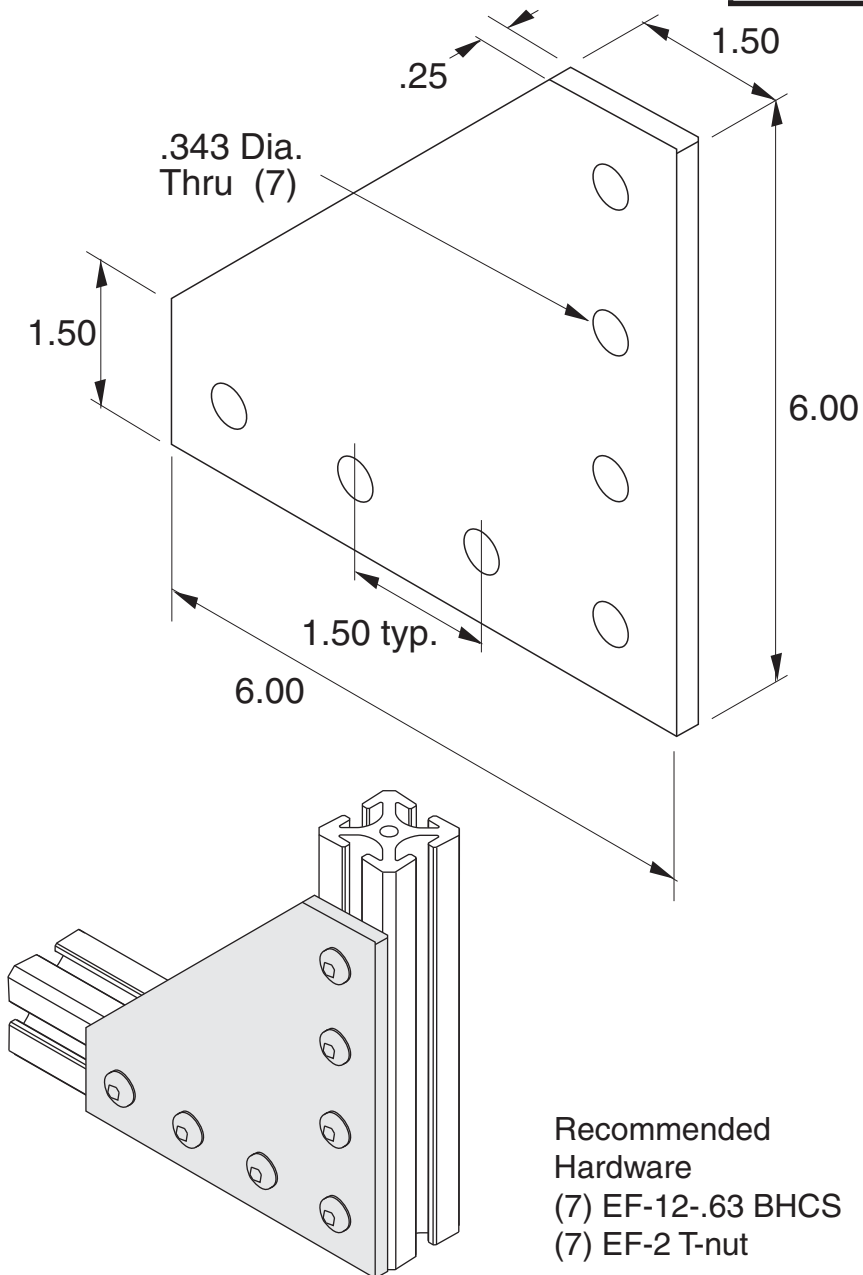
5/16" SLOTS



Recommended Hardware  
(5) EF-12-.63 BHCS  
(5) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



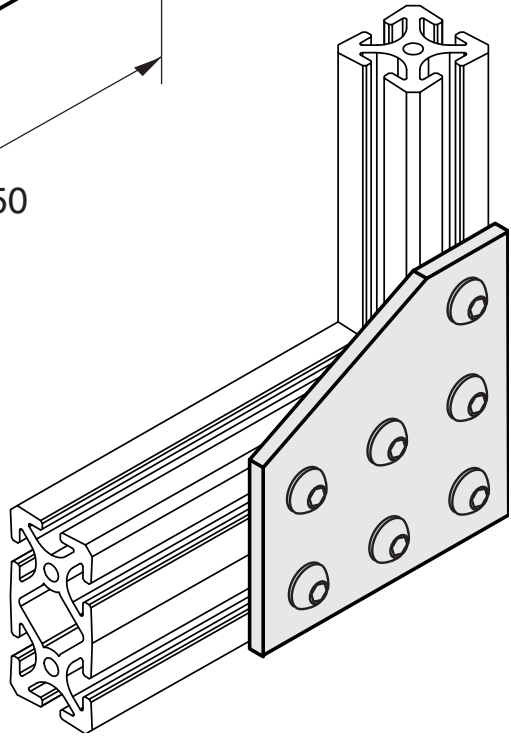
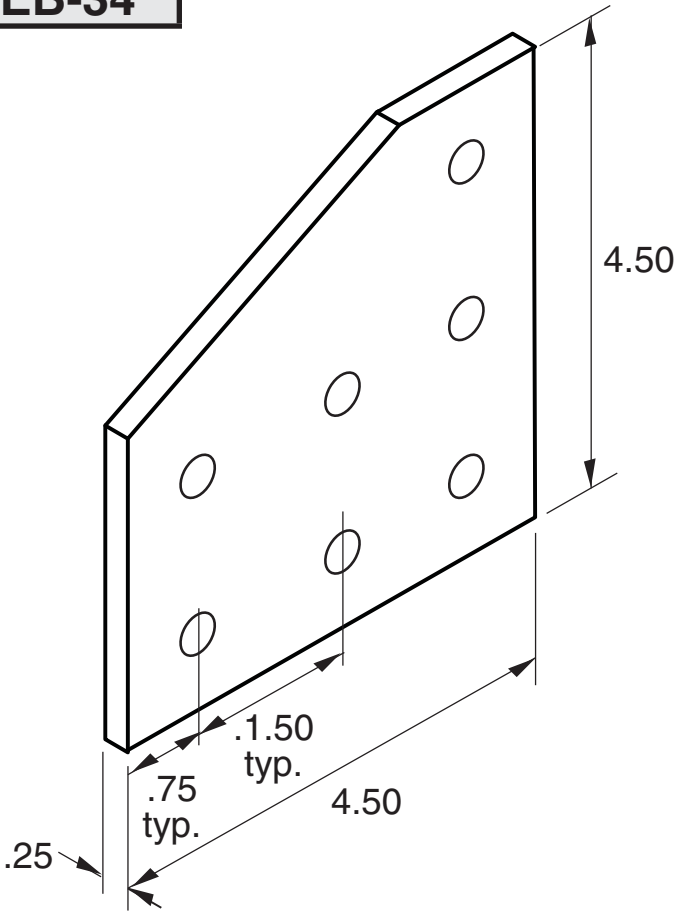


**5/16" SLOTS**

**Material - Aluminum**  
**Finish - Clear Anodize**

**EB-34**

5/16" SLOTS

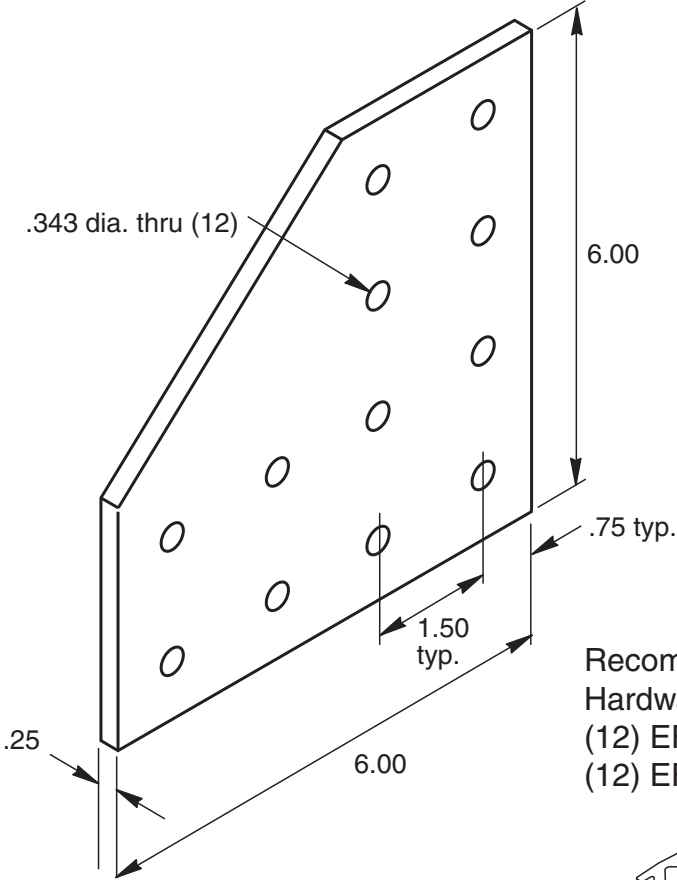


- Recommended Hardware  
(7) EF-12-.63 BHCS  
(7) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

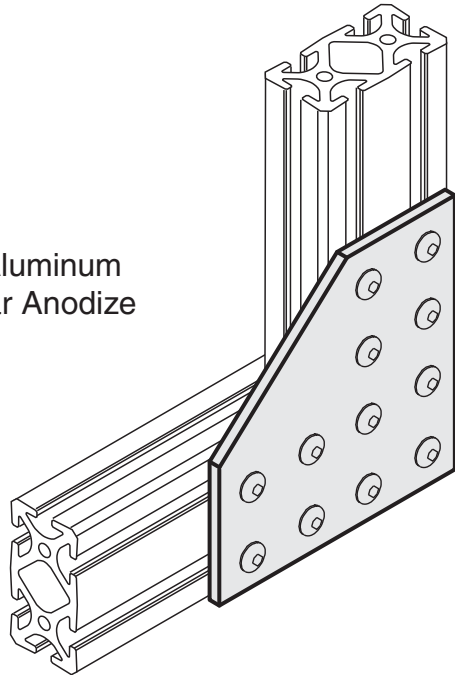
**EB-27**

**5/16" SLOTS**



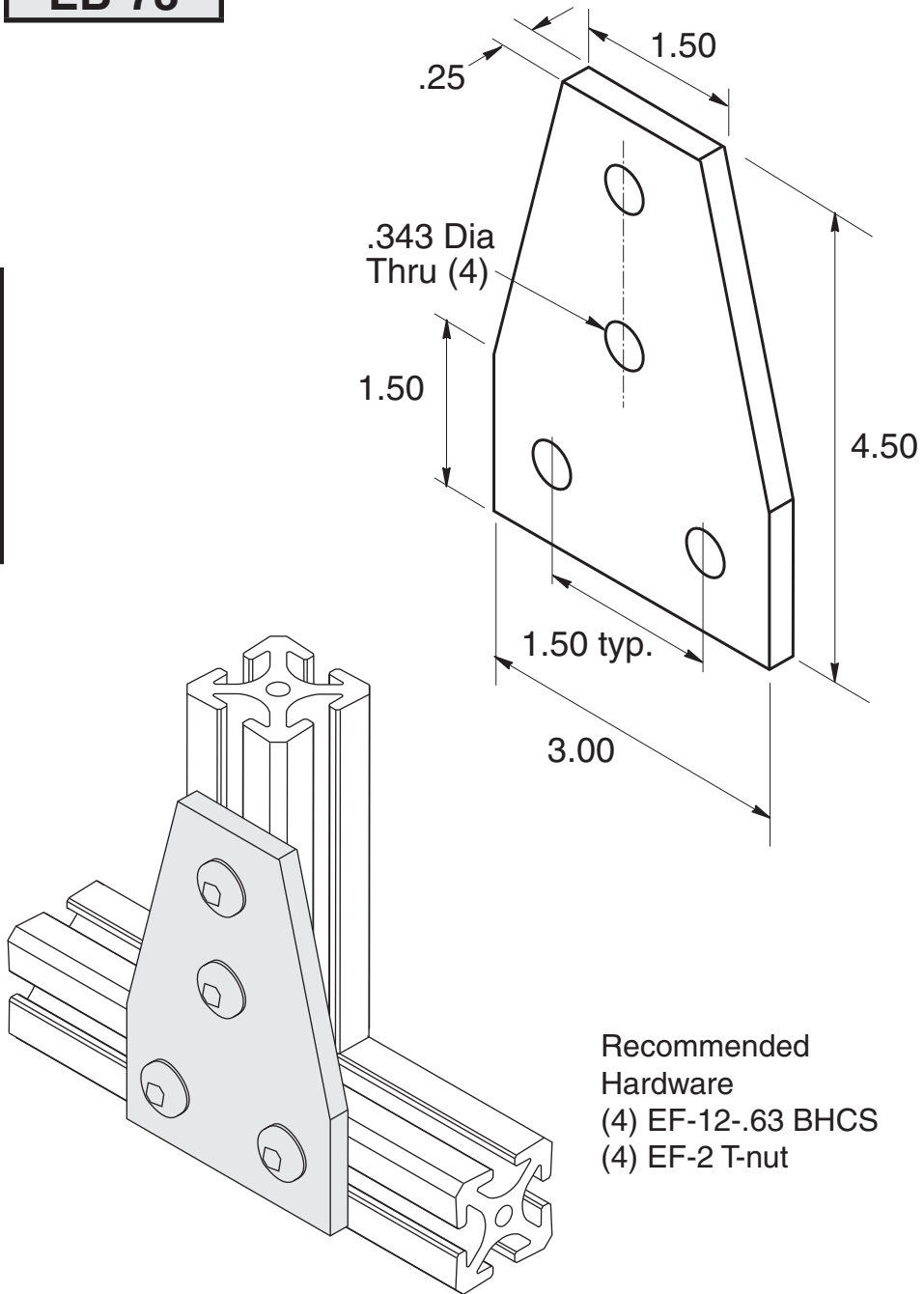
**Recommended  
Hardware**  
(12) EF-12-.63 BHCS  
(12) EF-2 T-nut

**Material - Aluminum**  
**Finish - Clear Anodize**



**EB-73**

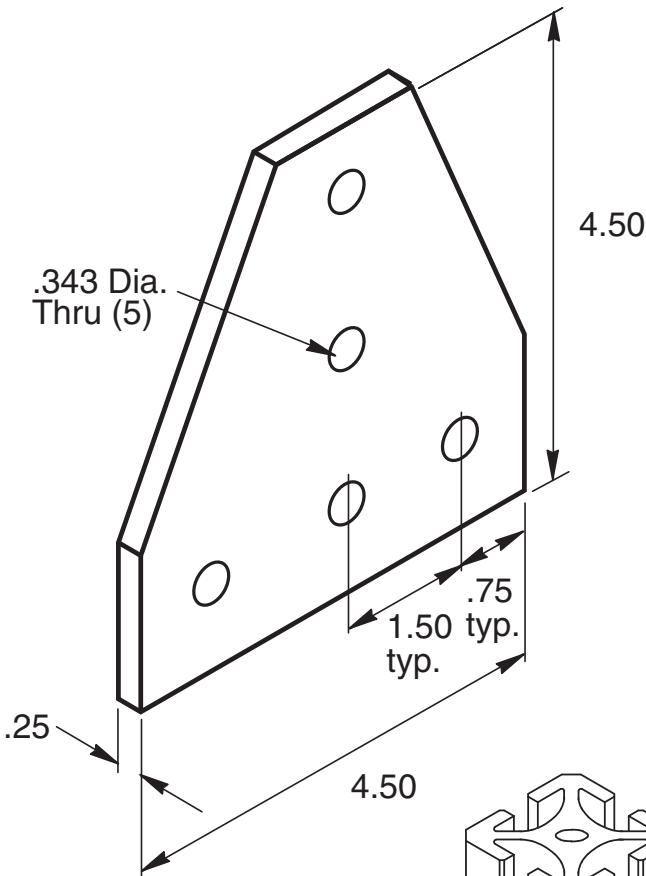
5/16" SLOTS



Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

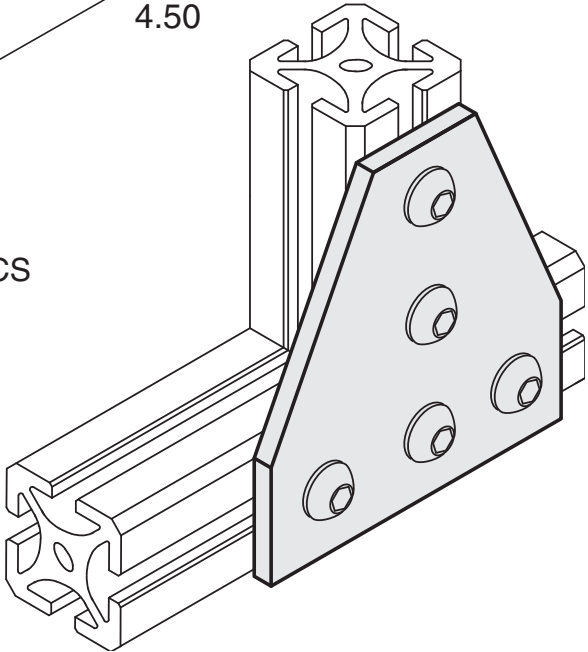
Material - Aluminum  
Finish - Clear Anodize

**EB-23**



5/16" SLOTS

Recommended  
Hardware  
(5) EF-12-.63 BHCS  
(5) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize

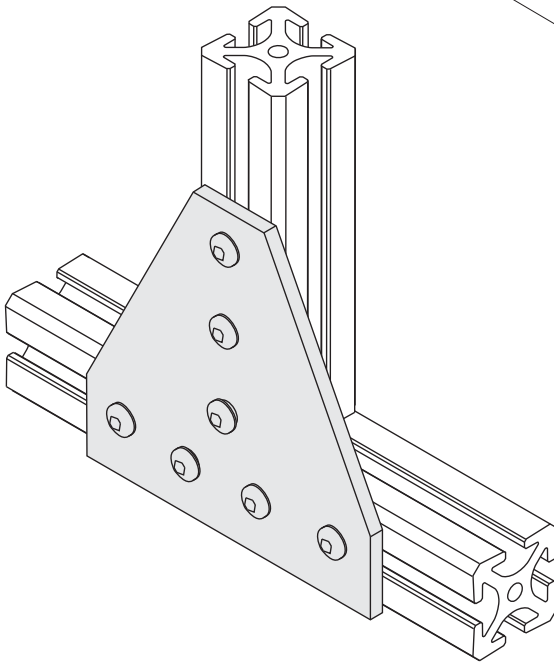
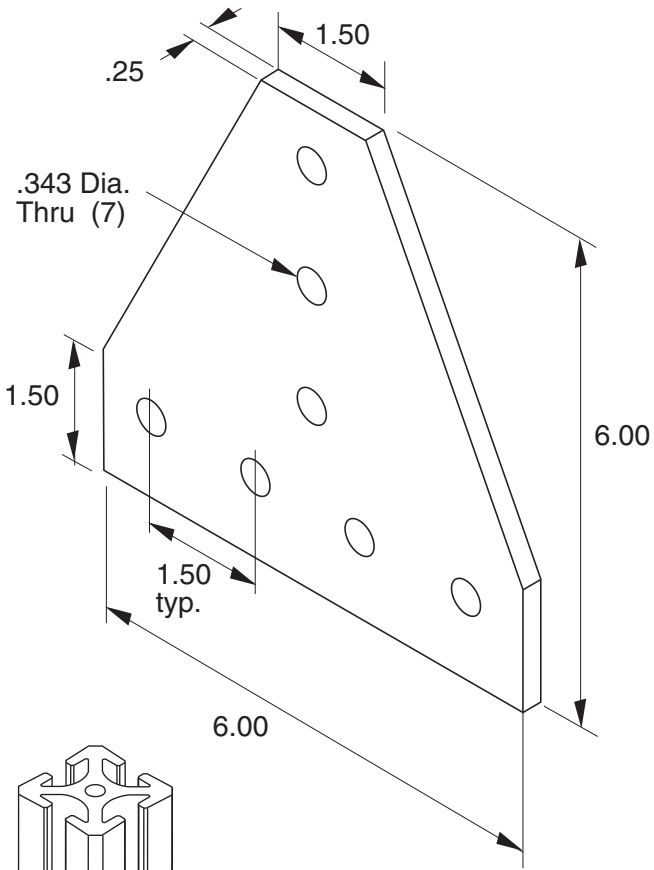


# Joining Plate



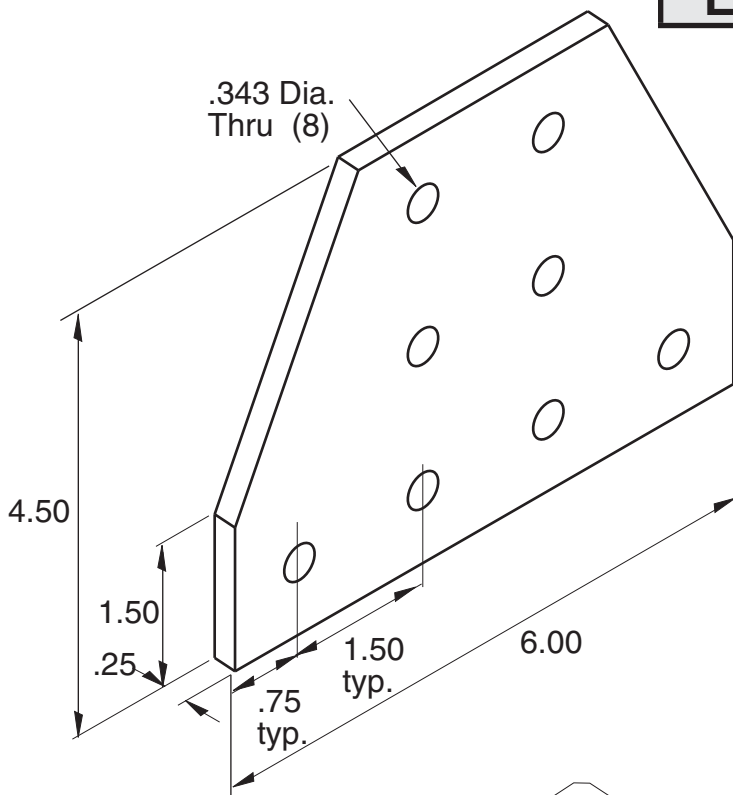
**EB-74**

5/16" SLOTS



Recommended Hardware  
(7) EF-12-.63 BHCS  
(7) EF-2 T-nut

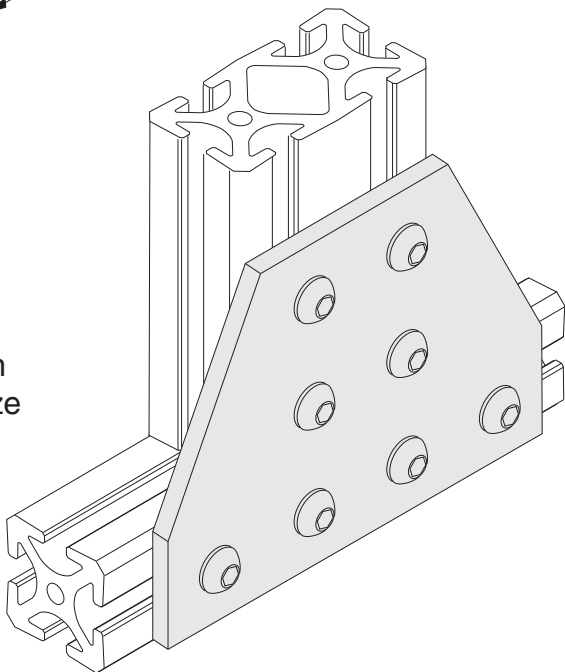
Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

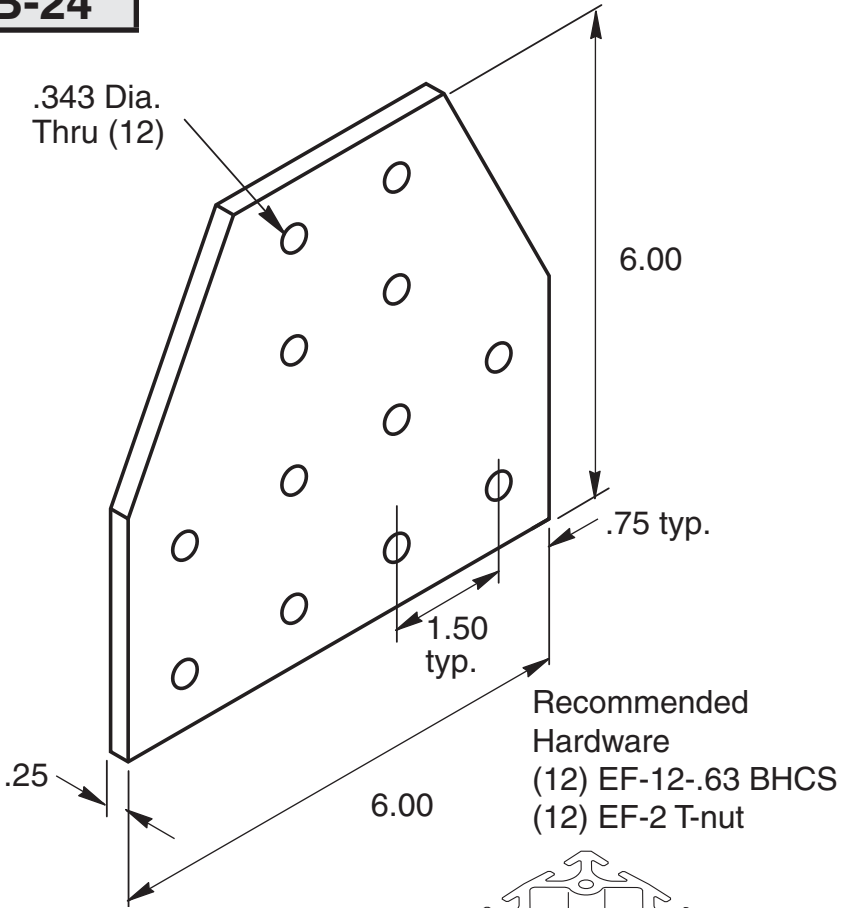
Recommended  
Hardware  
(8) EF-12-.63 BHCS  
(8) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

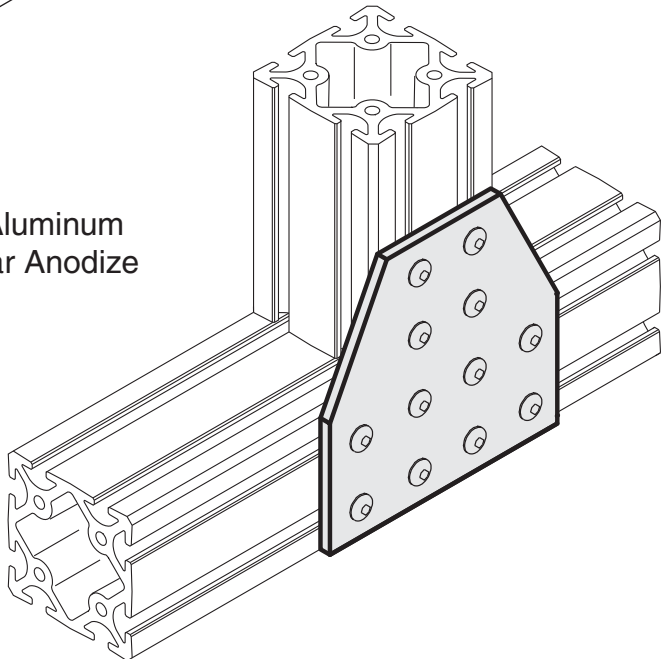


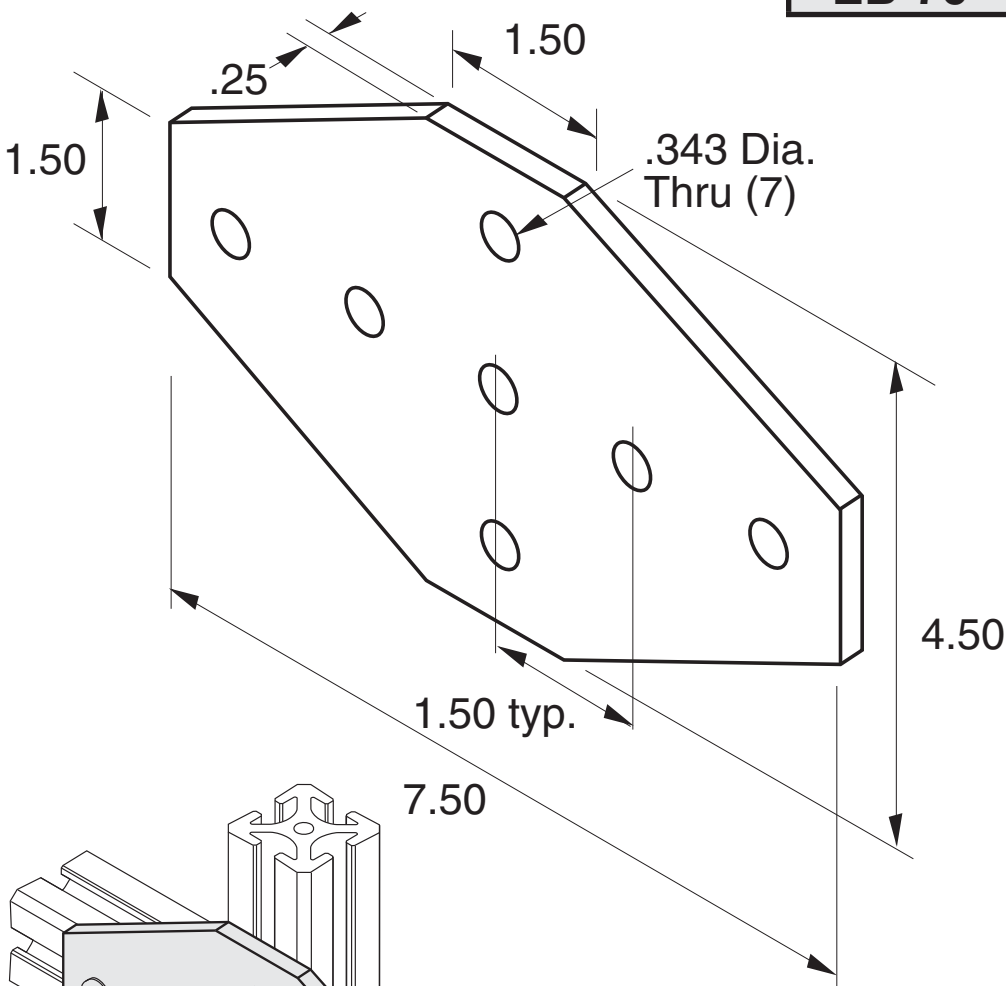
**EB-24**

5/16" SLOTS



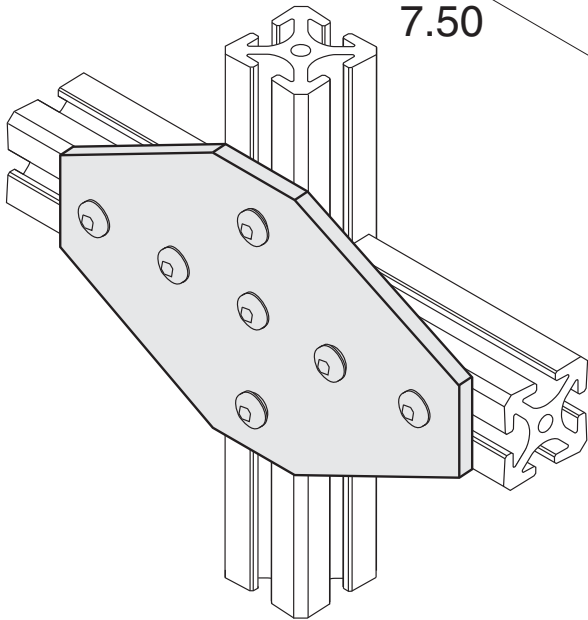
Material - Aluminum  
Finish - Clear Anodize





5/16" SLOTS

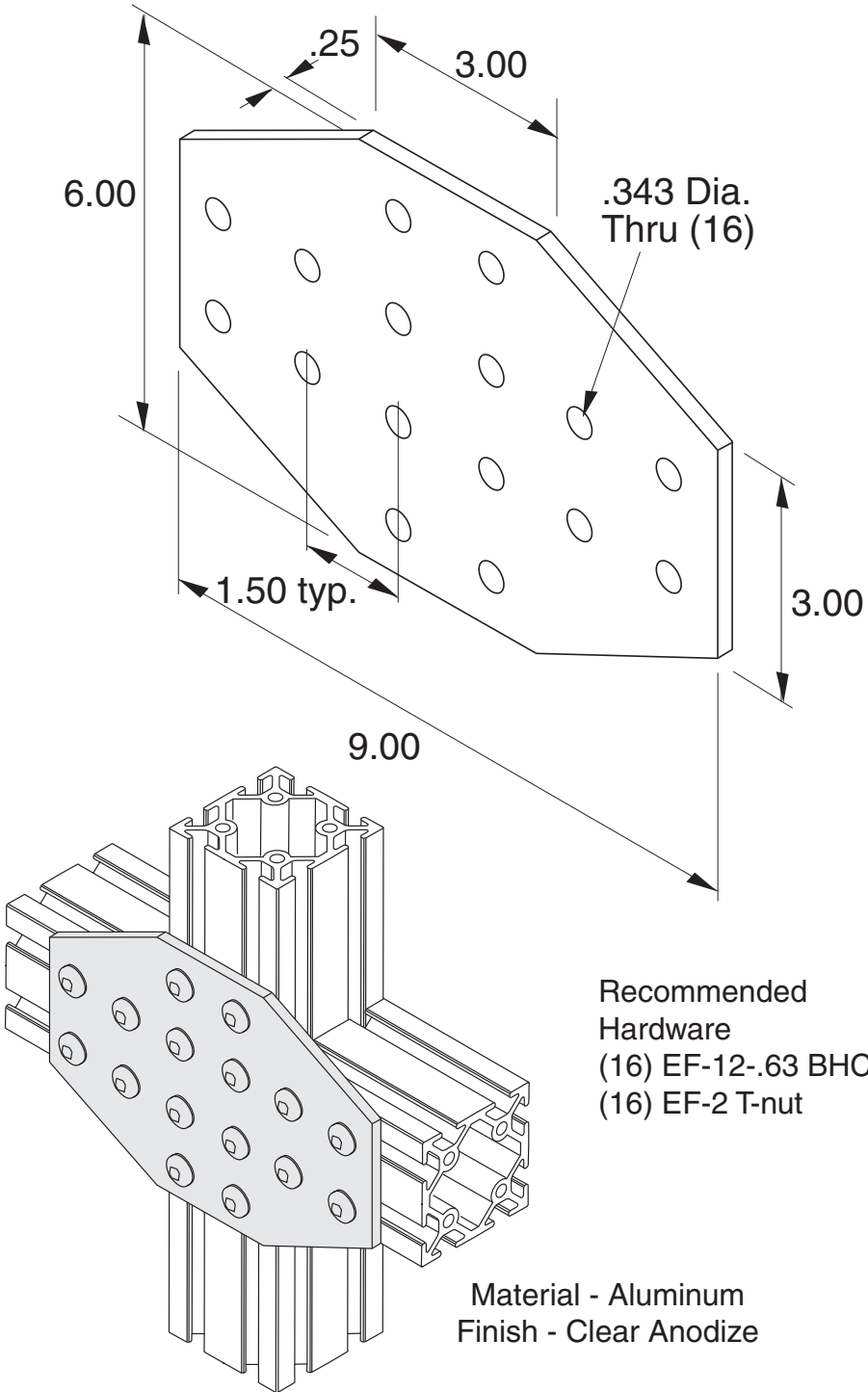
Recommended  
Hardware  
(7) EF-12-.63 BHCS  
(7) EF-2 T-nut

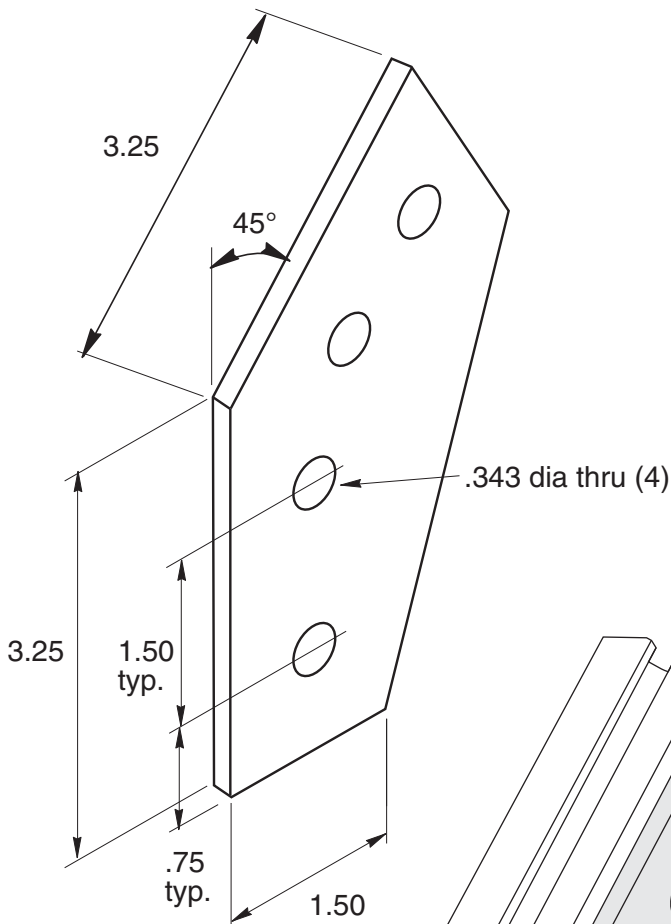


Material - Aluminum  
Finish - Clear Anodize

**EB-78**

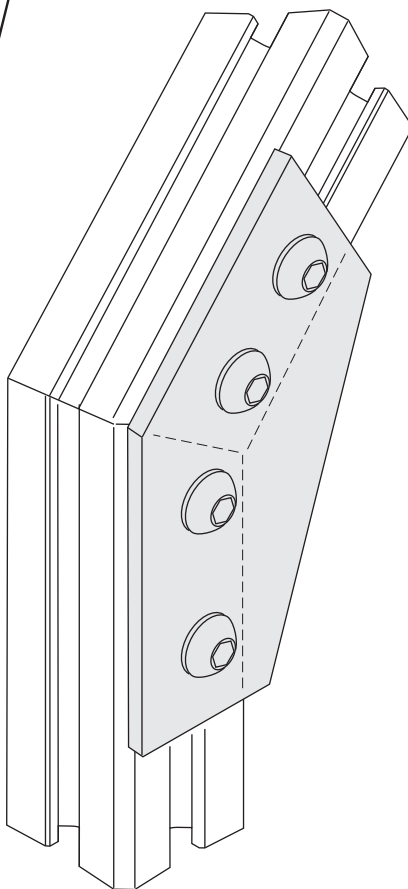
5/16" SLOTS





Recommended  
Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



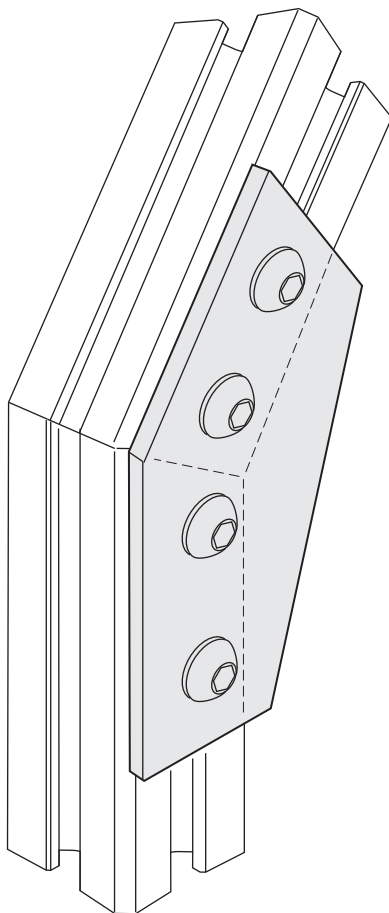
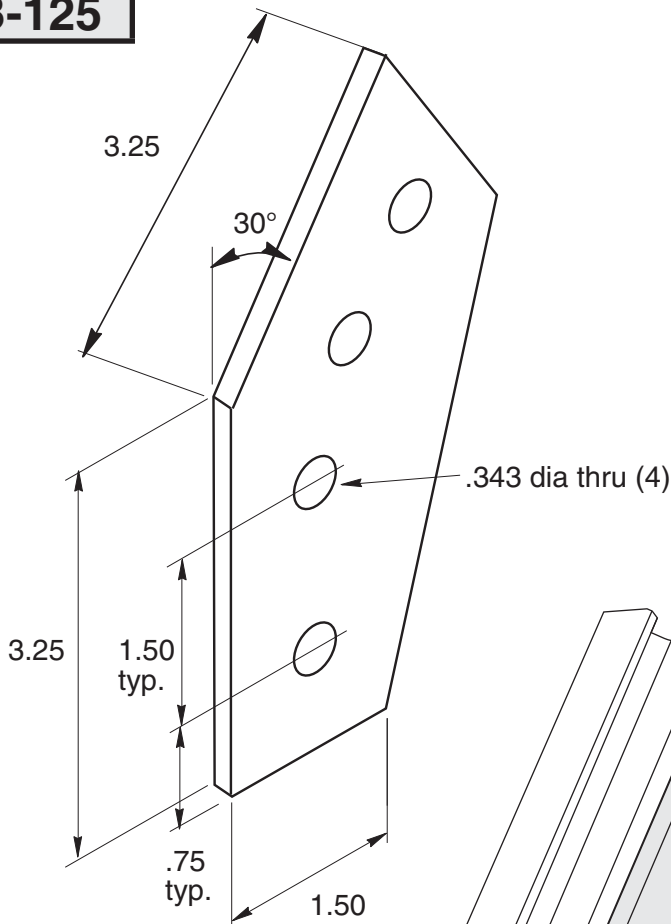
**5/16" SLOTS**

# 30° Joining Plate



**EB-125**

**5/16" SLOTS**

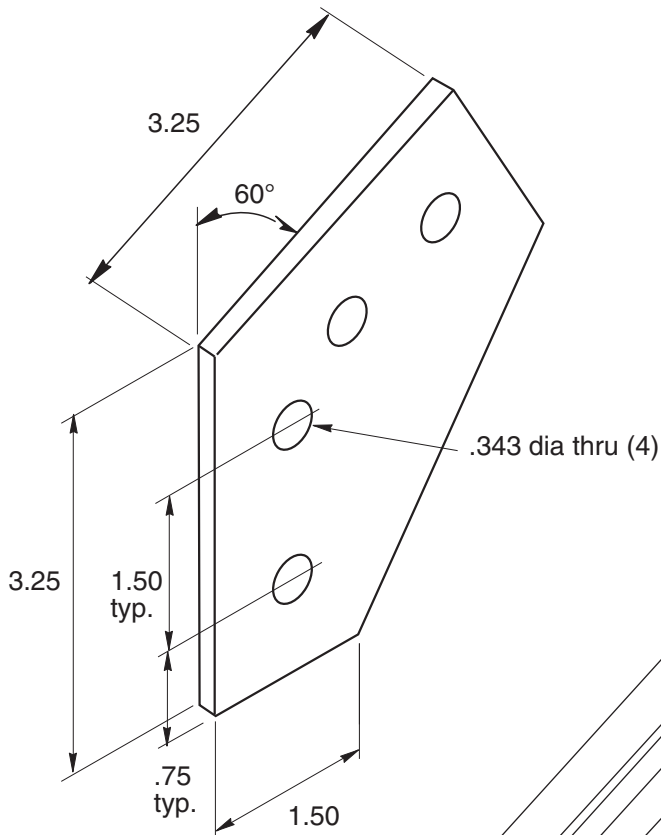


Recommended Hardware

(4) EF-12-.63 BHCS

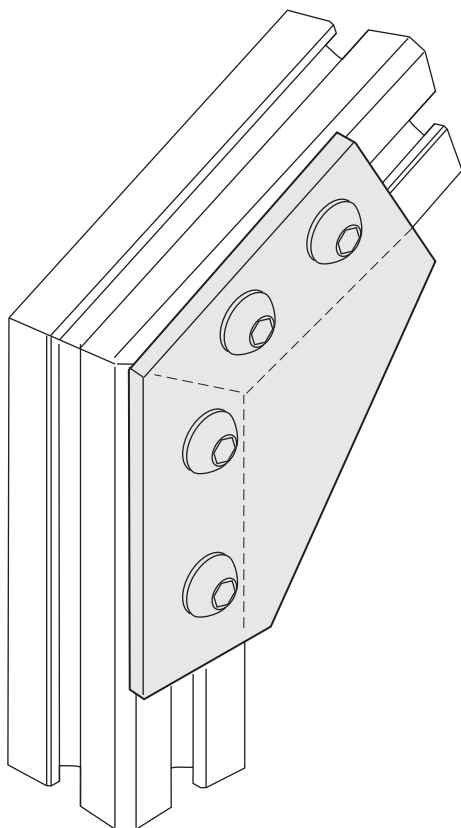
(4) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

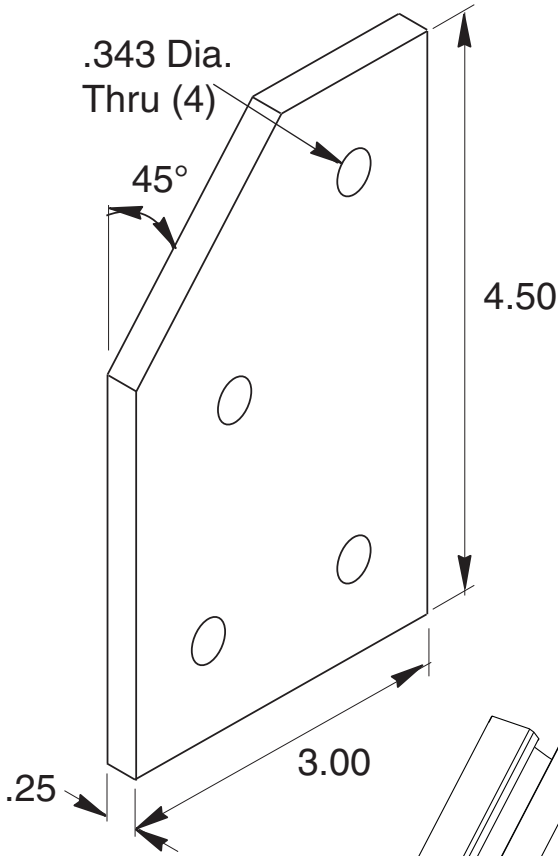


# 45° Joining Plate



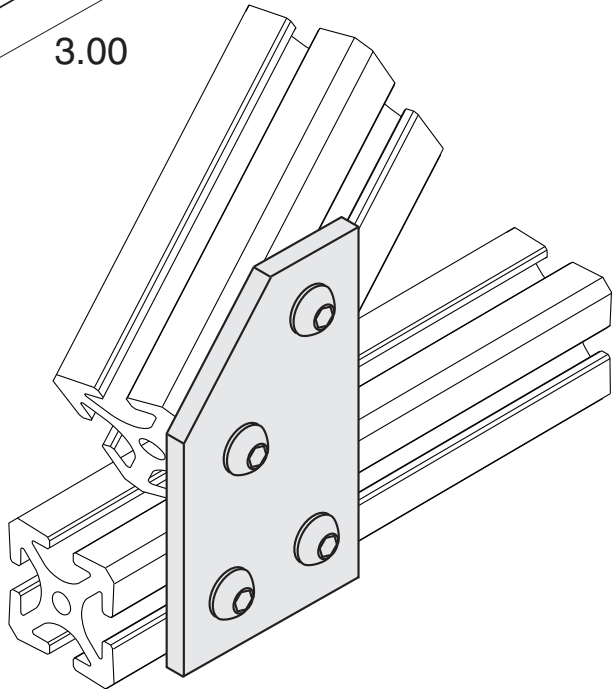
**EB-127**

5/16" SLOTS



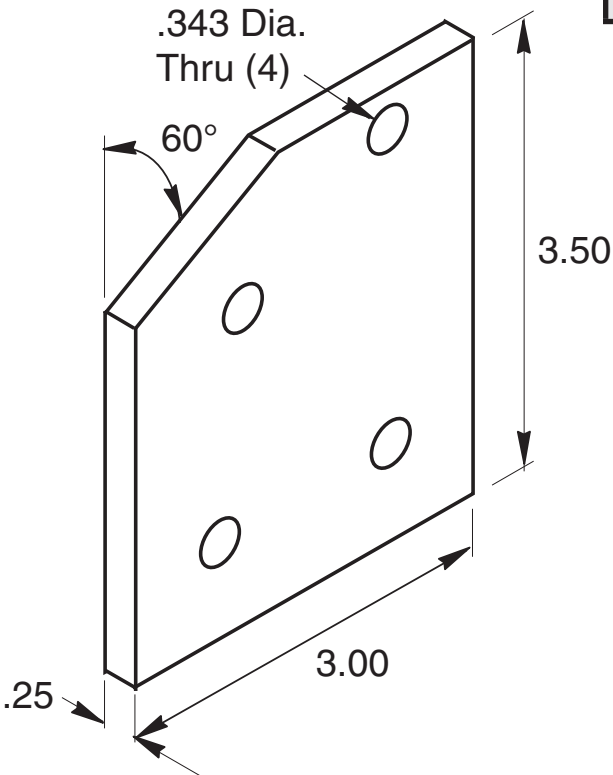
Recommended Hardware

- (4) EF-12-.63 BHCS
- (4) EF-2 T-nut



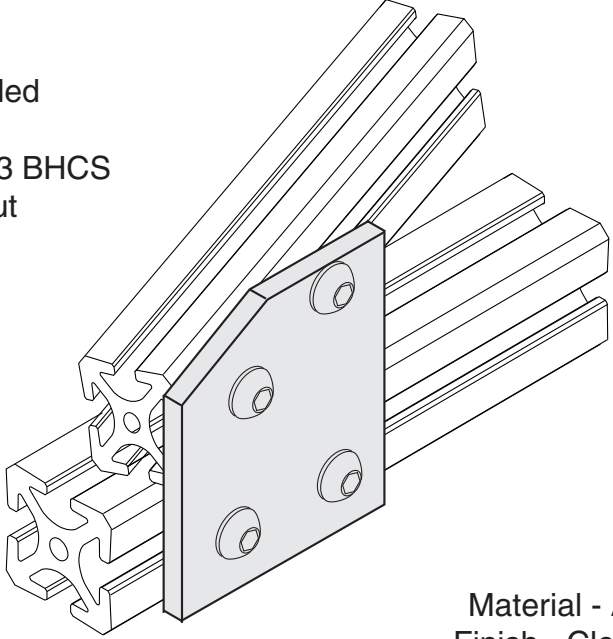
Material - Aluminum  
Finish - Clear Anodize

**EB-128**



5/16" SLOTS

Recommended  
Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut



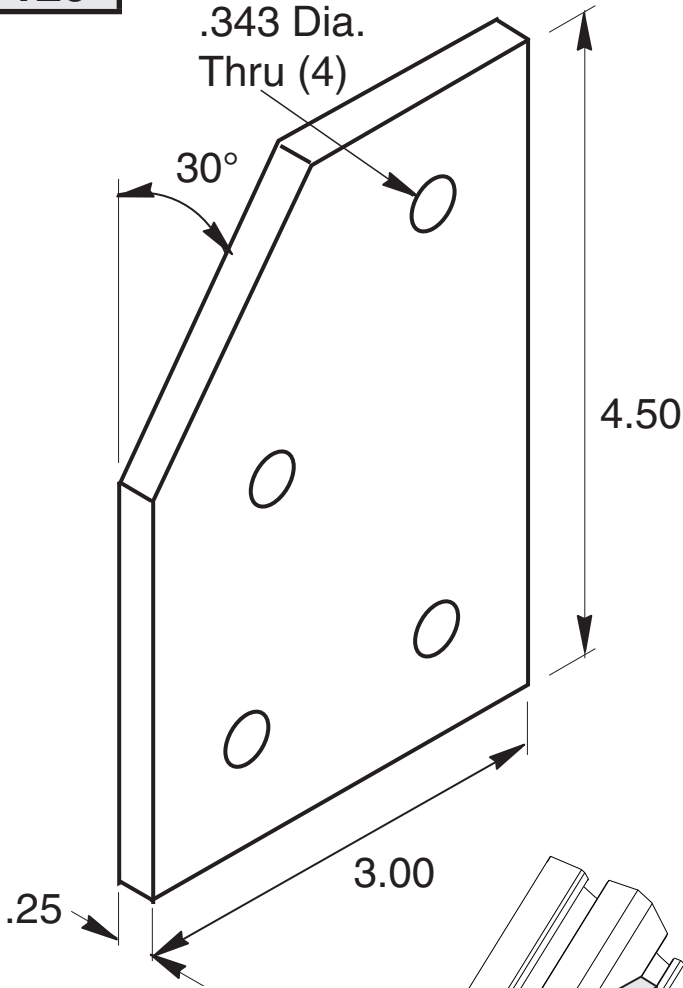
Material - Aluminum  
Finish - Clear Anodize

# 30° Joining Plate

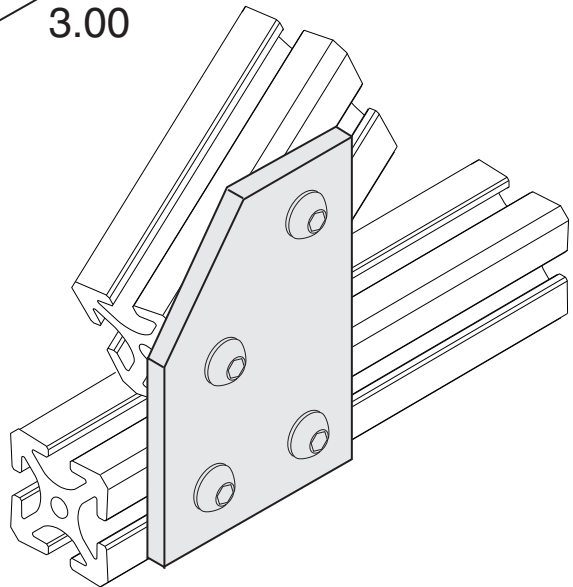


**EB-129**

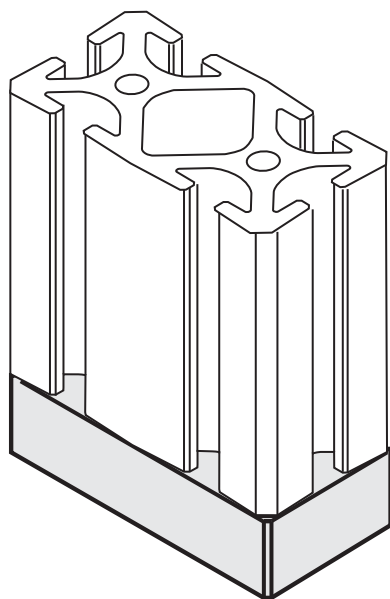
**5/16" SLOTS**



Recommended Hardware  
(4) EF-12-.63 BHCS  
(4) EF-2 T-nut



Material - Aluminum  
Finish - Clear Anodize

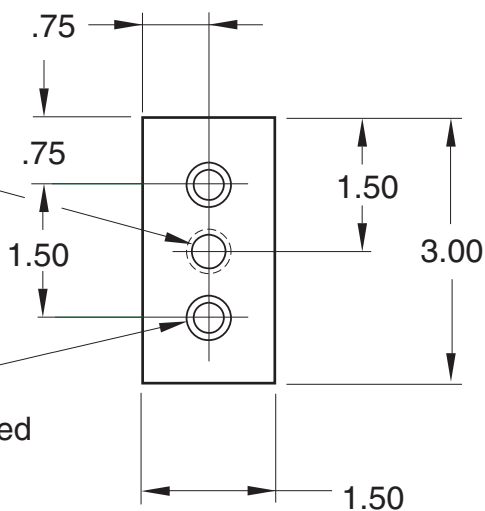


<b>EBP-1</b>
<b>EBP-1A</b>
<b>EBP-1B</b>
<b>EBP-1C</b>

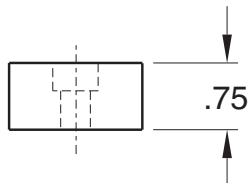
**5/16" SLOTS**

- |               |                      |
|---------------|----------------------|
| <b>EBP-1</b>  | <b>thread</b> 1/2-13 |
| <b>EBP-1A</b> | 3/8-16               |
| <b>EBP-1B</b> | 5/8-11               |
| <b>EBP-1C</b> | 3/4-10               |

Drilled & C'Bored  
for 5/16 SHCS  
(2) plc's



Requires  
(2) EF-11-1.0 SHCS

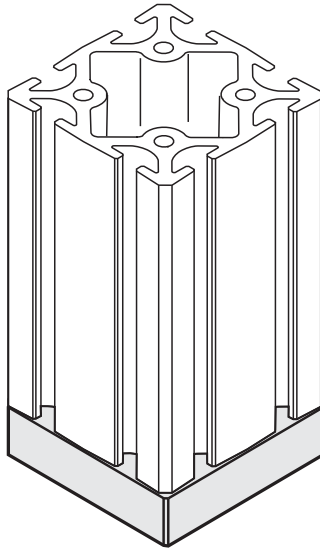


Material - Aluminum  
Finish - Clear Anodize

# Leveling Plate

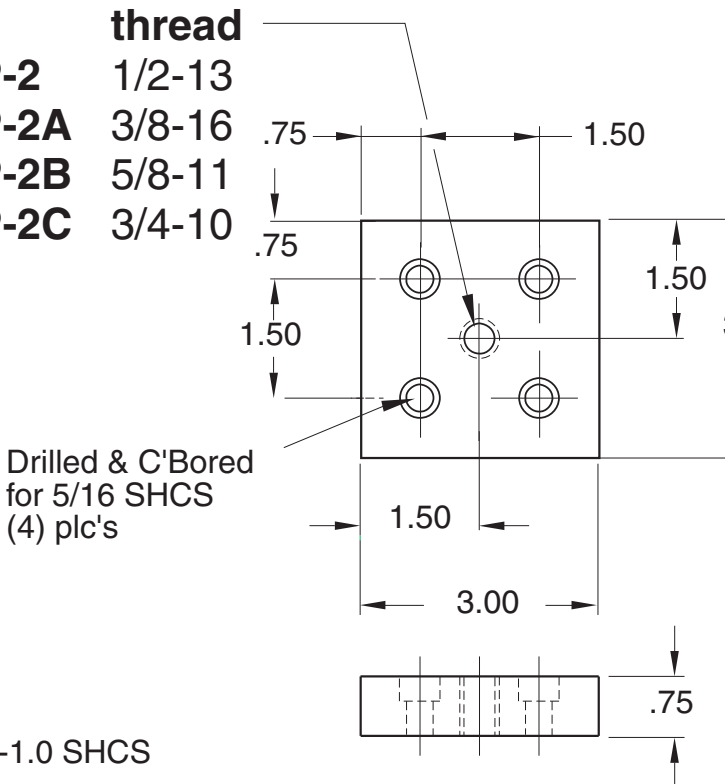


<b>EBP-2</b>
<b>EBP-2A</b>
<b>EBP-2B</b>
<b>EBP-2C</b>



**5/16" SLOTS**

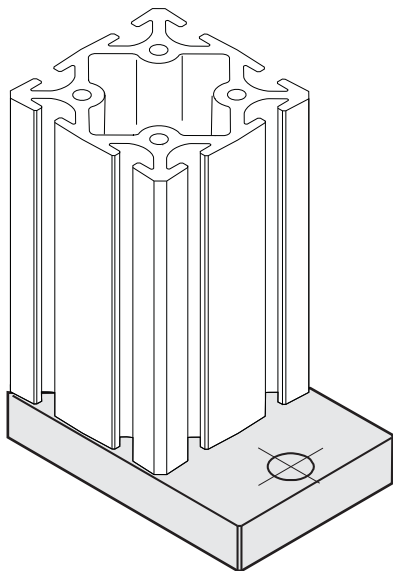
<b>EBP-2</b>	<b>thread</b> 1/2-13
<b>EBP-2A</b>	3/8-16
<b>EBP-2B</b>	5/8-11
<b>EBP-2C</b>	3/4-10



Requires  
(4) EF-11-1.0 SHCS

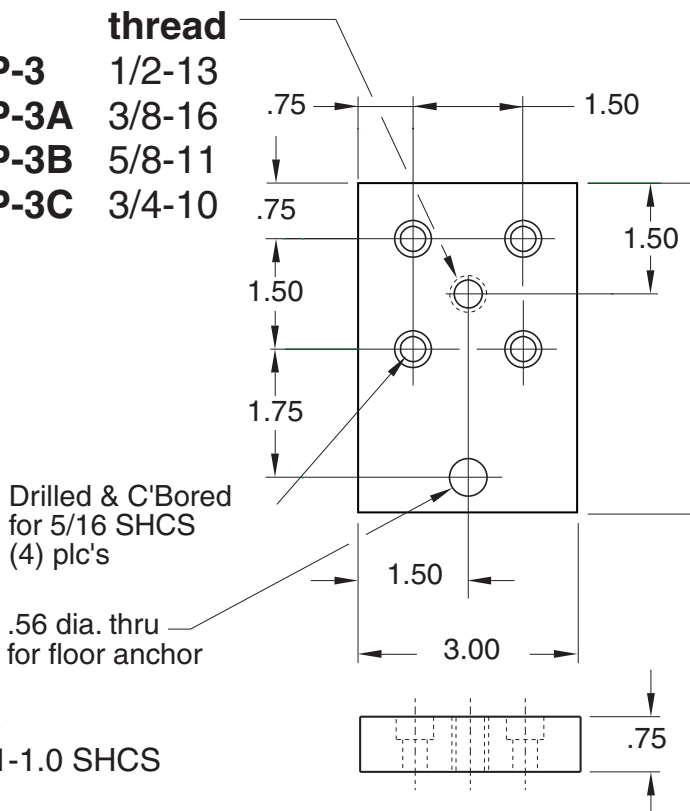
Material - Aluminum  
Finish - Clear Anodize

<b>EBP-3</b>
<b>EBP-3A</b>
<b>EBP-3B</b>
<b>EBP-3C</b>



**5/16" SLOTS**

<b>EBP-3</b>	<b>thread</b>	<b>1/2-13</b>
<b>EBP-3A</b>	<b>3/8-16</b>	
<b>EBP-3B</b>	<b>5/8-11</b>	
<b>EBP-3C</b>	<b>3/4-10</b>	

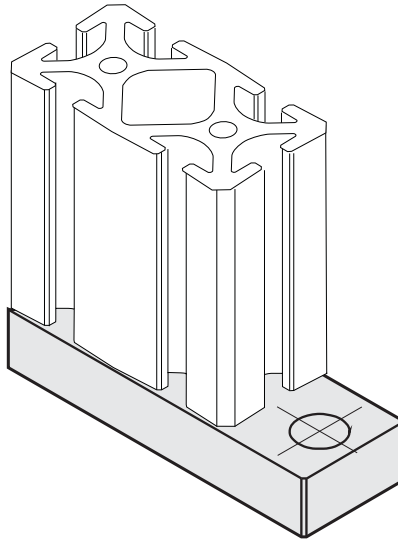


**Material - Aluminum**  
**Finish - Clear Anodize**

# Leveling Anchor Plate



<b>EBP-4</b>
<b>EBP-4A</b>
<b>EBP-4B</b>
<b>EBP-4C</b>

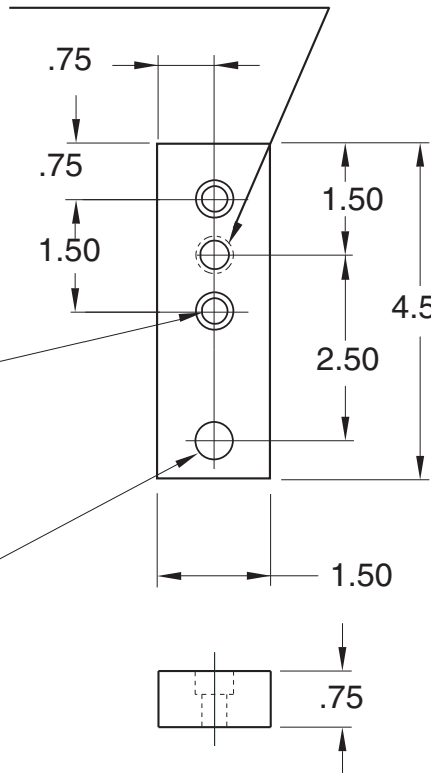


**5/16" SLOTS**

	<b>thread</b>
<b>EBP-4</b>	1/2-13
<b>EBP-4A</b>	3/8-16
<b>EBP-4B</b>	5/8-11
<b>EBP-4C</b>	3/4-10

Drilled & C'Bored  
for 5/16 SHCS  
(2) plc's

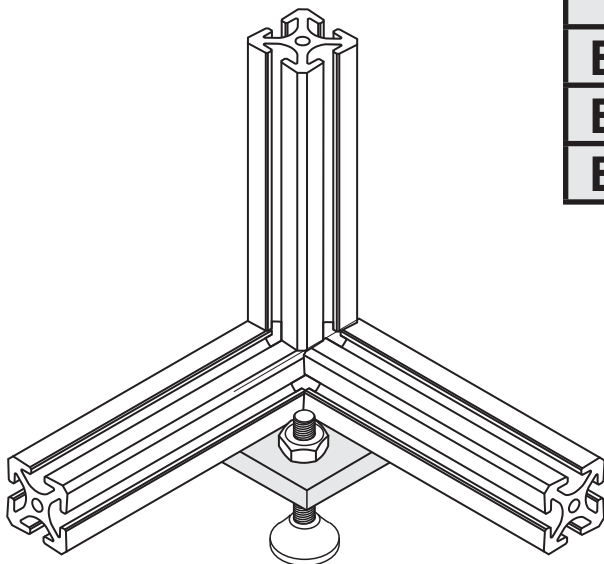
.56 dia. thru  
for floor anchor



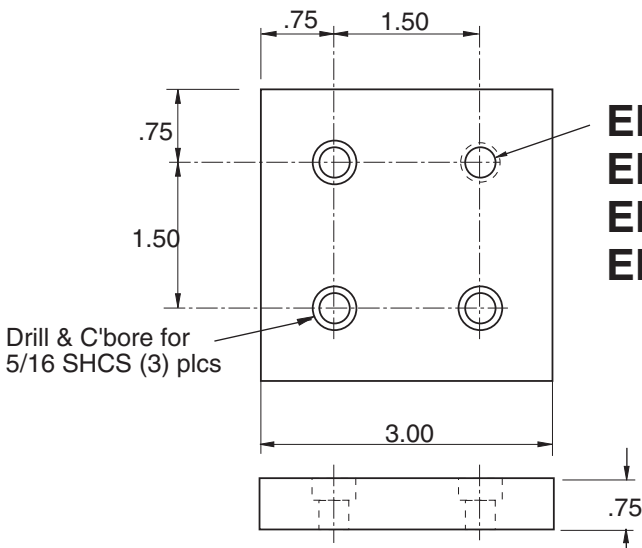
Requires  
(2) EF-11-1.0 SHCS

Material - Aluminum  
Finish - Clear Anodize

<b>EBP-6</b>
<b>EBP-6A</b>
<b>EBP-6B</b>
<b>EBP-6C</b>



**5/16" SLOTS**



	<b>thread</b>
<b>EBP-6</b>	1/2-13
<b>EBP-6A</b>	3/8-16
<b>EBP-6B</b>	5/8-11
<b>EBP-6C</b>	3/4-10

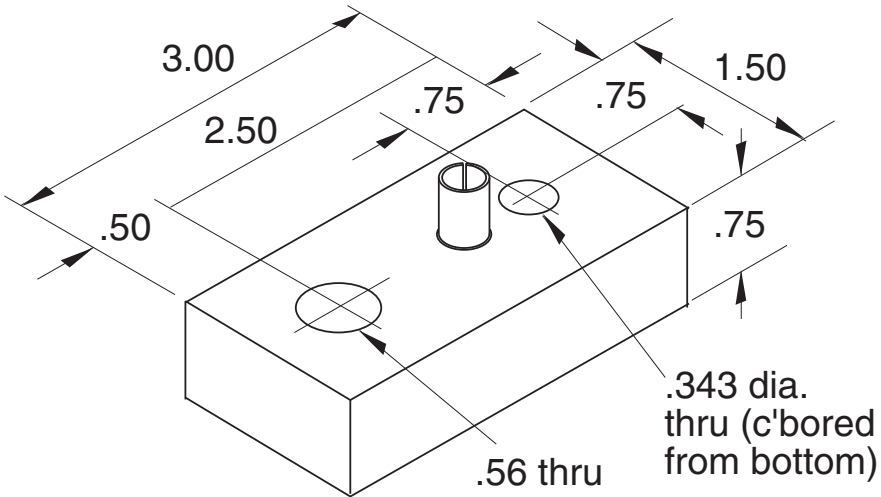
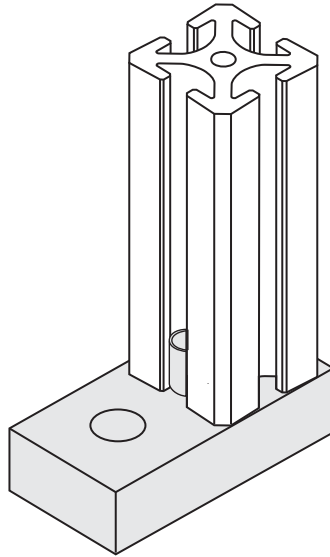
Requires  
 (3) EF-11-.875 SHCS  
 (3) EF-2 T-nut

Material - Aluminum  
 Finish - Clear Anodize



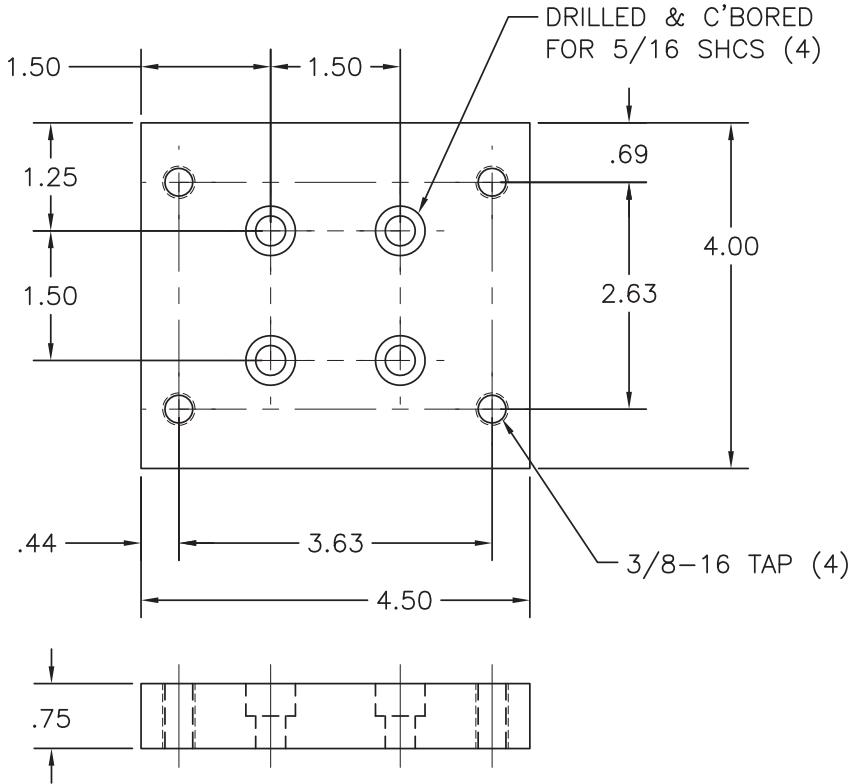
**EBP-8**

**5/16" SLOTS**



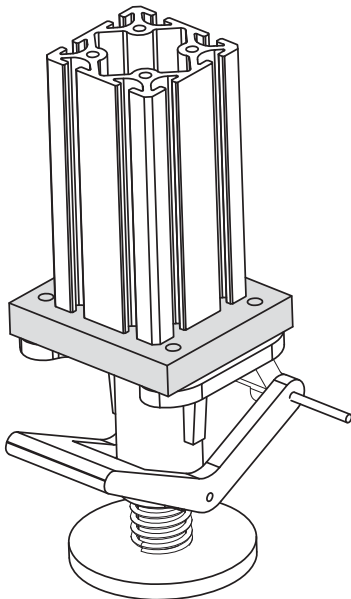
Requires  
(1) EF-11-1.0 SHCS

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

**Recommended Hardware**  
 (4) EF-11.75  
 (4) EF-1

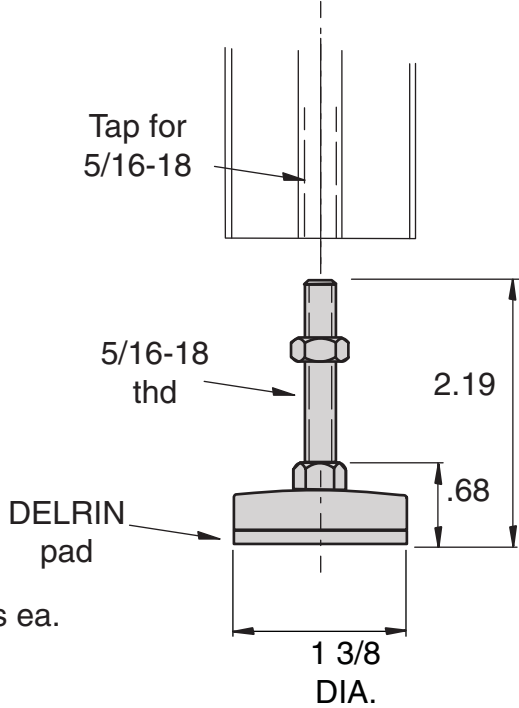


**Material - Steel**  
**Finish - Zinc Coated**

**EAL**

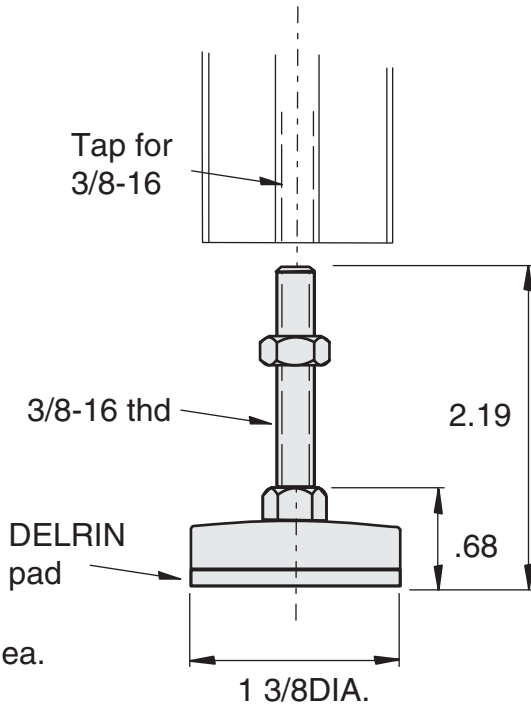
**EAL-1**

5/16" SLOTS



Max load = 250 lbs ea.

**EAL-2**



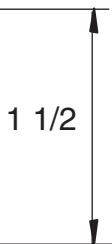
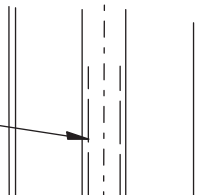
Max load = 400 lbs ea.

**EAL-E**

**EAL-E1**

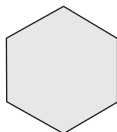
Max load = 1700 lbs ea.

Tap for  
5/16-18



5/16-18 thd

Material - Steel  
Finish - Zinc Plated

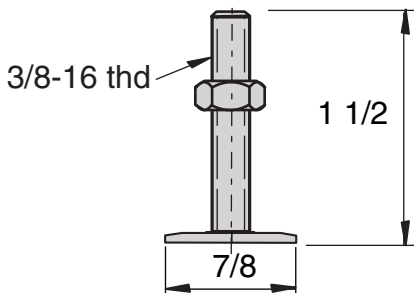
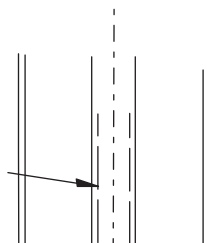


**5/16" SLOTS**

**EAL-E2**

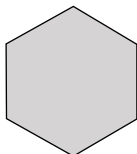
Max load = 1700 lbs ea.

Tap for  
3/8-16



3/8-16 thd

Material - Steel  
Finish - Zinc Plated



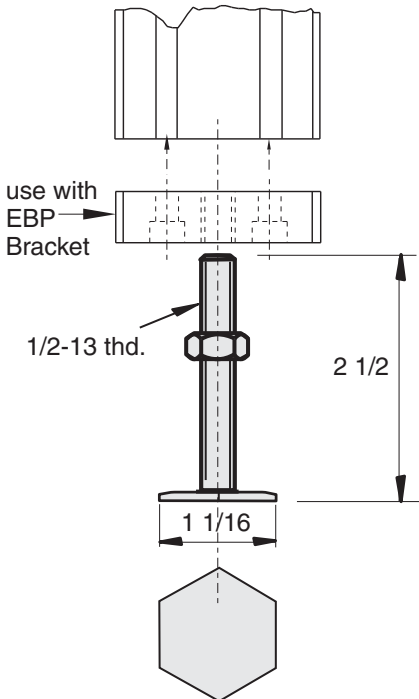
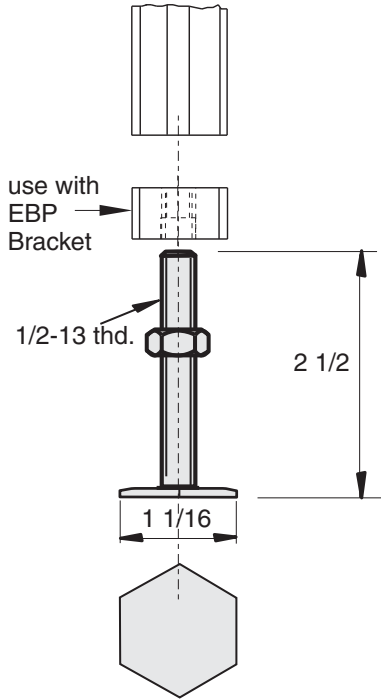
# Adjustable Leg (Economy)



**EAL-E**

**EAL-E3**

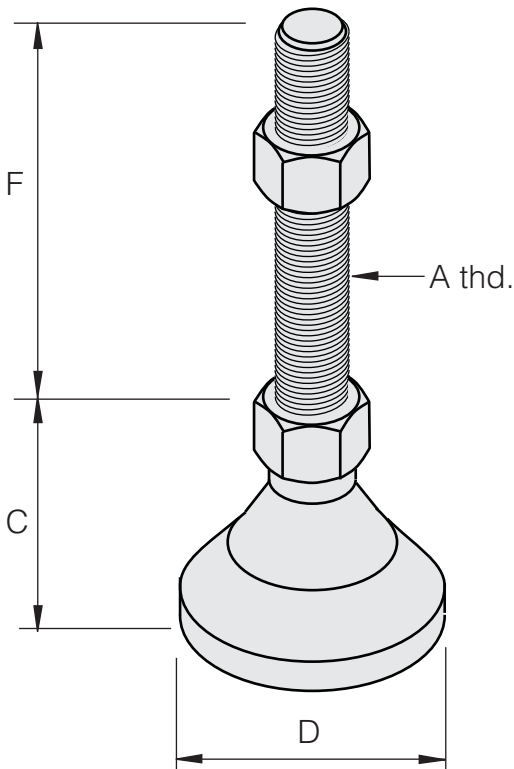
5/16" SLOTS



Max load = 4200 lbs ea.

Material - Steel  
Finish - Zinc Plated

<b>EAL-3</b>
<b>EAL-4</b>
<b>EAL-5</b>
<b>EAL-6</b>
<b>EAL-10</b>



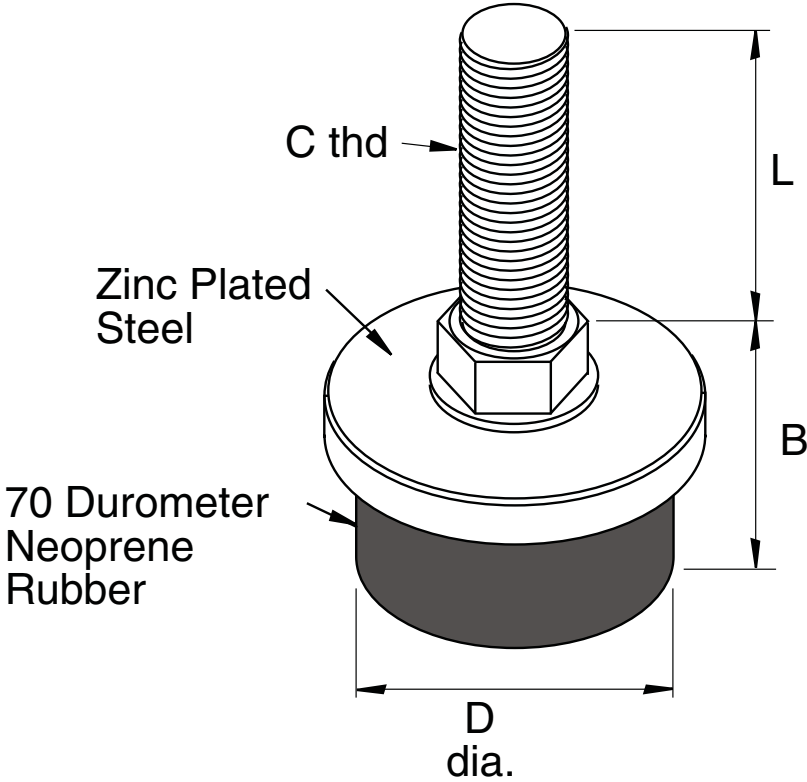
**5/16" SLOTS**

Part No	Max (lbs) Work Load	A	C	D	F
<b>EAL-4</b>	3750	3/8-16	7/8	1 1/4	2
<b>EAL-3</b>	5000	1/2-13	1 1/8	1 7/8	2
<b>EAL-5</b>	6000	5/8-11	1 1/4	2 1/2	2
<b>EAL-6</b>	7200	3/4-10	1 1/2	3	2
<b>EAL-10</b>	2300	5/16-18	1.25	1 1/4	2

**Material - Steel**  
**Finish - Yellow Zinc Plate**

<b>EAL-7</b>
<b>EAL-8</b>
<b>EAL-9</b>

**5/16" SLOTS**

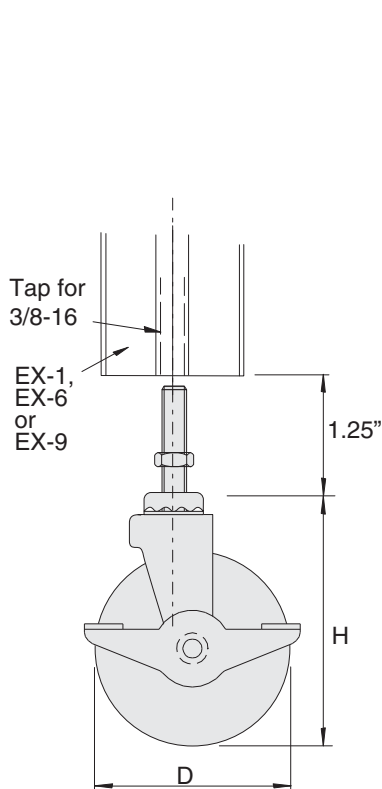


Part No	Max (lbs) Work Load	C Thd Size	D	B	L
<b>EAL-7</b>	100	$5/16$ -18	1.0	$13/16$	$1\ 1/4$
<b>EAL-8</b>	300	$3/8$ -16	1.5	$63/64$	3.0
<b>EAL-9</b>	300	$1/2$ -13	1.5	$1\ 1/16$	2.0

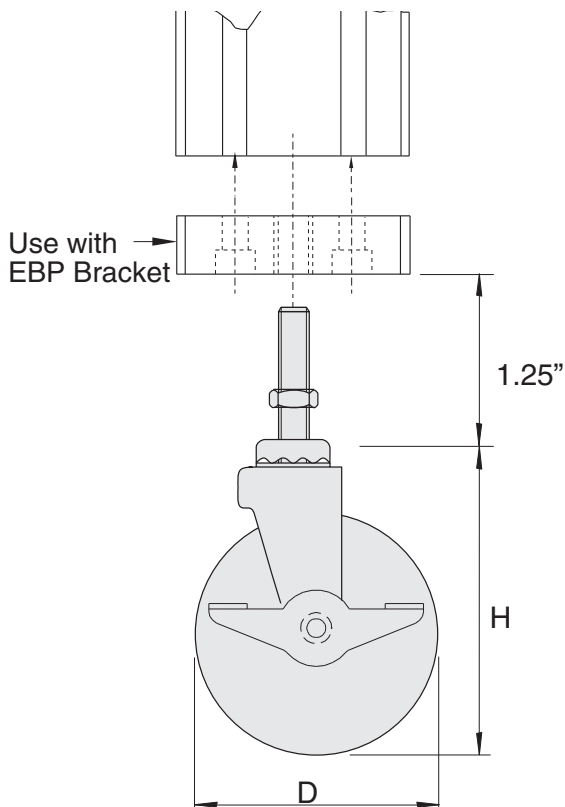
**EC-S1**

**EC-S2**

**EC-S3**



**EC-S1**  
**EC-S2**



**EC-S3**

**5/16" SLOTS**

Note: Wheel material is hard plastic

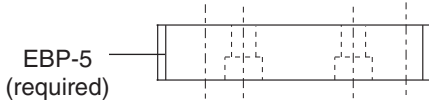
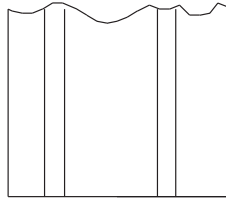
Part no.	D	H	Stem	Brake	Max. Load	Wheel Width
<b>EC-S1</b>	2	2 <sup>5</sup> / <sub>8</sub>	3/8-16 x 1 1/4	Yes	125 lbs	1.00
<b>EC-S2</b>	3	3 <sup>3</sup> / <sub>4</sub>	3/8-16 x 1 1/4	Yes	250 lbs	1.25
<b>EC-S3</b>	4	5	1/2-13 x 1 1/2	Yes	300 lbs	1.25



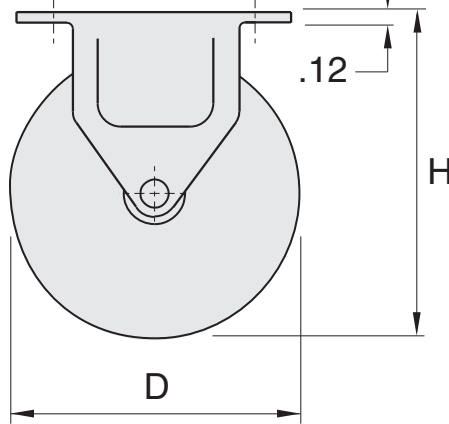
# Fixed Plate Caster



<b>EC-3F</b>
<b>EC-4F</b>
<b>EC-5F</b>



The casters have (4) .343 dia  
mtg holes on 1 3/4" x 3.00" centers



EX-3 uses caster plate EBP-5

Recommended Hardware  
(4) EF-11.63 BHCS

Note: Wheel material is hard plastic

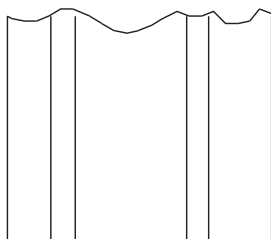
Part no.	D	H	Brake	Max. Load	Wheel Width
<b>EC-3F</b>	3	4.13	No	250 lbs	1.25
<b>EC-4F</b>	4	5.00	No	300 lbs	1.25
<b>EC-5F</b>	5	6.00	No	325 lbs	1.25

5/16" SLOTS

**EC-3S**

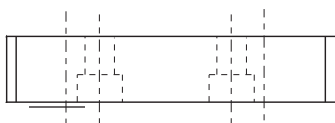
**EC-4S**

**EC-5S**



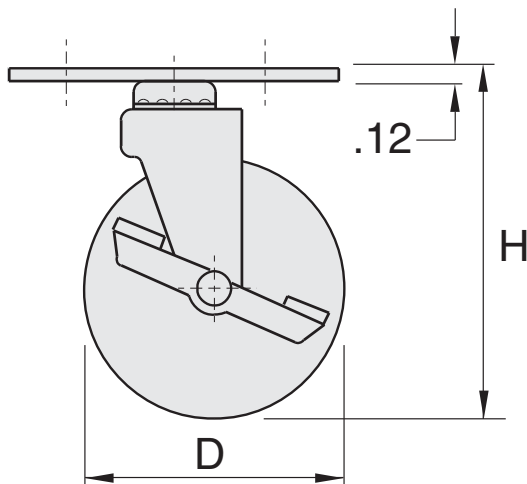
EX-3 uses caster plate EBP-5

EBP-5  
(required)



Recommended Hardware  
(4) EF-12.63 BHCS

The casters have (4) .343 dia  
mtg holes on 1 3/4" x 3.00" centers



Note: Wheel material is hard plastic

Part no.	D	H	Brake	Max. Load	Wheel Width
<b>EC-3S</b>	3	4.13	Yes	250 lbs	1.25
<b>EC-4S</b>	4	5.00	Yes	300 lbs	1.25
<b>EC-5S</b>	5	6.00	Yes	325 lbs	1.25

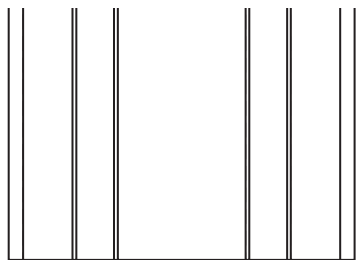
**5/16" SLOTS**

# Total Lock Swivel Plate Caster



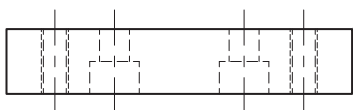
## ECT-4S

5/16" SLOTS

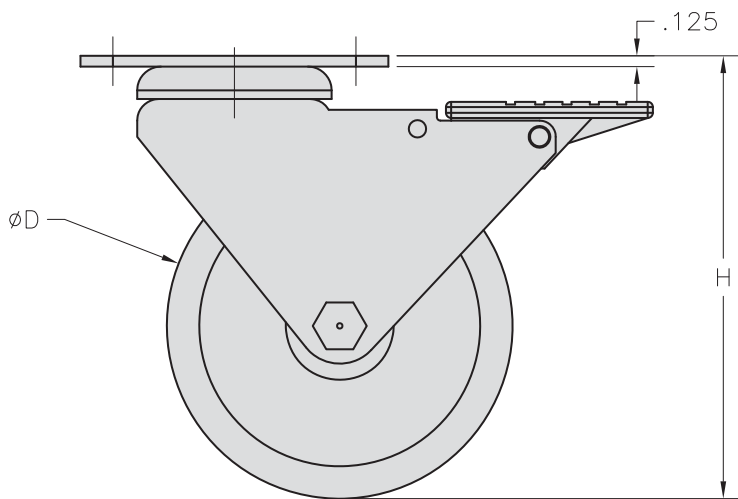


Locking Mechanism  
Locks  
Wheel Rotation  
and Swivel

EX-3 USES CASTER PLATE EBP-5  
REQUIRED HARDWARE  
(4) EF-12-.63 SHCS

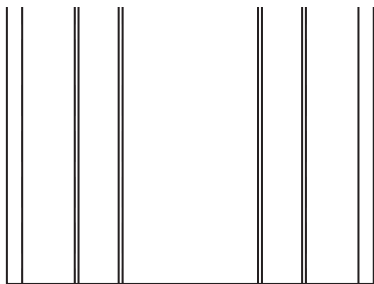


The Casters Have (4)  $\varnothing$ .343 Mounting Holes  
on 1 3/4" x 2 7/8" Centers

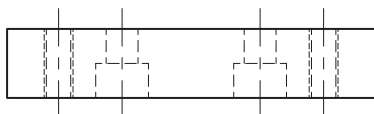


Note: Wheel Material is Grey Polyurethane

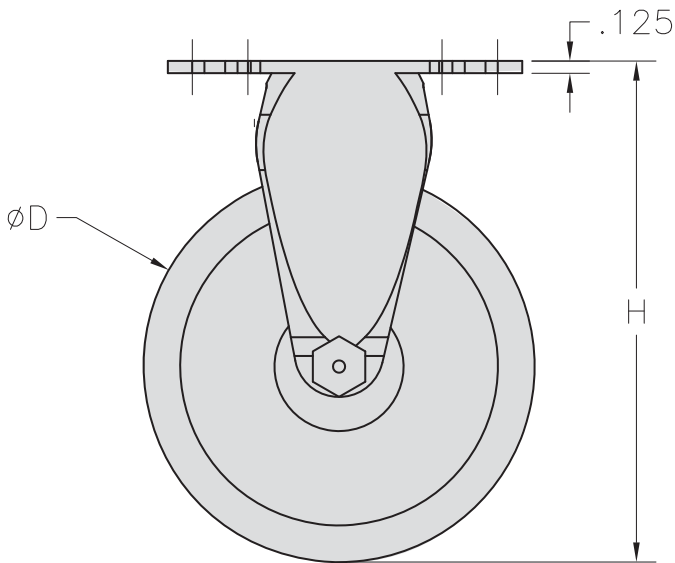
PART NO	$\varnothing$ D	H	BRAKE	MAX LOAD	WHEEL WIDTH
ECT-4S	4.00	5.13	YES	250 lbs	1.25



EX-3 USES CASTER PLATE EBP-5  
REQUIRED HARDWARE  
(4) EF-12-.63 SHCS



The Casters Have (4) Ø.343 Mounting Holes  
on 1 3/4" x 2 7/8" Centers



Note: Wheel Material is Grey Polyurethane

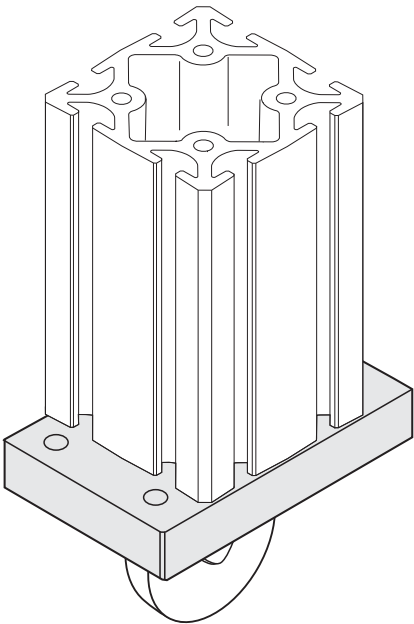
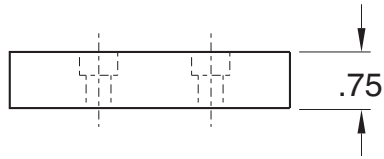
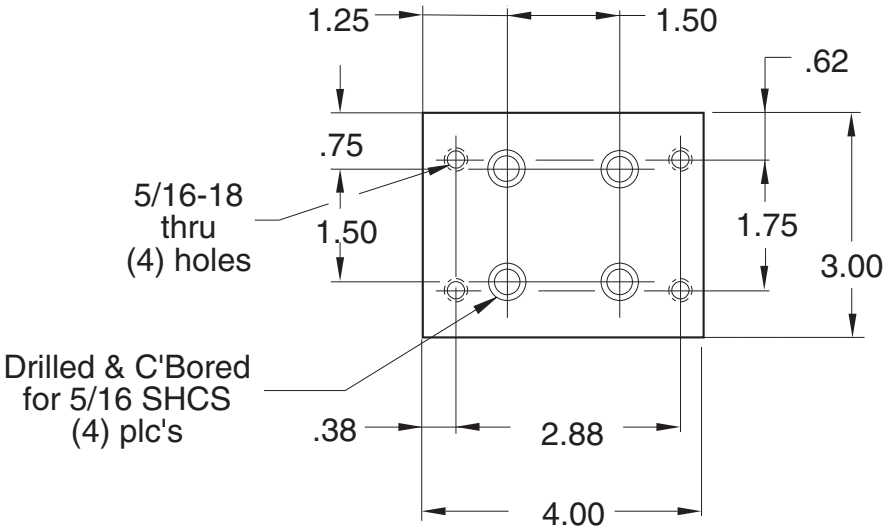
PART NO	ØD	H	BRAKE	MAX LOAD	WHEEL WIDTH
ECT-4F	4.00	5.13	NO	250 lbs	1.25

# Caster Mounting Plate



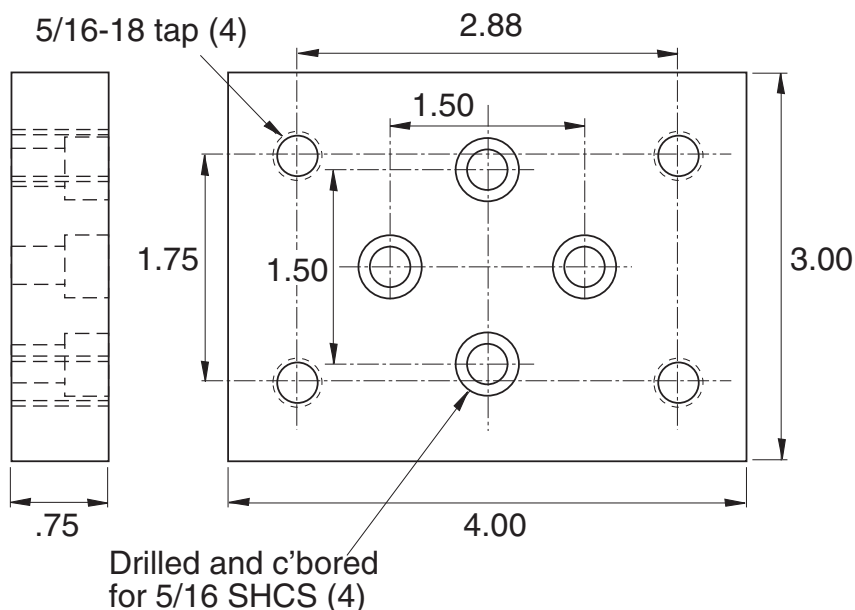
## EBP-5 for Plate Casters

5/16" SLOTS



Requires  
(4) EF-11-1.0 SHCS

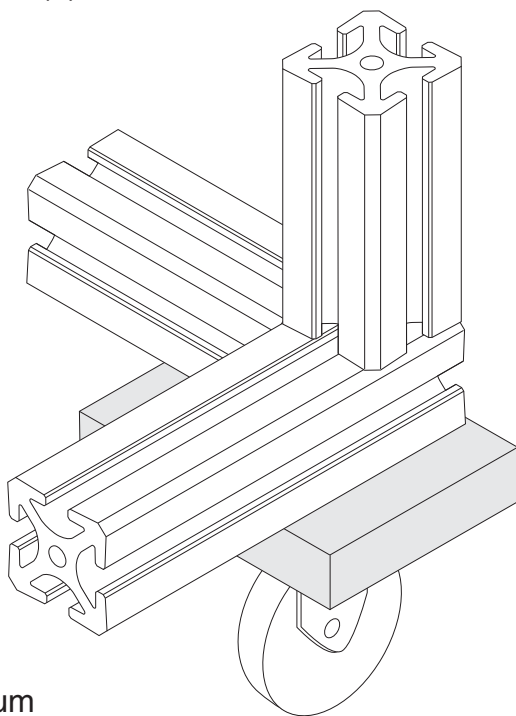
Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

- Requires
- (2) EF-11-.75 SHCS
  - (2) EF-2 T-nut

Note: Plate can be rotated 90°

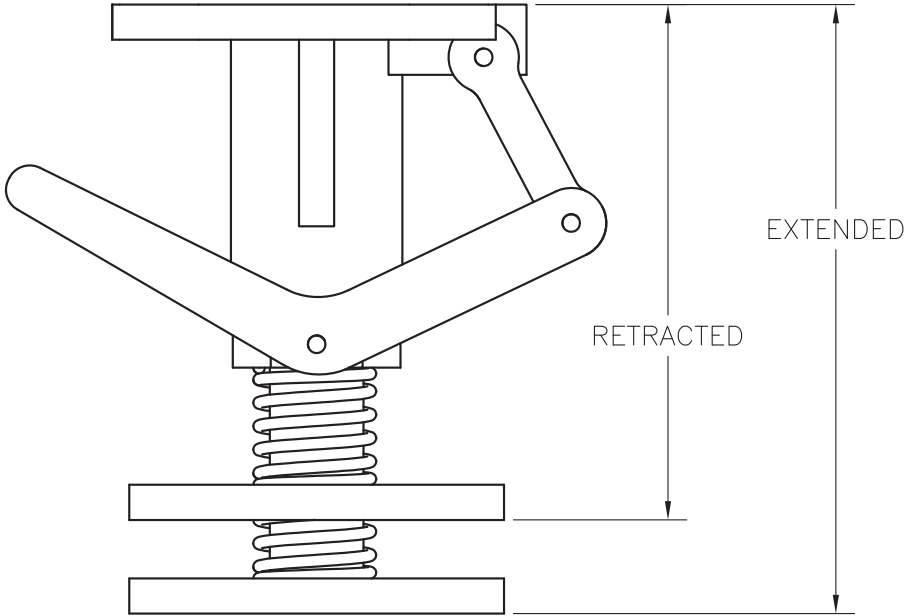


Material - Aluminum  
Finish - Clear Anodize

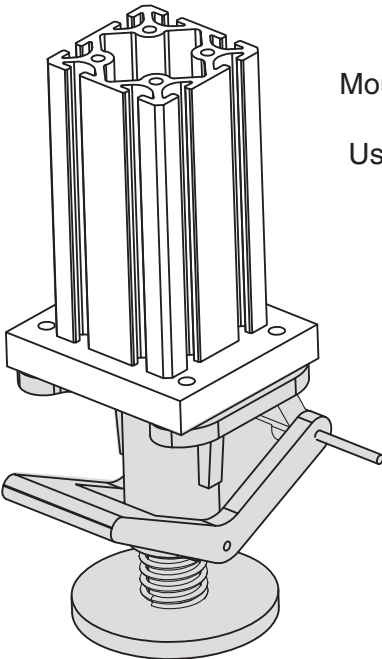
# Floor Locks



<b>EB-151</b>
<b>EB-153</b>



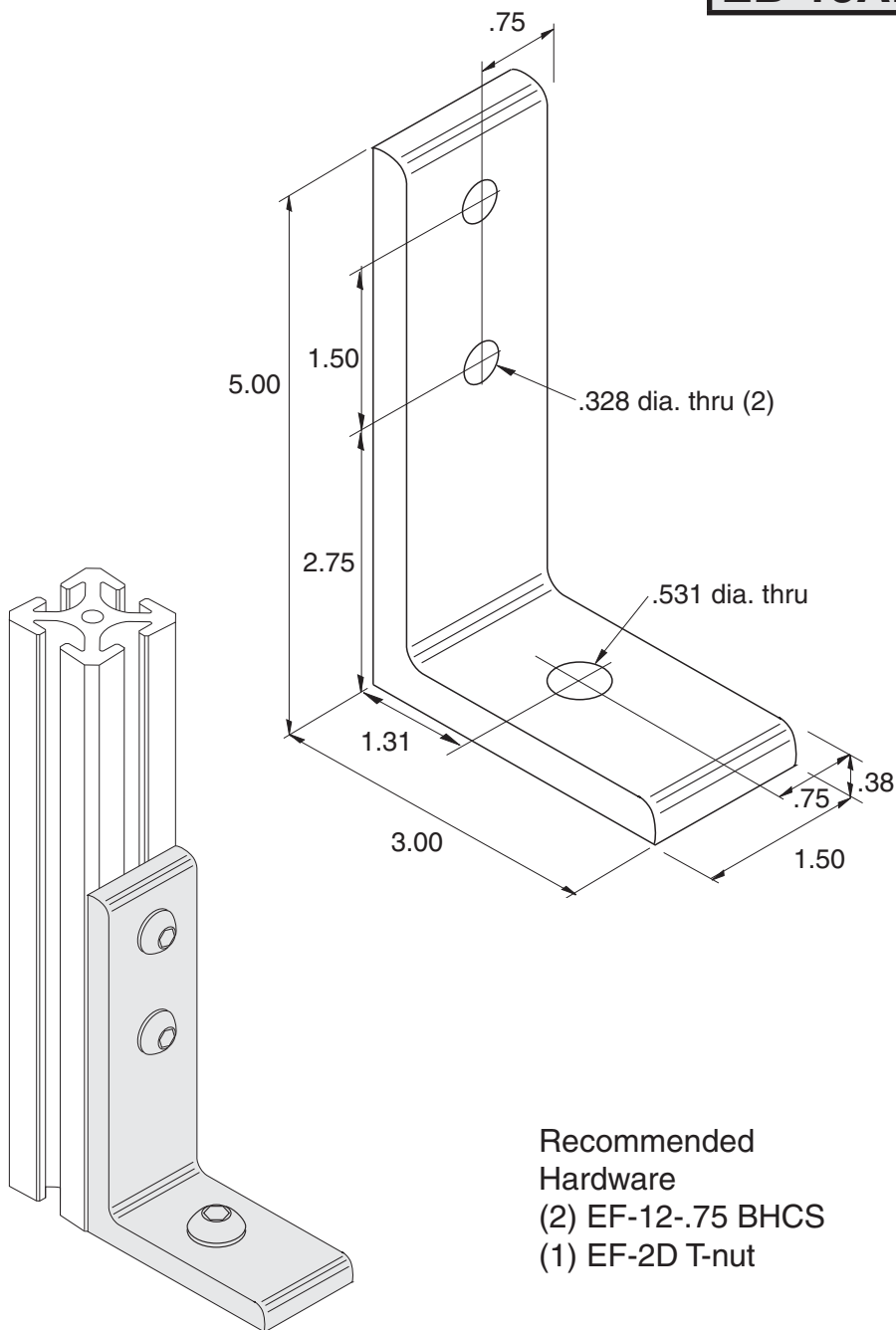
Top Plate Dimension - 4.0" x 4.0"  
 Bolt Diameter - Ø.375"  
 Mounting Hole Centerline - 2.625" x 3.625"  
 (4) 3/8-16 x 5/8" BHCS Included  
 Use EB-154 Mounting Plate for 5/16" Slot Extrusions.



PART NO	RETRACTED	EXTENDED
<b>EB-151</b>	5 1/16"	5 5/8"
<b>EB-153</b>	6 3/4"	7 3/4"

New Stuff

**5/16" SLOTS**



**Recommended  
Hardware**  
(2) EF-12-.75 BHCS  
(1) EF-2D T-nut

**Material - Aluminum  
Finish - Clear Anodize**

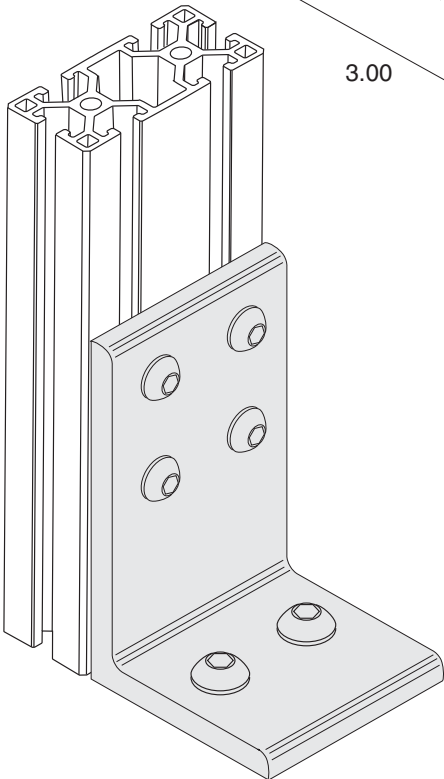
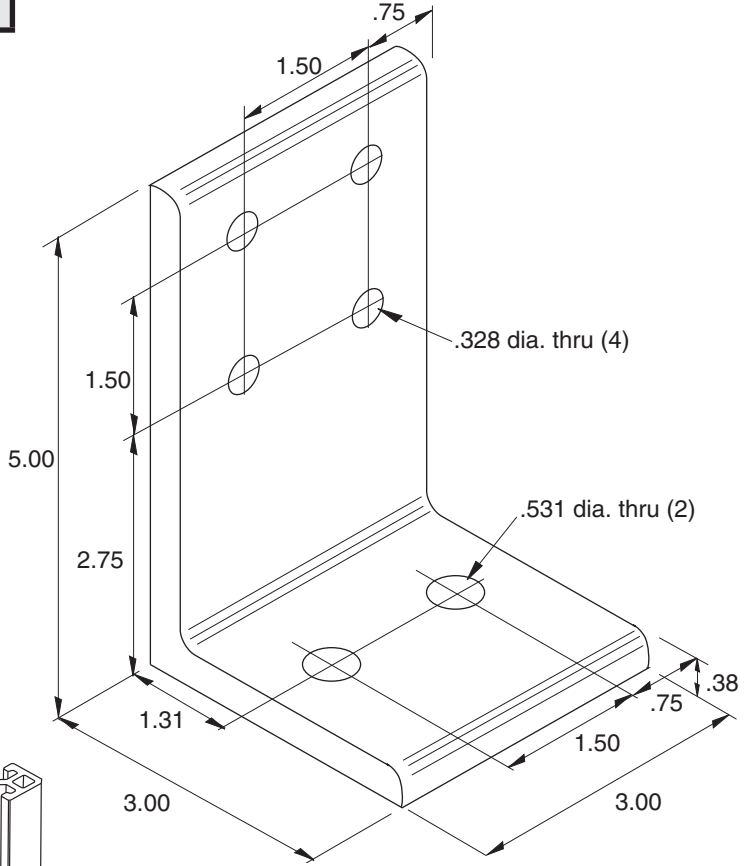


# Economy Aluminum Floor Mount



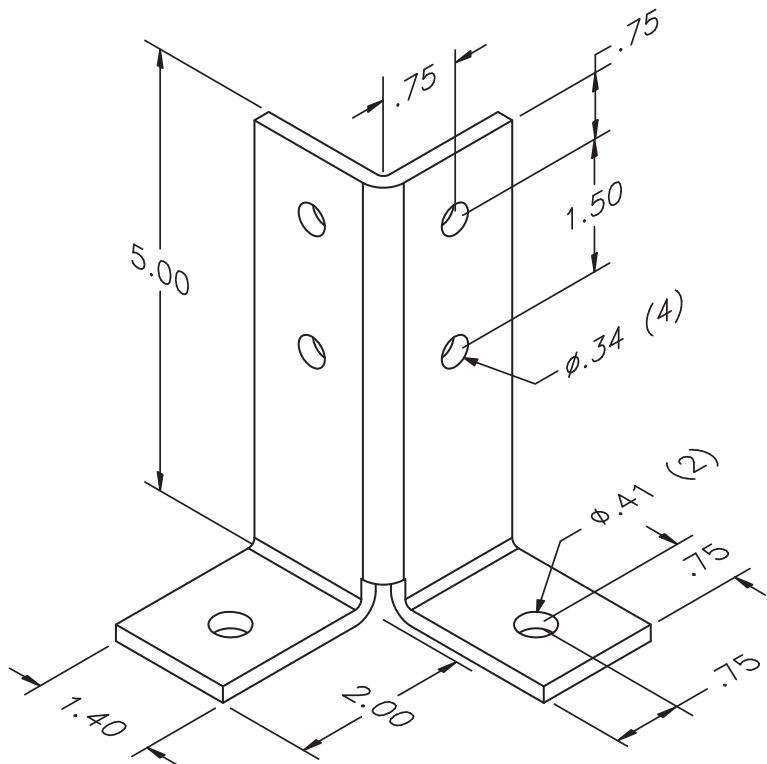
**EB-15AL3**

**5/16" SLOTS**



Recommended  
Hardware  
(4) EF-12-.75 BHCS  
(2) EF-2D T-nut

Material - Aluminum  
Finish - Clear Anodize

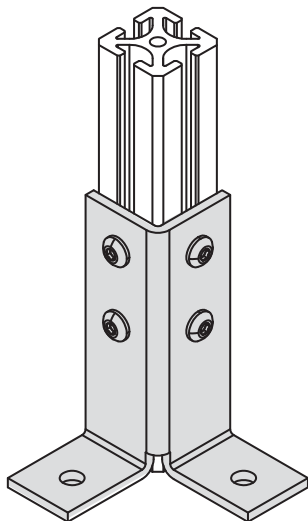


.200" thick

Use with 5/16" slot extrusions

- Recommended Hardware**  
 (4) EF-12-.63 BHCS  
 (2) EF-2D T-nut

**Material - Steel**  
**Finish - Grey Powder Coat**



**5/16" SLOTS**

# Adjustable Leveling Foot

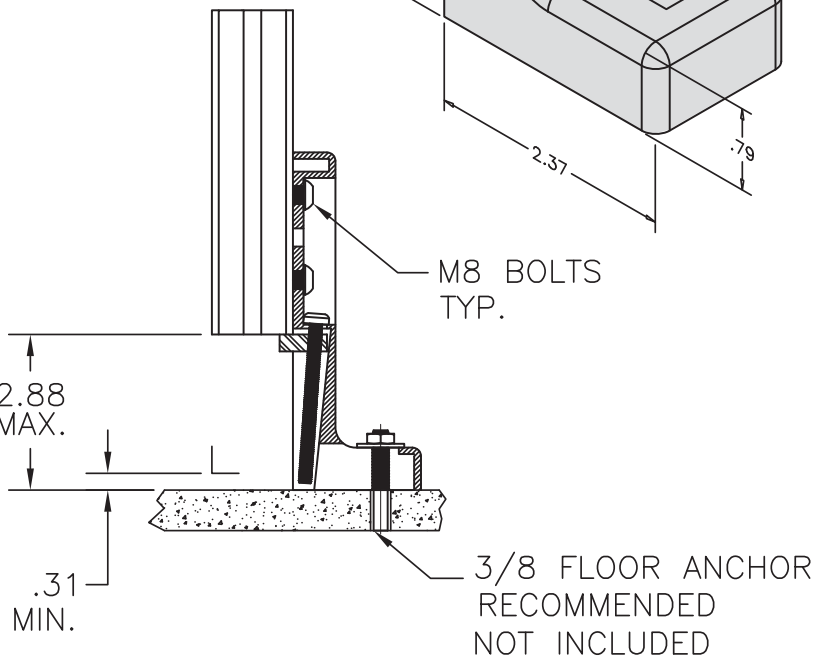
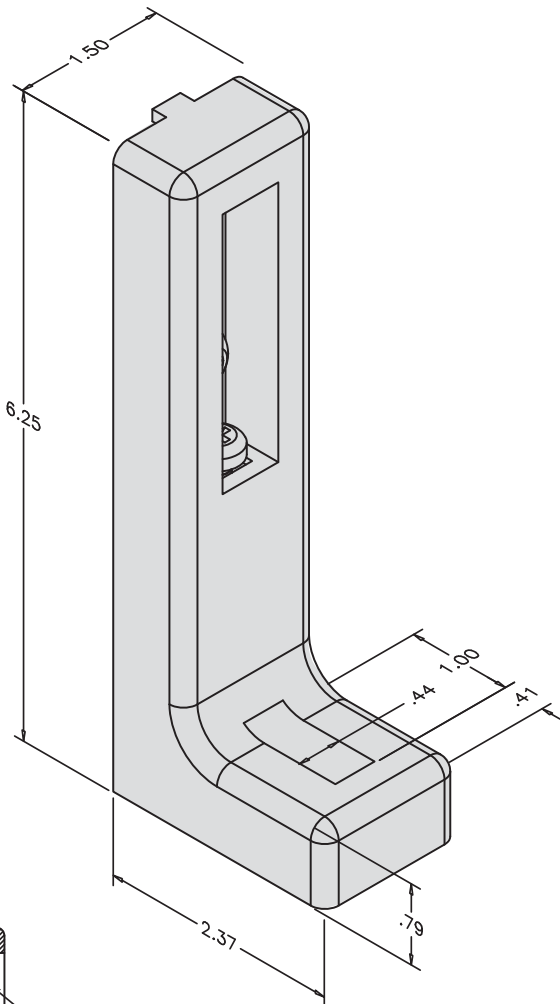


**EB-70**

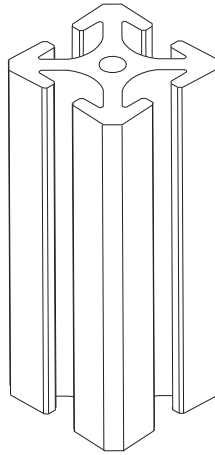
**5/16" SLOTS**

Hardware for Mounting to Extrusion Included

Use with 5/16" slot Extrusions

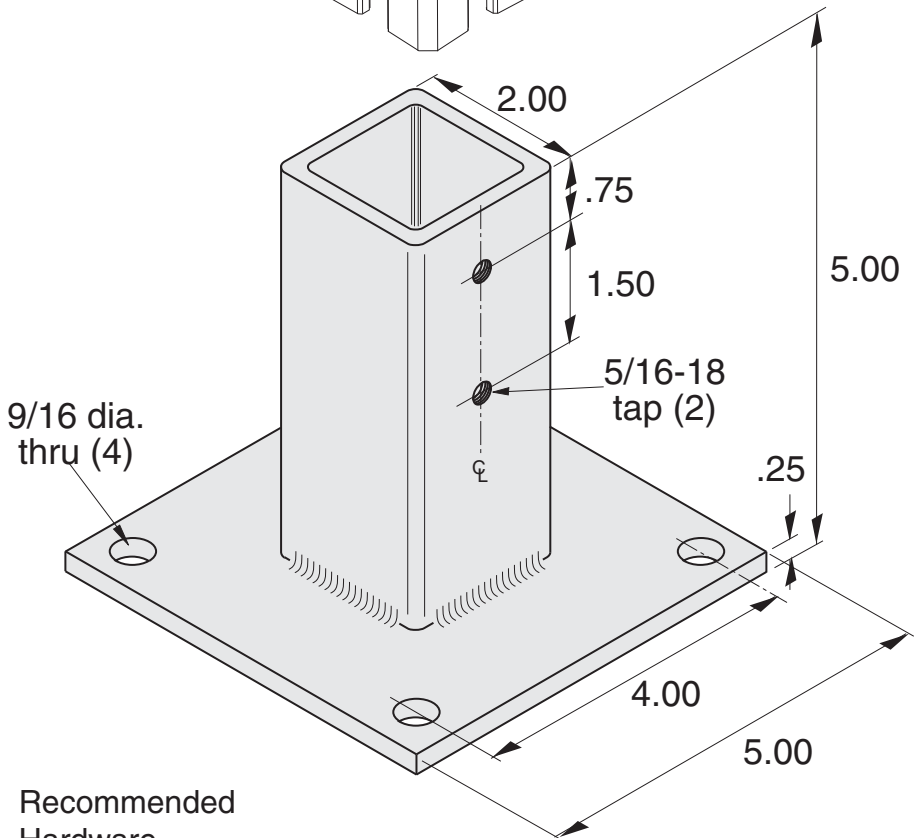


**Material - Die Cast Zinc**  
**Finish - Black Powder Coat**



use with  
1.5" square profiles

**5/16" SLOTS**



Recommended  
Hardware  
(2) EF-11-1.0 BHCS

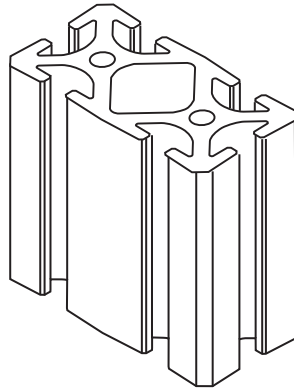
Material - Steel  
Finish - Black Powder Coat

# Steel Flanged Foot

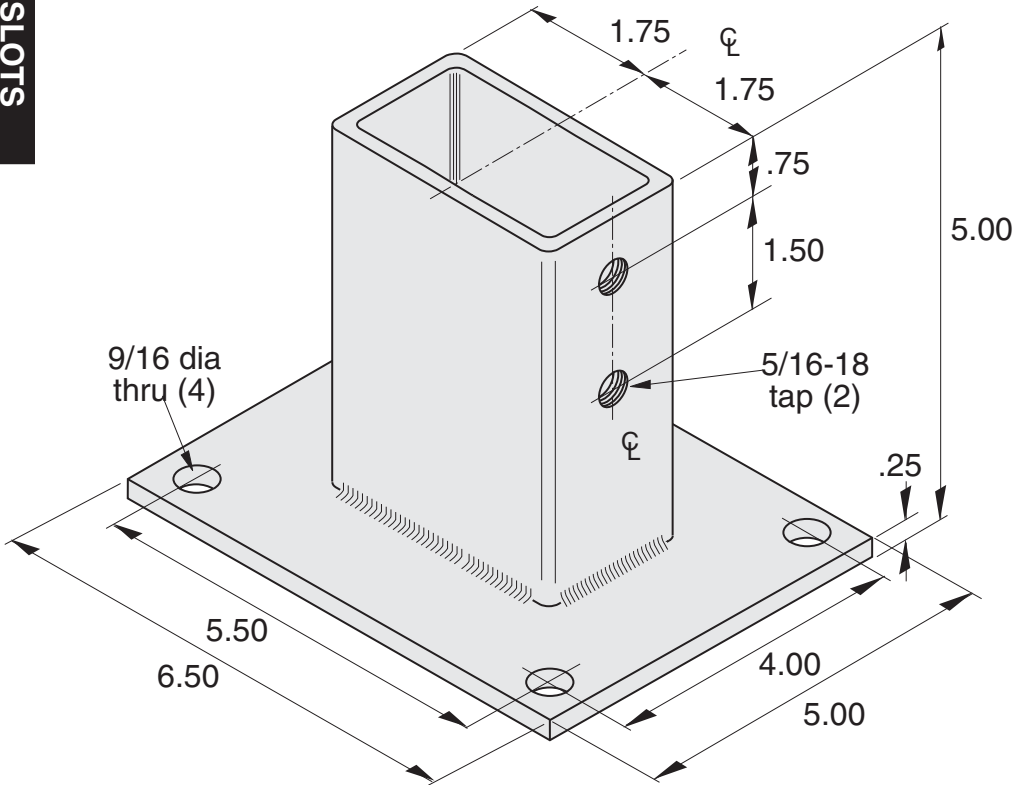


**EB-42**

**5/16" SLOTS**



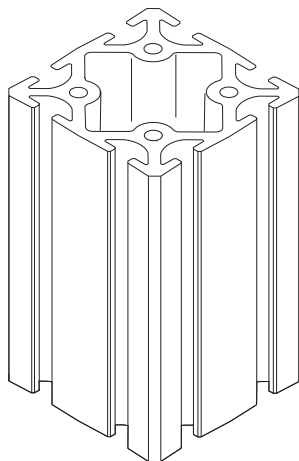
use with  
1.5" x 3" profiles



Recommended  
Hardware  
(2) EF-11-1.0 SHCS

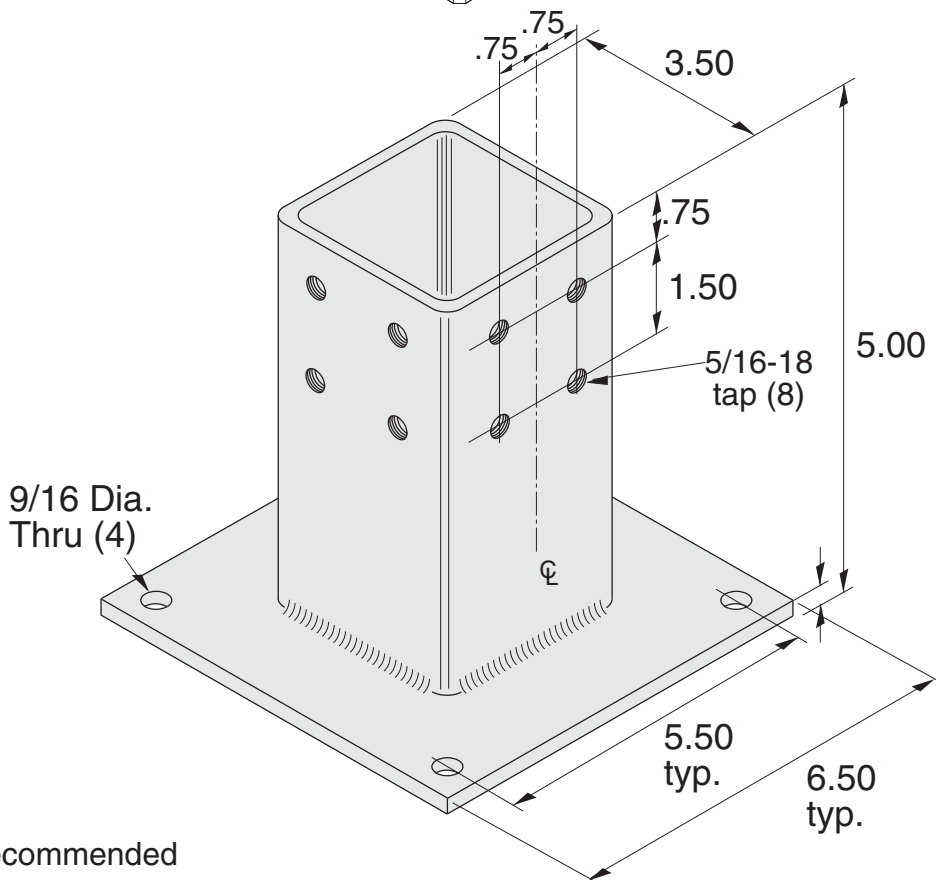
Material - Steel  
Finish - Black Powder Coat

**EB-43**



use with  
EX-3 or EX-37

**5/16" SLOTS**

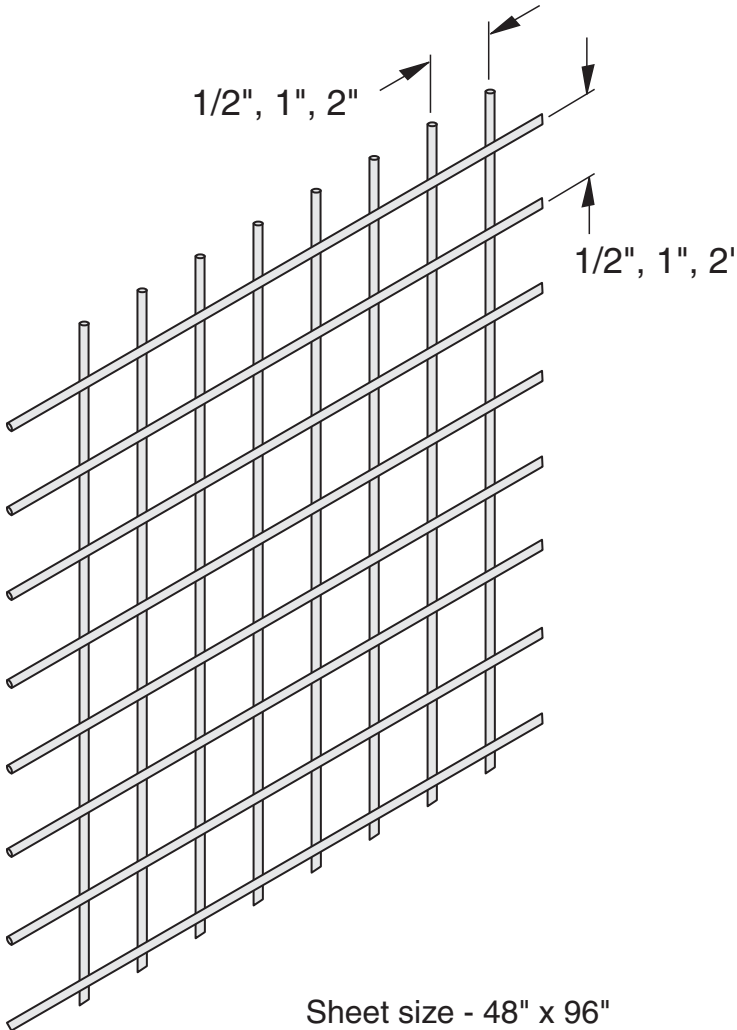


Recommended  
Hardware  
(4) EF-11-1.0 BHCS

Material - Steel  
Finish - Black Powder Coat

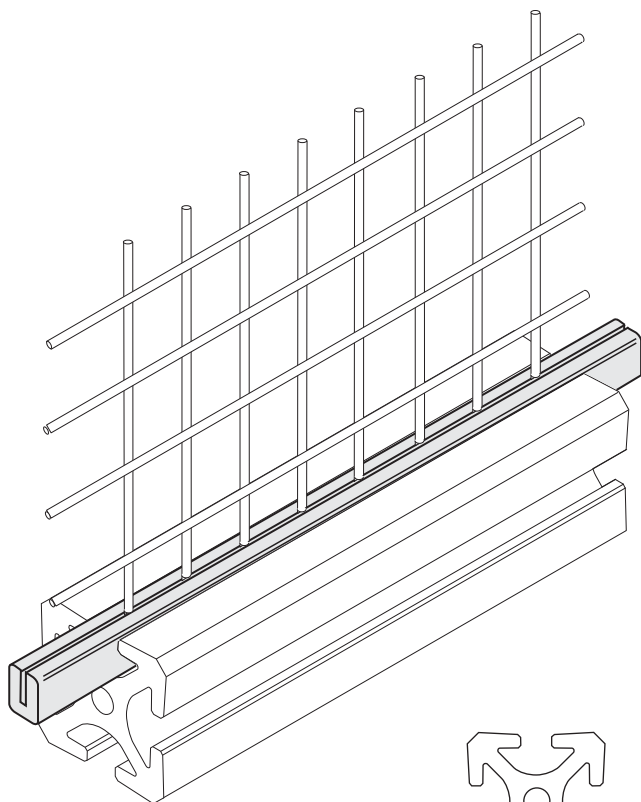
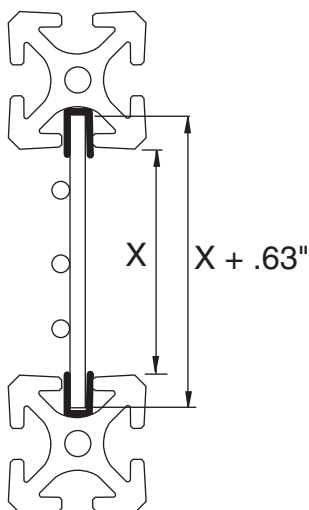
<b>EB-38-1/2</b>	16 gage wire 1/2"x 1/2" opening - Black
<b>EB-38-1/2Y</b>	16 gage wire 1/2"x 1/2" opening - Yellow
<b>EB-38-1</b>	12 gage wire 1"x1" opening - Black
<b>EB-38-1Y</b>	12 gage wire 1"x1" opening - Yellow
<b>EB-38-2</b>	12 gage wire 2" x 2" opening - Black

**5/16" SLOTS**



Material - PVC Coated Steel  
 Yellow or Black  
 Other colors/finishes available upon request

Use with EB-38-1 or EB-38-1/2

**EB-38G****5/16" SLOTS**

To specify length required,  
order EB-38G, length in feet.

Note: Snug fit - eliminates rattles

Cut wire  
mesh to  $X +$   
.63"

Material - Black Rubber



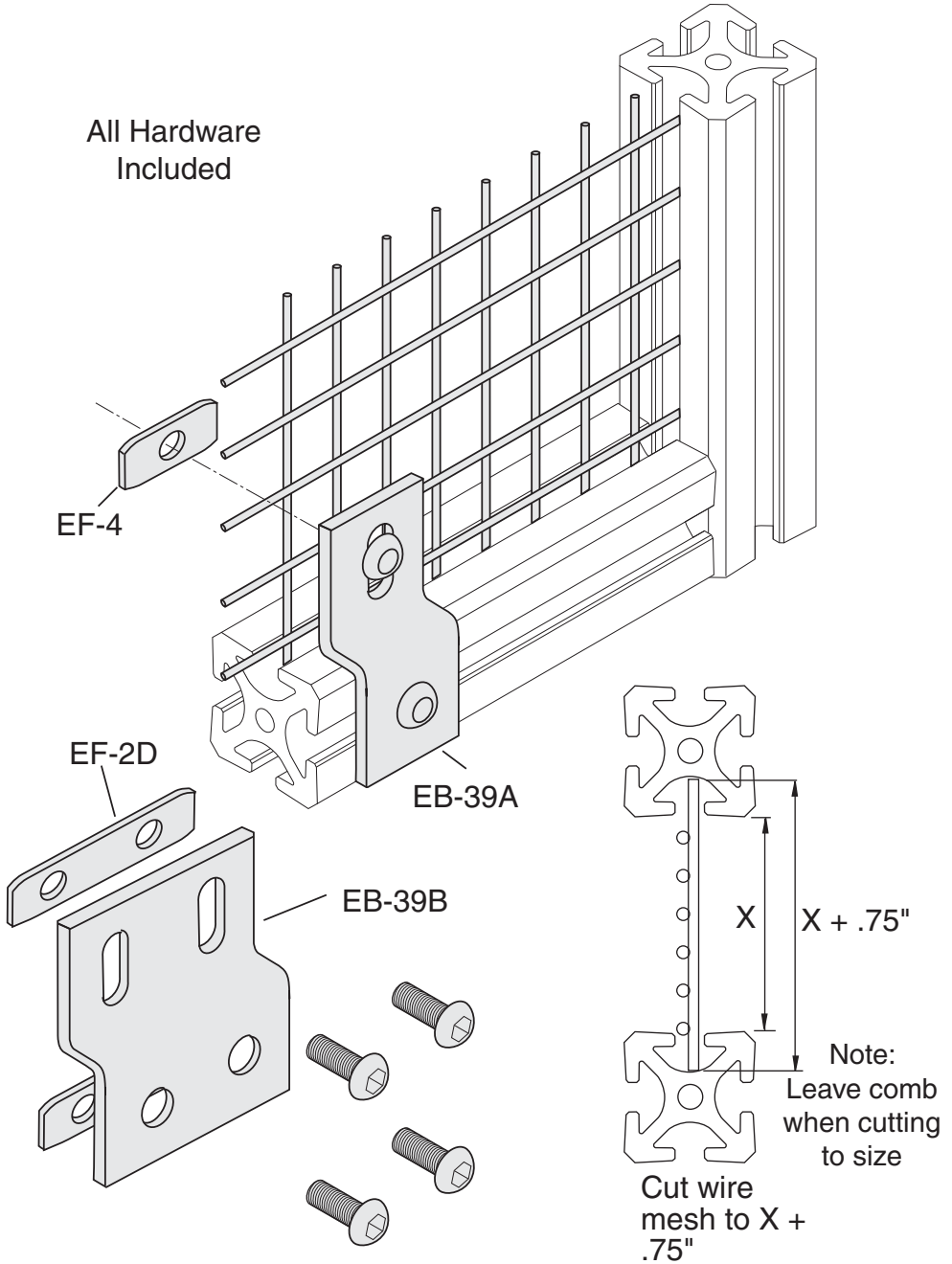
# Wire Mesh Bracket



**EB-39A**  
**EB-39B**

All Hardware  
Included

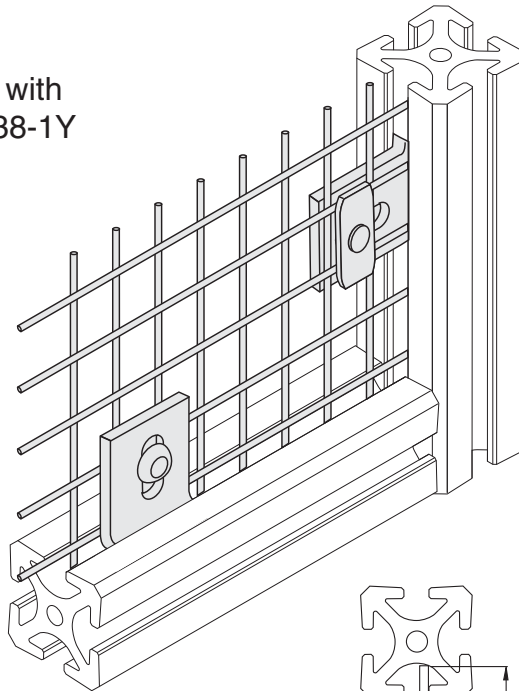
5/16" SLOTS



Material - Steel  
Finish - Black Powder Coat

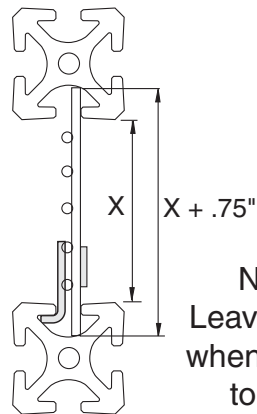
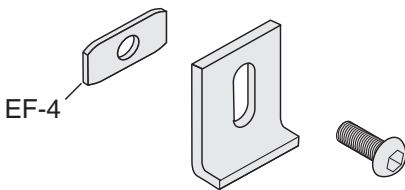
<b>Black Powder Coat</b>	<b>EB-49B</b>
<b>Yellow Powder Coat</b>	<b>EB-49Y</b>

Note: to be used with  
EB-38-1 and EB-38-1Y  
screen only

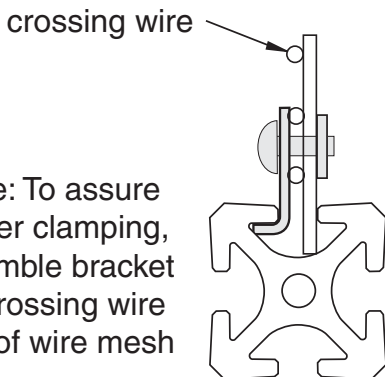


**5/16" SLOTS**

**Hardware Included**



Note:  
Leave comb  
when cutting  
to size



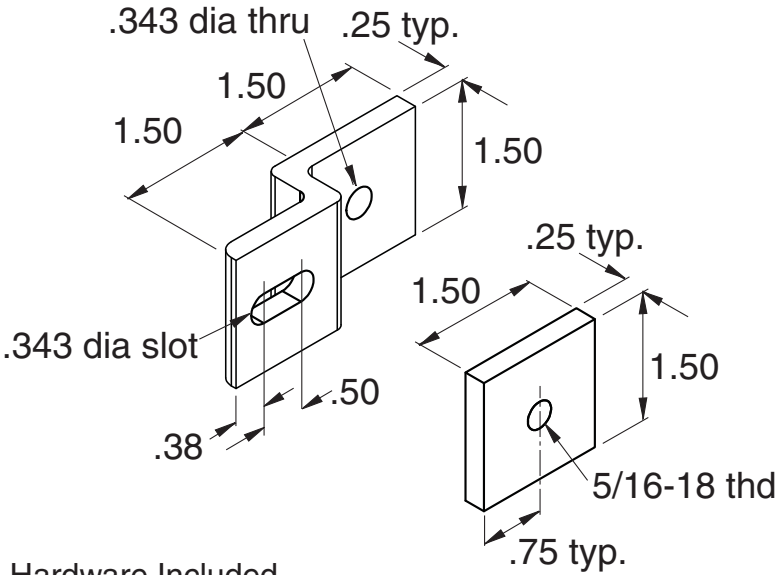
Cut wire  
mesh to  $X + .75"$

Note: To assure  
proper clamping,  
assemble bracket  
on crossing wire  
side of wire mesh

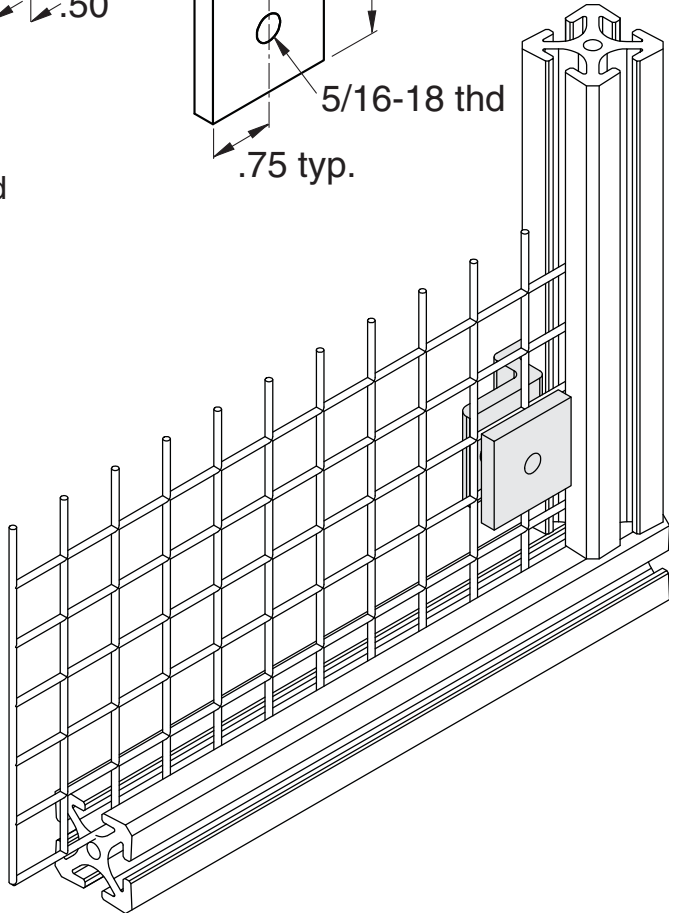
**Material - Powder Coated Steel**

**EB-63**

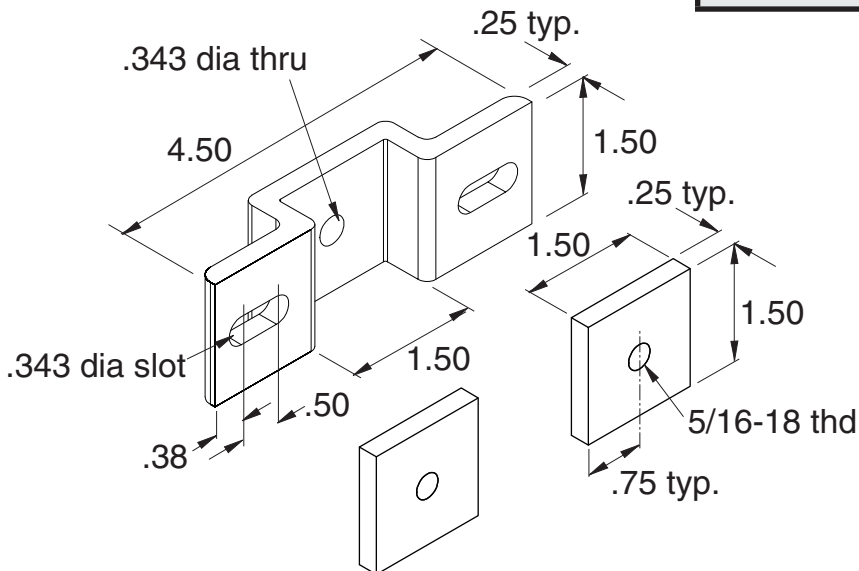
5/16" SLOTS



Hardware Included

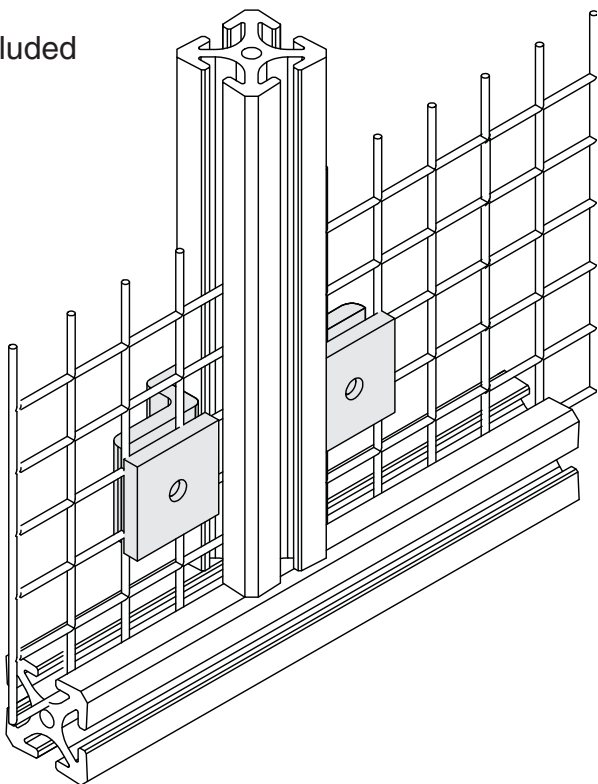


Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

**Hardware Included**

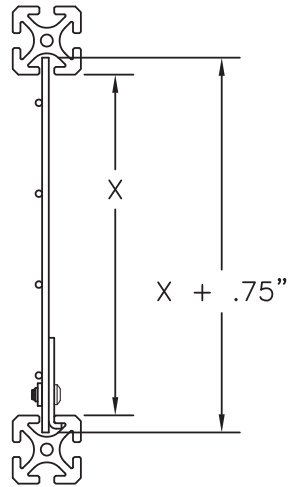
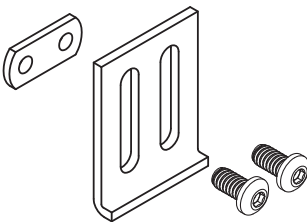
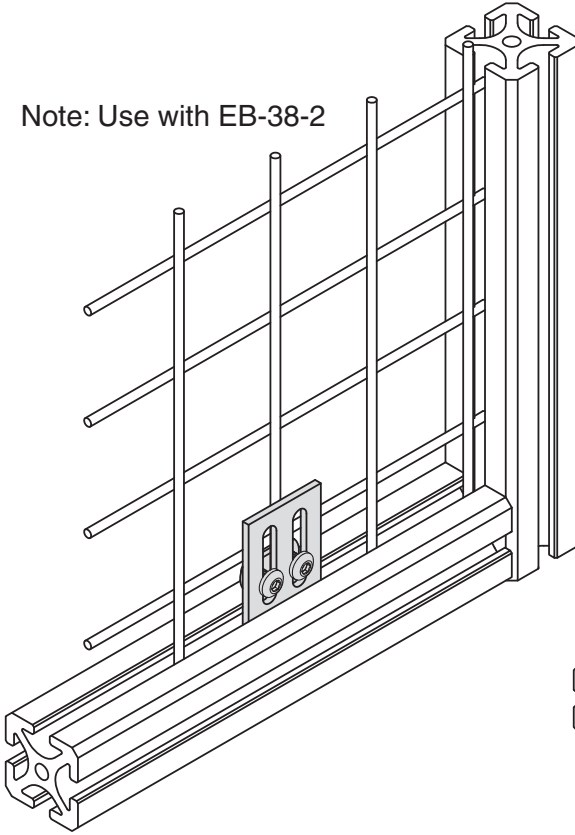


**Material - Aluminum**  
**Finish - Clear Anodize**

**EB-96**

5/16" SLOTS

Note: Use with EB-38-2



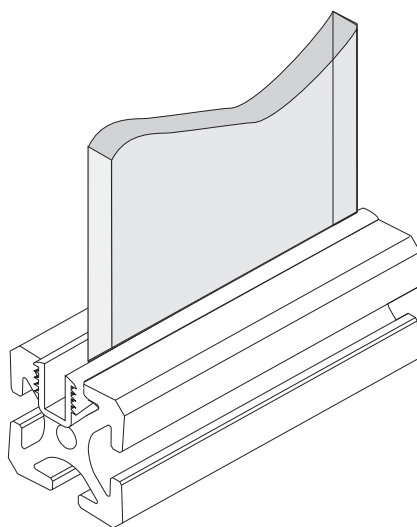
Cut Wire Mesh  
to  $X + .75$ "  
Note: Leave Comb  
when cutting to size

Hardware Included

Material - Steel  
Finish - Black Powder Coat

Stocked in 48" x 96" sheets  
Sold by the square foot.

- EB-160** Polycarb 1/4" Clear Panel
- EB-161** Polycarb 1/4" Bronze Panel
- EB-162** Polycarb 1/4" Black Panel
- EB-165** Polycarb 3/16" Clear Panel
- EB-166** Polycarb 3/16" Bronze Panel
- EB-170** Acrylic 1/4" Clear Panel
- EB-171** Acrylic 1/4" Bronze Panel
- EB-172** Acrylic 1/4" Black Panel
- EB-175** Acrylic 3/16" Clear Panel
- EB-176** Acrylic 3/16" Bronze Panel
- EB-177** Acrylic 3/16" Black Panel
- EB-180** ABS-Haircell 1/4" Black Panel
- EB-181** ABS-Haircell 3/16" Black Panel
- EB-185** Expanded PVC 6mm Yellow Panel
- EB-186** Expanded PVC 3mm Yellow Panel
- EB-187** Expanded PVC 6mm Grey Panel
- EB-188** Expanded PVC 3mm Grey Panel
- EB-189** Expanded PVC 6mm Blue Panel
- EB-190** Expanded PVC 3mm Blue Panel
- EB-191** Expanded PVC 6mm Red Panel
- EB-192** Expanded PVC 3mm Red Panel
- EB-193** Expanded PVC 6mm Black Panel
- EB-194** Expanded PVC 3mm Black Panel
- EB-195** Expanded PVC 6mm White Panel
- EB-196** Expanded PVC 3mm White Panel
- EB-197** Polycarb 1/4" Clear Scratch-resistant Panel
- EB-198** Polycarb 3/16" Clear Scratch-resistant Panel

**5/16" SLOTS**

Cut to size panels can be furnished on request.

For panels with both sides less than or equal to 48",  
order EM-4S Cutting Service.

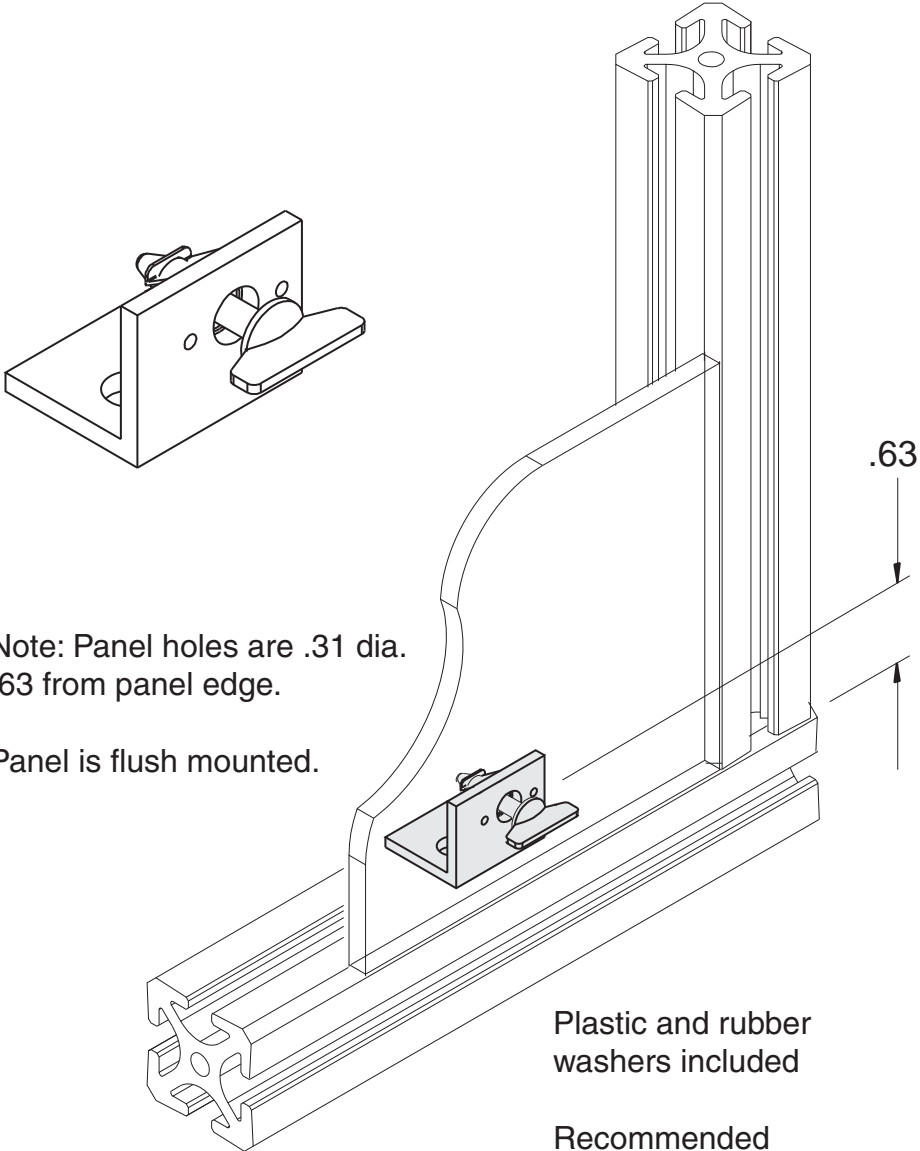
For panels with any side larger than 48",  
order EM-4L cutting service.

# 1/4 Turn Panel Bracket



<b>EB-88A</b>	<b>.235 Thick Panel</b>
<b>EB-88B</b>	<b>.220 Thick Panel</b>
<b>EB-88C</b>	<b>.170 Thick Panel</b>

**5/16" SLOTS**

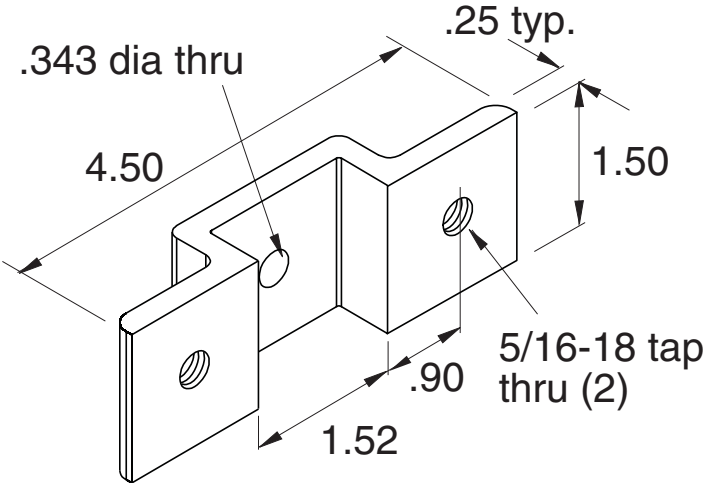


Note: Panel holes are .31 dia.  
.63 from panel edge.

Panel is flush mounted.

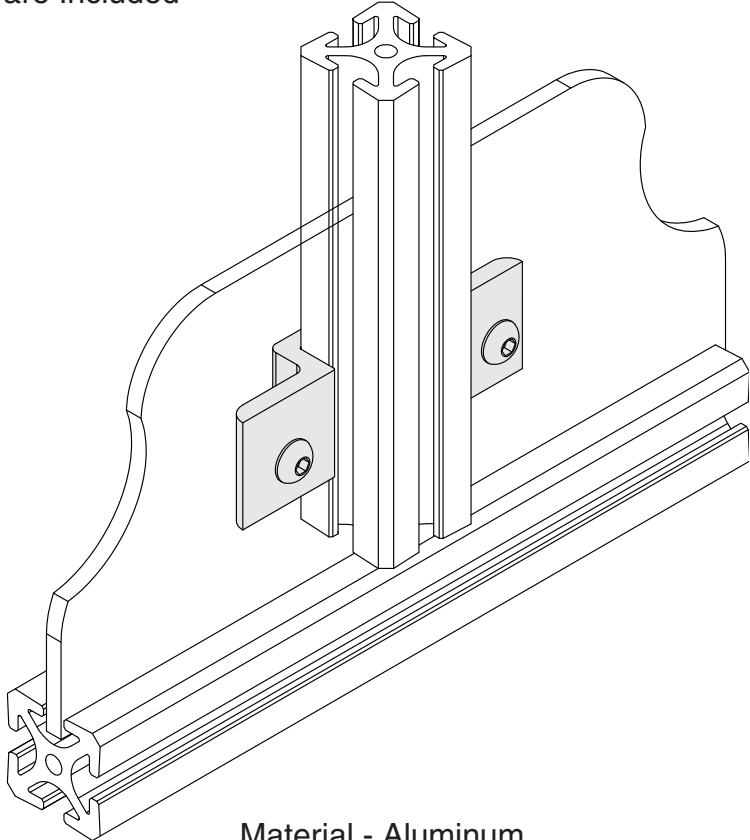
Plastic and rubber  
washers included

- Recommended  
Hardware
- (1) EF-12-.50 BHCS
  - (1) EF-1 T-nut or
  - (1) EF-2 T-nut



**5/16" SLOTS**

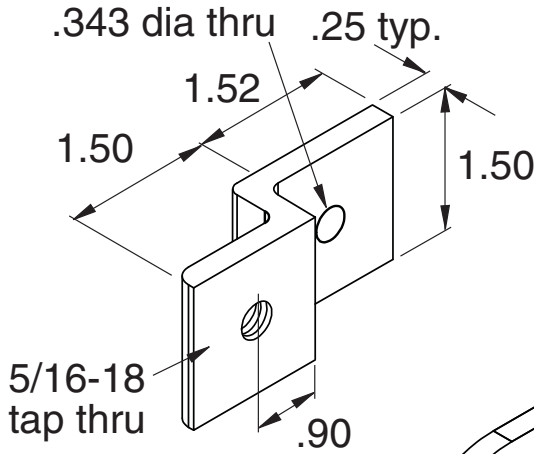
Hardware Included



**Material - Aluminum  
Finish - Clear Anodize**

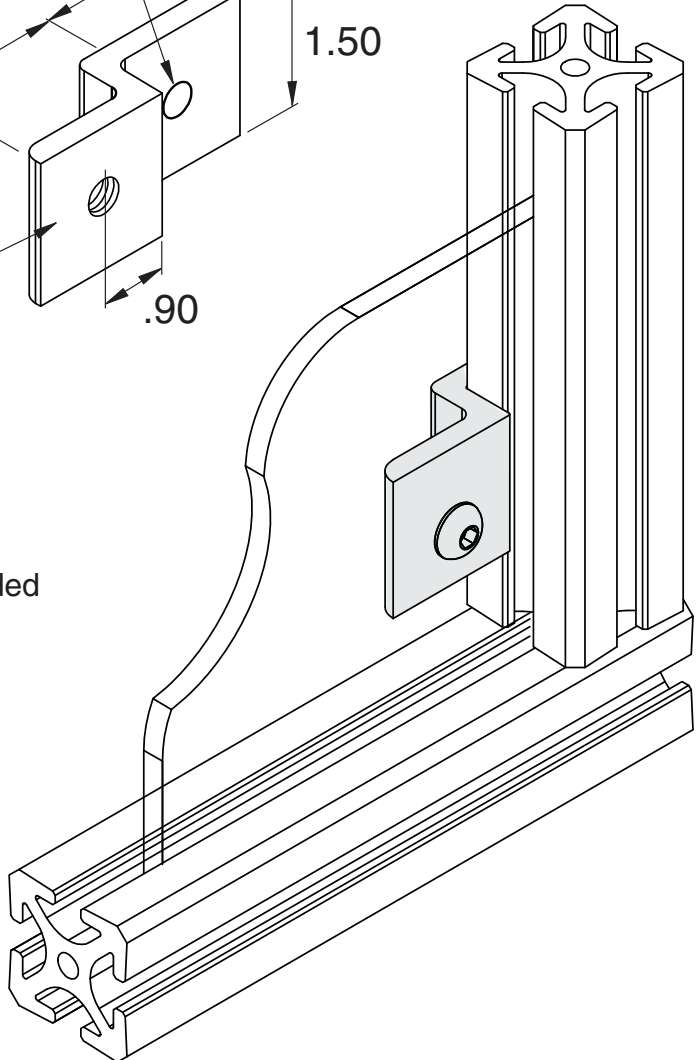


**EB-62**

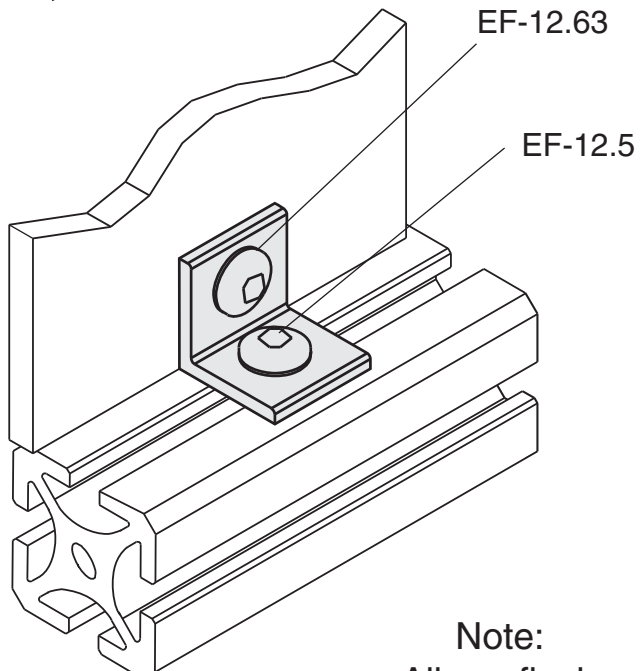
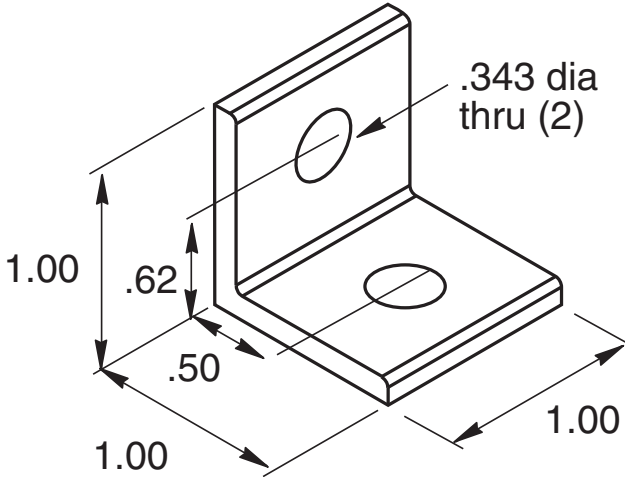


5/16" SLOTS

Hardware Included



Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

**Recommended Hardware**

- (1) EF-12-.50 BHCS
- (1) EF-12-.63 BHCS
- (2) EF-2 T-nut

**Note:**  
Allows flush  
mount of panel

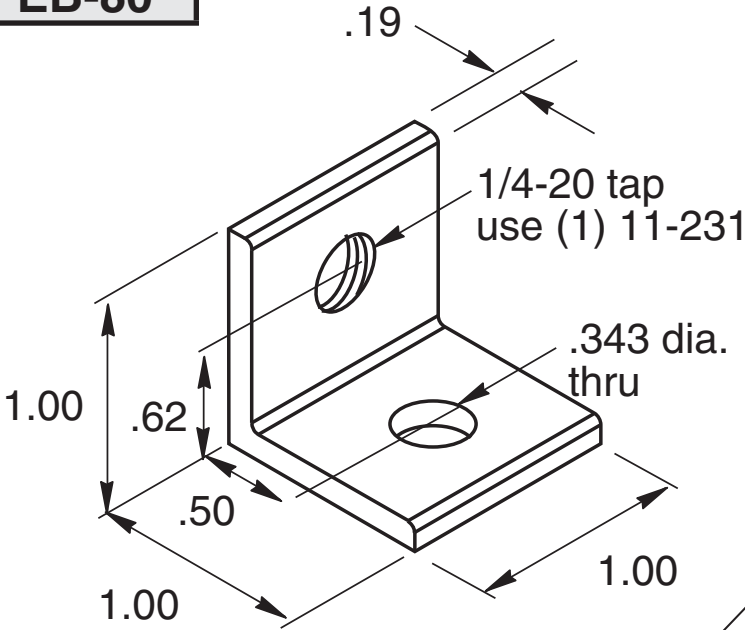
**Material - Aluminum  
Finish - Clear Anodize**

# Panel Mounting Angle

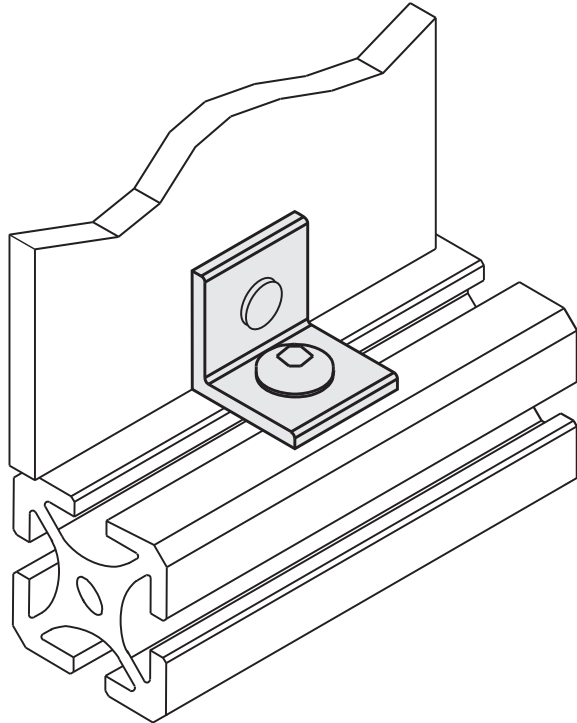


**EB-80**

5/16" SLOTS

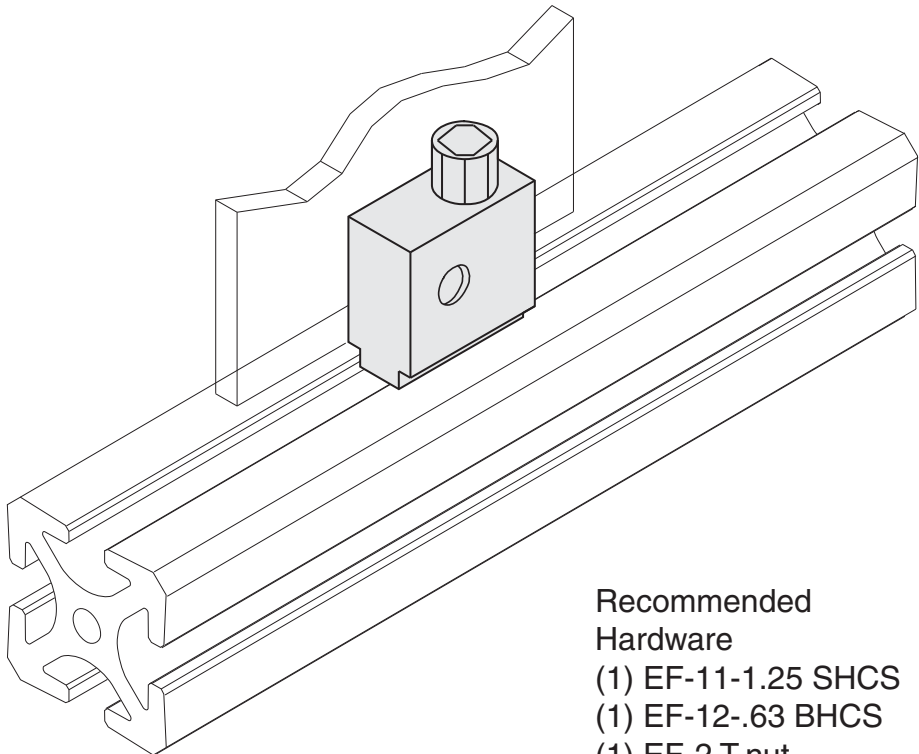
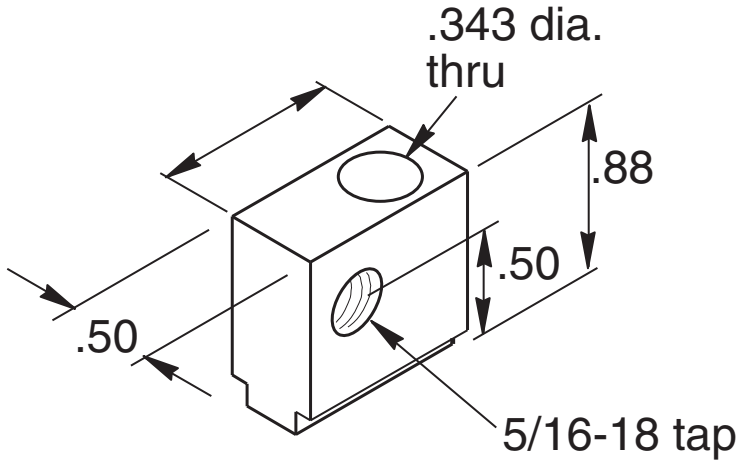


Note:  
Allows flush  
mount of panel



- Recommended Hardware
- (1) 11-231 BHCS
  - (1) EF-12-.63 BHCS
  - (1) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



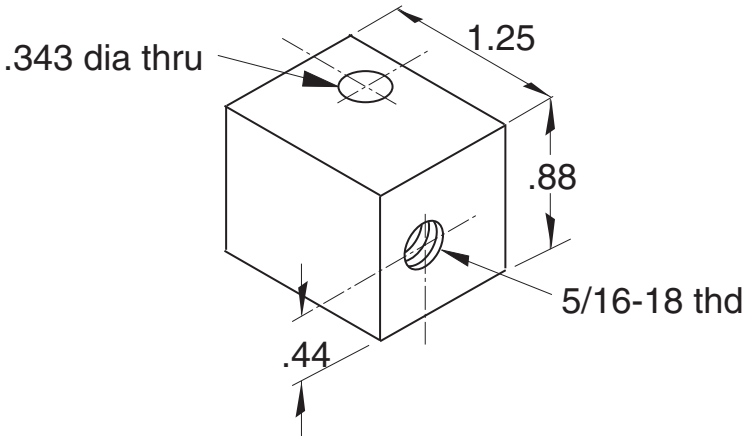
**Recommended  
Hardware**

- (1) EF-11-1.25 SHCS
- (1) EF-12-.63 BHCS
- (1) EF-2 T-nut

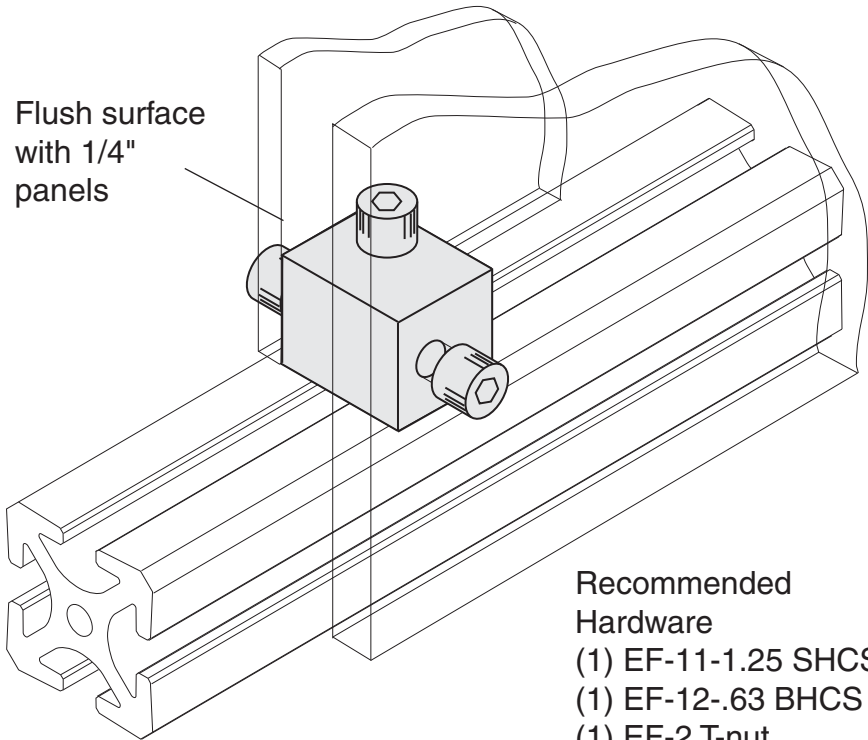
**Material - Aluminum  
Finish - Clear Anodize**

**EF-25B**

5/16" SLOTS

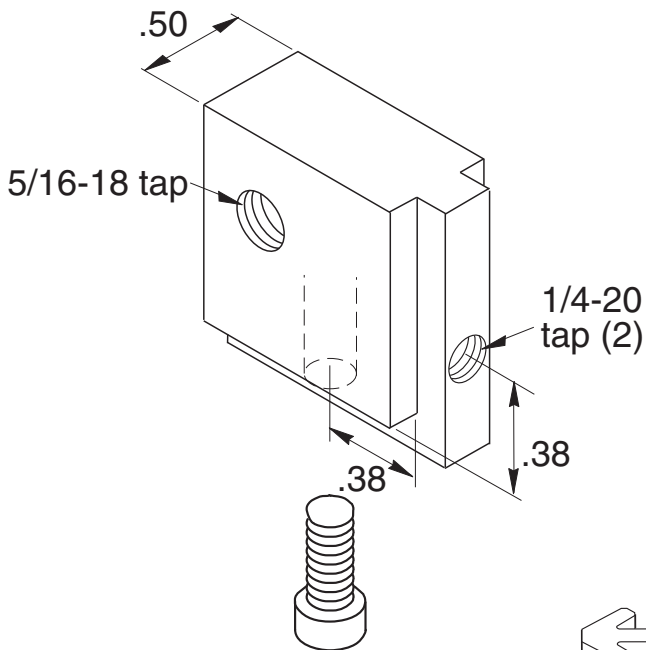


Flush surface  
with 1/4"  
panels



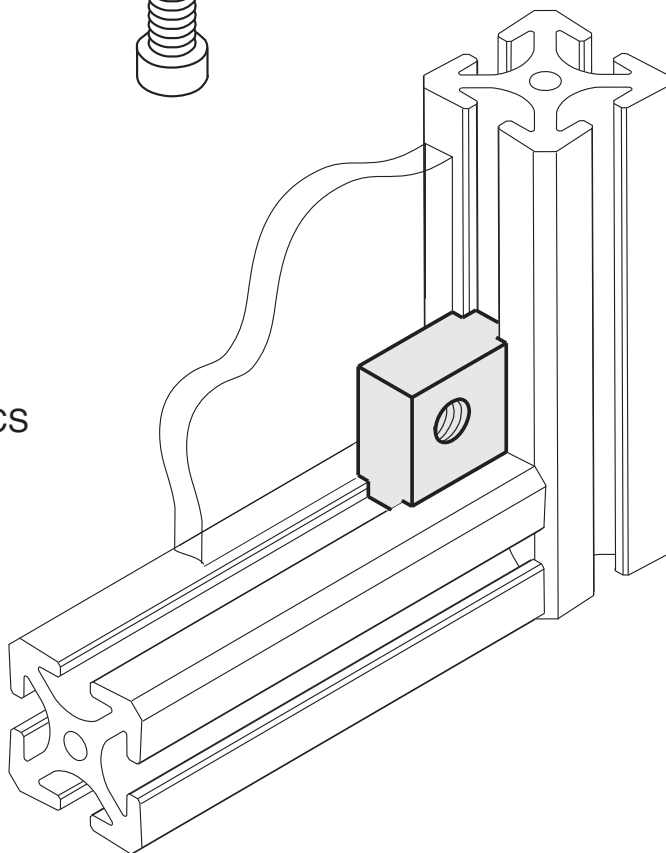
- Recommended  
Hardware
- (1) EF-11-1.25 SHCS
  - (1) EF-12-.63 BHCS
  - (1) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**

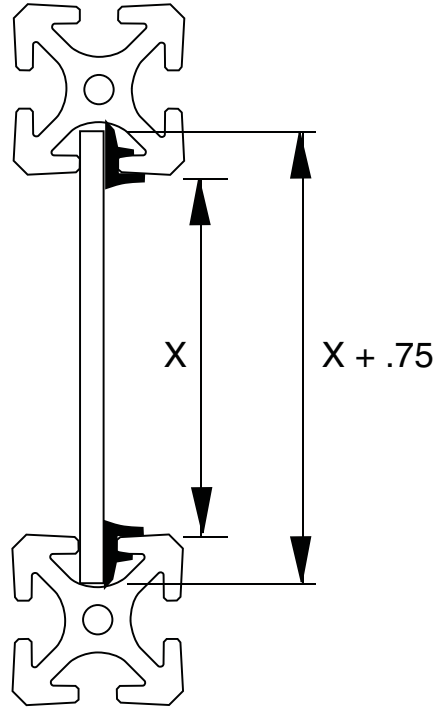
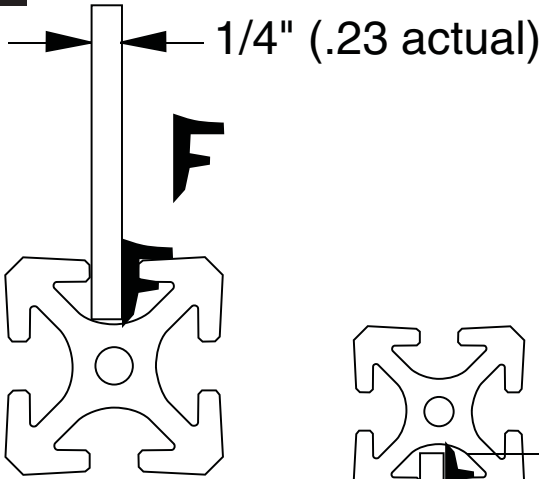
Recommended  
Hardware  
(2) 11-225 SHCS  
(1) EF-12-.63 BHCS



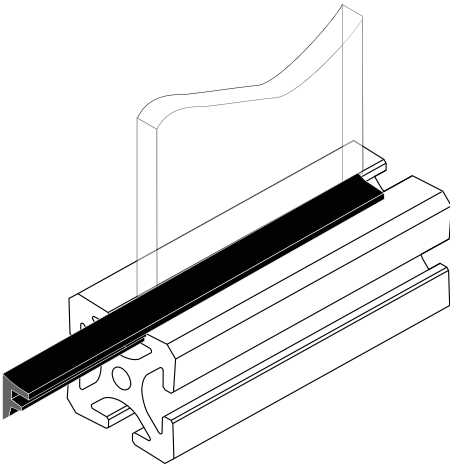
**Material - Aluminum  
Finish - Clear Anodize**

**EB-40**

5/16" SLOTS



Cut panel to X + .75"

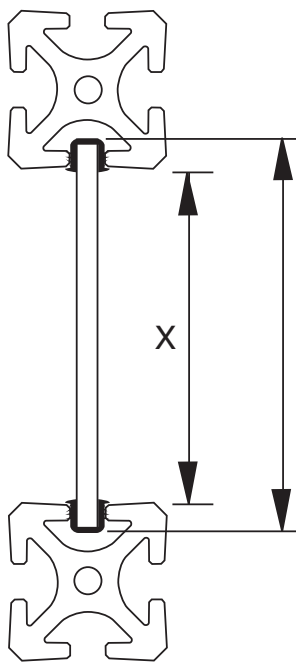
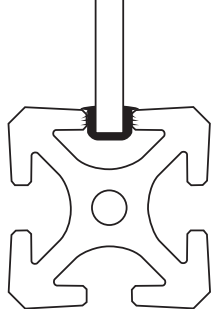


Note: insert gasket after panel is installed  
in 5/16" wide slot profiles

Material - Flexible PVC (Black)

Slip Fit	<b>EB-40A</b>
Interference Fit	<b>EB-40C</b>

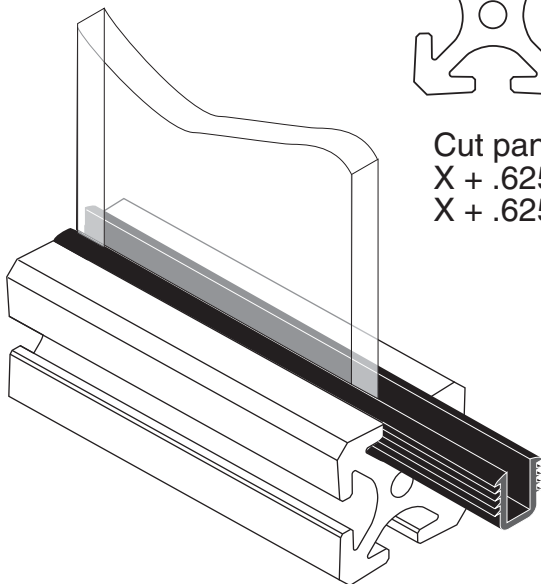
 1/4" (.235 actual)



$X + .625'' = \text{EB-40A}$   
 $X + .625'' = \text{EB-40C}$

**5/16" SLOTS**

Cut panel to  
 $X + .625'' = \text{EB-40A}$   
 $X + .625'' = \text{EB-40C}$



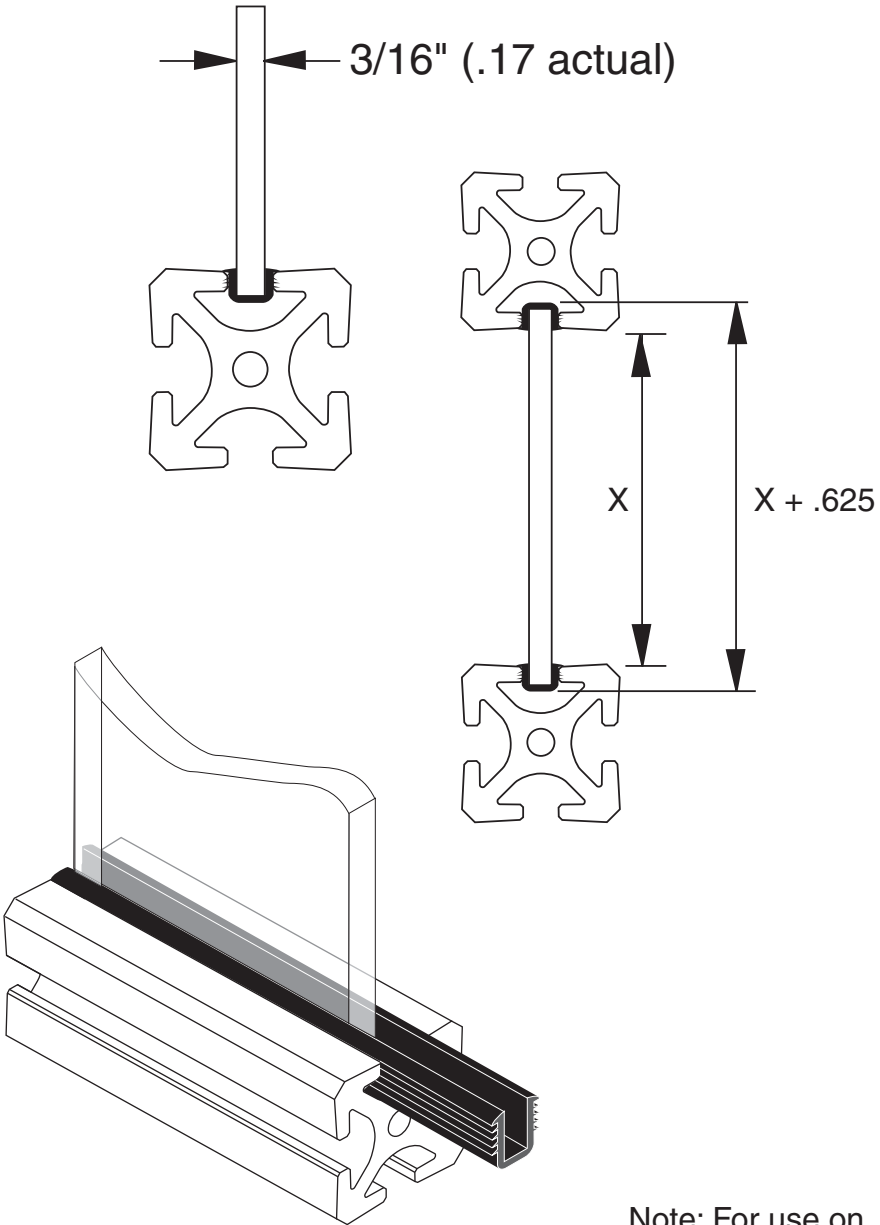
Note: For use on 5/16" wide profile slots.

**Material - Flexible PVC (Grey)**



**EB-40B**

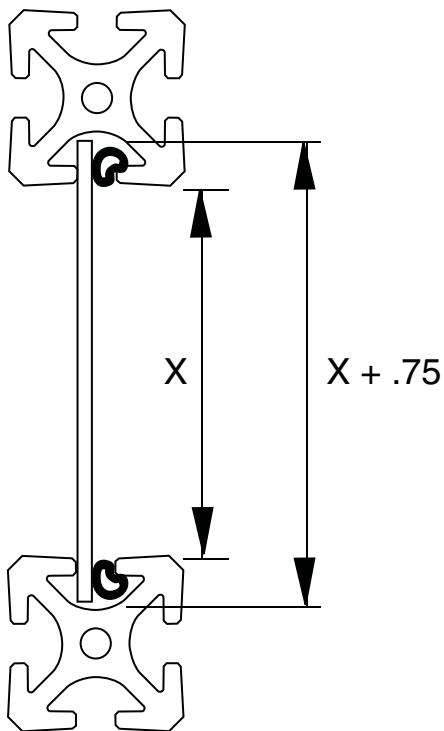
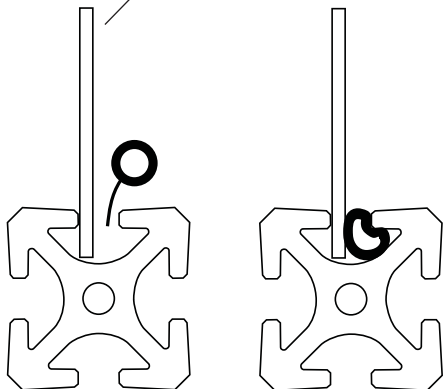
5/16" SLOTS



Note: For use on  
5/16" wide profile slots.

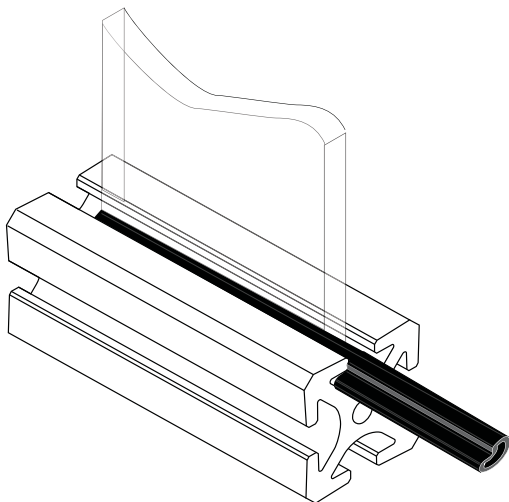
Material - Flexible PVC (Grey)

(12) gage to  
(16) gage panels



**5/16" SLOTS**

Cut panel to  $X + .75$ "



Material	Thickness
16 gage	.060
14 gage	.075
13 gage	.090
12 gage	.105

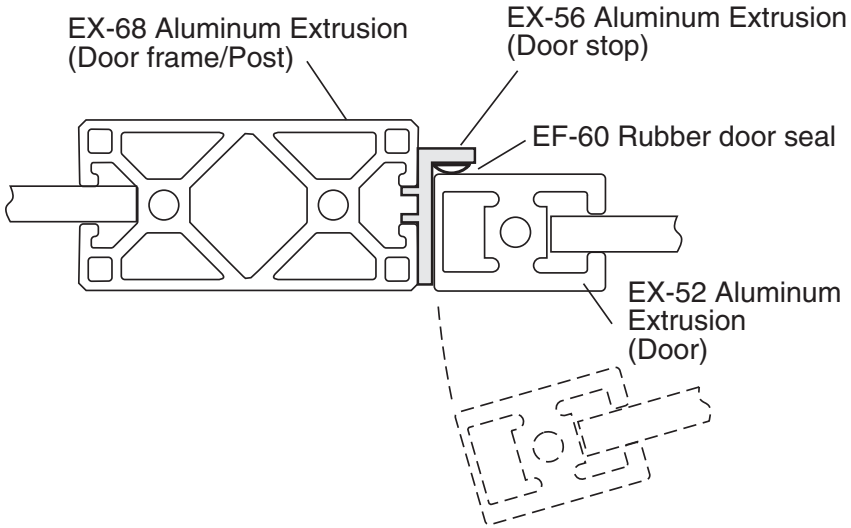
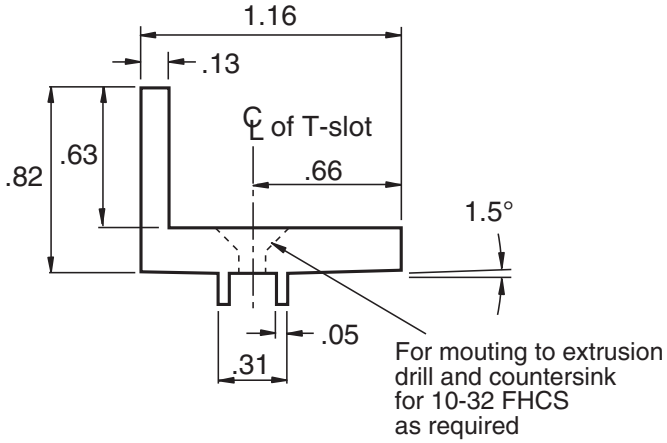
Material - Rubber (Black)

# Door Stop (Light Blocking)



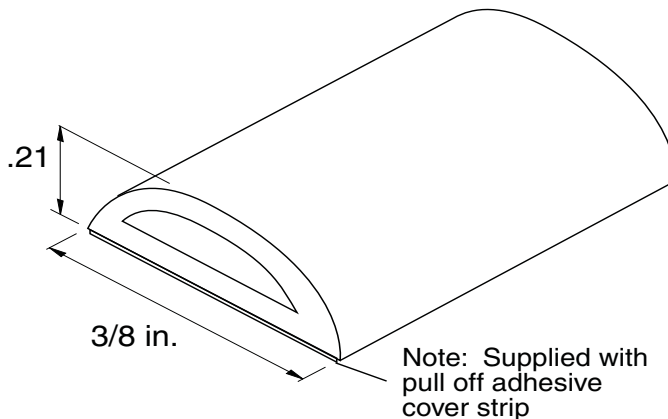
**EX-56** (.385 lbs/ft)

5/16" SLOTS



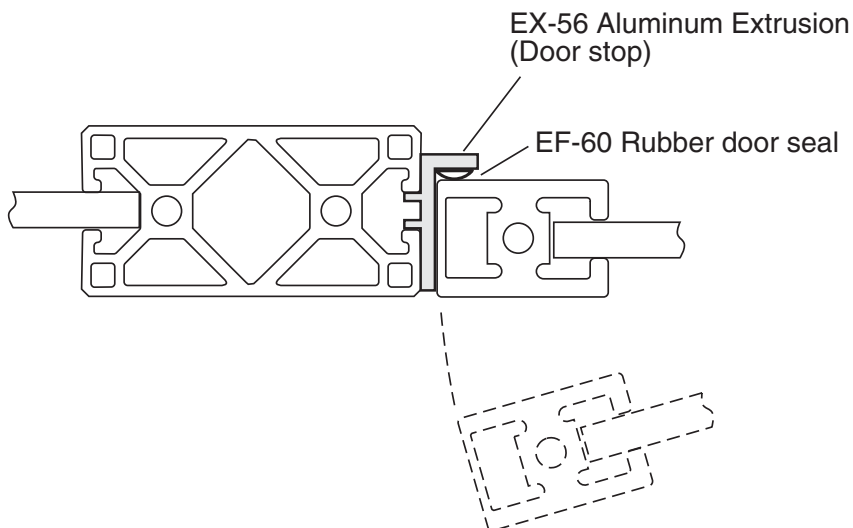
Standard size 96" and 192", sold by the inch

Material - Aluminum  
Finish - Clear Anodize



Sold by the foot

### Example: Door Frame Cross-Section



5/16" SLOTS

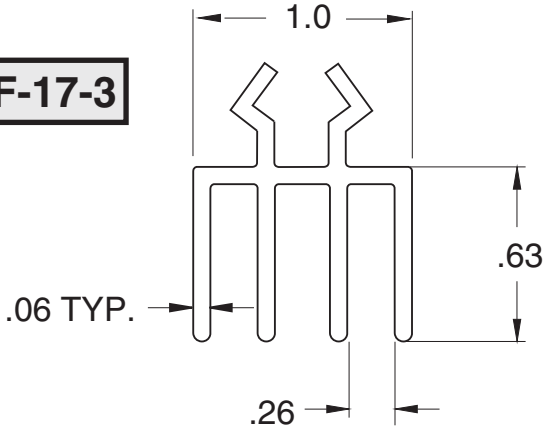
Door Slides (3 Tracks) 5/16" slots



<b>EF-17-3</b>	Upper Door Slide Track (1/4" panels)
<b>EF-18-3</b>	Lower Door Slide Track (1/4" panels)

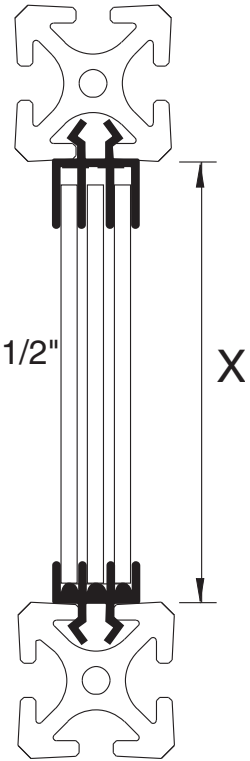
5/16" SLOTS

**EF-17-3**

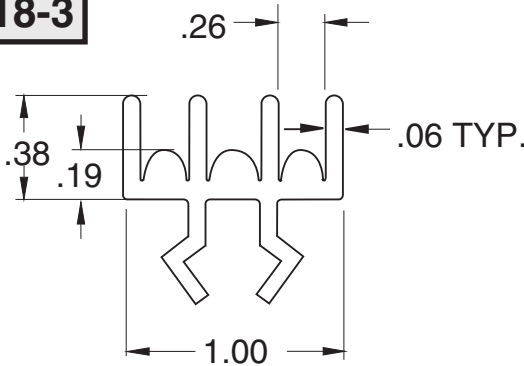


Material - Rigid PVC

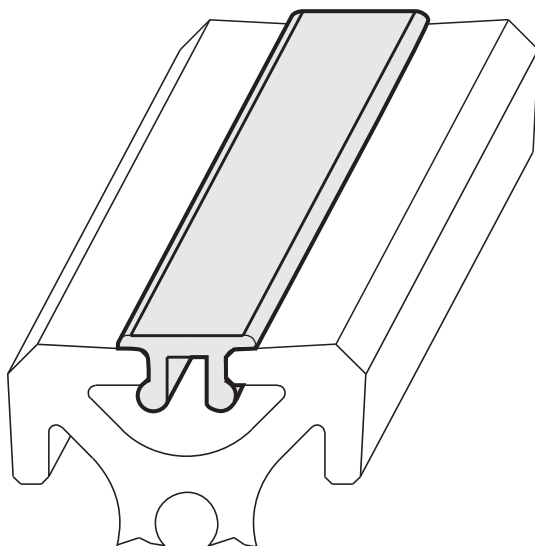
Cut Panels to X - 1/2"



**EF-18-3**



Material - Rigid PVC  
Sold in 6 ft. lengths



Sold in 6 ft. lengths

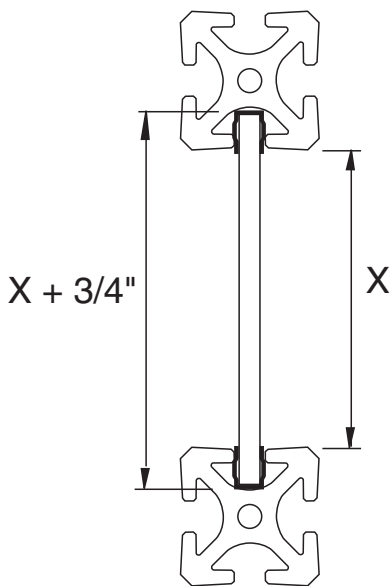
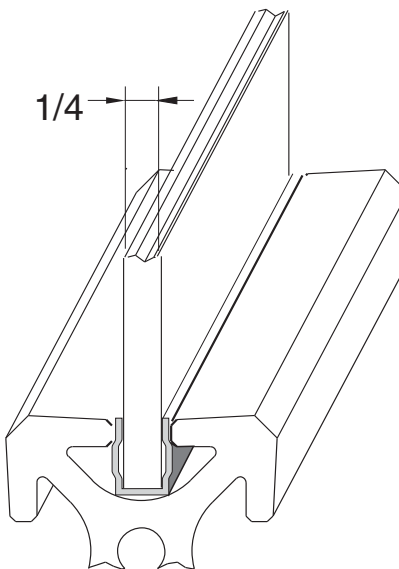
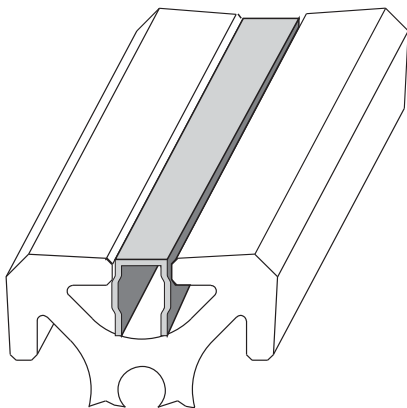
- EF-23G** Gray Rigid PVC
- EF-23B** Black Rigid PVC
- EF-23Y** Yellow Rigid PVC
- EF-23A** Clear Anodized Aluminum
- EF-23SO** Safety Orange Rigid PVC

# T-slot Cover or Panel Gasket



**EF-45**

**5/16" SLOTS**



**Note:**  
T-slot cover rests below surface of extrusion - can pass under brackets.

**Cut panel to  $X + .75"$**

- EF-45B** Black
- EF-45Y** Yellow
- EF-45G** Grey
- EF-45SO** Safety Orange

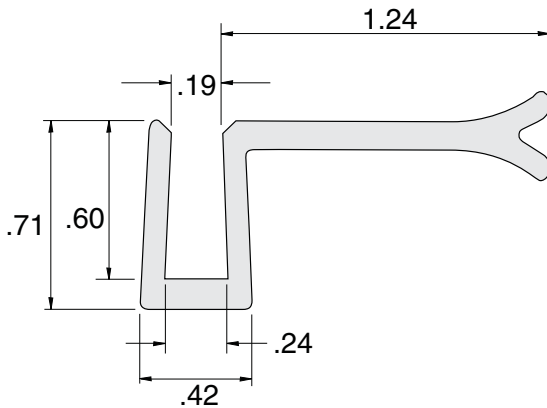
Material - Rigid PVC

**Stiffener w/handle (.343 lb/ft)**

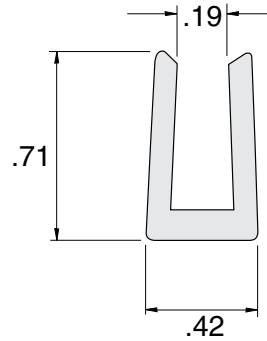
**EF-140**

**Stiffener w/o handle (.173 lb/ft)**

**EF-141**



**EF-140**



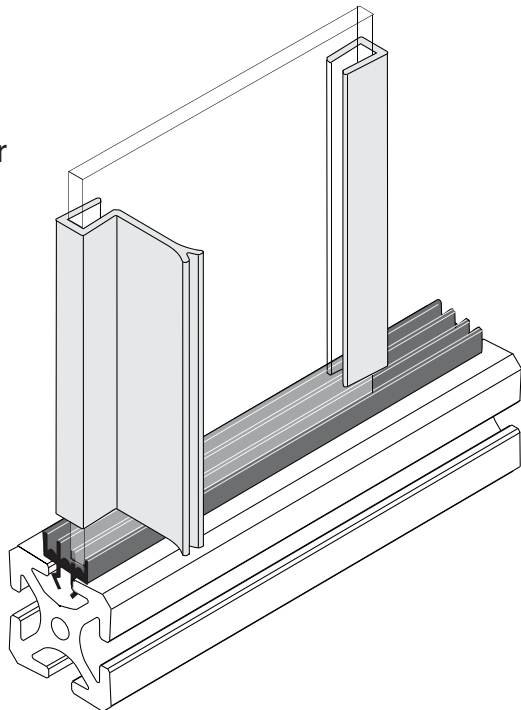
**EF-141**

**5/16" SLOTS**

Stocked in 144" lengths  
Sold by the inch

Note: Must use 1/4" Lexan for both EF-140 & EF-141

Note: can be used for swinging, slide and vertical lift doors.



**Material - Aluminum  
Finish - Clear Anodize**

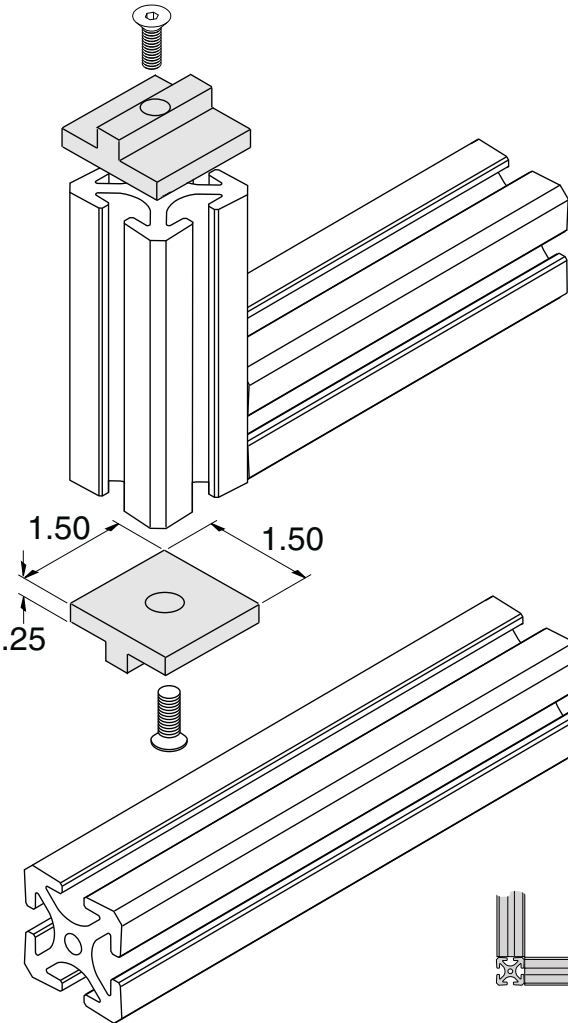


# Bi-fold Door Pad

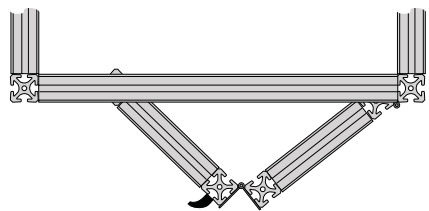


**EF-110** use on 1.5 x 1.5 sq. extrusions with 5/16 wide slots

**5/16" SLOTS**



Hardware Included  
Material - DELRIN

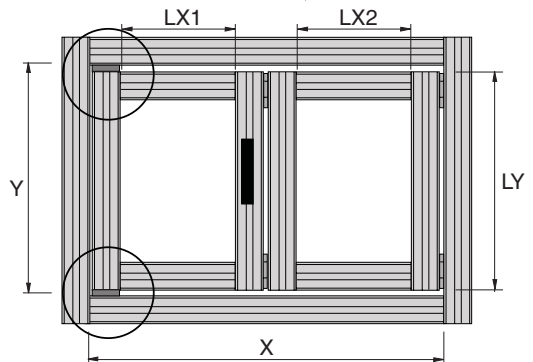


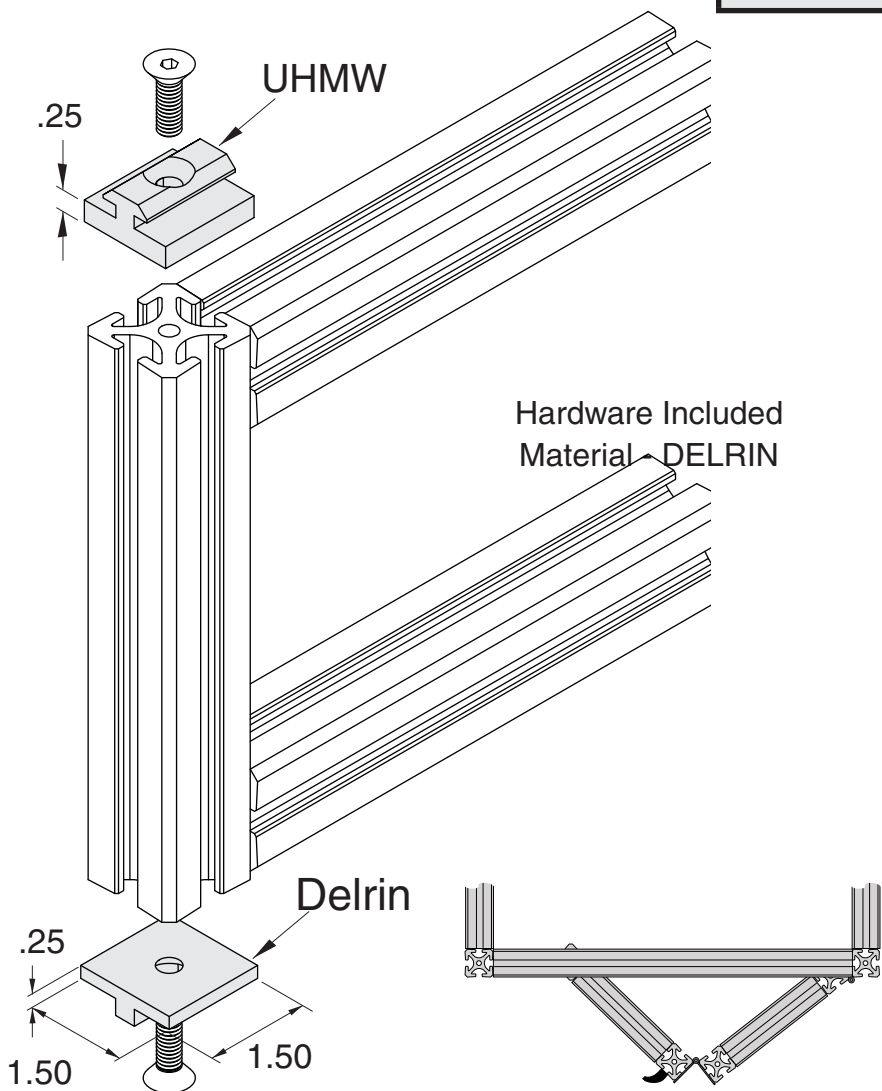
X = width of door opening  
Y = height of door opening

$$LX1 = \frac{(X-6.75)}{2} + .9375$$

$$LX2 = \frac{(X-6.75)}{2} - .9375$$

$$LY = Y-.5625$$





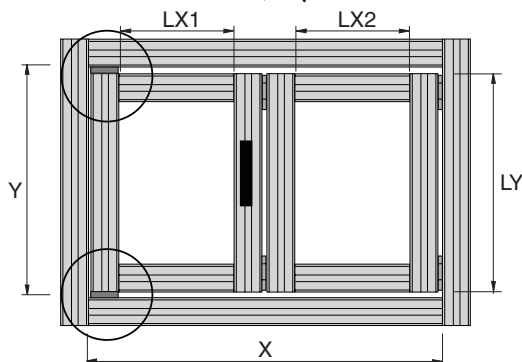
5/16" SLOTS

X = width of door opening  
Y = height of door opening

$$LX1 = \frac{(X-6.75)}{2} + .9375$$

$$LX2 = \frac{(X-6.75)}{2} - .9375$$

$$LY = Y - .5625$$



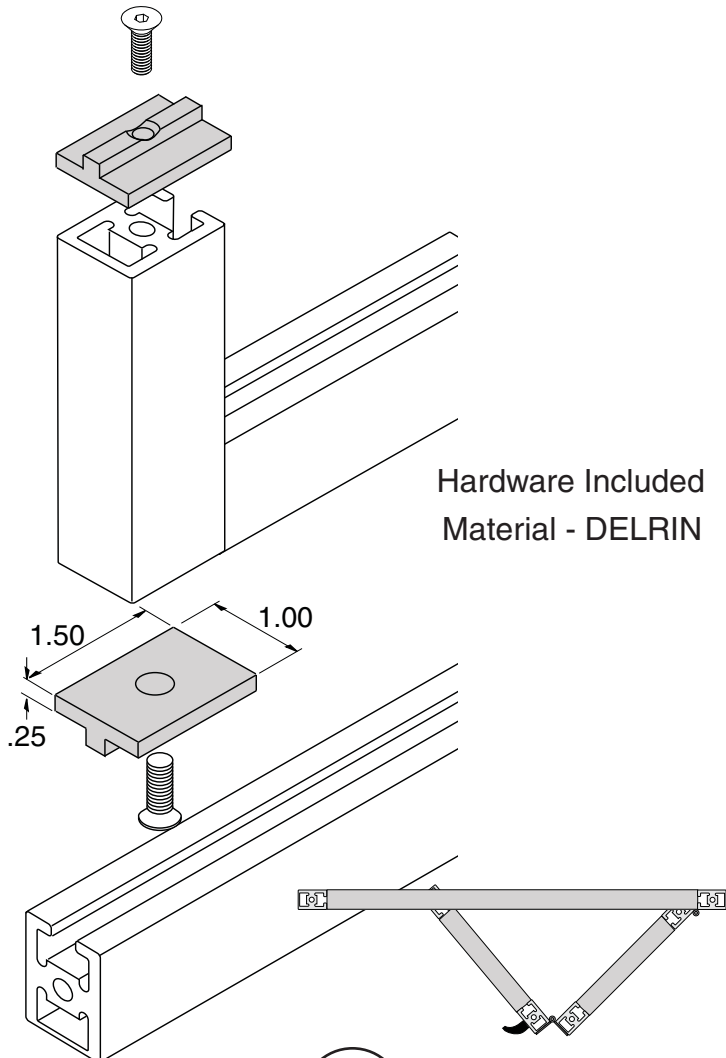
# Bi-fold Door Pad



**EF-115**

use on EX-52 and EX-54

5/16" SLOTS



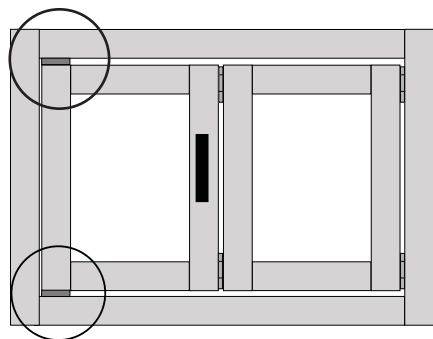
Hardware Included  
Material - DELRIN

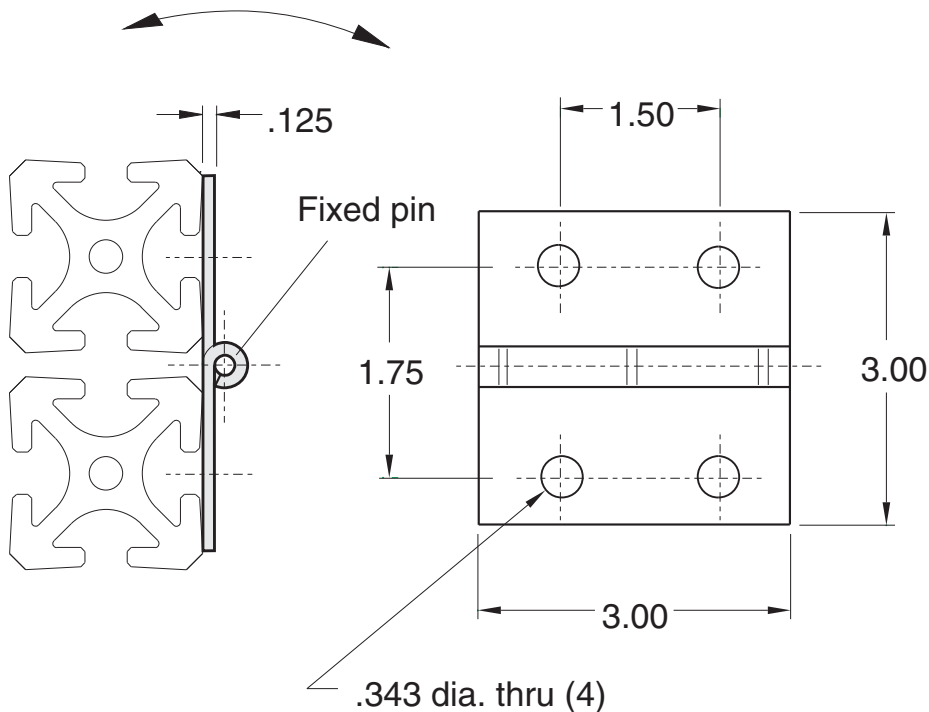
X = width of door opening  
Y = height of door opening

$$LX1 = \frac{(X-6.75)}{2} + .9375$$

$$LX2 = \frac{(X-6.75)}{2} - .9375$$

$$LY = Y-.5625$$





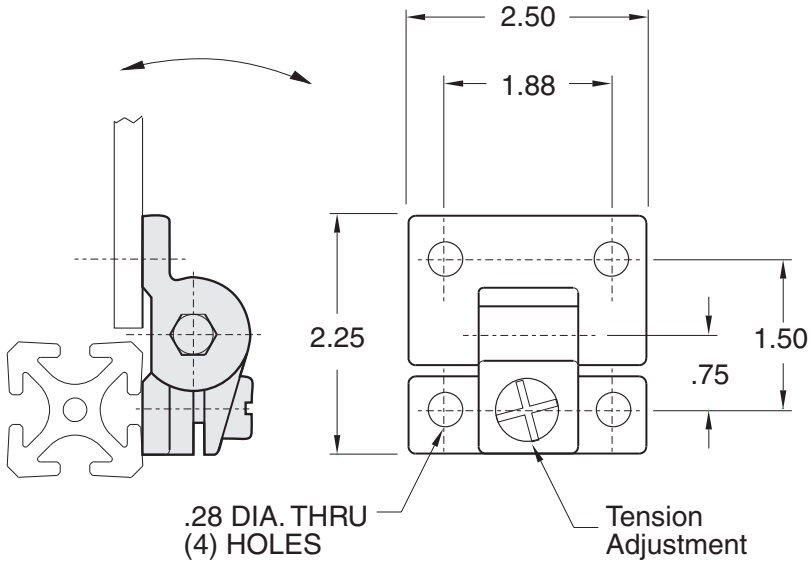
**5/16" SLOTS**

Hardware Included

Material - Aluminum  
Finish - Clear Anodize

**EF-20**

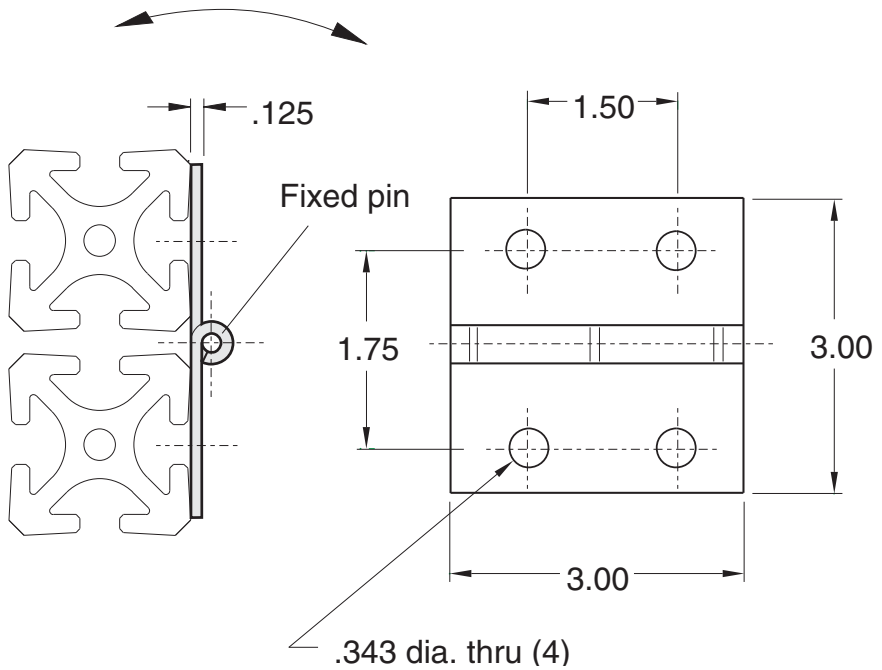
5/16" SLOTS



Hardware Included

Material - Plastic

**5/16" SLOTS**

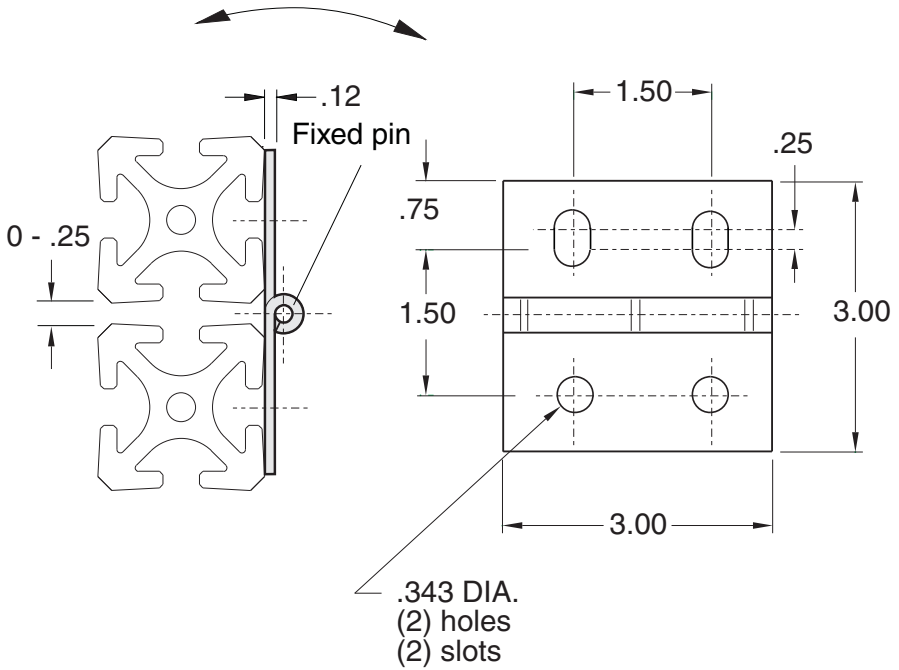


Hardware Included

Material - Steel  
Finish - Black Powder Coat

**EF-75**

5/16" SLOTS

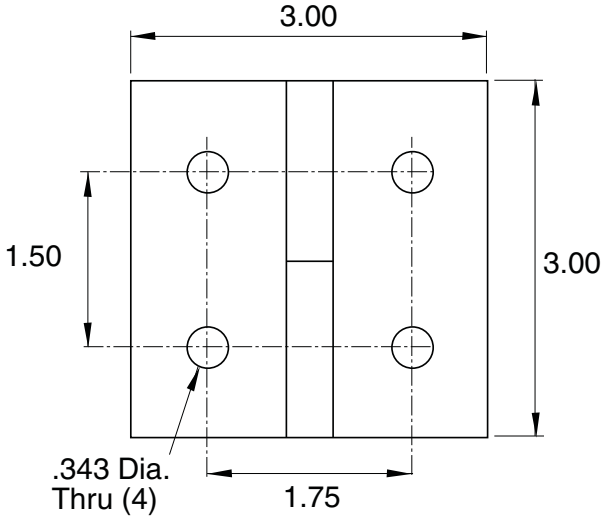


Hardware Included

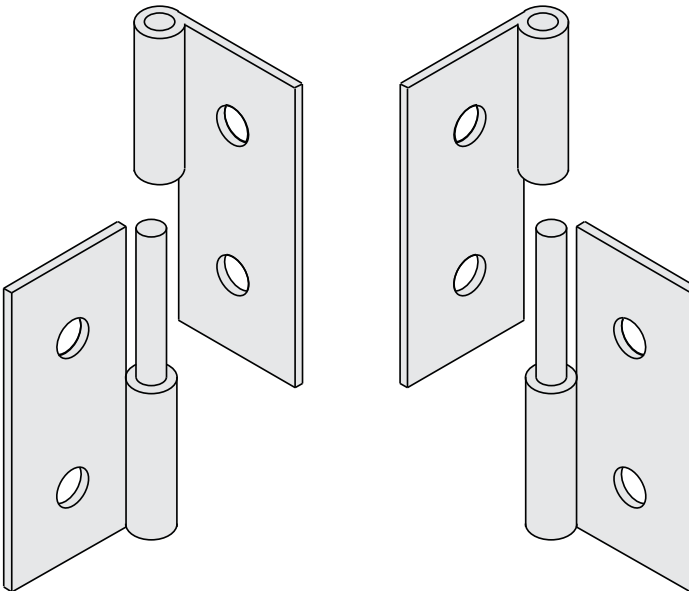
Material - Steel  
Finish - Black Powder Coat

**EF-21LH**

**EF-21RH**



**5/16" SLOTS**



**EF-21LH Left Hand**

**EF-21RH Right Hand**

**Hardware Included**

**Material - Steel  
Finish - Zinc Plated**

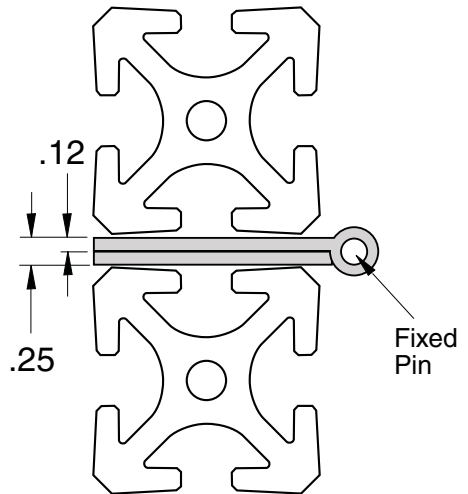
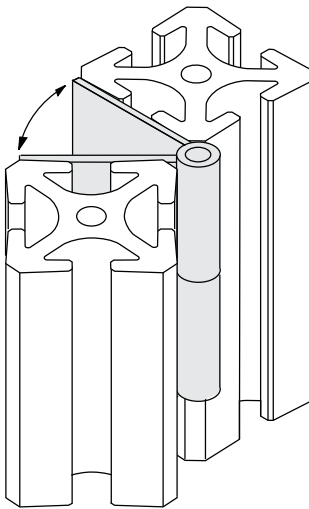
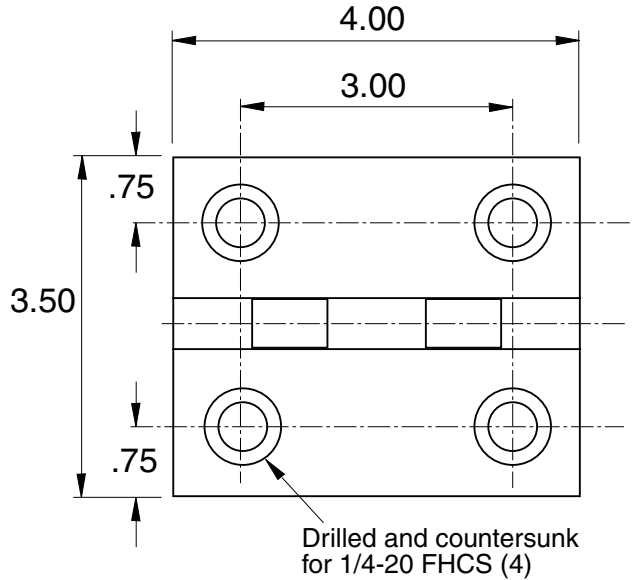


# Hidden Steel Hinge (.33" slot size)



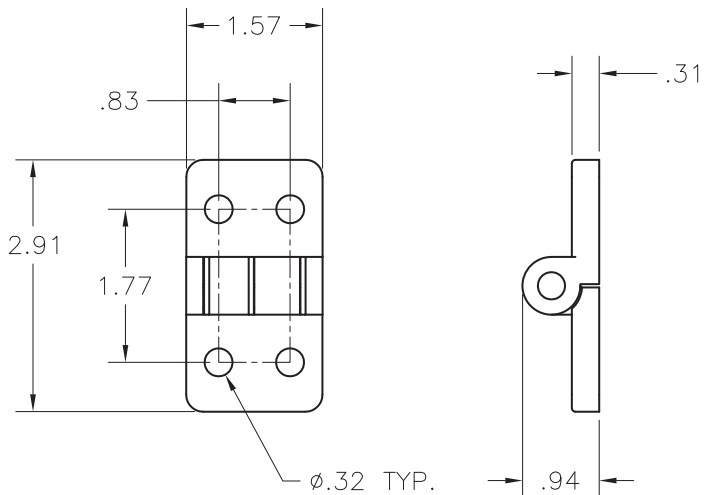
**EF-70**

**5/16" SLOTS**

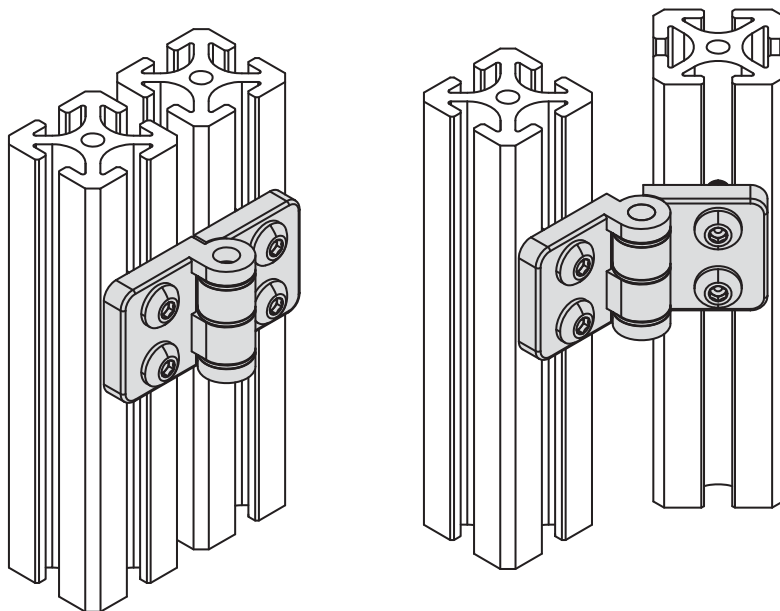


Hardware Included

Material - Steel  
Finish - Black Powder Coat



5/16" SLOTS



Hardware Included

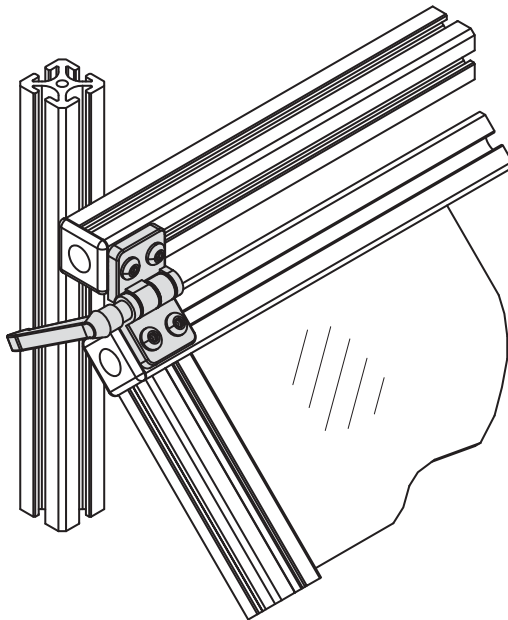
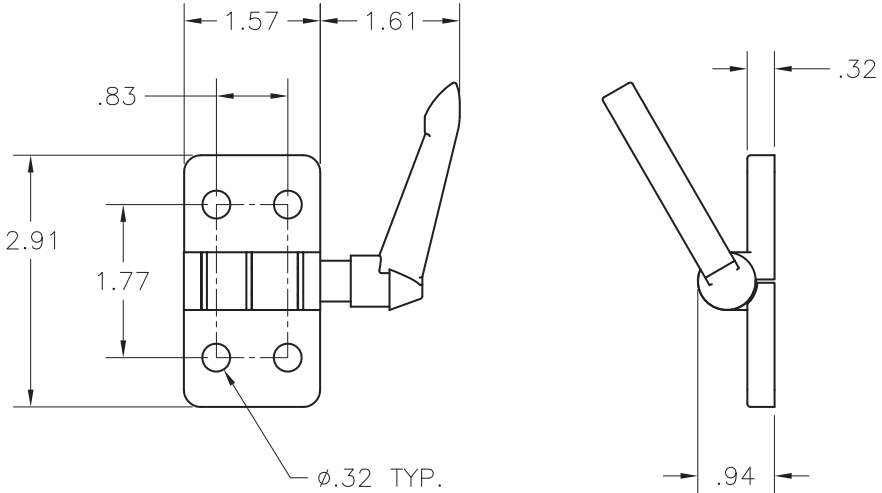
Material - Zinc Die Cast  
Finish - Black Powder Coat

# Die Cast Zinc Locking Hinge



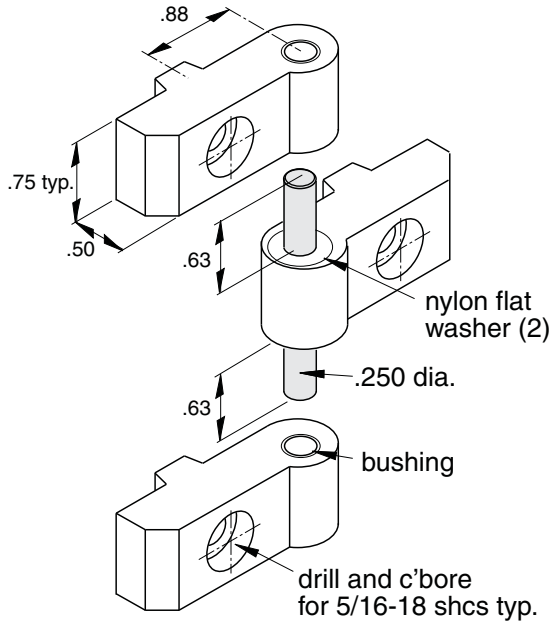
**EF-74**

**5/16" SLOTS**

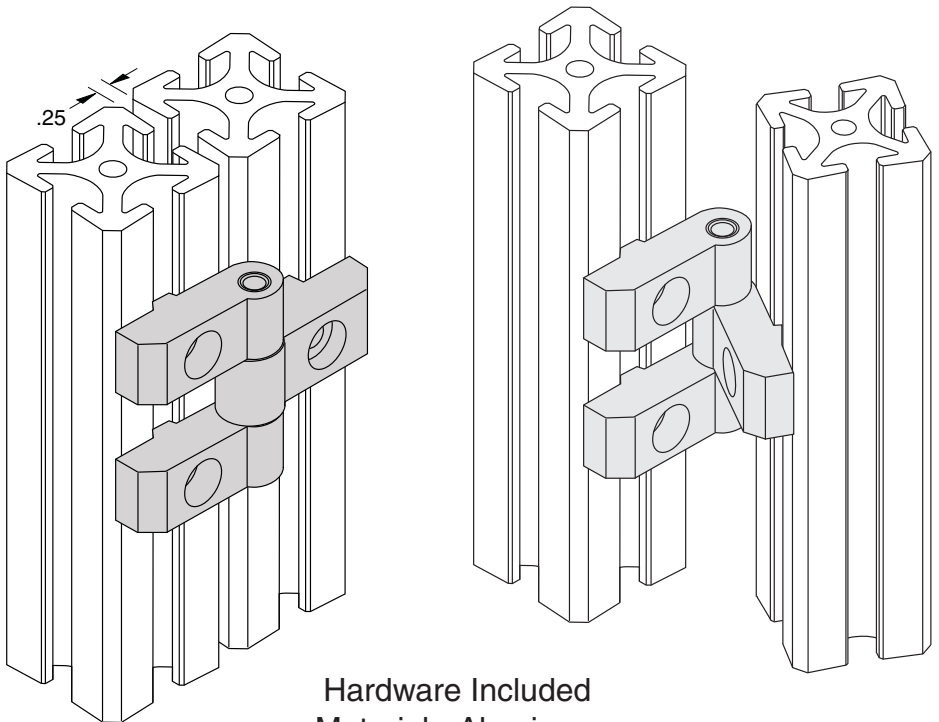


Hardware Included

Material - Zinc Die Cast  
Finish - Black Powder Coat



**5/16" SLOTS**



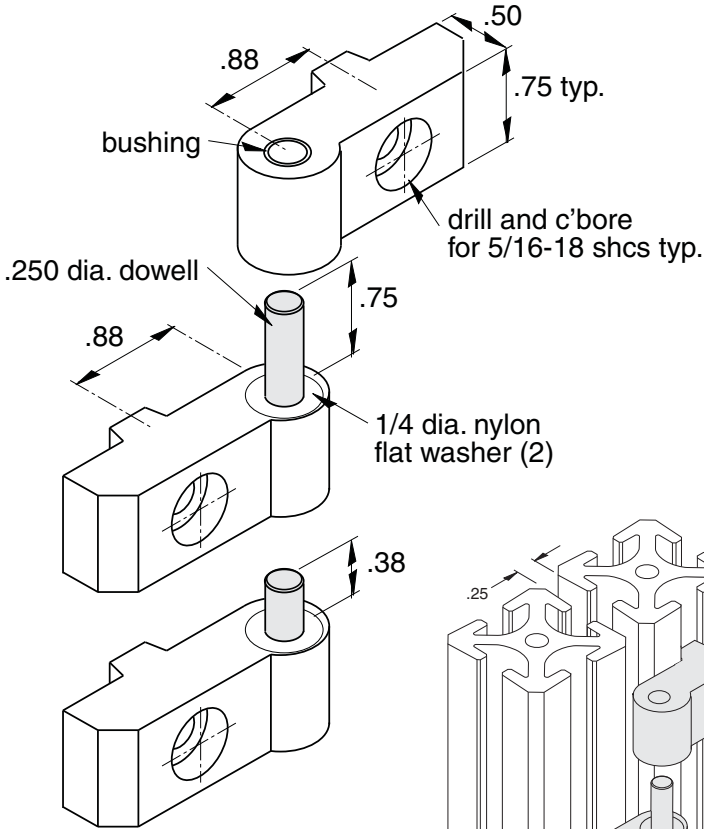
**Hardware Included**  
**Material - Aluminum**  
**Finish - Clear Anodize**

# Left Hand Lift-Off Hinge - 5/16" slots



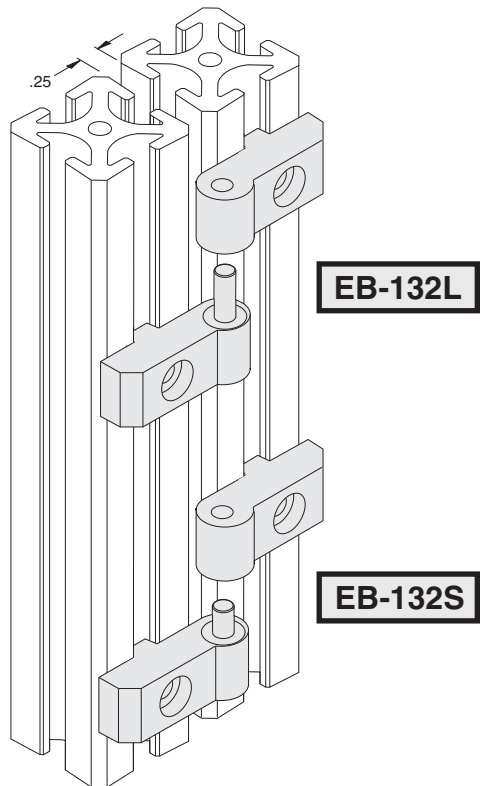
<b>EB-132</b>	One Set w/Long & Short Pin Assemblies
<b>EB-132L</b>	Long Pin Assembly Only
<b>EB-132S</b>	Short Pin Assembly Only

5/16" SLOTS



**Hardware Included**  
**Material - Aluminum**  
**Finish - Clear Anodize**

**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.



One Set w/Long & Short Pin Assemblies

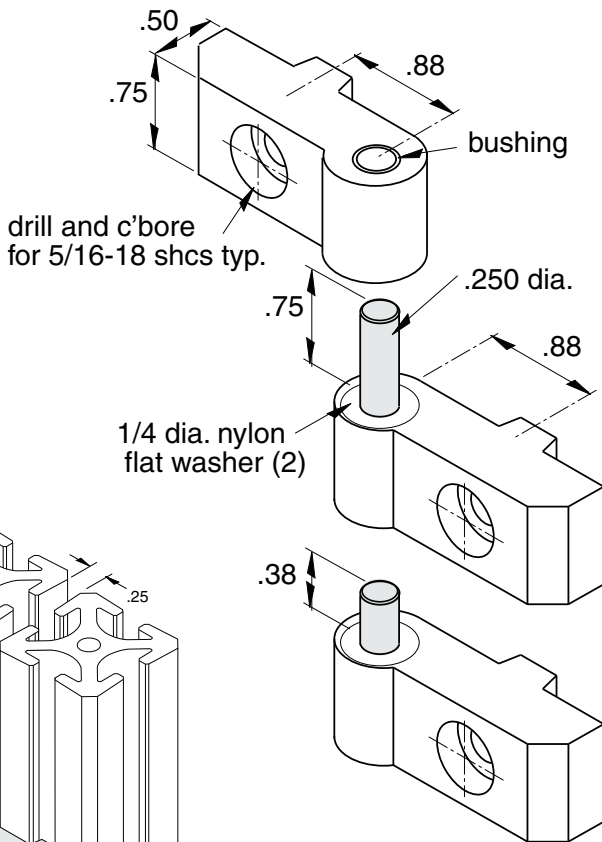
**EB-133**

Long Pin Assembly Only

**EB-133L**

Short Pin Assembly Only

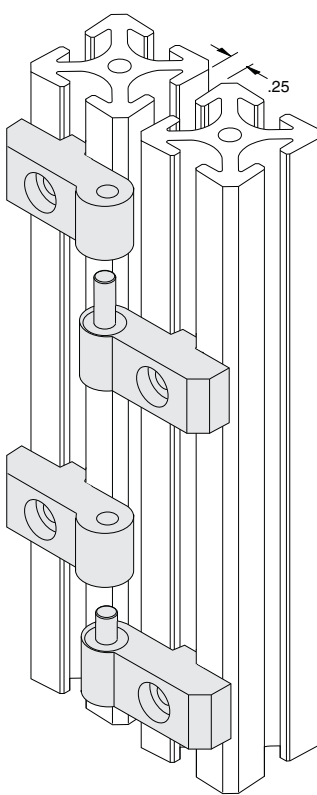
**EB-133S**



**5/16" SLOTS**

**EB-133L**

**EB-133S**



**Hardware Included**  
Material - Aluminum  
Finish - Clear Anodize

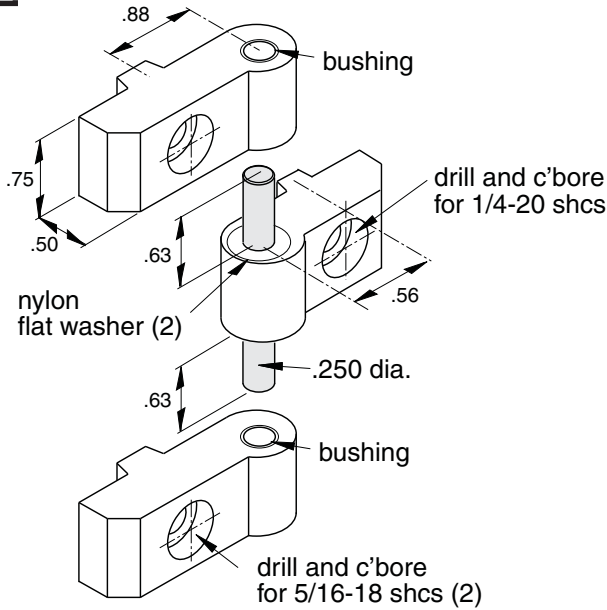
**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.

# Heavy Duty Transition 5/16 - 1/4 slots Hinge Assembly

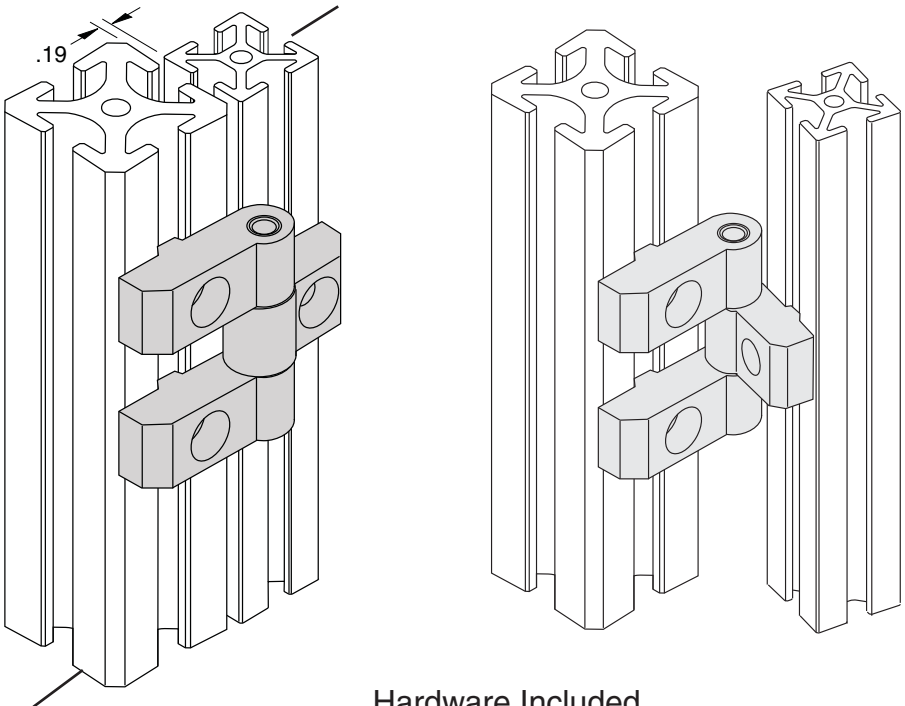


**EB-140**

5/16" SLOTS



**EX-11**



**EX-1**

Hardware Included  
Material - Aluminum  
Finish - Clear Anodize

One Set w/Long & Short Pin Assemblies

**EB-142**

Long Pin Assembly Only

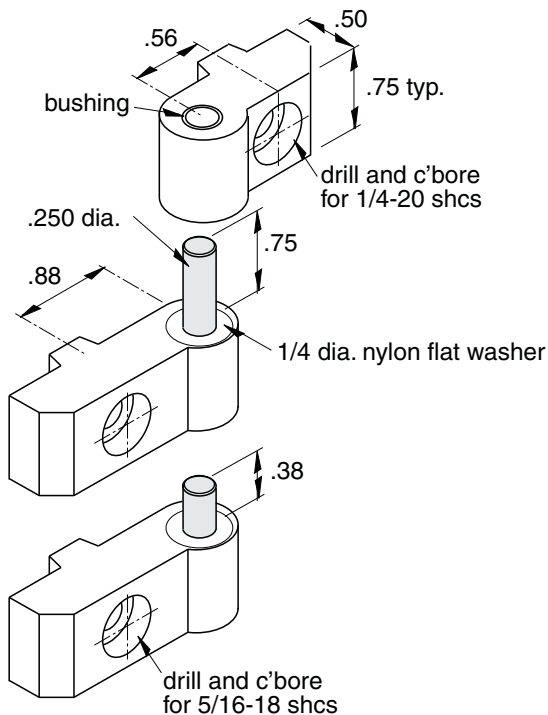
**EB-142L**

Short Pin Assembly Only

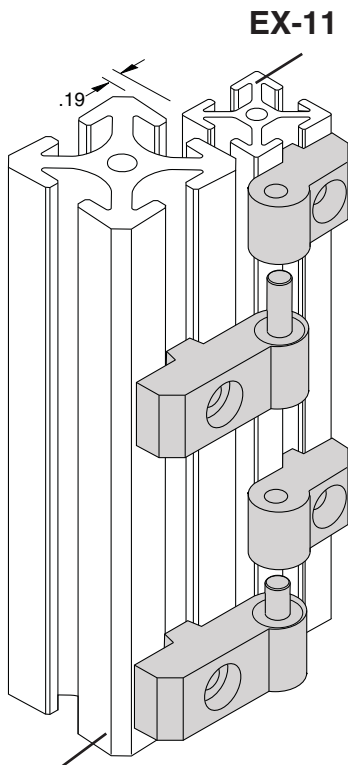
**EB-142S**

Hardware Included  
Material - Aluminum  
Finish - Clear Anodize

**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.



**5/16" SLOTS**



**EB-142L**

**EB-142S**

**EX-1**



# Right Hand Transition Lift-Off Hinge 5/16 - 1/4 slots



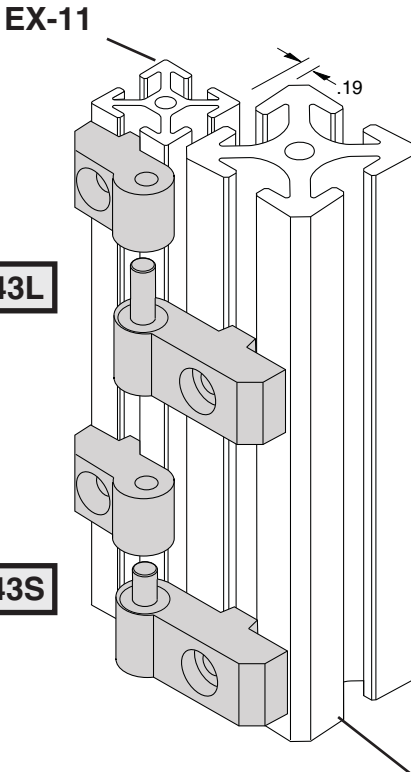
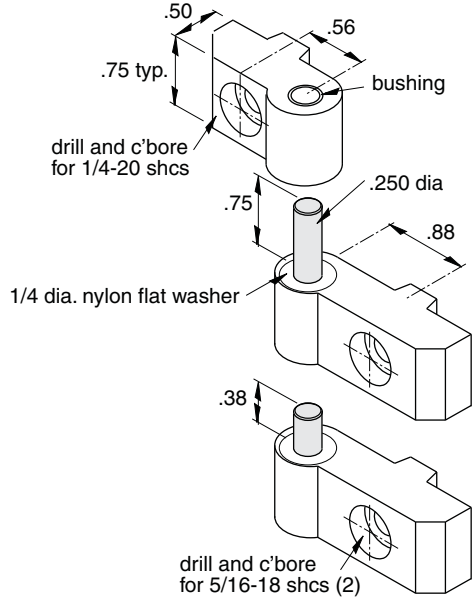
<b>EB-143</b>
<b>EB-143L</b>
<b>EB-143S</b>

One Set w/Long & Short Pin Assemblies  
 Long Pin Assembly Only  
 Short Pin Assembly Only

5/16" SLOTS

Hardware Included  
 Material - Aluminum  
 Finish - Clear Anodize

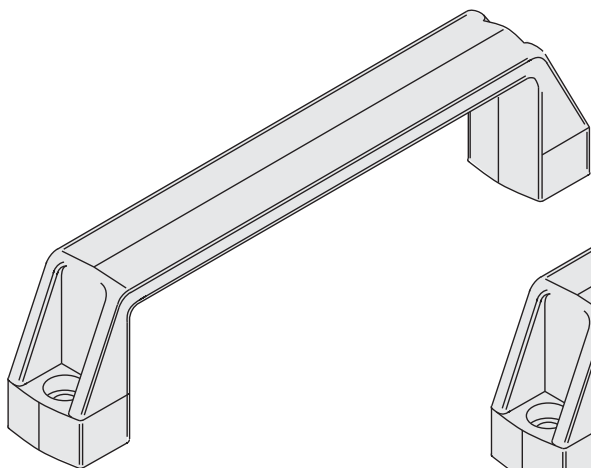
**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.



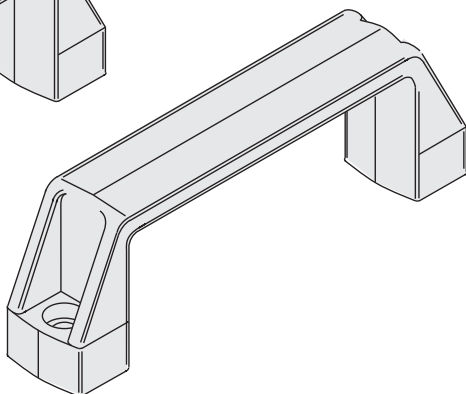
**EB-143L**

**EB-143S**

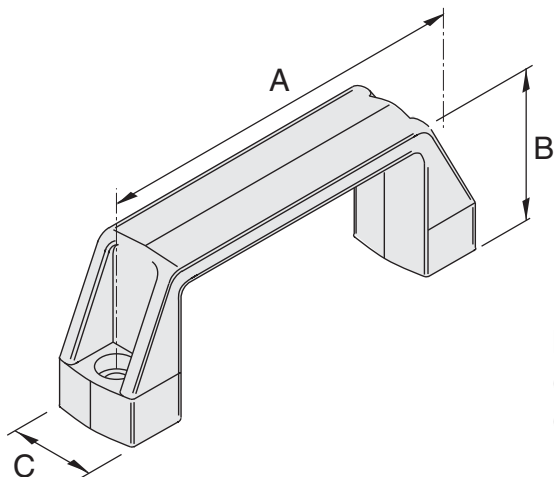
**EX-1**



**EF-15C**



**EF-15B**



**EF-15A**

Recommended  
Hardware  
(2) EF-11-.75 SHCS  
(2) EF-2 T-nut

Material - Black Plastic

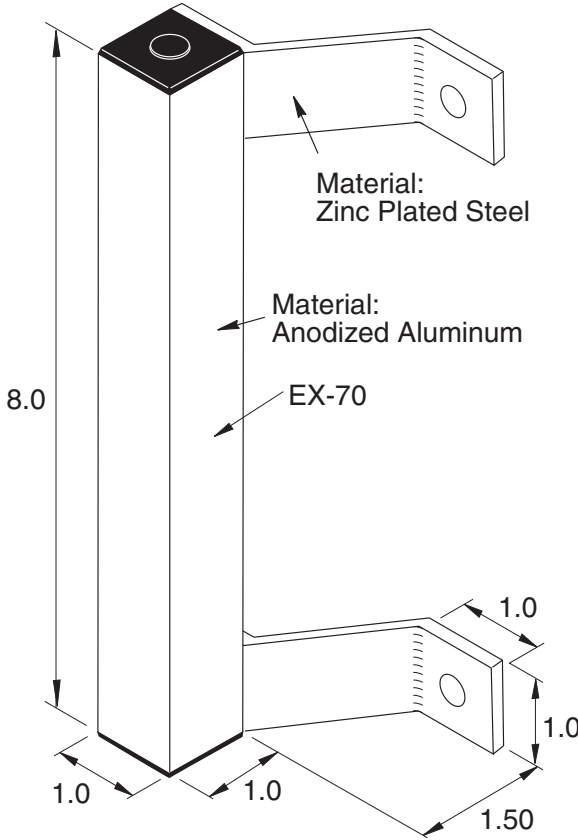
Part No.	A	B	C
<b>EF-15A</b>	4.61	1.61	1.06
<b>EF-15B</b>	5.20	1.77	1.02
<b>EF-15C</b>	7.05	1.97	1.10

# Offset Extrusion Door Handle

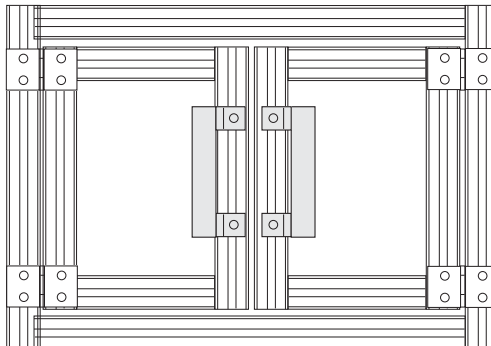
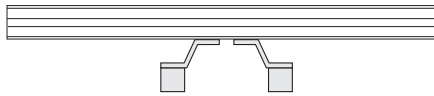


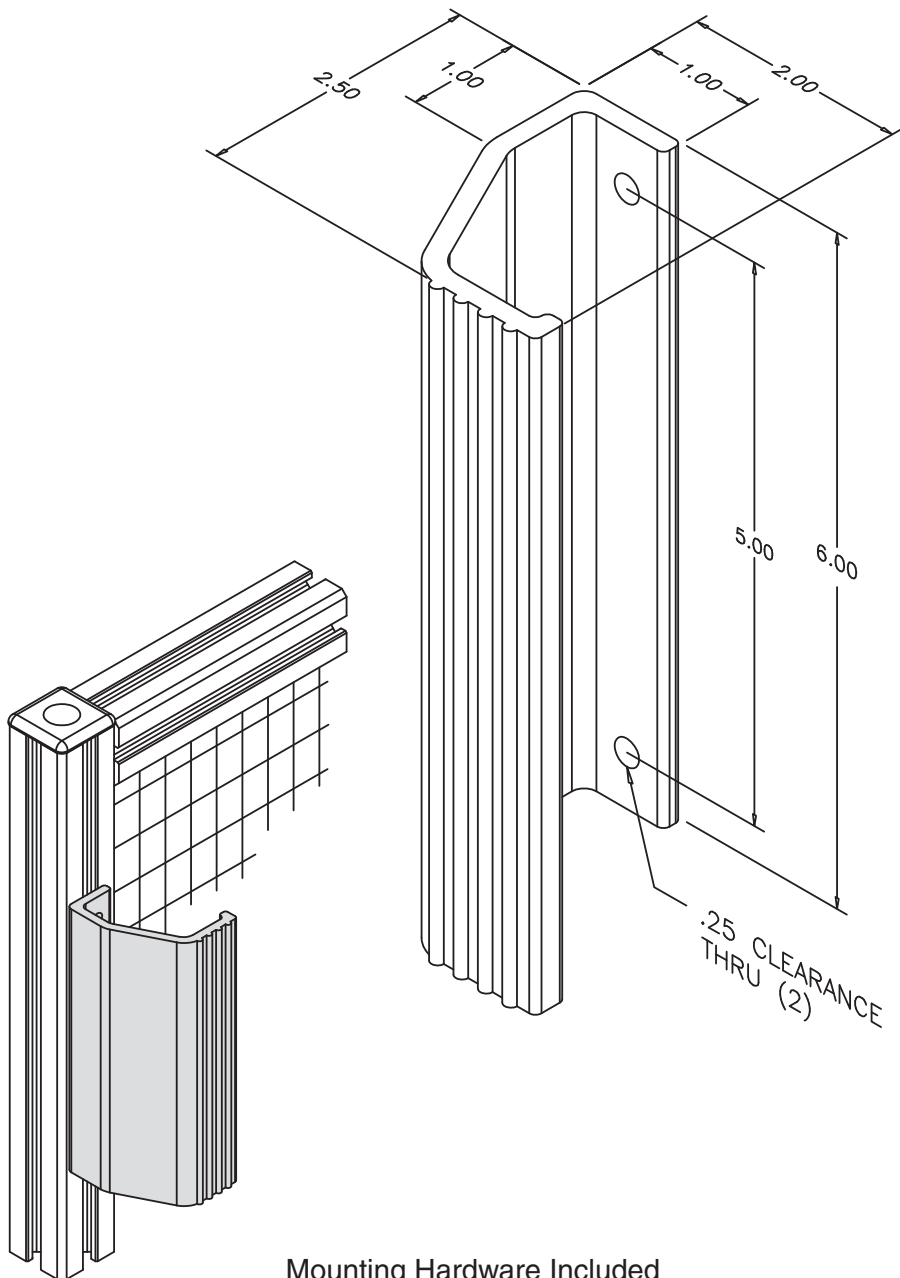
**EF-48**

**5/16" SLOTS**



Hardware Included





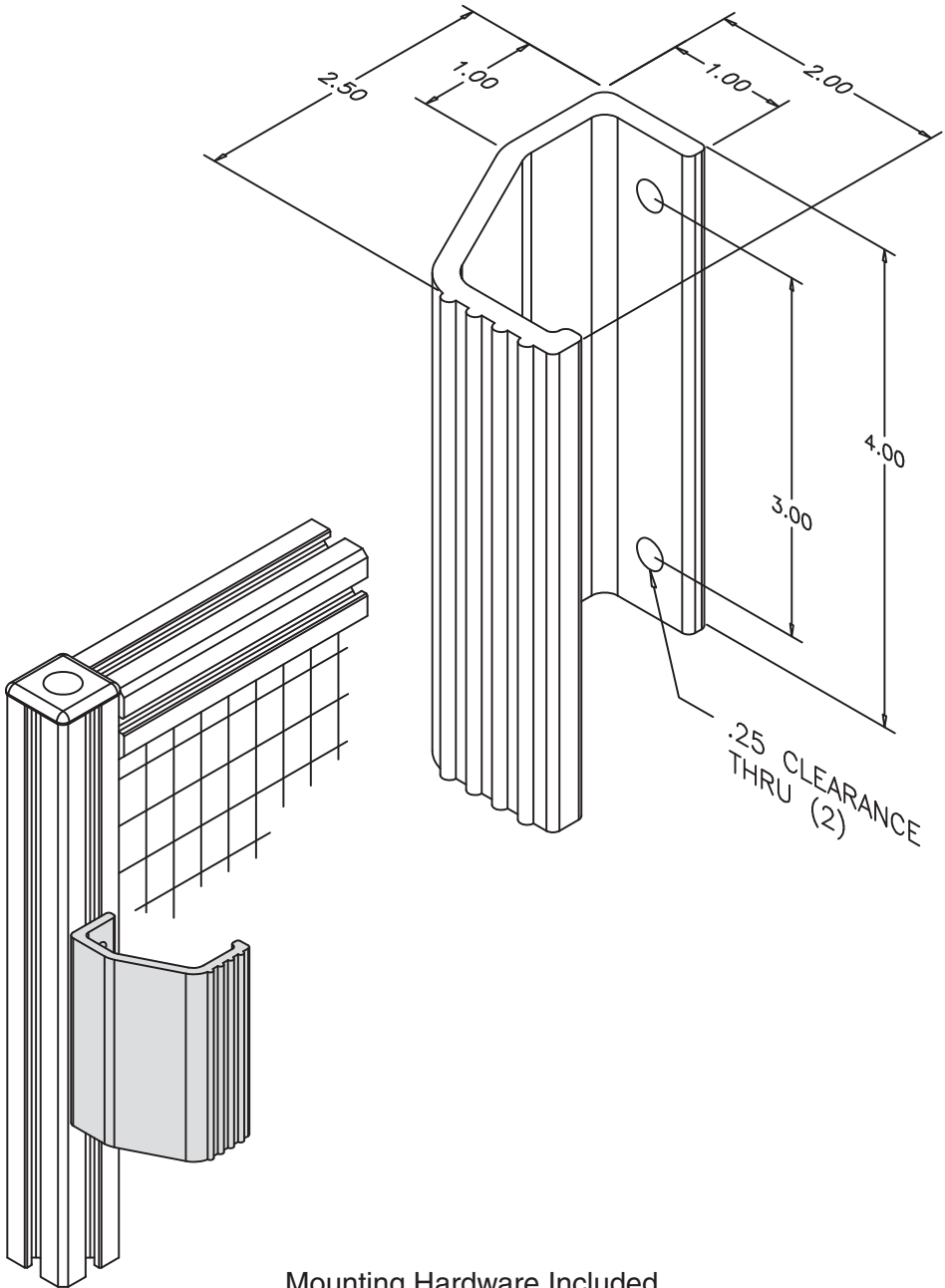
Material - Aluminum  
Finish - Black Powder Coat

# Extruded Door Handle



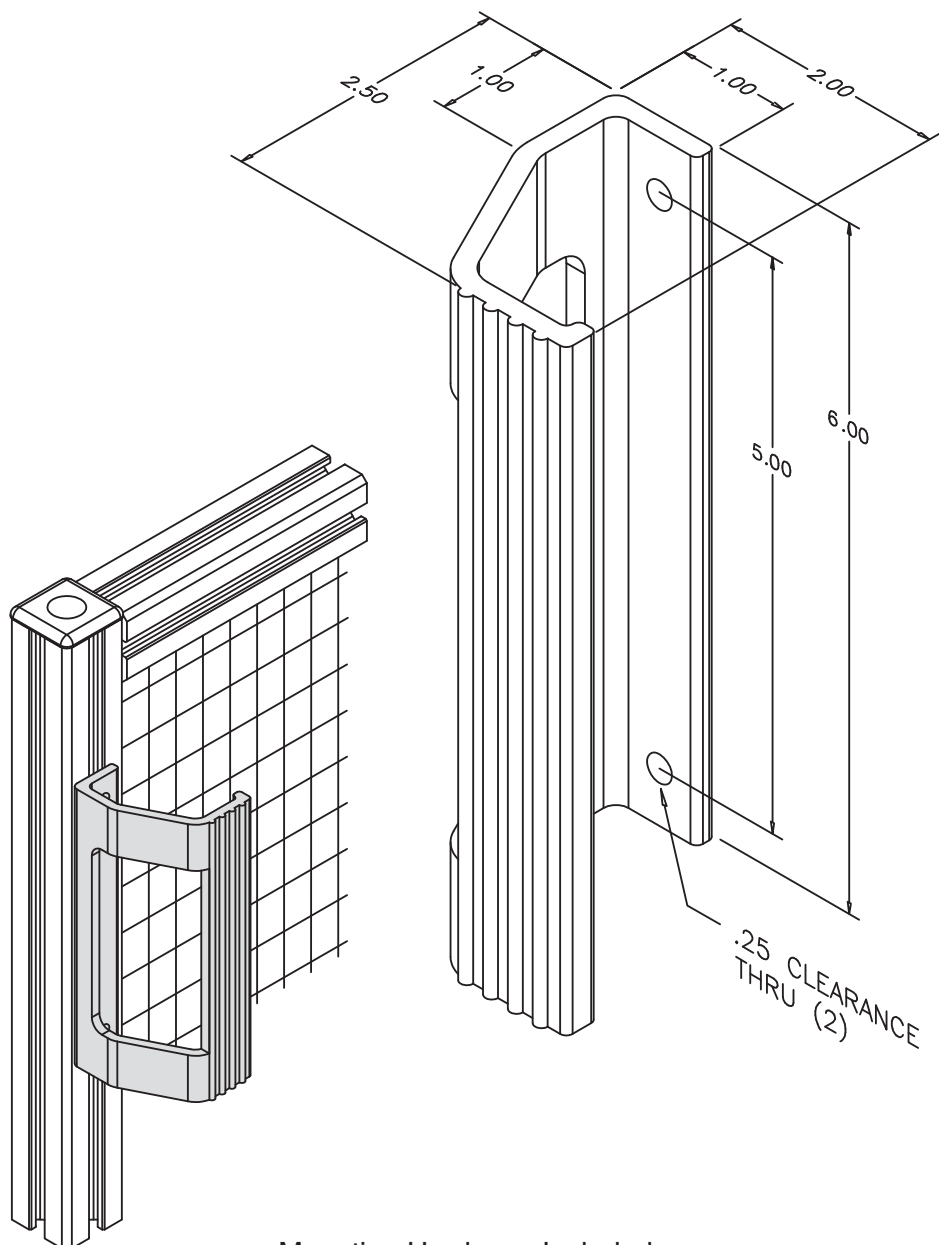
**EF-181**

**5/16" SLOTS**



Mounting Hardware Included

Material - Aluminum  
Finish - Black Powder Coat



Mounting Hardware Included

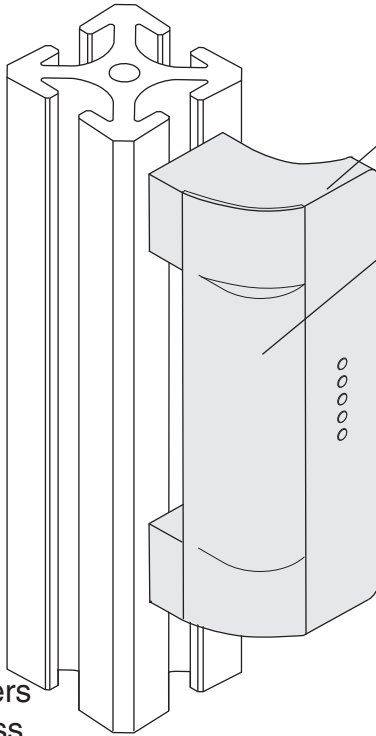
Material - Aluminum  
Finish - Black Powder Coat

# Safety Door Handle



<b>EF-125</b>
<b>EF-126</b>
<b>EF-127</b>

**5/16" SLOTS**



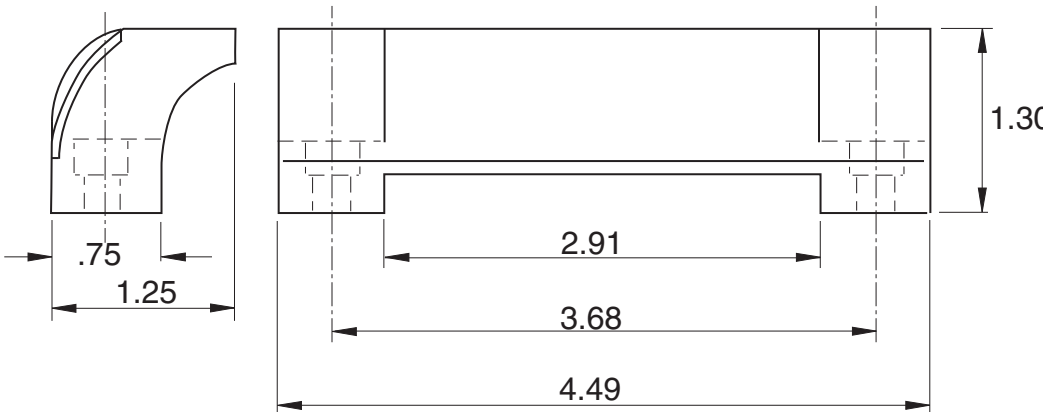
Black Handle Base

Colored Bolt Cover

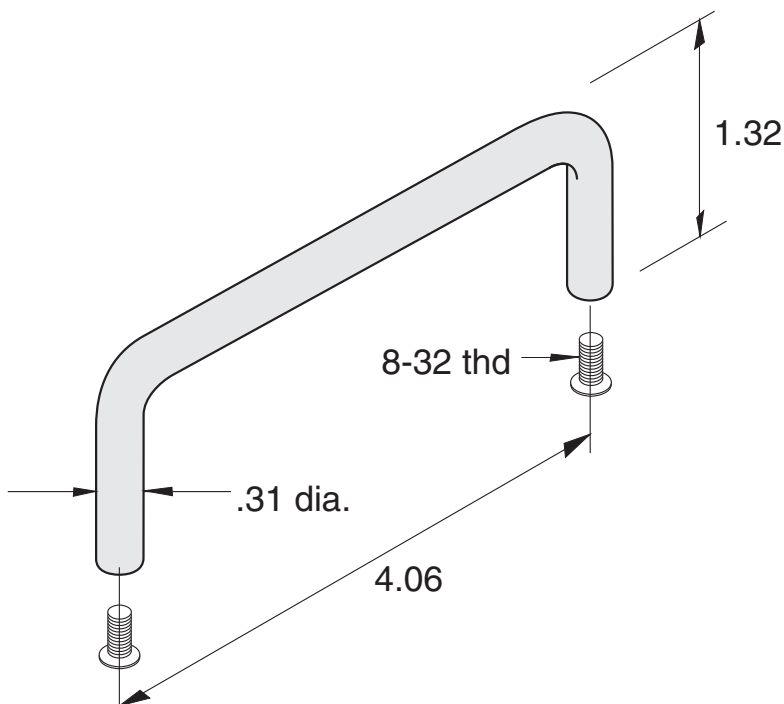
- EF-125** Black Cover
- EF-126** Yellow Cover
- EF-127** Orange Cover

Note: Fingers will not pass through

**Recommended Hardware**  
 For 5/16" slot sizes, use:  
 (2) 11-222 & (2) EF-2A  
  
 For 1/4" slot sizes, use:  
 (2) 11-221 & (2) 11-210



Material - Plastic

**5/16" SLOTS**

Hardware Included

Note: 8-32 bolt length determined by panel thickness

Material - Aluminum  
Finish - Clear Anodize



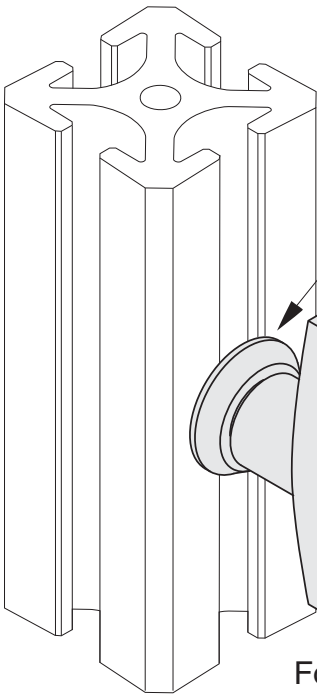
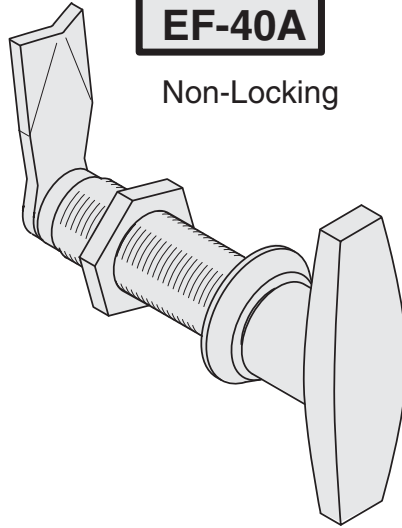
**EF-40**

5/16" SLOTS

Hardware included

**EF-40A**

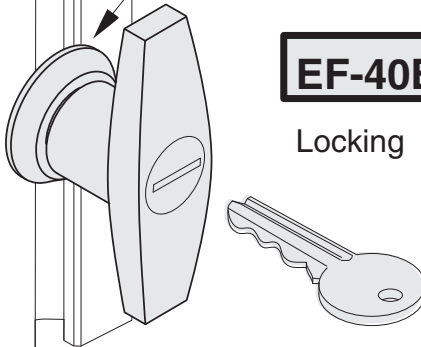
Non-Locking



.875 dia mounting hole

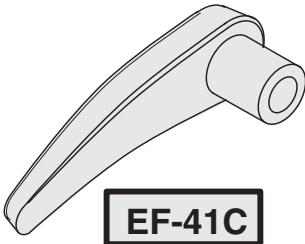
**EF-40B**

Locking



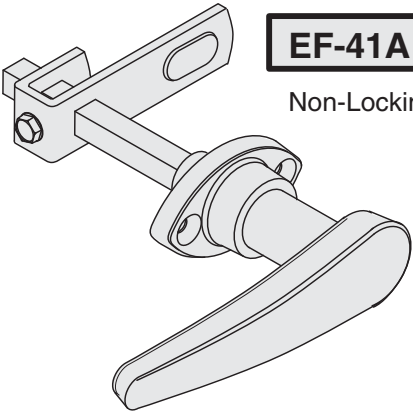
For factory supplied mounting hole,  
order EF-40H and provide hole location

Material - Steel  
Handle Finish - Black Powder Coat



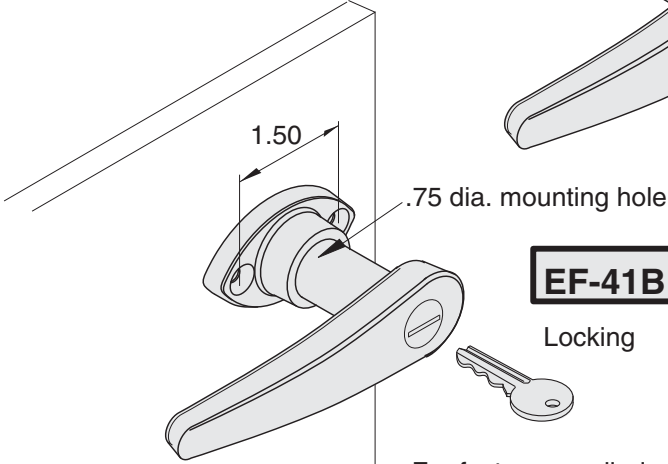
**EF-41C**

Inside Handle



**EF-41A**

Non-Locking



**EF-41B**

Locking

For factory supplied mounting holes, order EF-41H and provide hole location

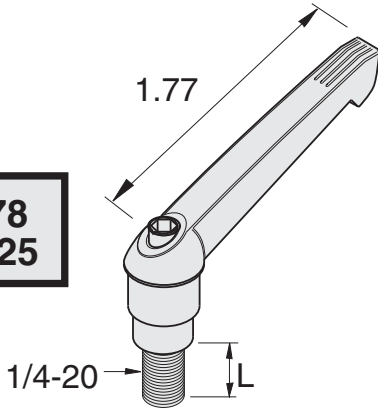
**5/16" SLOTS**

Material - Steel  
Handle Finish - Chrome

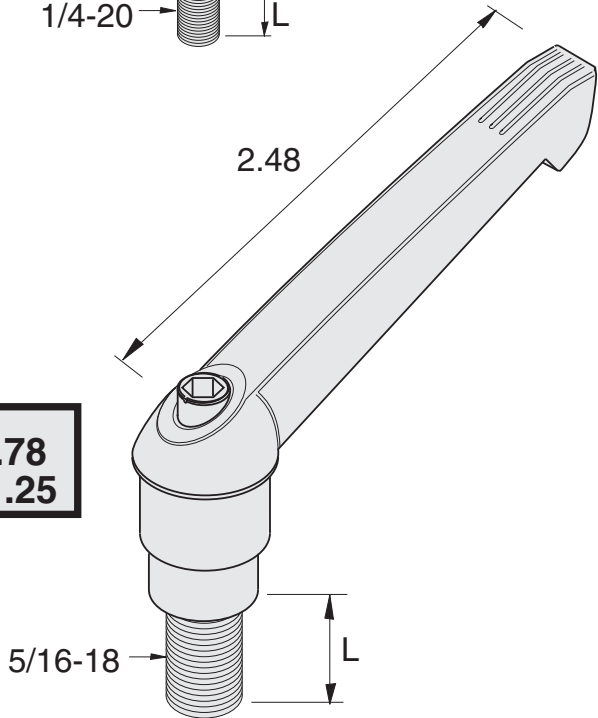
**EF-32**

5/16" SLOTS

**EF-32-1, L= .78**  
**EF-32-2, L=1.25**

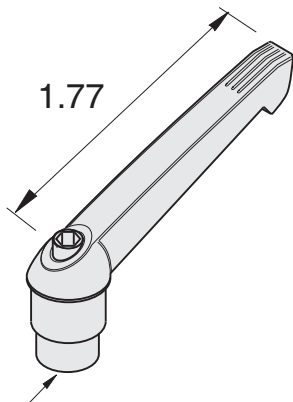


**EF-32-3, L= .78**  
**EF-32-4, L=1.25**



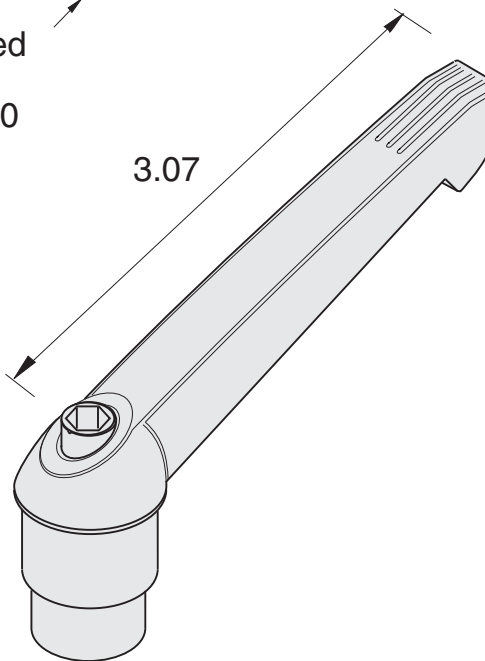
Handle Material - Plastic

**EF-33-1**



tapped for  
1/4-20

**EF-33-2**



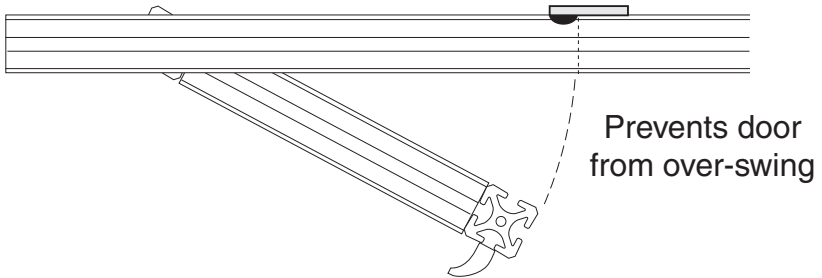
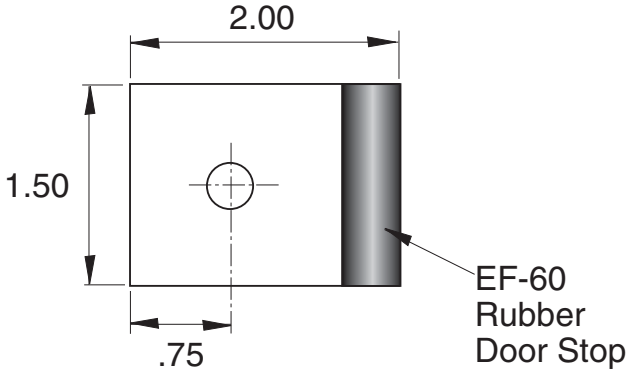
tapped for  
5/16-18

**5/16" SLOTS**

Handle Material - Plastic

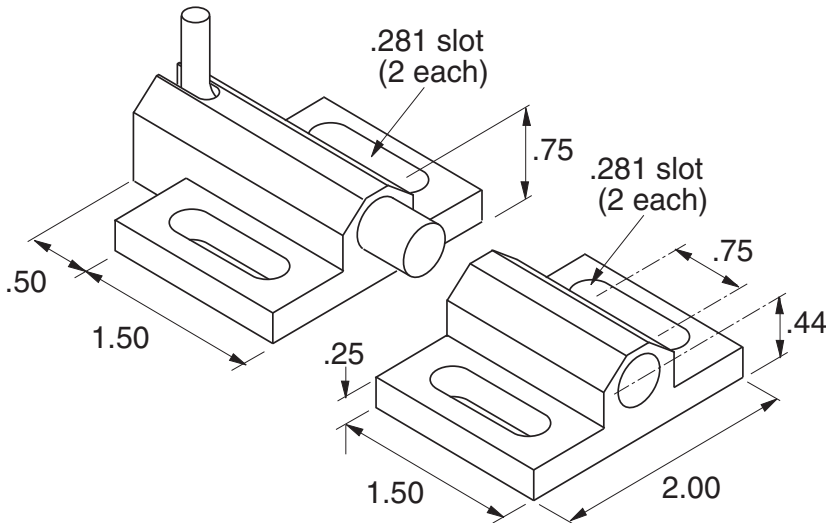
**EB-35**

5/16" SLOTS

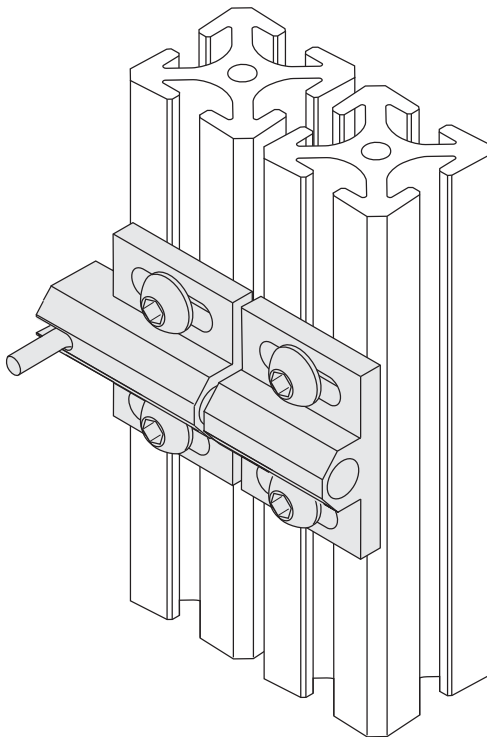


- Recommended  
Hardware
- (1) EF-12-.63 BHCS
  - (1) EF-1 Pivot T-nut

Material - Aluminum  
Finish - Clear Anodize



**5/16" SLOTS**



**Hardware Included**

**Material:**  
**Mounting Plates:**  
Aluminum , Clear Anodize  
**Dead Bolt:**Zinc Plated Steel

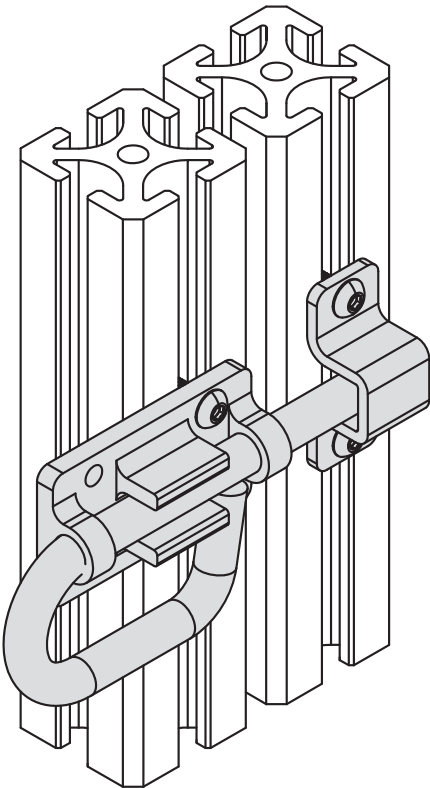
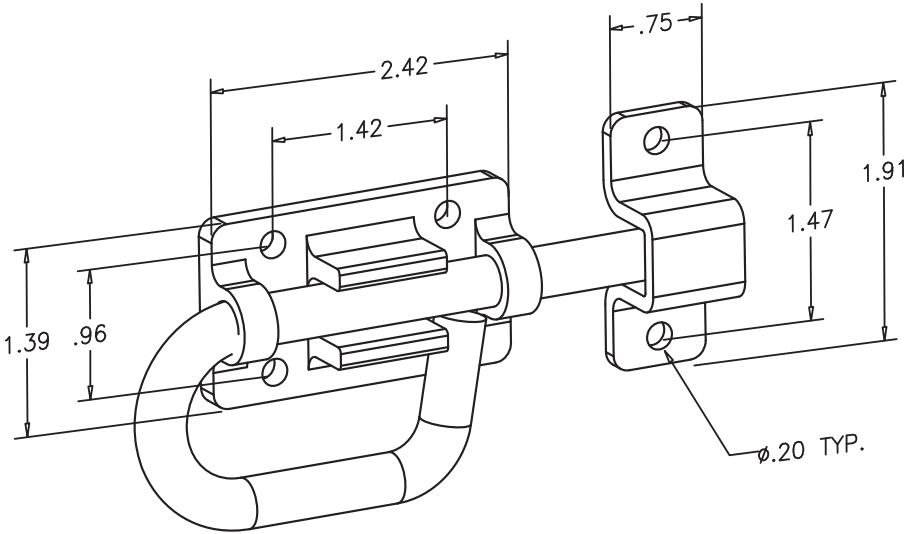
# Deadbolt Latch



**EF-171**

**.375 dia. Bolt**

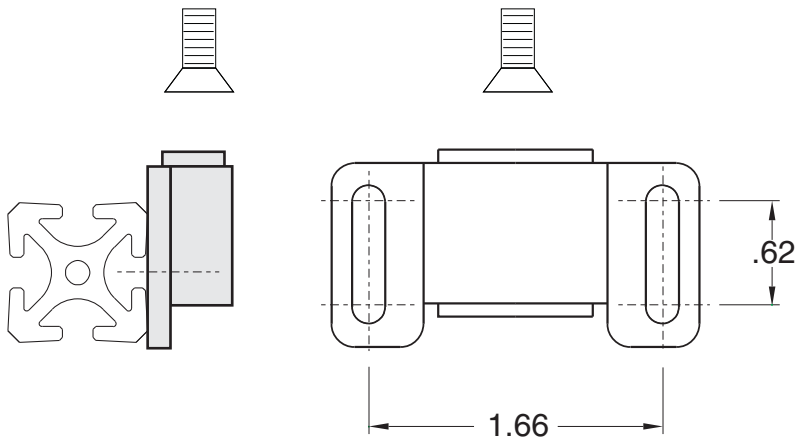
**5/16" SLOTS**



Hardware Included

Use with 5/16" slot extrusions

Material - Zinc Plated Steel



**5/16" SLOTS**

includes 1/4-20 FHCS striker and all hardware

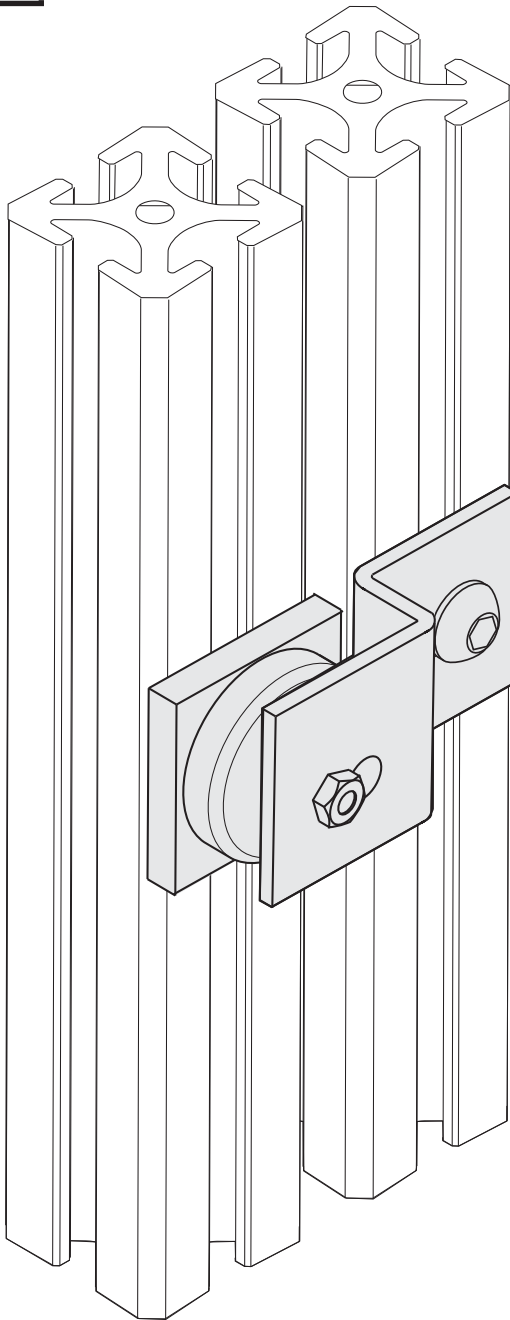


**Heavy Duty Magnetic  
Door Latch Assembly**



**EF-22HD**

**5/16" SLOTS**

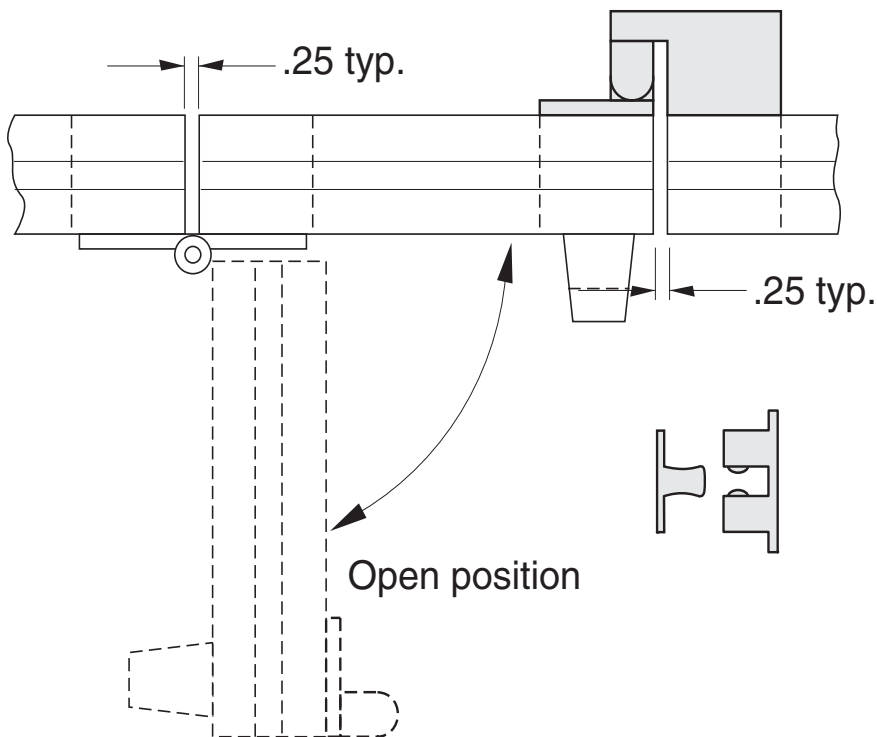


Hardware  
Included

Our most  
popular latch.

**Material - Steel**  
**Finish - Zinc Plate and Black Powder Coat**

**5/16" SLOTS**



Use with 1 1/2" extrusions (5/16" slot size)

Hardware Included

Catch Material - Zinc Plated Brass

Base Material - Aluminum

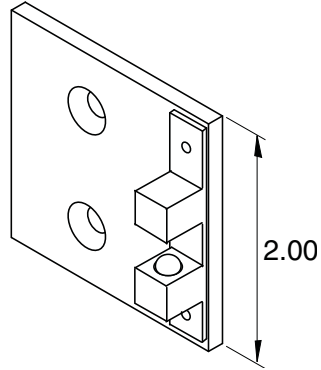
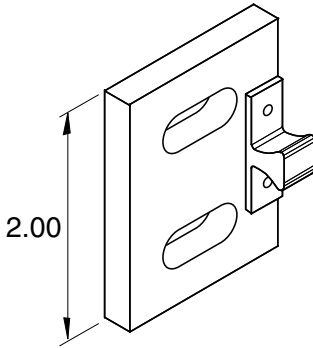
# Mechanical Door Latch 5/16" Slots



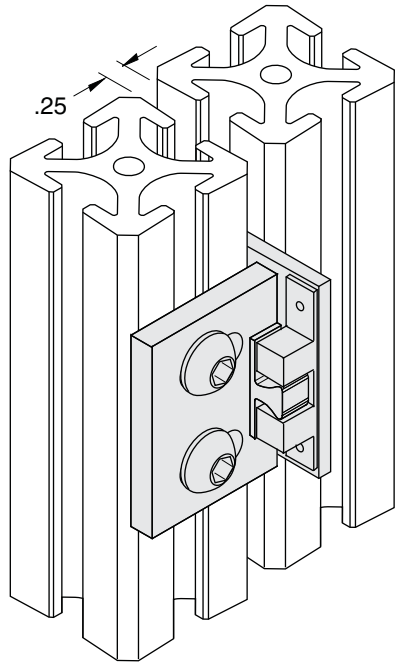
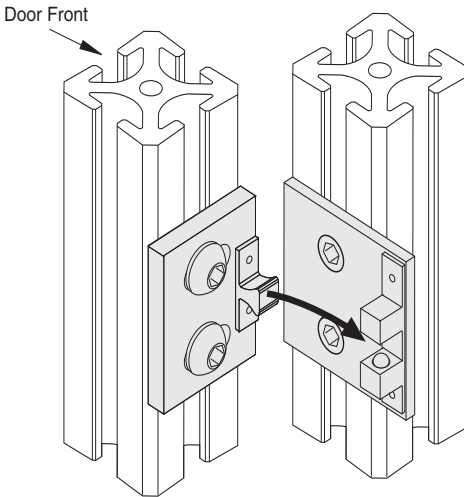
**EF-78**

excludes EX-52 & EX-54

Adjustable  
Tension

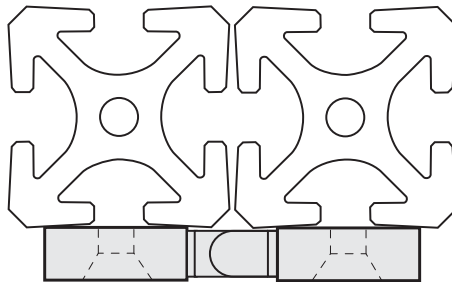
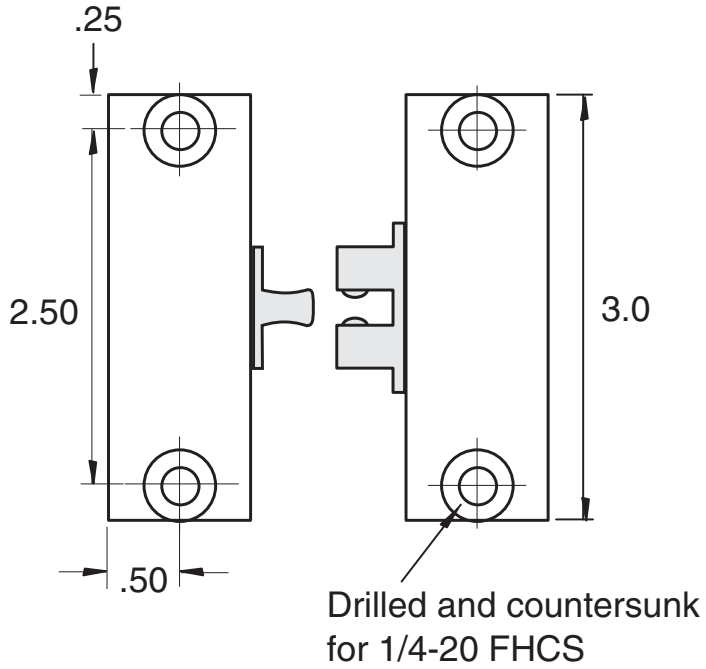


5/16" SLOTS



Hardware Included  
Material Mounting Plates: Aluminum , Clear Anodize  
Latch: Zinc Plated Brass

**5/16" SLOTS**



**Hardware Included**

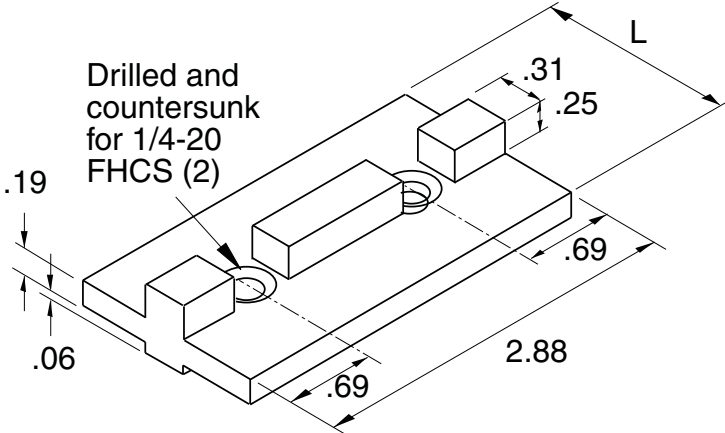
**Catch Material - Zinc Plated Brass**  
**Base Material - Aluminum (Clear Anodized)**

# Bearing Block (Plastic)

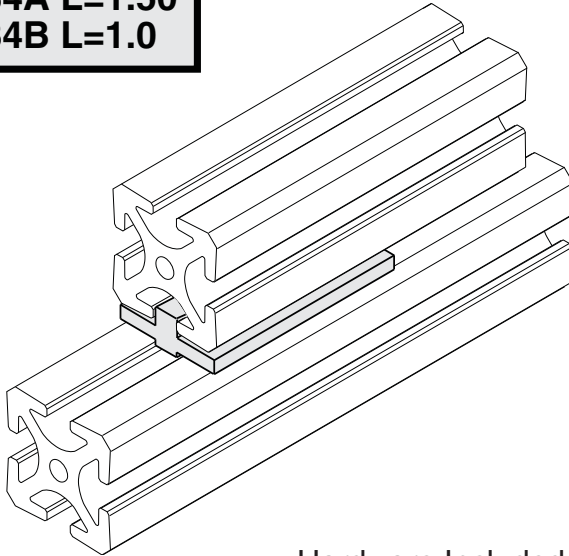


**EF-34**

5/16" SLOTS



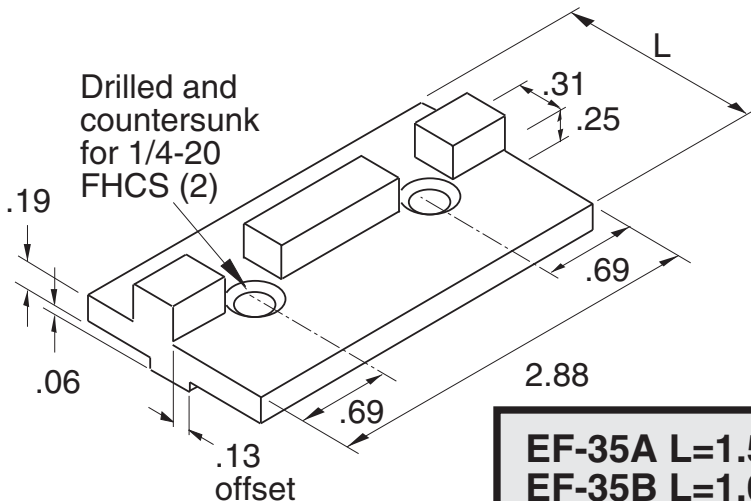
**EF-34A L=1.50**  
**EF-34B L=1.0**



Hardware Included

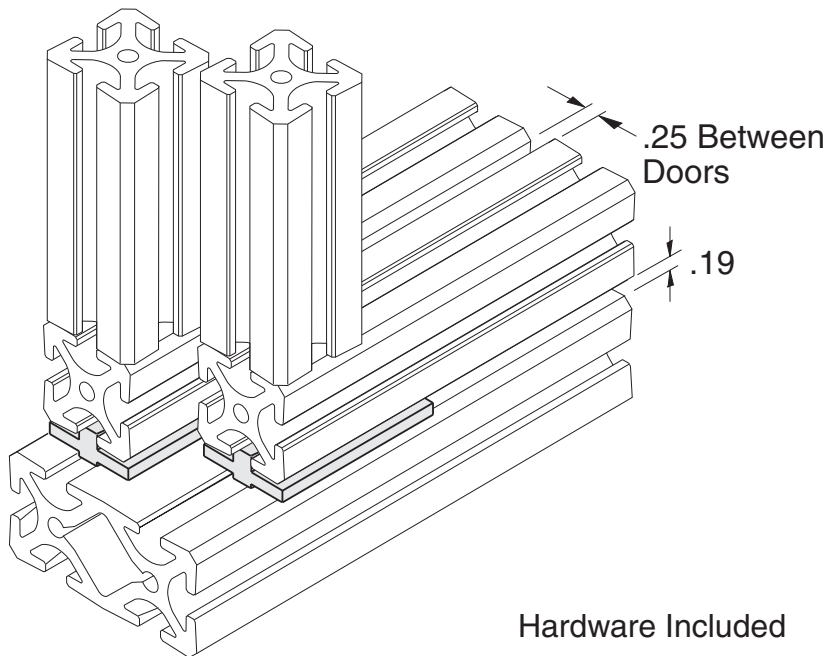
Bearing Material - DELRIN (white)

**EF-35**



**EF-35A L=1.50**  
**EF-35B L=1.0**

**5/16" SLOTS**



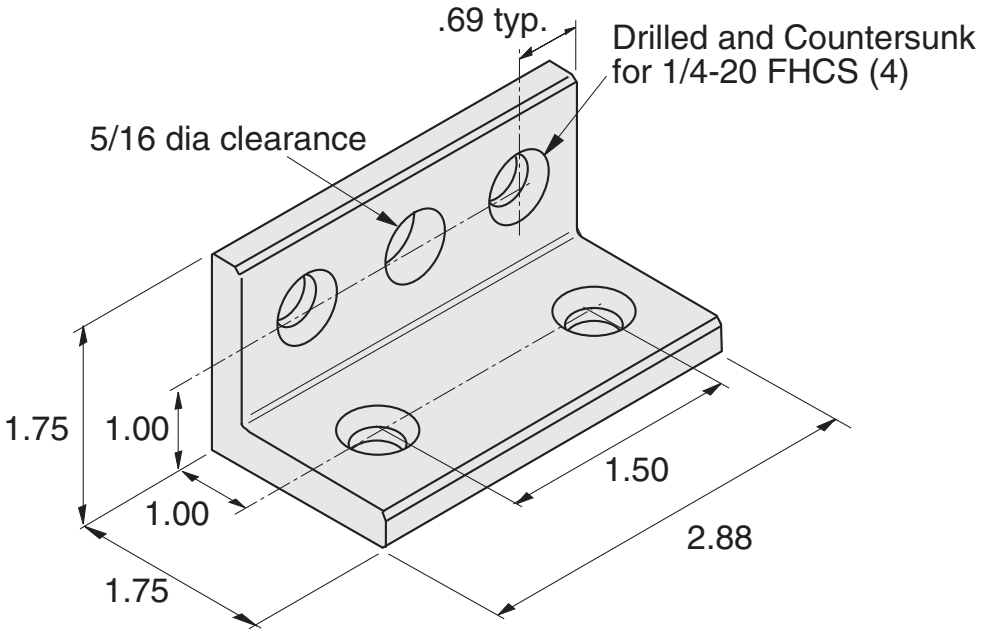
Hardware Included

Load Capacity = 50 lbs.

Bearing Material - DELRIN (white)

**EF-36**

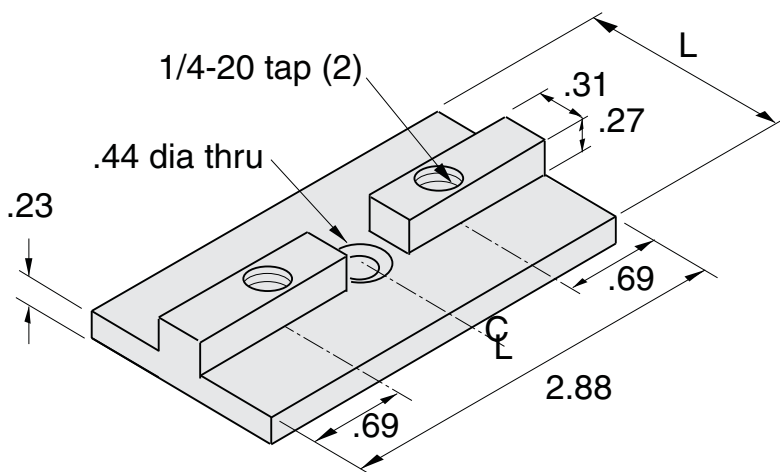
5/16" SLOTS



Note: See part no EB-38 for example

Recommended  
Hardware  
(4) EF-157-.63  
(2) EF-2A T-nut

Material - Aluminum  
Finish - Clear Anodize



5/16" SLOTS

**EF-37A L=1.50**  
**EF-37B L=1.0**

Load Capacity = 50 lbs.

Bearing Material - DELRIN (white)

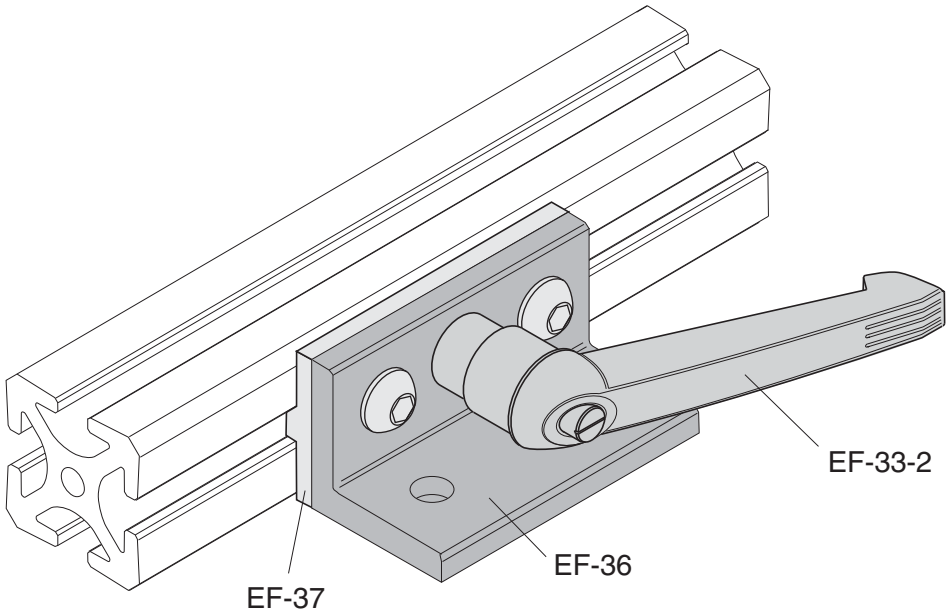


# Slider Assembly

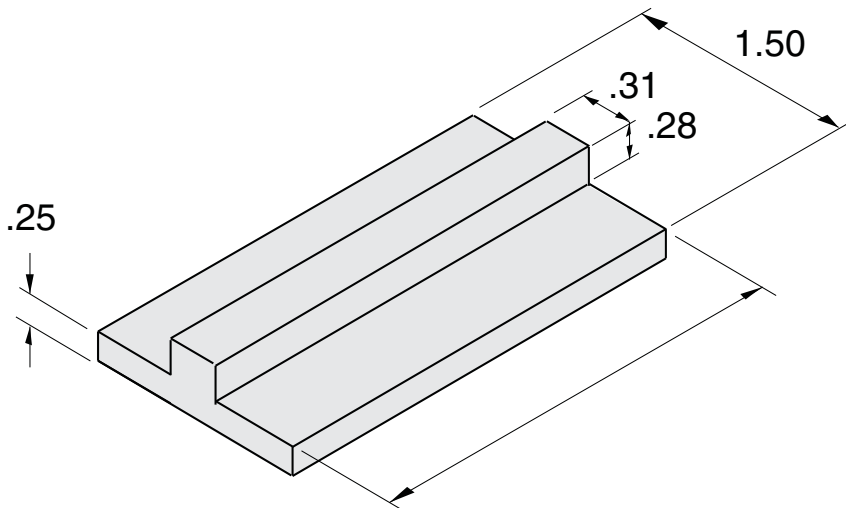


<b>EF-38</b>	Slider Assembly (as shown)
<b>EF-38S</b>	Slider Assembly (less clamp handle for sliding only)

5/16" SLOTS



Recommended  
Hardware  
(2) EF-157-.63  
(2) EF-2A T-nut



**5/16" SLOTS**

Standard length  
is 60" and 120" —  
sold by the inch.

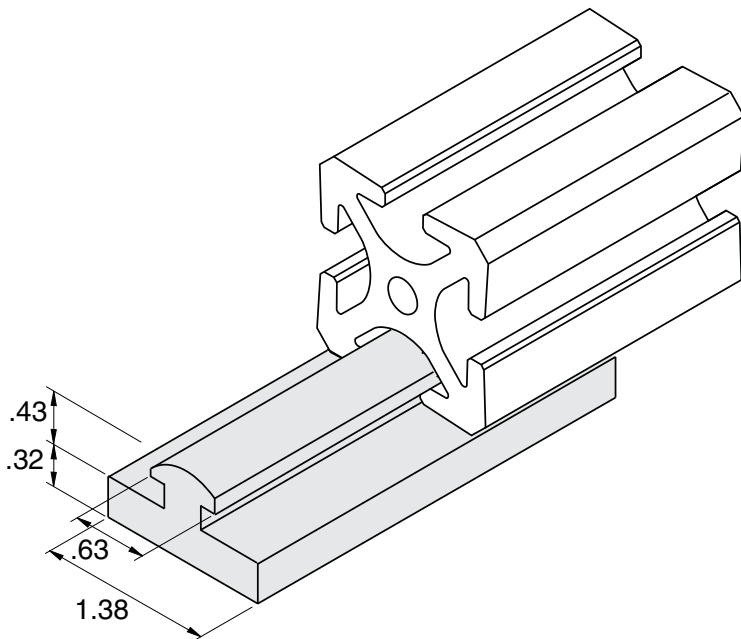
Material - UHMW (white)

**Blank Hanging Slider Track  
5/16" Slot Size**

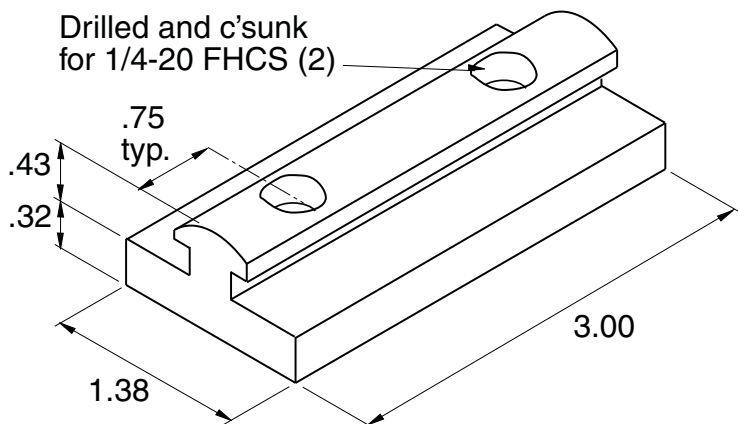


**EF-77**

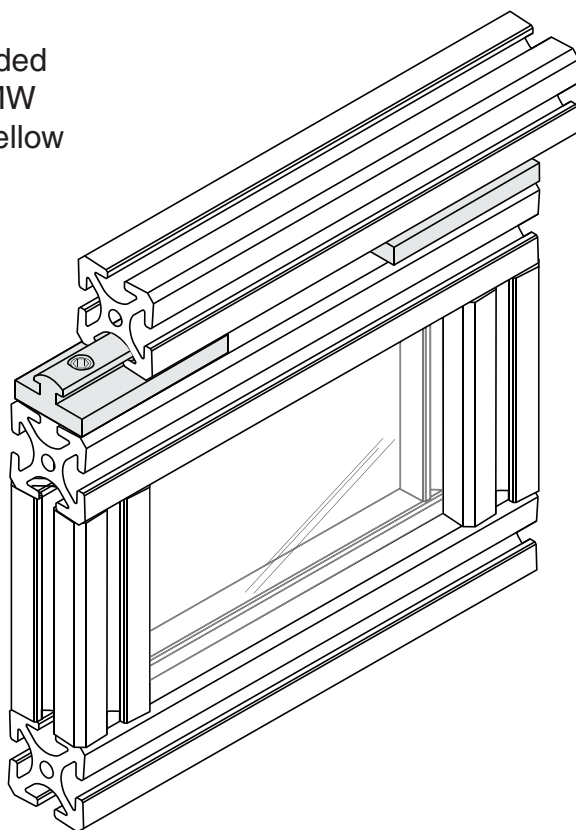
**5/16" SLOTS**



Material - UHMW  
Sold by the inch  
Stock length is 60" & 120"  
Color is Safety Yellow



Hardware Included  
Material - UHMW  
Color is Safety Yellow

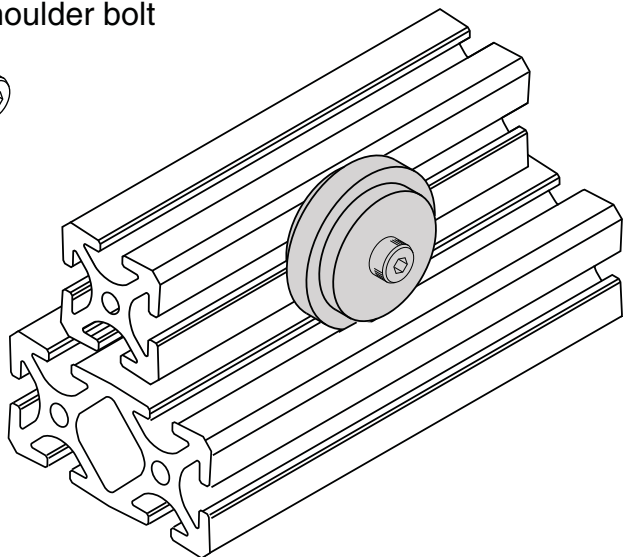
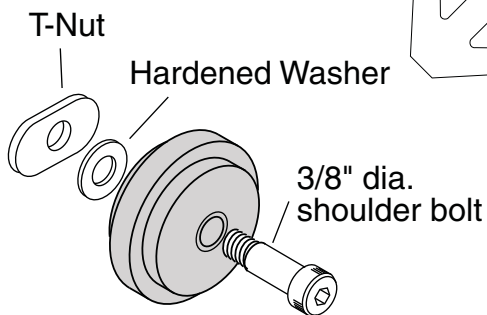
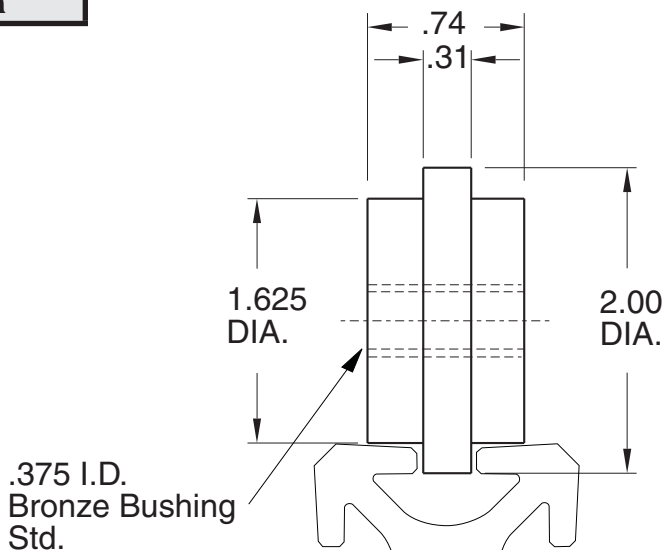


# T-slot Roller



**ER**

**5/16" SLOTS**



Load Capacity 30 lbs.  
Hardware Included

Material - DELRIN (white)

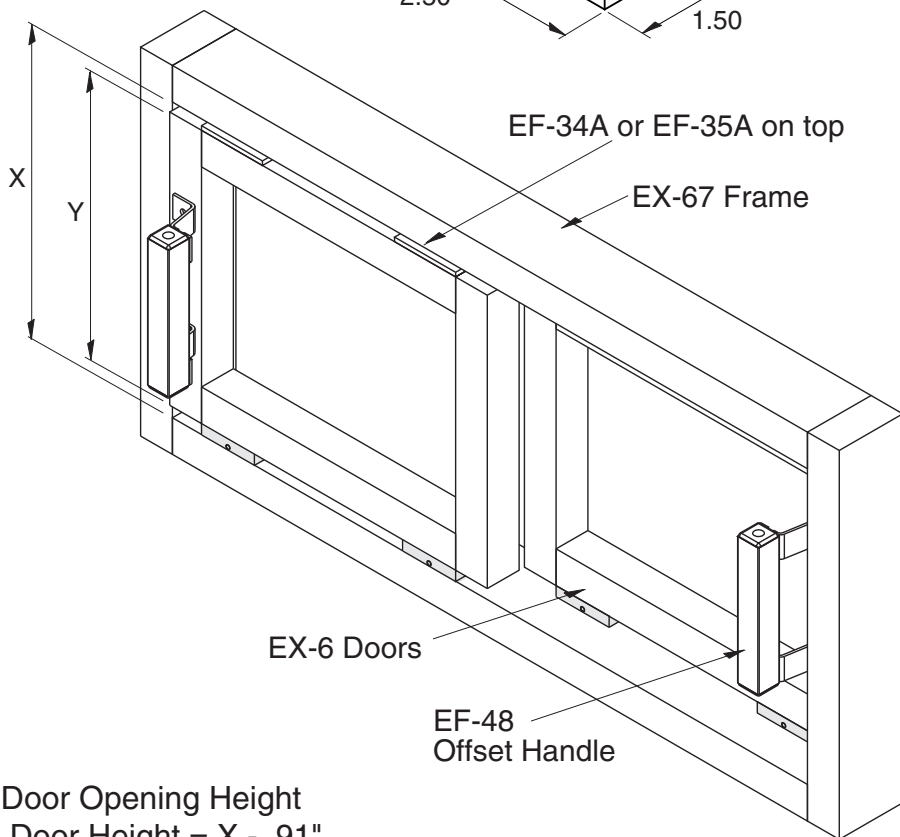
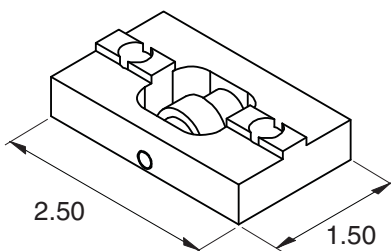
1/8" offset  
on center

**EF-88**

**EF-89**

**Door Clearance Between Sliders**

- = .25" using (4) EF-88 and (4) EF-35A
- = .13" using (2) EF-88 with (2) EF-35A  
and (2) EF-89 with (2) EF-34A



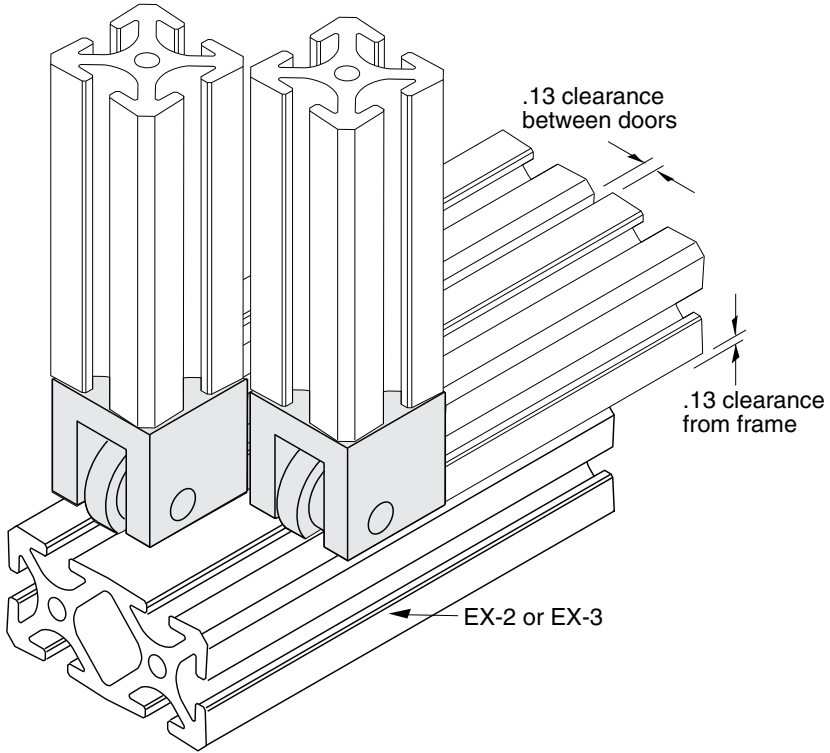
X= Door Opening Height  
Y = Door Height = X - .91"

**Hardware Included**

**5/16" SLOTS**

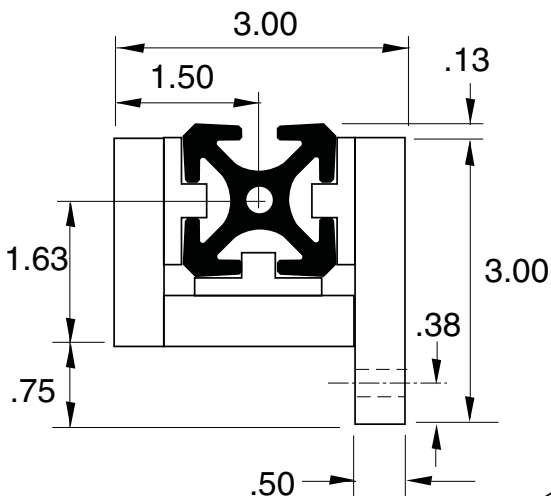
**ER-BL**

**5/16" SLOTS**



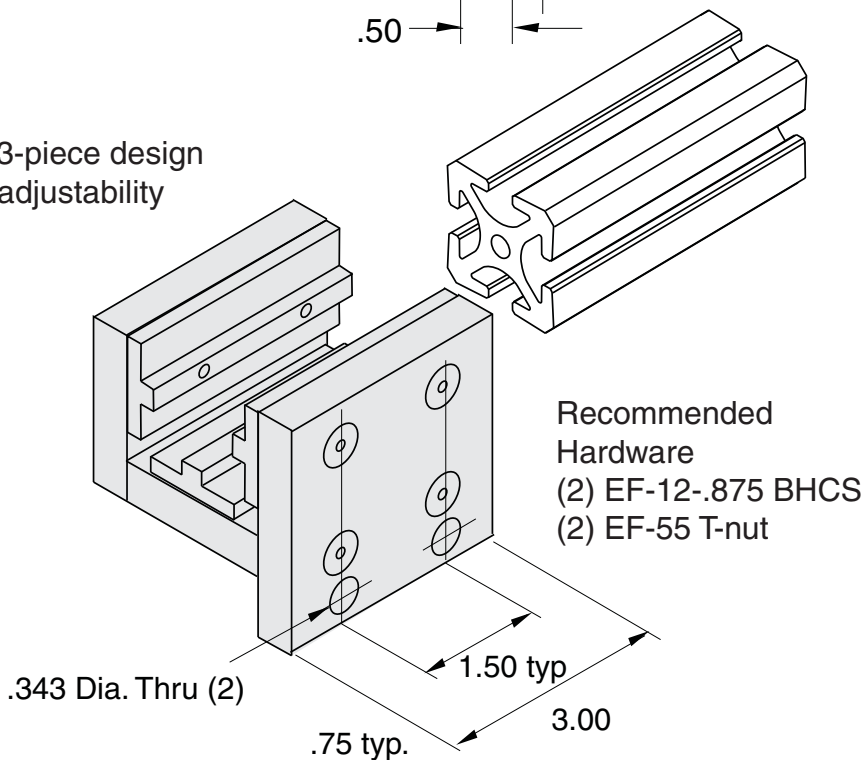
Hardware Included  
Load Capacity 25 lbs.

Roller Material - DELRIN  
Block Material - Aluminum (Clear Anodized)



**5/16" SLOTS**

Note: 3-piece design  
for adjustability



Recommended  
Hardware  
(2) EF-12-.875 BHCS  
(2) EF-55 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)

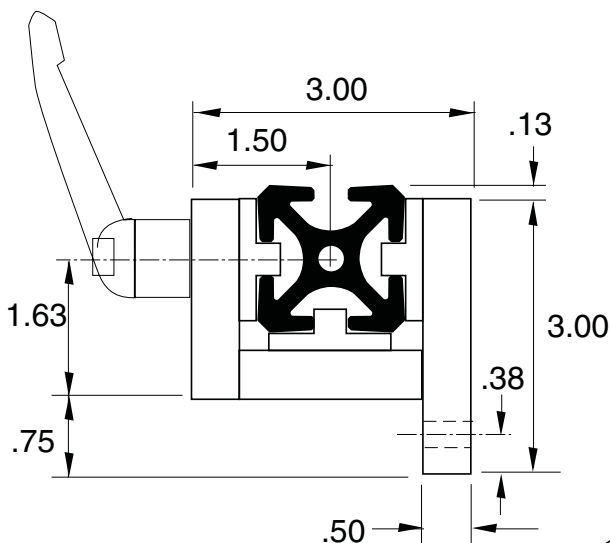


# Single Mount Linear Bearing with Locking Handle

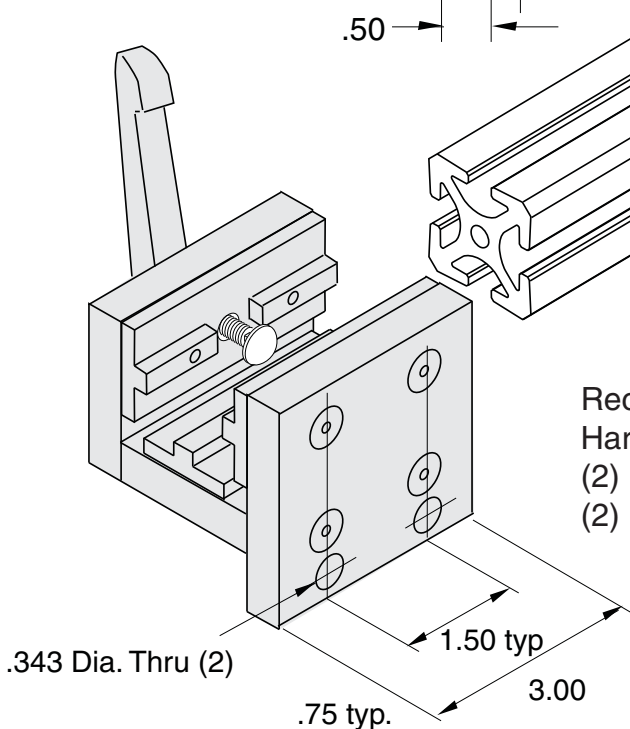


**EB-91LH**

5/16" SLOTS

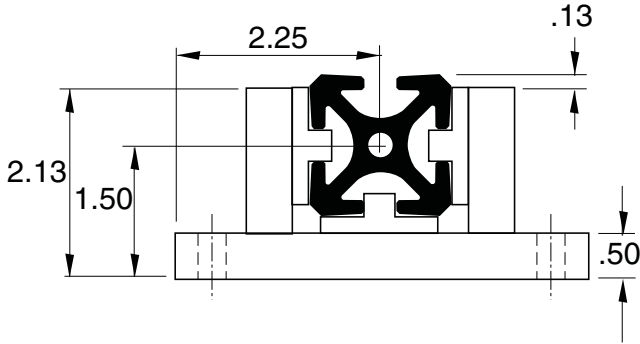


Note: 3-piece design for adjustability



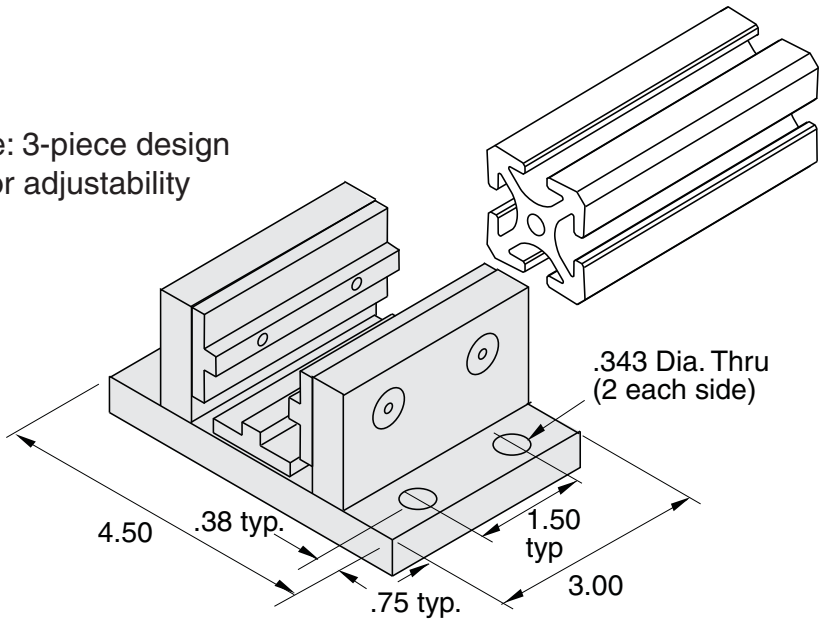
Recommended Hardware  
(2) EF-12-.875 BHCS  
(2) EF-55 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)



**5/16" SLOTS**

Note: 3-piece design  
for adjustability



- Recommended  
Hardware
- (4) EF-12-.875 BHCS
  - (4) EF-55 T-nut

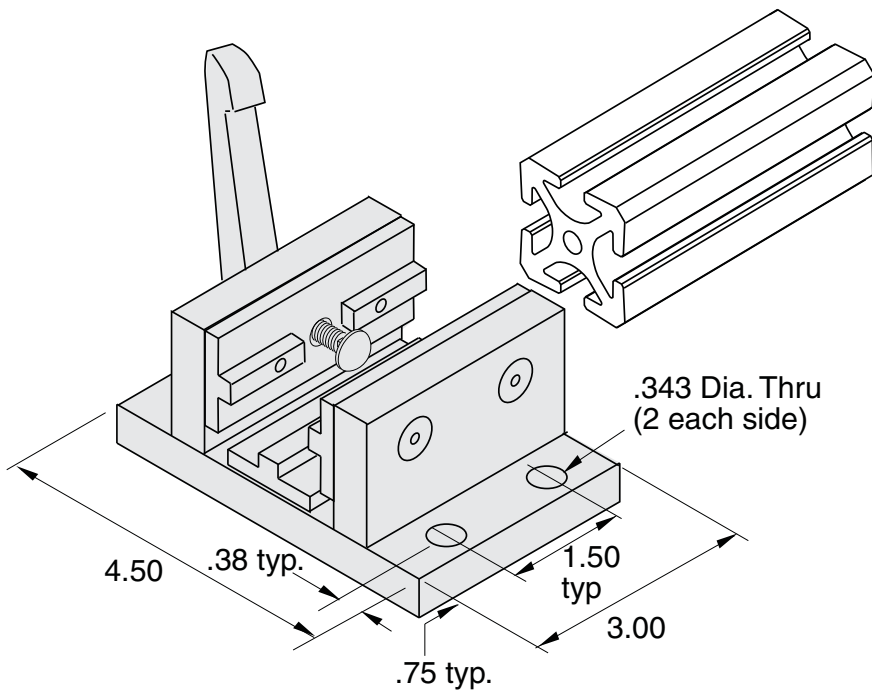
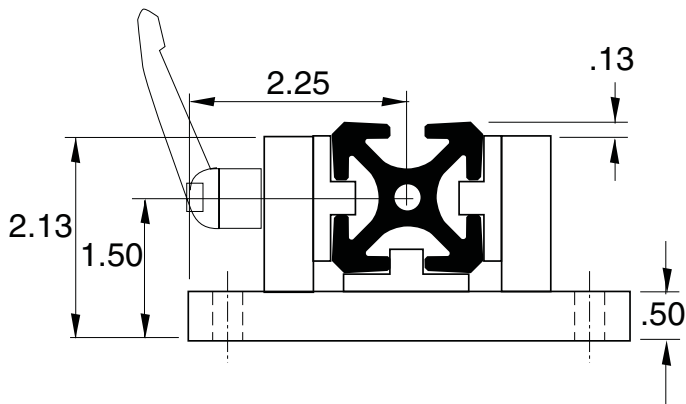
Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)

# Single Mount Linear Bearing with Locking Handle



**EB-93LH**

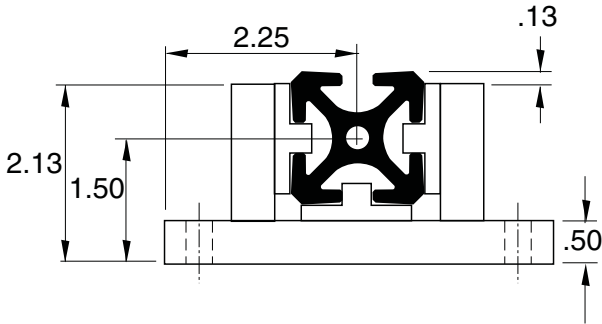
**5/16" SLOTS**



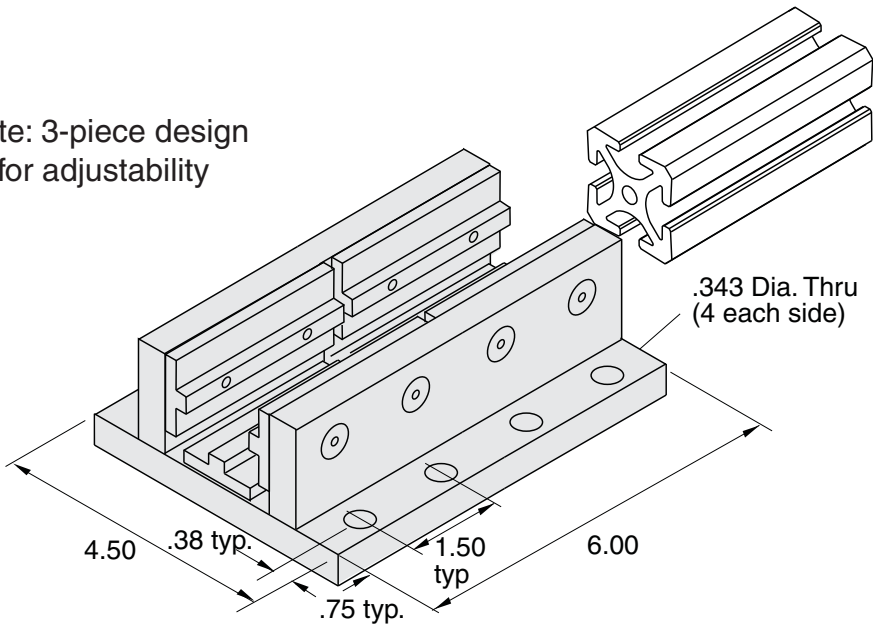
Recommended  
Hardware

- (4) EF-12-.875 BHCS
- (4) EF-55 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)



Note: 3-piece design  
for adjustability



**5/16" SLOTS**

Recommended  
Hardware  
(8) EF-12-.875 BHCS  
(8) EF-55 T-nut

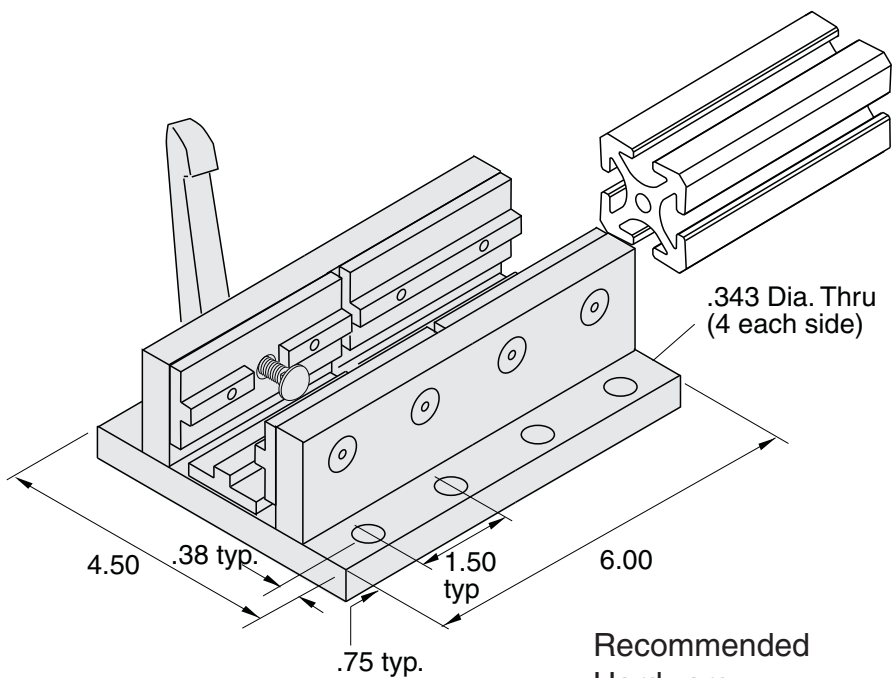
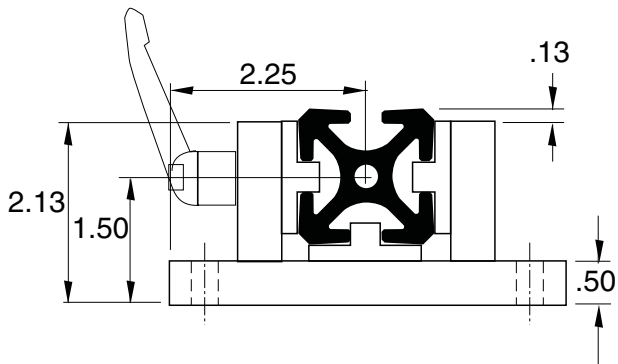
Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)

# Double Mount Linear Bearing with Locking Handle



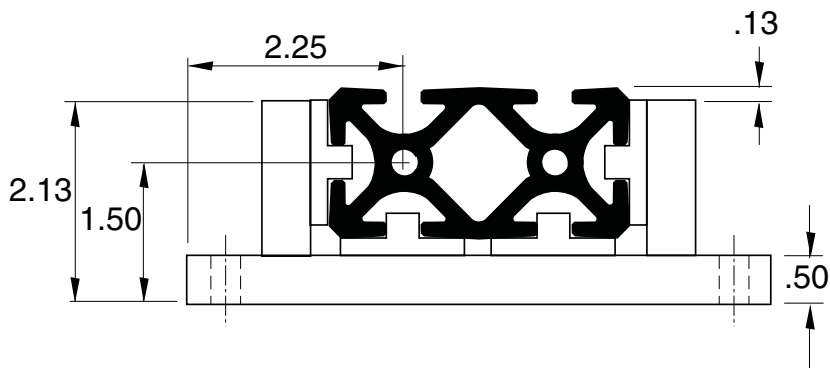
**EB-92LH**

**5/16" SLOTS**

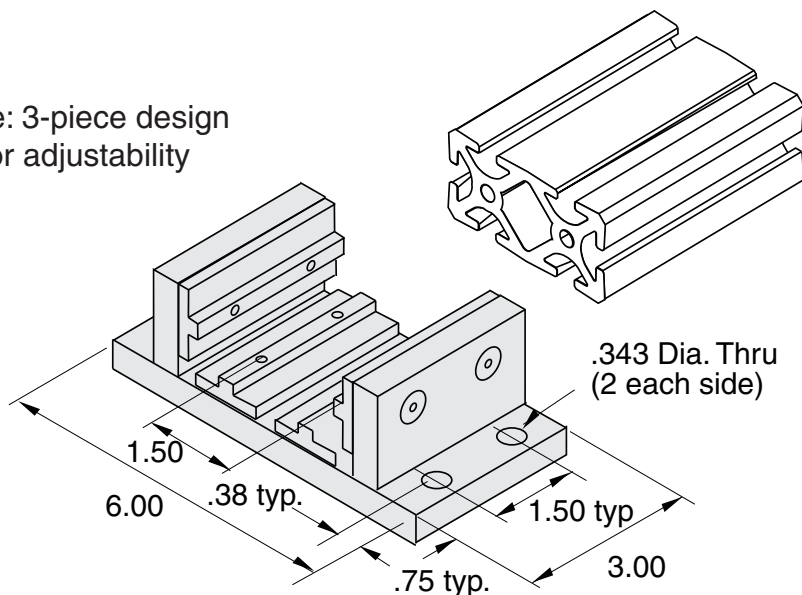


Recommended Hardware  
 (8) EF-12-.875 BHCS  
 (8) EF-55 T-nut

Bearing Material - DELRIN  
 Plate Material - Aluminum (Clear Anodized)



Note: 3-piece design  
for adjustability



Recommended  
Hardware

- (4) EF-12-.875 BHCS
- (4) EF-55 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)

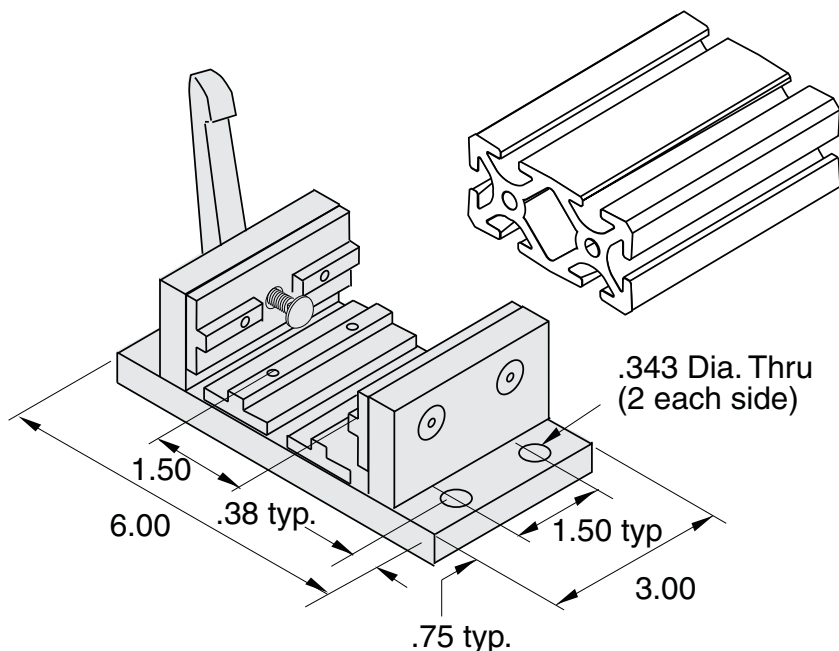
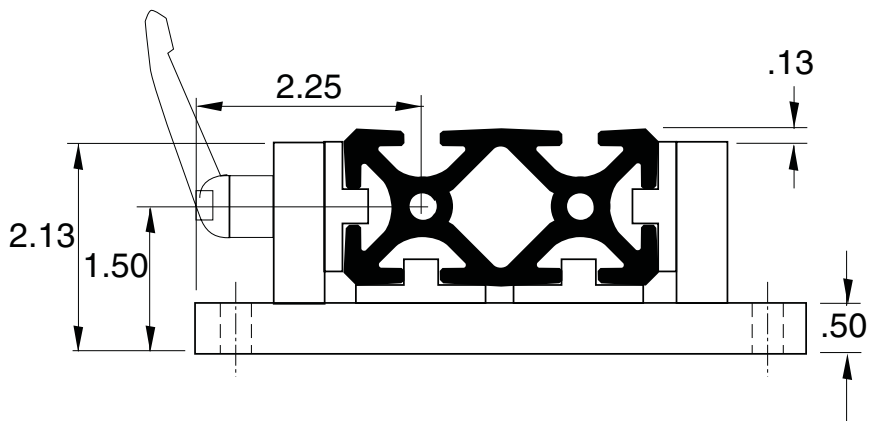
**5/16" SLOTS**

# Single Mount Linear Bearing with Locking Handle



**EB-94LH**

**5/16" SLOTS**



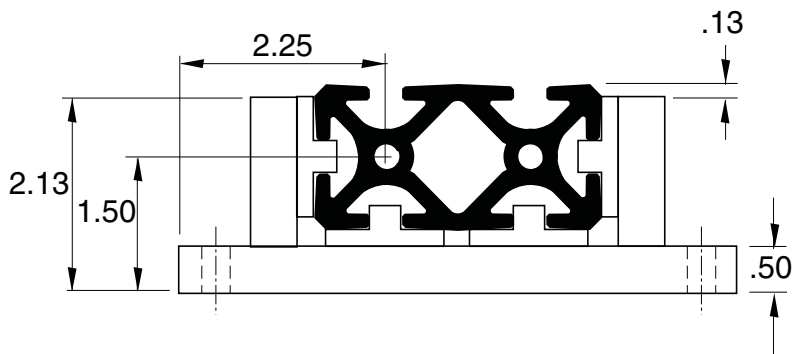
Recommended  
Hardware

(4) EF-12-.875 BHCS

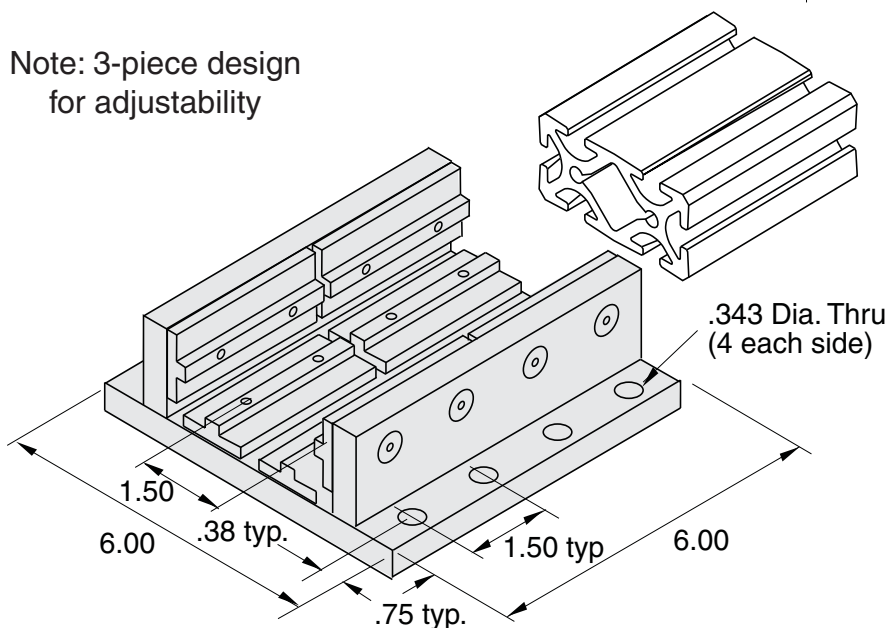
(4) EF-55 T-nut

Bearing Material - DELRIN

Plate Material - Aluminum (Clear Anodized)



Note: 3-piece design  
for adjustability



Recommended  
Hardware  
(8) EF-12-.875 BHCS  
(8) EF-55 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)

5/16" SLOTS

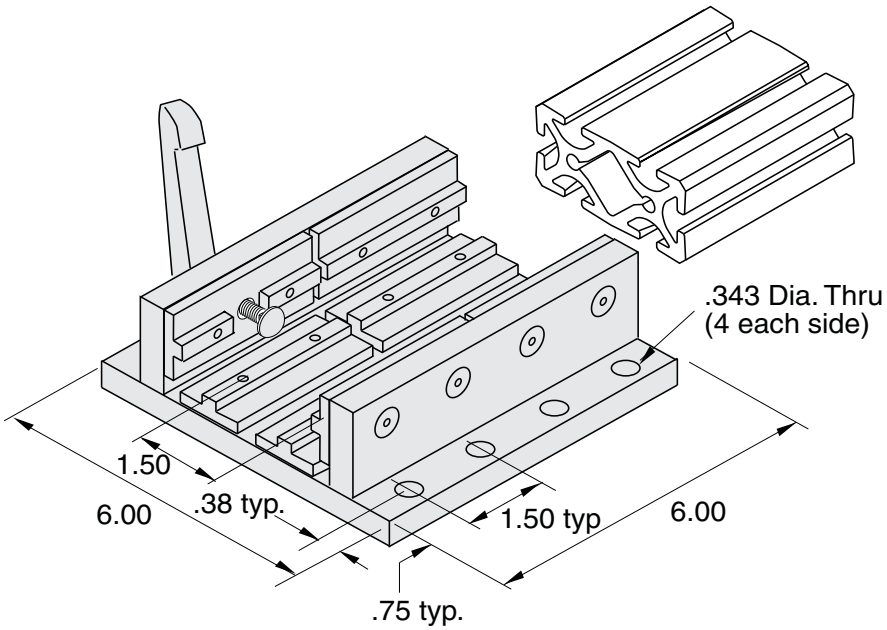
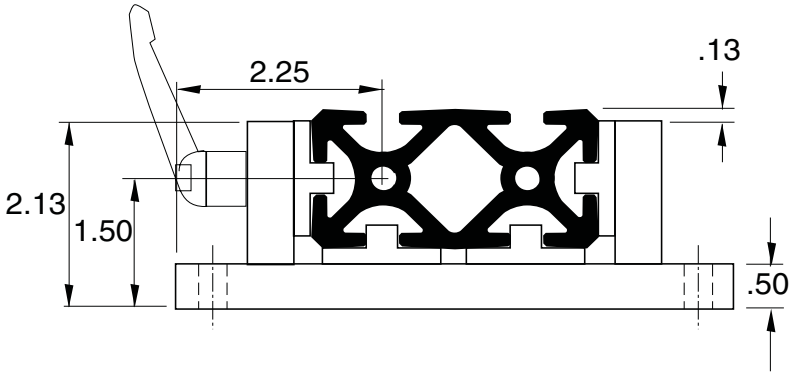


# Double Mount Linear Bearing with Locking Handle



**EB-95LH**

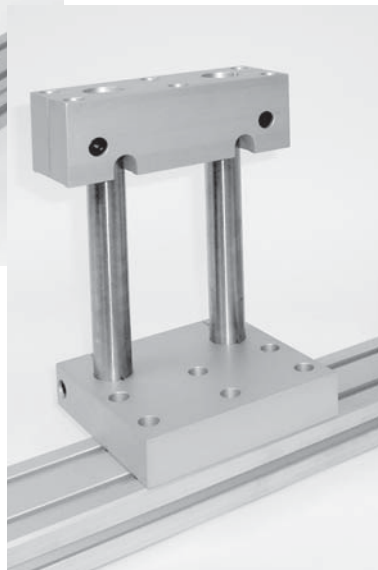
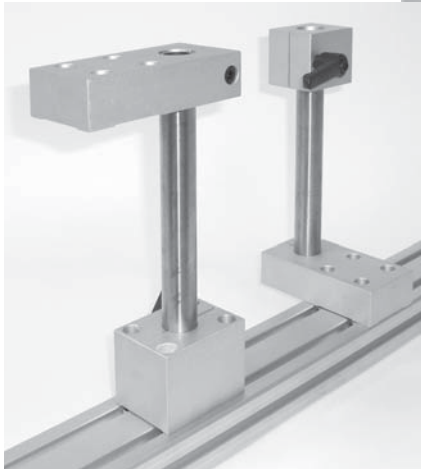
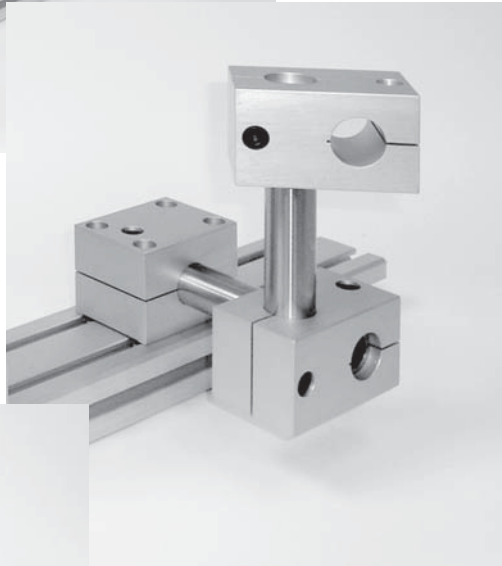
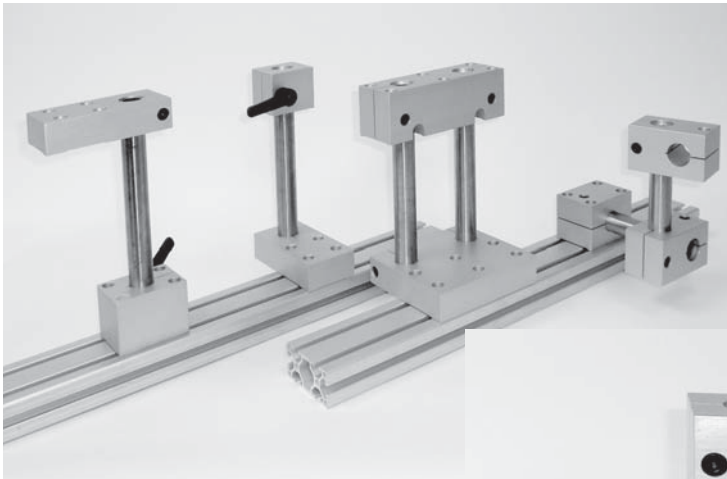
**5/16" SLOTS**



Recommended  
Hardware

- (8) EF-12-.875 BHCS
- (8) EF-55 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum (Clear Anodized)



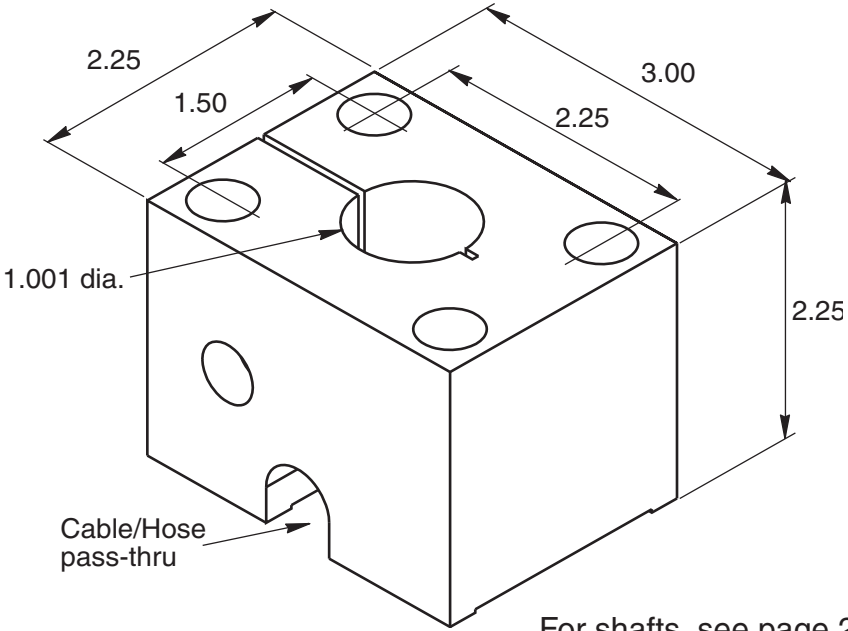
**5/16" SLOTS**

# Single Shaft Base



<b>EB-200</b>	<b>with locking handle</b>
<b>EB-201</b>	<b>with locking 5/16 SHCS</b>

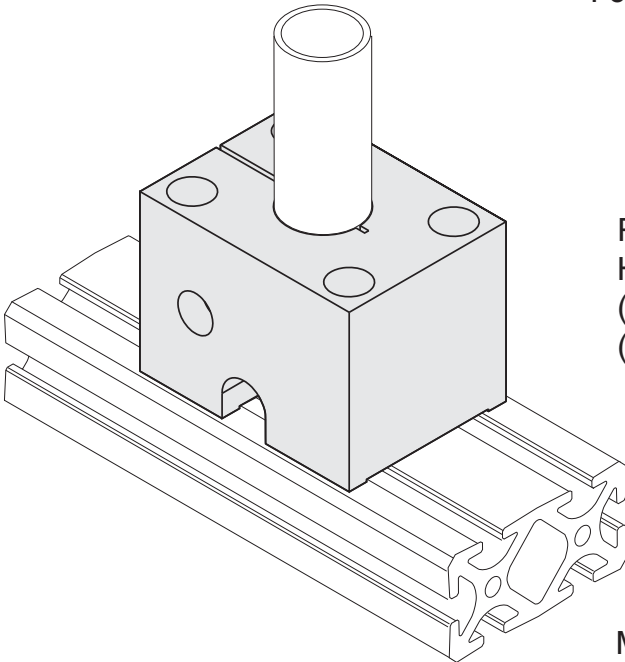
5/16" SLOTS



For shafts, see page 275.

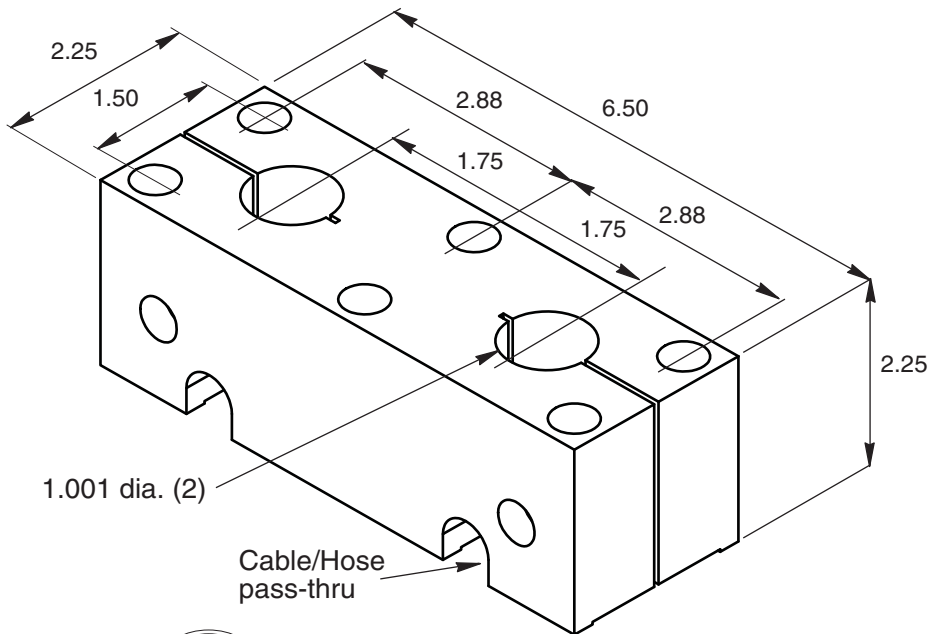
**EX-2, EX-67,  
EX-3, EX-37**

Recommended  
Hardware  
(4) EF-11-1.75 SHCS  
(4) EF-55 T-nut



Material - Aluminum  
Finish - Clear Anodize

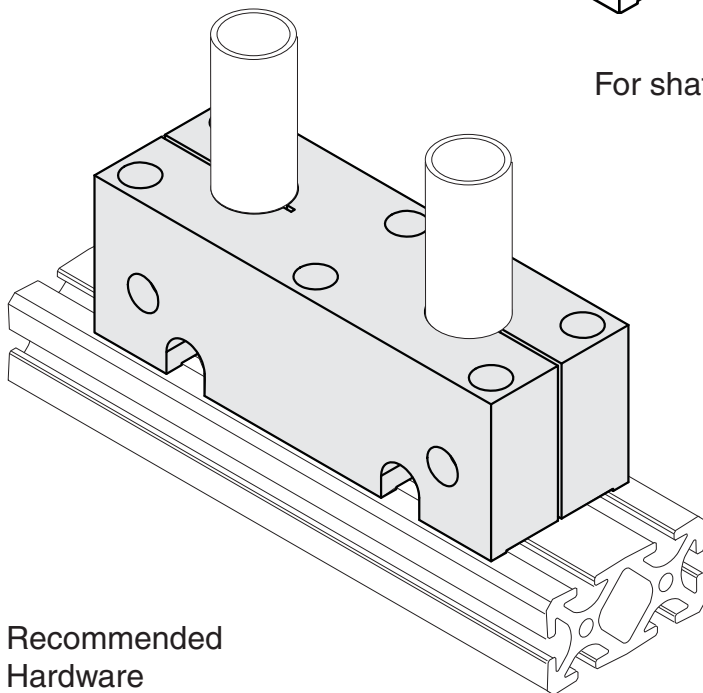
with locking handle	<b>EB-202</b>
with locking 5/16 SHCS	<b>EB-203</b>



**5/16" SLOTS**

For shafts, see page 275.

**EX-2, EX-67,  
EX-3, EX-37**



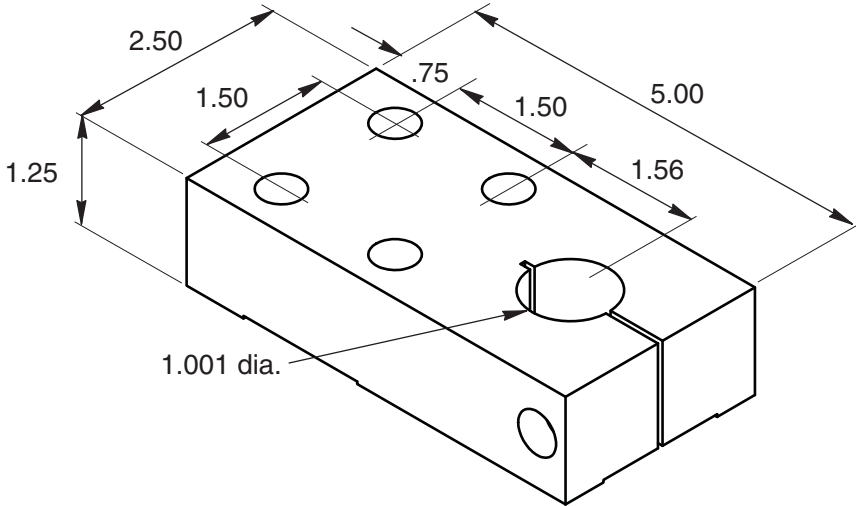
Recommended  
Hardware  
(6) EF-11-1.75 SHCS  
(6) EF-55 T-nut

Material - Aluminum  
Finish - Clear Anodize

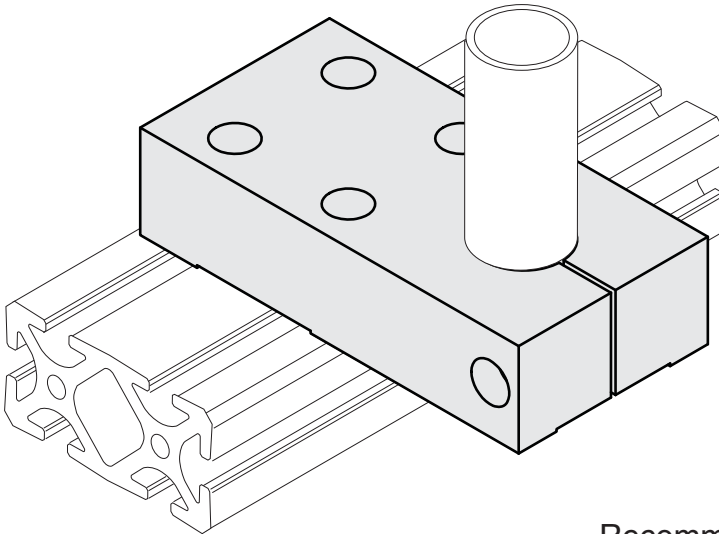
# Single Shaft Mounting Plate



<b>EB-204</b>	<b>with locking handle</b>
<b>EB-205</b>	<b>with locking 5/16 SHCS</b>



For shafts, see page 275.



**EX-2, EX-67,  
EX-3, EX-37**

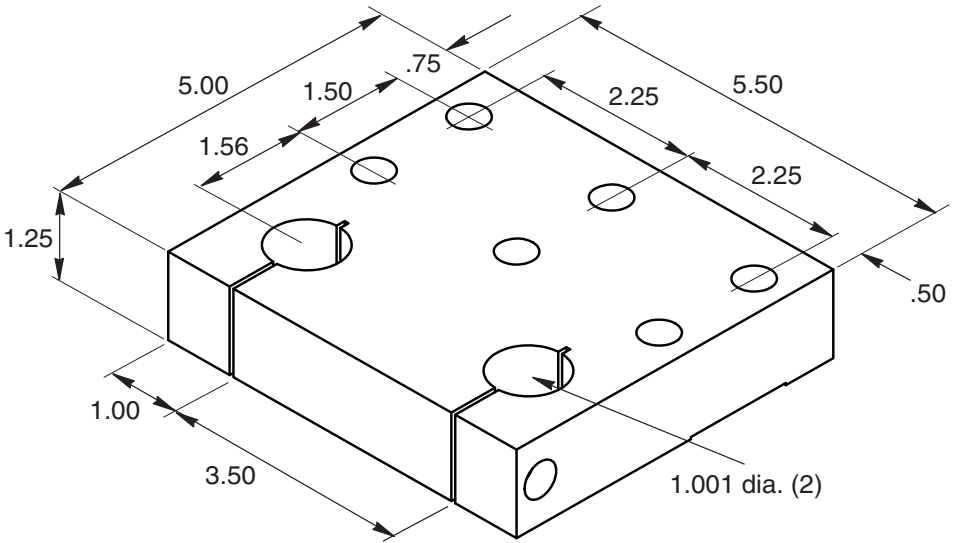
Material - Aluminum  
Finish - Clear Anodize

Recommended  
Hardware  
(4) EF-11-1.0 SHCS  
(4) EF-55 T-nut

**with locking handle**  
**with locking 5/16 SHCS**

**EB-206**

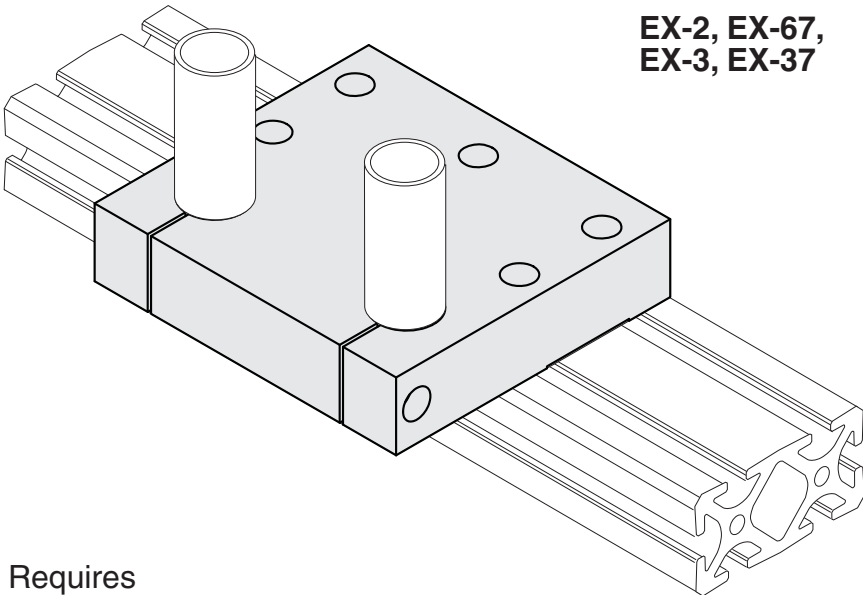
**EB-207**



**5/16" SLOTS**

For shafts, see page 275.

**EX-2, EX-67,  
EX-3, EX-37**



Requires  
(6) EF-11-1.0 SHCS  
(6) EF-55 T-nut

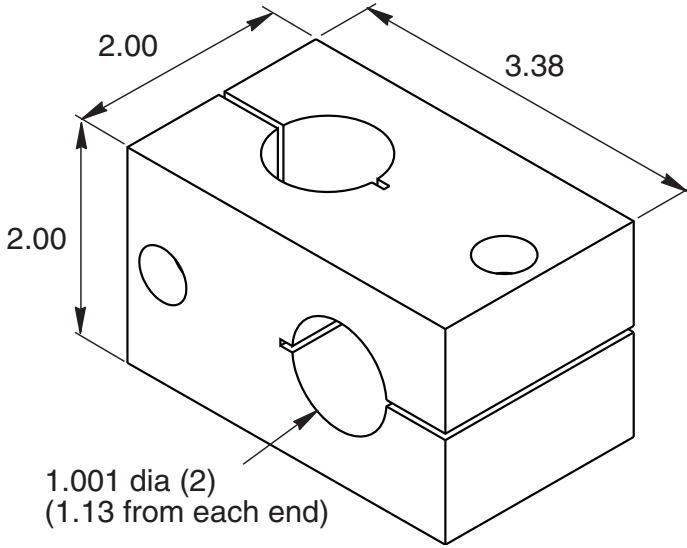
Material - Aluminum  
Finish - Clear Anodize

# Cross Clamp

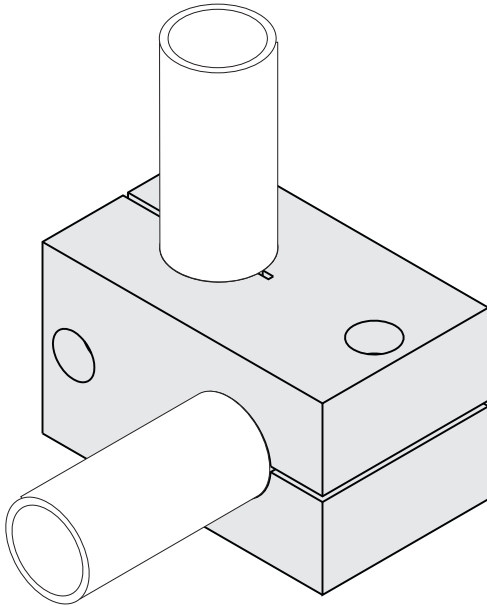


<b>EB-208</b>	<b>with locking handle</b>
<b>EB-209</b>	<b>with locking 5/16 SHCS</b>

5/16" SLOTS

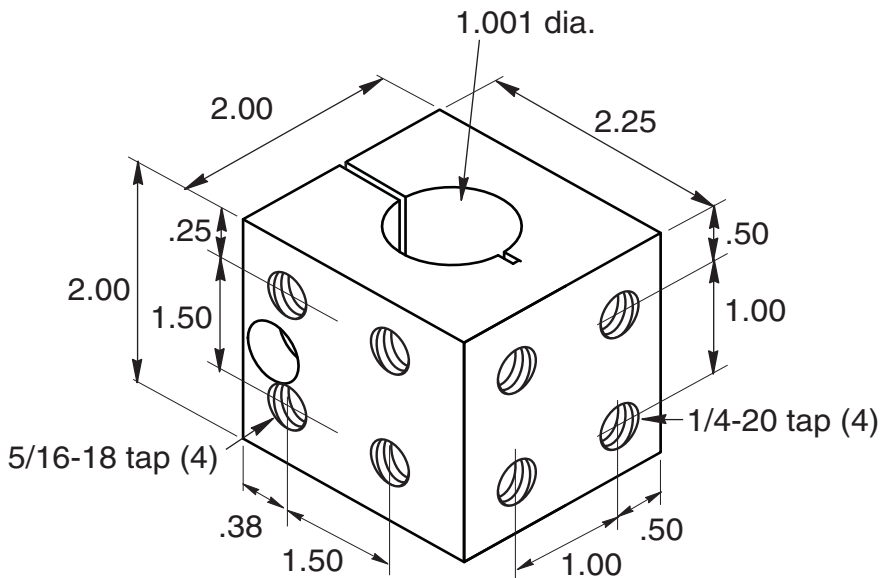


For shafts, see page 275.



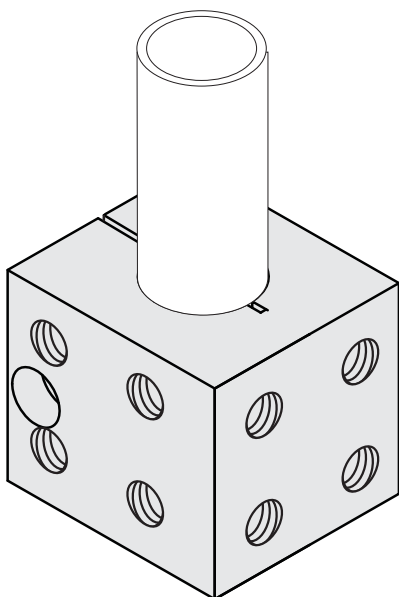
Material - Aluminum  
Finish - Clear Anodize

with locking handle	<b>EB-210</b>
with locking 5/16 SHCS	<b>EB-211</b>



**5/16" SLOTS**

For shafts, see page 275.



Material - Aluminum  
Finish - Clear Anodize

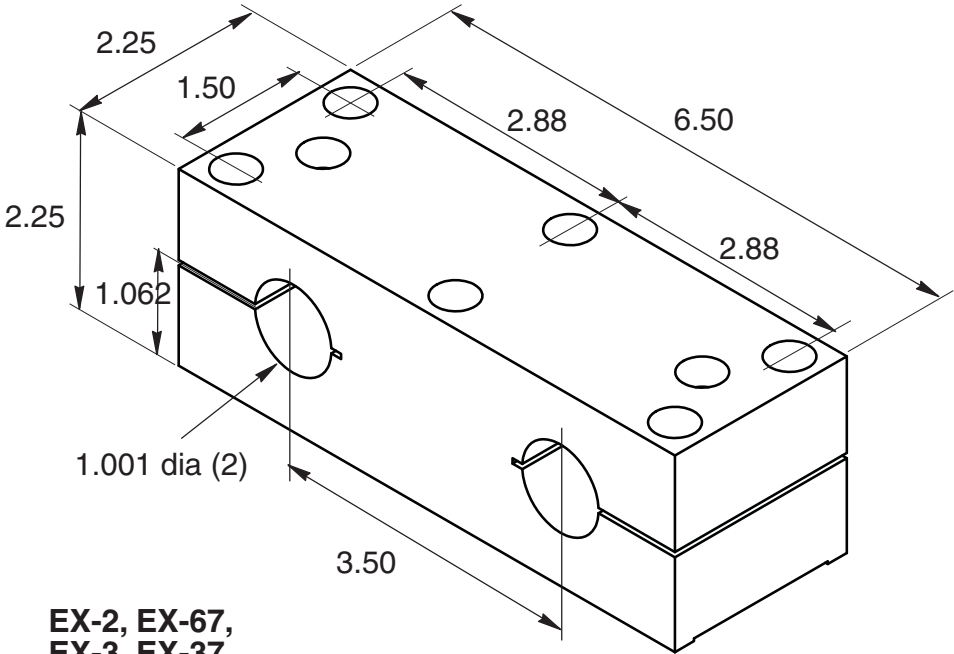


# Double Shaft Mounting Block



<b>EB-212</b>	with locking handle
<b>EB-213</b>	with locking 5/16 SHCS

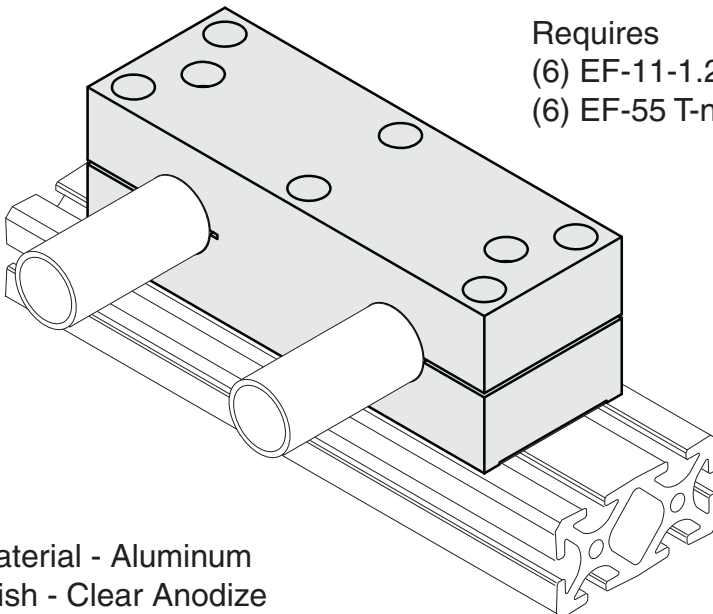
5/16" SLOTS



EX-2, EX-67,  
EX-3, EX-37

For shafts, see page 275.

Requires  
(6) EF-11-1.25 SHCS  
(6) EF-55 T-nut

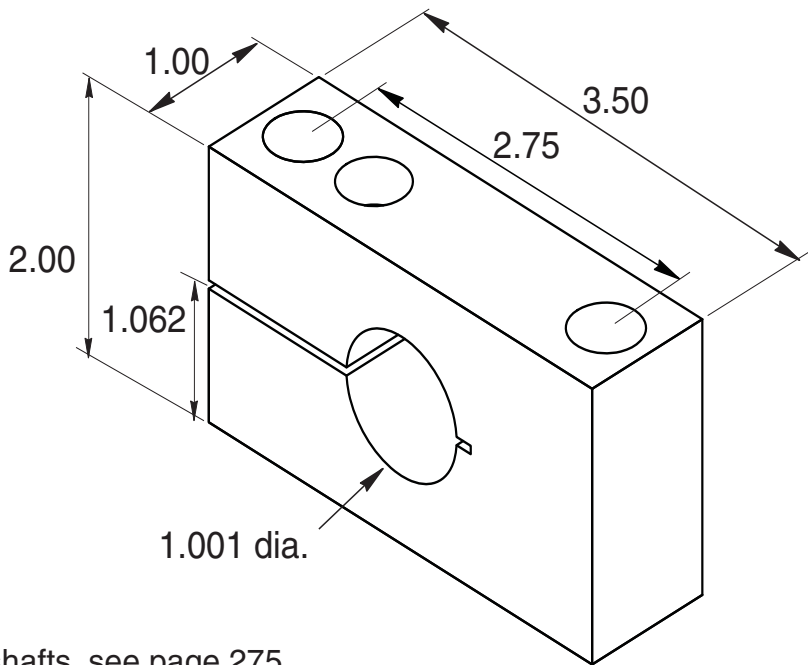


Material - Aluminum  
Finish - Clear Anodize

with locking handle  
with locking 5/16 SHCS

**EB-214**

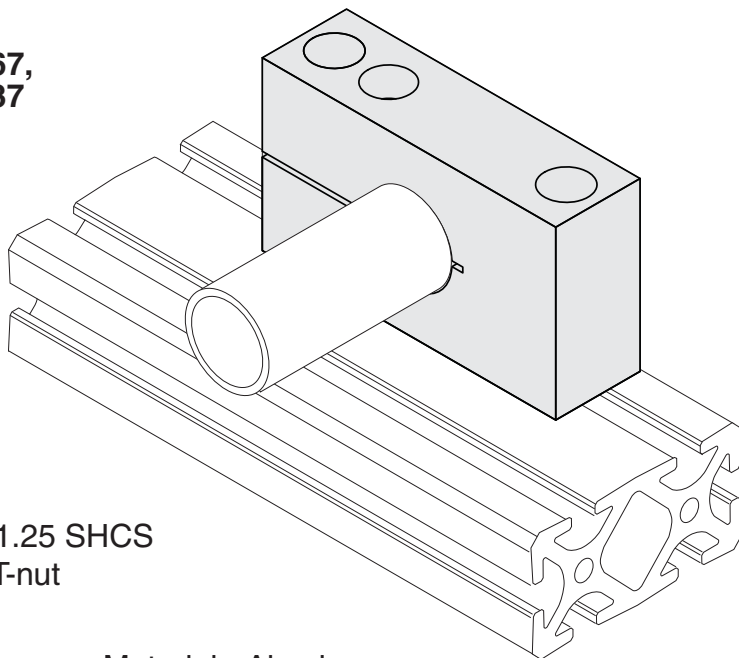
**EB-215**



**5/16" SLOTS**

For shafts, see page 275.

**EX-2, EX-67,  
EX-3, EX-37**



Requires

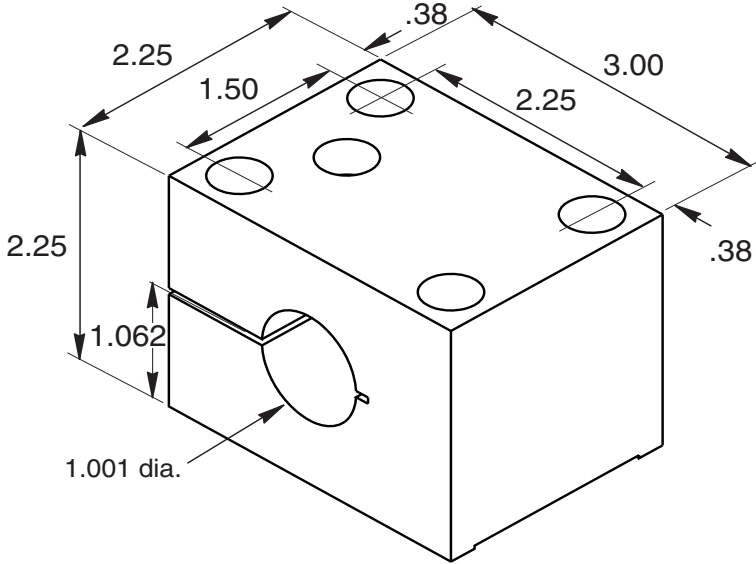
- (2) EF-11-1.25 SHCS
- (2) EF-55 T-nut

Material - Aluminum  
Finish - Clear Anodize

# Single Horizontal Base

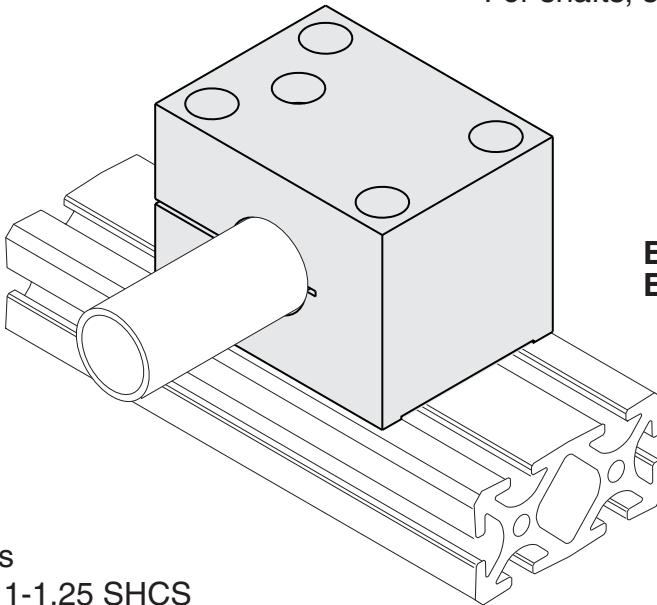


<b>EB-216</b>	<b>with locking handle</b>
<b>EB-217</b>	<b>with locking 5/16 SHCS</b>



5/16" SLOTS

For shafts, see page 275.

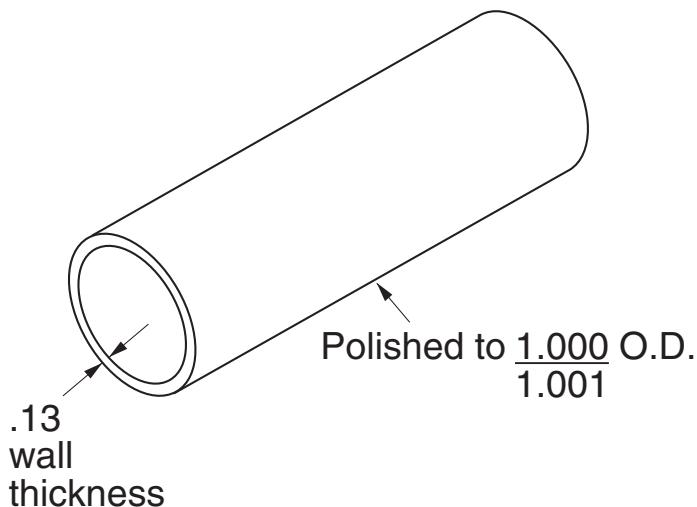


**EX-2, EX-67,  
EX-3, EX-37**

Requires

- (4) EF-11-1.25 SHCS
- (4) EF-55 T-nut

Material - Aluminum  
Finish - Clear Anodize

**EB-218****EB-219****5/16" SLOTS**

**EB-218** Anodized Aluminum  
Stock Length = 71"

**EB-219** Ground and Polished Steel (DOM)  
Stock Length = 71"

Note: For any length other than stock length for all of the above, add EM-1 cutting charge

# Conveyor Roller Mounting Block

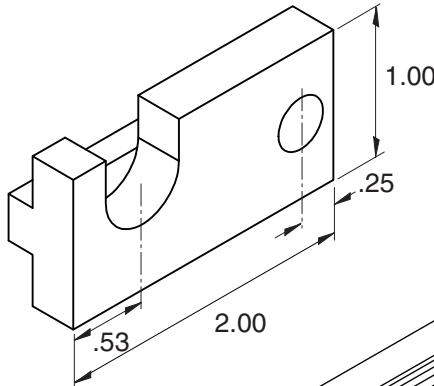


<b>EF-150</b>
<b>EF-151</b>

**5/16" profiles**

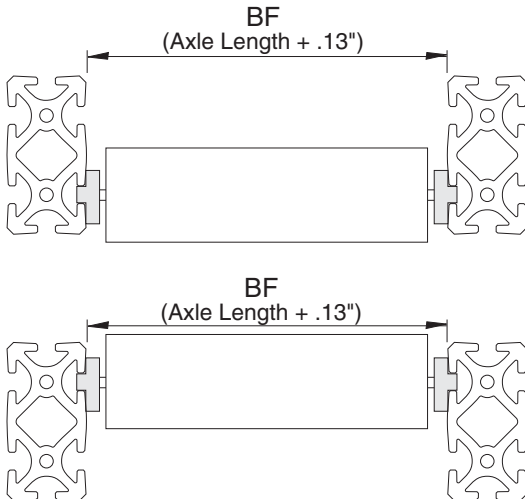
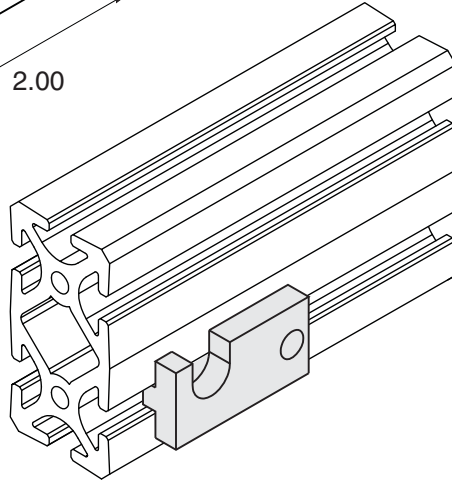
**1/4" profiles**

**5/16" SLOTS**



Axle size up to  
7/16" hex or 1/2" round  
Fasteners Included

Rollers can be put in or taken  
out individually without taking  
conveyor apart

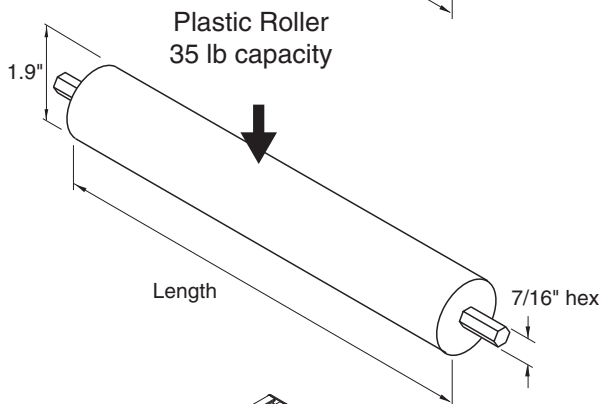
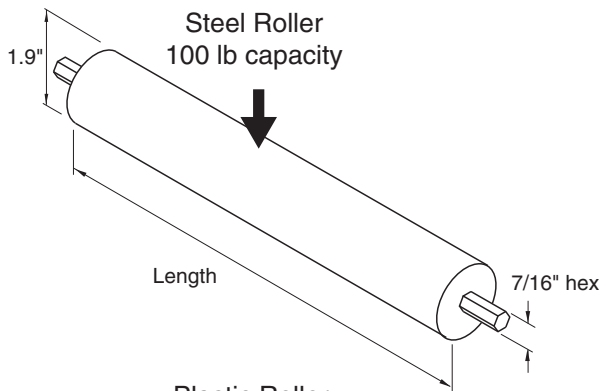


Roller Part no.	BF (Length between frame) Inches
<b>EF-161</b>	14.375
<b>EF-162</b>	20.375
<b>EF-163</b>	26.375
<b>EF-166</b>	14.375
<b>EF-167</b>	20.375
<b>EF-168</b>	26.375

Note: See page 277 for rollers.

Material - Aluminum  
Finish - Clear Anodize

**EF-160**

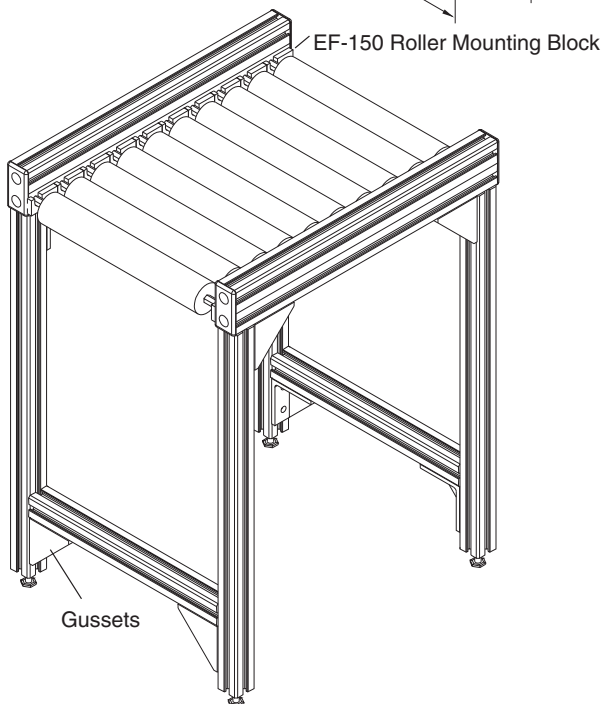


**Steel Rollers  
(Mild-uncoated)**

<b>EF-161</b>	12.75" long
<b>EF-162</b>	18.75" long
<b>EF-163</b>	24.75" long

**Plastic Rollers  
(PVC)**

<b>EF-166</b>	12.75" long
<b>EF-167</b>	18.75" long
<b>EF-168</b>	24.75" long



Note: Other roller types available, consult factory.

**5/16" SLOTS**

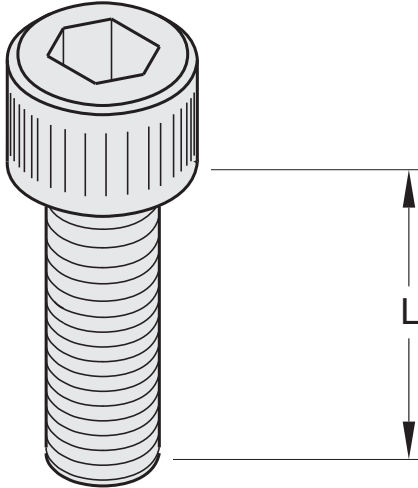
# Socket Head Cap Screw



## EF-11

Fractional  
EF-11 (5/16-18 thd)

- L - inch
- .5
  - .63
  - .75
  - .875
  - 1.0
  - 1.25
  - 1.5
  - 1.75
  - 2.0



Metric  
EF-11M (m8 thd)

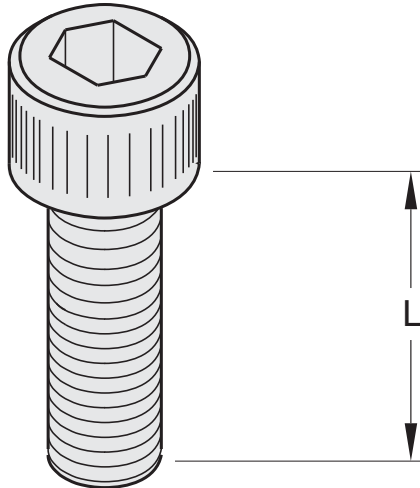
- L - mm
- 12
  - 16
  - 20
  - 25
  - 30
  - 35

Material - Steel  
Finish - Black Oxide Coated

5/16" SLOTS

## EF-11SS Stainless Steel

- L-inch
- EF-11SS-.5
  - EF-11SS-.63
  - EF-11SS-.75
  - EF-11SS-1.0
  - EF-11SS-1.25



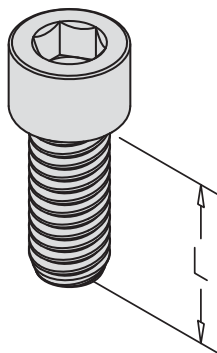
Material - Stainless Steel

Fractional  
(5/16" - 18 thd) L = inch

**EF-11K-.50**  
**EF-11K-.63**  
**EF-11K-.75**  
**EF-11K-.875**  
**EF-11K-1.00**  
**EF-11K-1.25**  
**EF-11K-1.50**

Metric  
(M8 x 1.25 thd) L = mm

**EF-11MK-12**  
**EF-11MK-16**  
**EF-11MK-20**  
**EF-11MK-25**  
**EF-11MK-30**  
**EF-11MK-35**



Material - Steel  
Finish - Bright Zinc Plated

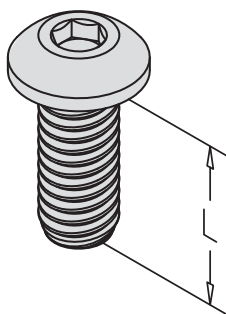
**5/16" SLOTS****Button Head** **EF-12K**

Fractional  
(5/16" - 18 thd) L = inch

**EF-12K-.50**  
**EF-12K-.63**  
**EF-12K-.75**  
**EF-12K-.875**  
**EF-12K-1.00**  
**EF-12K-1.25**  
**EF-12K-1.50**

Metric  
(M8 x 1.25 thd) L = mm

**EF-12MK-12**  
**EF-12MK-16**  
**EF-12MK-20**  
**EF-12MK-25**  
**EF-12MK-30**  
**EF-12MK-35**



Material - Steel  
Finish - Bright Zinc Plated



# Button Head Cap Screw



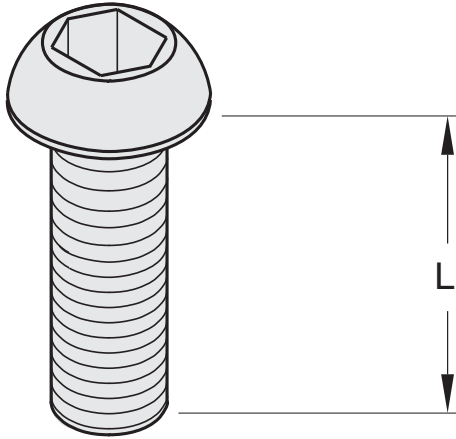
## EF-12

Fractional  
EF-12  
(5/16-18 thd)

- L - inch
- .5
  - .63
  - .75
  - .875
  - 1.0
  - 1.25
  - 1.5

Metric  
EF-12M  
(m8 thd)

- L - mm
- 12
  - 16
  - 20
  - 25
  - 30



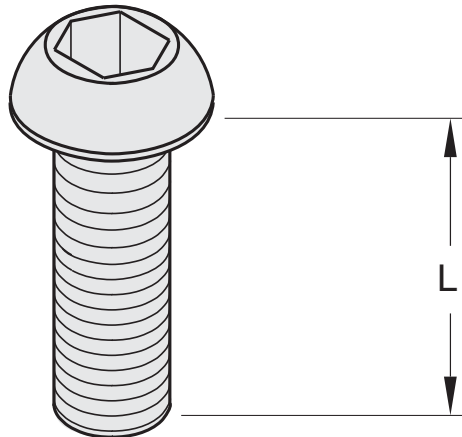
Material - Steel  
Finish - Black Oxide Coated

5/16" SLOTS

## EF-12SS

### Stainless Steel Button Head Cap Screw

- L-inch
- EF-12SS-.5
  - EF-12SS-.63
  - EF-12SS-.75
  - EF-12SS-1.0
  - EF-12SS-1.25



Material - Stainless Steel

**Flat Head Socket Cap Screws**

**5/16-18 thd.**

**EF-156**

**1/4-20 thd.**

**EF-157**

**#10-32 thd.**

**EF-158**

**Steel**

(5/16" - 18 thd) L = inch

**EF-156-.50**

**EF-156-.63**

**EF-156-.75**

**EF-156-.88**

**EF-156-1.0**

**EF-156-1.25**

(1/4" - 20 thd) L = inch

**EF-157-.50**

**EF-157-.63**

**EF-157-.75**

**EF-157-1.0**

(#10-32 thd) L = inch

**EF-158-.50**

**EF-158-.63**

**Stainless Steel**

(5/16" - 18 thd) L = inch

**EF-156SS-.50**

**EF-156SS-.63**

**EF-156SS-.75**

(1/4" - 20 thd) L = inch

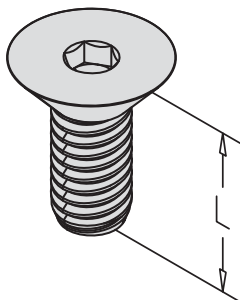
**EF-157SS-.50**

**EF-157SS-.63**

(#10-32 thd) L = inch

**EF-158SS-.50**

**EF-158SS-.63**



Material - Steel  
Finish - Black Oxide

Material - Stainless Steel

**Button Head Cap Screw (Flanged)**

**EF-12F**

**EF-12F (flanged)**

**(5/16-18 thd)**

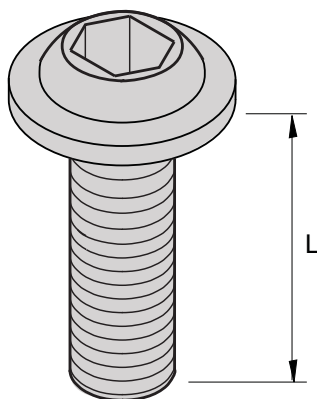
**L - inch**

.5

.63

.75

1.0

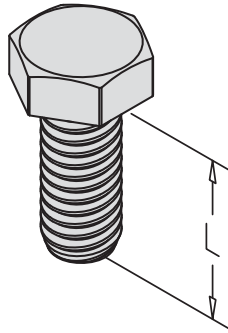


Material - Steel  
Finish - Black Oxide Coated

**5/16" SLOTS**

**EF-155**

**5/16" SLOTS**



Fractional  
(5/16" - 18 thd) L = inch

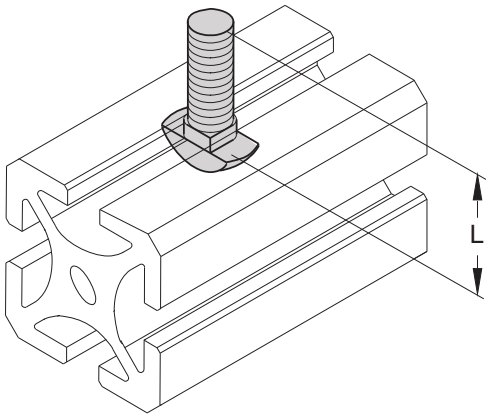
- EF-155-.50**
- EF-155-.63**
- EF-155-.75**
- EF-155-.875**
- EF-155-1.00**
- EF-155-1.25**
- EF-155-1.50**

Material - Steel  
Finish - Bright Zinc Plated

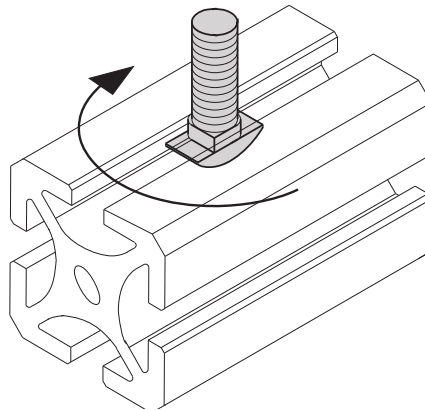
Metric  
(M8 x 1.25 thd) L = mm

- EF-155M-12**
- EF-155M-16**
- EF-155M-20**
- EF-155M-25**
- EF-155M-30**

Material - Steel  
Finish - Yellow Zinc Plated



- L - inch**  
-.75  
-1.0  
-1.25  
-1.50



**5/16" SLOTS**

Material - Steel  
Finish - Zinc Plated

**EF-10**

**Fractional**  
**EF-10 (5/16-18 thd)**

**Metric**  
**EF-10M (m8 thd)**

**L - inch**

**L - mm**

.75

20

1.0

25

1.25

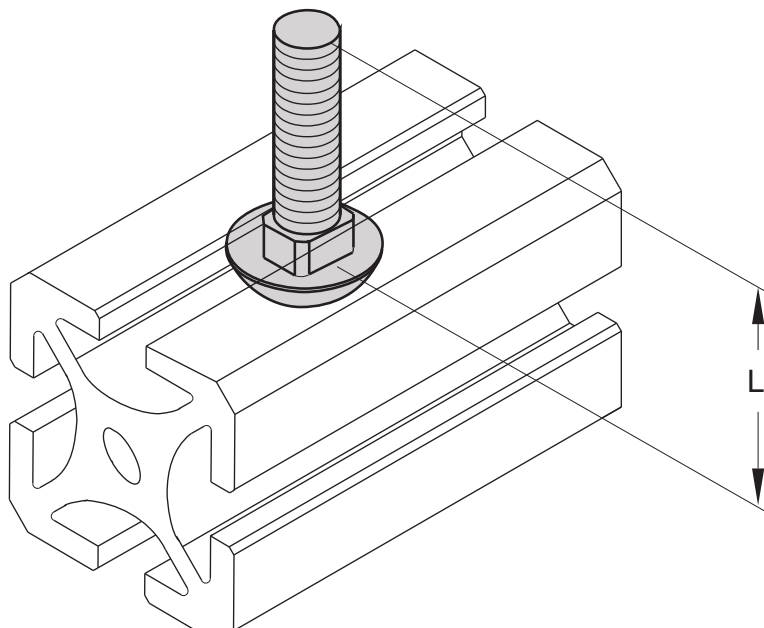
35

1.5

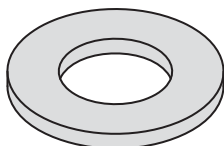
45

2.0

**5/16" SLOTS**



**Material - Steel**  
**Finish - Zinc Plated**



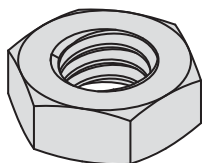
- EF-13A** Washer Hardened Steel Heavy Duty  
(Black Oxide) (use with M8 also)  
**EF-SS13A** Washer (Stainless Steel)  
**EF-13S** Washer (Zinc Plated)

Material - Steel



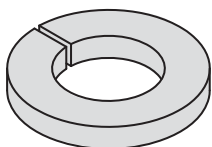
- EF-13B** Serrated Belleville  
(use with M8 also)

Material - Steel  
Finish - Black Oxide



- EF-13C** 5/16-18 Hex Nut  
**EF-13CM** M8 Hex Nut

Material - Steel  
Finish - Zinc Plated

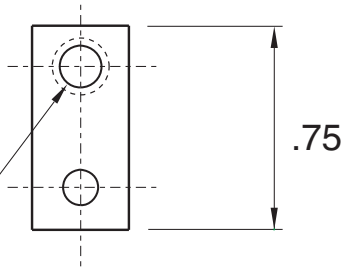
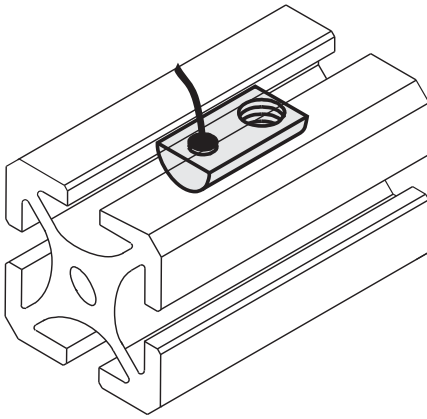


- EF-13L** Locking Washer

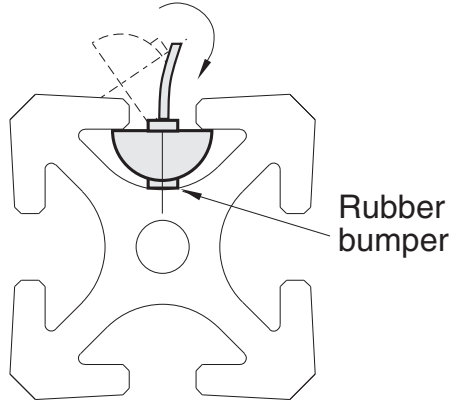
Material - Steel  
Finish - Zinc Plated

**EF-1**

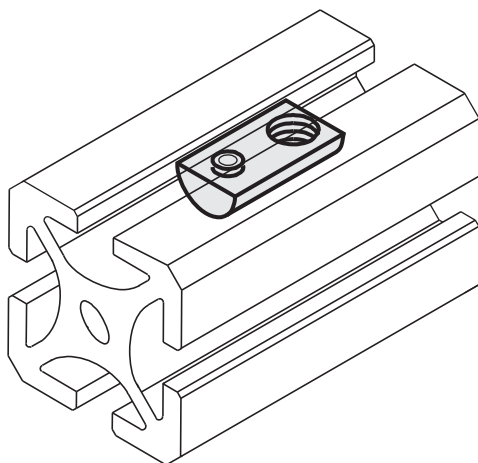
**5/16" SLOTS**



- EF-1** 5/16-18 thd
- EF-1A** 1/4-20 thd
- EF-1B** 10-32 thd
- EF-1C** m8 thd
- EF-1D** m6 thd
- EF-1E** 8-32 thd



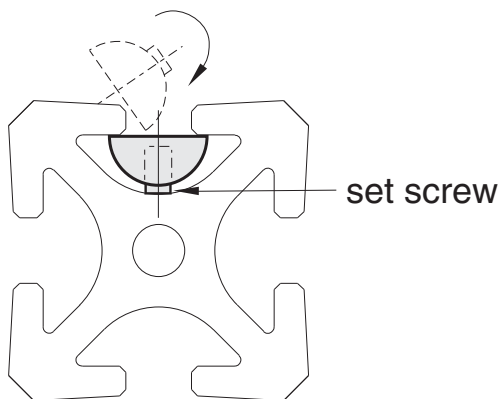
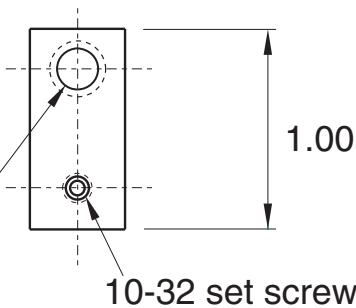
Material - Steel  
Finish - Zinc Plated



<b>EF-65</b>
<b>EF-66</b>
<b>EF-67</b>
<b>EF-68</b>
<b>EF-69</b>

**5/16" SLOTS**

- EF-65** 5/16-18 thd
- EF-66** 1/4-20 thd
- EF-67** 10-32 thd
- EF-68** m8 thd
- EF-69** m6 thd



**Material - Steel**  
**Finish - Zinc Plated**

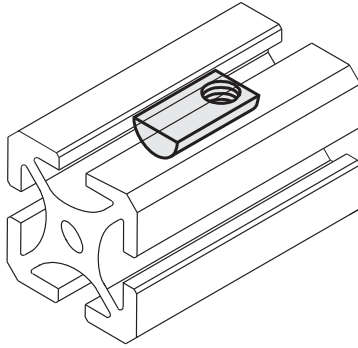


# Ball and Spring Pivot T-nut



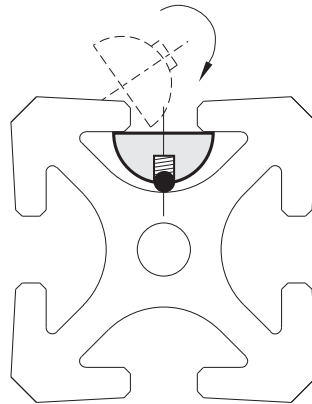
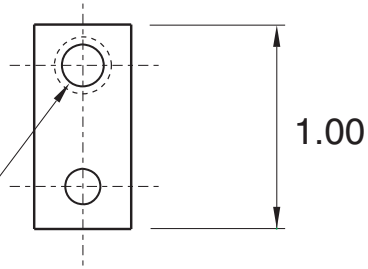
<b>EF-91</b>
<b>EF-92</b>
<b>EF-93</b>
<b>EF-94</b>
<b>EF-95</b>

use with EX-1, EX-2, EX-26,  
EX-3, and EX-36 only

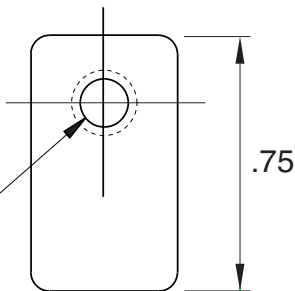
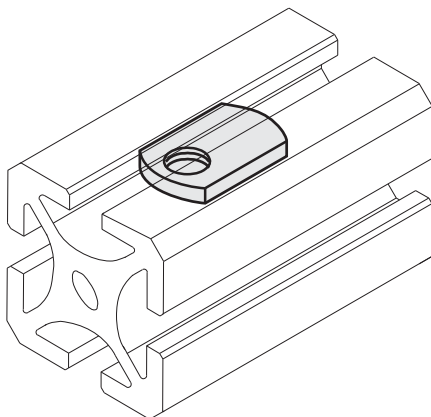


**5/16" SLOTS**

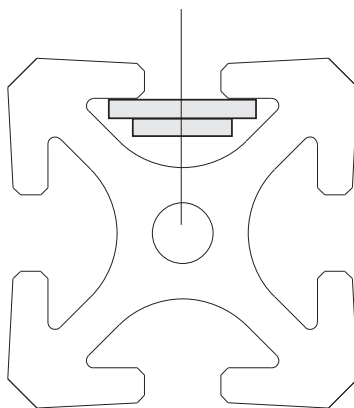
- EF-91** 5/16-18 thd
- EF-92** 1/4-20 thd
- EF-93** 10-32 thd
- EF-94** m8 thd
- EF-95** m6 thd



Material - Steel  
Finish - Zinc Plated

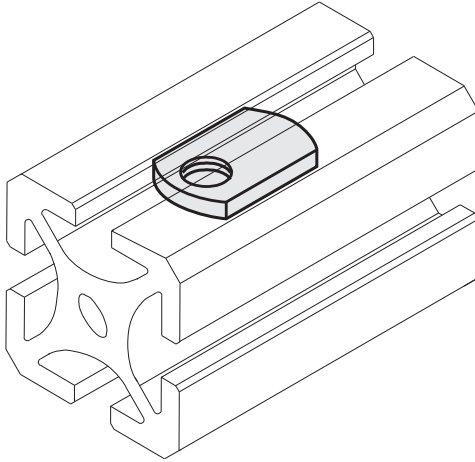


- EF-2** 5/16-18 thd
- EF-2A** 1/4-20 thd
- EF-2B** 10-32 thd
- EF-2C** m8 thd
- EF-2E** m6 thd
- EF-2H** 6-32 thd
- 11-217** 8-32 thd



Material - Steel  
Finish - Zinc Plated

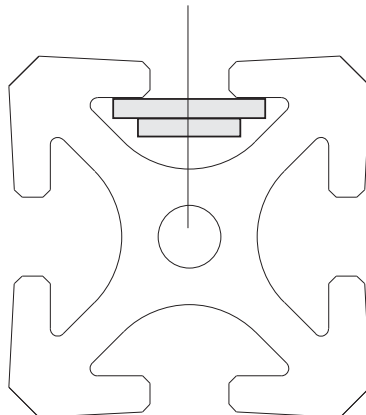
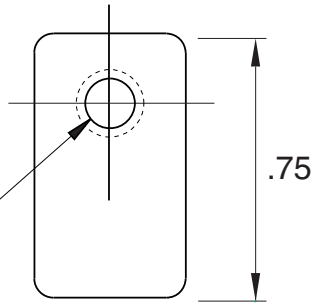
<b>EF-2ST</b>
<b>EF-2AST</b>
<b>EF-2CST</b>



**5/16" SLOTS**

**EF-2ST  
EF-2AST  
EF-2CST**

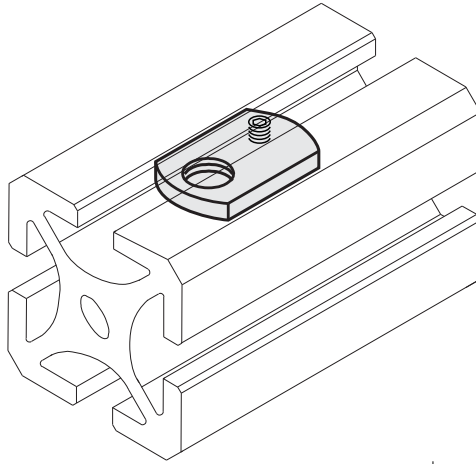
5/16-18 thd  
1/4-20 thd  
m8 thd



**EF-50**

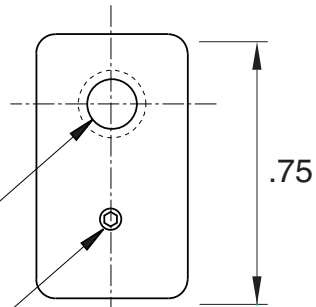
**EF-51**

**EF-52**



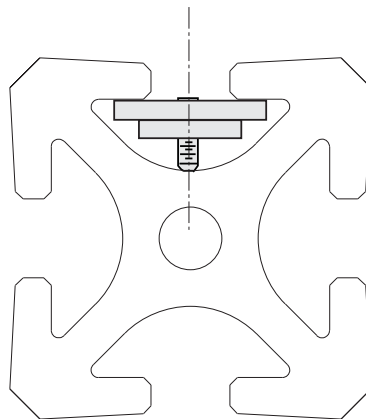
**5/16" SLOTS**

- EF-50** 5/16-18 thd
- EF-51** 1/4-20 thd
- EF-52** m8 thd



set screw  
(included)

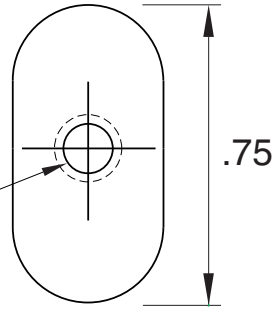
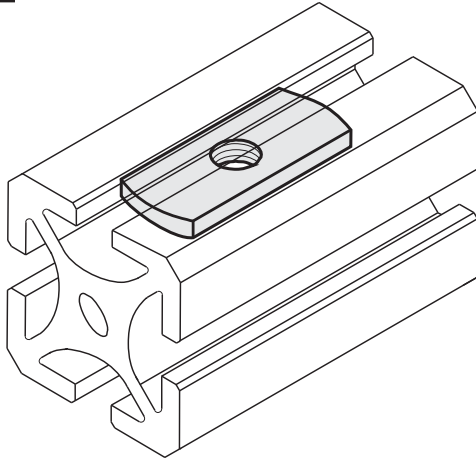
Set screw holds  
T-nut in place



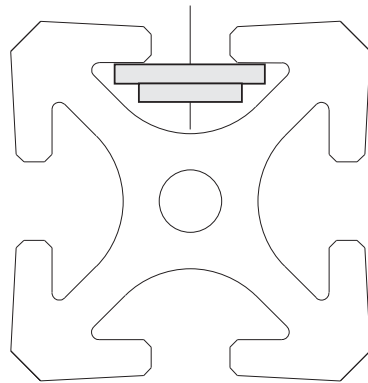
Material - Steel  
Finish - Zinc Plated

**EF-4**

**5/16" SLOTS**

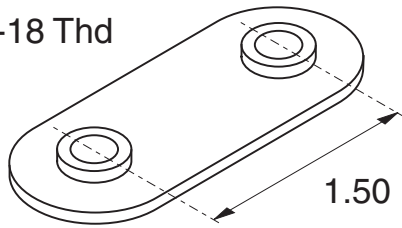


- EF-4** 5/16-18 thd
- EF-4A** 1/4-20 thd
- EF-4B** 10-32 thd
- EF-4C** m8 thd
- EF-4D** m6 thd
- 11-217** 8-32 thd
- 11-219** 6-32 thd

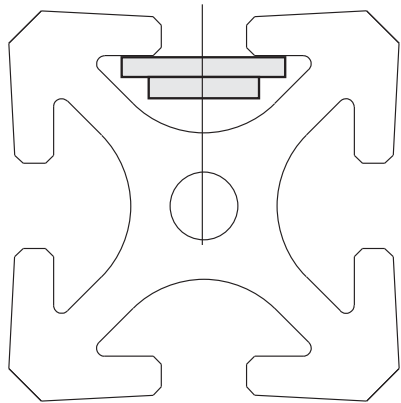
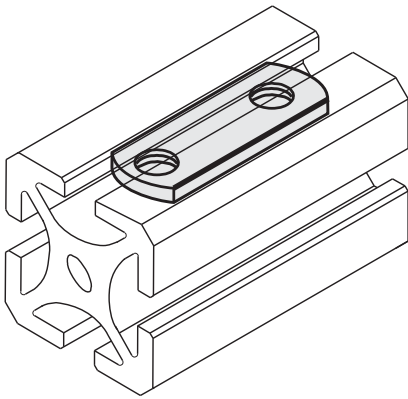


Material - Steel  
Finish - Zinc Plated

5/16-18 Thd



5/16" SLOTS



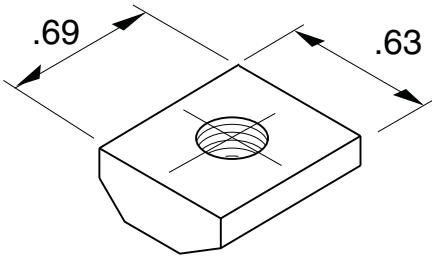
Material - Steel  
Finish - Zinc Plated

# Heavy Duty T-nut



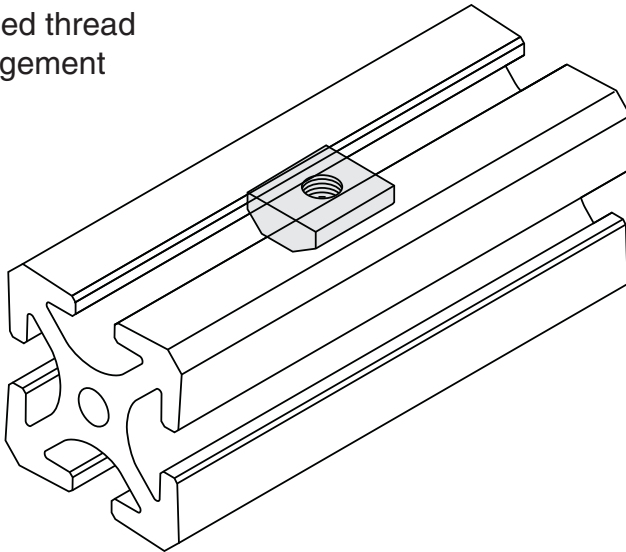
<b>EF-55</b>	<b>.33 Slot Width</b>
<b>EF-56</b>	
<b>EF-57</b>	
<b>EF-58</b>	
<b>EF-59</b>	
<b>EF-83</b>	
<b>EF-84</b>	

5/16" SLOTS



- EF-55** 5/16-18 thd
- EF-56** 1/4-20 thd
- EF-57** 10-32 thd
- EF-58** m8 thd
- EF-59** m6 thd
- EF-83** 8-32 thd
- EF-84** 6-32 thd

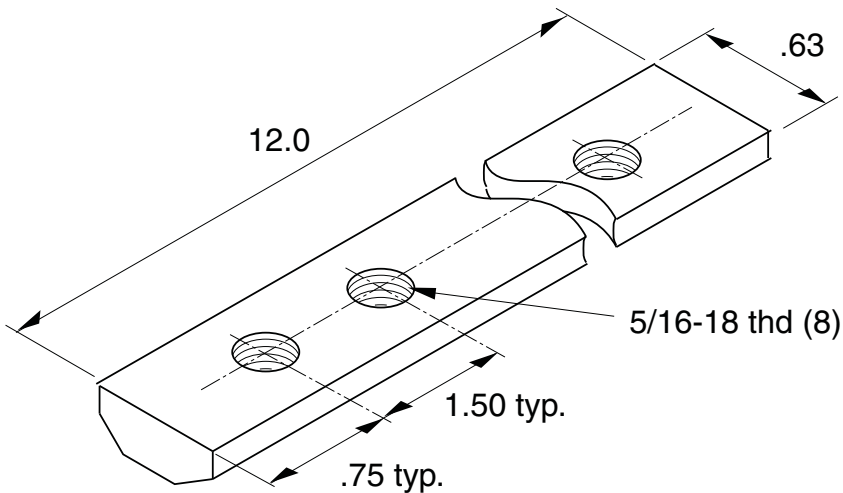
Note: Provides increased thread engagement



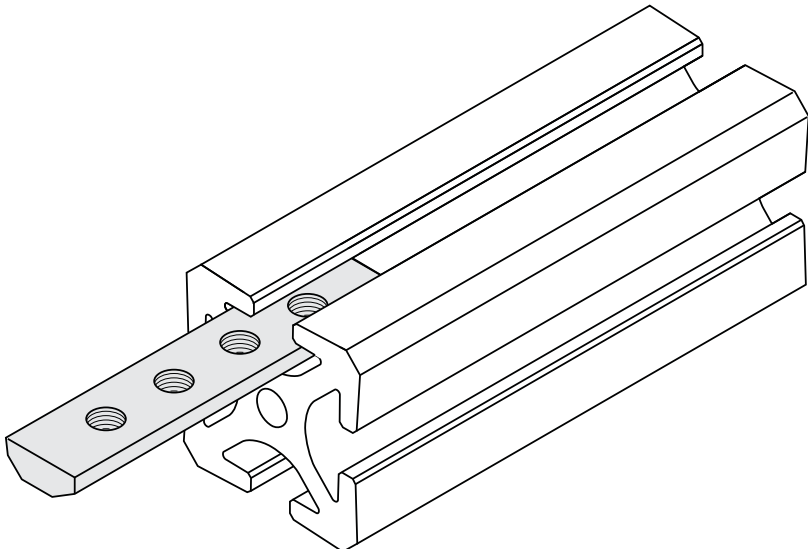
Material - Steel  
Finish - Zinc Plated

.33 Slot Width

**EF-53**



5/16" SLOTS



Special lengths can be provided on request

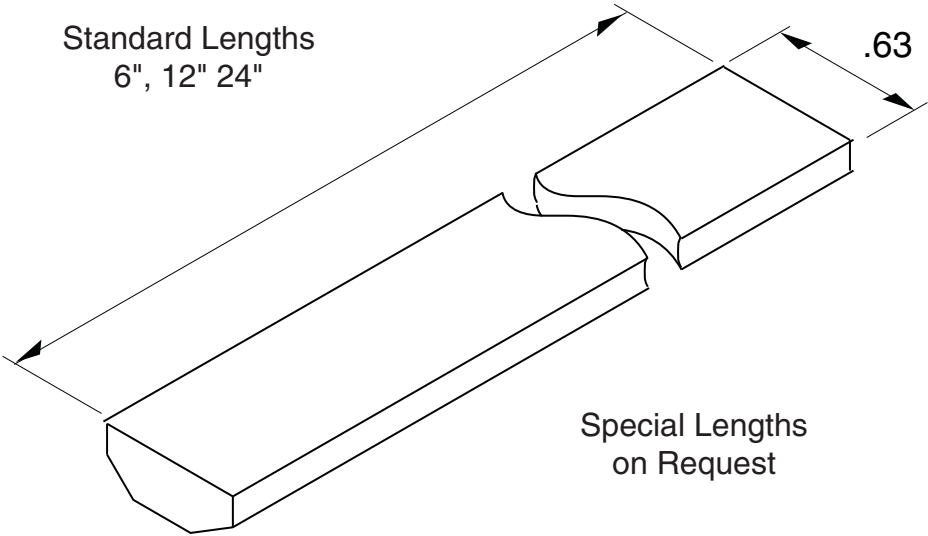
Material - Steel  
Finish - Zinc Plated



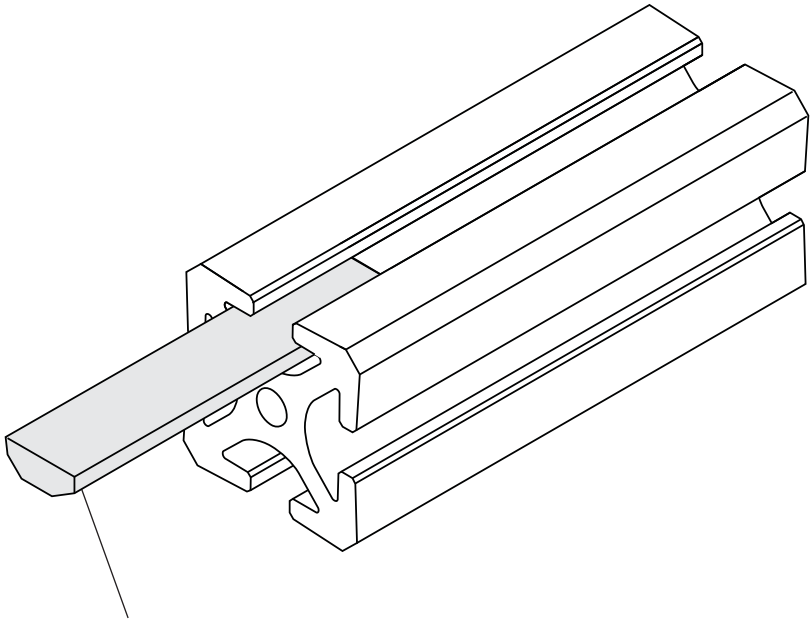
**EF-53B**

5/16" SLOTS

Standard Lengths  
6", 12" 24"

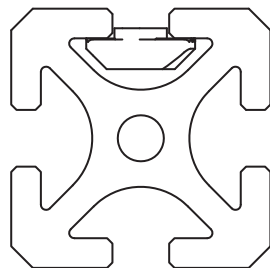
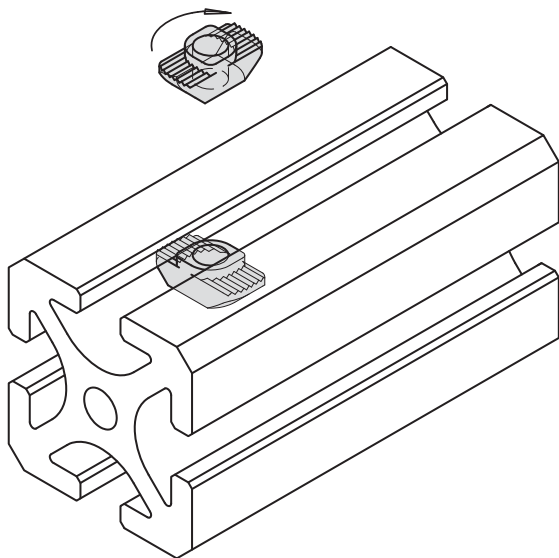


Special Lengths  
on Request

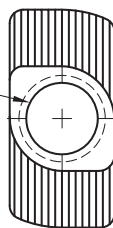


Note: Factory supplied tapped holes  
can be supplied per customer specification

Material - Steel  
Finish - Zinc Plated



- EF-96** 1/4-20 thd.
- EF-97** 10-32 thd.
- EF-98** m6 thd.
- EF-99** m5 thd.

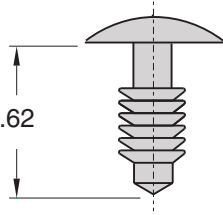


Use with 5/16" Slot Extrusions Only

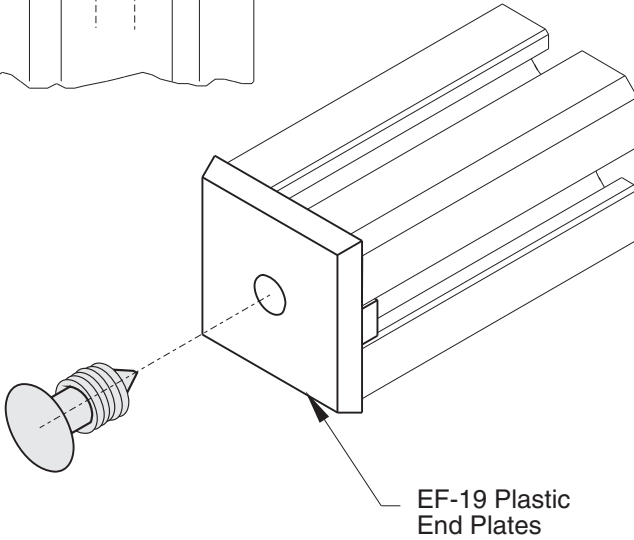
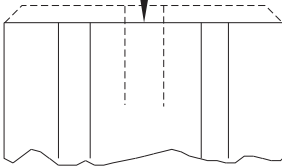
Material - Steel  
Finish - Zinc Plated

**EF-14**

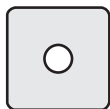
5/16" SLOTS



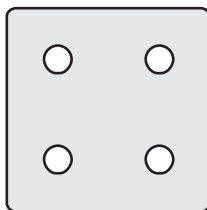
Note: Hole can be threaded for permanent installation



Material - Nylon

**EF-19-A**

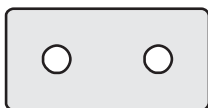
use with EX-1,  
EX-6, EX-61,  
EX-63, EX-64,  
and EX-65

**EF-19-C**

use with EX-3,  
and EX-36

**EF-19-D**

use with EX-7

**EF-19-B**

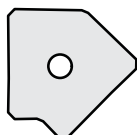
use with EX-2,  
EX-67 and EX 68

**EF-19-E**

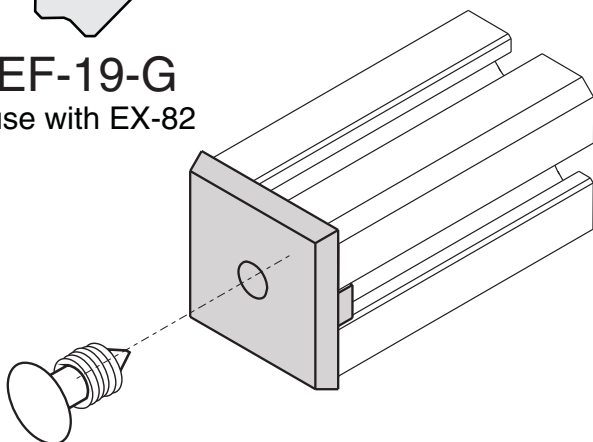
use with EX-52,  
and 11-251

**EF-19-F**

use with EX-8

**EF-19-G**

use with EX-82



Push Lock Fasteners included with ALL end plates

Material - Black ABS Plastic

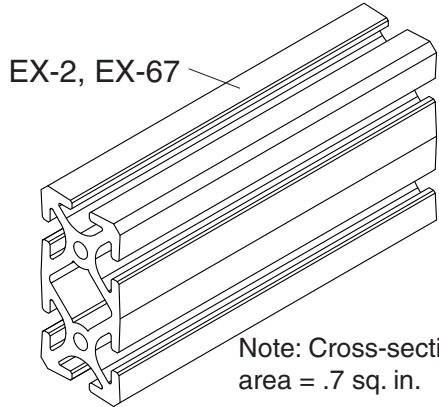
Note: for metal covers, consult the factory.

# Pneumatic Manifold End Plate and Gasket

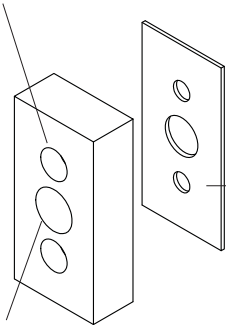


## PM-2

### PM-2



Drilled and C'bored  
for 5/16-18 SHCS (2)

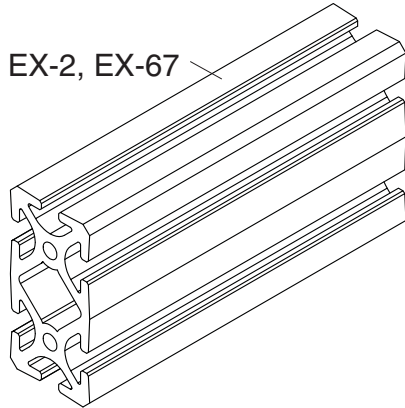


Note: Cross-sectional internal  
area = .7 sq. in.

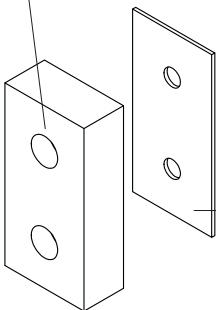
Cork Gasket Included

3/8 NPT

### PM-2B



Drilled and C'bored  
for 5/16-18 SHCS (2)



Note: Cross-sectional internal  
area = .7 sq. in.

Cork Gasket Included

Note: tap extrusion holes  
5/16-18 thread

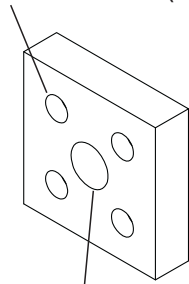
Recommended Hardware  
(2) EF-11-1.0

5/16" SLOTS

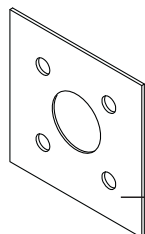
**PM-3**

**PM-3**

Drilled and C'bored  
for 5/16-18 SHCS (4)

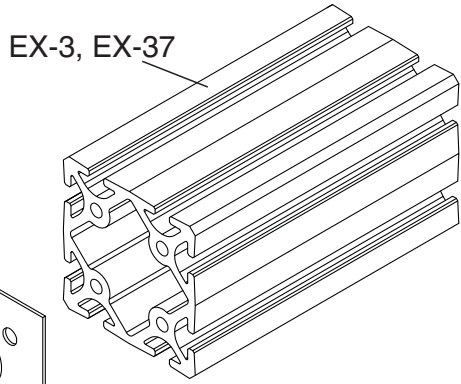


1/2 NPT



Cork Gasket Included

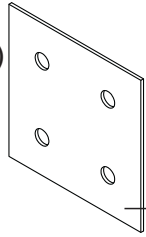
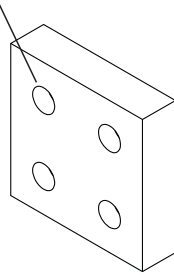
Note: Cross-sectional internal  
area = 3.5 sq. in.



EX-3, EX-37

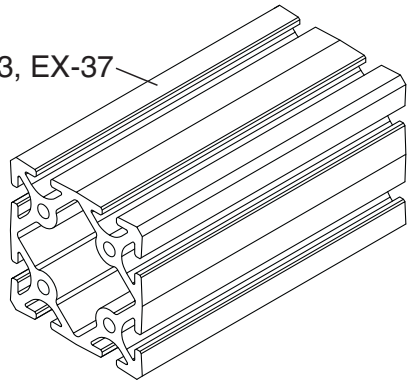
**PM-3B**

Drilled and C'bored  
for 5/16-18 SHCS (4)



Cork Gasket Included

Note: Cross-sectional internal  
area = 3.5 sq. in.



EX-3, EX-37

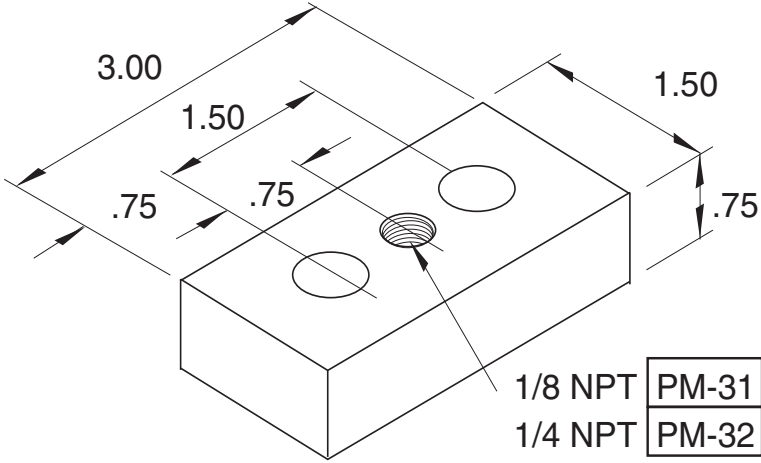
**5/16" SLOTS**

**Recommended Hardware**  
(4) EF-11-1.0

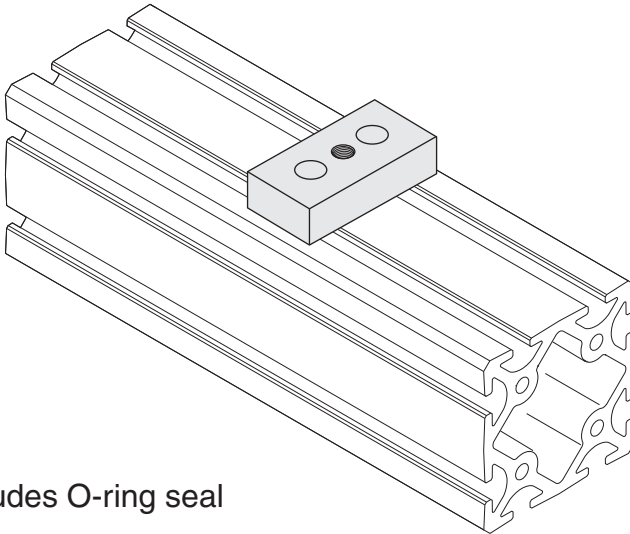
# Pressure Manifold Plate



PM-31
PM-32



5/16" SLOTS

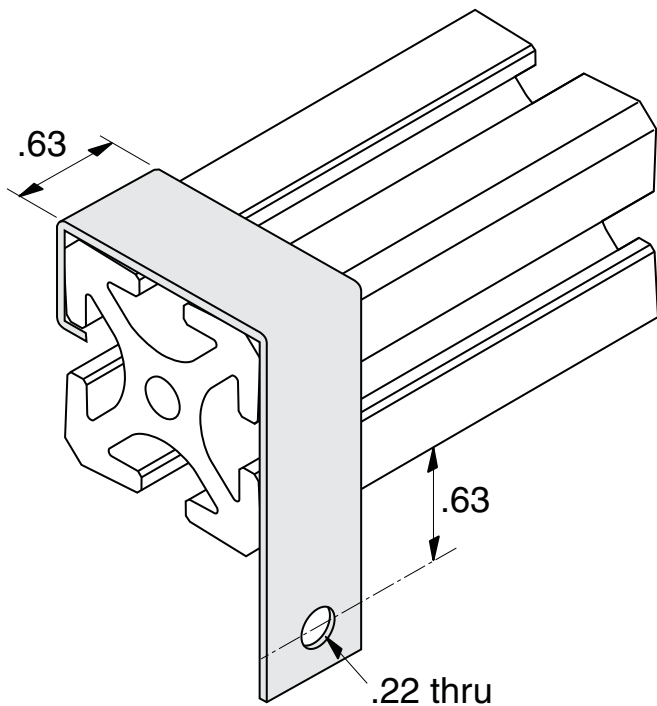


includes O-ring seal

## Recommended Hardware

- (2) EF-11-.875 SHCS
- (2) EF-2 T-nuts

Material - Aluminum  
Finish - Clear Anodize

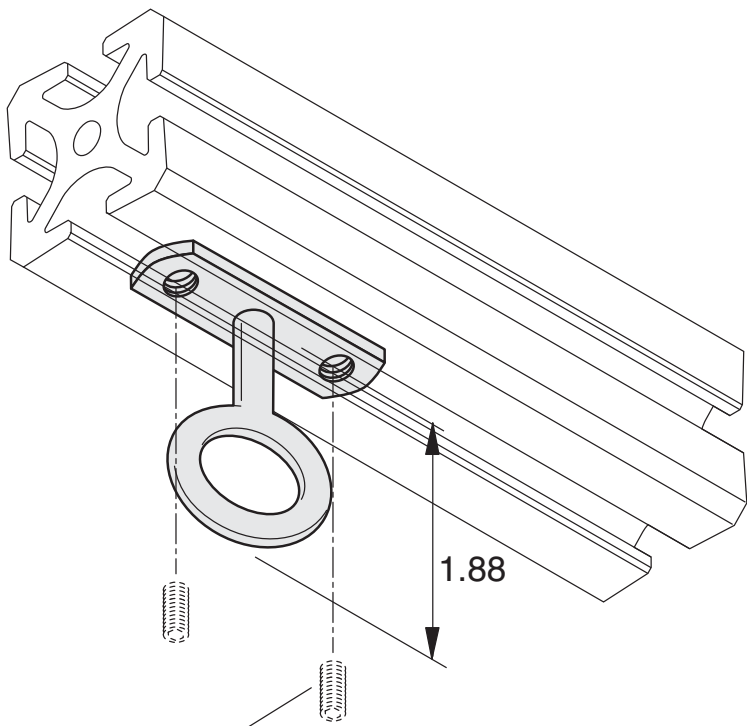


Material  
Zinc Plated Steel



**ETH**

**5/16" SLOTS**



Can be locked in place with  
5/16-18 set screws

Max. load 40 lbs

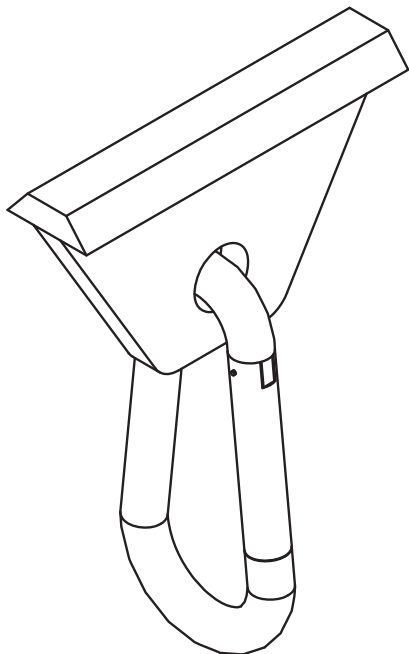
Material - Steel  
Finish - Zinc Plated

without Snap Hook

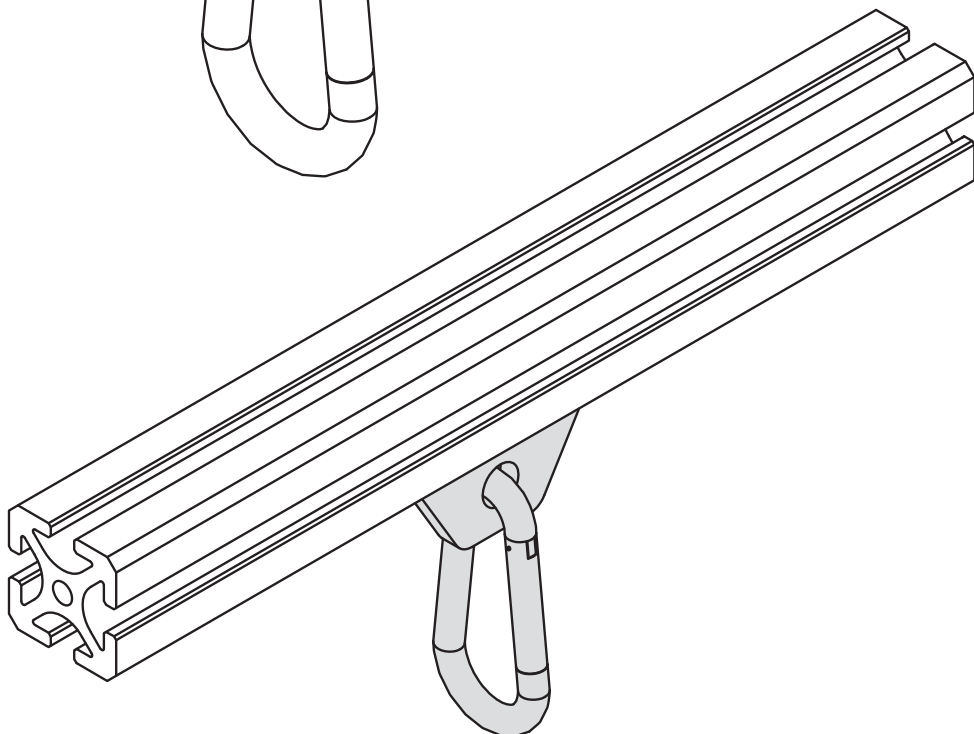
**EF-146**

with Snap Hook

**EF-146A**



Maximum Load 25 lbs



Material

Hanger - Rigid Nylon

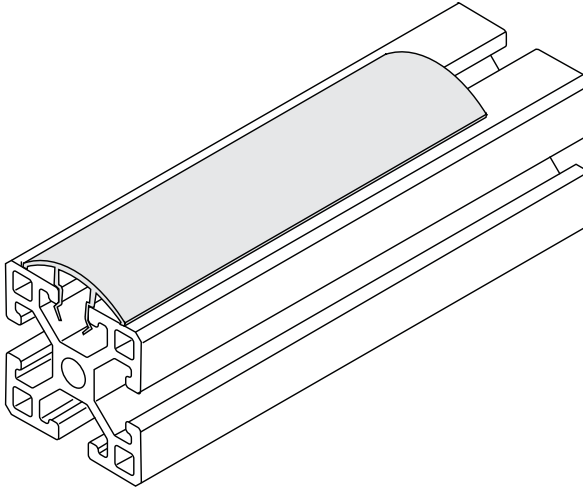
Hook - Zinc Plated Steel

5/16" SLOTS

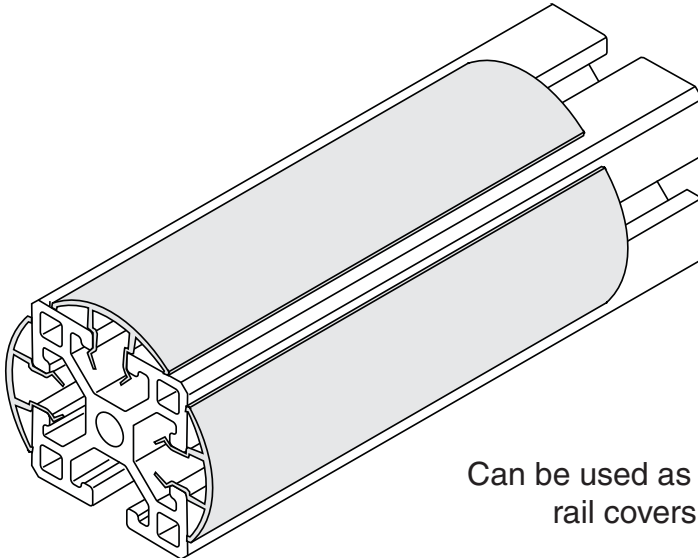
**EF-28**

use on all 5/16" slot extrusions  
with 1.5" sides

5/16" SLOTS



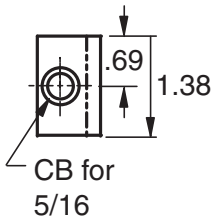
Standard length 72"



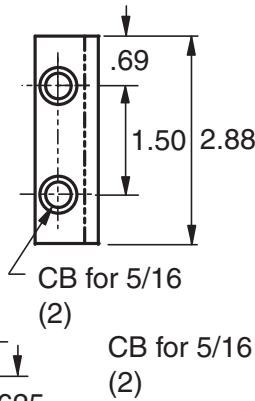
Can be used as hand-  
rail covers

Material - Rigid PVC  
Color - Black

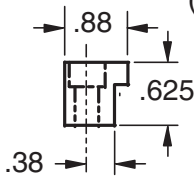
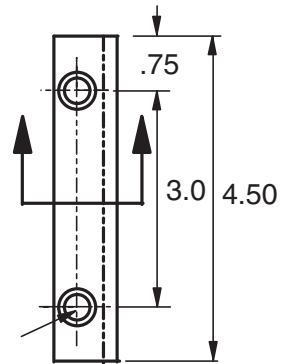
**EF-30A**



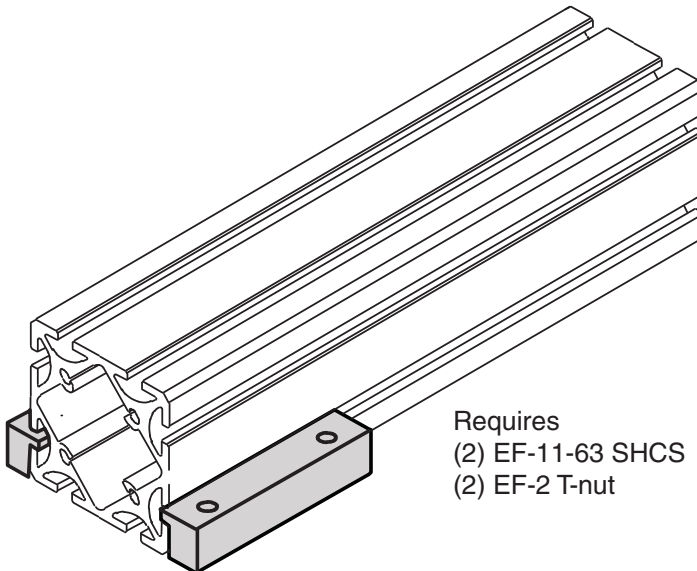
**EF-30B**



**EF-30C**



**5/16" SLOTS**

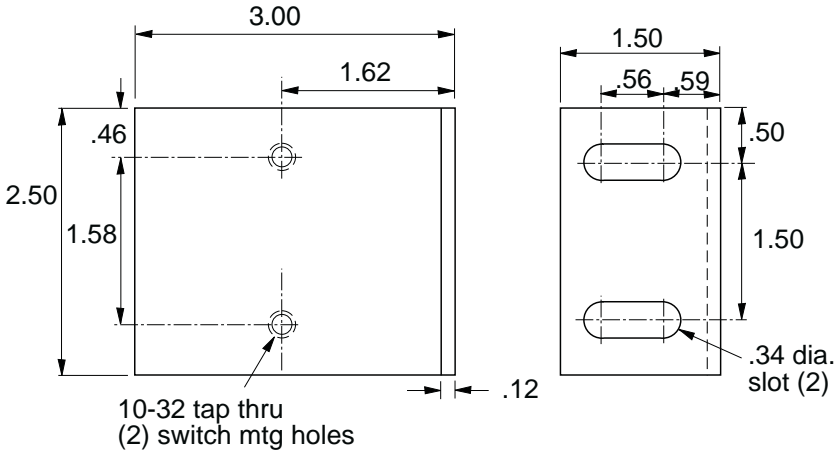


Requires  
(2) EF-11-63 SHCS  
(2) EF-2 T-nut

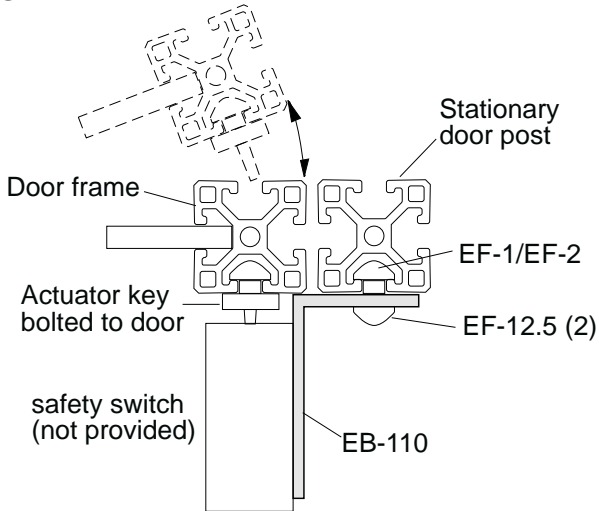
Material - Aluminum  
Finish - Clear Anodize

**EB-110**

5/16" SLOTS

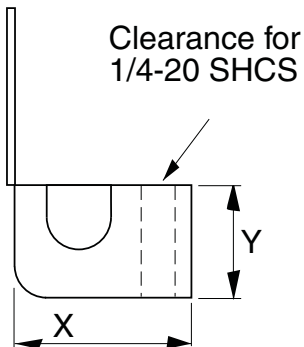


- Requires  
(2) EF-12.5 BHCS  
(2) EF-2 T-nut



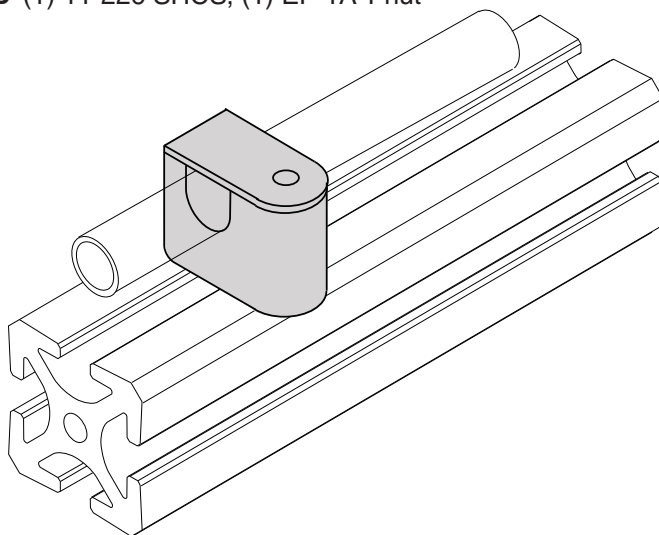
Material - Aluminum  
Finish - Clear Anodize

	Tubing Size	X	Y
<b>EF-42A</b>	3/8"	1.06	.56
<b>EF-42B</b>	1/2"	1.38	.88
<b>EF-42C</b>	3/4"	1.63	1.19
<b>EF-42D</b>	1"	1.69	1.19



Hardware Required:

- EF-42A** (1) 11-224 SHCS, (1) EF-1A T-nut
- EF-42B** (1) 11-225 SHCS, (1) EF-1A T-nut
- EF-42C** (1) 11-226 SHCS, (1) EF-1A T-nut
- EF-42D** (1) 11-226 SHCS, (1) EF-1A T-nut



Material - Polypropylene

**5/16" SLOTS**

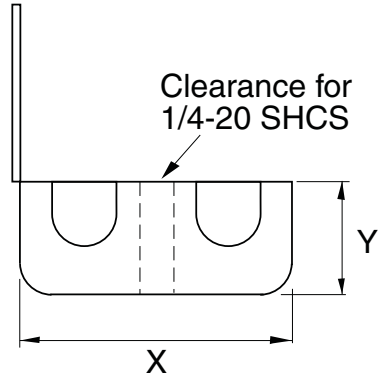
# Double Tubing Clamp



## EF-43

5/16" SLOTS

	Tubing Size	X	Y
<b>EF-43A</b>	3/8"	1.66	.56
<b>EF-43B</b>	1/2"	2.18	.88
<b>EF-43C</b>	3/4"	2.81	1.19
<b>EF-43D</b>	1"	2.88	1.19



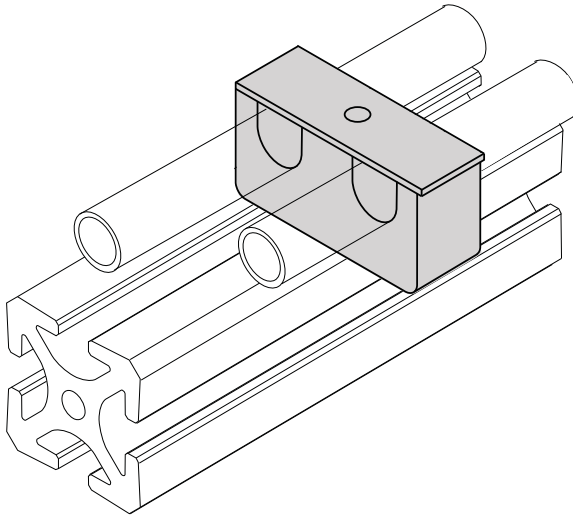
### Hardware Required:

**EF-43A** (1) 11-224 SHCS, (1) EF-1A T-nut

**EF-43B** (1) 11-225 SHCS, (1) EF-1A T-nut

**EF-43C** (1) 11-226 SHCS, (1) EF-1A T-nut

**EF-43D** (1) 11-226 SHCS, (1) EF-1A T-nut



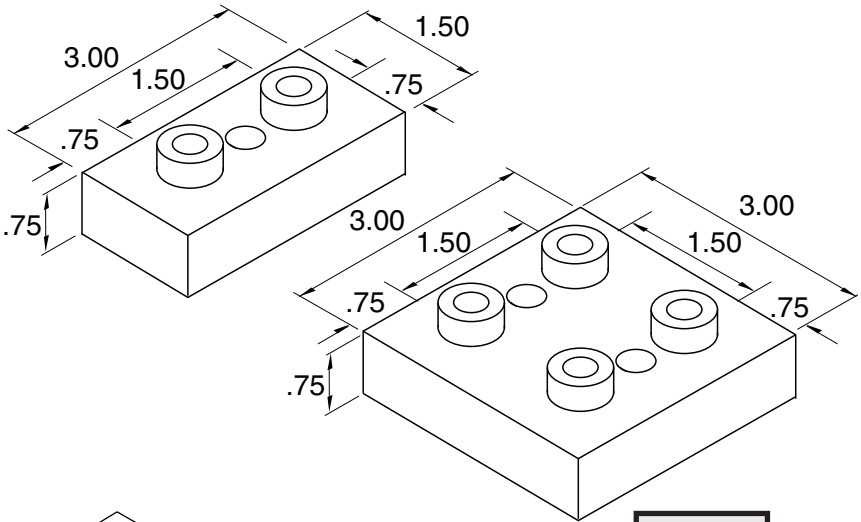
Material - Polypropylene

**EF-80**

**EF-81**

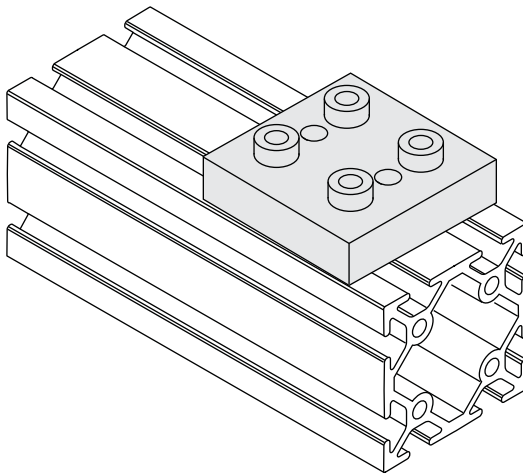
**EF-80**

Hardware Included



**EF-81**

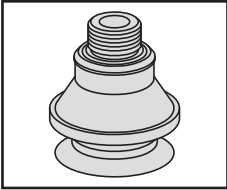
Hardware Included



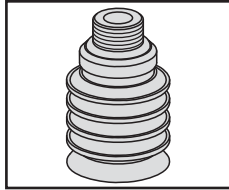
**5/16" SLOTS**

Plate Material - Aluminum  
Finish - Clear Anodize

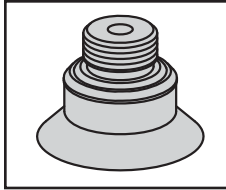




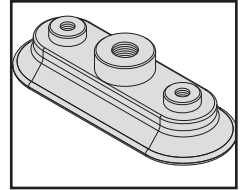
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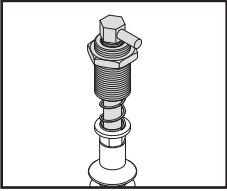
page 314



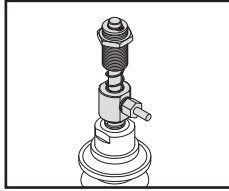
page 315



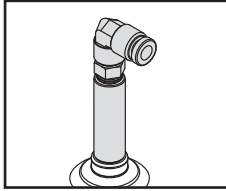
page 316



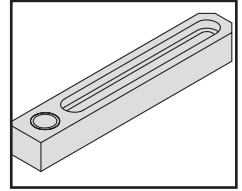
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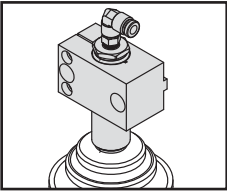
page 318



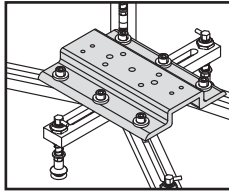
page 319



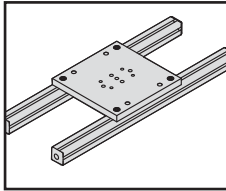
page 320



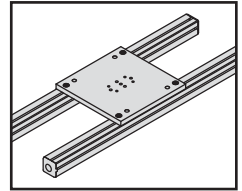
page 321



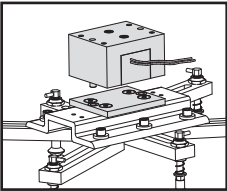
page 322



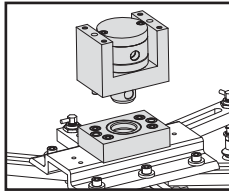
page 323



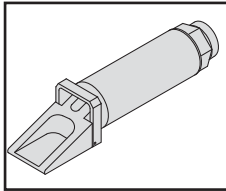
page 324



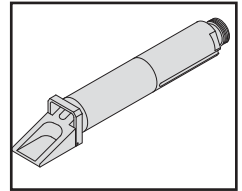
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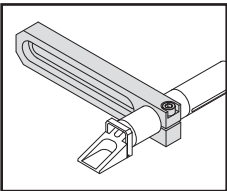
page 326



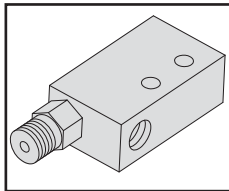
page 327



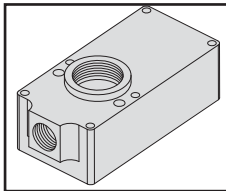
page 328



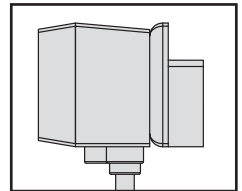
page 329



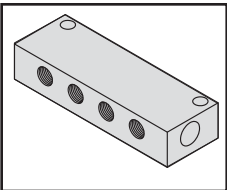
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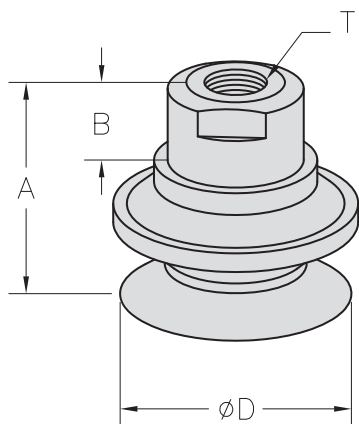
page 331



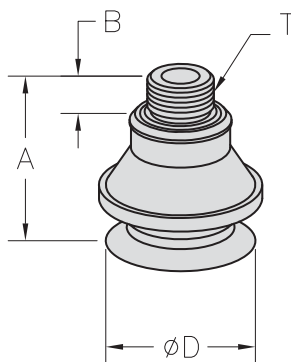
page 332



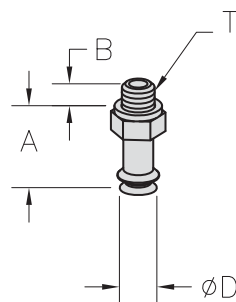
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**VB-30**  
**VB-50**  
**VB-75**  
**VB-110**



**VB-20**



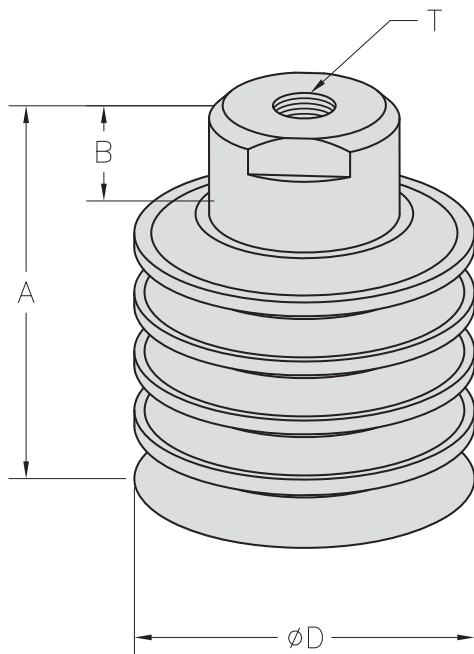
**VB-5**  
**VB-10**  
**VB-15**

MODULAR TOOLING

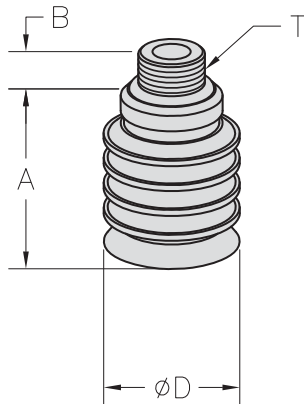
PART NO NBR	PART NO Silicone	ØD	A	B	T
<b>VB-5</b>	<b>VB-5-S</b>	.22	.52	.14	#10-32
<b>VB-10</b>	<b>VB-10-S</b>	.43	.83	.16	#10-32
<b>VB-15</b>	<b>VB-15-S</b>	.61	.96	.16	#10-32
<b>VB-20</b>	<b>VB-20-S</b>	.87	.81	.24	1/8-NPT
<b>VB-30</b>	<b>VB-30-S</b>	1.34	1.34	.31	1/8-NPT
<b>VB-50</b>	<b>VB-50-S</b>	2.09	1.73	.35	1/8 NPT
<b>VB-75</b>	<b>VB-75-S</b>	3.07	1.97	.71	1/2 NPT
<b>VB-110</b>	<b>VB-110-S</b>	4.53	2.48	.59	1/2 NPT

Cup Material is Nitrile Buna N Rubber (NBR)  
 Silicone is specified with -S suffix

**VMB-Series**



**VMB-50**



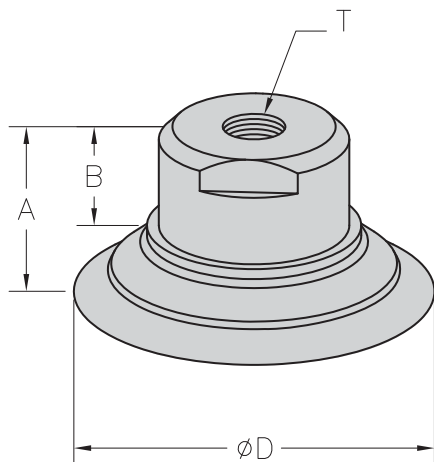
**VMB-20  
VMB-30**

MODULAR TOOLING

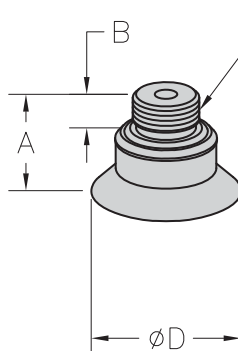
PART NO NBR	PART NO Silicone	ØD	A	B	T
VMB-20	VMB-20-S	.79	.96	.24	1/8 NPT
VMB-30	VMB-30-S	1.18	1.46	.28	1/8 NPT
VMB-50	VMB-50-S	1.97	2.36	.35	1/8 NPT

Cup Material is Nitrile Buna N Rubber (NBR)  
Silicone is specified with -S suffix

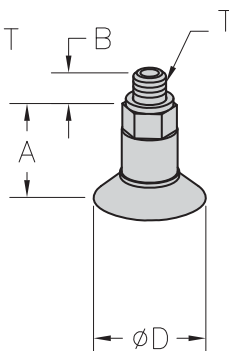
**VU & VF-Series**



**VF-50  
VF-75  
VF-110**



**VF-20  
VF-30**



**VU-6  
VU-10  
VF-15**

**MODULAR TOOLING**

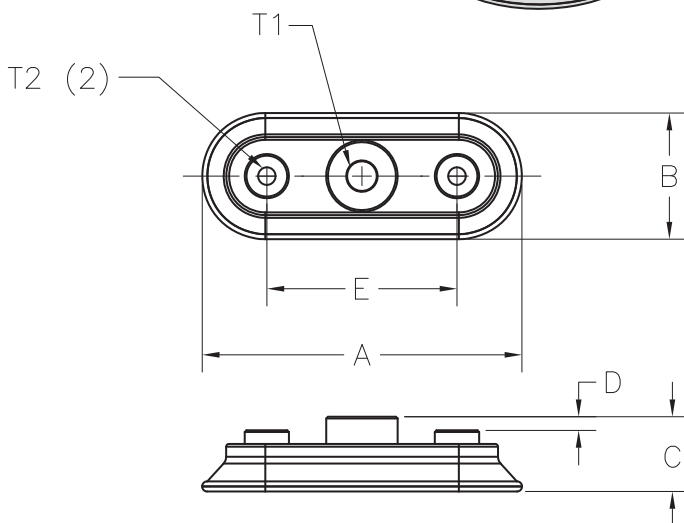
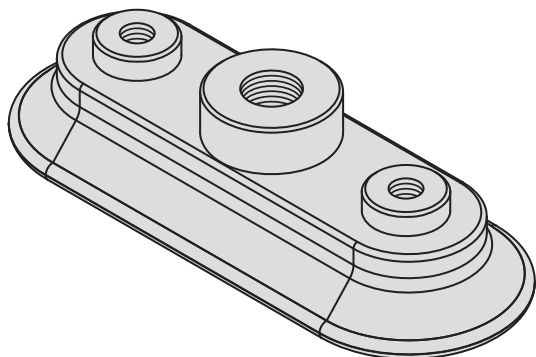
PART NO NBR	PART NO Silicone	ØD	A	B	T
<b>VU-6</b>	<b>VU-6-S</b>	.28	.41	.14	#10-32
<b>VU-10</b>	<b>VU-10-S</b>	.43	.61	.14	#10-32
<b>VF-15</b>	<b>VF-15-S</b>	.65	.63	.16	#10-32
<b>VF-20</b>	<b>VF-20-S</b>	.87	.37	.24	1/8 NPT
<b>VF-30</b>	<b>VF-30-S</b>	1.26	.45	.24	1/8 NPT
<b>VF-50</b>	<b>VF-50-S</b>	2.09	1.04	.35	1/8 NPT
<b>VF-75</b>	<b>VF-75-S</b>	3.03	1.02	.71	1/2 NPT
<b>VF-110</b>	<b>VF-110-S</b>	4.41	1.14	.59	1/2 NPT

Cup Material is Nitrile Buna N Rubber (NBR)  
Silicone is specified with -S suffix

# Vacuum Cups Oval



## VOC-Series

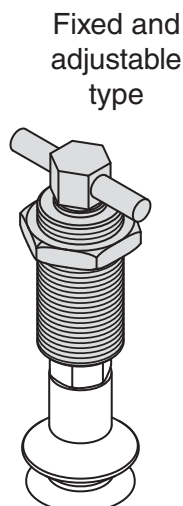
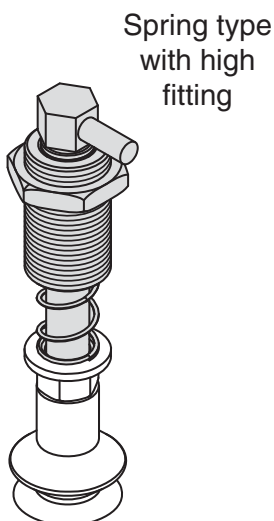
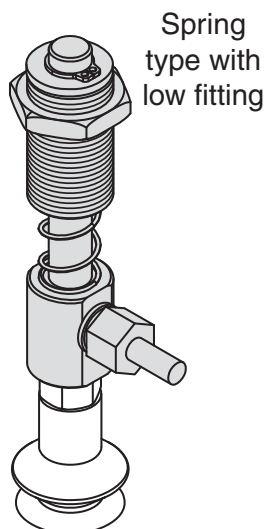


MODULAR TOOLING

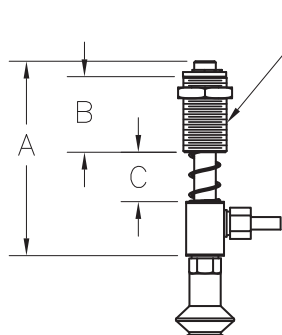
PART NO	A	B	C	D	E	T1	T2
VOC-35	3.70	1.46	.87	.16	2.20	1/8 NPT	m6
VOC-60	5.51	2.40	1.18	.16	2.99	3/8 NPT	m8

MODEL	(in <sup>3</sup> )	LIFTING FORCE (lb) Perpendicular			LIFTING FORCE (lb) Parallel		
		2.9 psi	8.7 psi	13.0 psi	2.9 psi	8.7 psi	13.0 psi
VOC-35	1.22	11.02	29.54	38.36	15.21	36.16	42.3
VOC-60	3.17	29.54	83.78	116.84	41.67	83.78	114.64

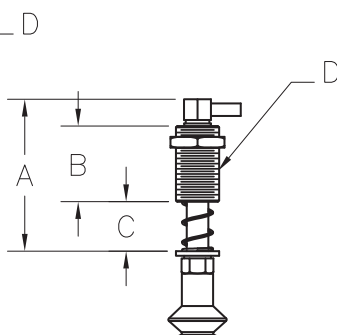
Cup Material is Nitrile Buna N Rubber (NBR)



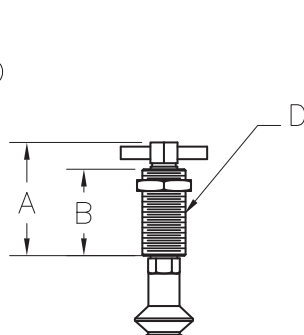
Note: Vacuum cups sold separately



MT-ST-B



MT-ST-A



MT-ST-C

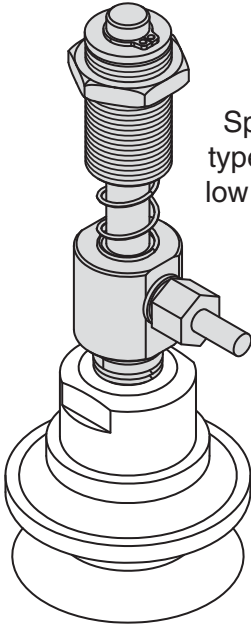
Fittings accept  $\text{\O}1/4$  tubing

PART NO	A	B	C	D	USE WITH VACUUM CUPS
MT-ST-A	1.81	.88	.53	1/2-20	VB-5, VB-10, VB-15, VU-6, VU-10, VF-15
MT-ST-B	2.25	.88	.53	1/2-20	
MT-ST-C	3.31	1.00	--	1/2-20	

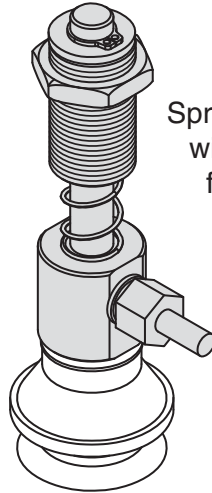
# Medium Vacuum Stems



## MT-ST

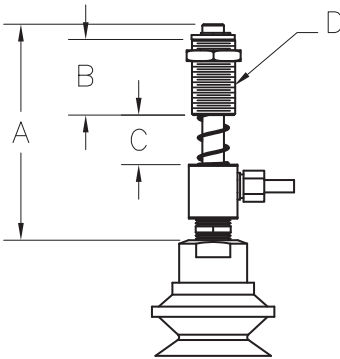


Spring type with low fitting

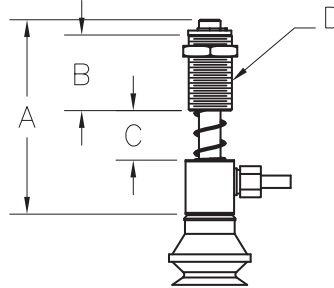


Spring type with low fitting

Note: Vacuum cups sold separately



MT-ST-E



MT-ST-D

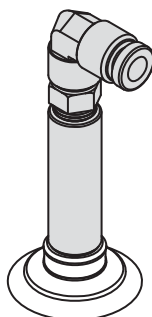
Fittings accept Ø1/4 tubing

PART NO	A	B	C	D	USE WITH VACUUM CUPS
MT-ST-D	2.25	.88	.53	1/2-20	VB-20, VF-20
MT-ST-E	2.50	.88	.53	1/2-20	VB-30, VB-50, VF-30, VF-50

MODULAR TOOLING

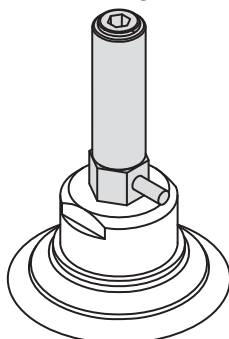
### MT-ST

Rigid clamp type with top fitting



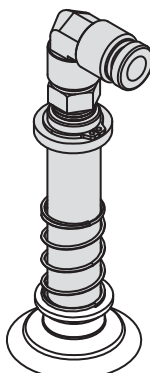
MT-ST-F  
MT-ST-G

Rigid clamp type with bottom fitting



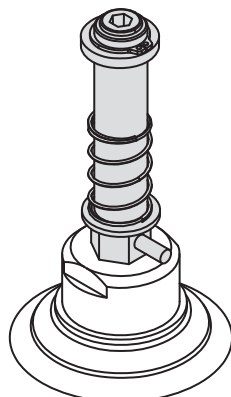
MT-ST-H

Spring type with top fitting



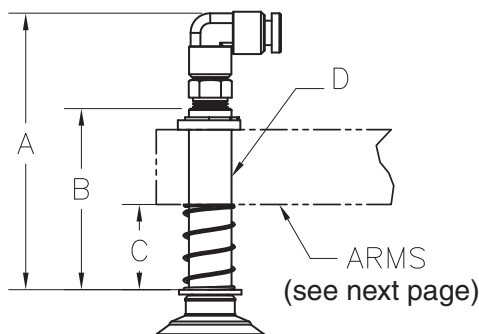
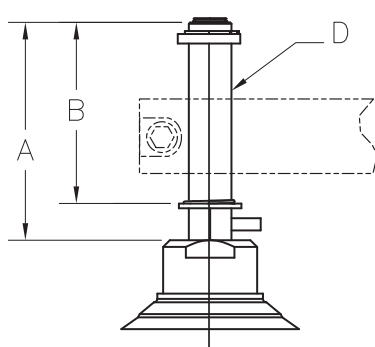
MT-ST-I  
MT-ST-J

Spring type with bottom fitting



MT-ST-K

Note: Vacuum cups sold separately

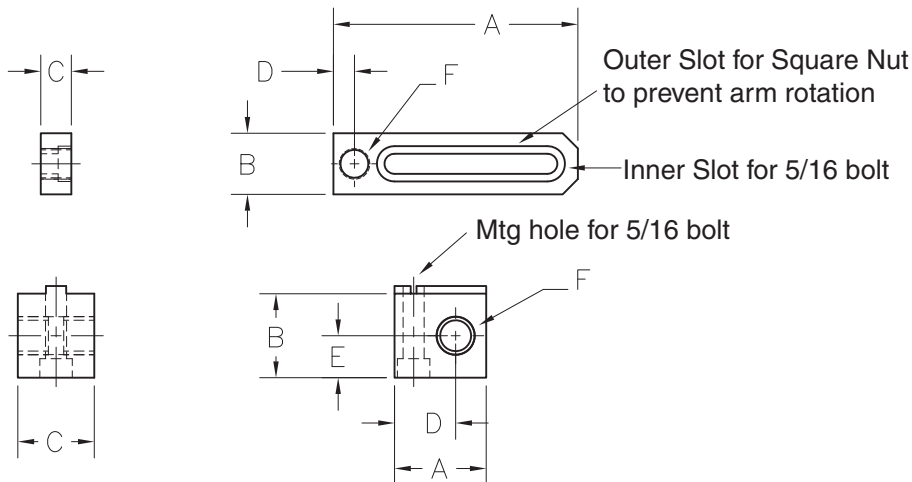
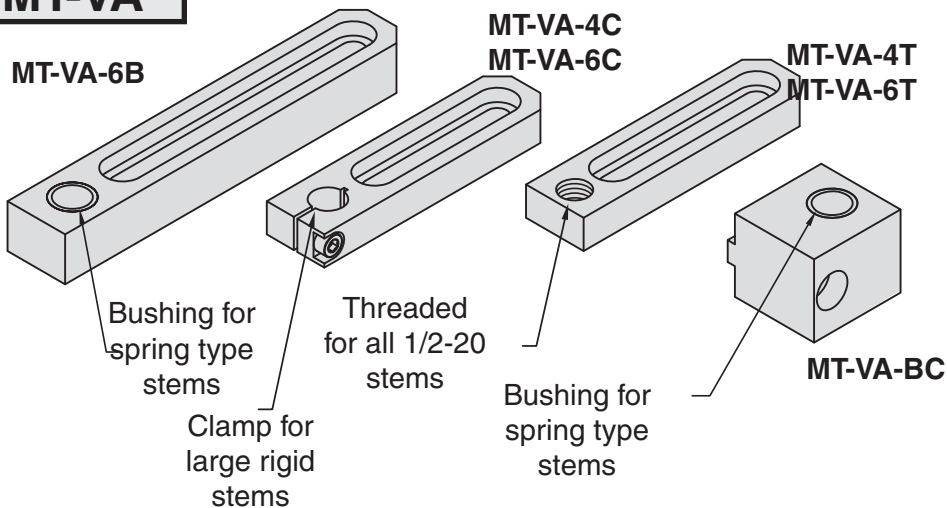


Fittings accept  $\text{\O}1/4$  tubing

PART NO	A	B	C	D	SPRING	USE WITH VACUUM CUPS
MT-ST-F	2.62	1.50	--	$\text{\O}0.50$	NO	VF-20, VF-30, VB-20, VB-30
MT-ST-G	2.87	1.50	--	$\text{\O}0.50$	NO	VF-50, VB-50
MT-ST-H	1.88	1.50	--	$\text{\O}0.50$	NO	VF-50, VB-50
MT-ST-I	3.25	2.13	1.00	$\text{\O}0.50$	YES	VF-20, VF-30, VB-20, VB-30
MT-ST-J	3.50	2.13	1.00	$\text{\O}0.50$	YES	VF-50, VB-50
MT-ST-K	2.56	1.88	1.00	$\text{\O}0.50$	YES	VF-50, VB-50



**MT-VA**



MODULAR TOOLING

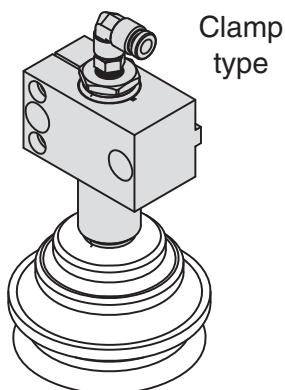
Requires Square Nut **SMN-56**

PART NO	A	B	C	D	E	F
MT-VA-4T	4.00	1.00	.50	.34	--	1/2-20 THD.
MT-VA-6T	6.00	1.00	.50	.34	--	1/2-20 THD
MT-VA-4C	4.00	1.00	.50	.56	--	Ø.50 CLAMP
MT-VA-6C	6.00	1.00	.50	.56	--	Ø.50 CLAMP
MT-VA-6B	6.00	1.00	.50	.62	--	Ø.50 BUSHING
MT-VA-BC	1.50	1.38	1.25	1.00	.69	Ø.50 BUSHING

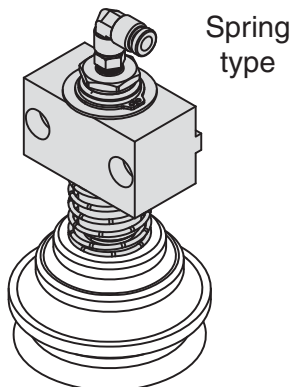
Material - Aluminum  
Finish - Clear Anodize

**MT-STL-CL**

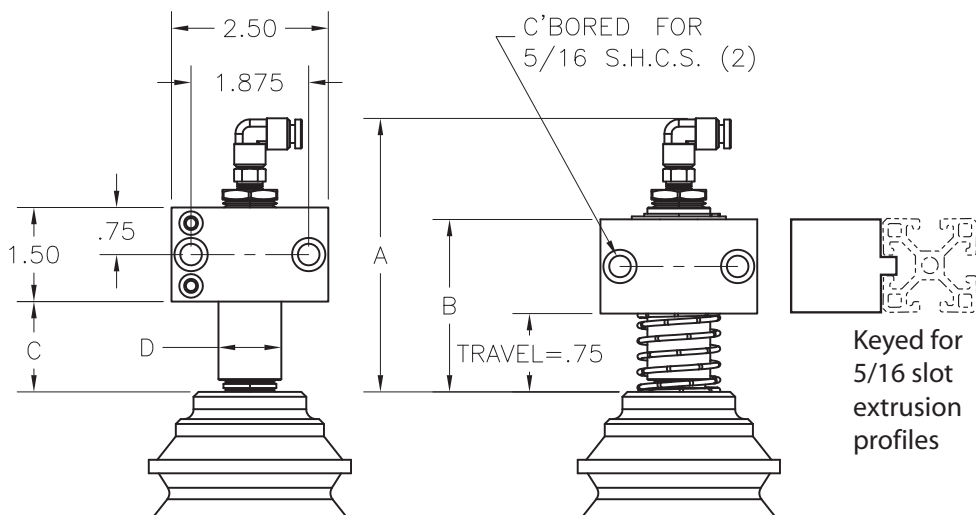
**MT-STL-SP**



**MT-STL-CL**



**MT-STL-SP**



Fittings Accept Ø1/4 Tubing

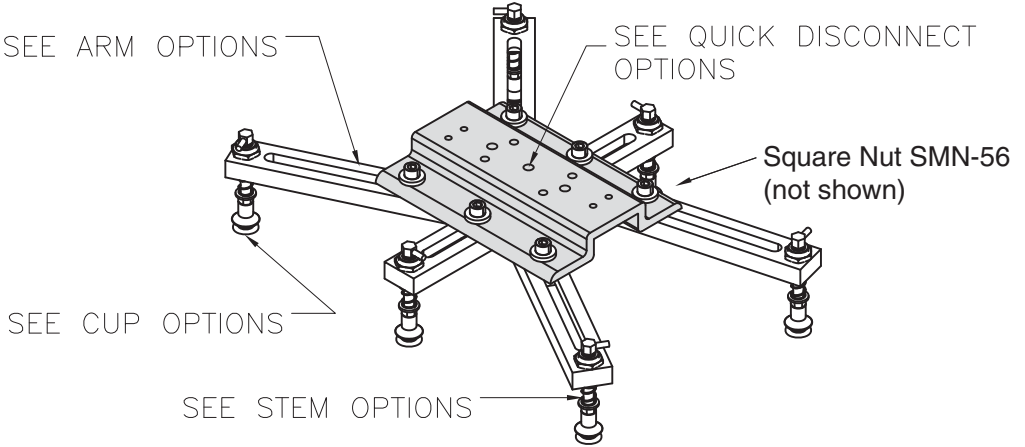
PART NO	A	B	C	D	SPRING	USE WITH VACUUM CUPS
MT-STL-CL	4.36	2.94	1.44	Ø1.00	NO	VB-75, VB-150 VF-75, VF-150
MT-STL-SP	4.36	2.75	--	Ø1.00	YES	VB-75, VB-150 VF-75, VF-150

Note: Vacuum cups sold separately

# Small Vacuum Assembly Plate



## MT-SAS



MODULAR TOOLING

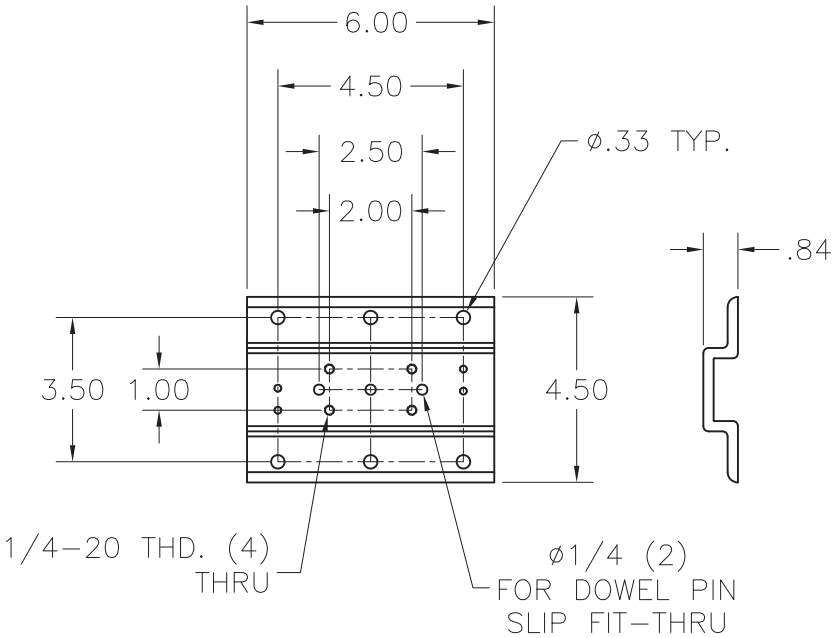
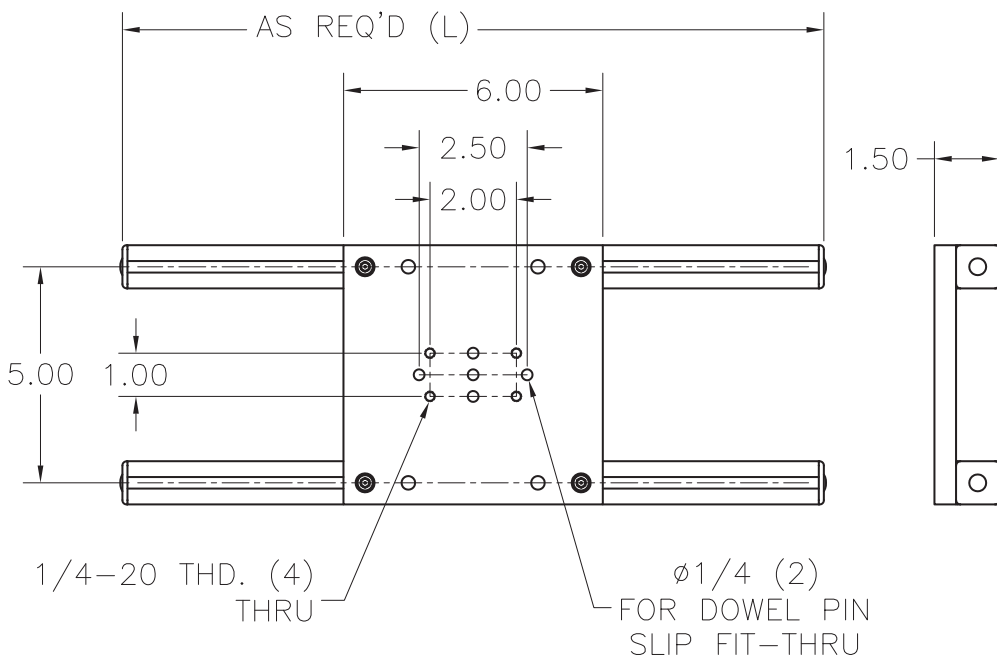
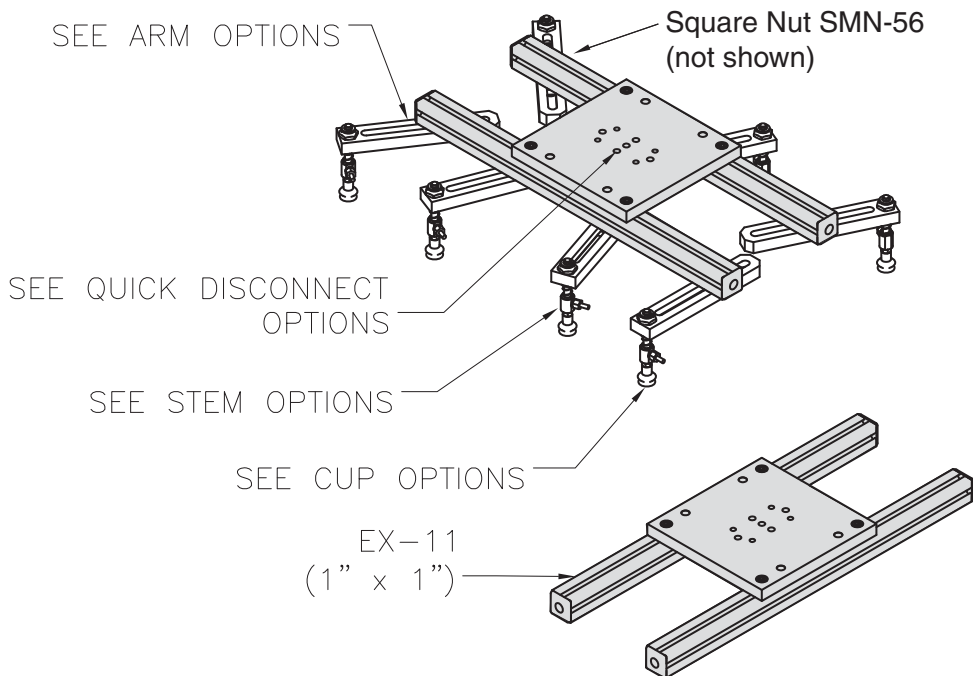


Plate Material - Aluminum  
Finish - Clear Anodize

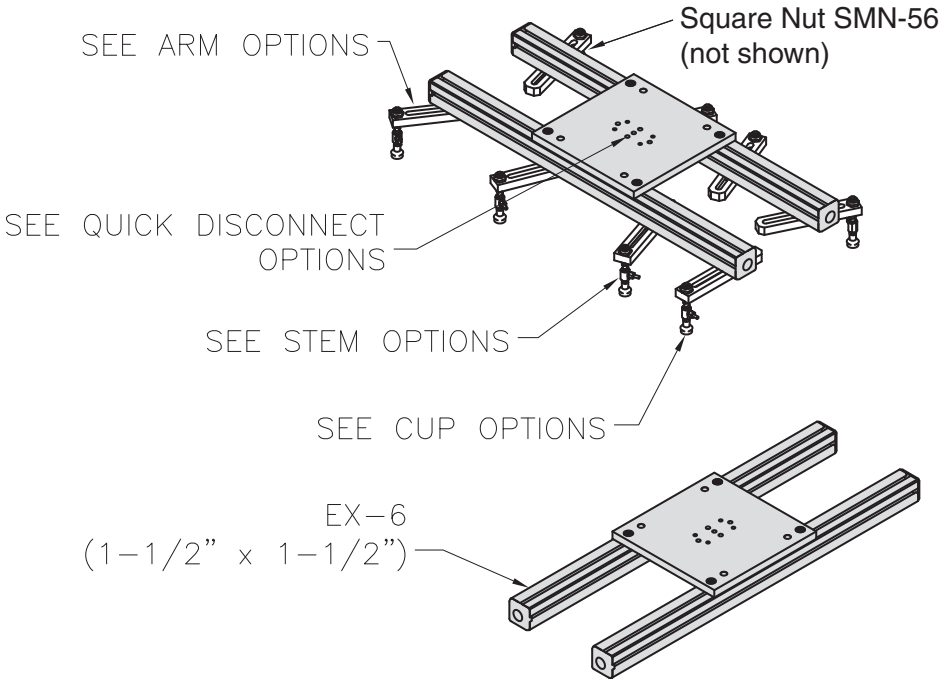


**Plate Material - Aluminum**  
**Finish - Clear Anodize**

# Large Vacuum Assembly Plate



## MT-LAS



MODULAR TOOLING

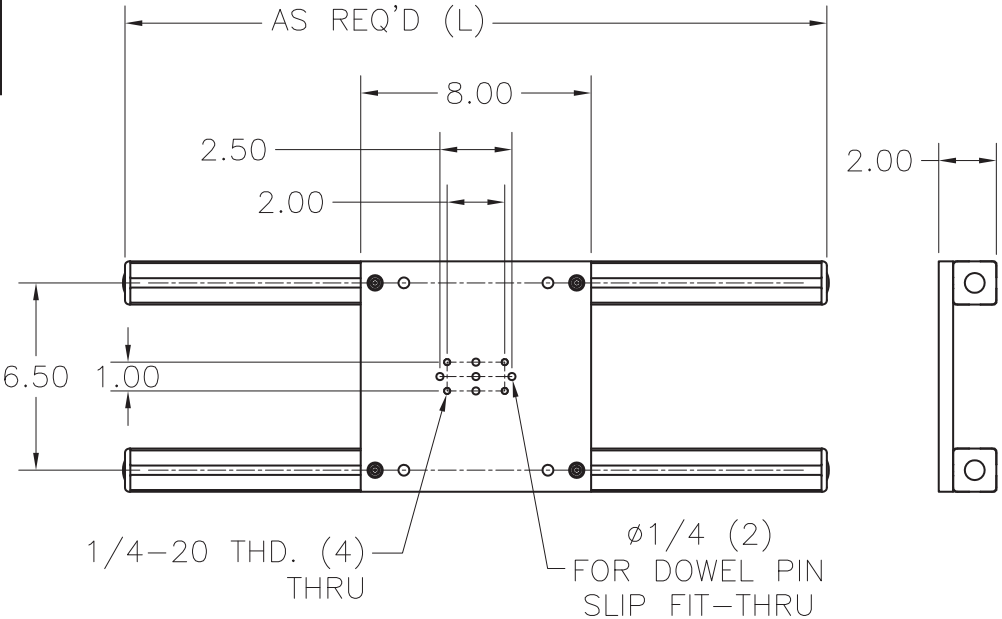
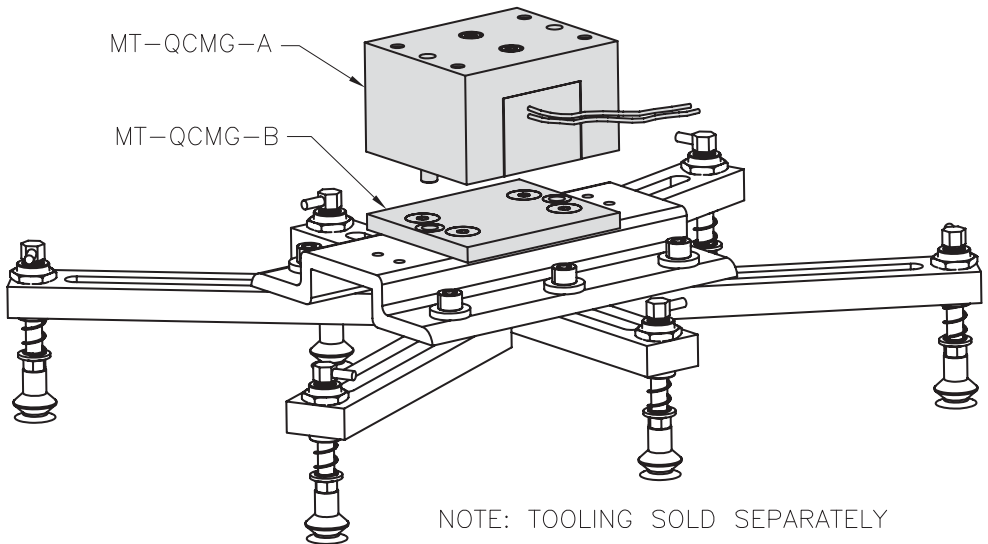
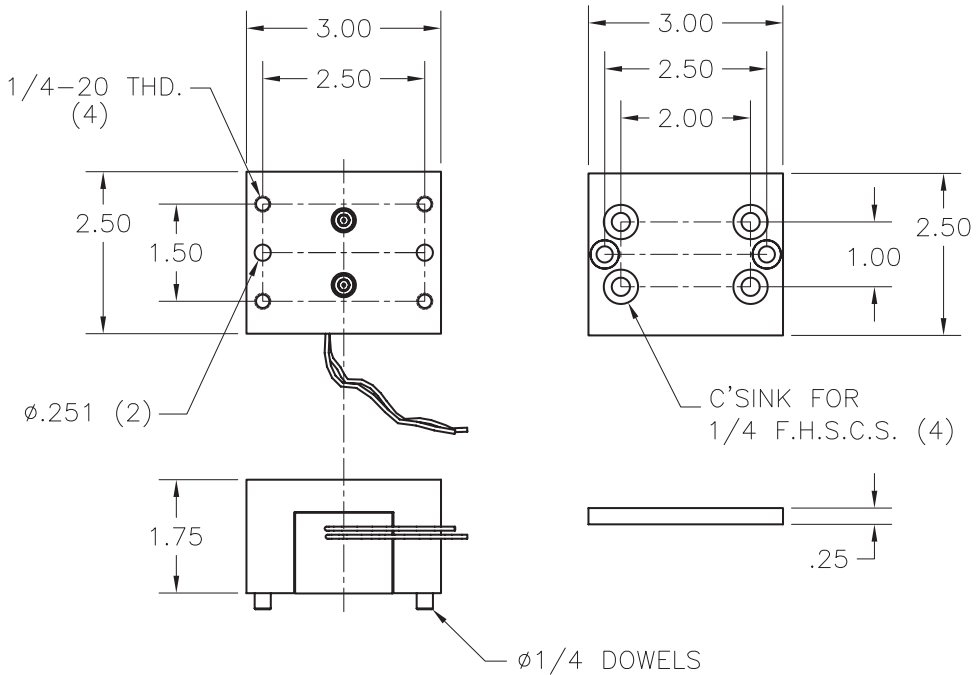


Plate Material - Aluminum  
Finish - Clear Anodize

**MT-QCMG-A**  
**MT-QCMG-B**



NOTE: TOOLING SOLD SEPARATELY



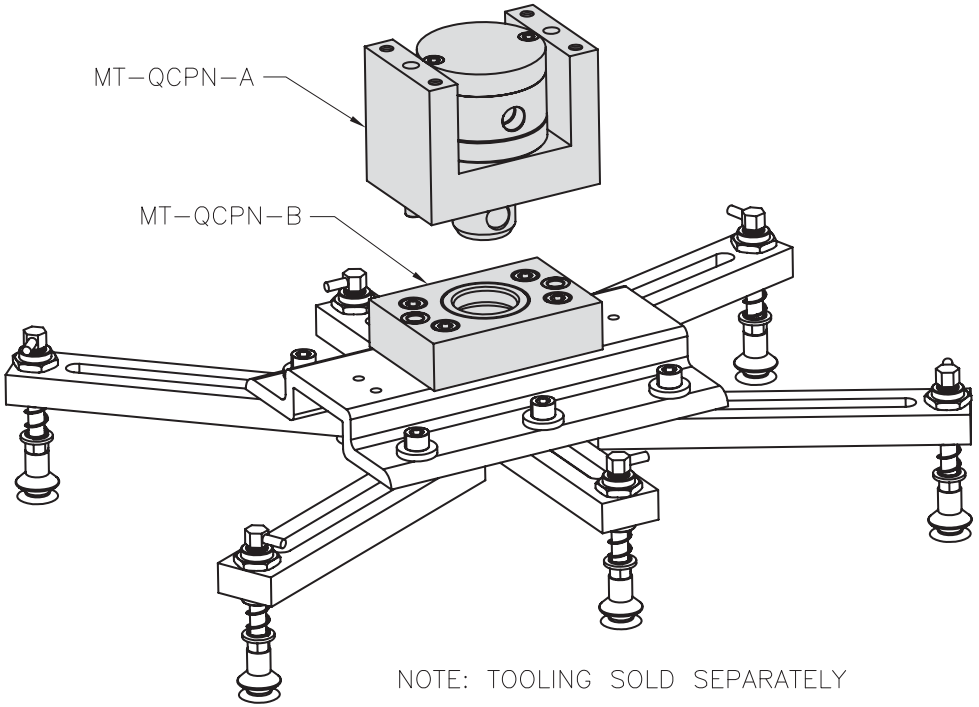
DC-POWERED ELECTROMAGNET  
REQUIRES A DC POWER SUPPLY  
10 WATTS, 12VDC  
MAX. PULL 160 lbs.

**MODULAR TOOLING**

# Pneumatic Quick Change Module

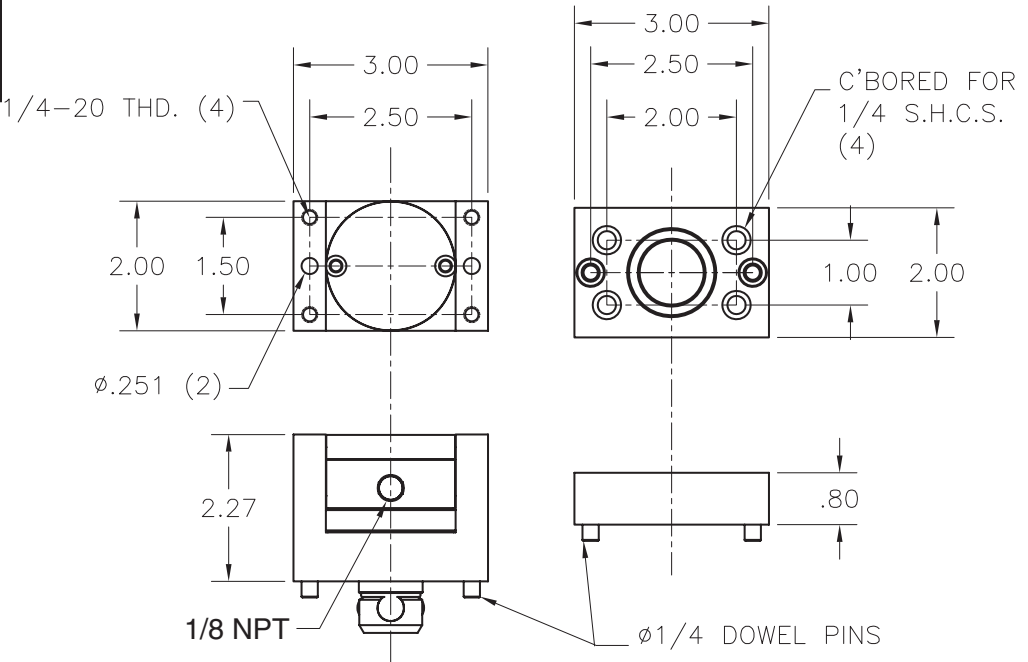


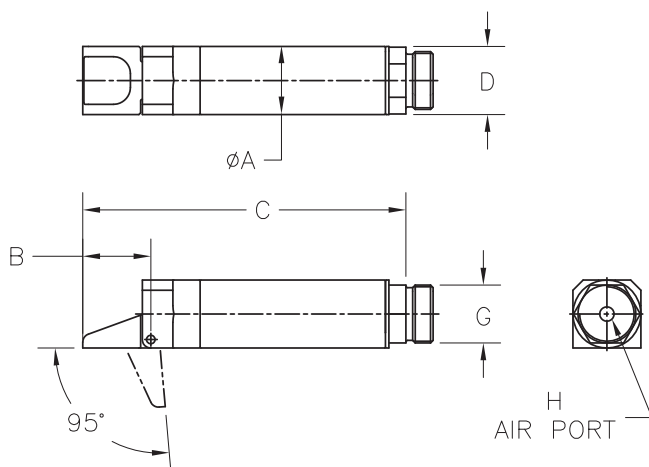
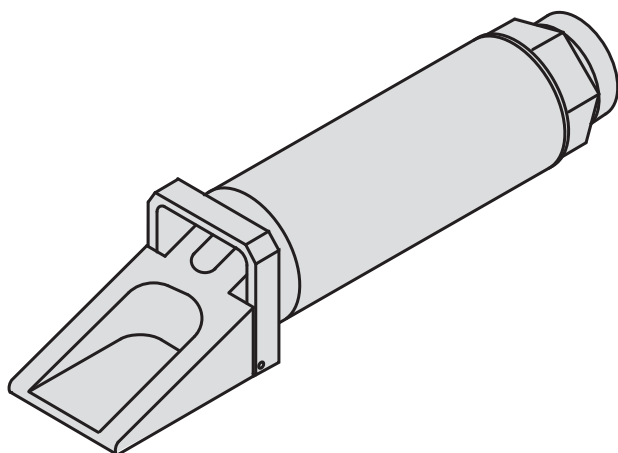
**MT-QCPN-A**  
**MT-QCPN-B**



NOTE: TOOLING SOLD SEPARATELY

MODULAR TOOLING





PART NO.	A	B	C	D	G	STROKE	H	CLOSING FORCE*
MT-MCL-1	Ø.787	.787	3.74	.787	M17 x 1	95°	M5	16 lbf

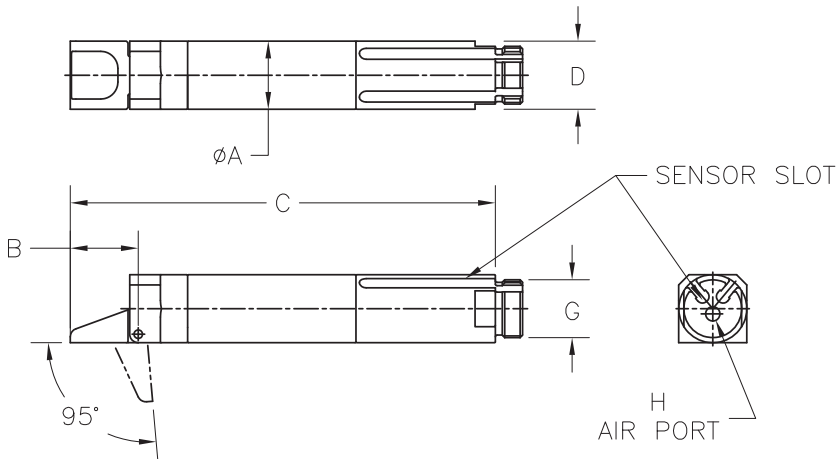
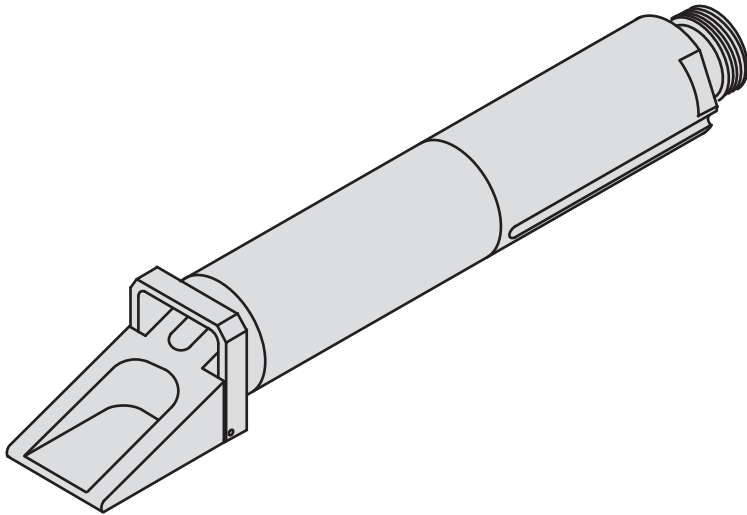
\* at 87 PSI



# 90° Mini Clamp (Sensor)



## MT-MCL-2



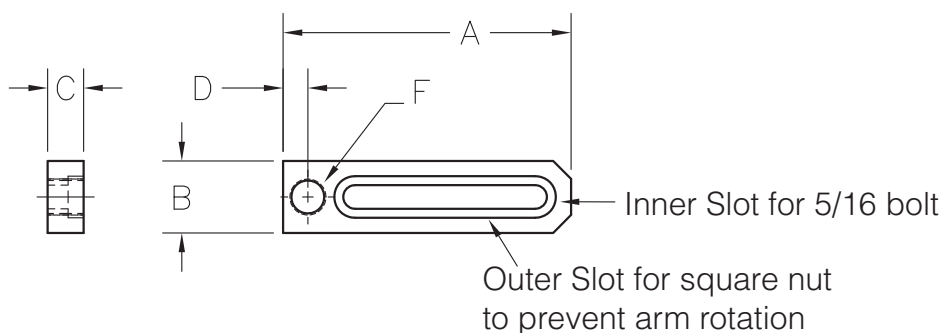
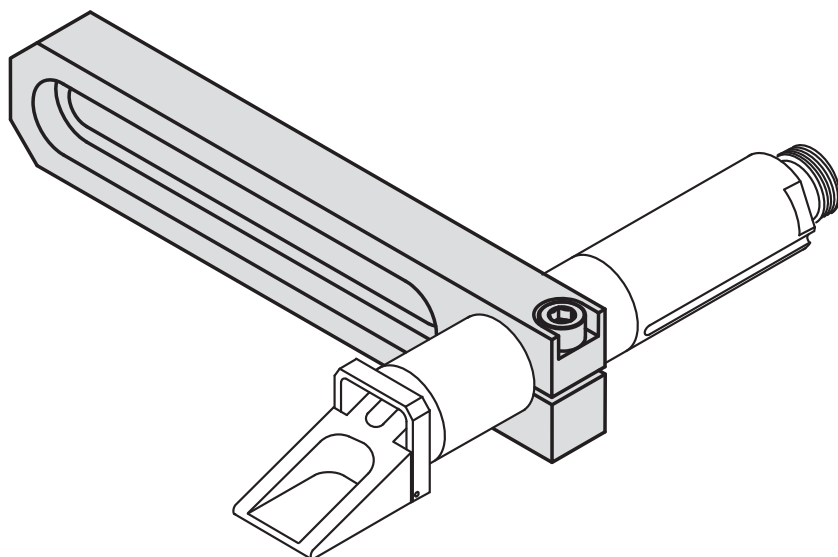
MODULAR TOOLING

PART NO.	A	B	C	D	G	STROKE	H	CLOSING FORCE*
MT-MCL-2	Ø.787	.787	4.92	.787	M17 x 1	95°	M5	16 lbf

\* at 87 PSI

Order Sensors Separately

MT-MCL-SP	PNP Sensor	3-wire, 78.74" long cable	6-24 vdc
MT-MCL-SN	NPN Sensor	3-wire, 78.74" long cable	6-24 vdc



PART NO	A	B	C	D	E	F
<b>MT-MCA- 4C</b>	4.00	1.00	.50	.56	--	Ø.75 CLAMP
<b>MT-MCA-6C</b>	6.00	1.00	.50	.56	--	Ø.75 CLAMP

Requires Square Nut **SMN-56**

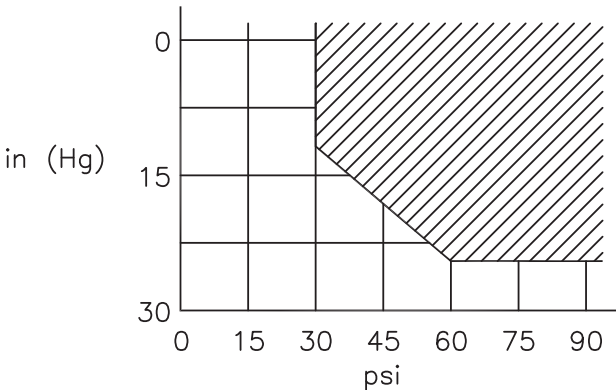
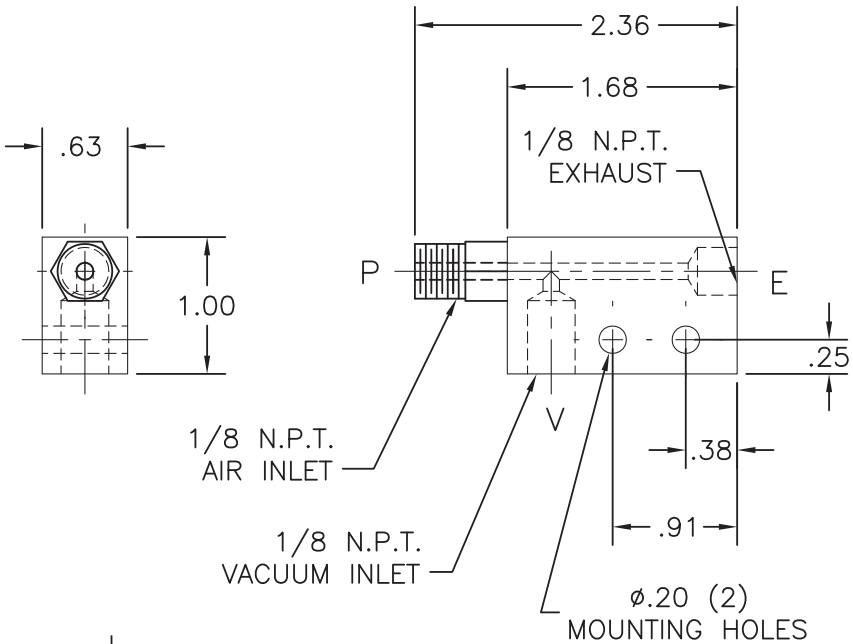
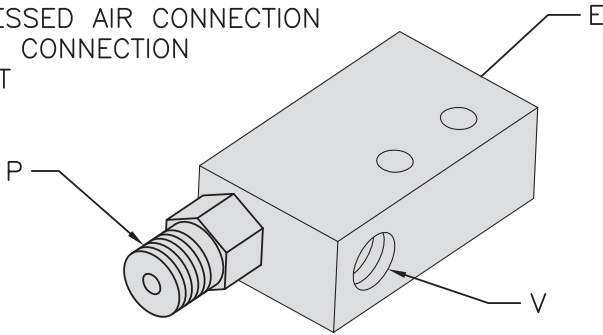
Material - Aluminum  
Finish - Clear Anodize

# Vacuum Generator



## VGEN-1

P=COMPRESSED AIR CONNECTION  
 V=VACUUM CONNECTION  
 E=EXHAUST

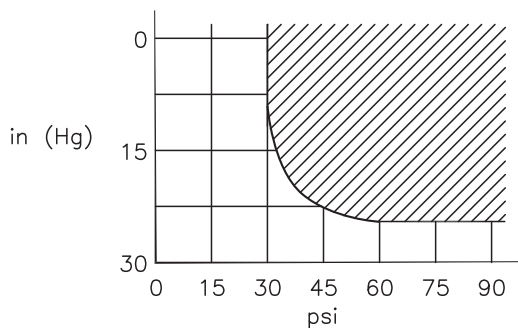
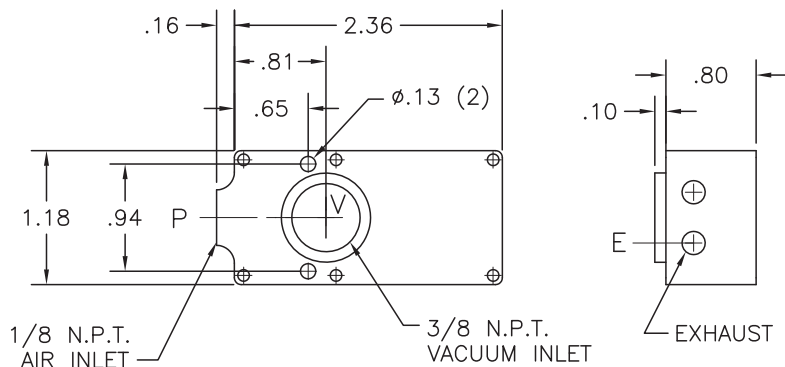
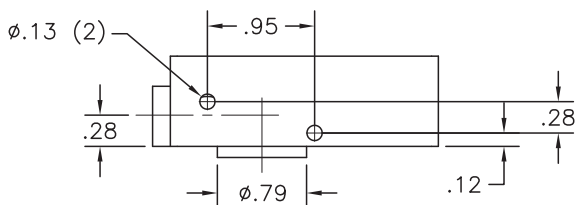
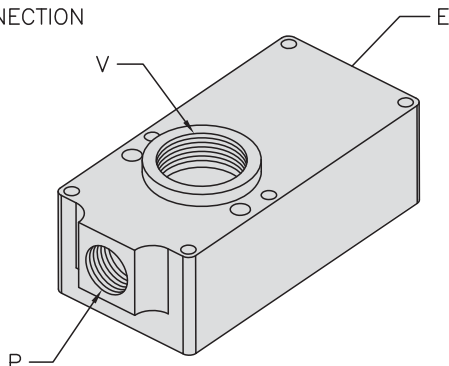


Capacity: Approx 4 in<sup>2</sup>

GRAPH OF SUPPLY PRESSURE vs. VACUUM PRODUCED

MODULAR TOOLING

P=COMPRESSED AIR CONNECTION  
V=VACUUM CONNECTION  
E=EXHUAST



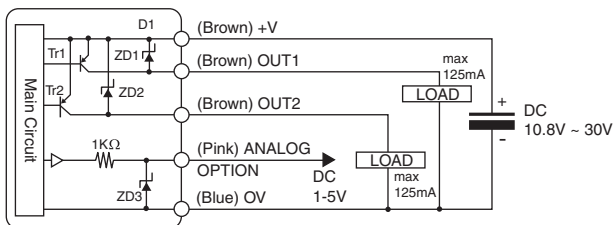
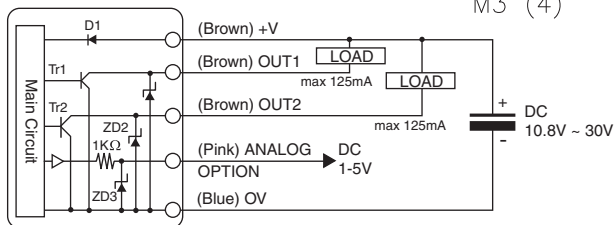
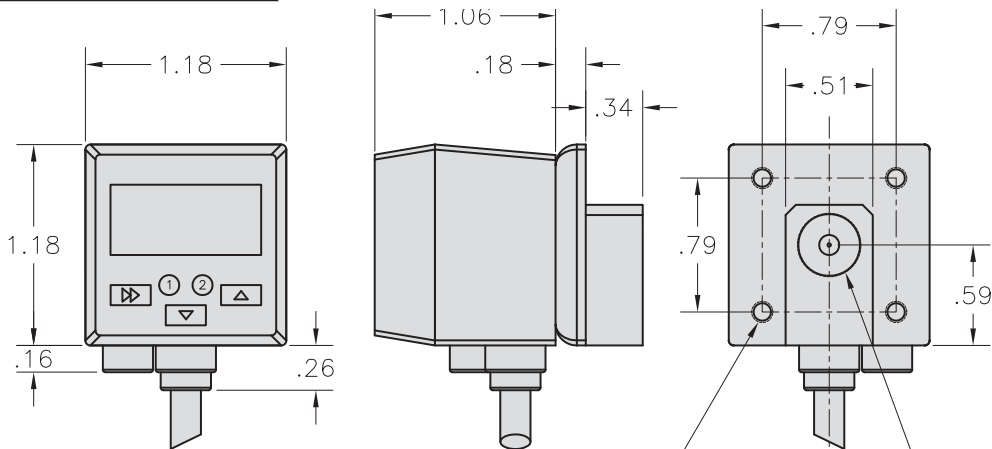
Capacity: Approx 10 in<sup>2</sup>

GRAPH OF SUPPLY PRESSURE vs. VACUUM PRODUCED

# Vacuum Switch

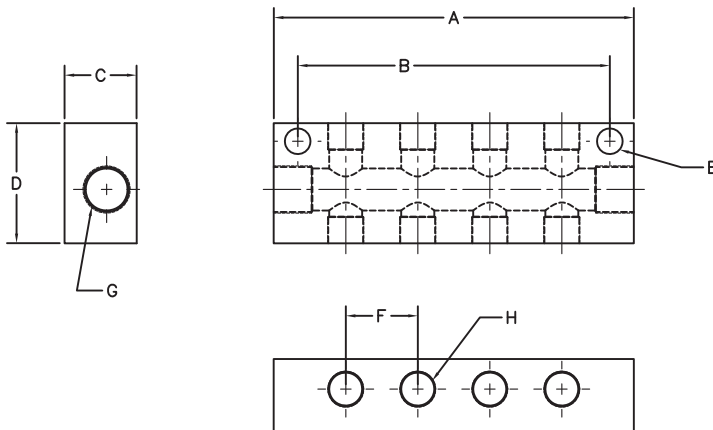
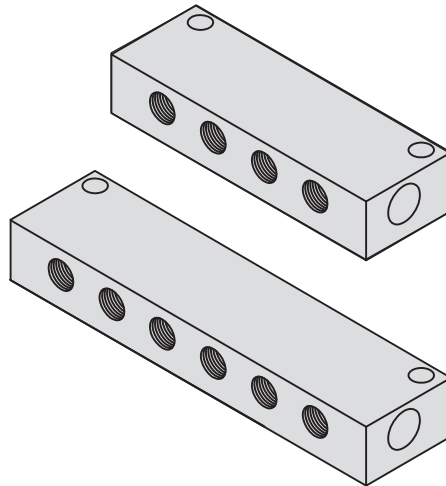


## VSW-1



MODULAR TOOLING

SPECIFICATIONS	
APPLICABLE FLUID	NON-CORROSIVE GASES
PRESSURE RANGE	0.0 ~ - 101.3 kPa
PRESSURE PROOF FORCE	500 kPa
MATERIAL OF PRESSURE PORT	Zn DIE CASTING
POWER SUPPLY VOLTAGE	12~24 VDC ± 10%, RIPPLE (P-P) 10% or LESS
POWER CONSUMPTION	55 mA or LESS
OUTPUT	NPN or PNP OPEN COLLECTOR 2 OUTPUTS, MAX 80 mA
RESPONSE TIME	≤2.5 ms (CHATTERING-PROOF FUNCTION: 24ms, 192ms AND 768 ms SELECTIONS)
PROTECTION STRUCTURE	IP 40
OPERATING AMBIENT TEMPERATURE (°C)	OPERATION: 0~50°C , STORAGE: -20~60°C (NO CONDENSATION FREEZING)



**MODULAR TOOLING**

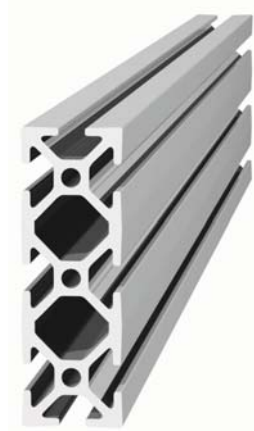
PART NO	PORTS	A	B	C	D	E	F	G	H
<b>MT-MFD-L8</b>	8	3.75	3.25	.75	1.25	Ø.27	.75	1/4 NPT (2)	1/8 NPT (8)
<b>MT-MFD-L12</b>	12	5.25	4.75	.75	1.25	Ø.27	.75	1/4 NPT (2)	1/8 NPT (12)
<b>MT-MFD-S8</b>	8	3.00	2.50	.63	1.00	Ø.20	.50	1/8 NPT (2)	10-32 THD. (8)
<b>MT-MFD-S12</b>	12	4.00	3.50	.63	1.00	Ø.20	.50	1/8 NPT (2)	10-32 THD. (8)



**EX-11**  
1" x 1"



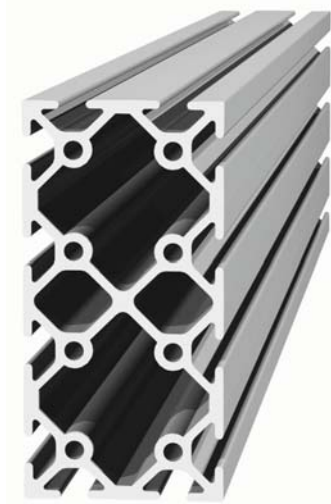
**EX-12**  
1" x 2"



**EX-13**  
1" x 3"



**EX-22**  
2" x 2"



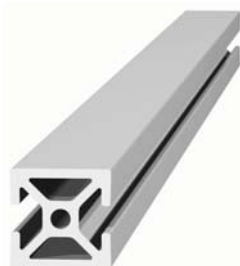
**EX-24**  
2" x 4"

1/4" SLOTS

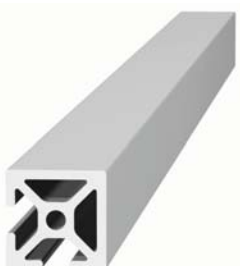
**SMOOTH-Series**



**EX-70**  
1" x 1"



**EX-71**  
1" x 1"



**EX-72**  
1" x 1"



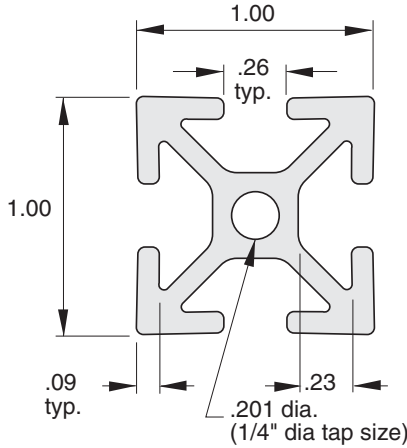
**EX-73**  
1" x 1"



**EX-14**  
1" x 1"



**EX-11**



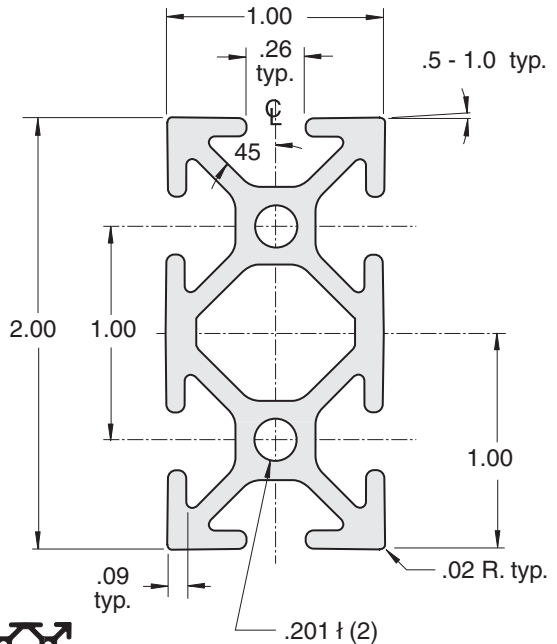
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .530 lbs.
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	.049
Section modulus in <sup>3</sup>	.097

**EX-12**

- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .807 Sq. In.
- Weight/ft = .949 lbs.
- 96", 192.63" Lengths standard.

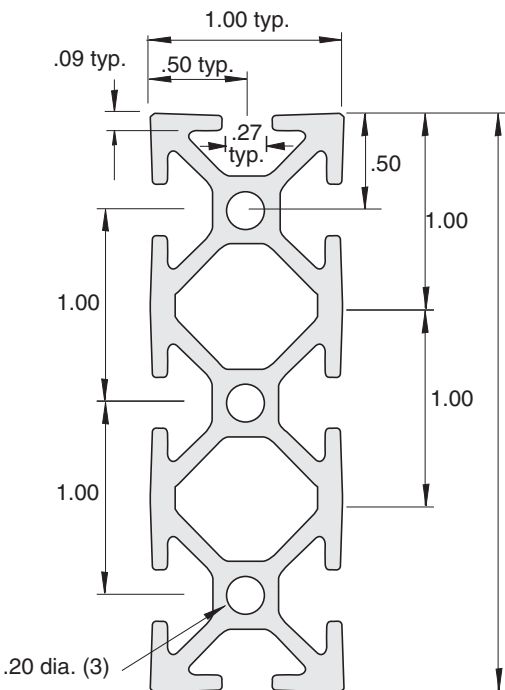


**Section Properties:**

Moment of Intertia in <sup>4</sup>	.316	.088
Section modulus in <sup>3</sup>	.316	.176

1/4" SLOTS

### EX-13



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.162 Sq. In.
- Weight/ft = 1.367 lbs.
- 96", 192.63" Lengths standard.

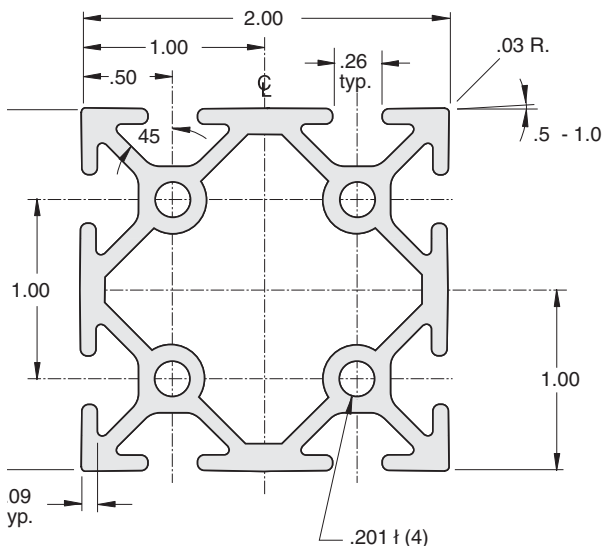
**Section Properties:**

Moment of Inertia in <sup>4</sup>	1.376	0.387
Section modulus in <sup>3</sup>	0.917	0.516



### EX-22

- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = 1.468 lbs.
- 96", 192.63" Lengths standard.

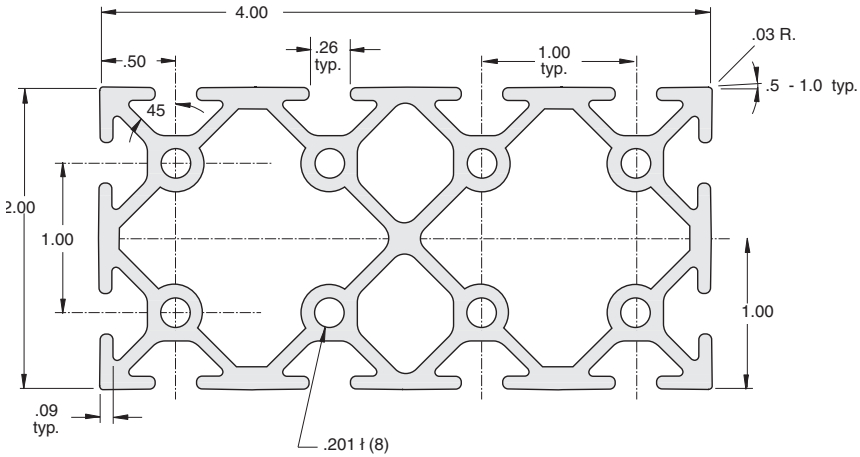


**1/4" SLOTS**

**Section Properties:**

Moment of Inertia in <sup>4</sup>	.49
Section modulus in <sup>3</sup>	.097

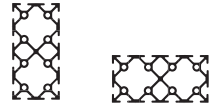
**EX-24**



- Finish = Clear anodized
- Material = 6063-T6HT Aluminum
- Est. Area = 2.352 Sq. In.
- Weight/ft = 2.766 lbs.
- 96", 192.63" Lengths standard.

**Section Properties:**

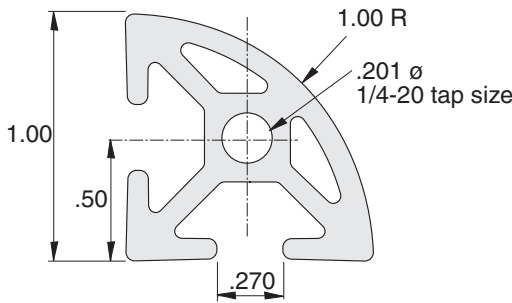
Moment of Intertia in <sup>4</sup>	3.634	1.078
Section modulus in <sup>3</sup>	1.817	1.078



**EX-14**

**SMOOTH-Series**

1/4" SLOTS



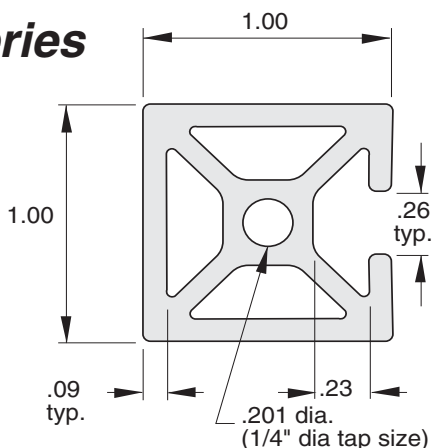
- Finish = Clear anodized
- Material = 6105-T6 Aluminum
- Est. Area = .438 Sq. In.
- Weight/ft = .515 lbs.
- 96", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	.0368
Section modulus in <sup>3</sup>	.0675

### SMOOTH-Series

**EX-70**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .576 lbs.
- 96", 192.63" Lengths standard.

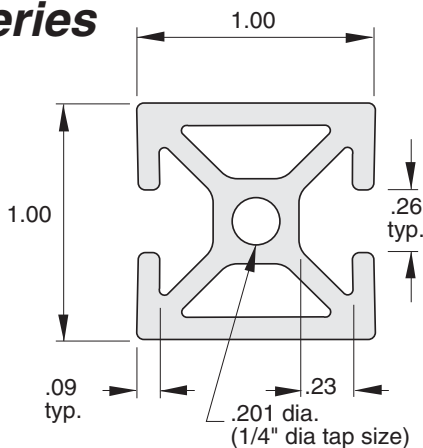
#### Section Properties:

Moment of Inertia in <sup>4</sup>	.057	.052
Section modulus in <sup>3</sup>	.114	.099



### SMOOTH-Series

**EX-71**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .550 lbs.
- 96", 192.63" Lengths standard.

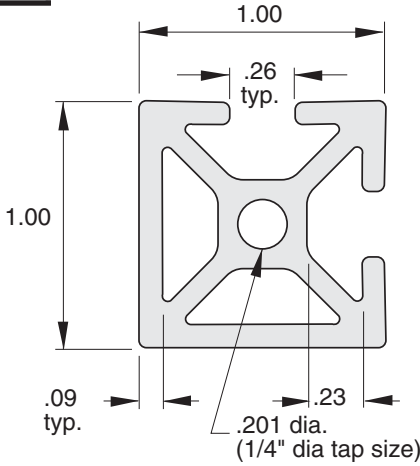
#### Section Properties:

Moment of Inertia in <sup>4</sup>	.057	.046
Section modulus in <sup>3</sup>	.114	.093



**EX-72**

**SMOOTH-Series**



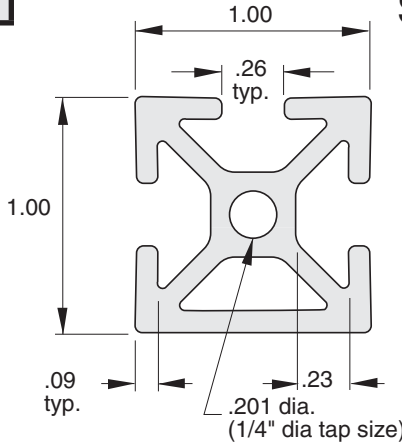
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .546 lbs.
- 96", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	.051
Section modulus in <sup>3</sup>	.098

**EX-73**

**SMOOTH-Series**



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .523 lbs.
- 96", 192.63" Lengths standard.

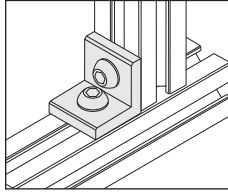
**Section Properties:**

Moment of Intertia in <sup>4</sup>	.051	.046
Section modulus in <sup>3</sup>	.099	.092

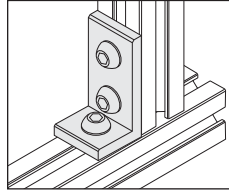


1/4" SLOTS

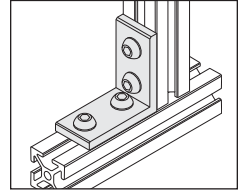
## Section F.1 Corner Angle Brackets



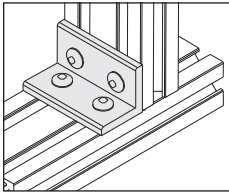
page 350



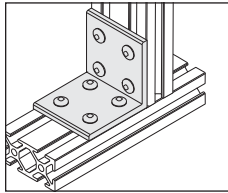
page 351



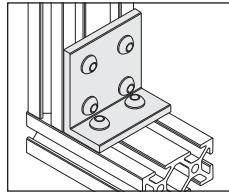
page 352



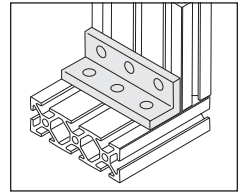
page 353



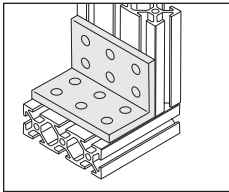
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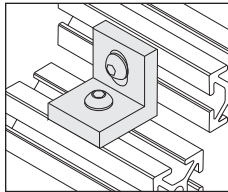
page 355



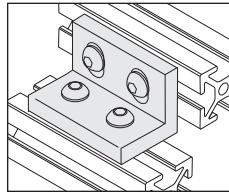
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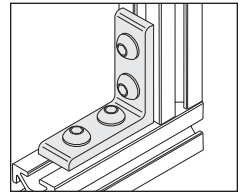
page 357



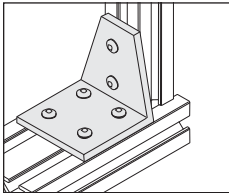
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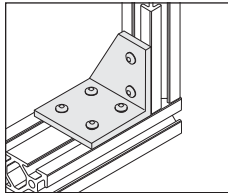
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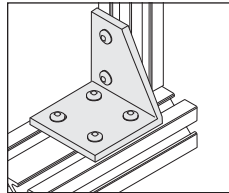
page 360



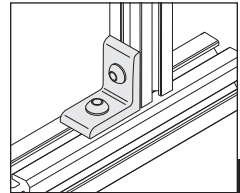
page 361



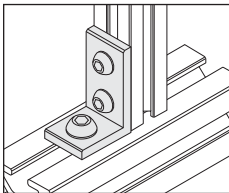
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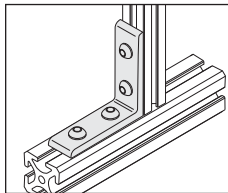
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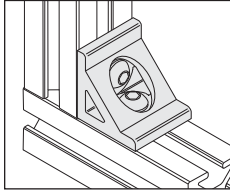
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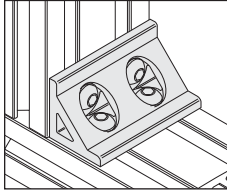
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## Section F.2

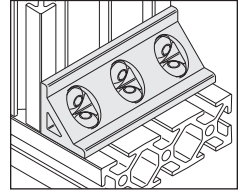
### Gusseted Corner Angle Brackets



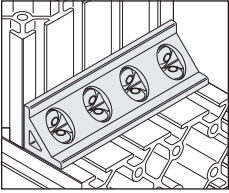
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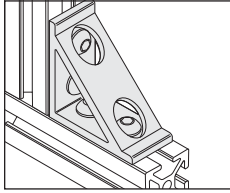
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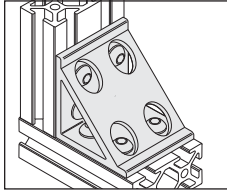
page 369



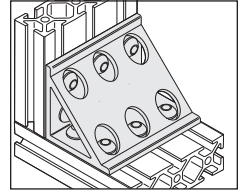
page 370



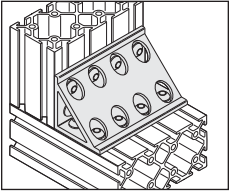
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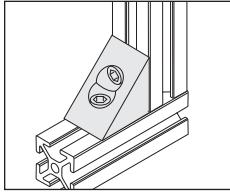
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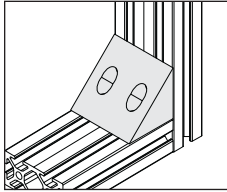
page 373



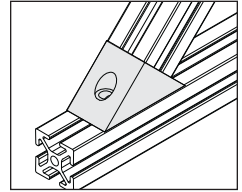
page 374



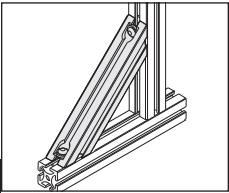
page 375



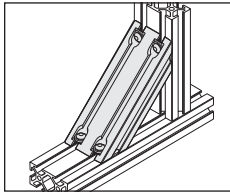
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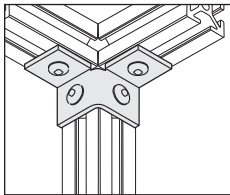
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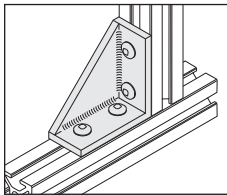
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## Section F.3

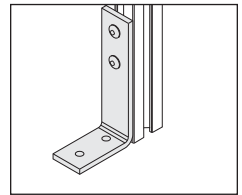
### Steel Corner Angle Brackets



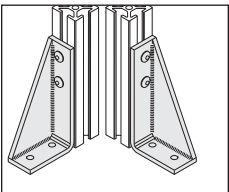
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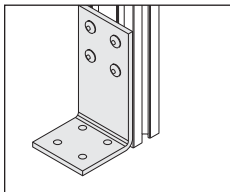
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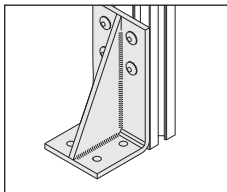
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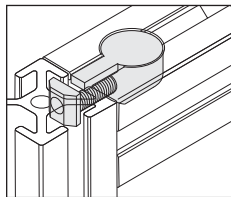
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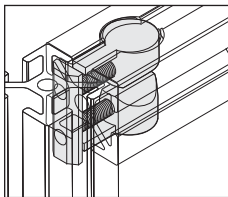
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## Section F.4

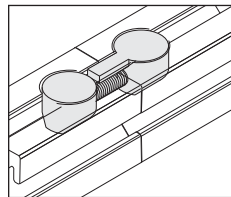
### Internal & Adjustable Corner Brackets



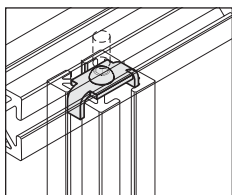
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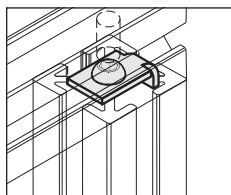
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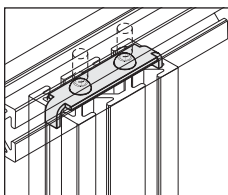
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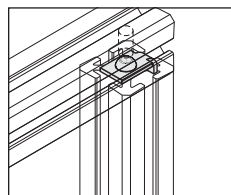
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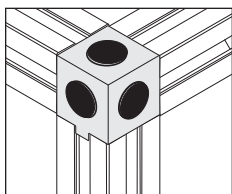
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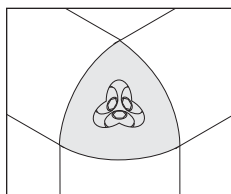
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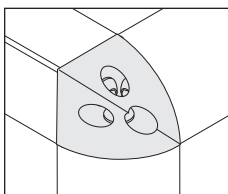
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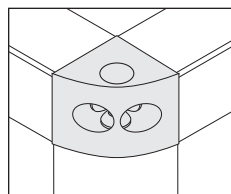
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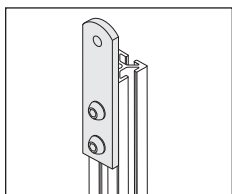
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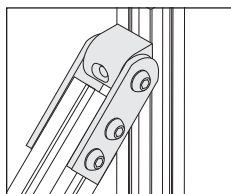
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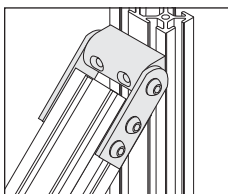
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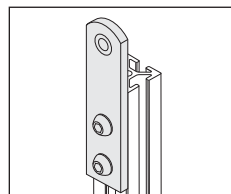
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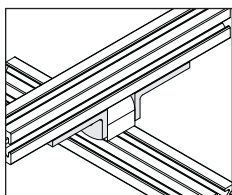
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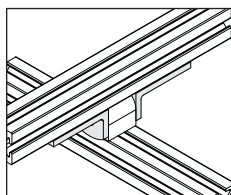
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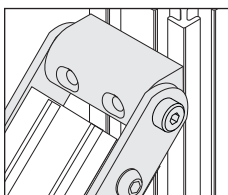
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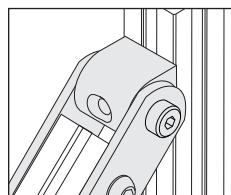
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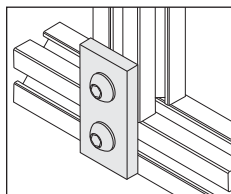
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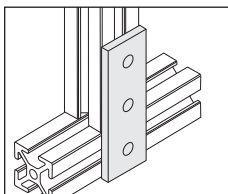
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## Section F.5

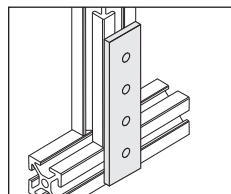
### Joining Plates



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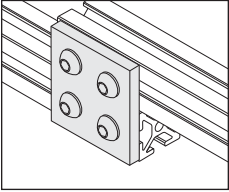
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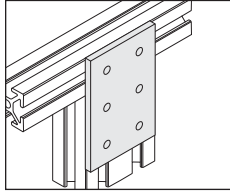
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1/4" SLOTS

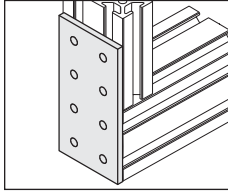




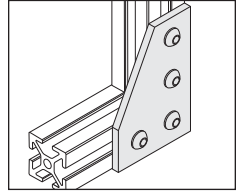
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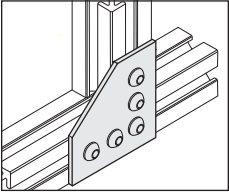
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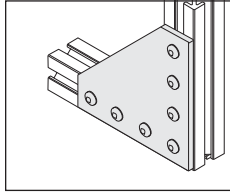
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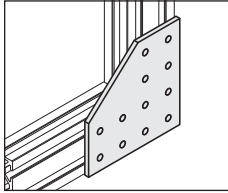
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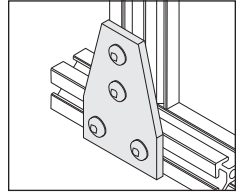
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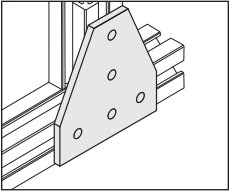
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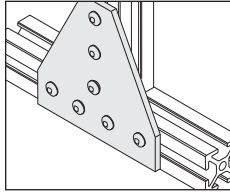
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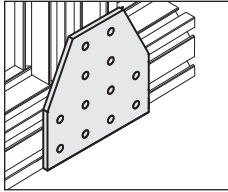
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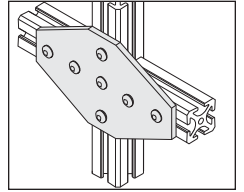
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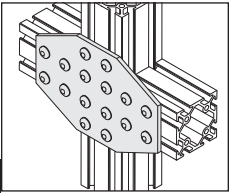
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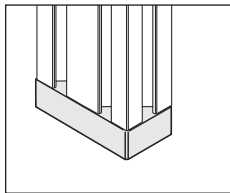


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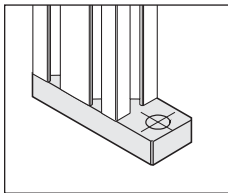


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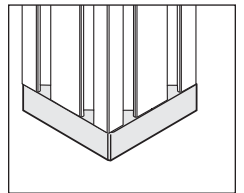
**Section F.6**  
**Floor Mounts,**  
**Casters and**  
**Adjustable**  
**Feet**



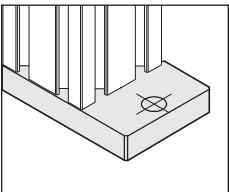
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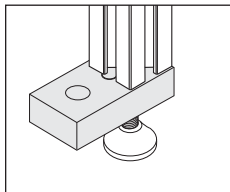
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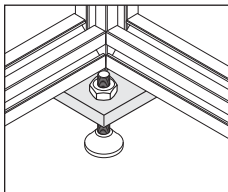
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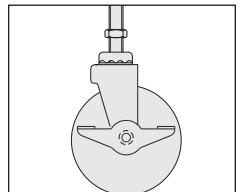
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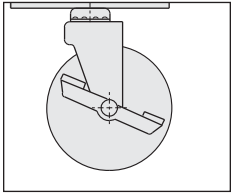


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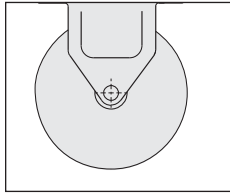


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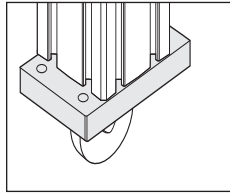
1/4" SLOTS



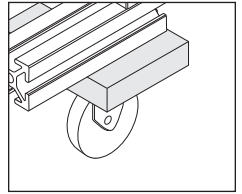
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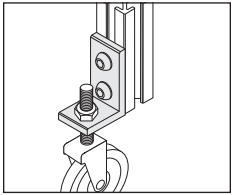
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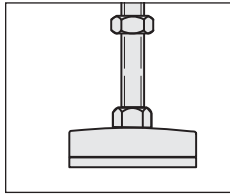
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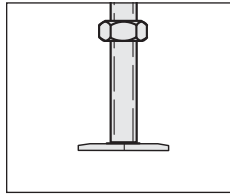
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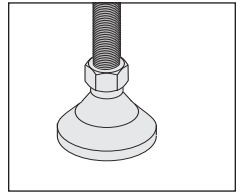
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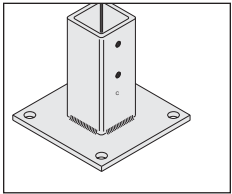
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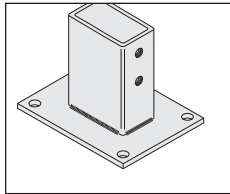
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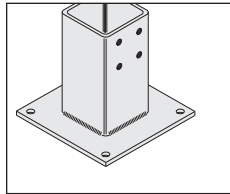
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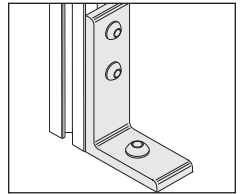
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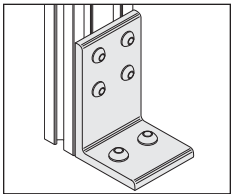
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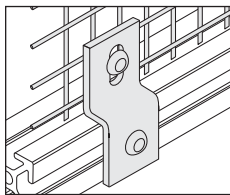


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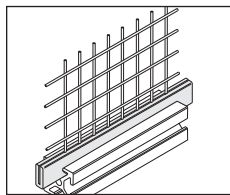


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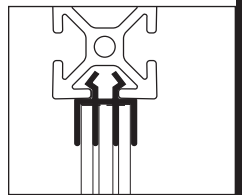
## Section F.7 Panels, Doors and Hardware



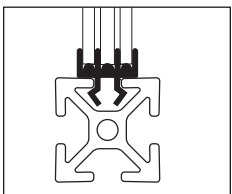
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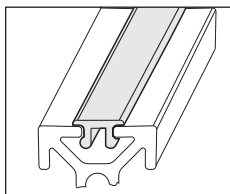
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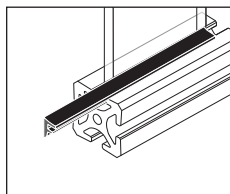
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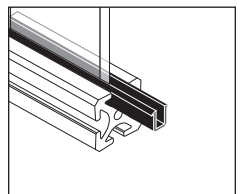
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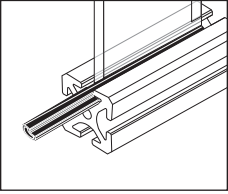


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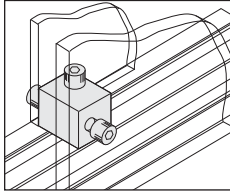


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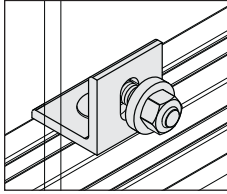
1/4" SLOTS



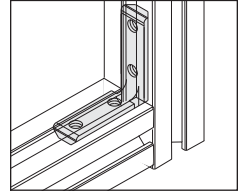
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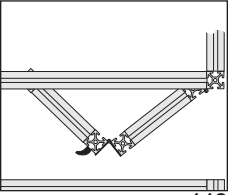
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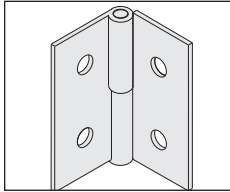
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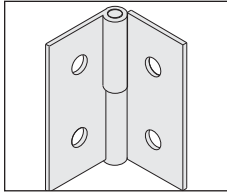
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## Section F.8

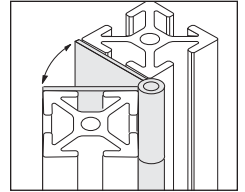
### Hinges, Handles and Latches



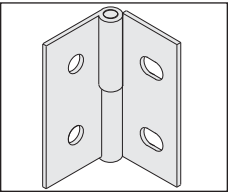
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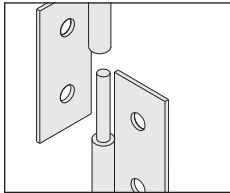
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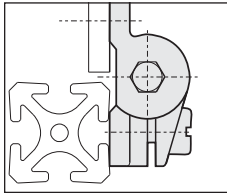
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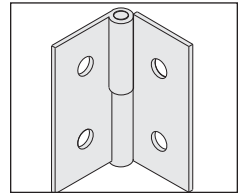
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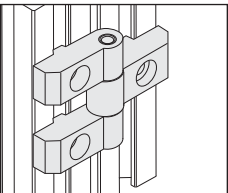


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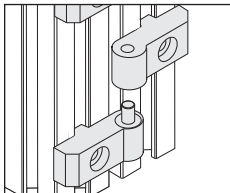


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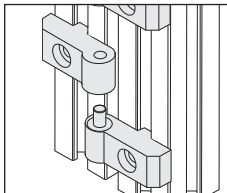
1/4" SLOTS



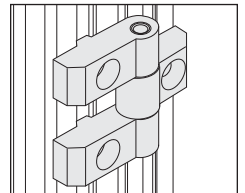
page 456



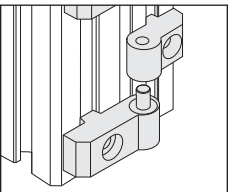
page 457



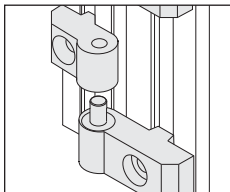
page 458



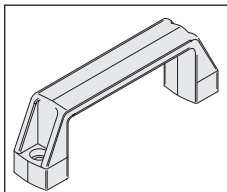
page 459



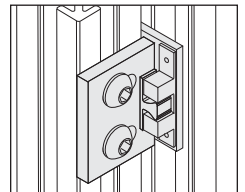
page 460



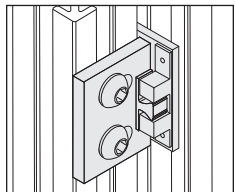
page 461



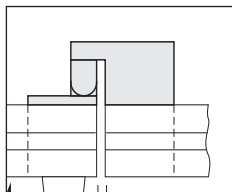
page 462



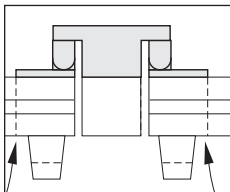
page 463



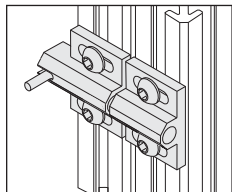
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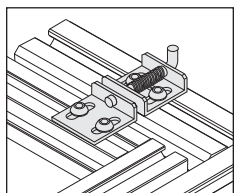
page 465



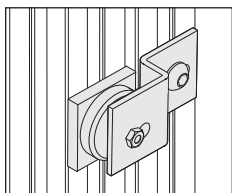
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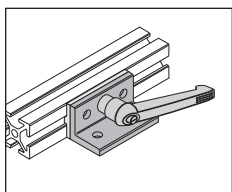
page 467



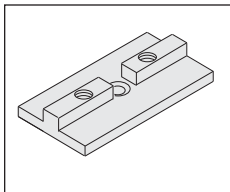
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## Section F.9

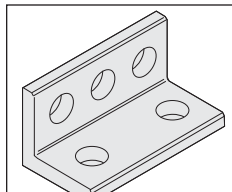
### Sliding Components and Bearings



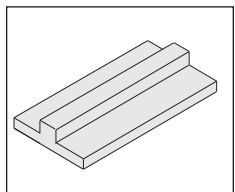
page 469



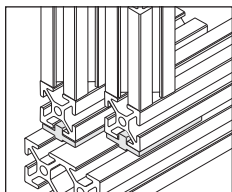
page 470



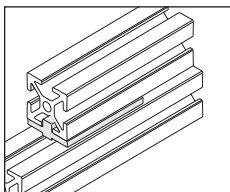
page 471



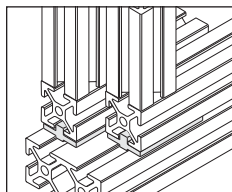
page 472



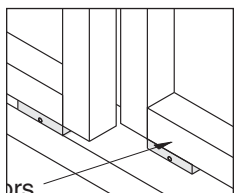
page 473



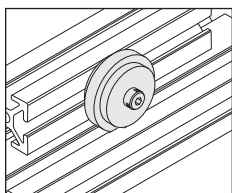
page 474



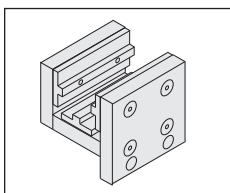
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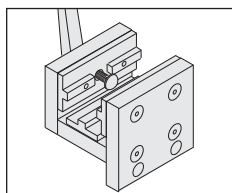
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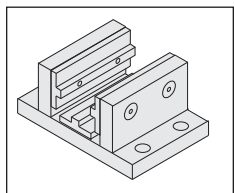
page 477



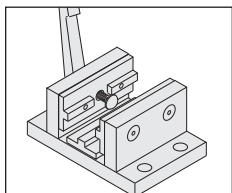
page 478



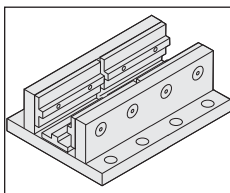
page 479



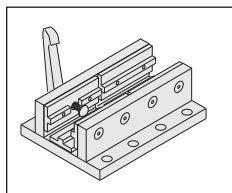
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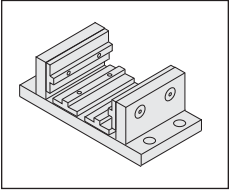


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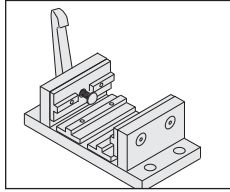


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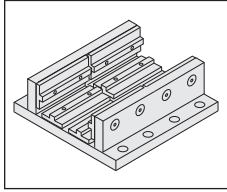
1/4" SLOTS



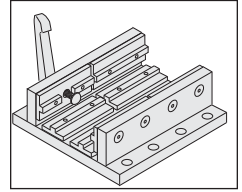
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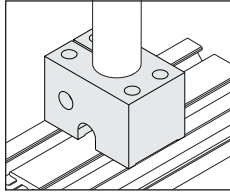


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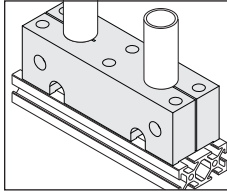


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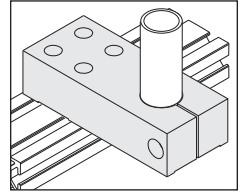
**Section E.10  
Stanchions**



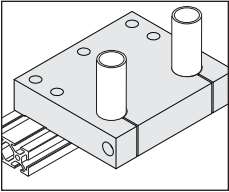
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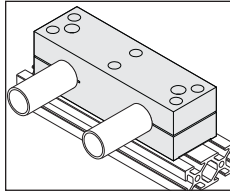
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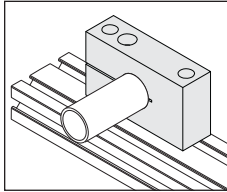
page 490



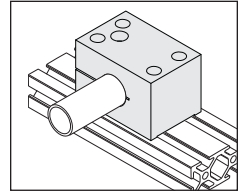
page 491



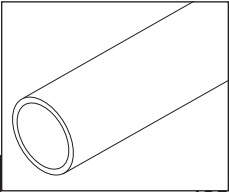
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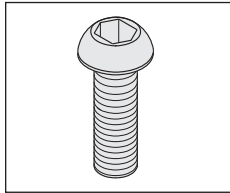
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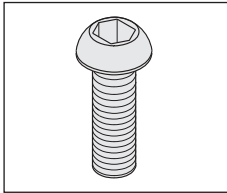
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**1/4" SLOTS**

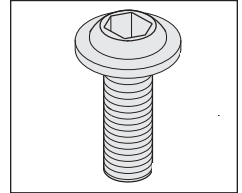
**Section E.10  
Screws, Nuts  
& Fasteners**



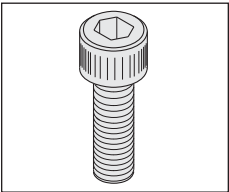
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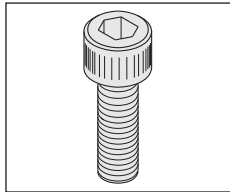
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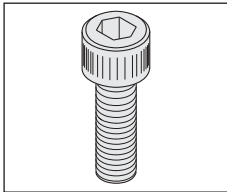
page 497



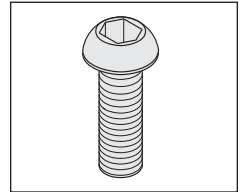
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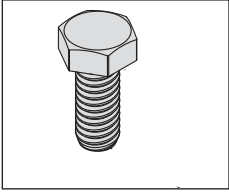
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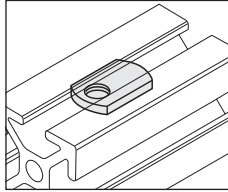
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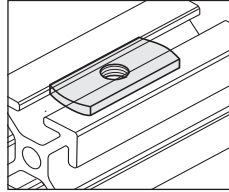
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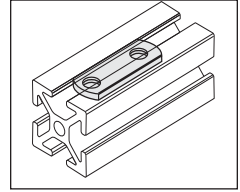
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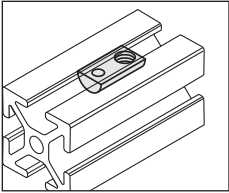
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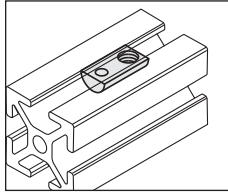
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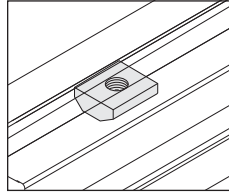
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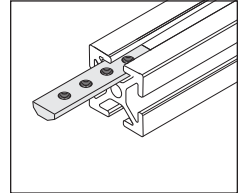
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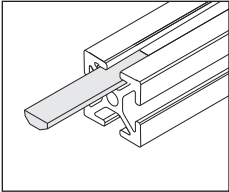
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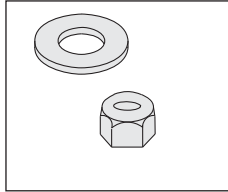
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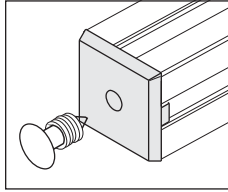


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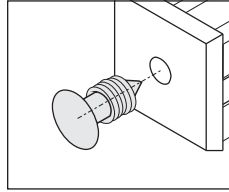


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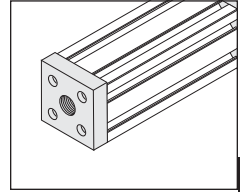
## Section E.11 Miscellaneous Components



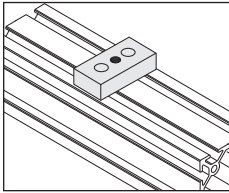
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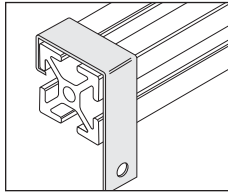
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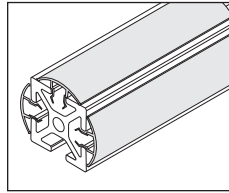
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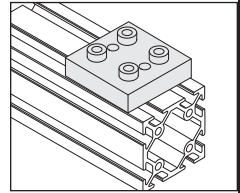
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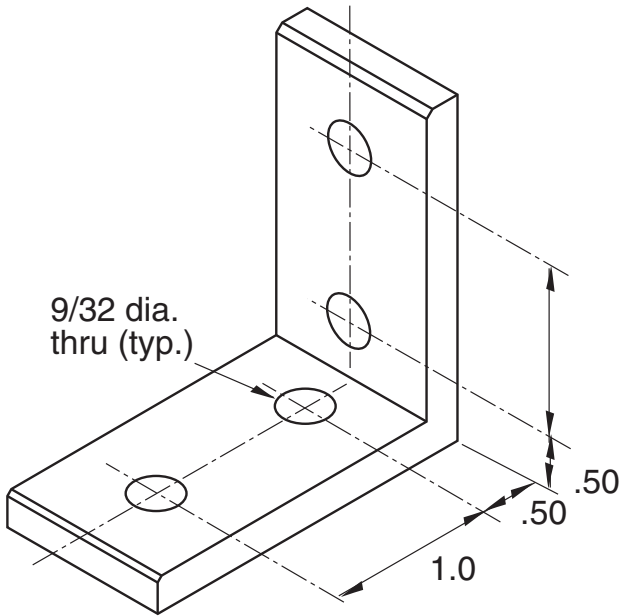


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1/4" SLOTS

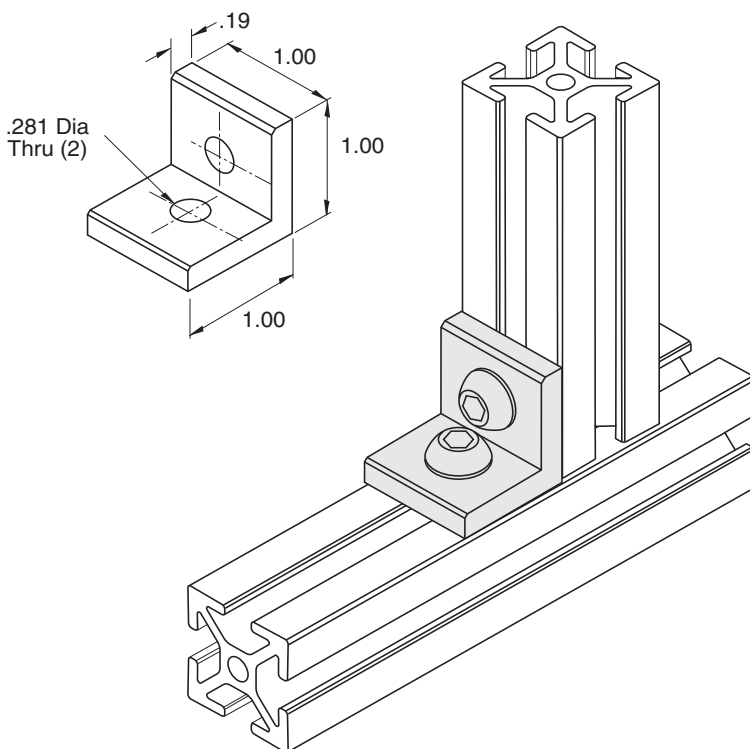


Mounting brackets and plates are made from clear anodized aluminum unless specified.

Mounting and connecting brackets have 9/32" diameter clearance holes which are on .50" or 1.00" centers.

Any deviations are specified.

**Recommended torque for fasteners is 12-17 ft lbs.**



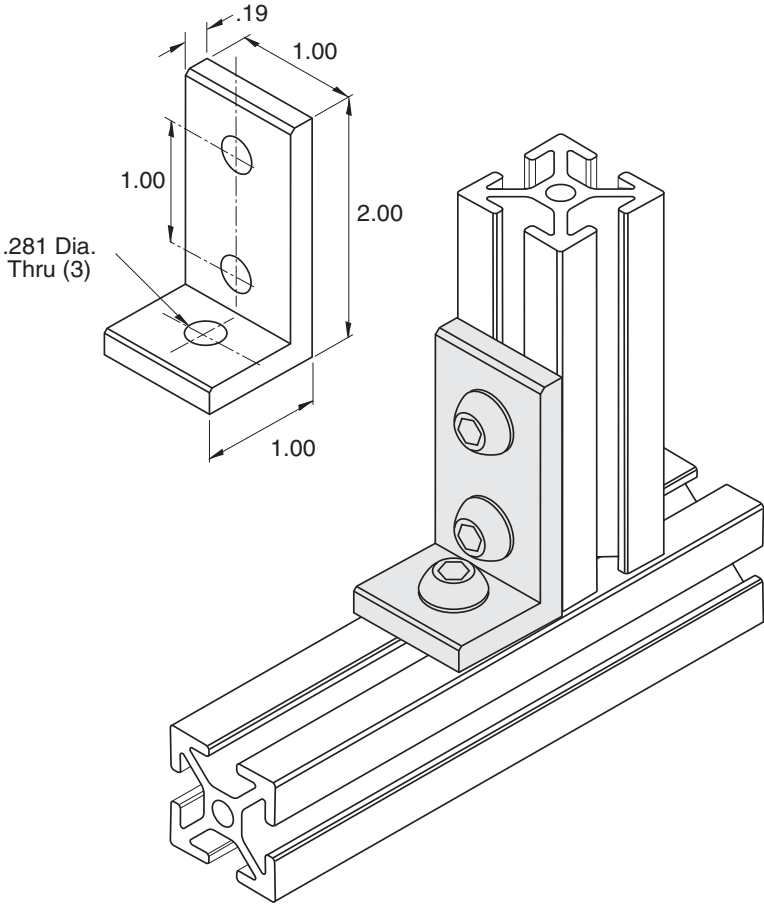
Recommended Hardware  
(2) 11-231 BHCS  
(2) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize

1/4" SLOTS



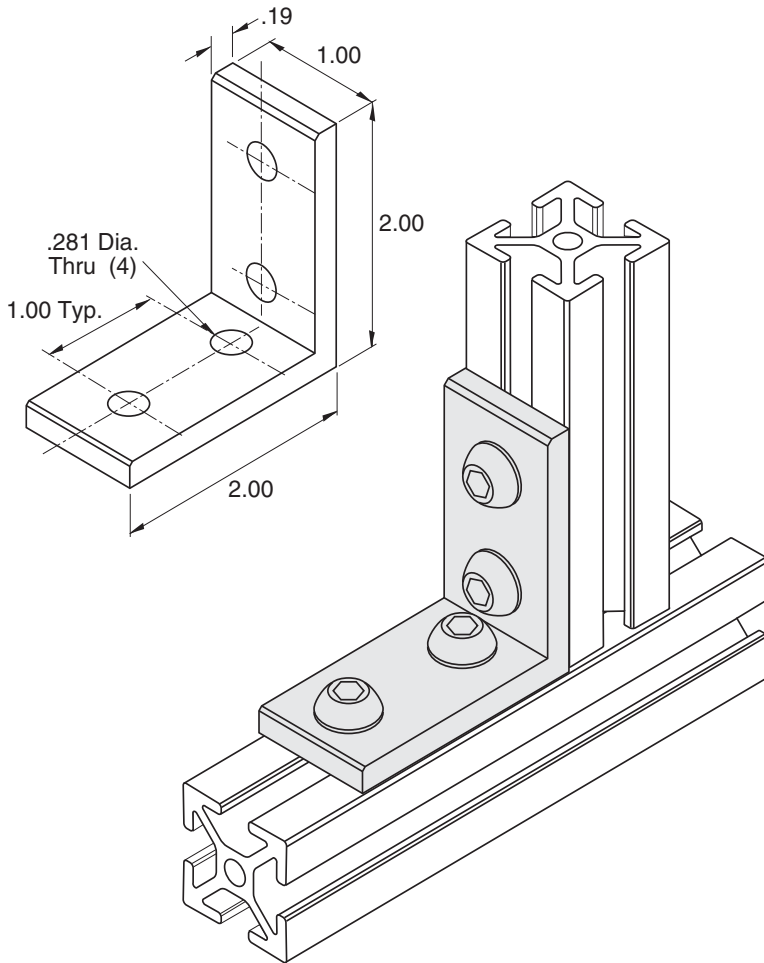
**11-2**



**1/4" SLOTS**

Recommended Hardware  
(3) 11-231 BHCS  
(3) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize

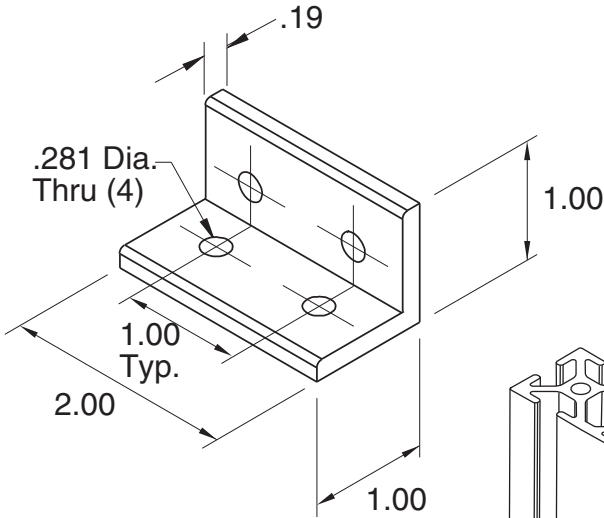


Recommended Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

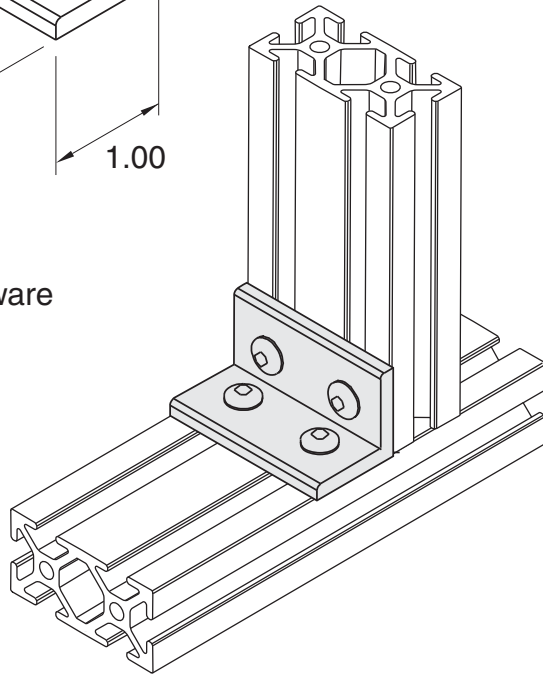
**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

**11-4**

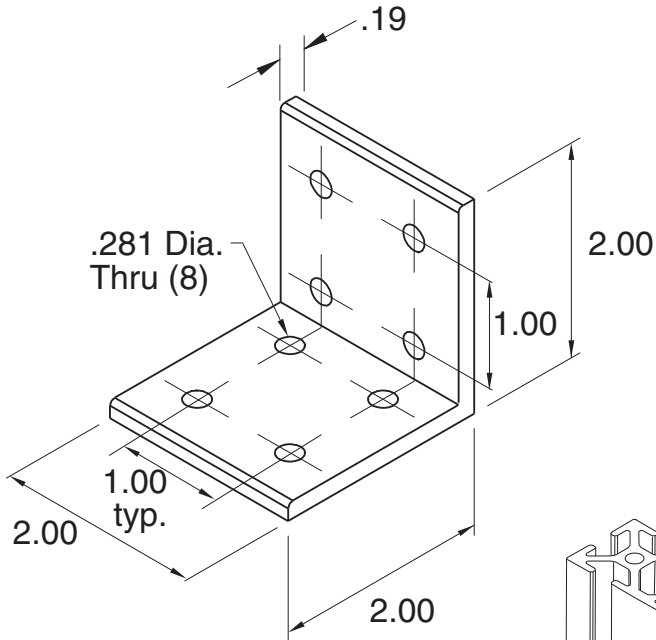


Recommended Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

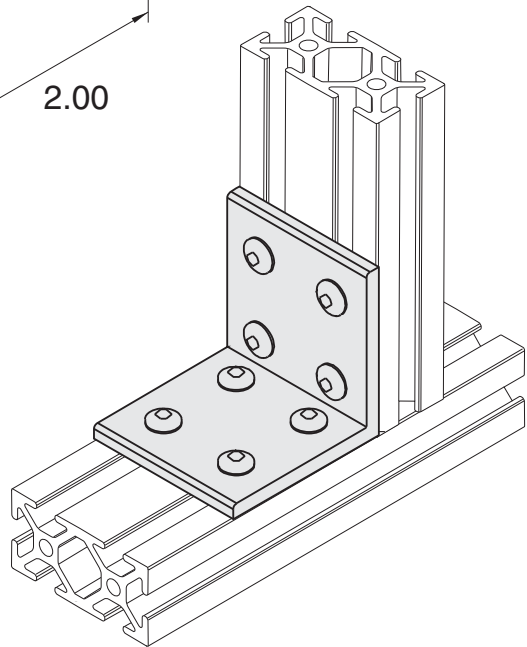


1/4" SLOTS

Material - Aluminum  
Finish - Clear Anodize

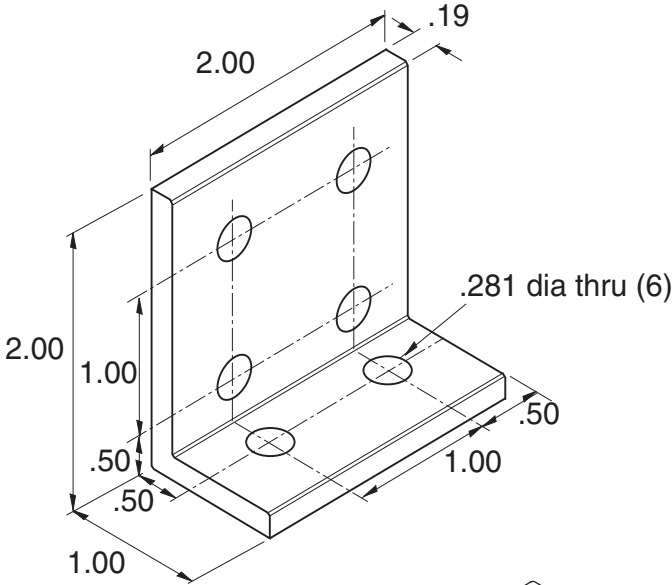


Recommended Hardware  
(8) 11-231 BHCS  
(8) 11-210 T-nut



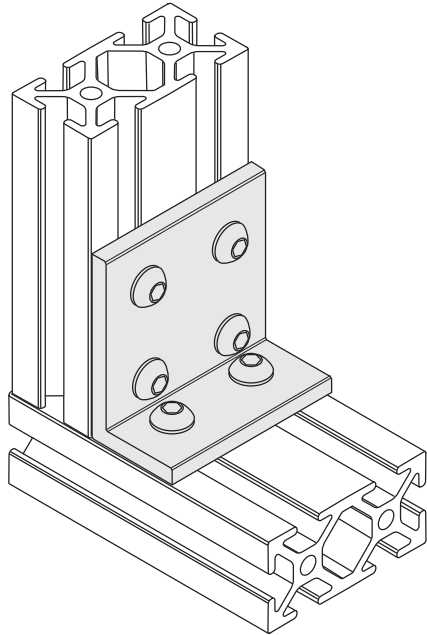
Material - Aluminum  
Finish - Clear Anodize

**11-80**

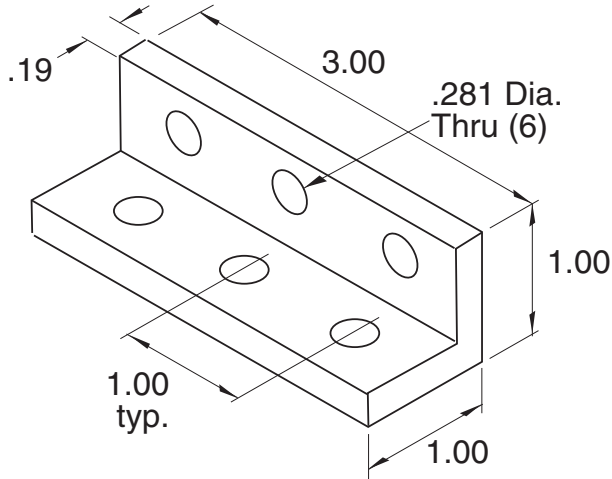


Recommended Hardware  
(6) 11-231 BHCS  
(6) 11-210 T-nut

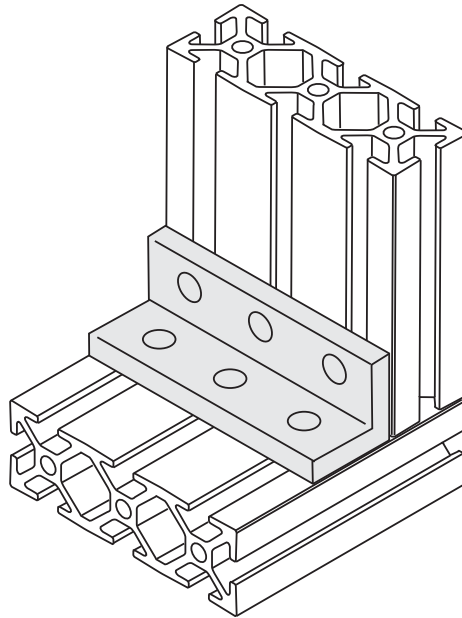
**1/4" SLOTS**



Material - Aluminum  
Finish - Clear Anodize

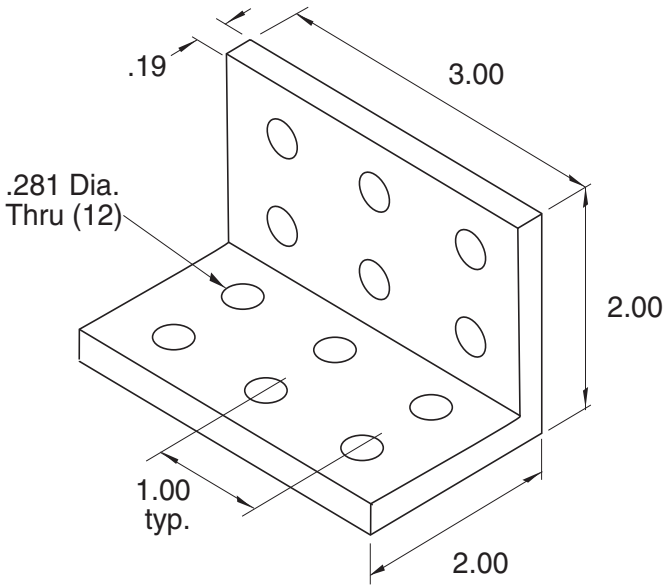


Recommended  
Hardware  
(6) 11-231 BHCS  
(6) 11-210 T-nut



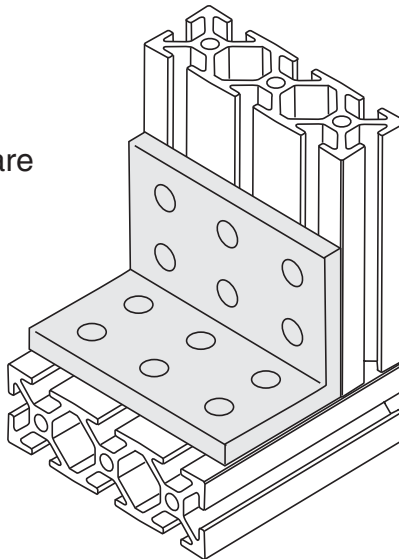
Material - Aluminum  
Finish - Clear Anodize

**11-14**

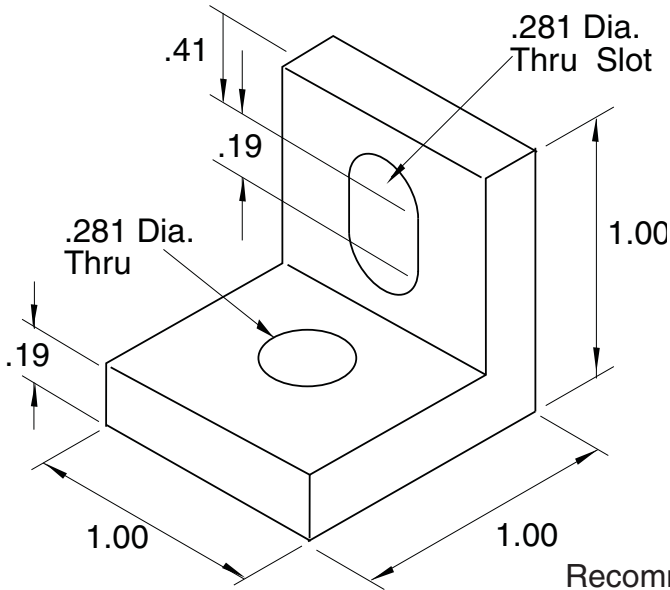


Recommended Hardware  
(12) 11-231 BHCS  
(12) 11-210 T-nut

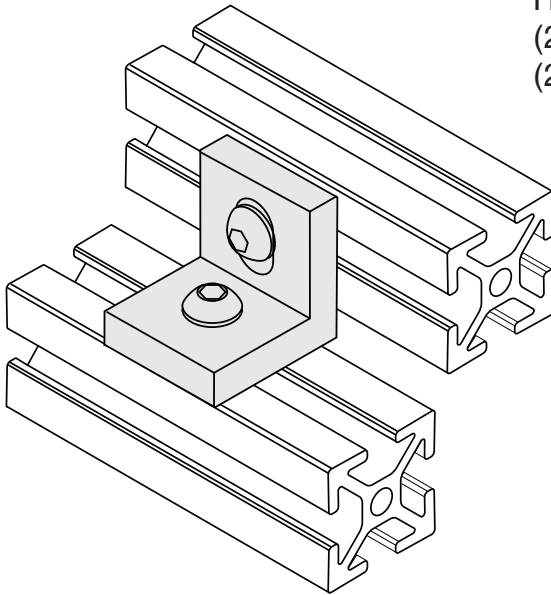
**1/4" SLOTS**



Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(2) 11-231 BHCS  
(2) 11-210 T-nut



**1/4" SLOTS**

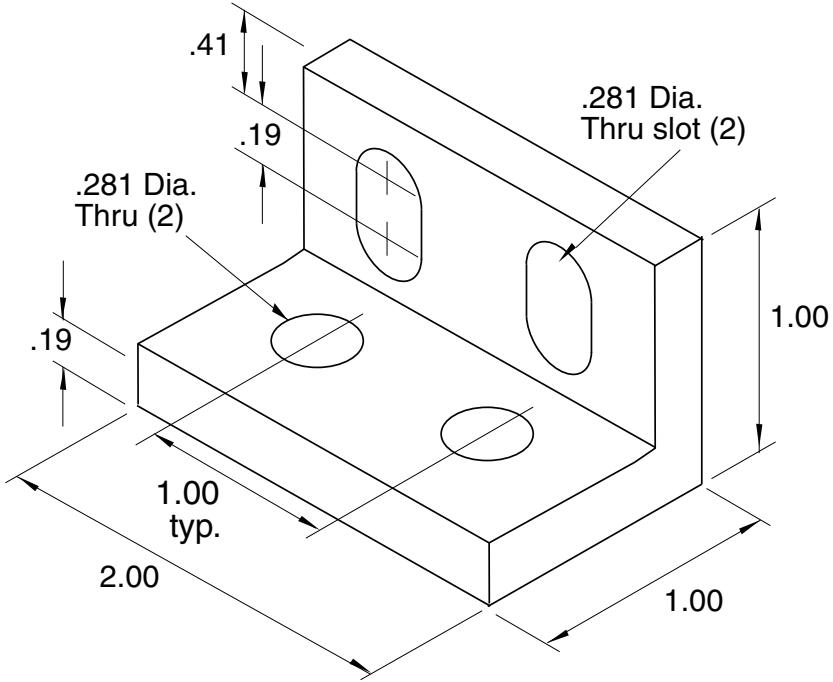
Material - Aluminum  
Finish - Clear Anodize



# Slotted Corner Angle

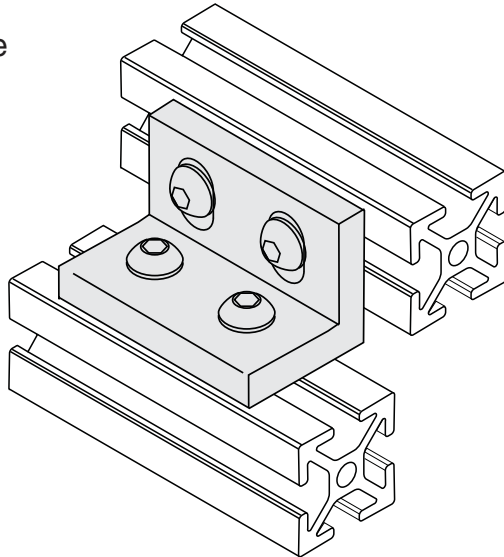


**11-16**

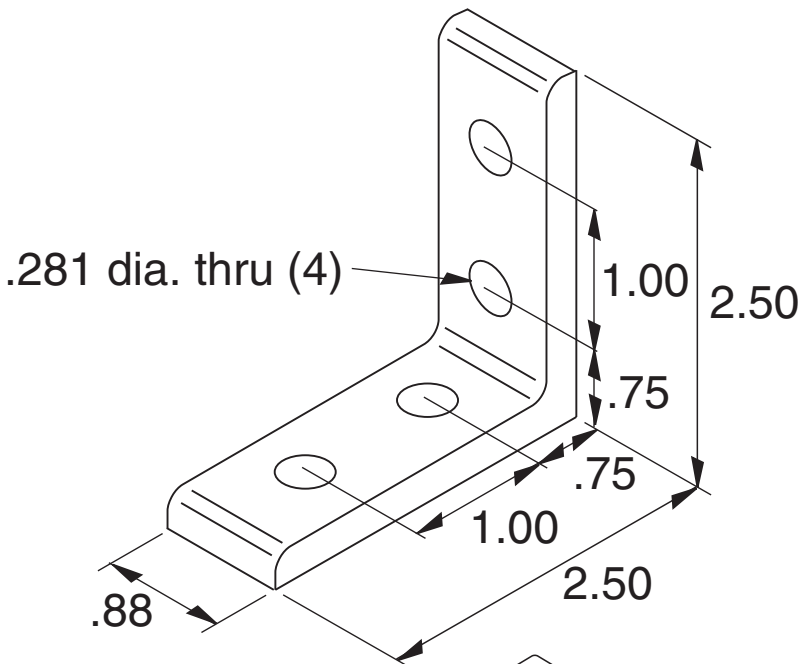


Recommended Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

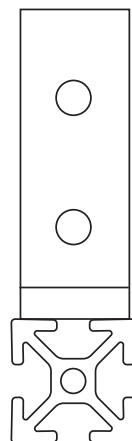
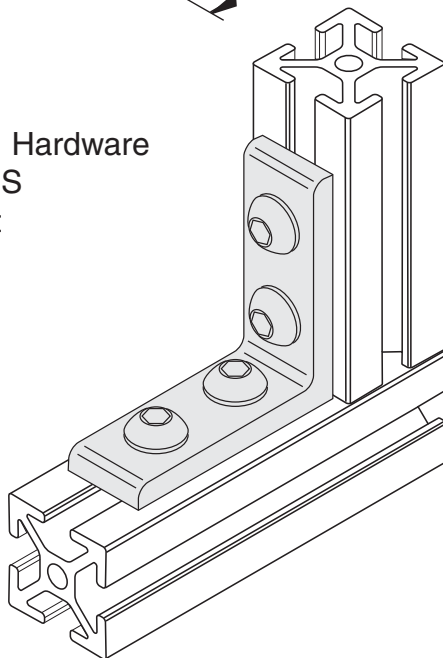
1/4" SLOTS



Material - Aluminum  
Finish - Clear Anodize



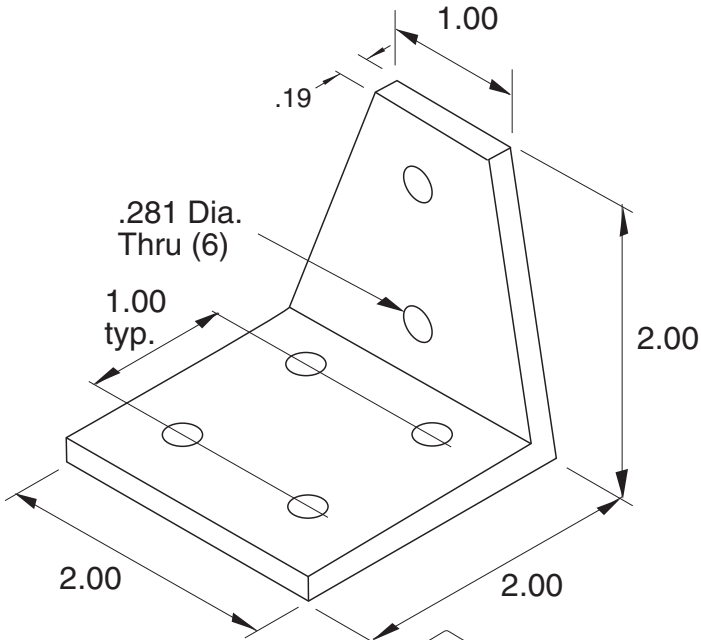
Recommended Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut



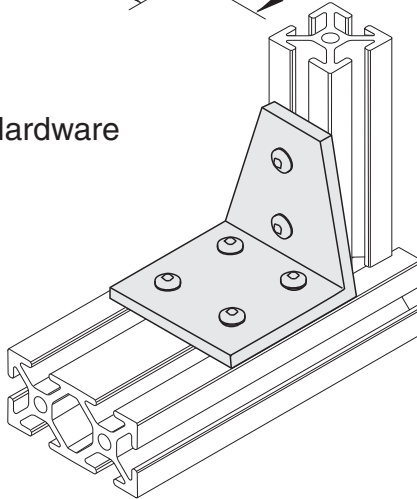
**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

**11-17**

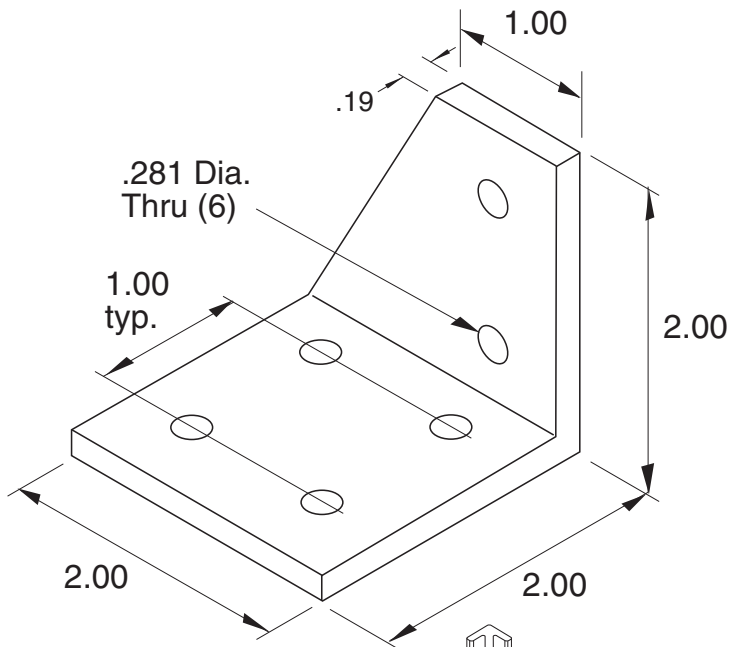


Recommended Hardware  
(6) 11-231 BHCS  
(6) 11-210 T-nut

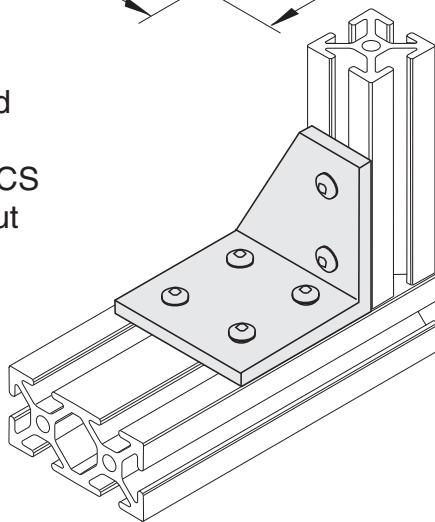


**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize



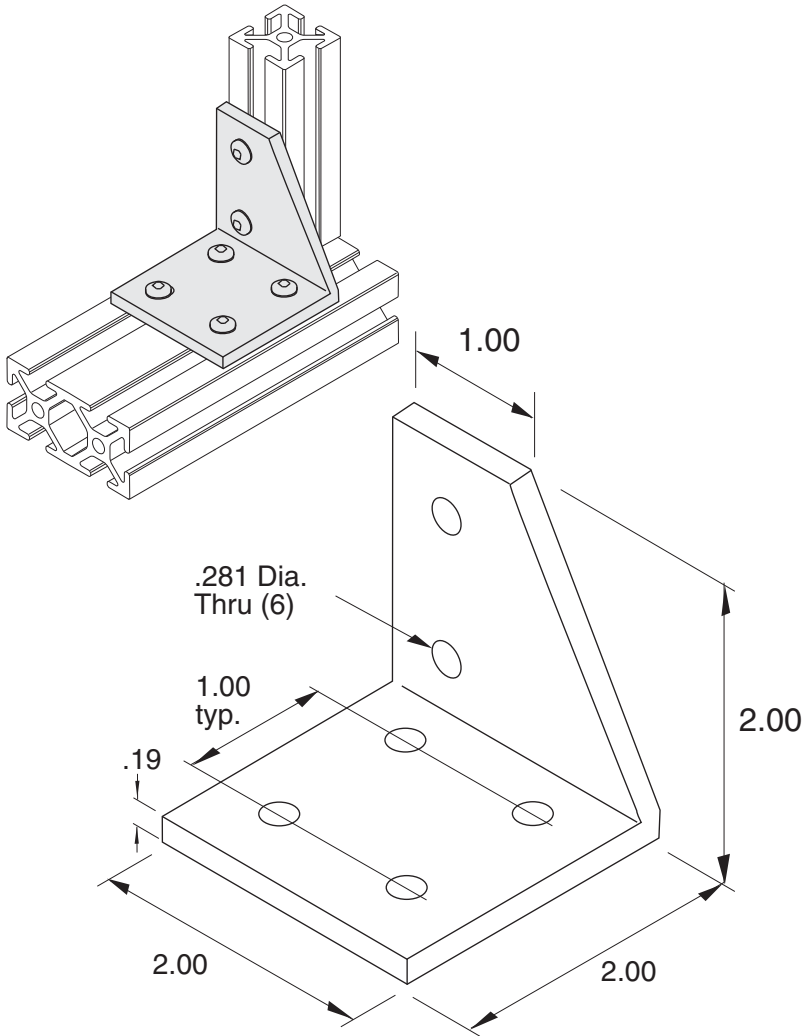
Recommended  
Hardware  
(6) 11-231 BHCS  
(6) 11-210 T-nut



**1/4" SLOTS**

**Material - Aluminum  
Finish - Clear Anodize**

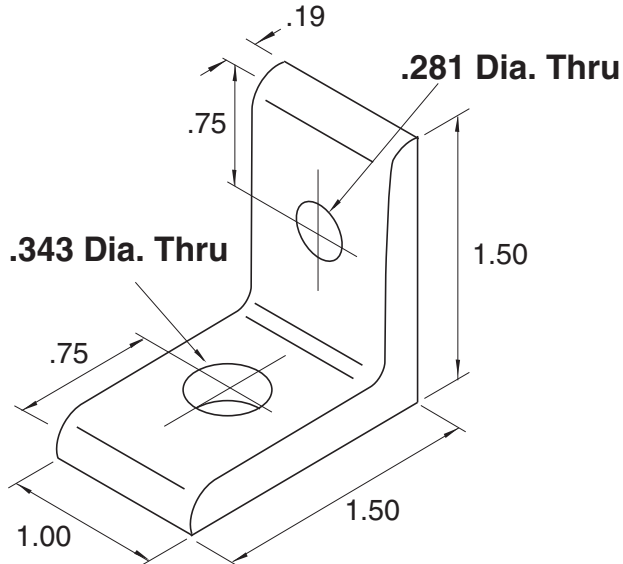
**11-37**



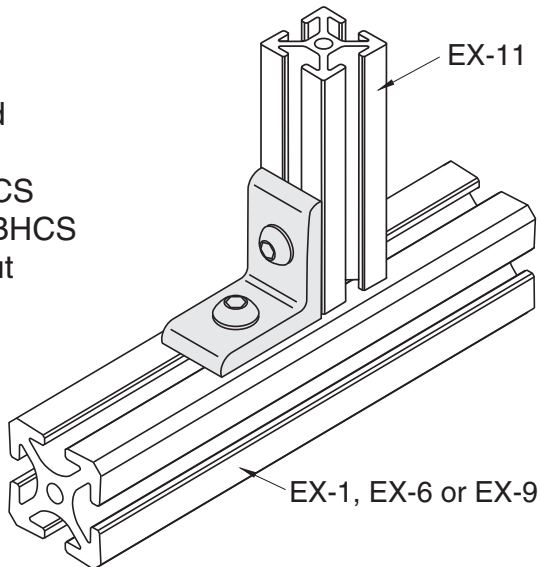
**1/4" SLOTS**

Recommended  
Hardware  
(6) 11-231 BHCS  
(6) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize

**.33 wide slot to .27 wide slot****11-53****Recommended  
Hardware**

- (1) 11-231 BHCS
- (1) EF-12-.63 BHCS
- (1) 11-210 T-nut
- (1) EF-2 T-nut

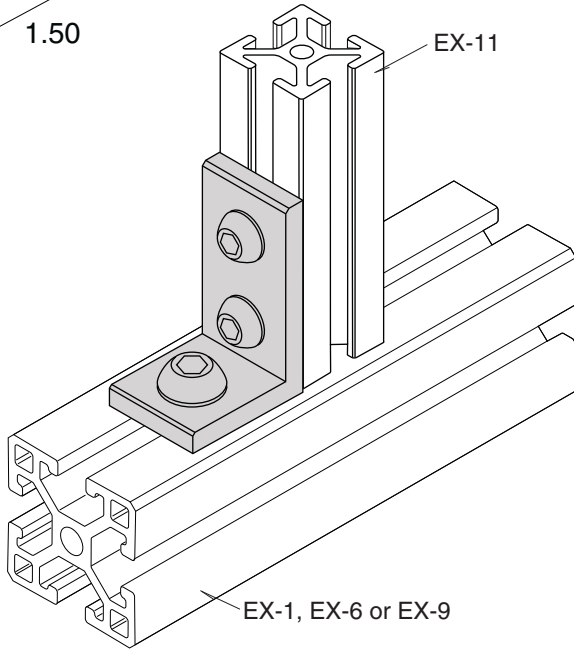
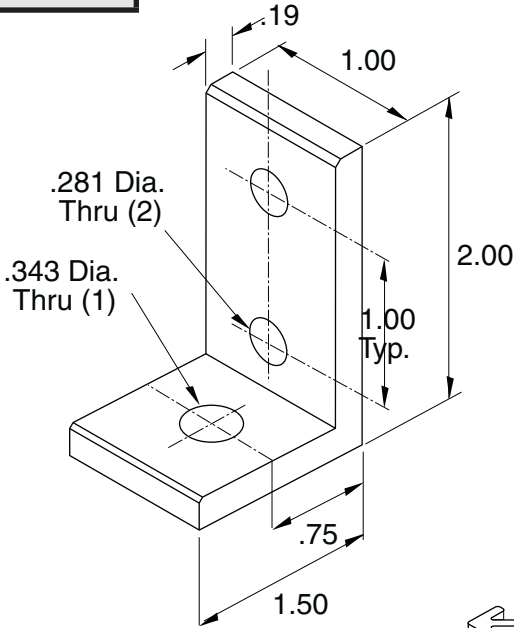
**1/4" SLOTS**

**Material - Aluminum**  
**Finish - Clear Anodize**

# Transition Corner Angle



## 11-5

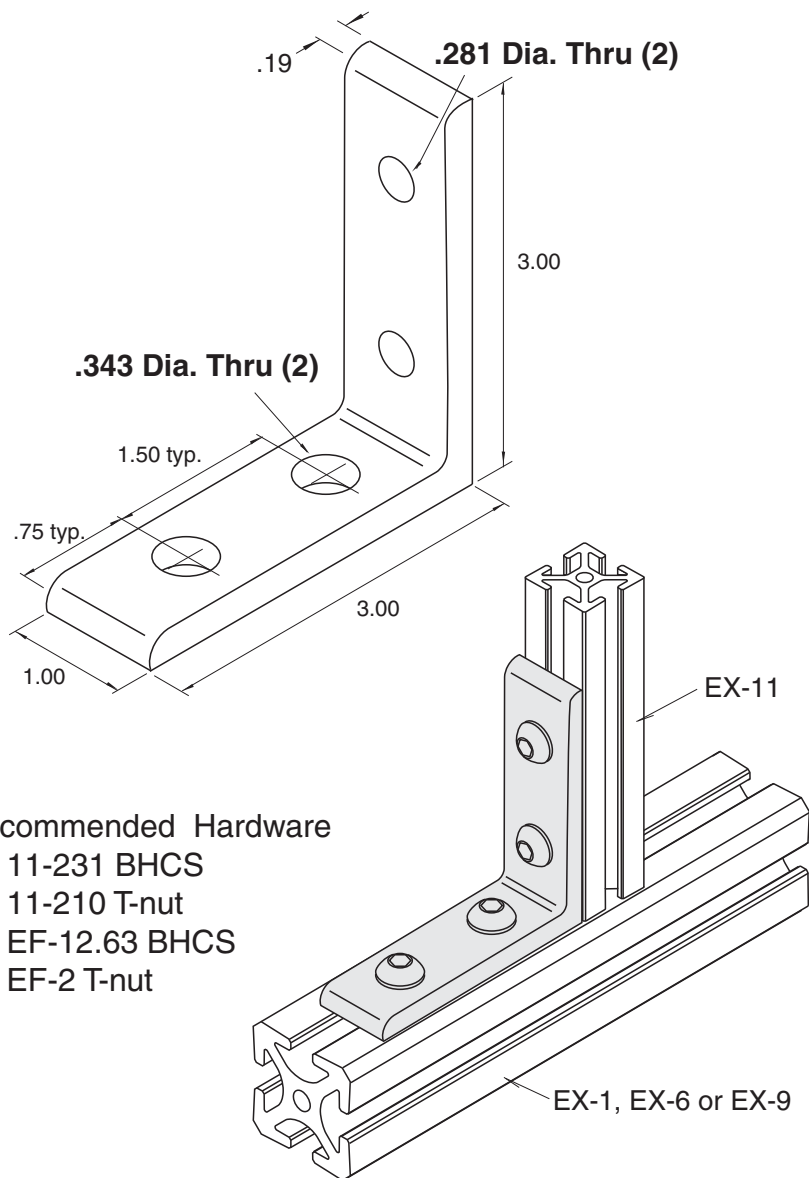


1/4" SLOTS

Recommended Hardware

- (2) 11-231 BHCS
- (2) 11-210 T-nut
- (1) EF-12-.63 BHCS
- (1) EF-2 T-nut

Material - Aluminum  
Finish - Clear Anodize

**.33 wide slot to .27 wide slot****11-54****Recommended Hardware**

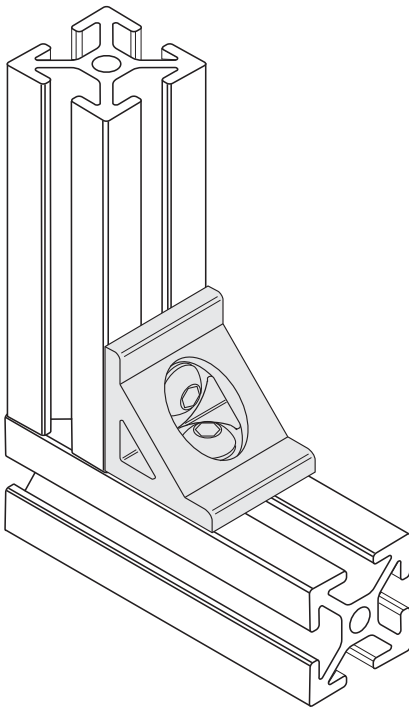
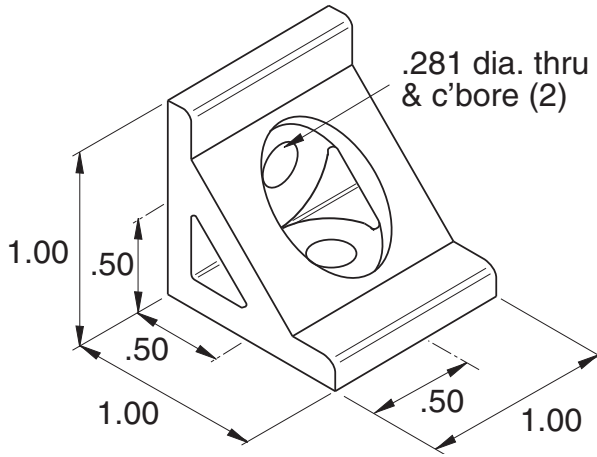
- (2) 11-231 BHCS
- (2) 11-210 T-nut
- (2) EF-12.63 BHCS
- (2) EF-2 T-nut

**Material - Aluminum**  
**Finish - Clear Anodize**

**1/4" SLOTS**



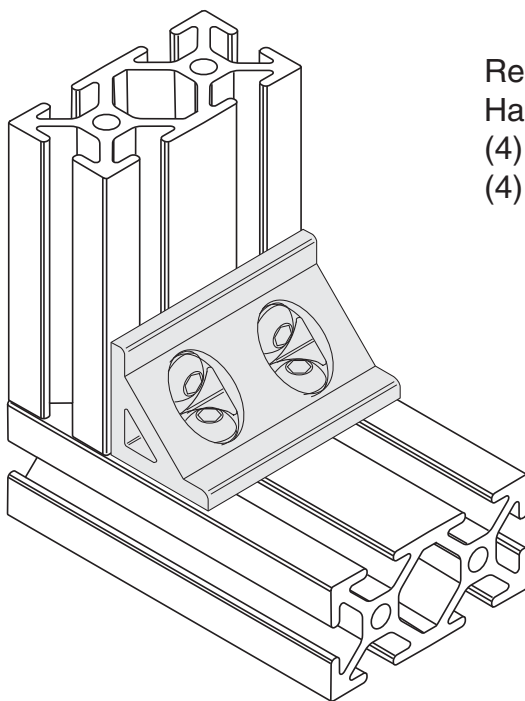
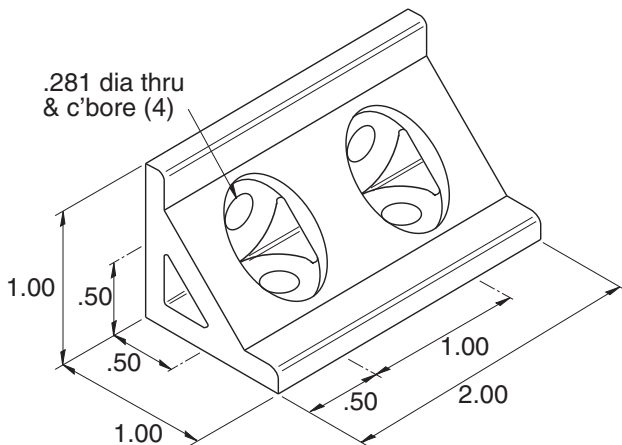
**11-160**



Recommended  
Hardware  
(2) 11-231 BHCS  
(2) 11-210 T-nut

**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

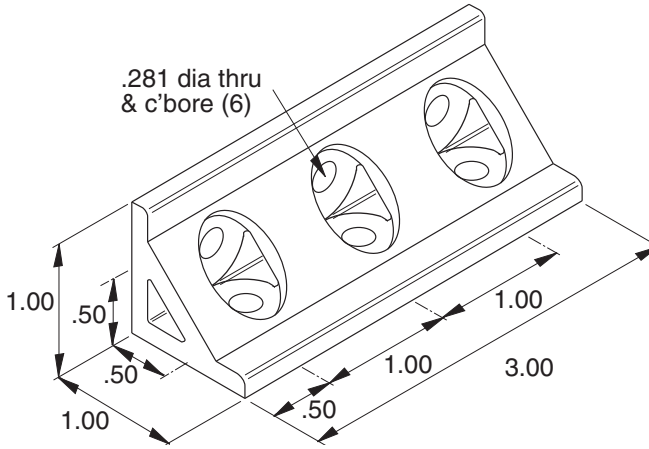


Recommended  
Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize

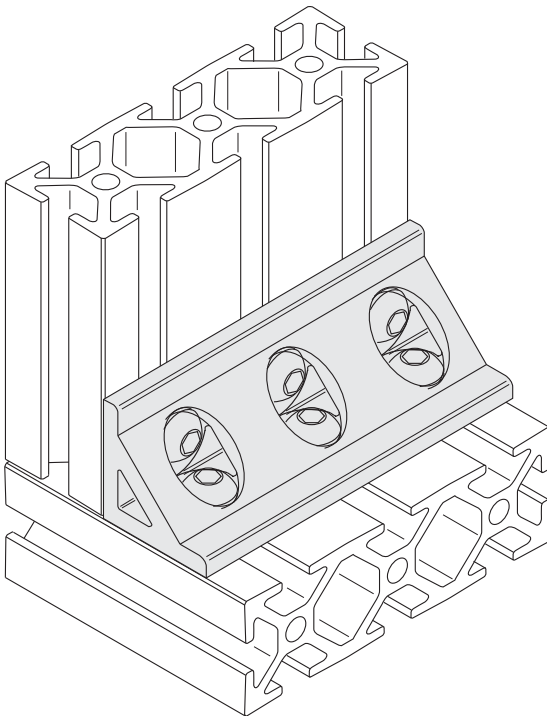
**1/4" SLOTS**

**11-162**

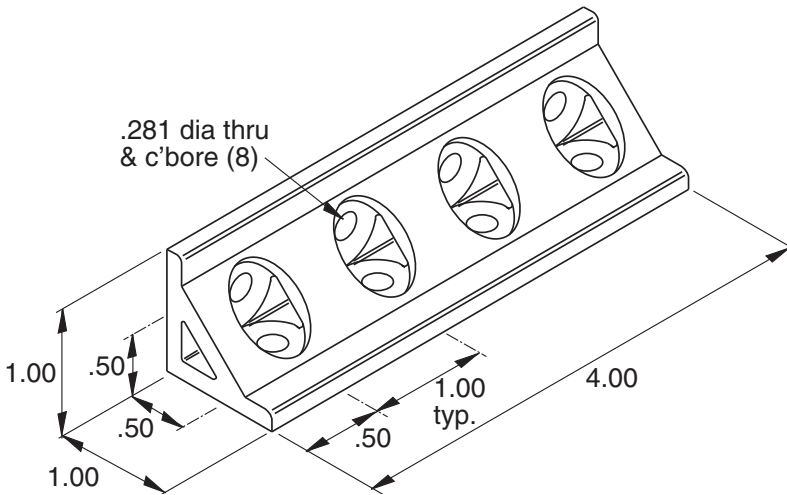


Recommended  
Hardware  
(6) 11-231 BHCS  
(6) 11-210 T-nut

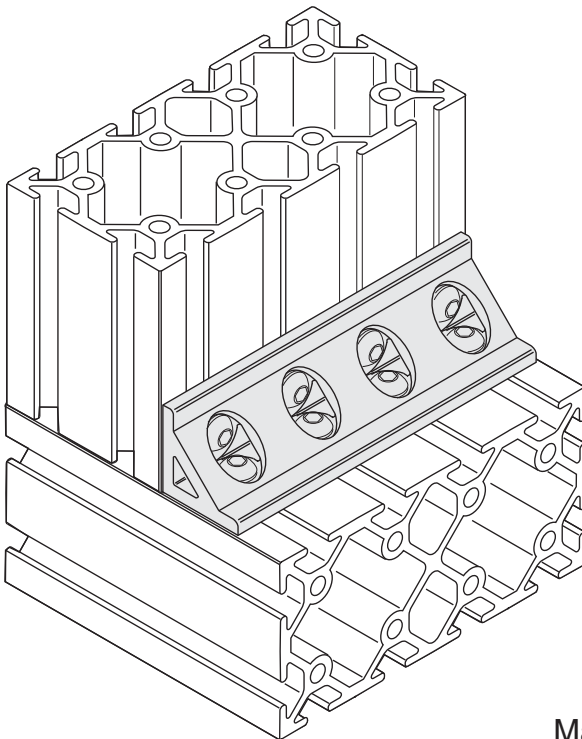
**1/4" SLOTS**



Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(8) 11-231 BHCS  
(8) 11-210 T-nut



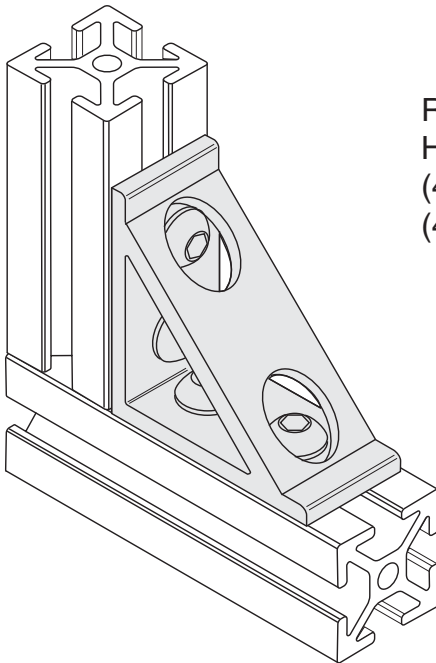
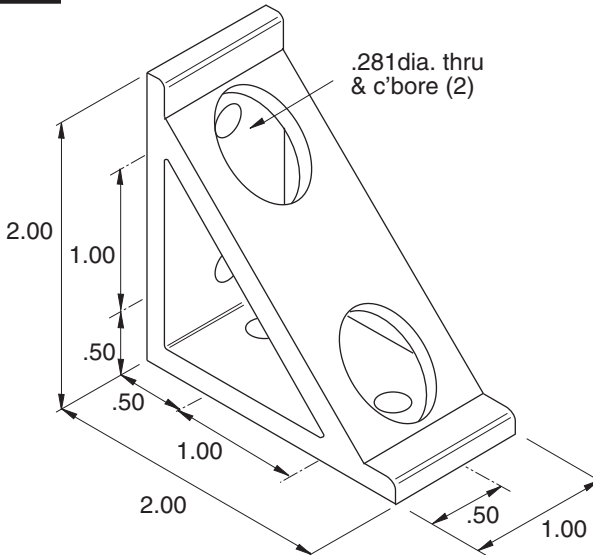
Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

# Corner Gusset



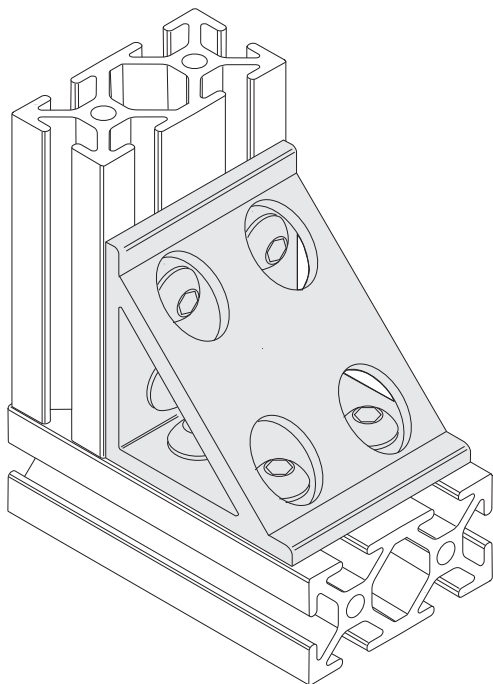
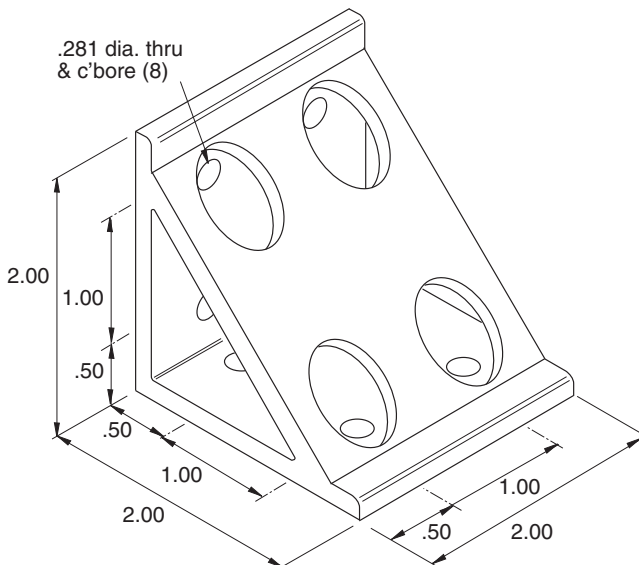
**11-170**



Recommended  
Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

1/4" SLOTS

Material - Aluminum  
Finish - Clear Anodize



**Recommended  
Hardware**  
(8) 11-231 BHCS  
(8) 11-210 T-nut

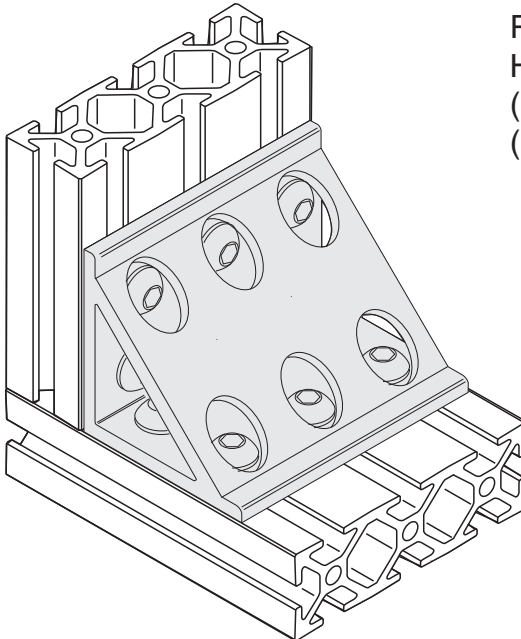
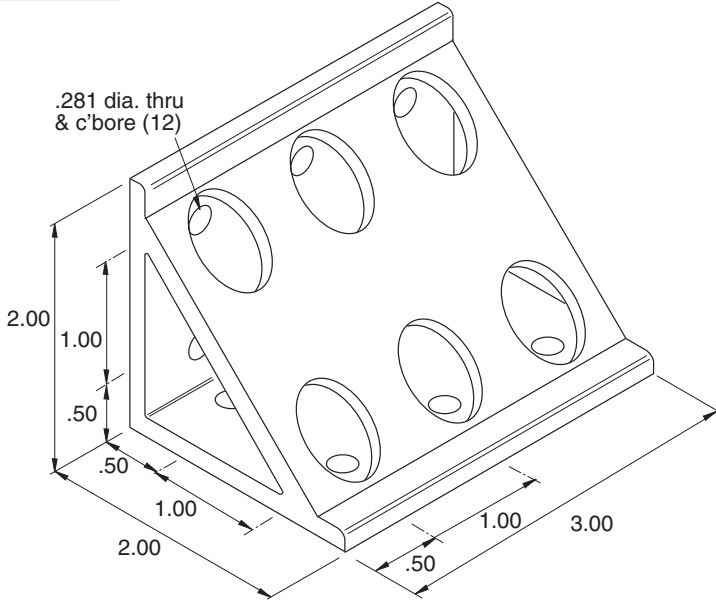
**1/4" SLOTS**

**Material - Aluminum  
Finish - Clear Anodize**

# Corner Gusset



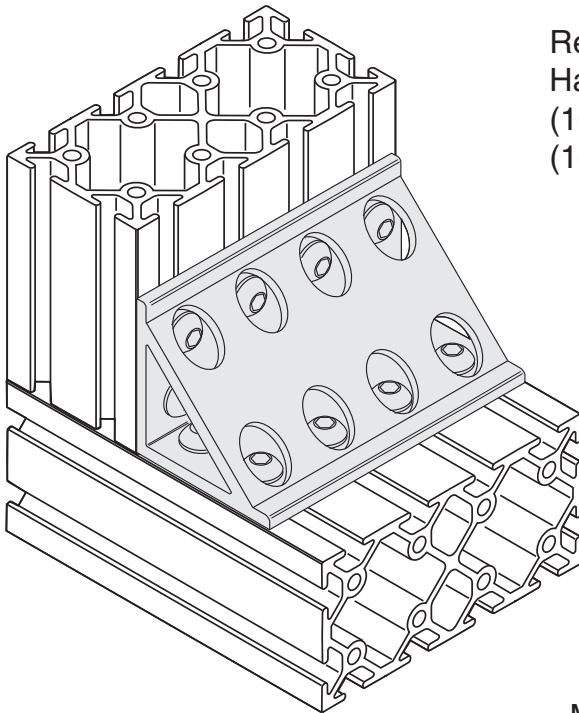
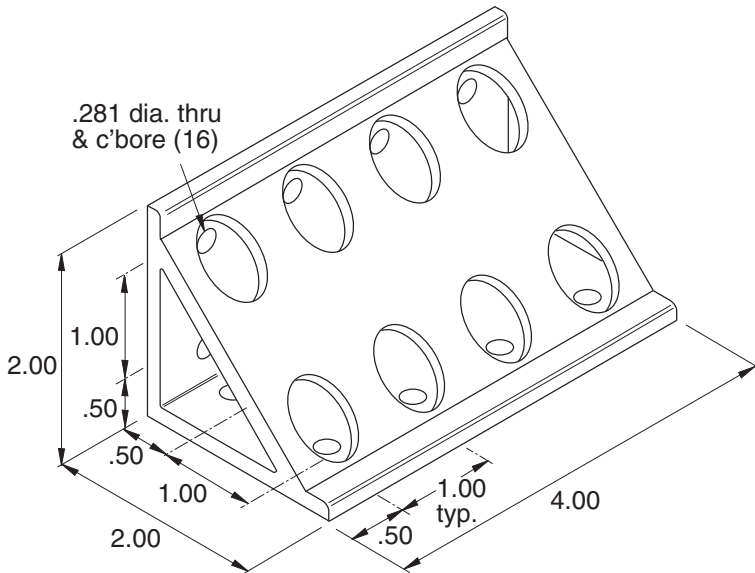
**11-172**



Recommended Hardware  
(12) 11-231 BHCS  
(12) 11-210 T-nut

**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize



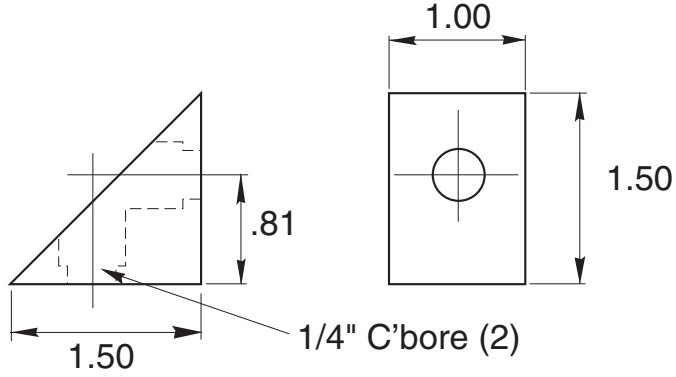
Recommended  
Hardware  
(16) 11-231 BHCS  
(16) 11-210 T-nut

**1/4" SLOTS**

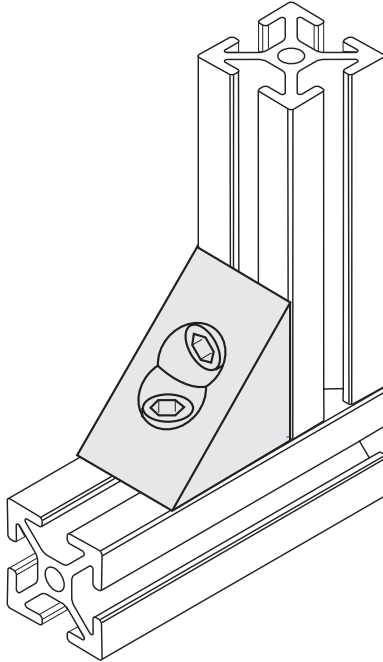
Material - Aluminum  
Finish - Clear Anodize



**11-29**

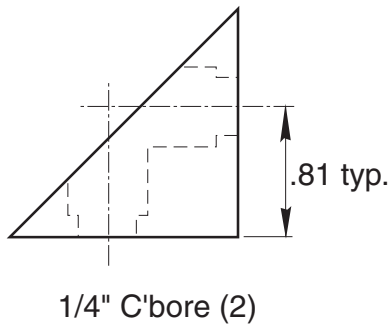
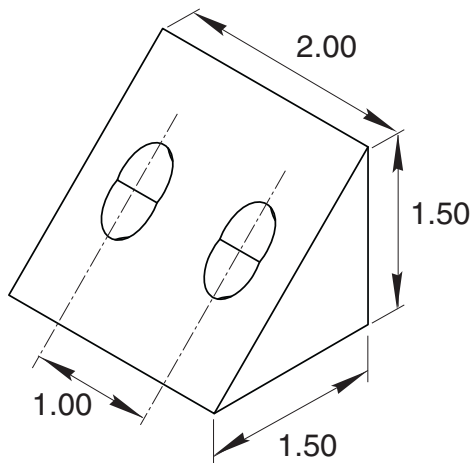


Recommended  
Hardware  
(2) 11-221 SHCS  
(2) 11-210 T-nut

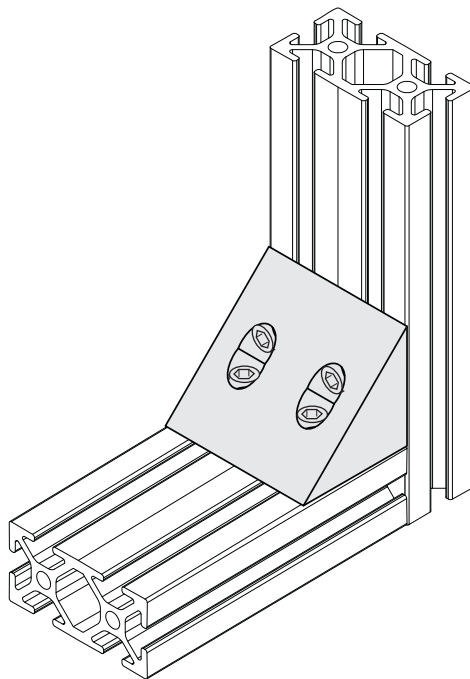


**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(4) 11-221 SHCS  
(4) 11-210 T-nut



**1/4" SLOTS**

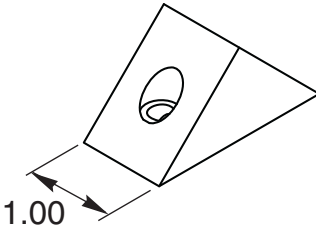
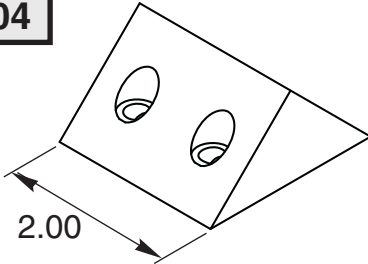
Material - Aluminum  
Finish - Clear Anodize

# Angle Blocks

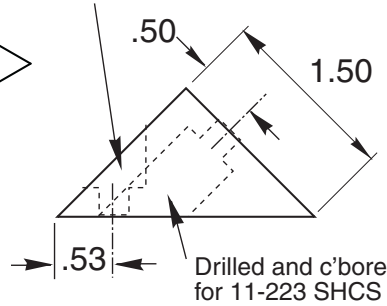


<b>11-103</b>
<b>11-104</b>

## 11-104



Drilled and c'bore  
for 11-222 SHCS



## 11-103

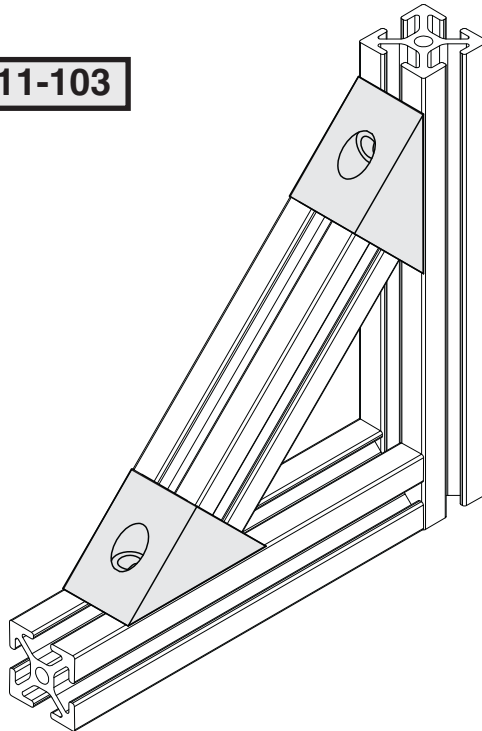
Recommended  
Hardware

### 11-103

- (1) 11-222 SHCS
- (1) 11-223 SHCS
- (1) 11-210 T-nut

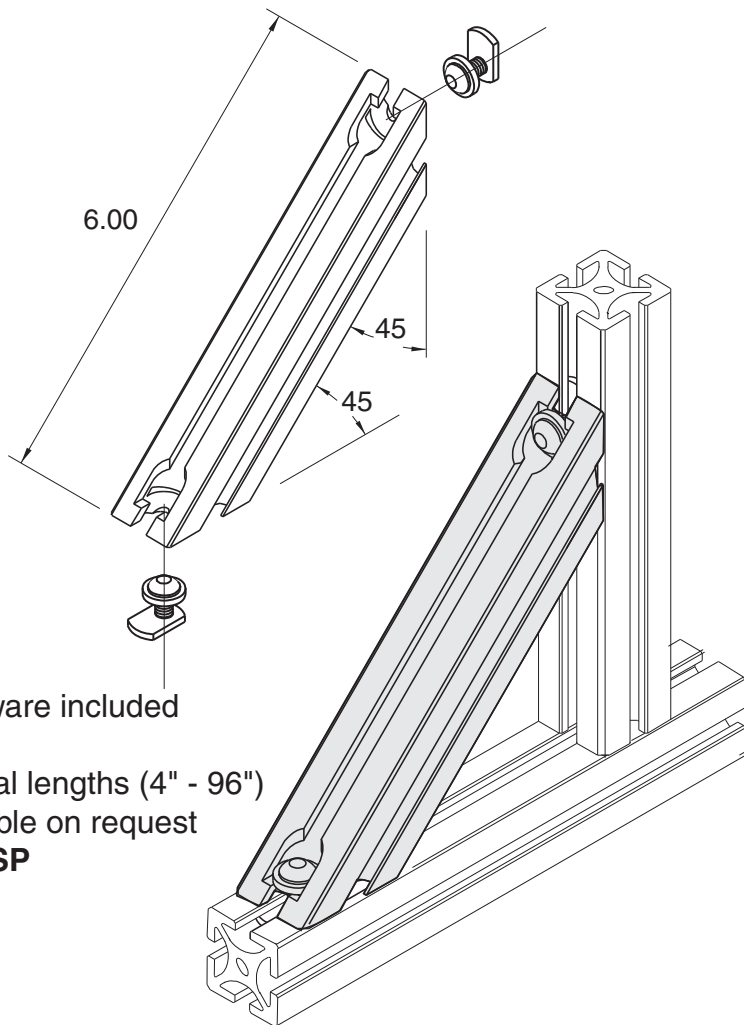
### 11-104

- (2) 11-222 SHCS
- (2) 11-223 SHCS
- (2) 11-210 T-nut



Material - Aluminum  
Finish - Clear Anodize

1/4" SLOTS



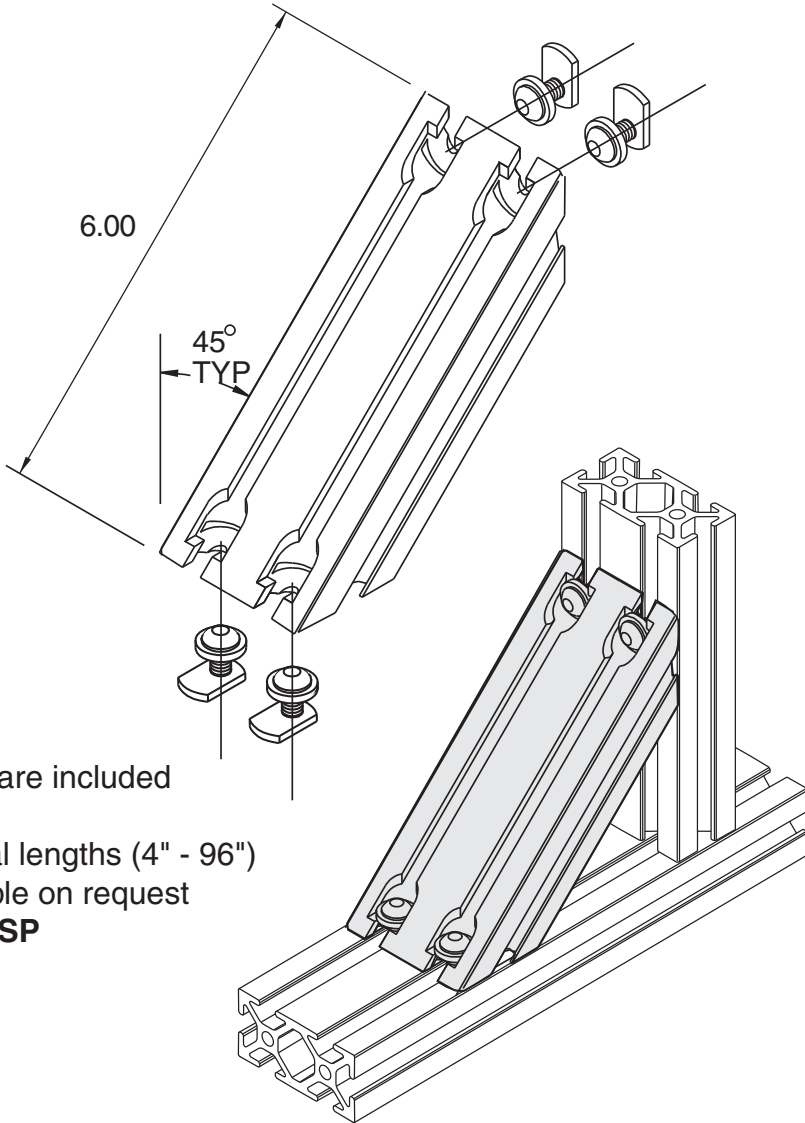
Hardware included

Special lengths (4" - 96")  
available on request  
**11-7-SP**

**1/4" SLOTS**

Material - Aluminum (EX-11)  
Finish - Clear Anodize

**11-12**

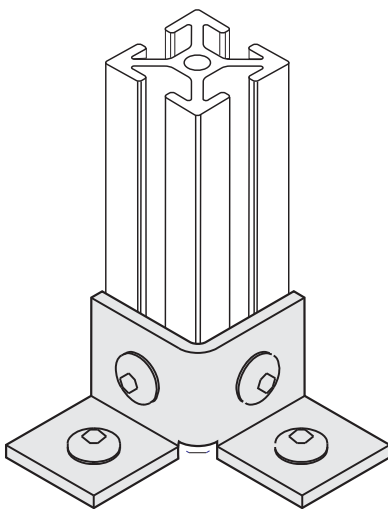
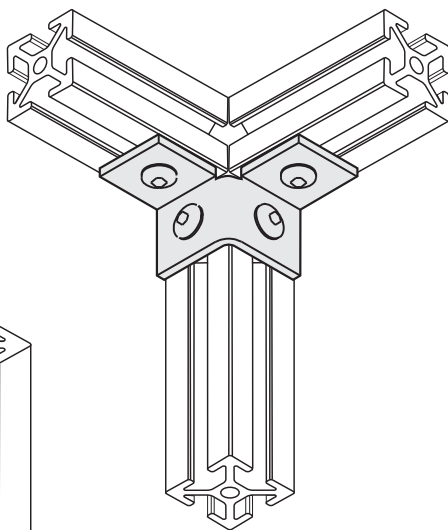
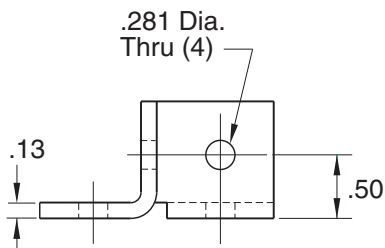
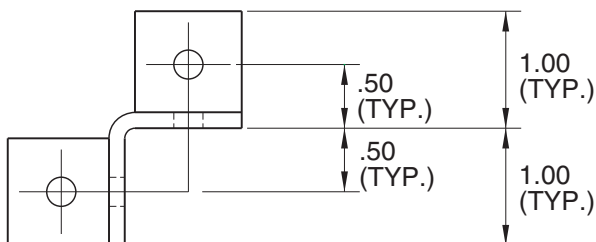


Hardware included

Special lengths (4" - 96")  
available on request  
**11-12-SP**

**1/4" SLOTS**

Material - Aluminum (EX-12)  
Finish - Clear Anodize

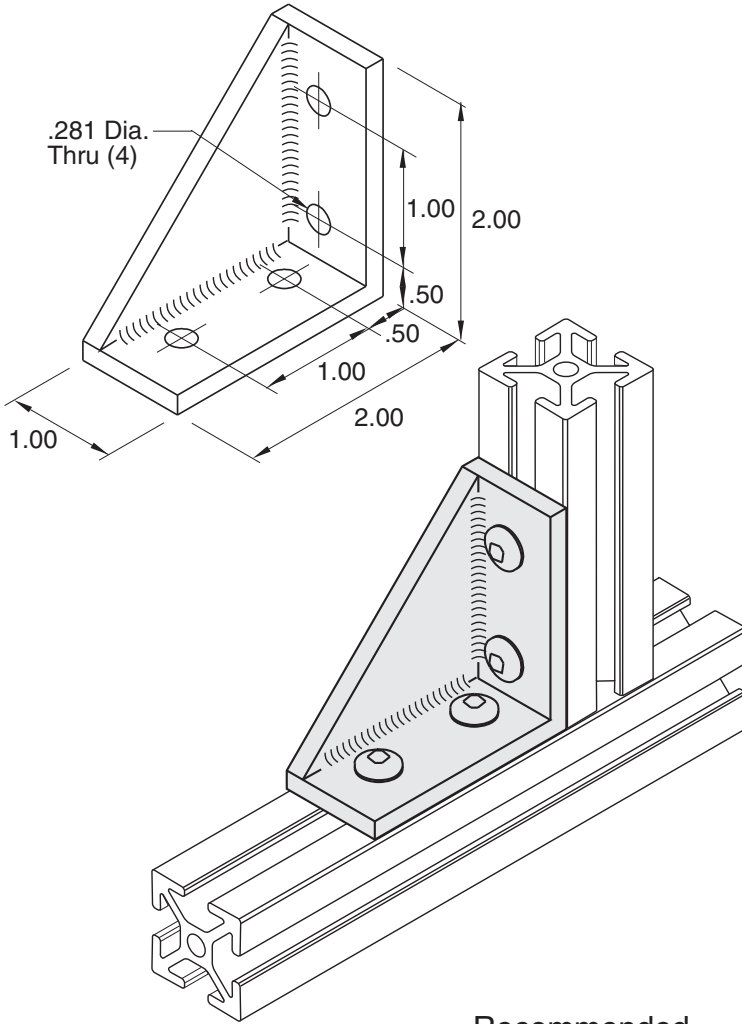


Recommended  
Hardware  
(4) 11-230 BHCS  
(4) 11-210 T-nut

**1/4" SLOTS**

Material - Steel  
Finish - Zinc Plating

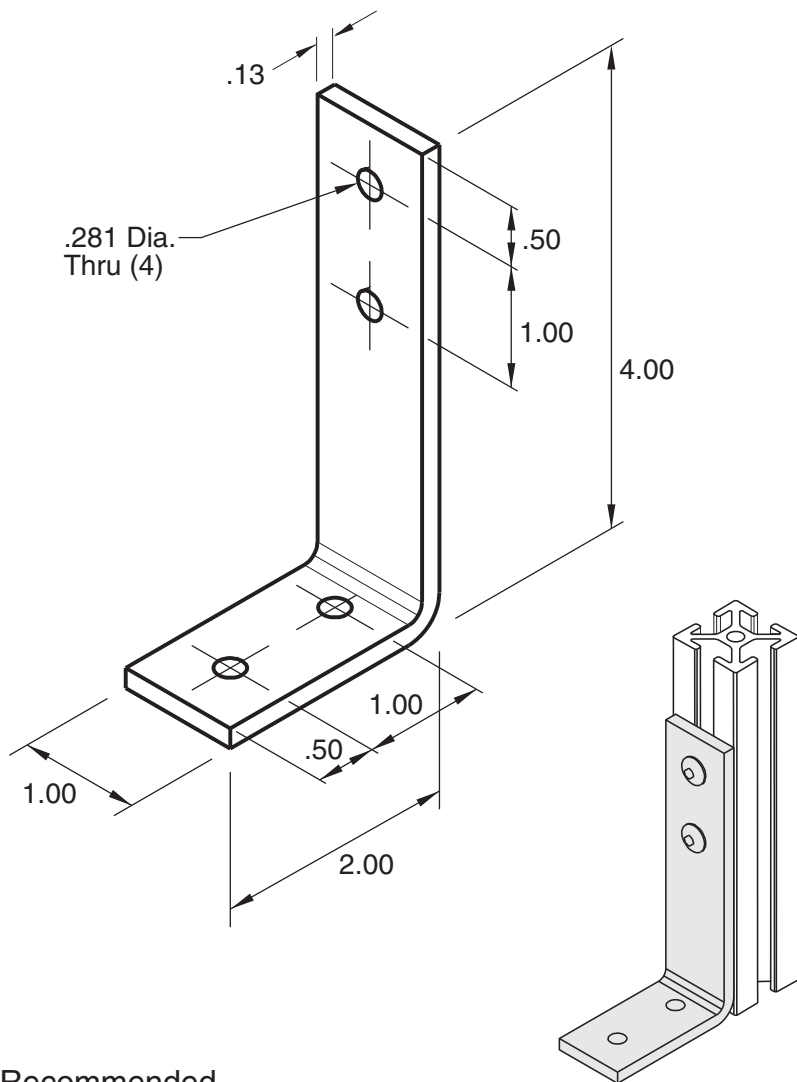
**11-60**



**1/4" SLOTS**

Recommended  
Hardware  
(4) 11-230 BHCS  
(4) 11-210 T-nut

Material - Steel  
Finish - Black Powder Coat



Recommended  
Hardware  
(4) 11-230 BHCS  
(4) 11-210 T-nut

Material - Steel  
Finish - Black Powder Coat

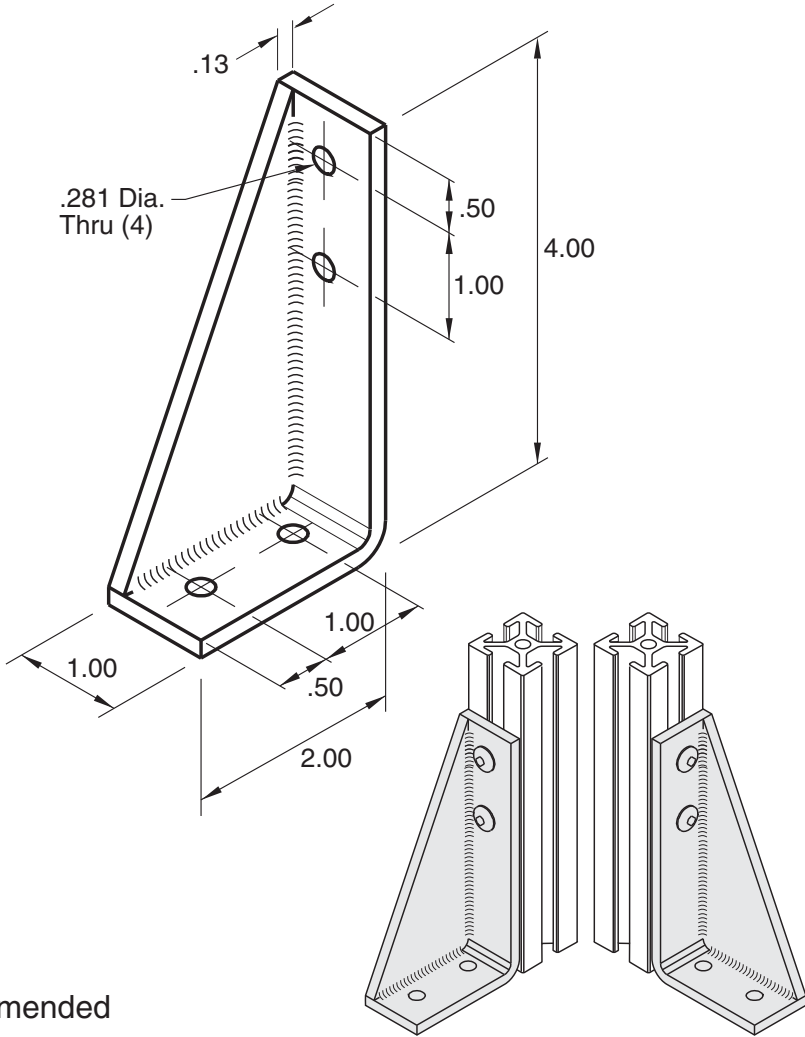
**1/4" SLOTS**



# Welded Steel Angle Bracket



<b>11-61</b>	<b>Left Hand</b>
<b>11-62</b>	<b>Right Hand</b>



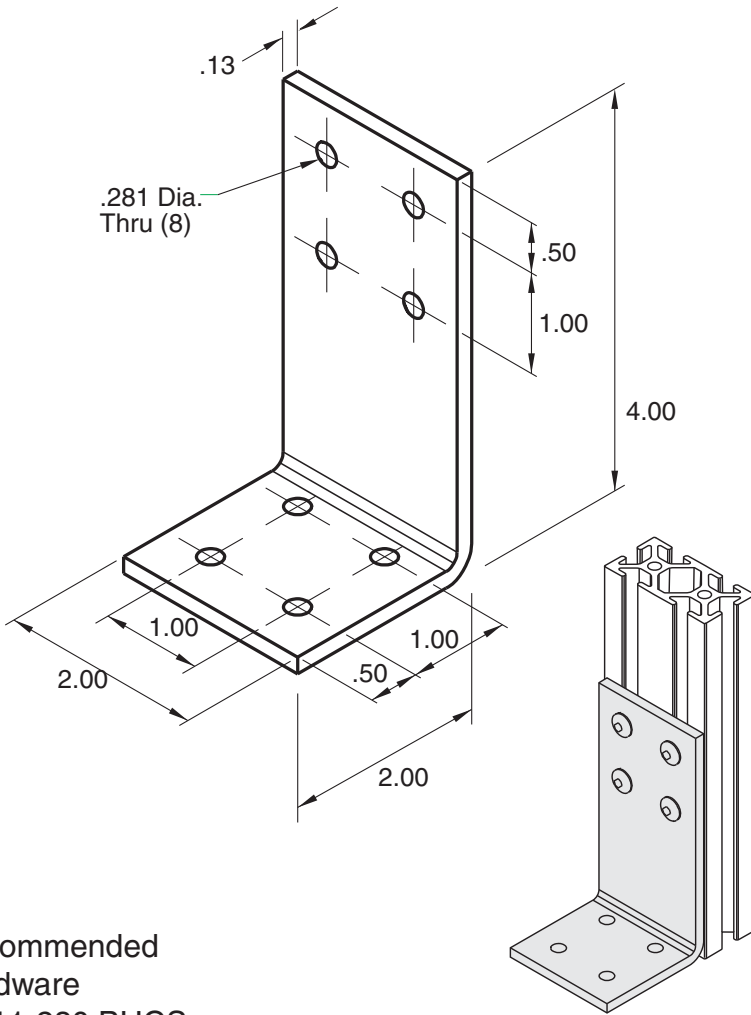
**1/4" SLOTS**

Recommended Hardware  
 (4) 11-230 BHCS  
 (4) 11-210 T-nut

**11-61**  
**Left Hand**

**11-62**  
**Right Hand**

Material - Steel  
 Finish - Black Powder Coat

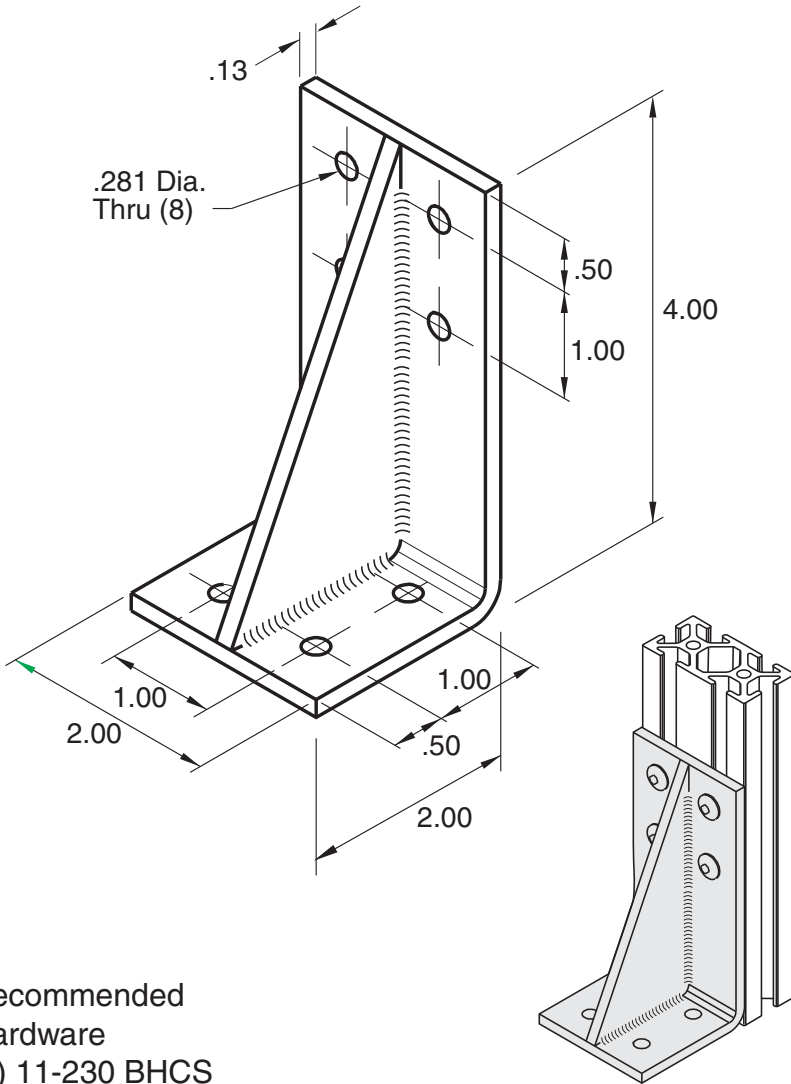


Recommended  
Hardware  
(8) 11-230 BHCS  
(8) 11-210 T-nut

Material - Steel  
Finish - Black Powder Coat

**1/4" SLOTS**

11-63

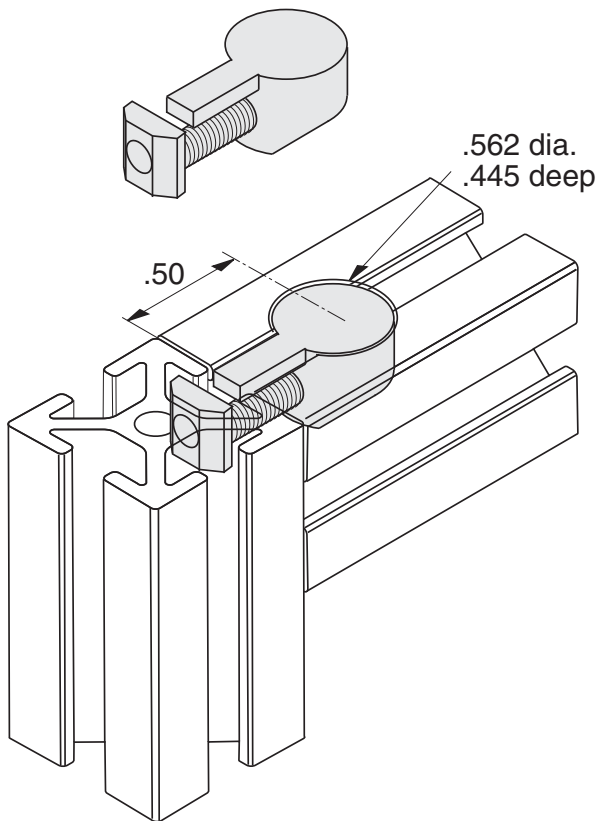


1/4" SLOTS

Recommended Hardware  
(8) 11-230 BHCS  
(8) 11-210 T-nut

Material - Steel  
Finish - Black Powder Coat

with Hardware	<b>11-242</b>
without Hardware	<b>11-242P</b>
with Metric Hardware	<b>11-242M</b>



**1/4" SLOTS**

**Material:**  
 Anchor - Cast Zinc, Zinc Plated  
 Bolt - Steel, Black Oxide Coating  
 T-nut - Steel Zinc Coated

# Double Anchor Fastener



<b>11-248</b>
<b>11-248M</b>
<b>11-249</b>
<b>11-249M</b>

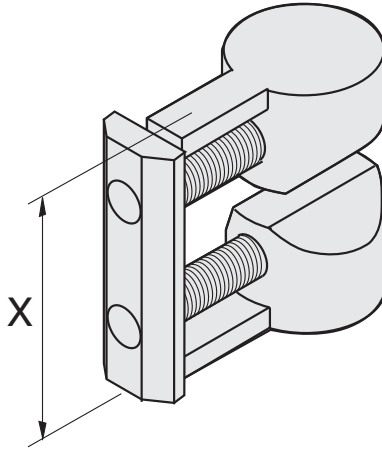
**with Metric Hardware**

**with Metric Hardware**

**11-248** x=1.0

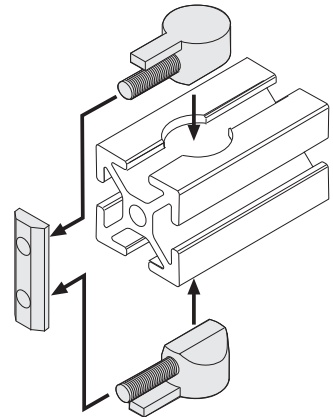
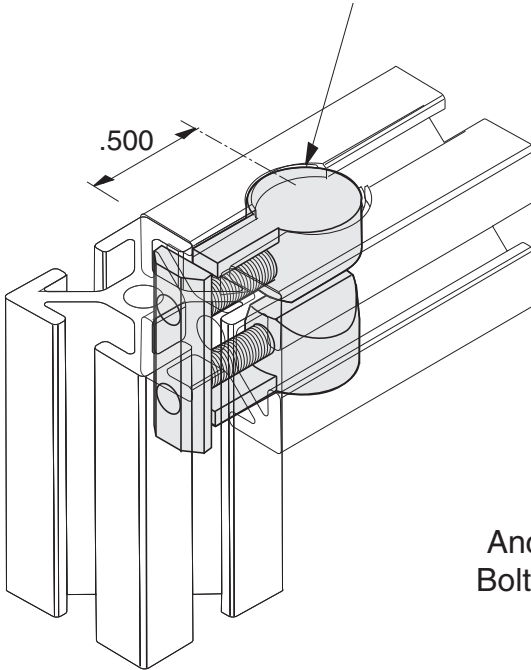
**11-249** x=2.0

Hardware Included



.562 dia. x .445 deep (2) plces

.500



**Material:**

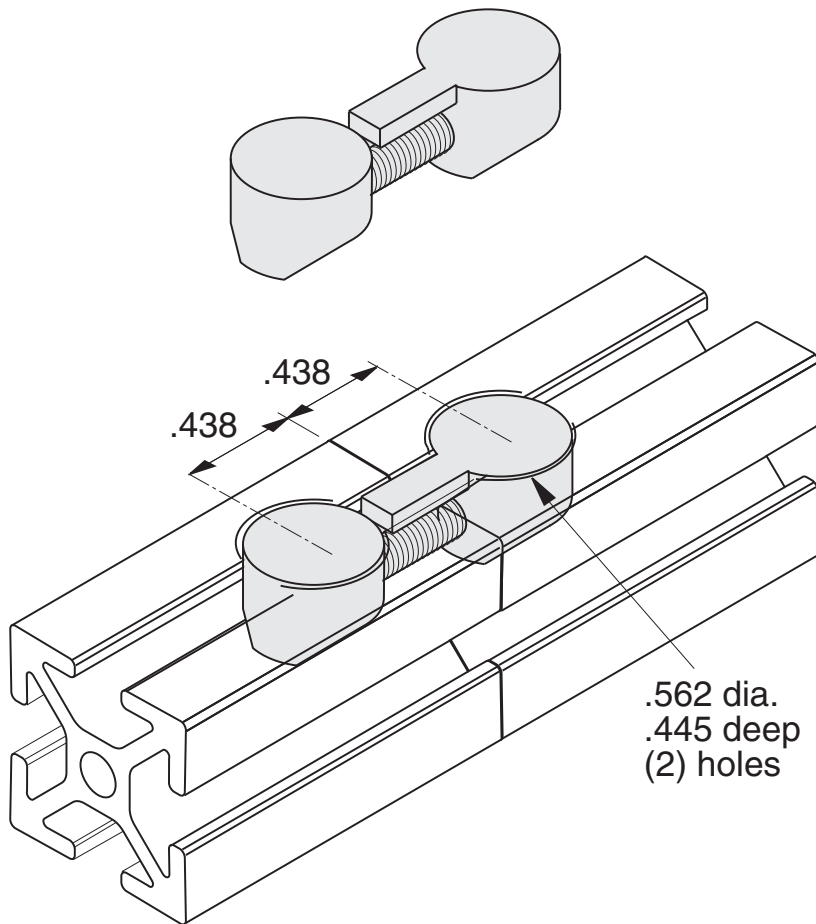
- Anchor - Cast Zinc, Zinc Plated**
- Bolt - Steel, Black Oxide Coating**
- T-nut - Steel Zinc Coated**

**1/4" SLOTS**

**11-243**

**with metric Hardware**

**11-234M**



Hardware Included

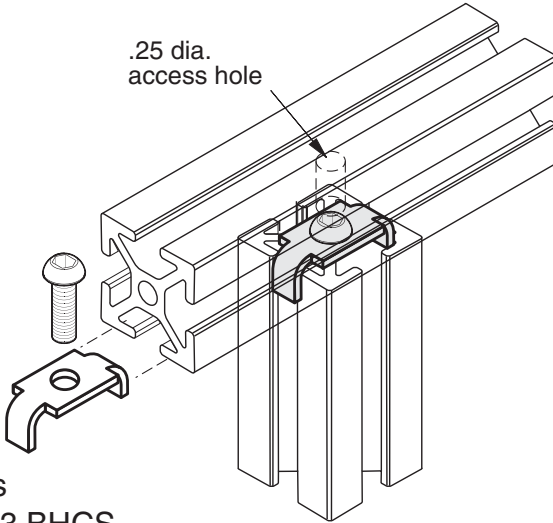
Material:  
Anchor - Cast Zinc, Zinc Plated  
Bolt - Steel, Black Oxide Coating  
T-nut - Steel Zinc Coated

**1/4" SLOTS**

# Universal Connector



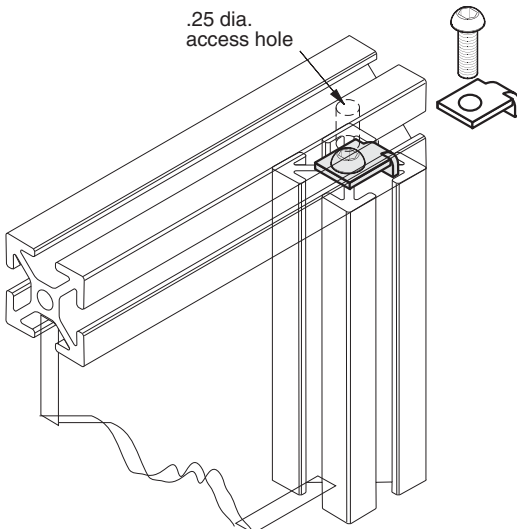
<b>11-262</b>	<b>Zinc Plated Steel</b>
<b>11-262SS</b>	<b>Stainless Steel</b>



Requires  
(1)11-233 BHCS

# Universal Panel Connector

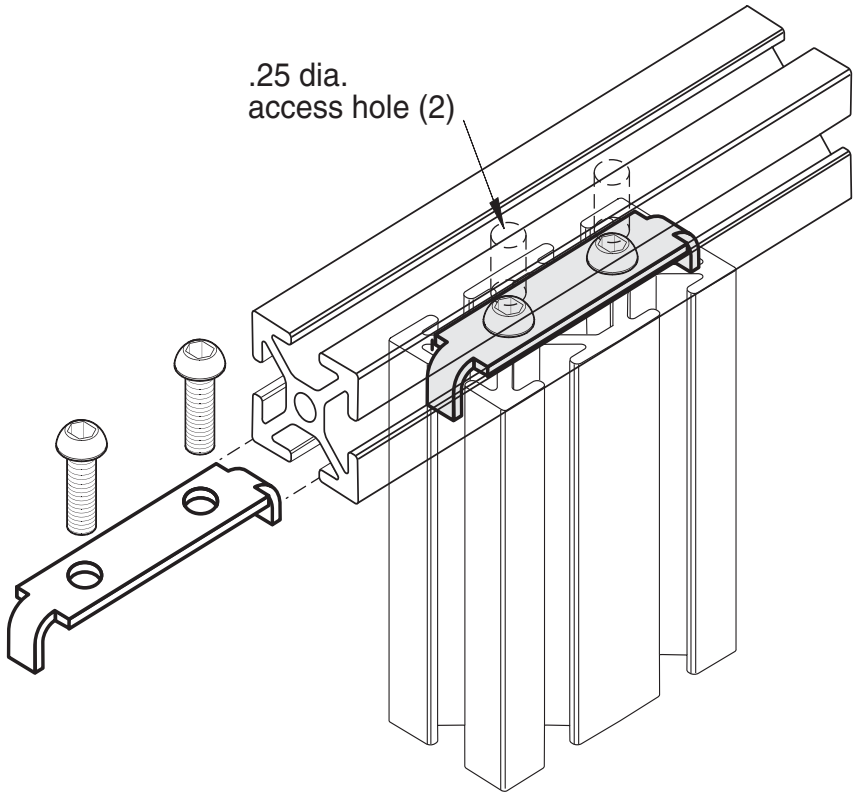
<b>11-267</b>	<b>Zinc Plated Steel</b>
<b>11-267SS</b>	<b>Stainless Steel</b>



Requires  
(1)11-233 BHCS

No panel  
trimming  
required

1/4" SLOTS



Recommended  
Hardware  
(2) 11-233 BHCS

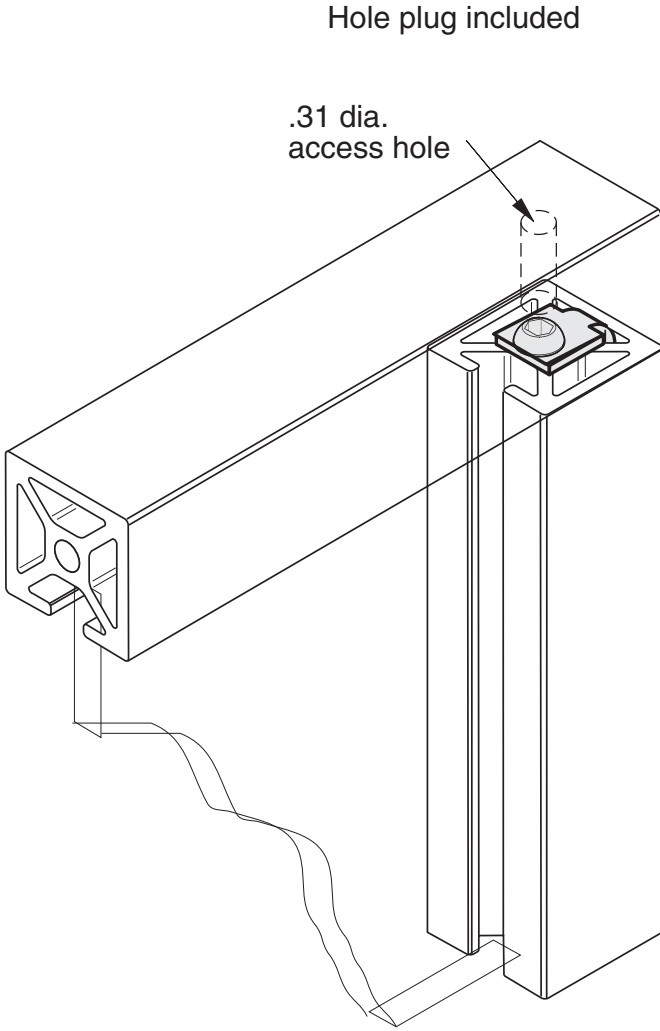
Material - Steel  
Finish - Zinc Plated

**1/4" SLOTS**



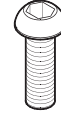
**11-269**

use with EX-70, EX-71, EX-72 and EX-73



Hole plug included

.31 dia.  
access hole

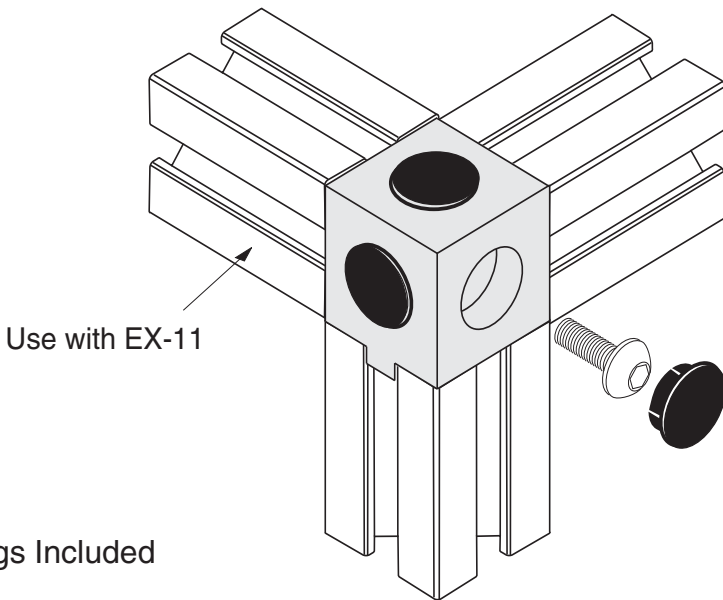
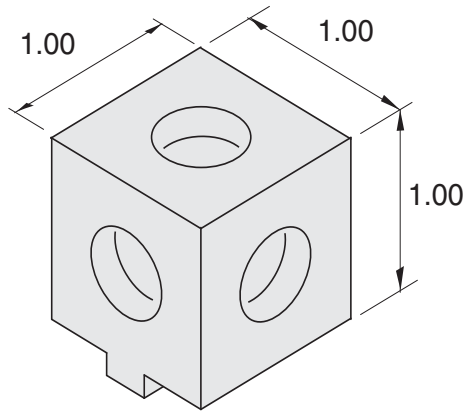


No panel trimming  
required.

**1/4" SLOTS**

Recommended  
Hardware  
(1) 11-233 BHCS

Material - Steel  
Finish - Zinc Plated



**1/4" SLOTS**

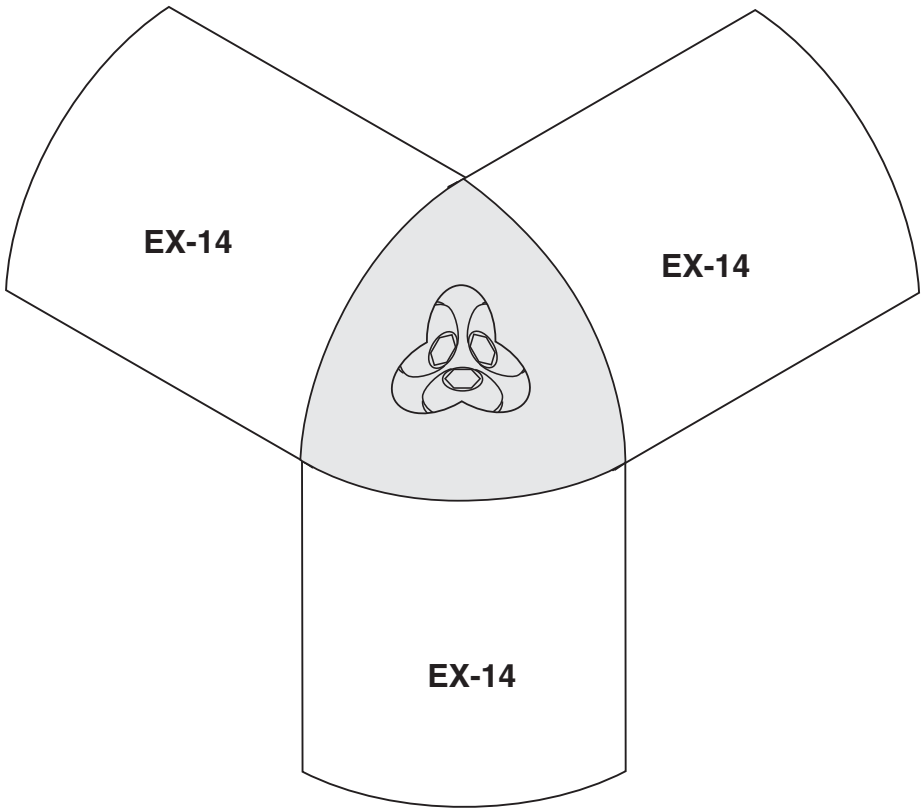
Hole Plugs Included

Recommended  
Hardware  
(3) 11-233 BHCS

Material - Aluminum  
Finish - Clear Anodize

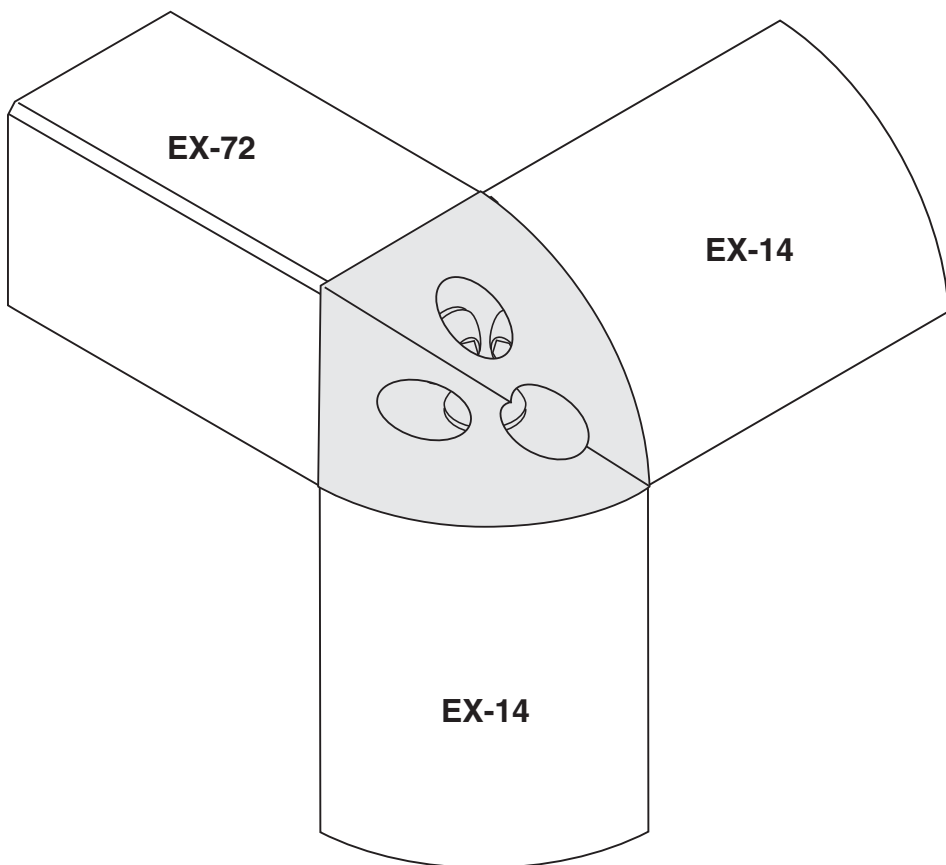
**11-56**

For 1" x 1" 1/4" Slot Profiles



**1/4" SLOTS**

Hardware Included  
Material - Aluminum  
Finish - Clear Anodize

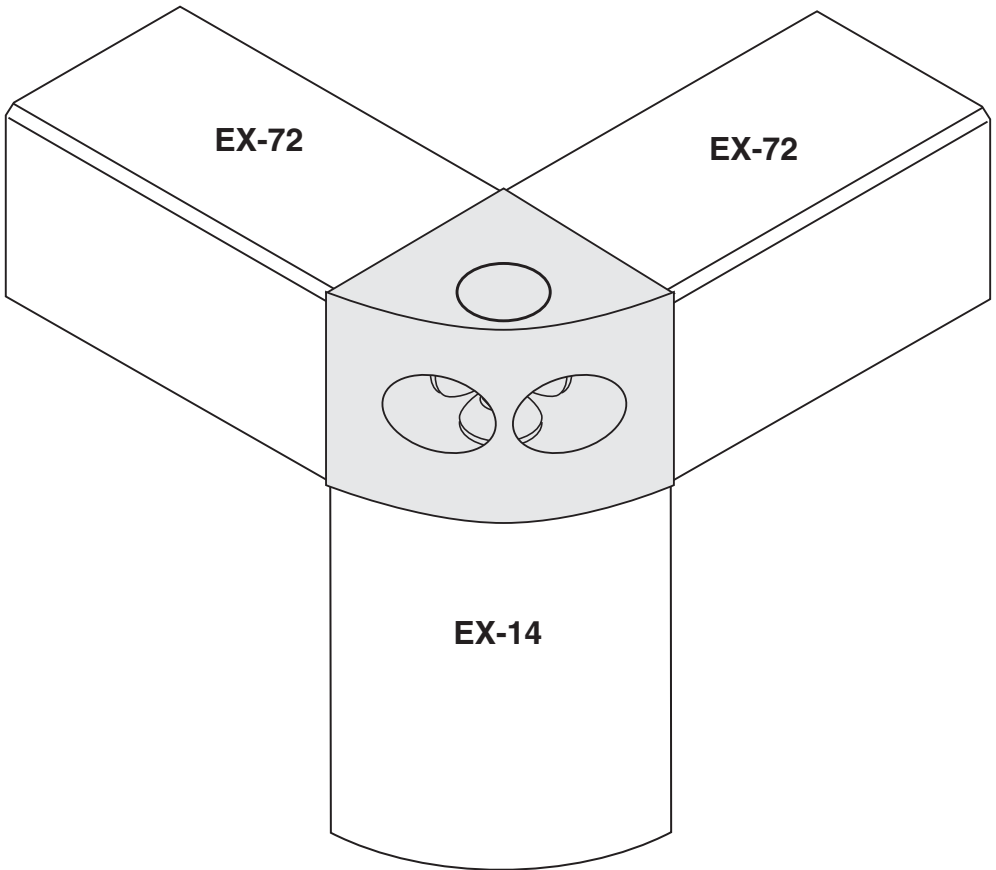


**1/4" SLOTS**

Hardware Included  
Material - Aluminum  
Finish - Clear Anodize

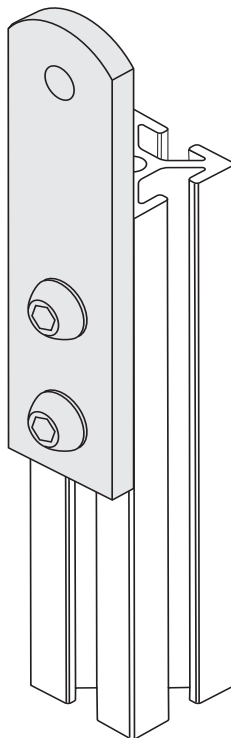
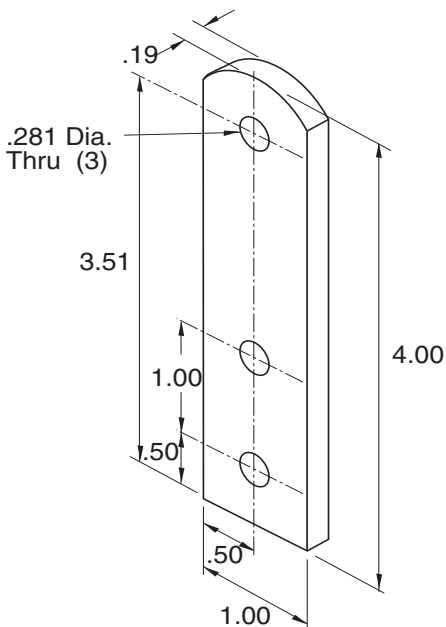
**11-58**

For 1" x 1" 1/4" Slot Profiles



**1/4" SLOTS**

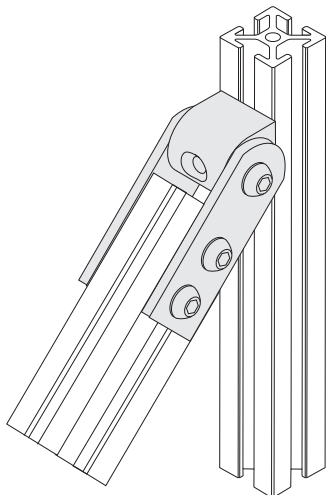
Hardware Included  
Material - Aluminum  
Finish - Clear Anodize



Assembled

(1) 11-10

(2) 11-11



Recommended  
Hardware

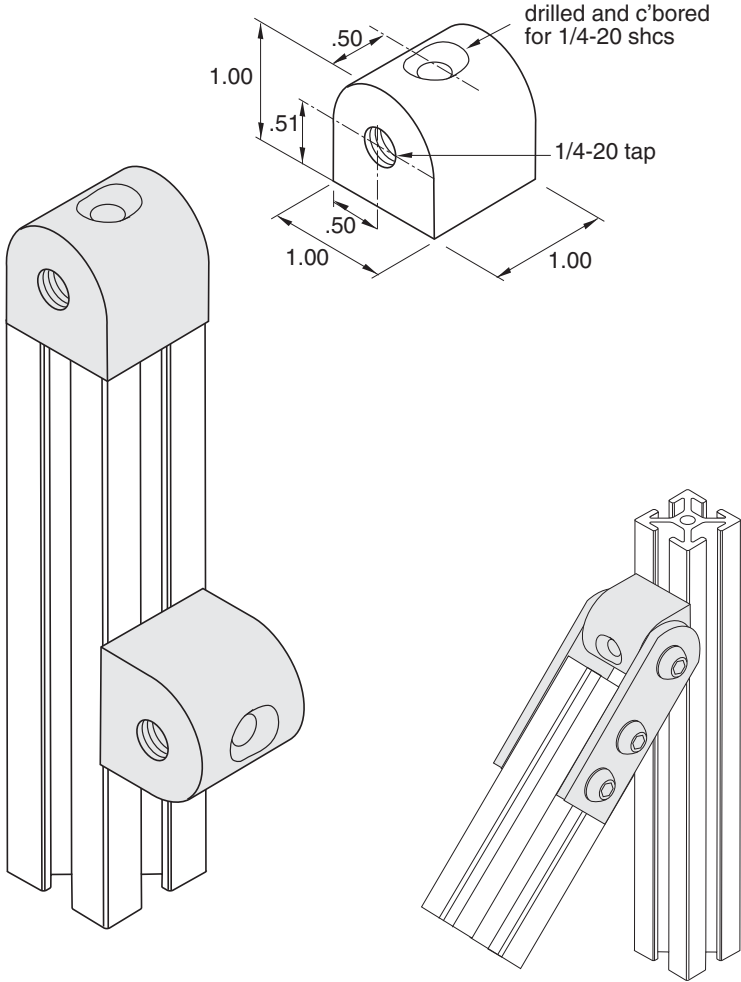
(3) 11-231 BHCS

(2) 11-210 T-nut

**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

**11-10**

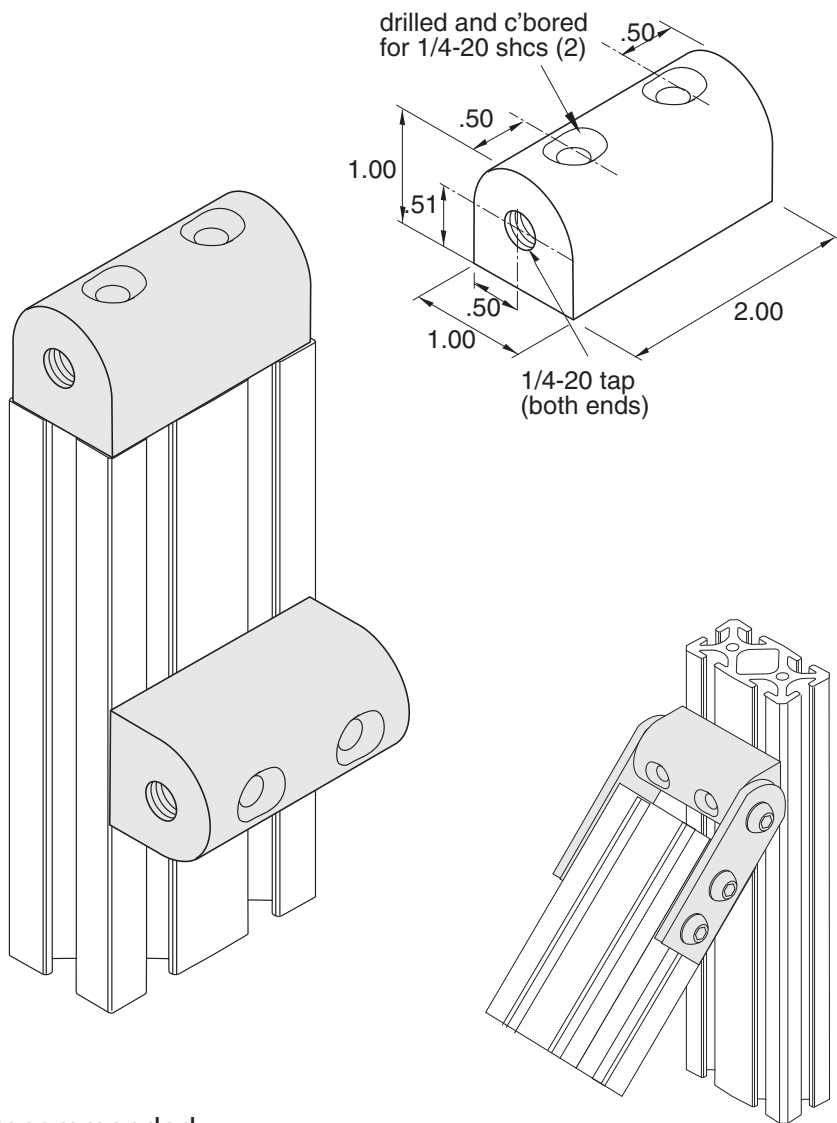


**1/4" SLOTS**

Recommended Hardware  
(1) 11-224 SHCS  
(1) 11-210 T-nut

Assembled  
(1) 11-10  
(2) 11-11

Material - Aluminum  
Finish - Clear Anodize



**Recommended  
Hardware**  
(2) 11-224 SHCS  
(2) 11-210 T-nut

**Assembled**  
(1) 11-9  
(2) 11-11

**Material - Aluminum  
Finish - Clear Anodize**

**1/4" SLOTS**

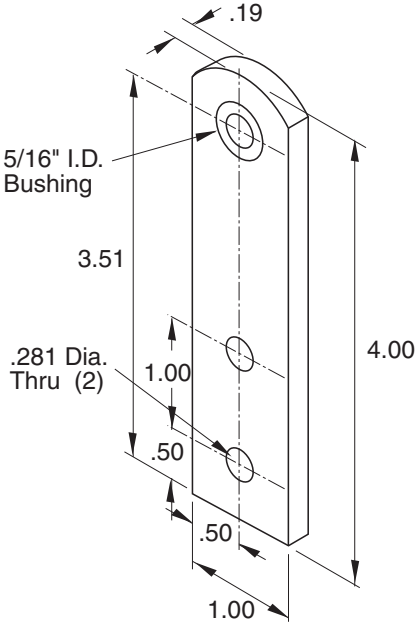


# Pivoting Post Arm with Bushing

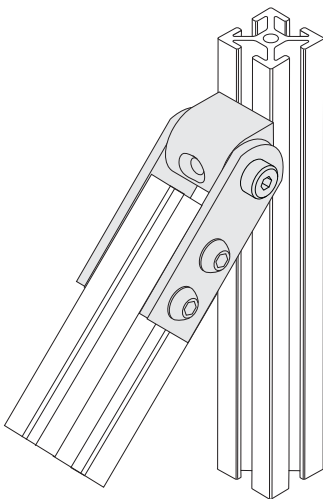
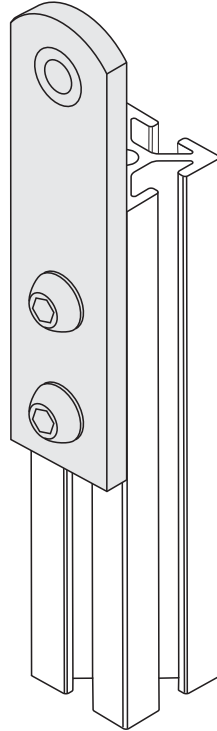


**11-105** use with 11-108 or 11-109

For shoulder bolt,  
order (1) 11-204



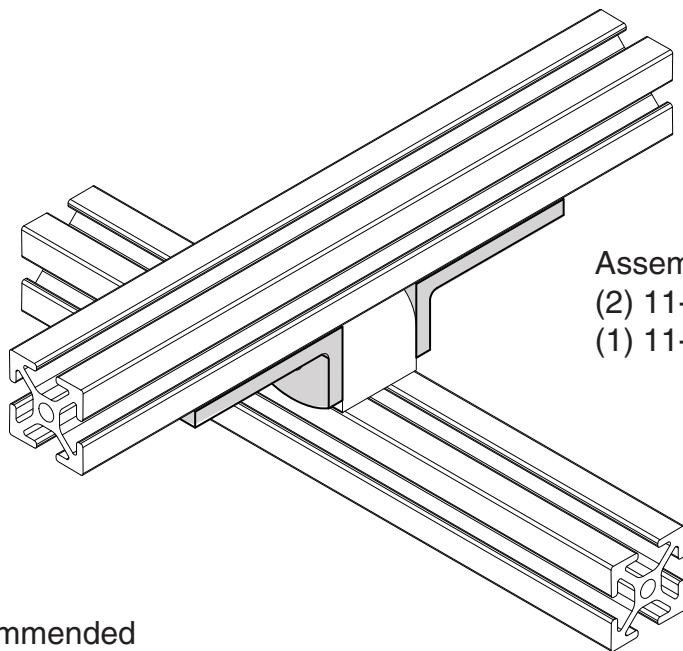
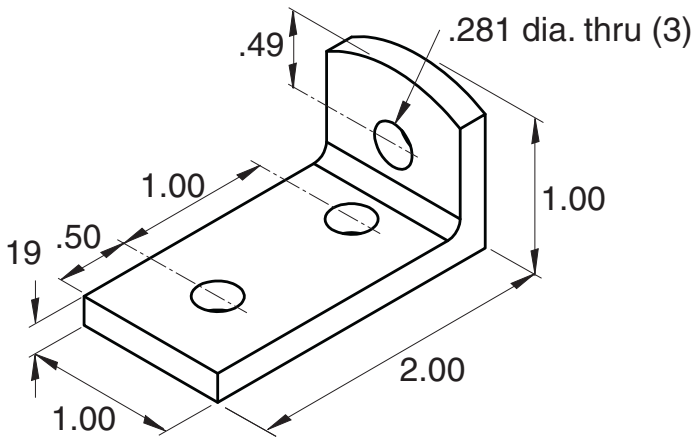
Recommended  
Hardware  
(2) 11-210 T-nut  
(2) 11-231 BHCS  
(1) 11-204 Sholder Bolt



Assembled  
(2) 11-105  
(1) 11-109  
(2) 11-204

Material - Aluminum  
Finish - Clear Anodize

1/4" SLOTS



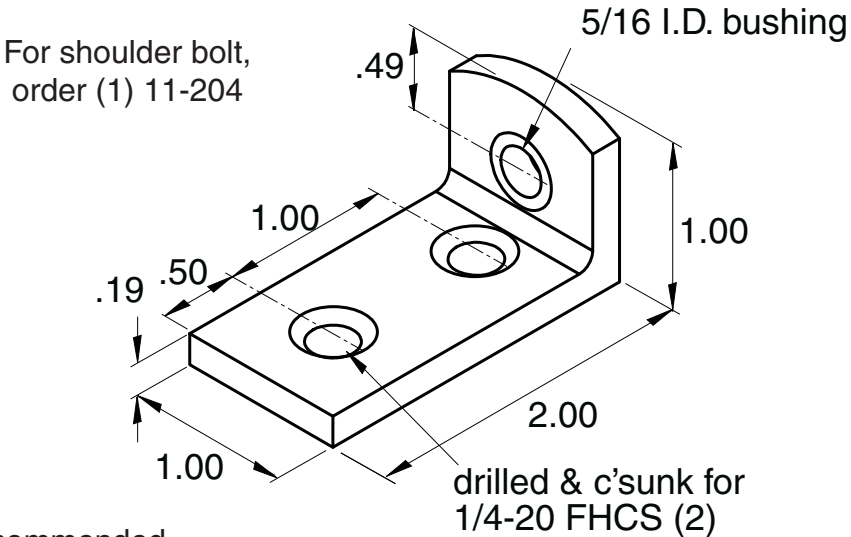
Assembled  
(2) 11-106  
(1) 11-10

Recommended  
Hardware  
(3) 11-231 BHCS  
(2) 11-210 T-nut

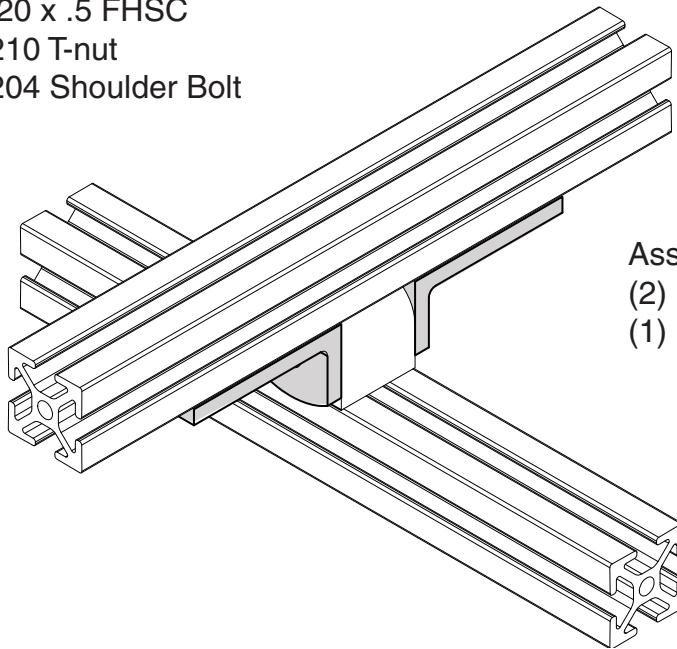
Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

**11-107** use with 11-108 or 11-109



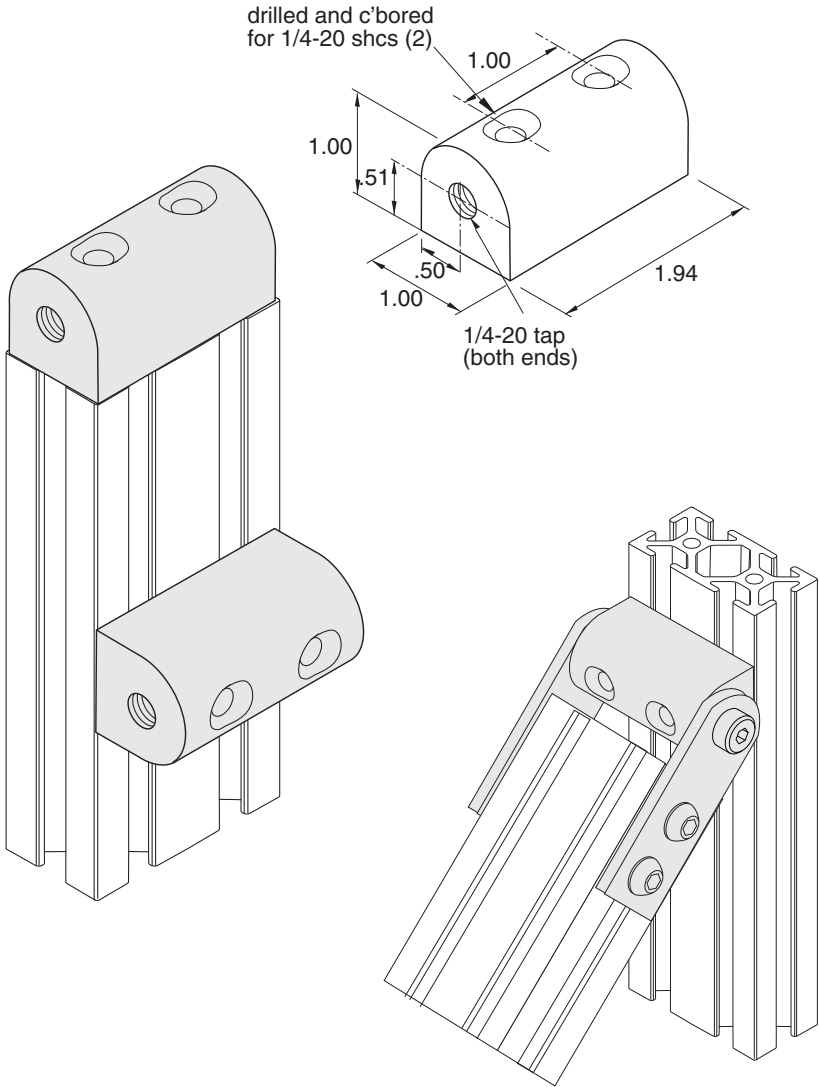
- Recommended Hardware
- (2) 1/4-20 x .5 FHSC
  - (2) 11-210 T-nut
  - (1) 11-204 Shoulder Bolt



Assembled  
(2) 11-107  
(1) 11-109

1/4" SLOTS

Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(2) 11-224 BHCS  
(2) 11-210 T-nut

Assembled  
(2) 11-105  
(1) 11-108  
(2) 11-204

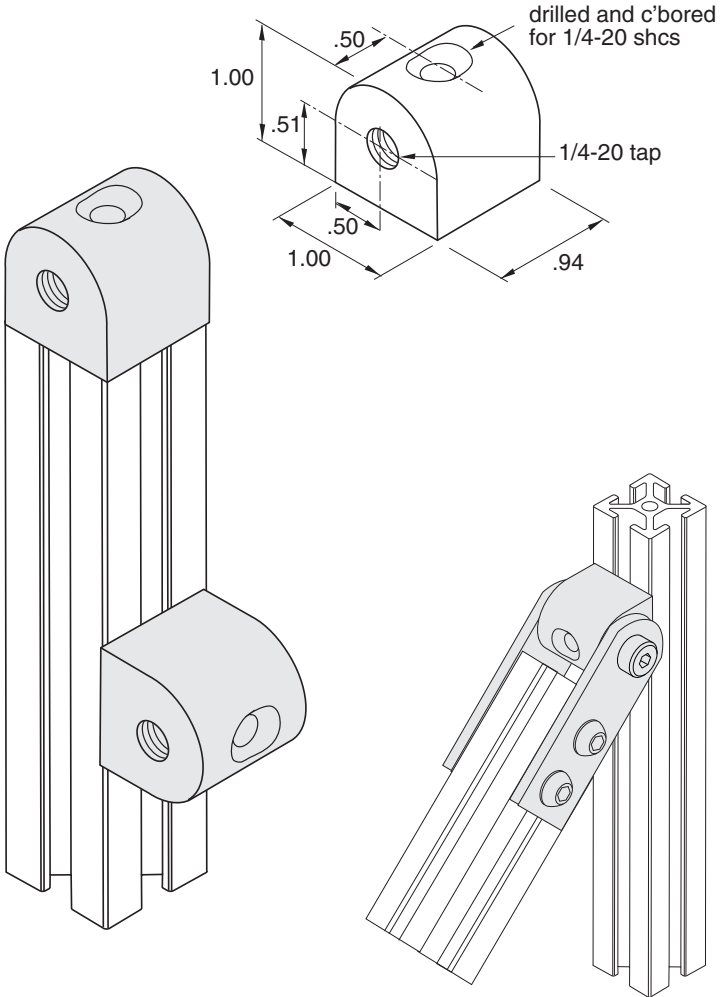
Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

# Pivoting Corner Post



**11-109** use with 11-105 or 11-107

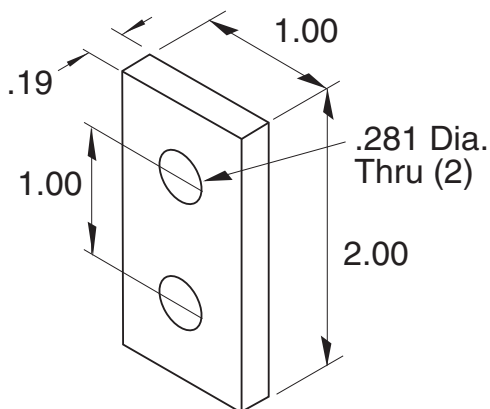


1/4" SLOTS

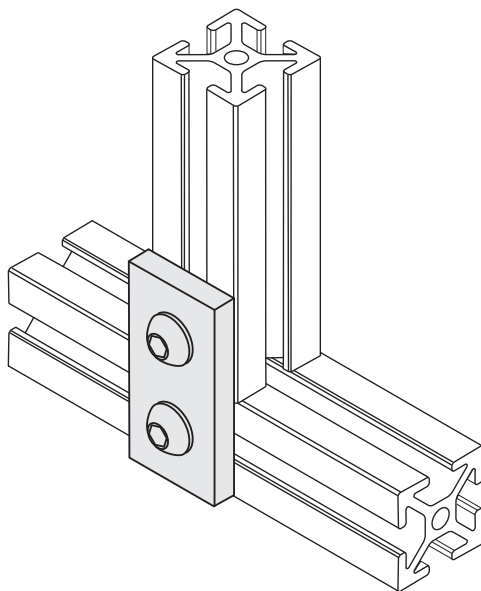
Recommended Hardware  
(1) 11-224 BHCS  
(1) 11-210 T-nut

Assembled  
(2) 11-105  
(1) 11-109  
(2) 11-204

Material - Aluminum  
Finish - Clear Anodize



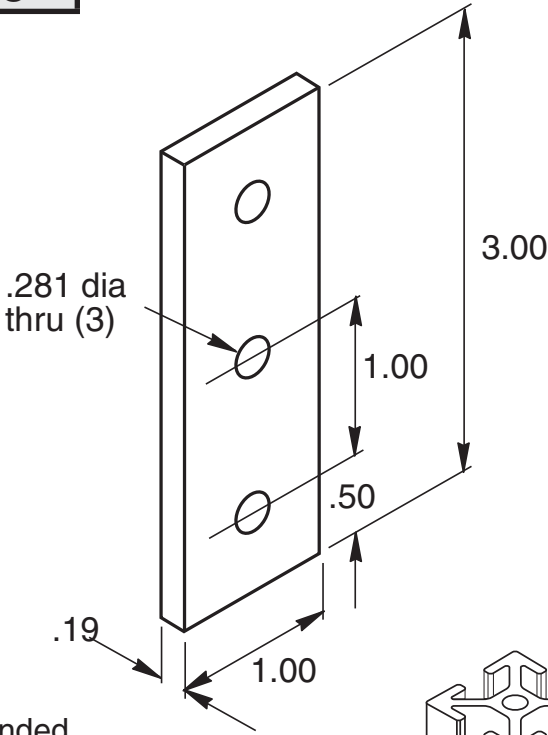
Recommended  
Hardware  
(2) 11-231 BHCS  
(2) 11-210 T-nut



**1/4" SLOTS**

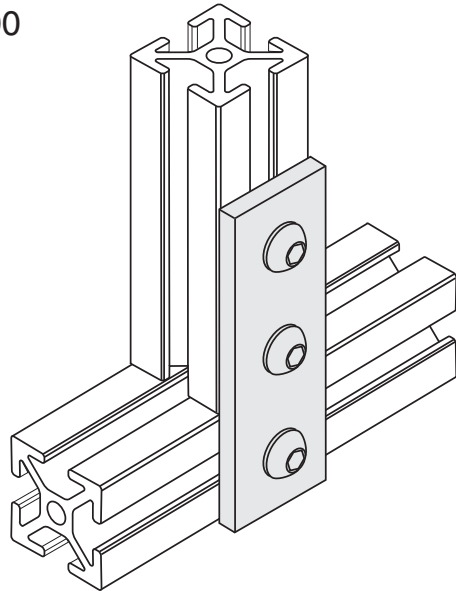
Material - Aluminum  
Finish - Clear Anodize

**11-23**



Recommended Hardware  
(3) 11-231 BHCS  
(3) 11-210 T-nut

**1/4" SLOTS**



Material - Aluminum  
Finish - Clear Anodize

**11-22**

.281 dia.  
thru (4)

4.00

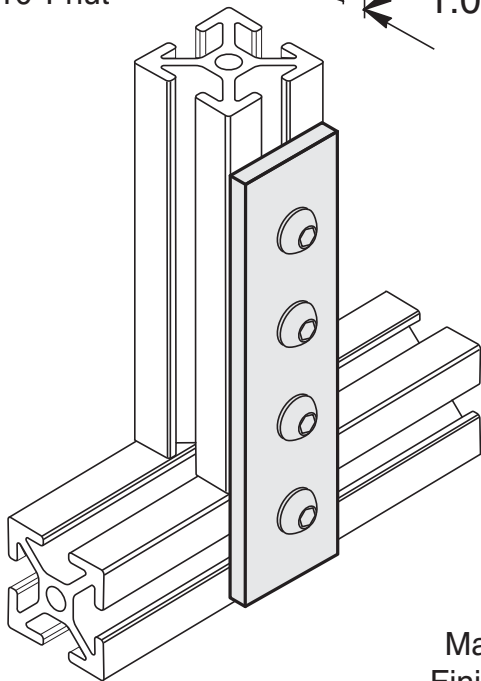
1.00

.50

Recommended  
Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

.19

1.00

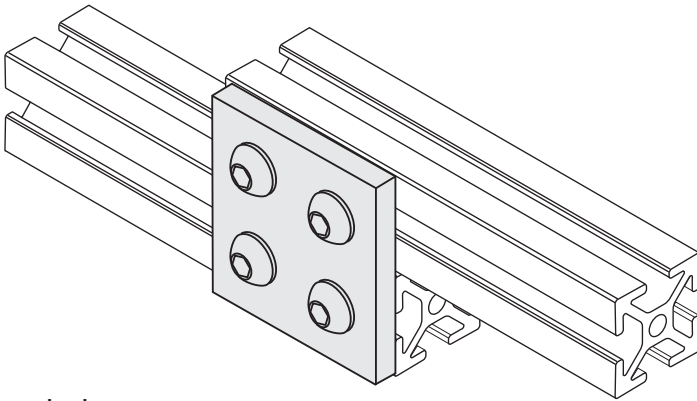
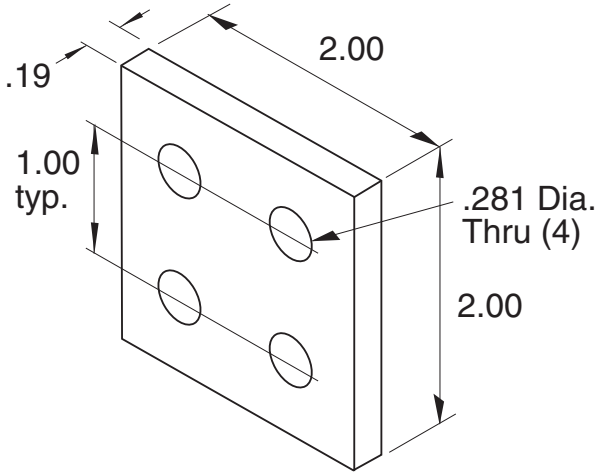


Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**



**11-39**

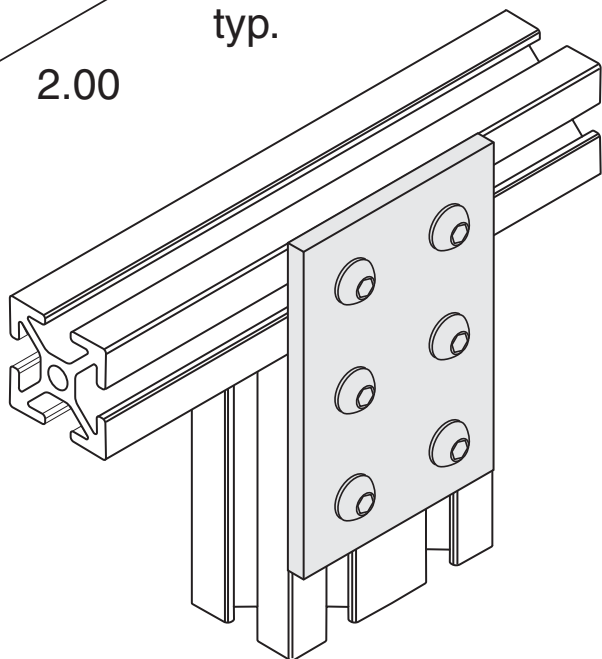
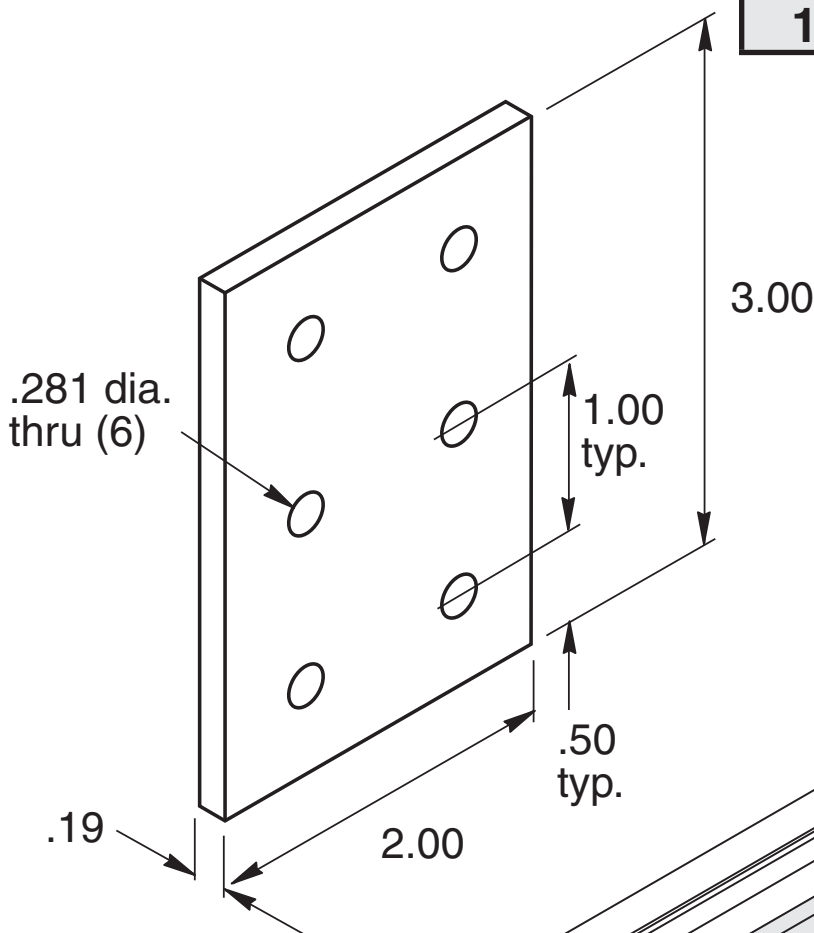


**1/4" SLOTS**

Recommended  
Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize

**11-28**



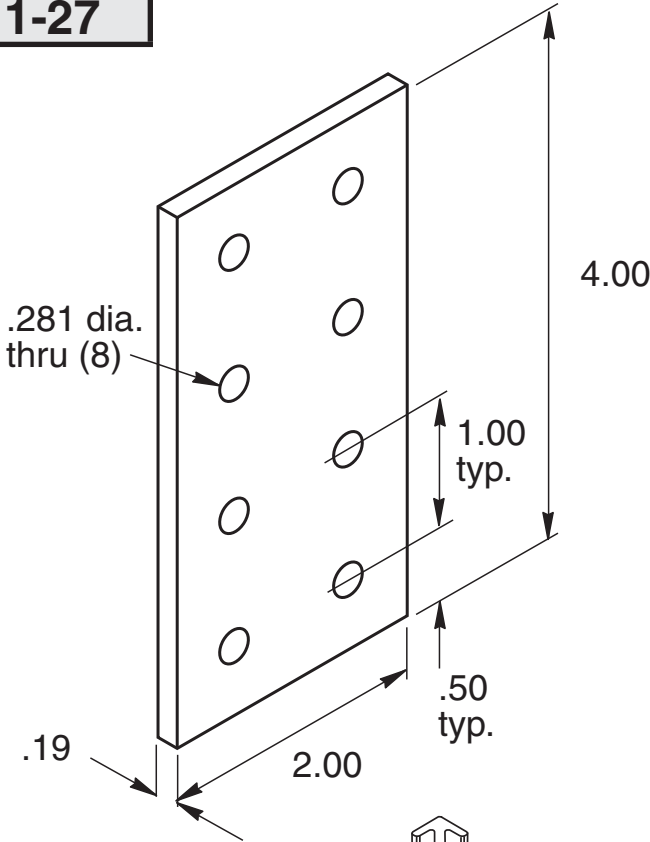
Recommended  
Hardware  
(6) 11-231 BHCS  
(6) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize

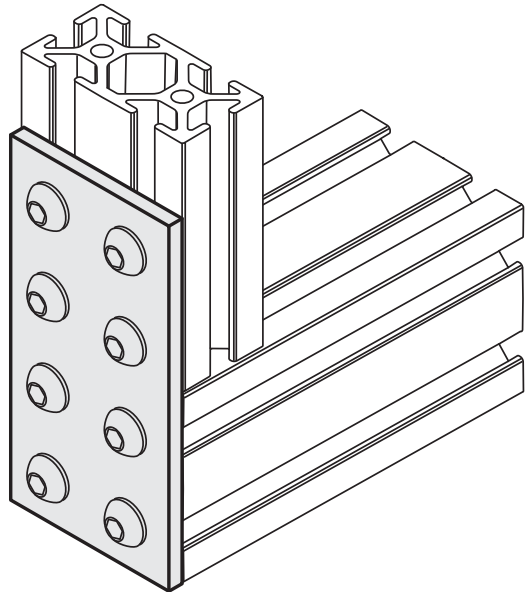
# Joining Plate



**11-27**

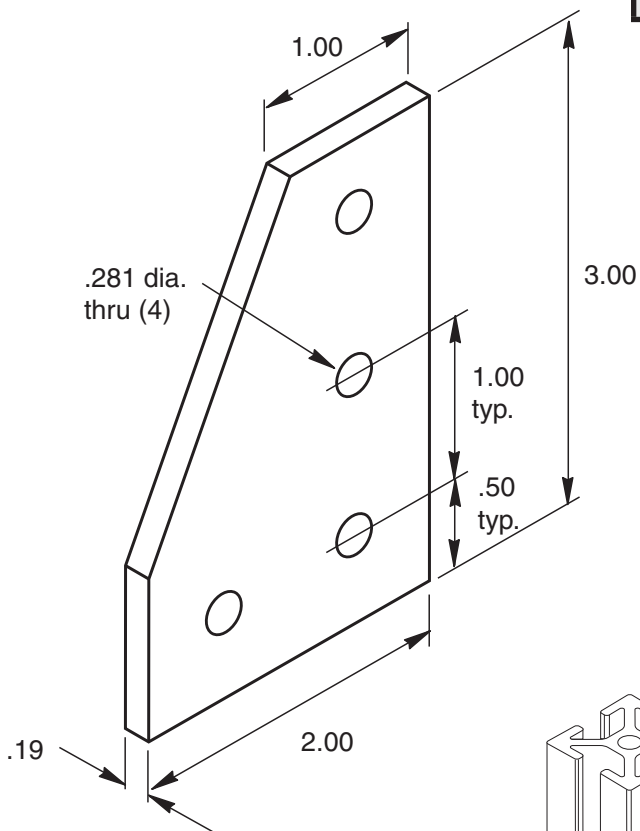


**1/4" SLOTS**

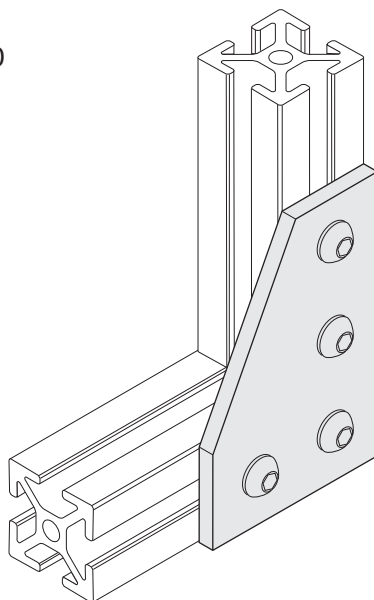


Recommended Hardware  
(8) 11-231 BHCS  
(8) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut



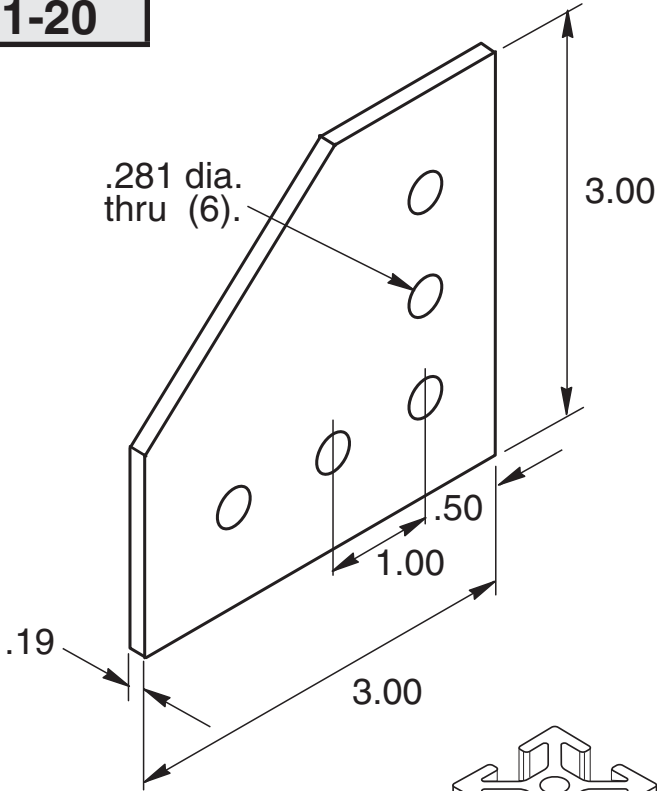
**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

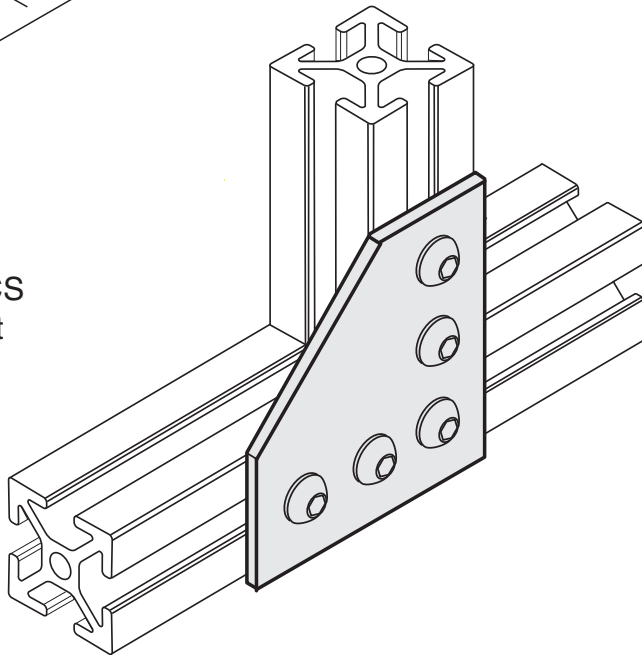
# Joining Plate



**11-20**

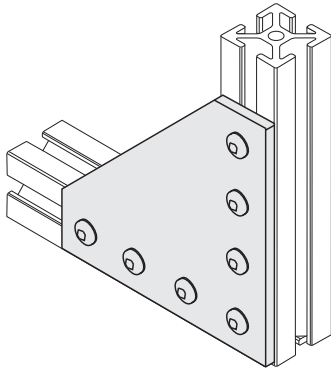
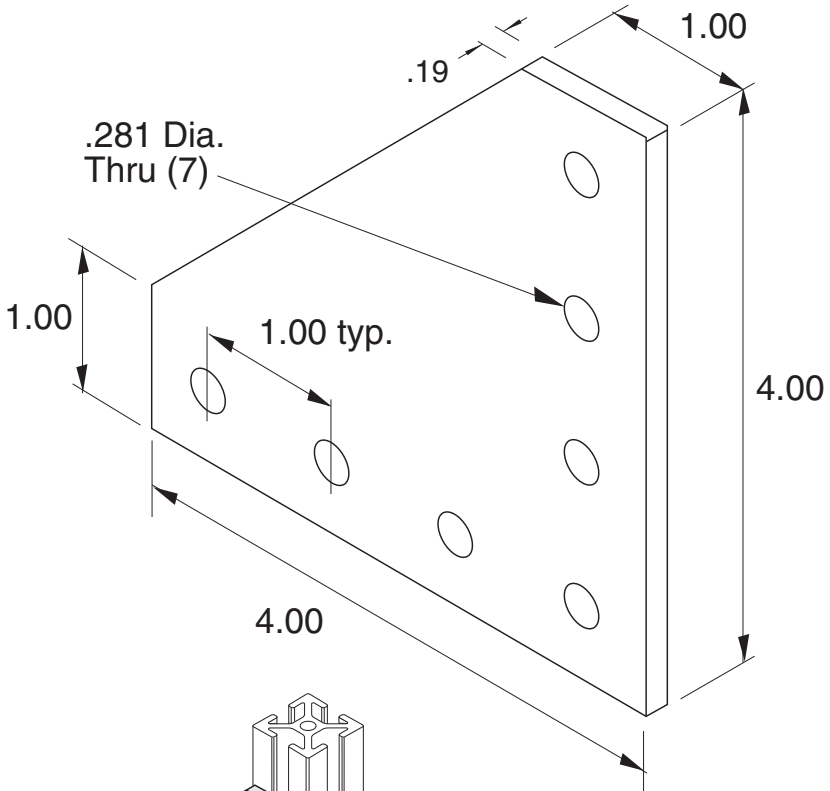


Recommended  
Hardware  
(5) 11-231 BHCS  
(5) 11-210 T-nut



Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**



Recommended  
Hardware  
(7) 11-231 BHCS  
(7) 11-210 T-nut

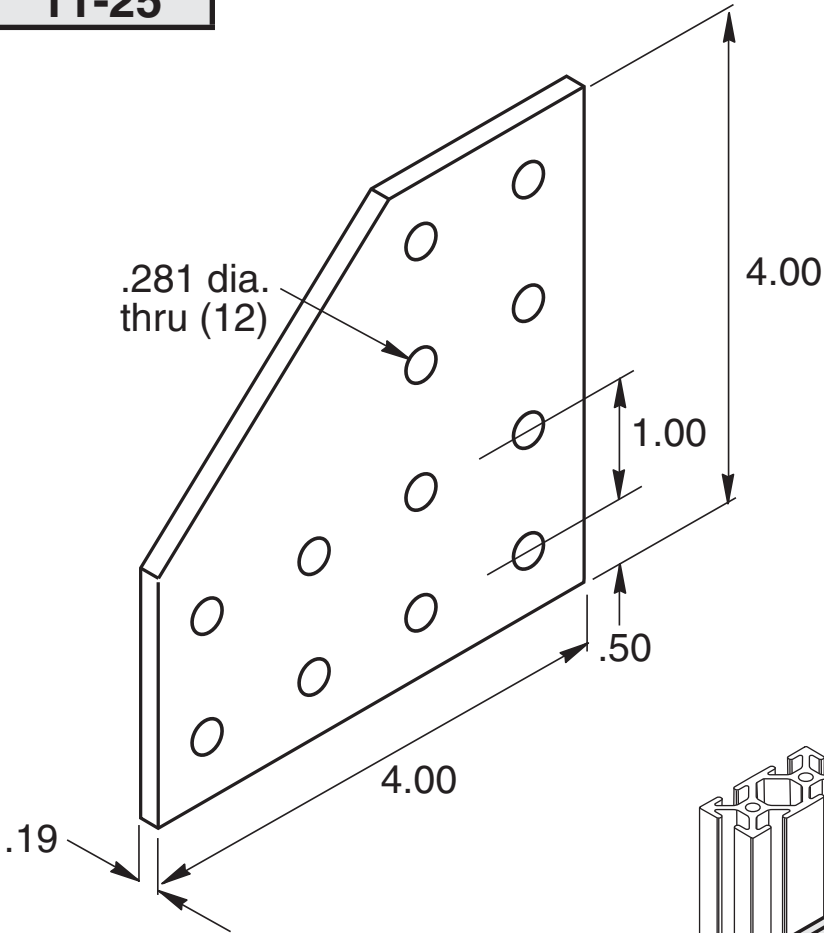
**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

# Joining Plate

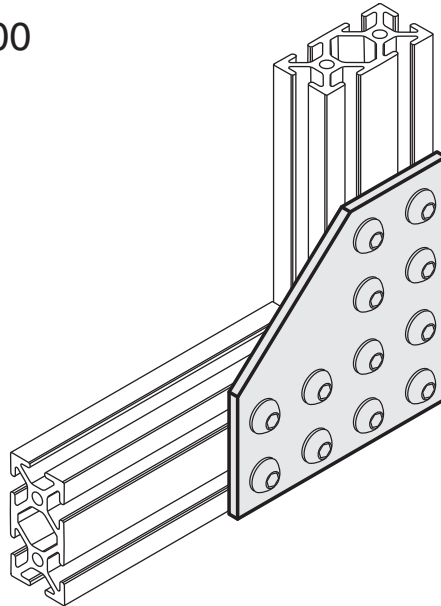


**11-25**

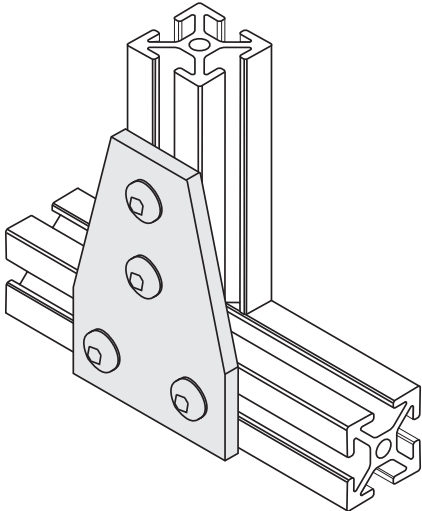
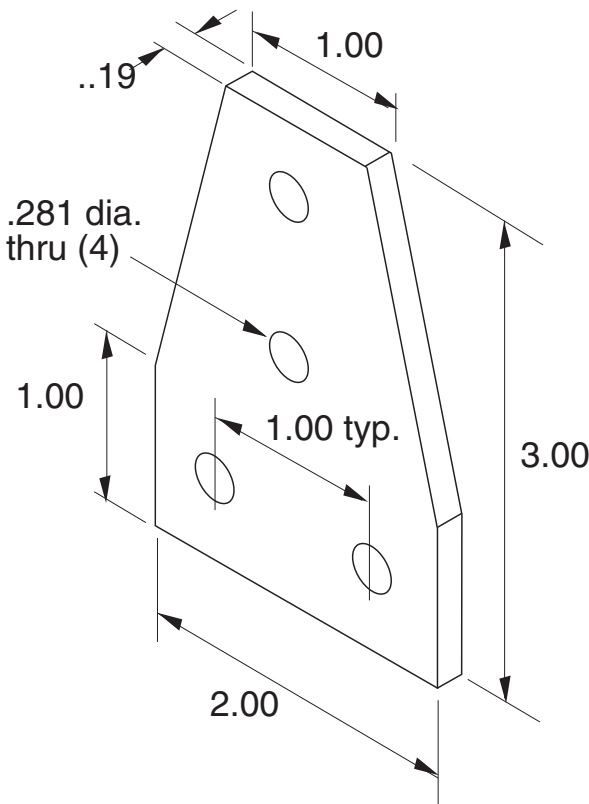


**1/4" SLOTS**

Recommended Hardware  
(12) 11-231 BHCS  
(12) 11-210 T-nut



Material - Aluminum  
Finish - Clear Anodize



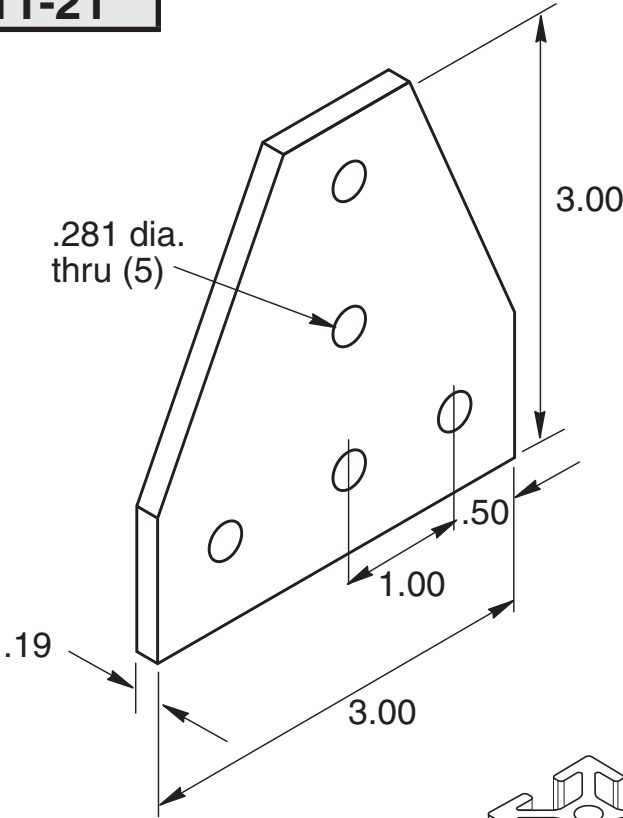
Recommended  
Hardware  
(4) 11-231 BHCS  
(4) 11-210 T-nut

**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

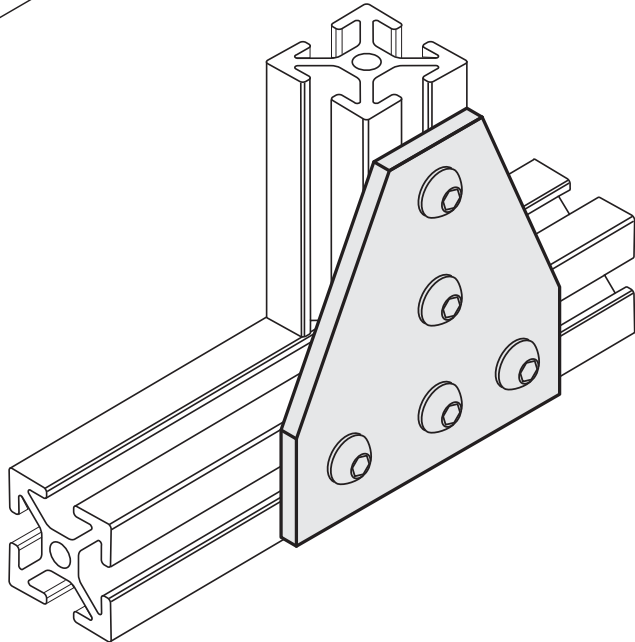


**11-21**

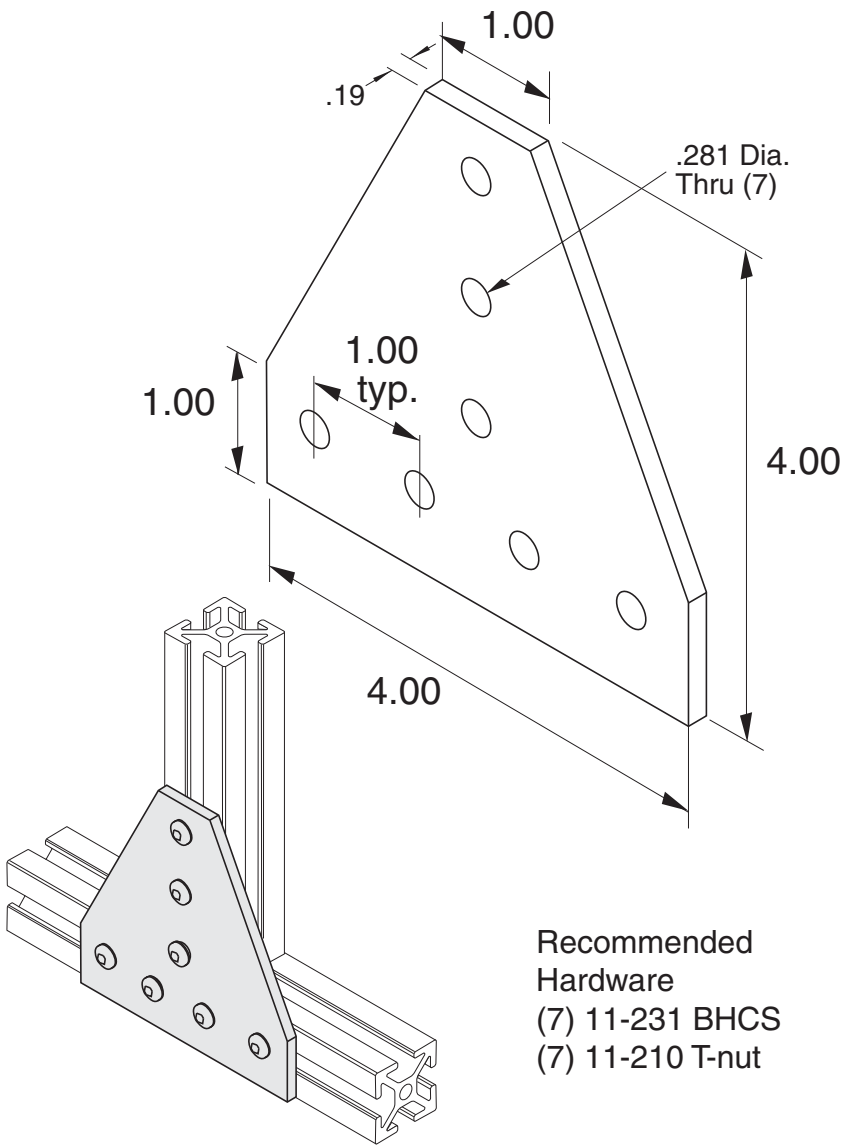


Recommended  
Hardware  
(5) 11-231 BHCS  
(5) 11-210 T-nut

**1/4" SLOTS**



Material - Aluminum  
Finish - Clear Anodize



Recommended  
Hardware  
(7) 11-231 BHCS  
(7) 11-210 T-nut

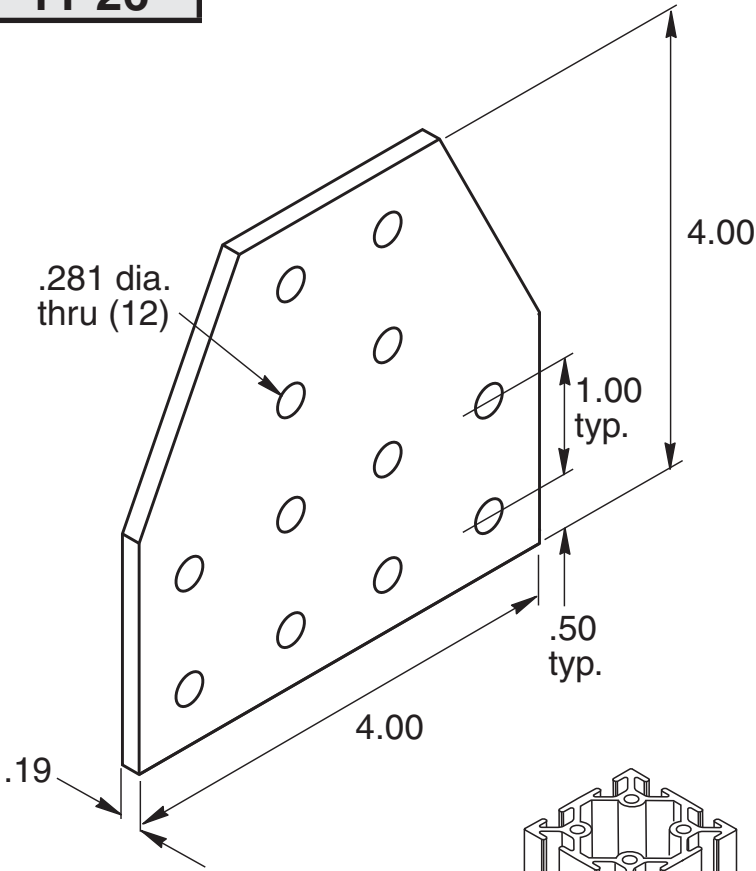
**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize

# Joining Plate

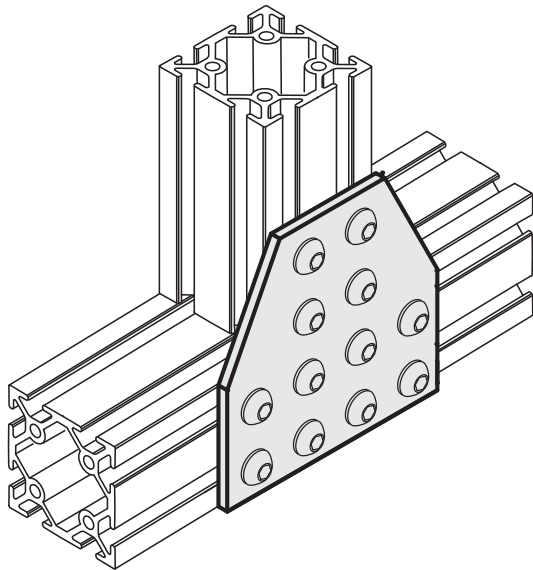


**11-26**

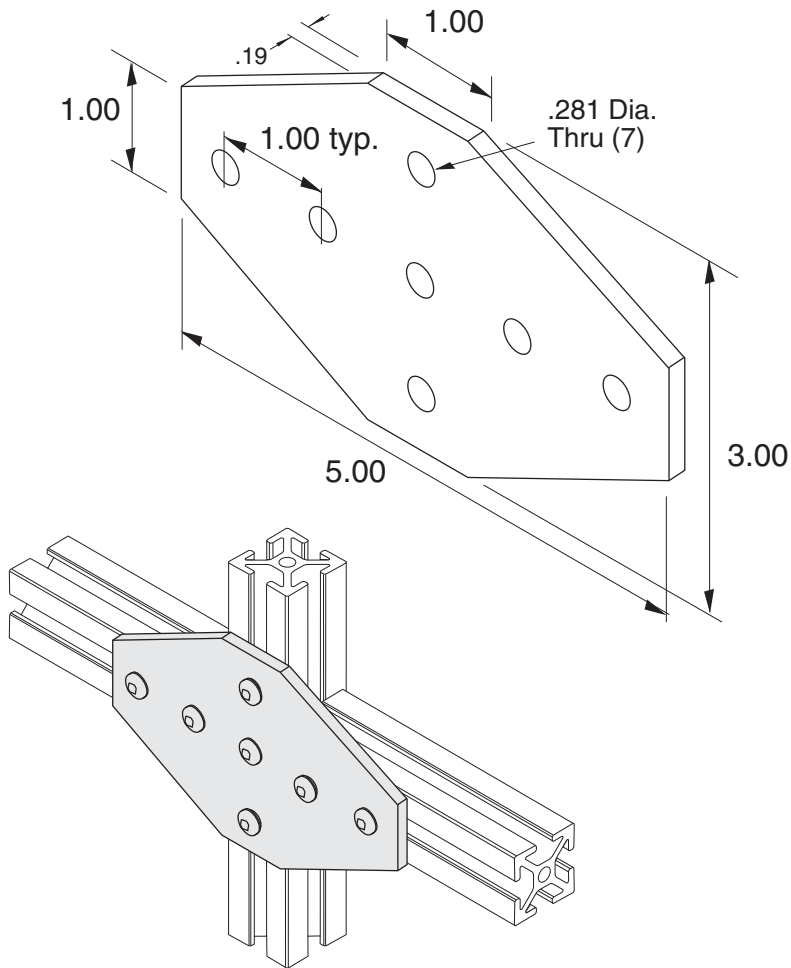


**1/4" SLOTS**

Recommended Hardware  
(12) 11-231 BHCS  
(12) 11-210 T-nut



Material - Aluminum  
Finish - Clear Anodize

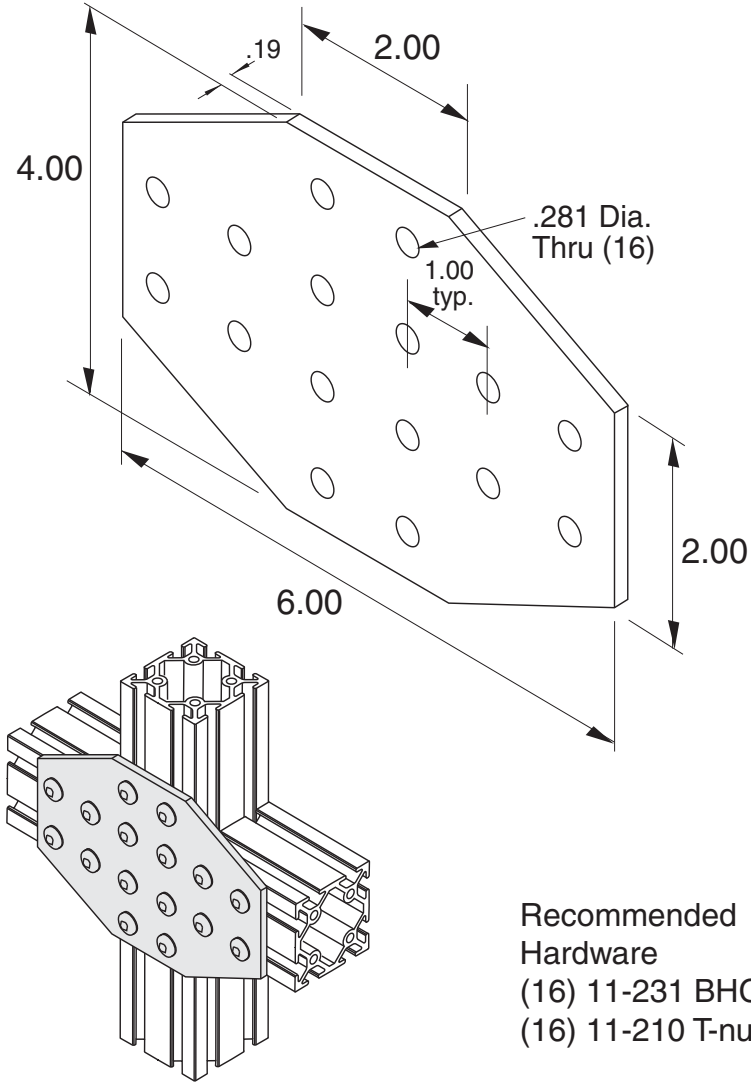


Recommended  
Hardware  
(7) 11-231 BHCS  
(7) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

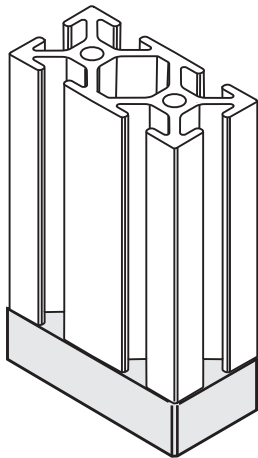
**11-40**



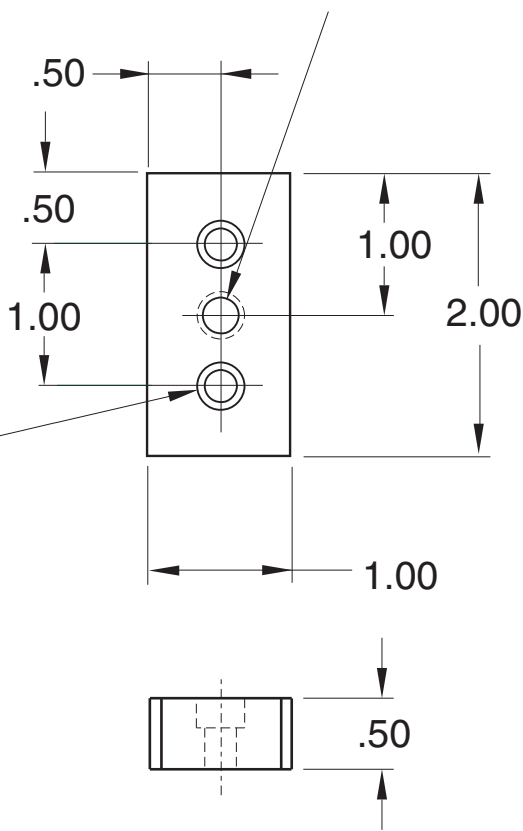
**1/4" SLOTS**

Recommended  
Hardware  
(16) 11-231 BHCS  
(16) 11-210 T-nut

Material - Aluminum  
Finish - Clear Anodize



**11-45A** 3/8-16 UNC thru  
**11-45B** 1/2-13 UNC thru



Drilled & C'Bored  
 for 1/4-20 SHCS  
 (2) plc's

Recommended  
 Hardware  
 (2) 11-223 SHCS

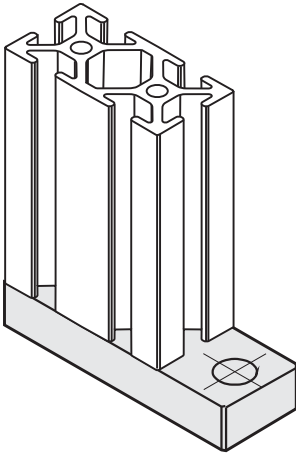
Material - Aluminum  
 Finish - Clear Anodize

**1/4" SLOTS**

# Leveling Anchor Plate



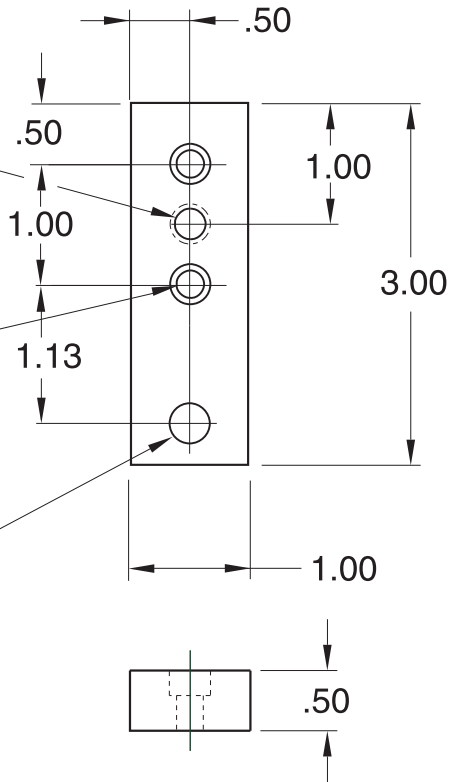
**11-48**



**11-48A** 3/8-16 UNC thru  
**11-48B** 1/2-13 UNC thru

Drilled & C'Bored  
for 1/4-20 SHCS  
(2) plcs

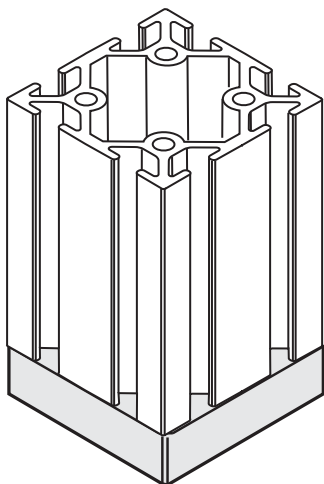
7/16" Dia. thru  
for floor anchor



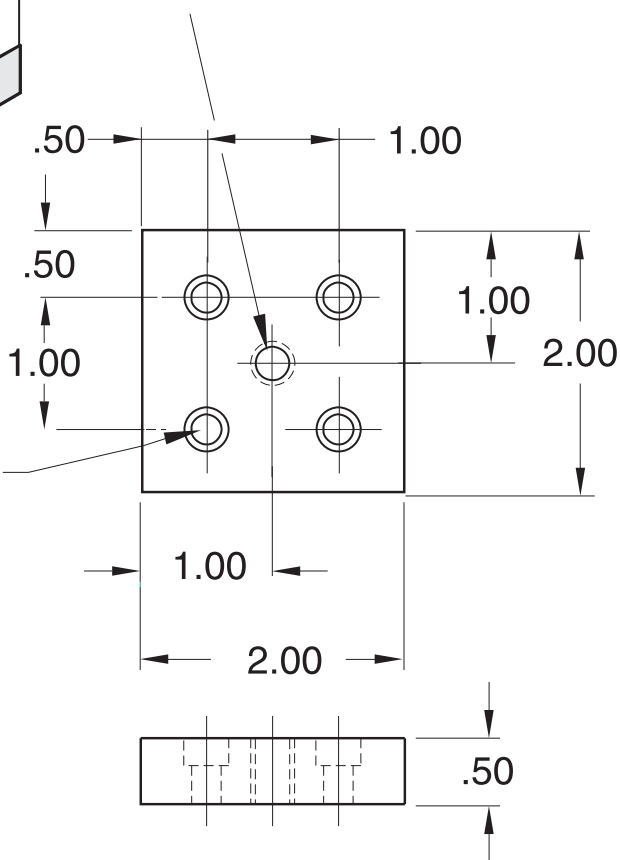
Recommended  
Hardware  
(2) 11-223 SHCS

Material - Aluminum  
Finish - Clear Anodize

1/4" SLOTS



**11-46A** 3/8-16 UNC thru  
**11-46B** 1/2-13 UNC thru



Drilled & C'Bored  
 for 1/4-20 SHCS  
 (4) plc's

Recommended  
 Hardware  
 (4) 11-223 SHCS

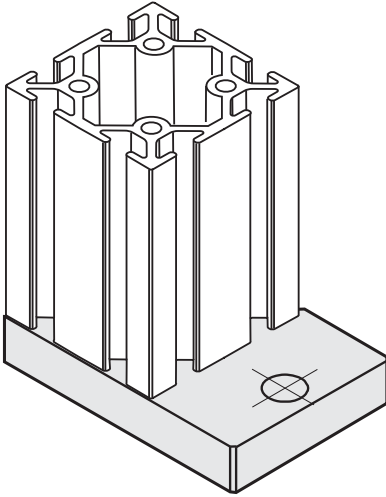
Material - Aluminum  
 Finish - Clear Anodize



# Leveling Anchor Plate

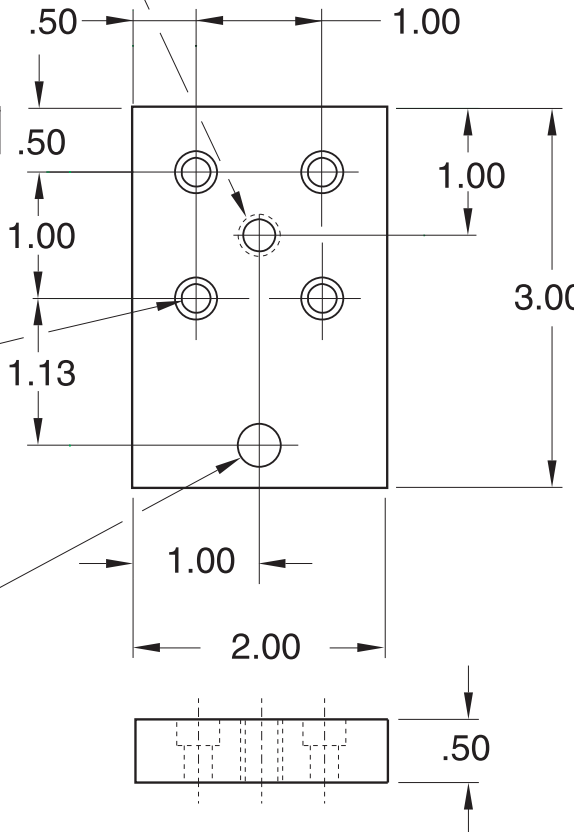


**11-47**



**11-47A** 3/8-16 UNC thru  
**11-47B** 1/2-13 UNC thru

Drilled & C'Bored  
for 1/4-20 SHCS  
(4) plc's

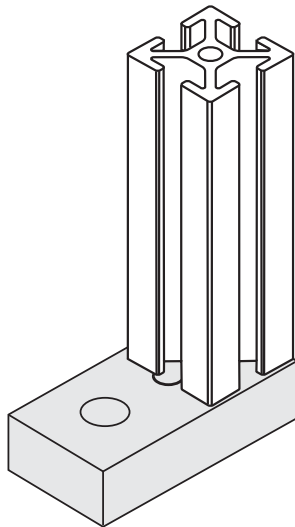
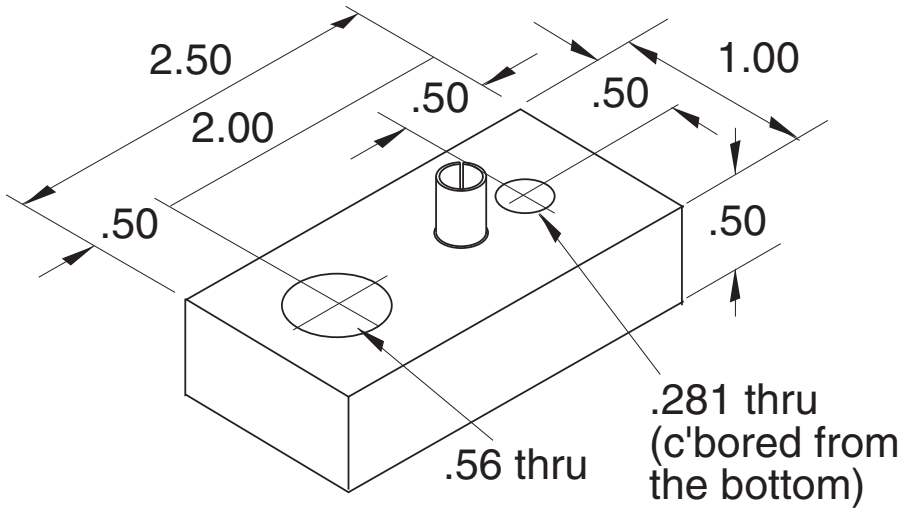


7/16 Dia. thru  
for floor anchor

**1/4" SLOTS**

Recommended  
Hardware  
(4) 11-223 SHCS

Material - Aluminum  
Finish - Clear Anodize



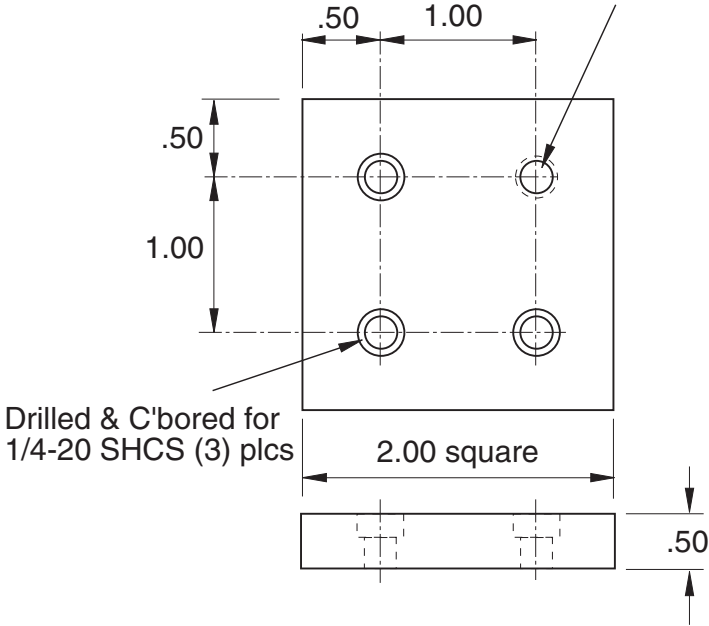
Recommended  
Hardware  
(1) 11-223 SHCS

Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

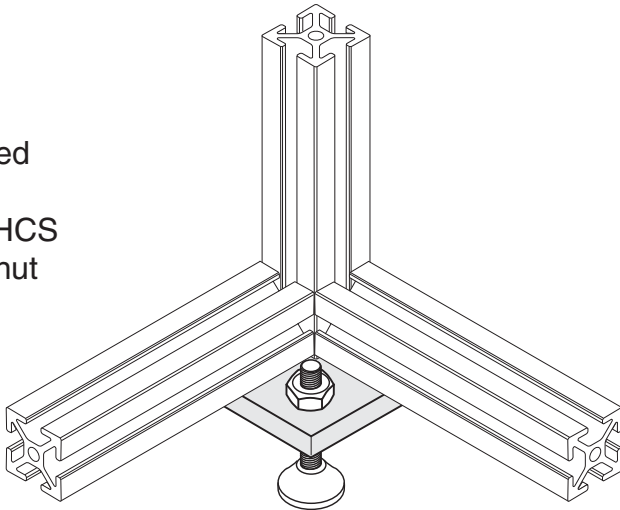
**11-49**

**11-49A** 3/8-16 UNC tap thru  
**11-49B** 1/2-13 UNC tap thru



**1/4" SLOTS**

Recommended  
Hardware  
(3) 11-221 SHCS  
(3) 11-210 T-nut



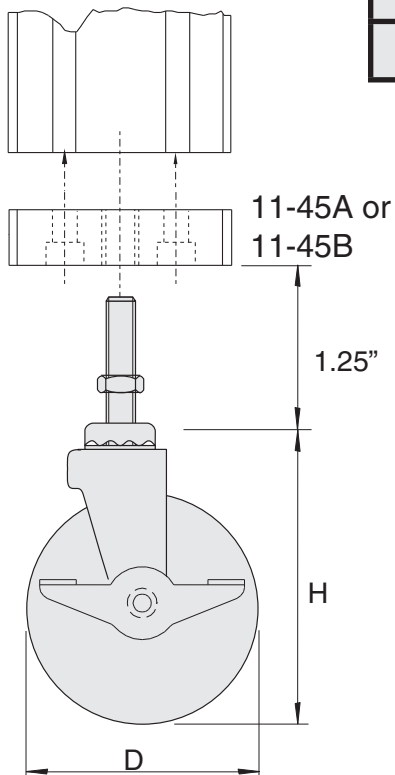
Material - Aluminum  
Finish - Clear Anodize

**EC-S1**

**EC-S2**

**EC-S3**

EX-12



**EC-S1**

**EC-S2**

**EC-S3**

Note: Wheel material is hard plastic

Part no.	D	H	Stem	Brake	Max. Load	Wheel Width
<b>EC-S1</b>	2	2 7/8	3/8-16 x 1 1/4	Yes	125 lbs	1.00
<b>EC-S2</b>	3	3 3/4	3/8-16 x 1 1/4	Yes	250 lbs	1.25
<b>EC-S3</b>	4	5	1/2-13 x 1 1/2	Yes	300 lbs	1.25

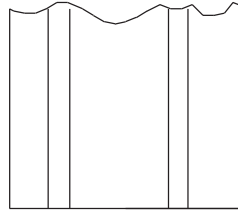
**1/4" SLOTS**

# Swivel Plate Caster w/brake



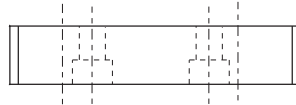
<b>11-110</b>
<b>11-111</b>
<b>11-112</b>

EX-22 uses caster plate 11-50



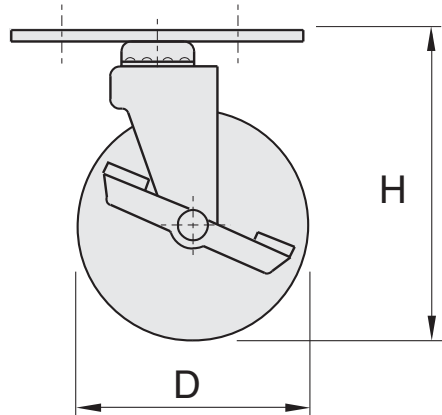
EX-22

The casters have (4) .343 dia mtg. holes on 1 3/4" x 3.00" centers



11-50

Recommended Hardware  
(4) EF-12-.5 BHCS



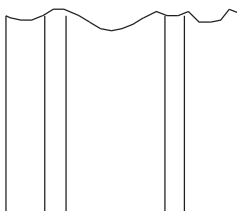
**1/4" SLOTS**

Note: Wheel material is hard plastic

Part no.	D	H	Brake	Max. Load	Wheel Width
<b>11-110</b>	3"	4.13	Yes	250 lbs	1.25
<b>11-111</b>	4"	5.00	Yes	300 lbs	1.25
<b>11-112</b>	5"	6.00	Yes	325 lbs	1.25

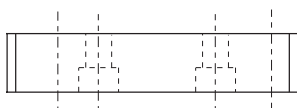
<b>11-120</b>
<b>11-121</b>
<b>11-122</b>

EX-22 uses caster plate 11-50



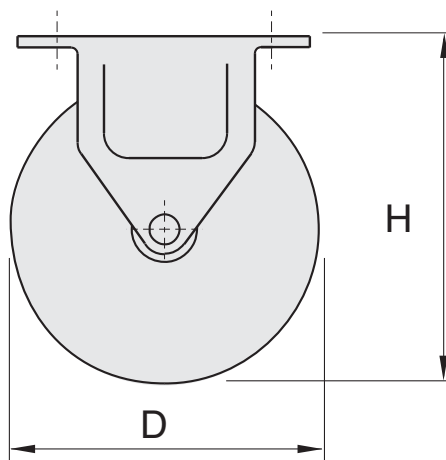
EX-22

The casters have (4) .343 dia mtg. holes on 1 3/4" x 3.00" centers



11-50

Recommended Hardware  
(4) EF-12-.50 BHCS

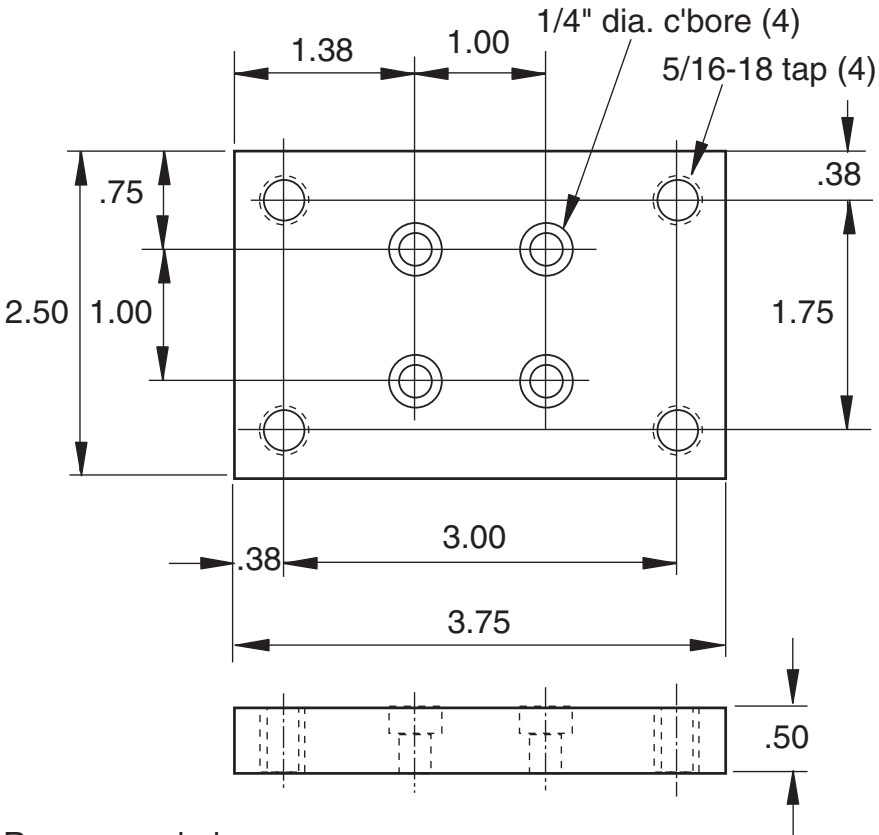


Note: Wheel material is hard plastic

Part no.	D	H	Brake	Max. Load	Wheel Width
<b>11-120</b>	3"	4.13	No	250 lbs	1.25
<b>11-121</b>	4"	5.00	No	300 lbs	1.25
<b>11-122</b>	5"	6.00	No	325 lbs	1.25

**1/4" SLOTS**

**11-50**



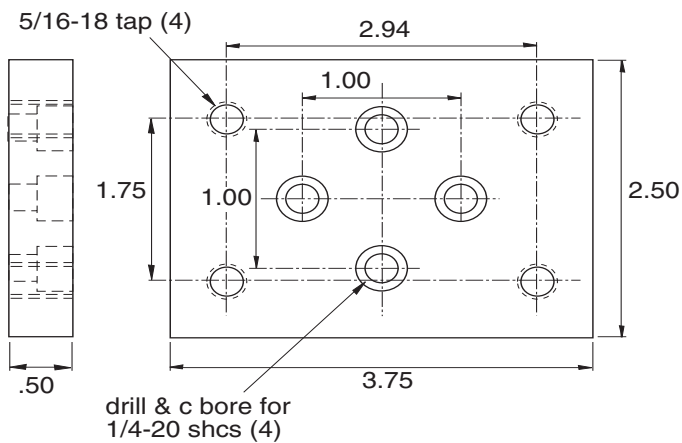
**1/4" SLOTS**

Recommended Hardware

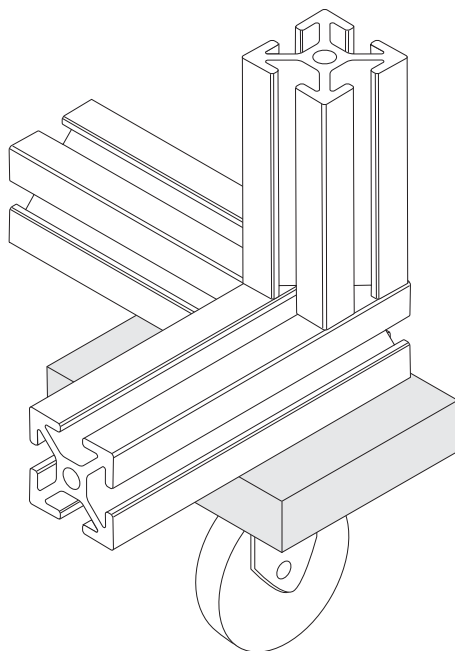
- (4) 11-221 SHCS for extrusion end mounting
- or
- (4) 11-223 SHCS for extrusion slot mounting
- (4) 11-210 T-nut

For Casters, See Pages 427 & 428

Material - Aluminum  
 Finish - Clear Anodize



Recommended  
Hardware  
(4) 11-221 SHCS  
(4) 11-210 T-nut

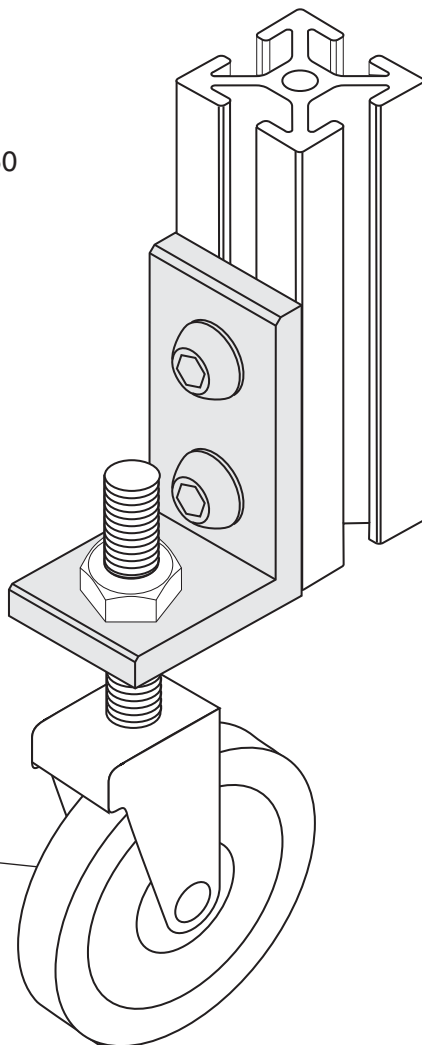
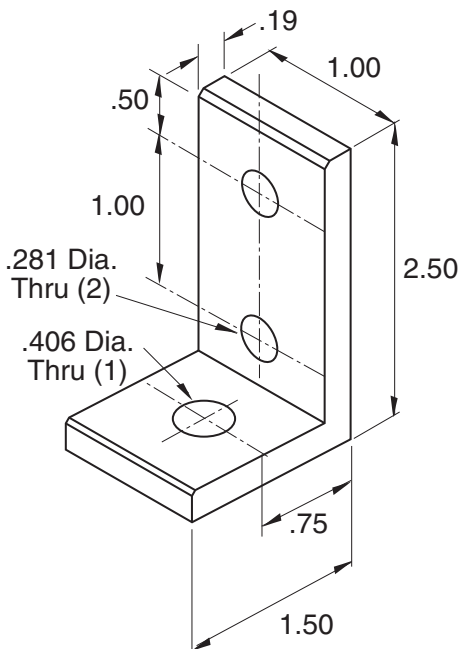


**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize



**11-270**



Recommended  
Hardware  
(2) 11-221 SHCS  
(2) 11-210 T-nut

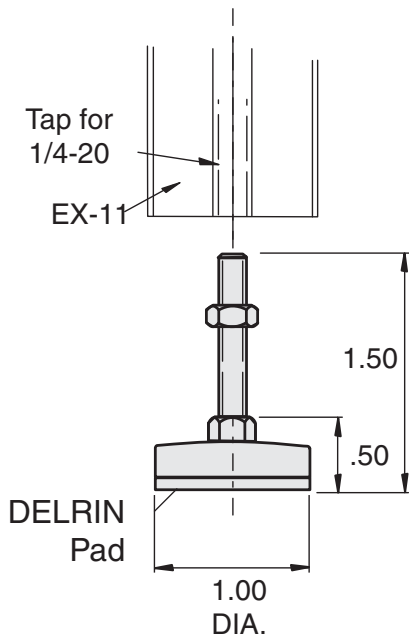
**1/4" SLOTS**

EC-S1  
EC-S2

Material - Steel  
Finish - Black Powder Coat

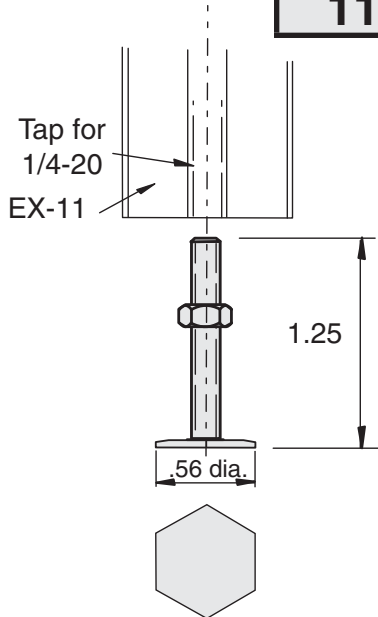
**11-35**

**11-36**



Load = 100 lbs

**11-35**



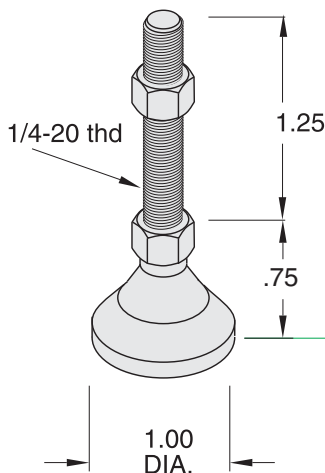
Load = 150 lbs

**11-36**

Material - Steel

**Deluxe Leg**

**11-52**



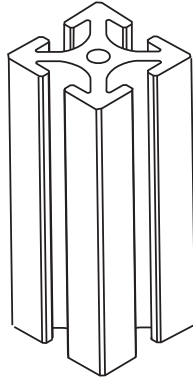
Load = 2000 lbs

**1/4" SLOTS**

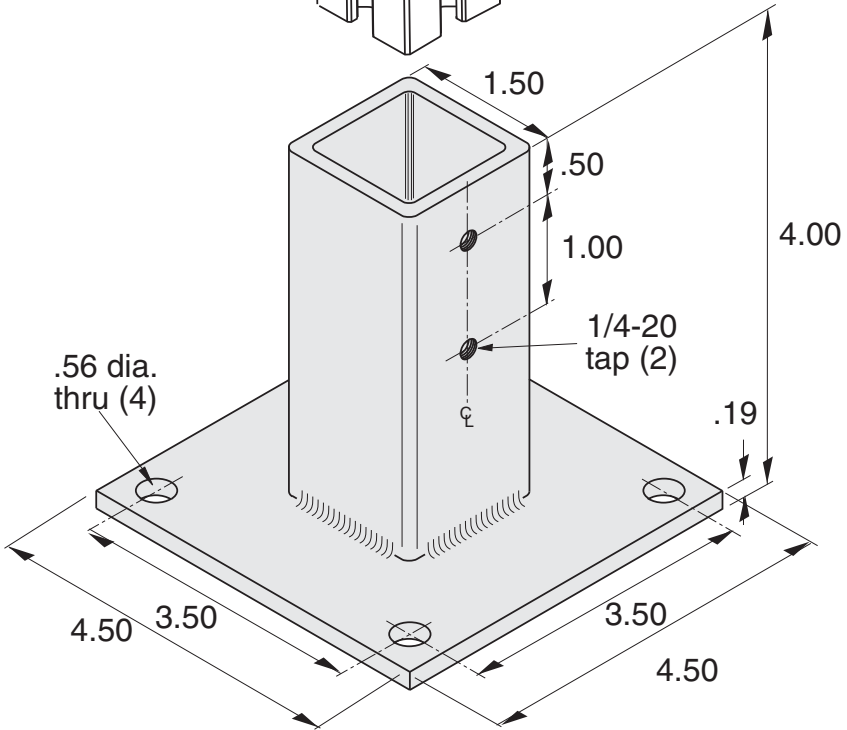
# Steel Flanged Foot



**11-70**



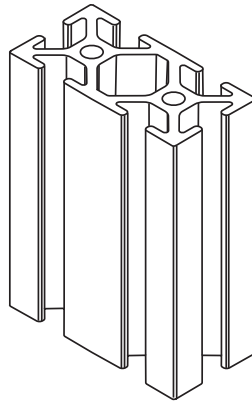
use with EX-11



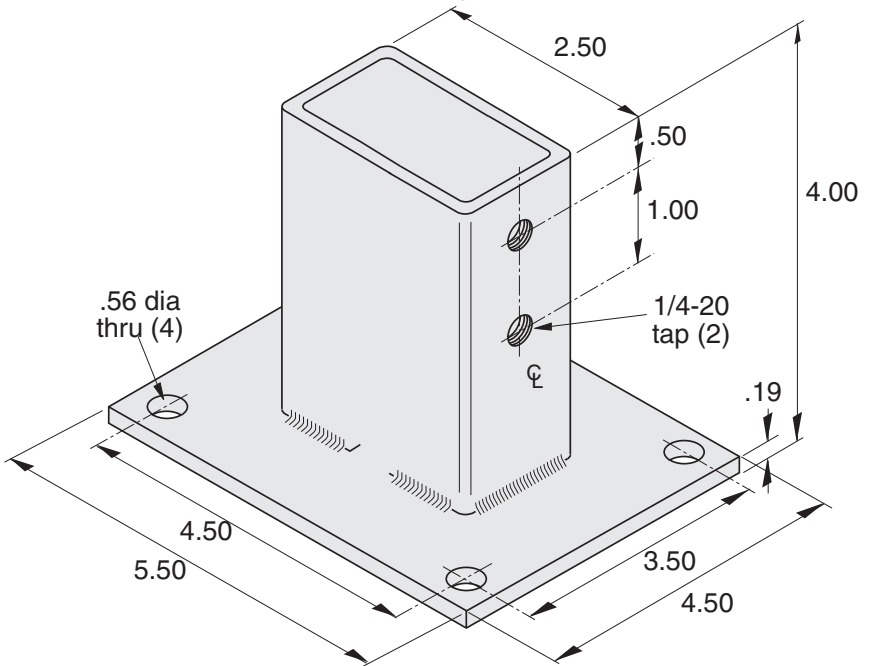
1/4" SLOTS

Recommended Hardware  
(2) 11-223 SHCS

Material - Steel  
Finish - Black Powder Coat



use with EX-12



**1/4" SLOTS**

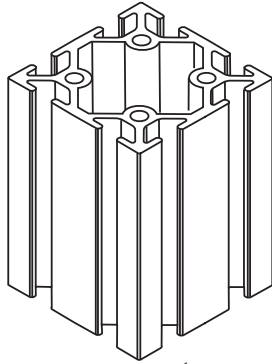
Recommended  
Hardware  
(2) 11-223 SHCS

Material - Steel  
Finish - Black Powder Coat

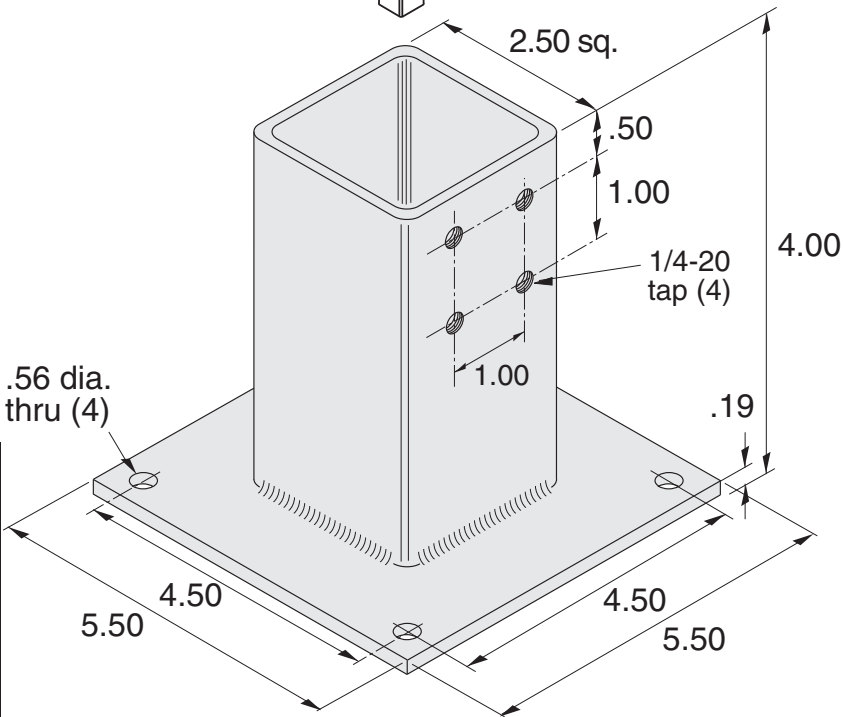
# Steel Flanged Foot



**11-72**

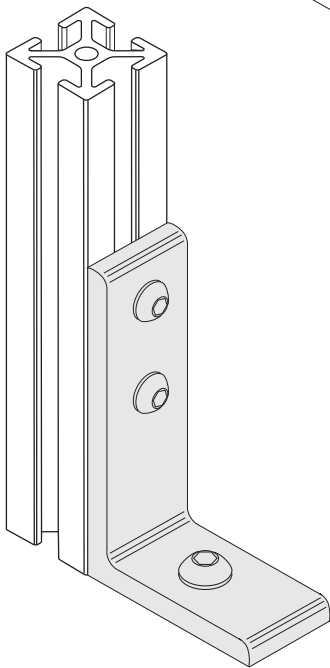
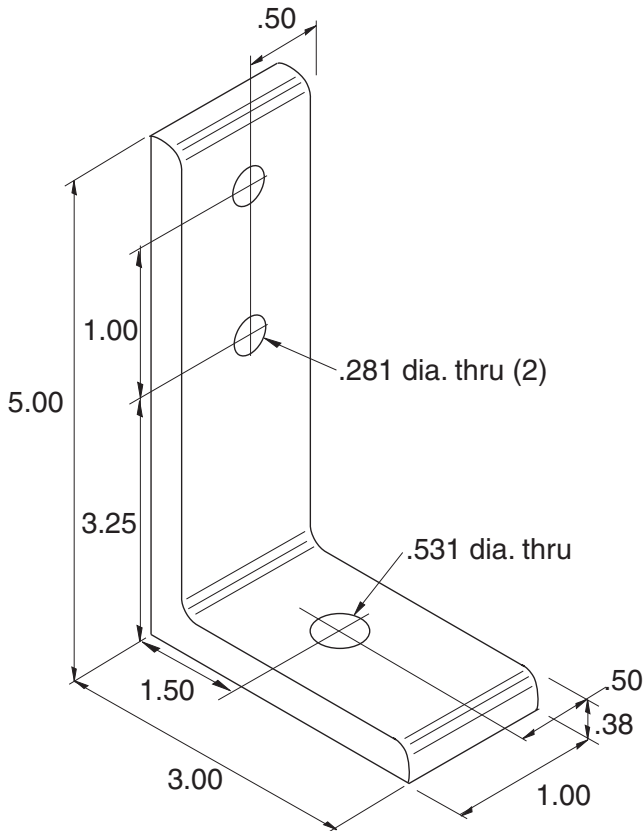


use with  
EX-22



Recommended  
Hardware  
(4) 11-223 SHCS

Material - Steel  
Finish - Black Powder Coat



**Recommended  
Hardware**  
(2) 11-232 BHCS  
(2) 11-205 T-nut

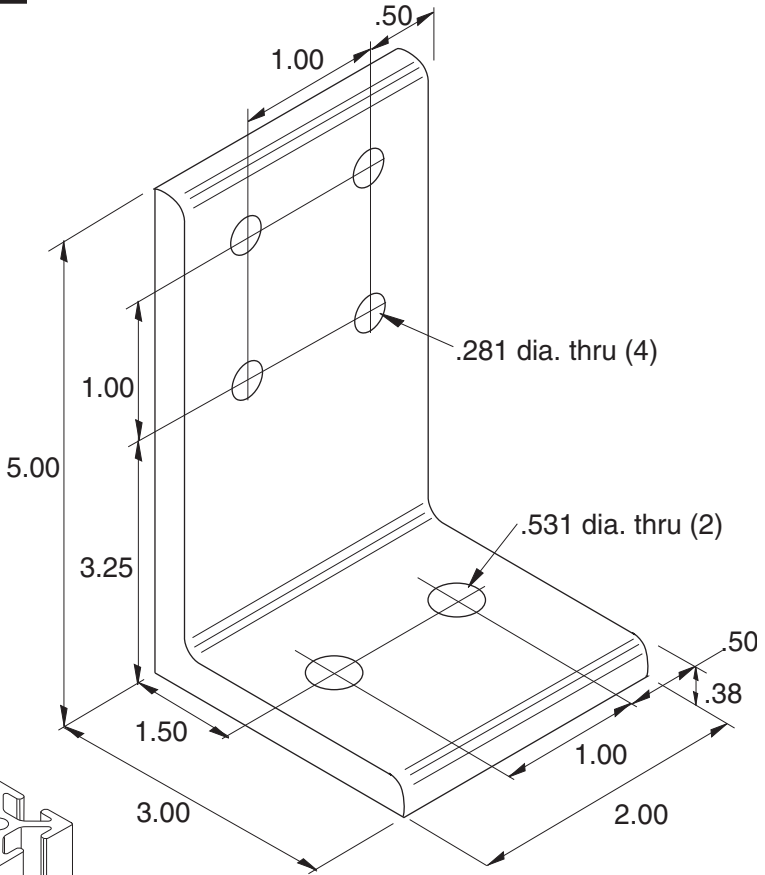
**Material - Aluminum  
Finish - Clear Anodize**

**1/4" SLOTS**

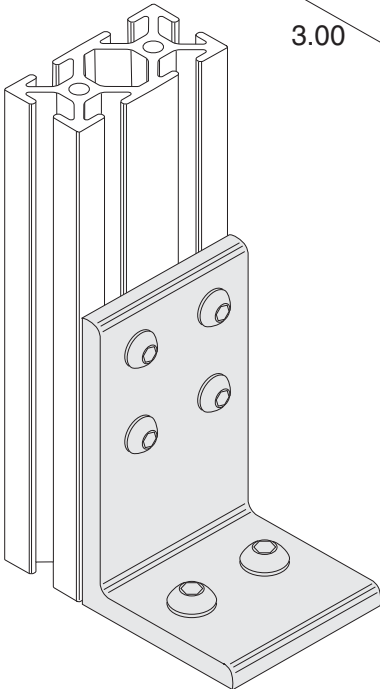
# Economy Aluminum Floor Mount



**11-74**

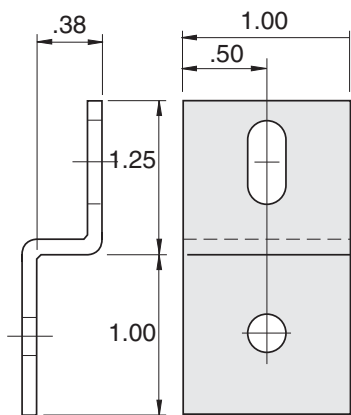


**1/4" SLOTS**

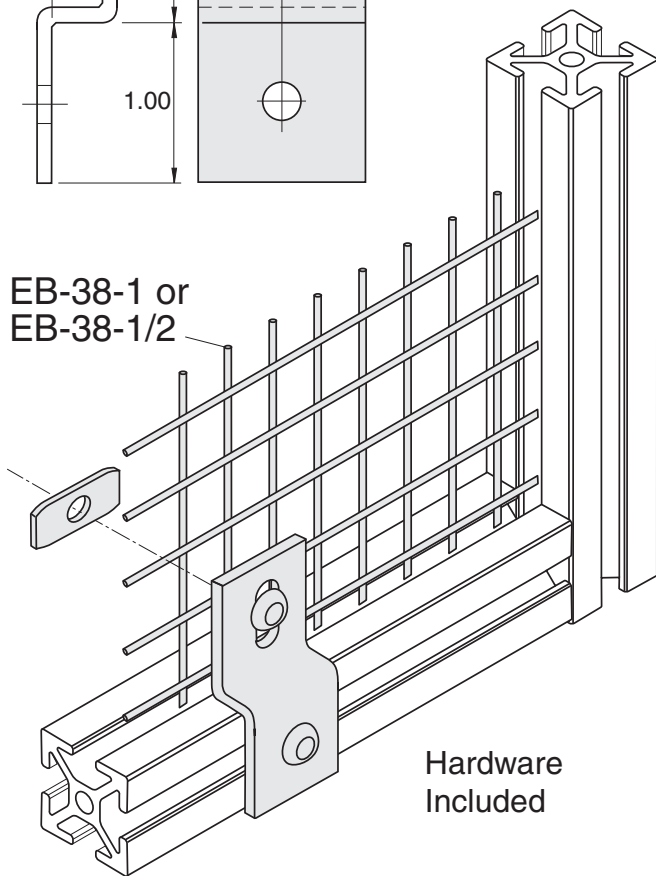


**Recommended Hardware**  
(4) 11-232 BHCS  
(4) 11-205 T-nut

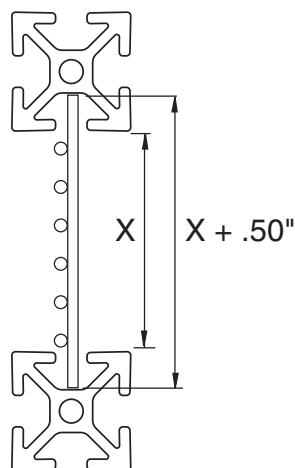
**Material - Aluminum**  
**Finish - Clear Anodize**



EB-38-1 or  
EB-38-1/2



Hardware  
Included



Cut wire  
mesh to  
X + .50"

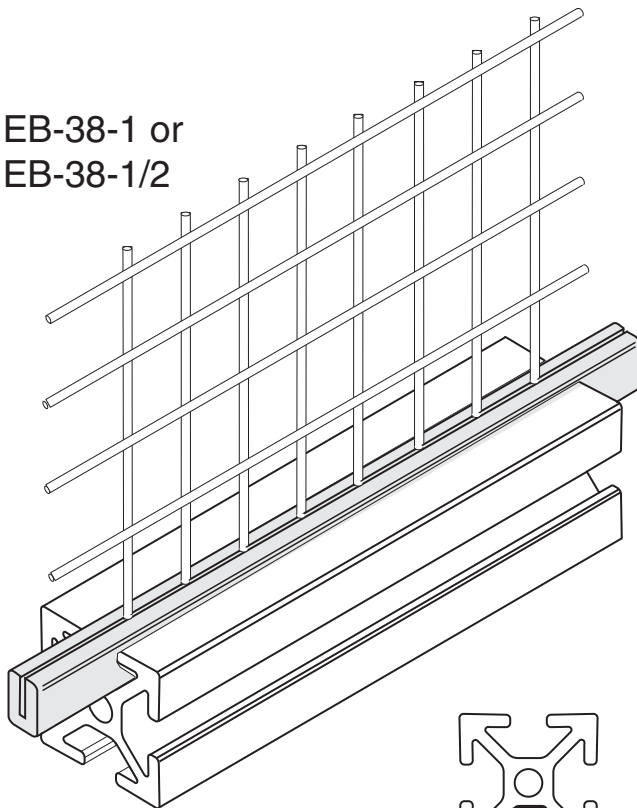
**1/4" SLOTS**

Material - Steel  
Finish -Black Powder Coat

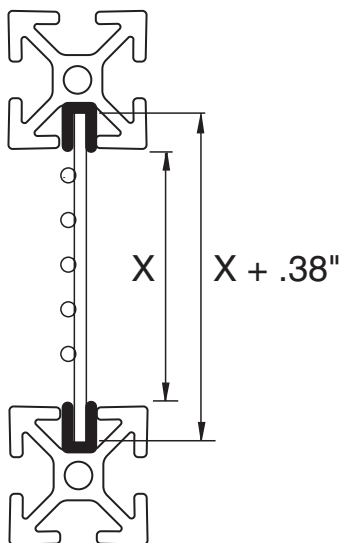


**11-31**

EB-38-1 or  
EB-38-1/2



Note: Provides snug fit



Cut wire mesh  
to  $X + .38''$

**1/4" SLOTS**

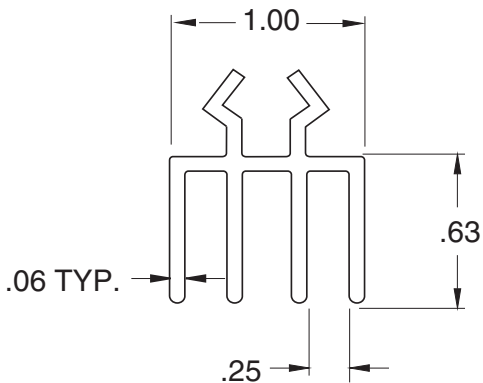
**Upper Door Slide (3 track)**

**11-32**

**Lower Door Slide (3 track)**

**11-33**

**11-32**



Material - Rigid PVC

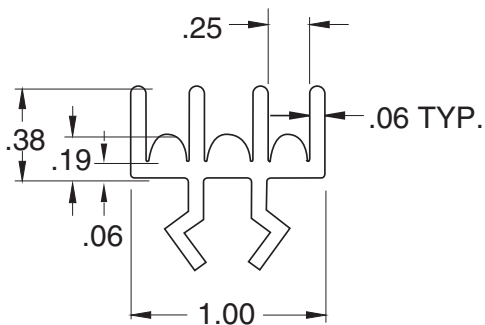
Sold in 6 foot lengths



cut panels  
to X - 1/2"

X

**11-33**



Cut Panels  
to X - 1/2"

**1/4" SLOTS**

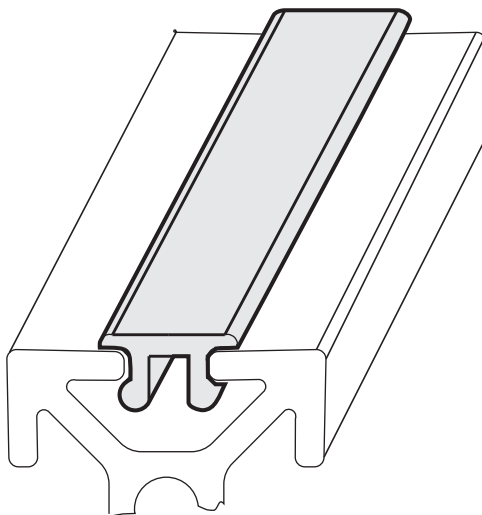
Sold in 6 foot lengths

Material - Rigid PVC

# T-Slot Cover



11-245
11-246
11-247
11-244



<b>Part No.</b>	
11-244	Safety Orange
11-245	Gray
11-246	Black
11-247	Yellow

Sold in 6 ft. lengths

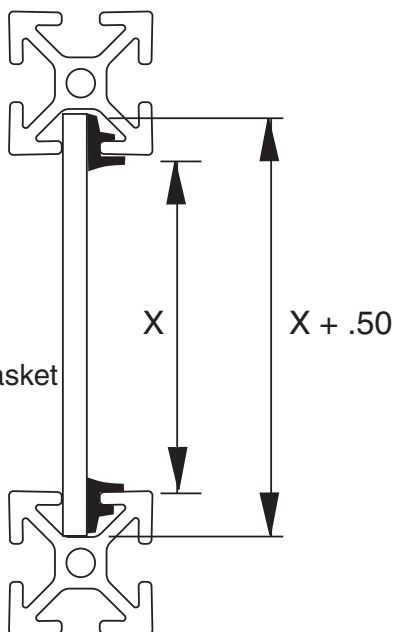
Material - Rigid PVC

1/4" SLOTS



3/16" (.17 actual)

Note: Install panel, then gasket



Cut panel to X + .50"

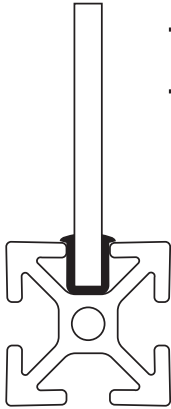
1/4" SLOTS

Material - Black Flexible PVC

# Plastic Panel Retaining Gasket

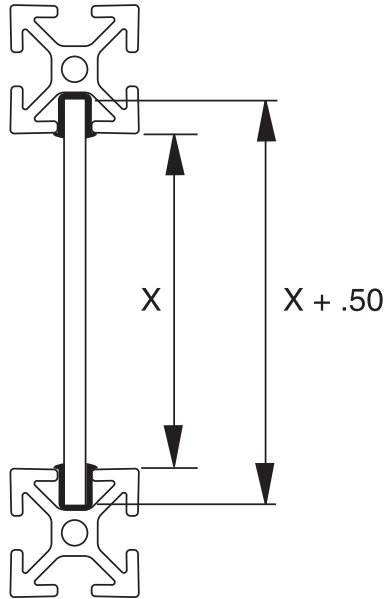


<b>11-298</b>	<b>3/16" for .170 thick panels</b>
<b>11-299</b>	<b>1/8" for .125 thick panels</b>

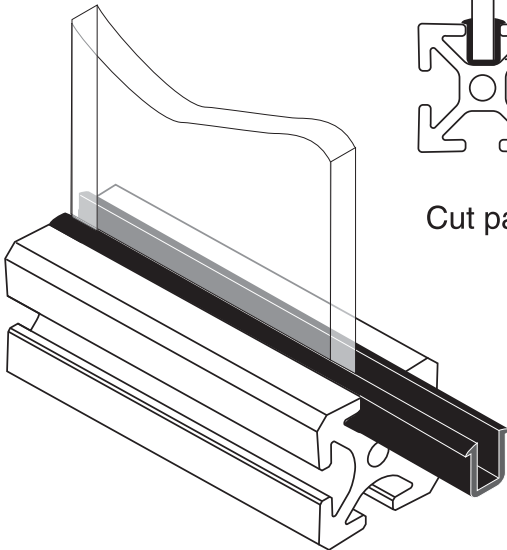


**11-298** for .170 thick panels

**11-299** for .125 thick panels

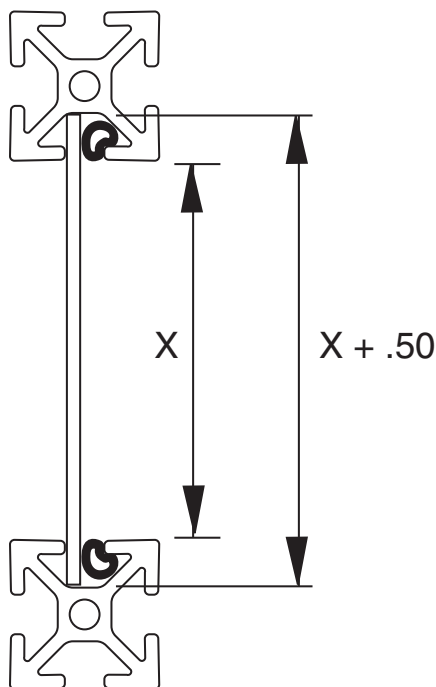
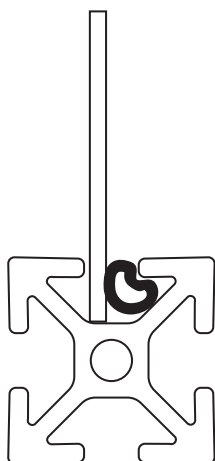
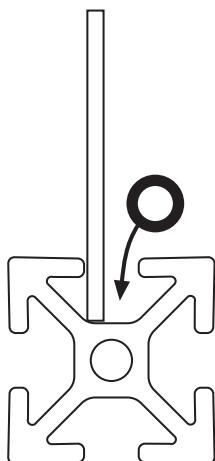


Cut panel to  $X + .50$ "



Material:  
Flexible Vinyl  
(Gray)

1/4" SLOTS



Cut panel to  $X + .50''$

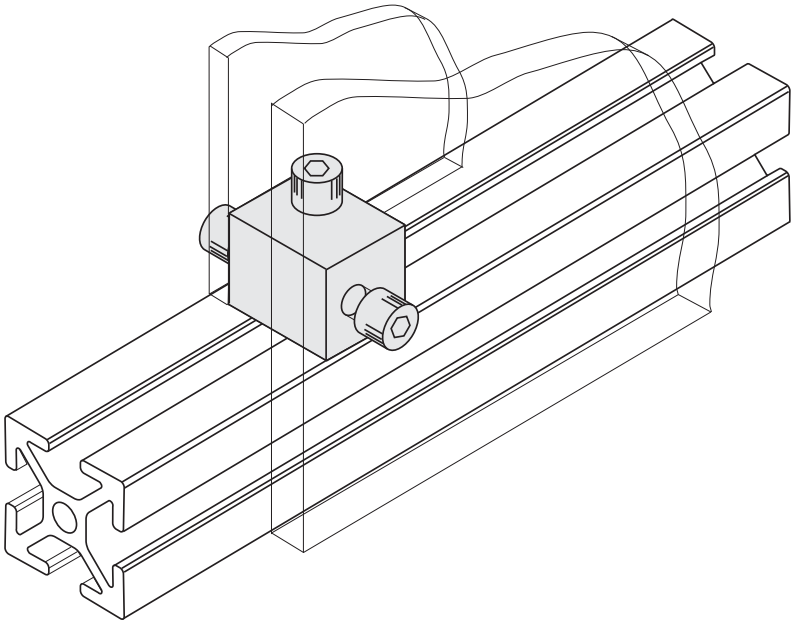
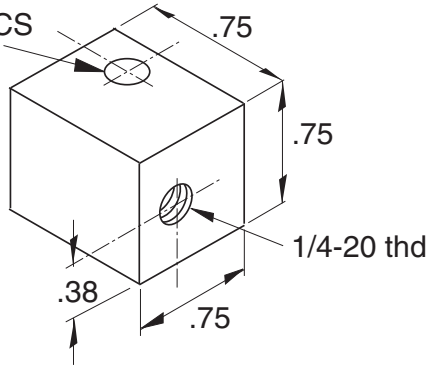
Material	Thickness
16 gage	.060
14 gage	.075
13 gage	.090
12 gage	.105

Material - Rubber (Black)

**1/4" SLOTS**

**11-260**

Clearance for  
1/4-20 x 1.0 SHCS

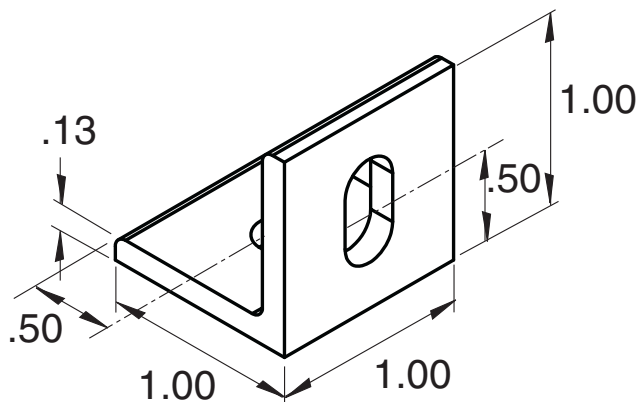


Requires

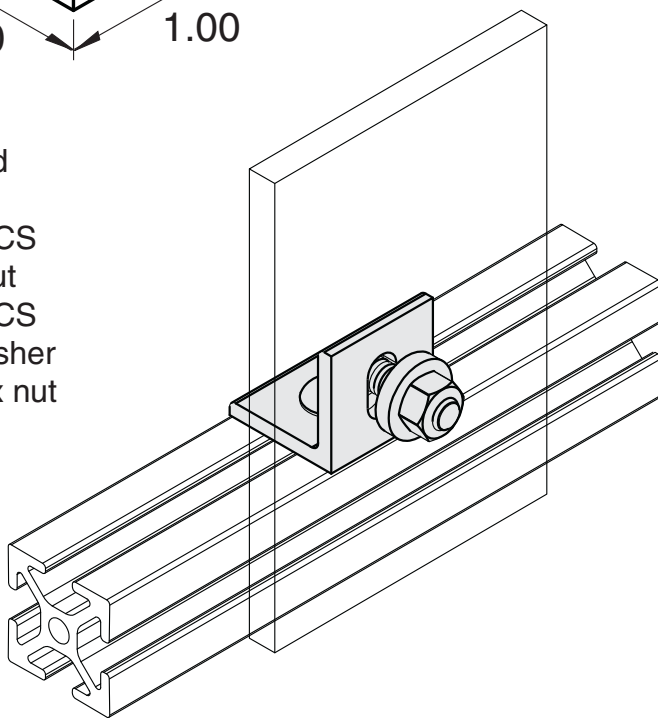
- (1) 11-224 SHCS
- (1) 11-210 T-nut
- (1) 11-231 BHCS

Material - Aluminum  
Finish - Clear Anodize

1/4" SLOTS

**Recommended  
Hardware**

- (1) 11-230 BHCS
- (1) 11-210 T-nut
- (1) 11-233 BHCS
- (1) 11-240 Washer
- (1) 11-241 Hex nut

**1/4" SLOTS**

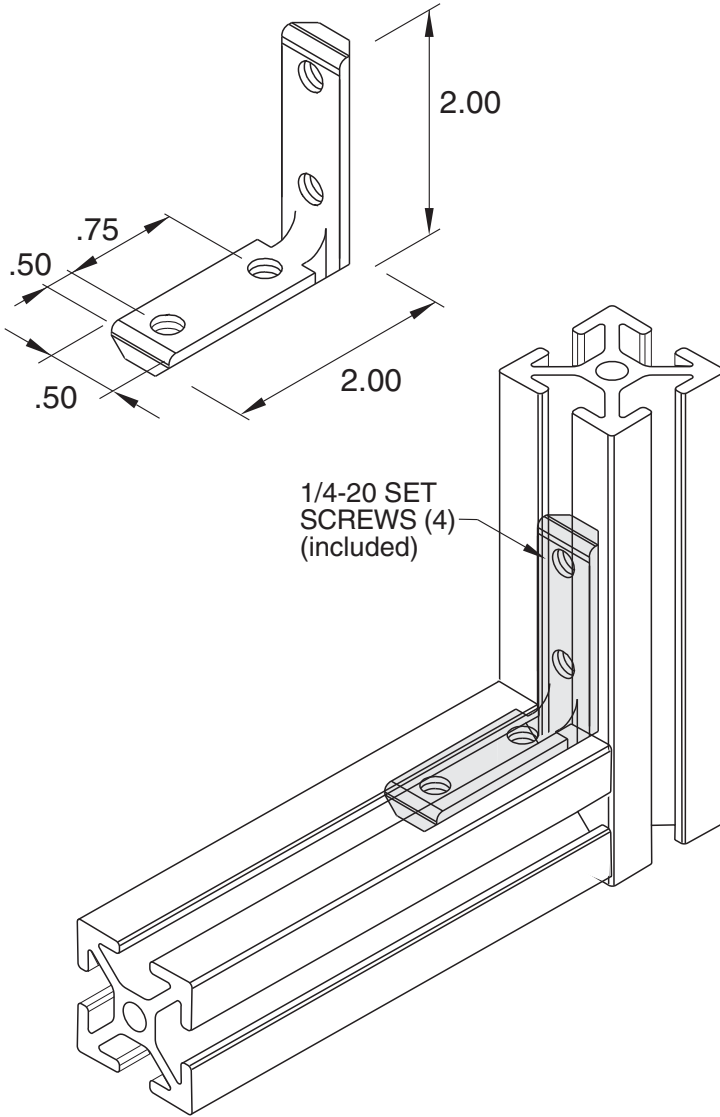
Material - Aluminum  
Finish - Clear Anodized



# Internal Corner Bracket

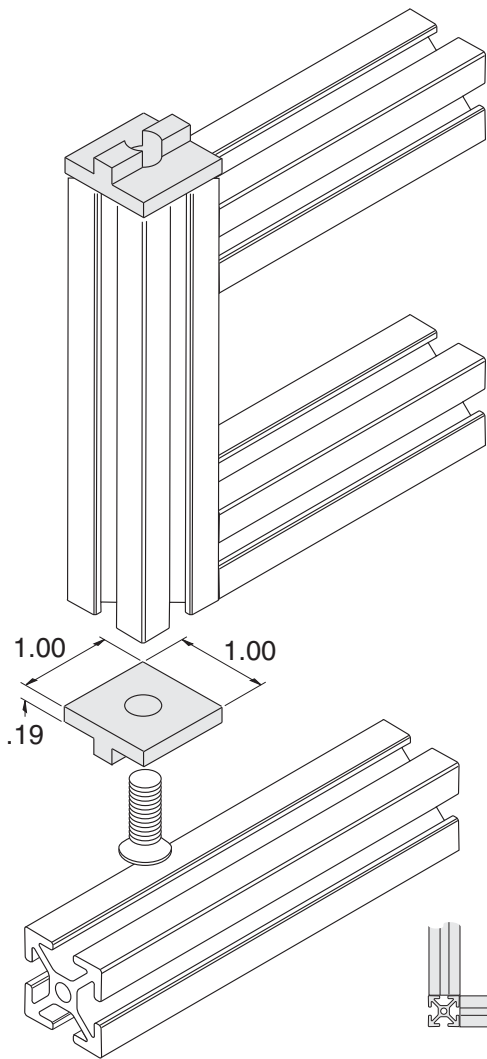


**11-261**

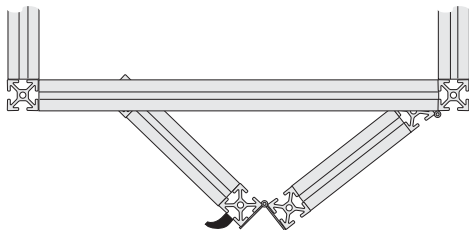


**1/4" SLOTS**

Material - Steel  
Finish - Zinc Plated



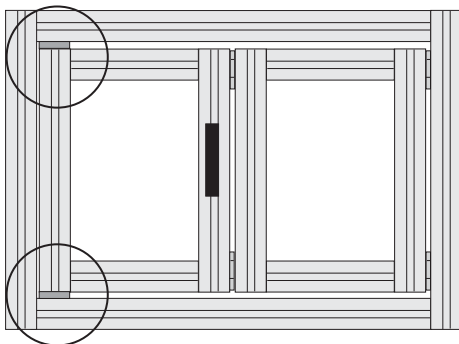
Use on 1" x 1" sq. extrusions  
with 1/4" wide slots



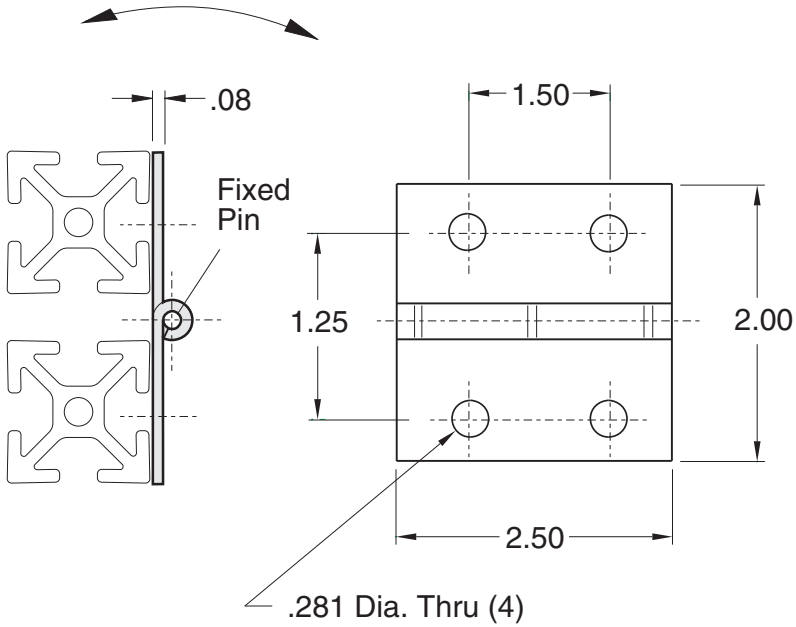
**1/4" SLOTS**

Hardware Included

Pad material is DELRIN



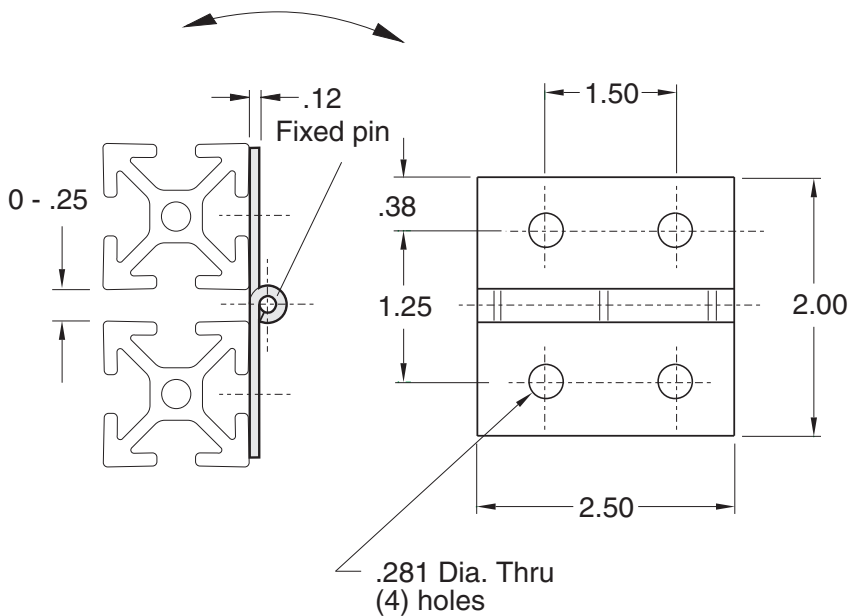
**11-252**



**1/4" SLOTS**

Hardware Included

Material - Aluminum  
Finish - Clear Anodize

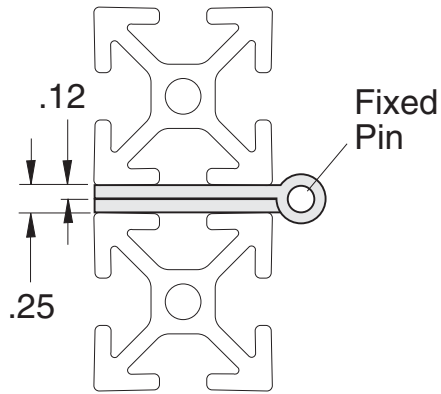
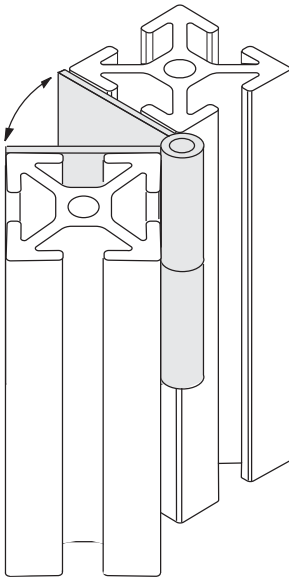
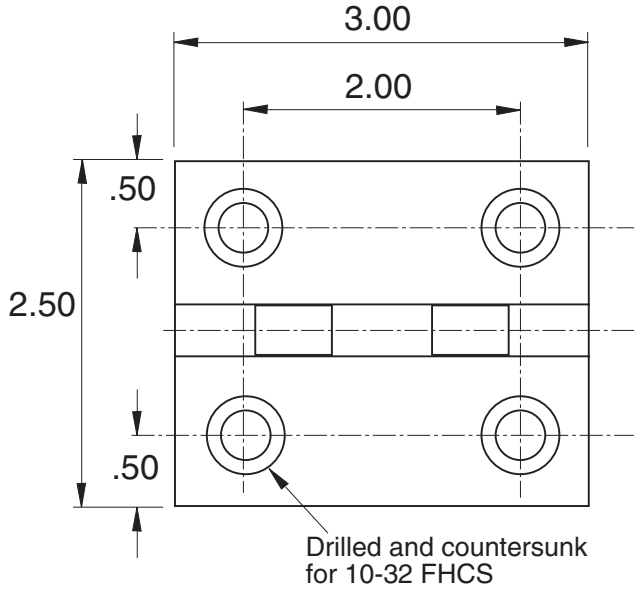


Hardware Included

Material Steel  
Finish Black Powder Coat

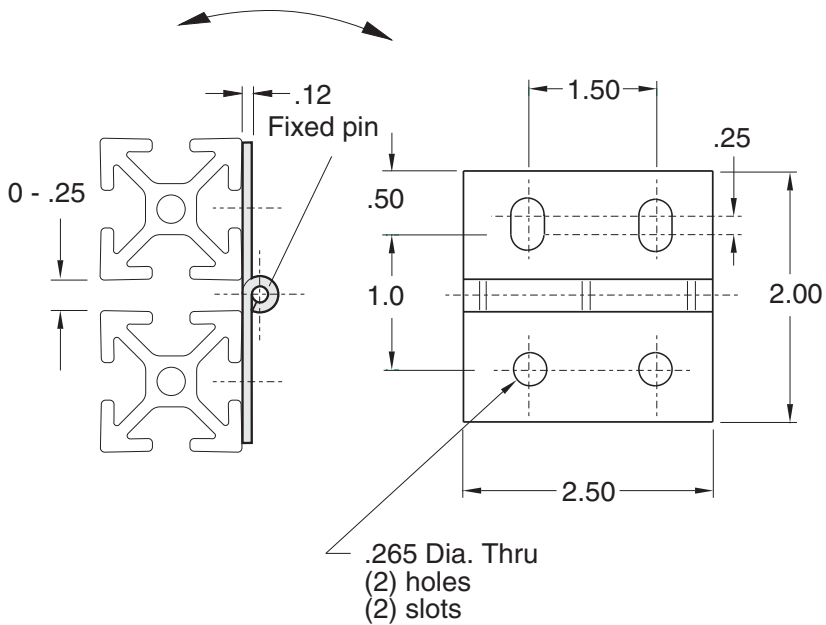
**1/4" SLOTS**

11-285



Hardware Included

Material - Steel  
Finish - Black Powder Coat



Hardware Included

Material - Steel  
Finish - Black Powder Coat

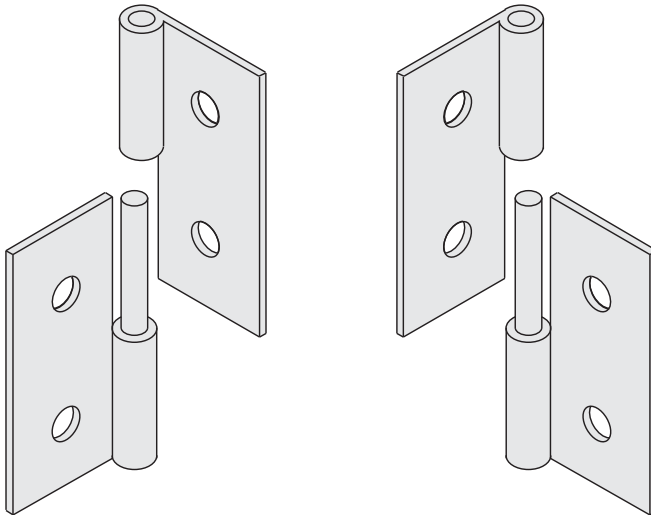
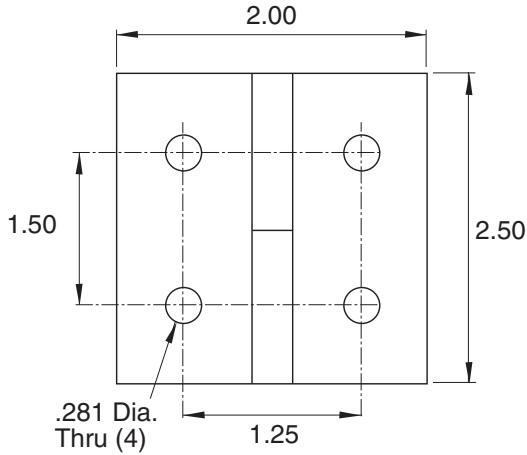
**1/4" SLOTS**

# Steel Lift-Off Hinge



<b>11-253</b>	<b>Steel Lift-Off Hinge (left hand)</b>
<b>11-254</b>	<b>Steel Lift-Off Hinge (right hand)</b>

Hardware Included



**11-253**

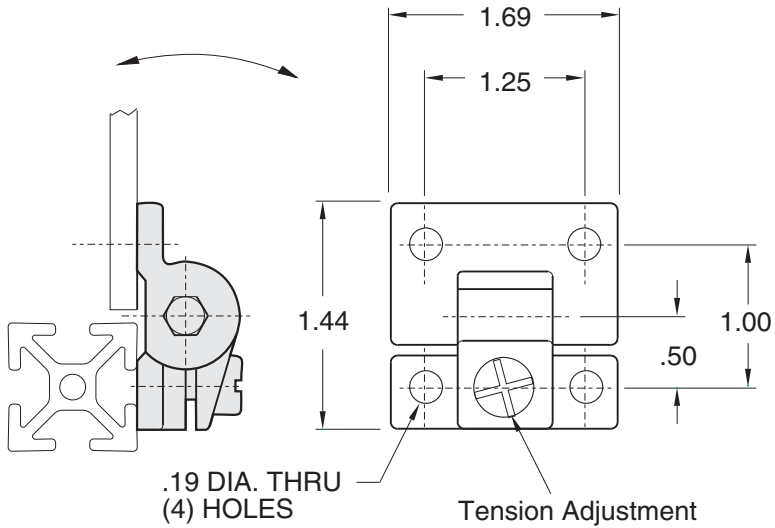
**Left Hand**

**11-254**

**Right Hand**

Material - Steel  
Finish - Zinc Plated

1/4" SLOTS



Hardware Included

**1/4" SLOTS**

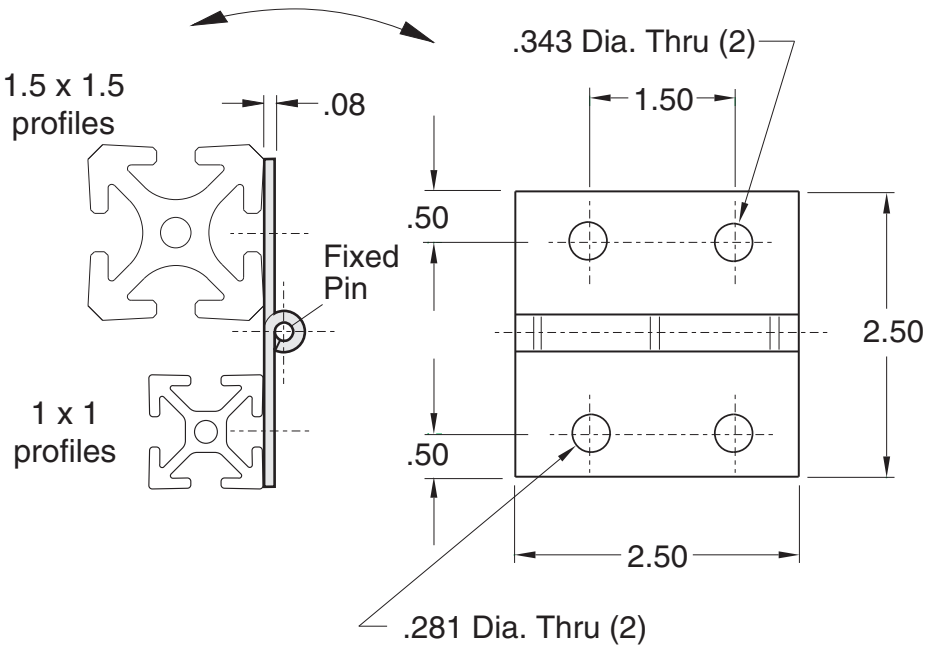
Material - Plastic



Aluminum Transition Hinge  
(EX-1, EX-6 or EX-9 to EX-11)



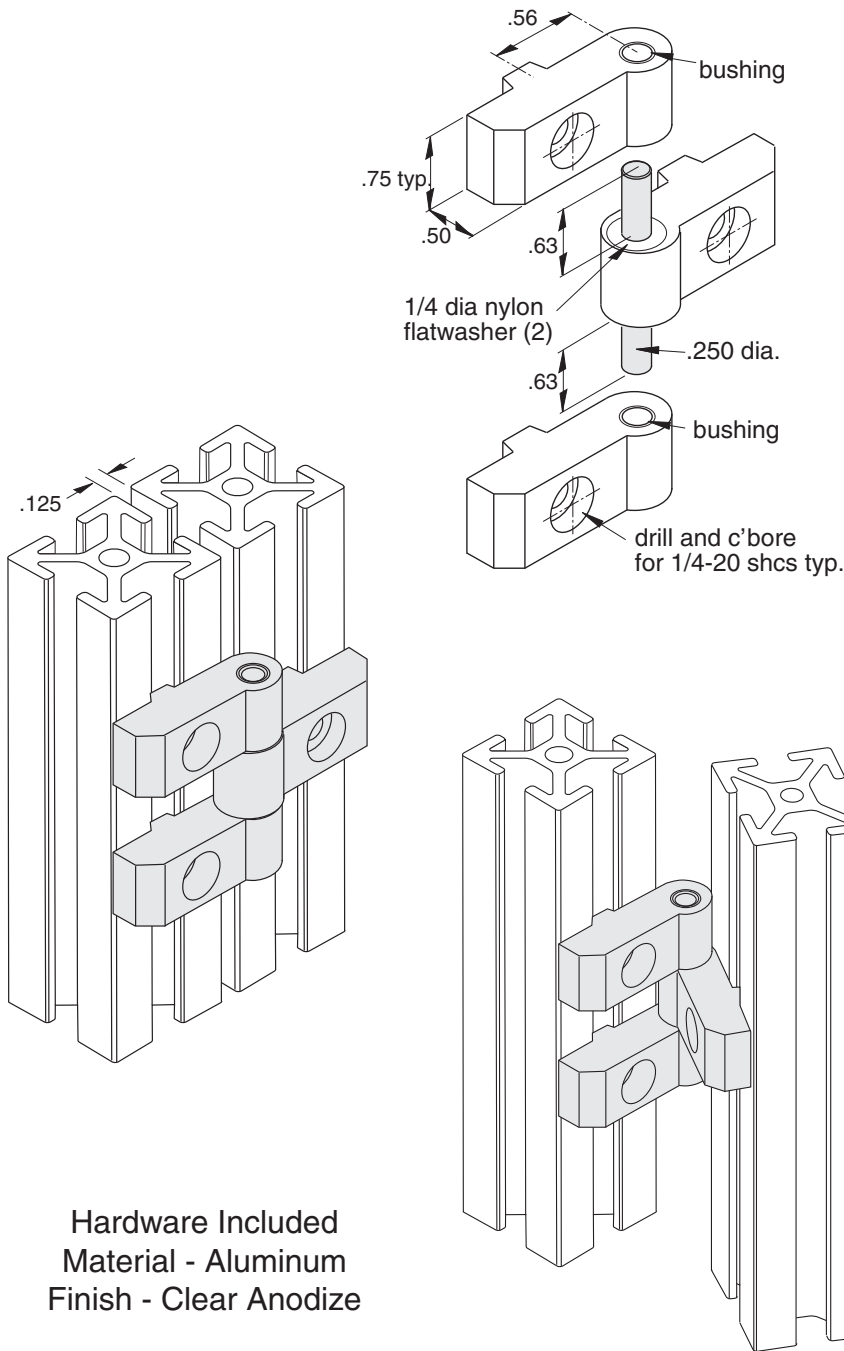
11-280



Hardware Included

Material - Aluminum  
Finish - Clear Anodize

1/4" SLOTS



# Left Hand Lift-Off Hinge - 1 / 4" slots

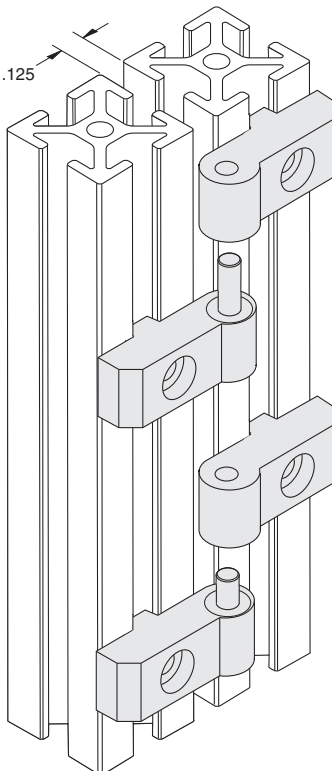
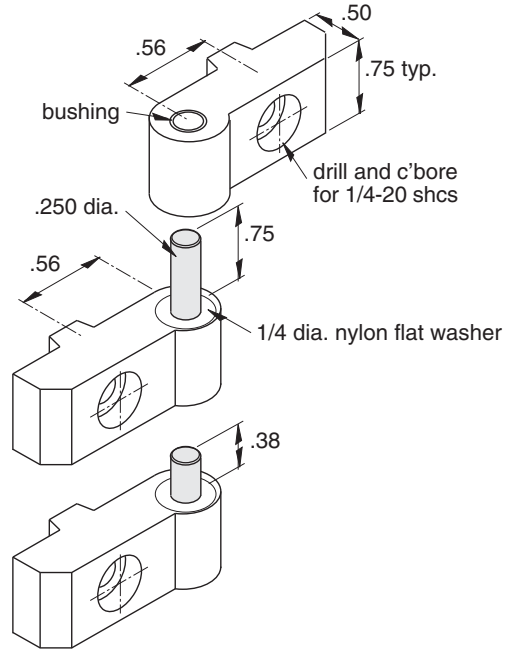


<b>11-402</b>
<b>11-402L</b>
<b>11-402S</b>

One Set w/Long & Short Pin Assemblies

Long Pin Assembly Only

Short Pin Assembly Only



1/4" SLOTS

**11-402L**

Hardware Included  
Material - Aluminum  
Finish - Clear Anodize

**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.

**11-402S**

One Set w/Long & Short Pin Assemblies

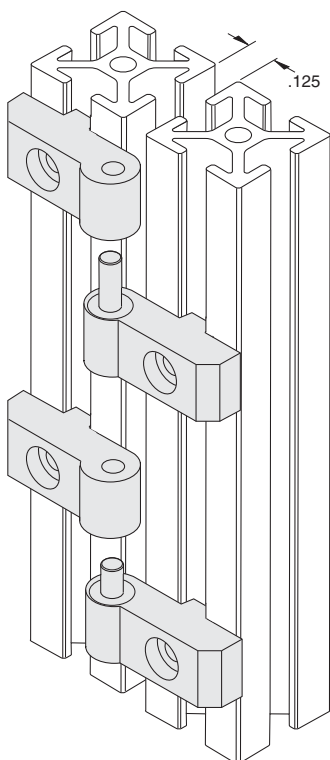
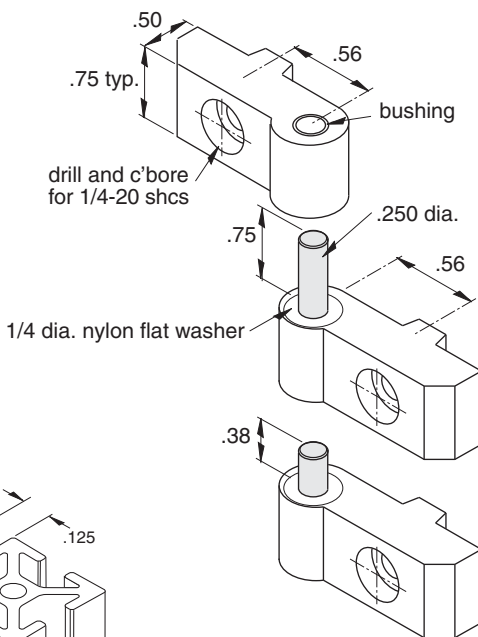
**11-403**

Long Pin Assembly Only

**11-403L**

Short Pin Assembly Only

**11-403S**



**11-403L**

**11-403S**

**Hardware Included  
Material - Aluminum  
Finish - Clear Anodize**

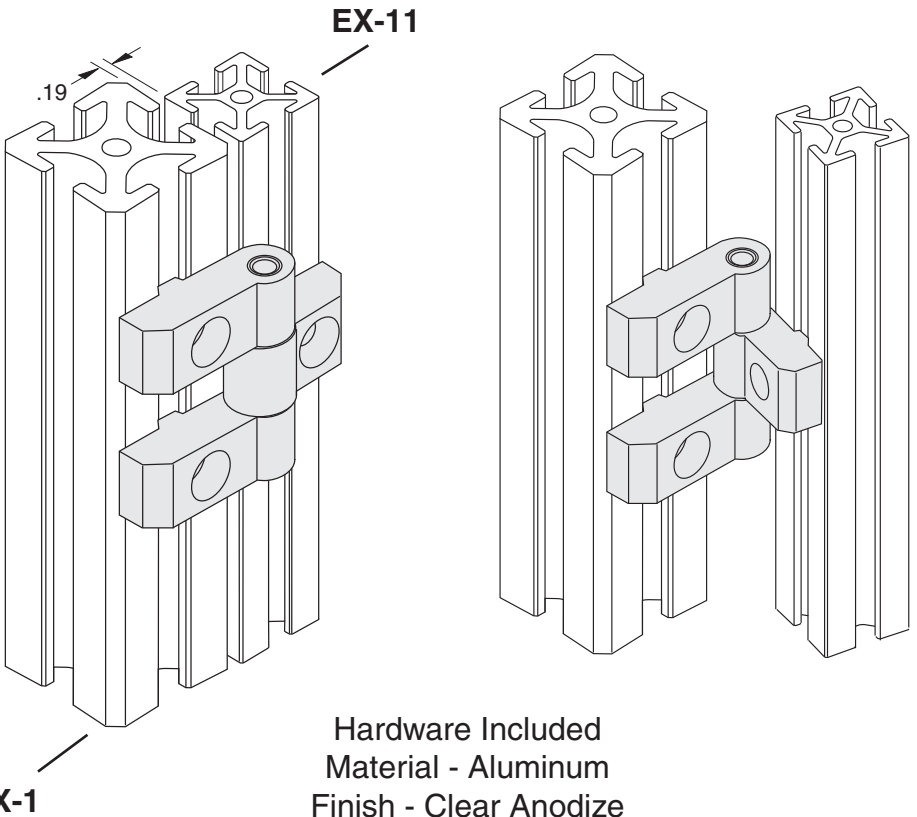
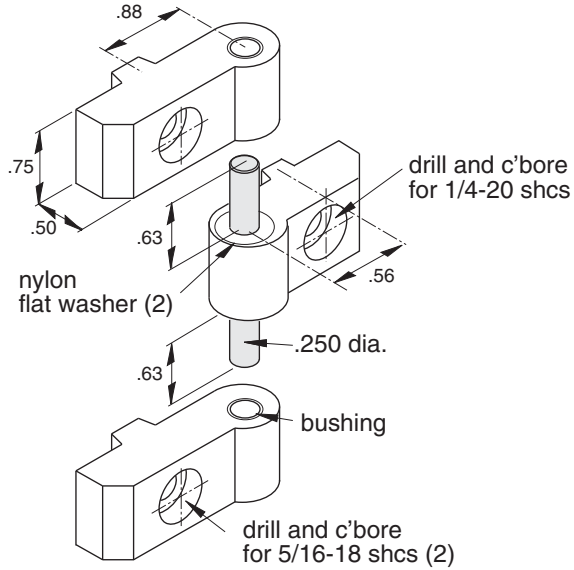
**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.

**1/4" SLOTS**

# Heavy Duty Transition 5/16 - 1/4 slots Hinge Assembly



**EB-140**



**1/4" SLOTS**

**Hardware Included**  
**Material - Aluminum**  
**Finish - Clear Anodize**

One Set w/Long & Short Pin Assemblies

**EB-142**

Long Pin Assembly Only

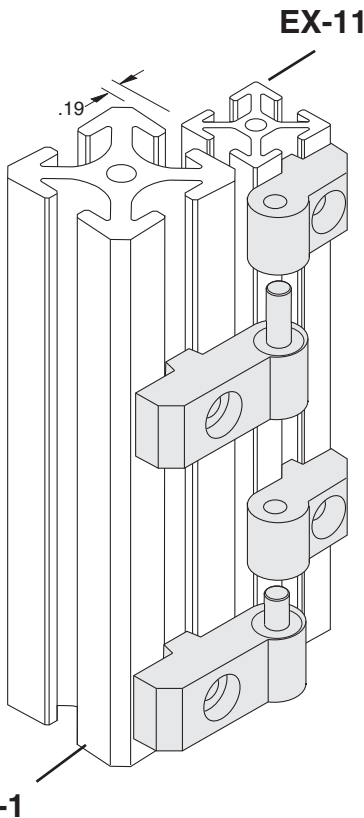
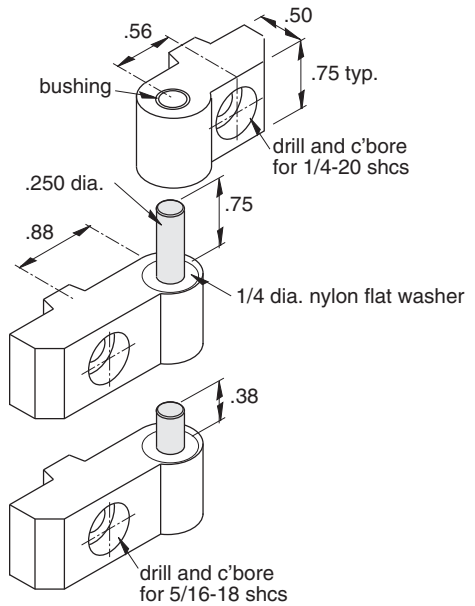
**EB-142L**

Short Pin Assembly Only

**EB-142S**

**Hardware Included**  
Material - Aluminum  
Finish - Clear Anodize

**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.



**EB-142L**

**EB-142S**

**1/4" SLOTS**

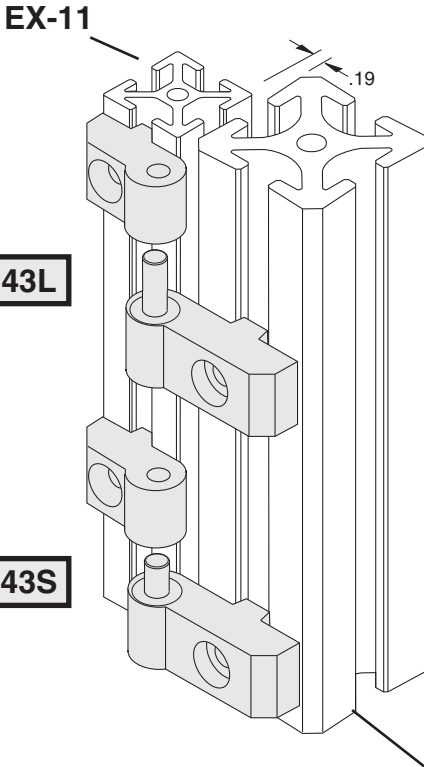
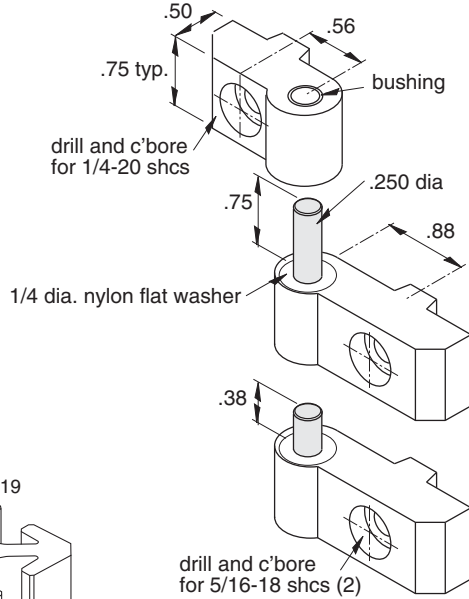
**Right Hand Transition  
Lift-Off Hinge 5/16 - 1/4 slots**



<b>EB-143</b>	One Set w/Long & Short Pin Assemblies
<b>EB-143L</b>	Long Pin Assembly Only
<b>EB-143S</b>	Short Pin Assembly Only

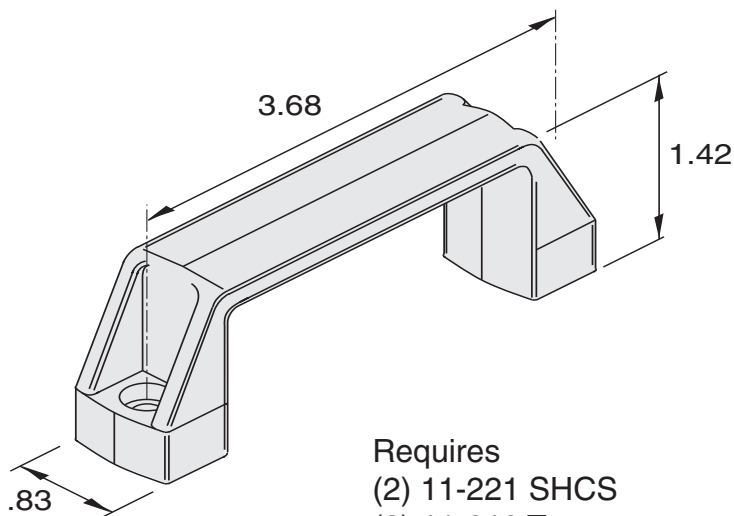
Hardware Included  
Material - Aluminum  
Finish - Clear Anodize

**Note:** Use short and long pin assemblies together as shown to ease lift-off and replacement of doors.



1/4" SLOTS

EX-1



Requires  
(2) 11-221 SHCS  
(2) 11-210 T-nut

**1/4" SLOTS**

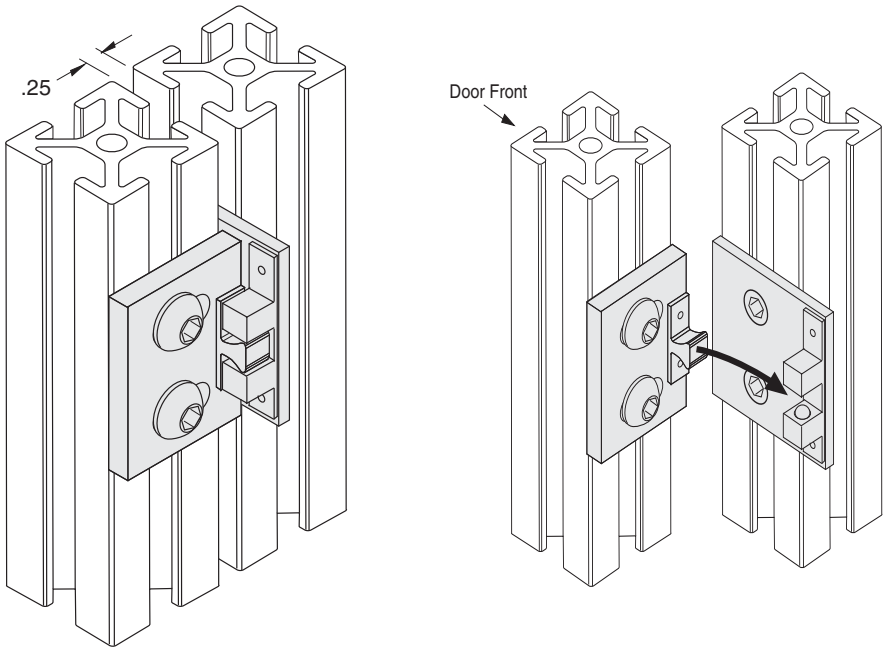
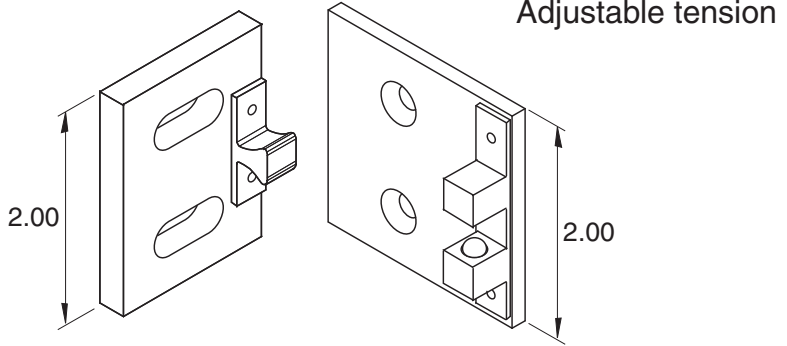
Material - Plastic  
Color- Black



# Mechanical Latch 1/4" slots

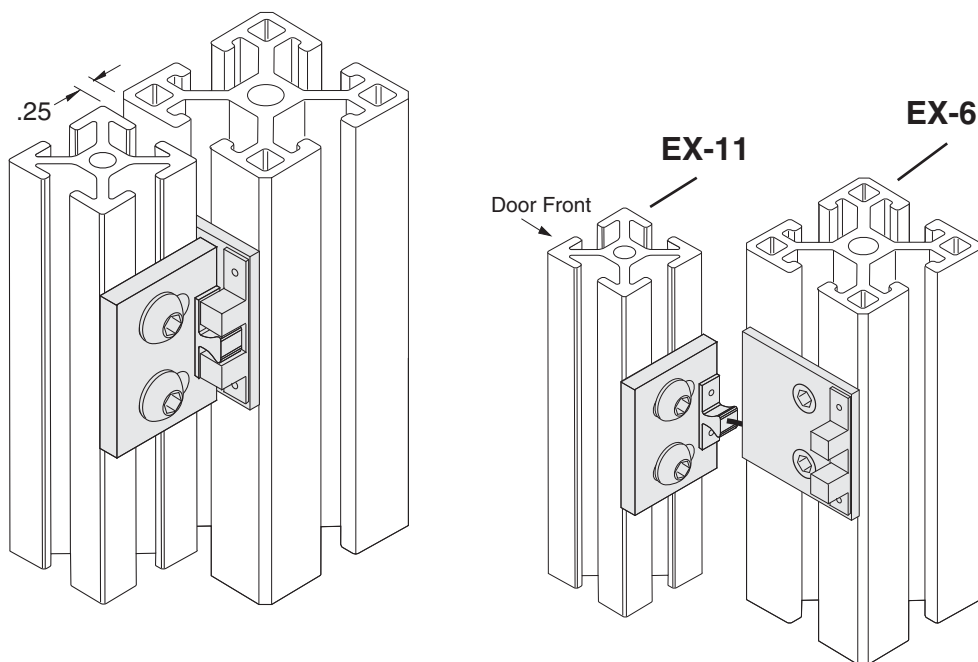
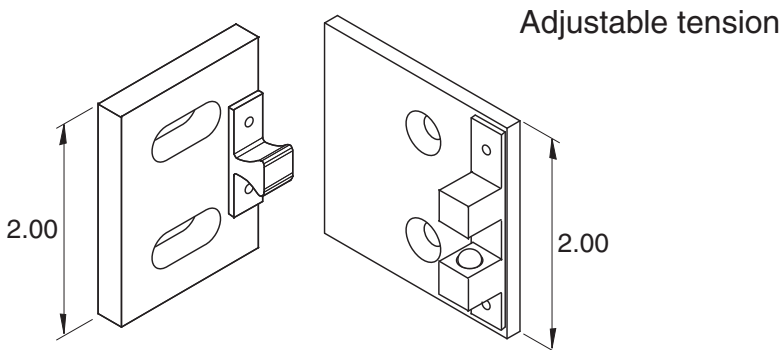


**11-282**



**1/4" SLOTS**

Hardware Included  
Material Mounting Plates: Aluminum, Clear Anodize  
Latch: Zinc Plated Brass

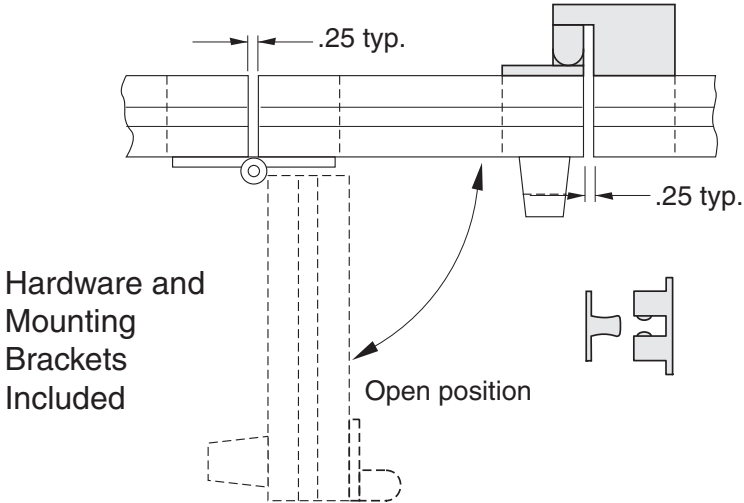


Hardware Included  
Material Mounting Plates: Aluminum, Clear Anodize  
Latch: Zinc Plated Brass

# Single Door Mechanical Latch



**11-264**

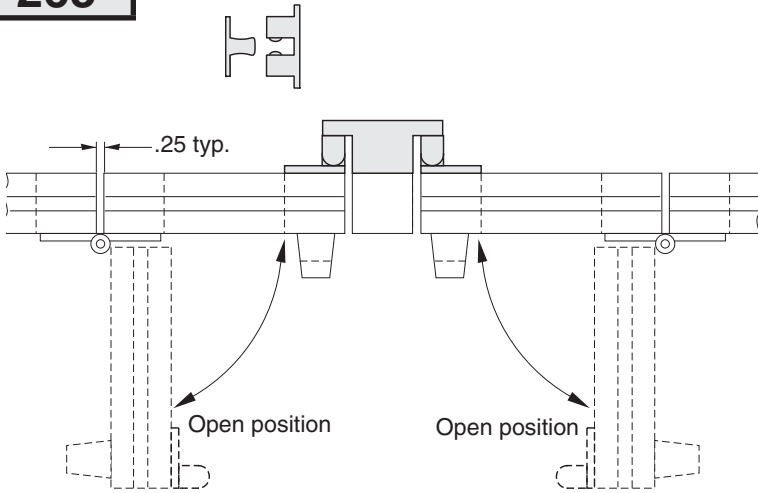


Catch Material - Zinc Plated Brass  
Base Material - Aluminum

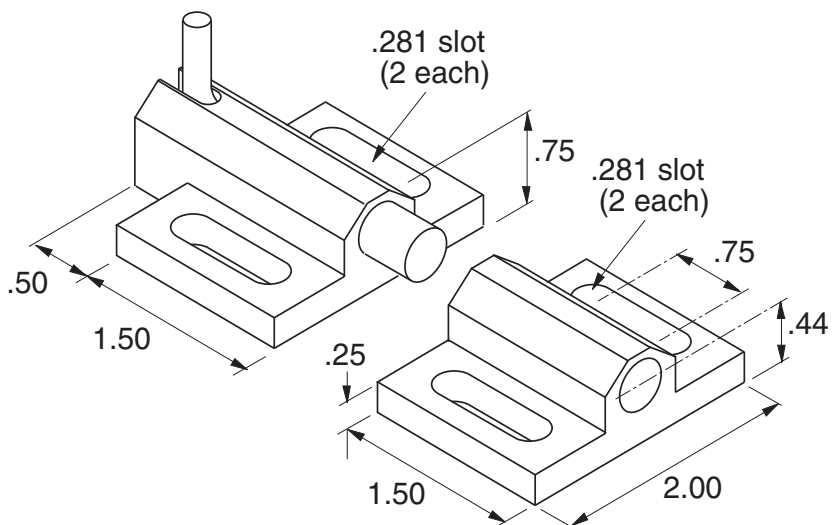
# Double Door Mechanical Latch

**11-265**

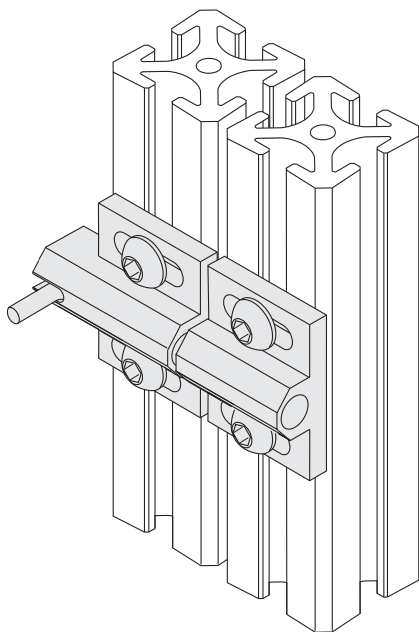
1/4" SLOTS



Hardware and Mounting Brackets Included  
Catch Material - Zinc Plated Brass  
Base Material - Aluminum



Hardware Included



Material:  
 Mounting Plates:  
 Aluminum, Clear Anodize  
 Dead Bolt: Zinc Plated Steel

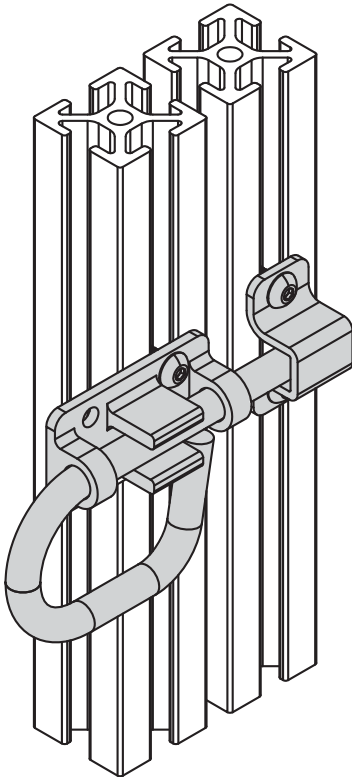
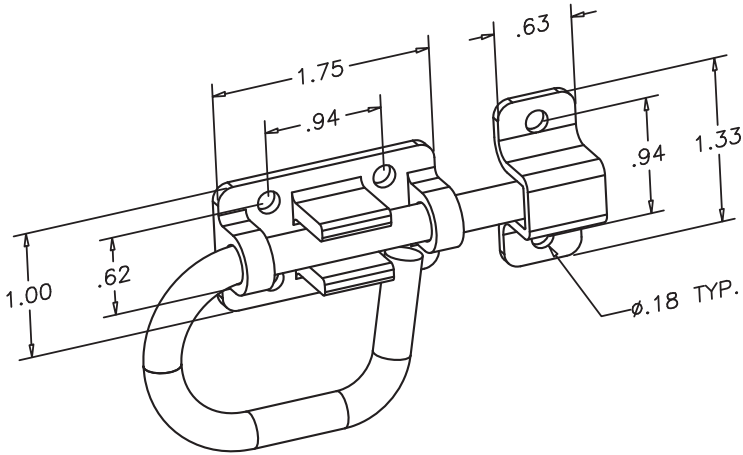
**1/4" SLOTS**

# Deadbolt Latch



**11-273**

**.281 dia. Bolt**

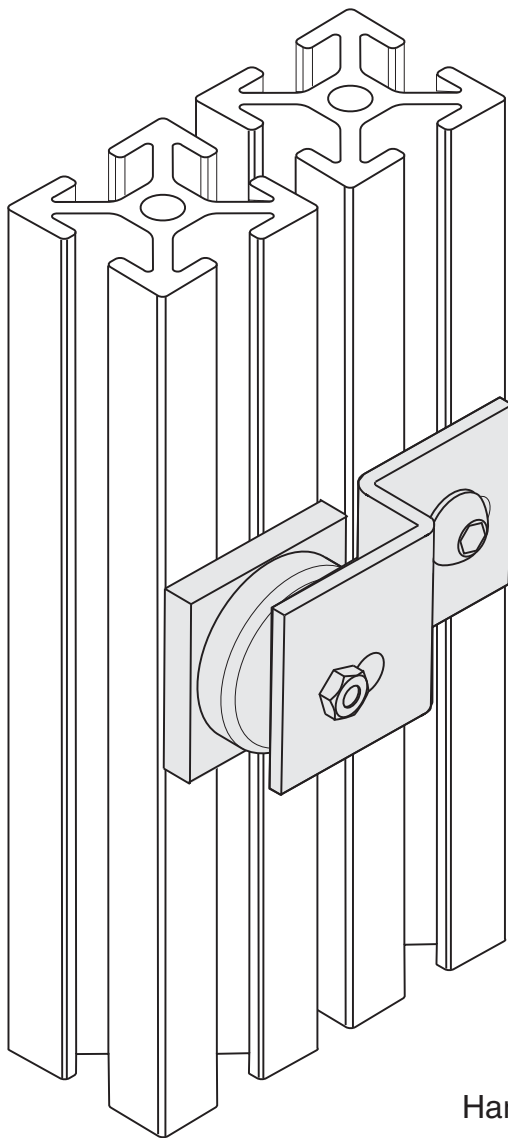


**1/4" SLOTS**

Hardware Included

Use with 1/4" slot extrusions

Material - Zinc Plated Steel



Hardware Included

Material - Steel  
Finish - Zinc Plated

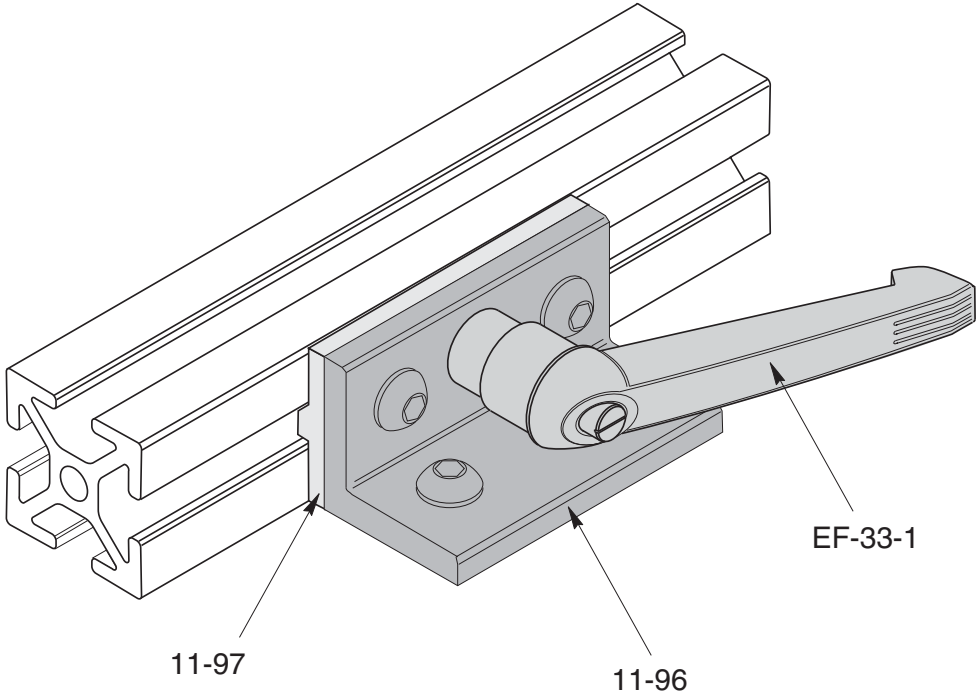
**1/4" SLOTS**

# Slider Assembly



<b>11-98</b>
<b>11-99</b>

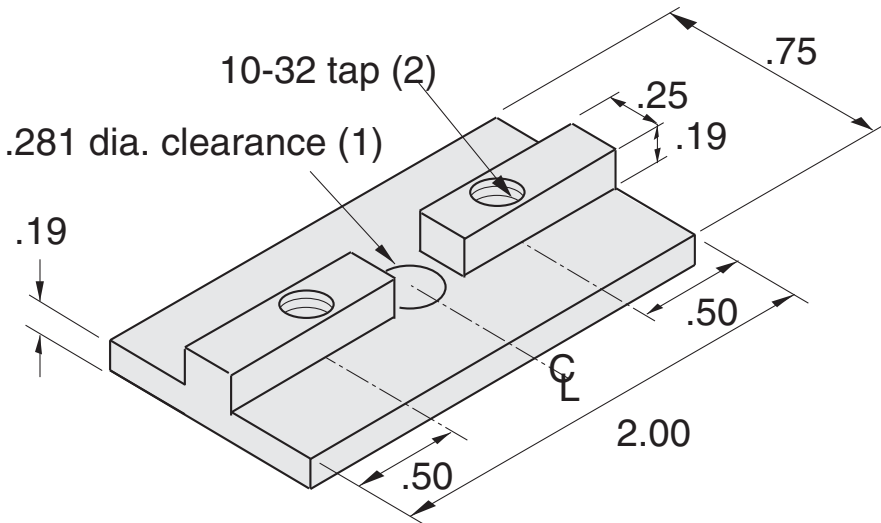
Slider Assembly (as shown)  
Slider Assembly  
(less clamp handle for sliding only)



1/4" SLOTS

Bearing Material is DELRIN (White)

Hardware Included with 11-98 and 11-99



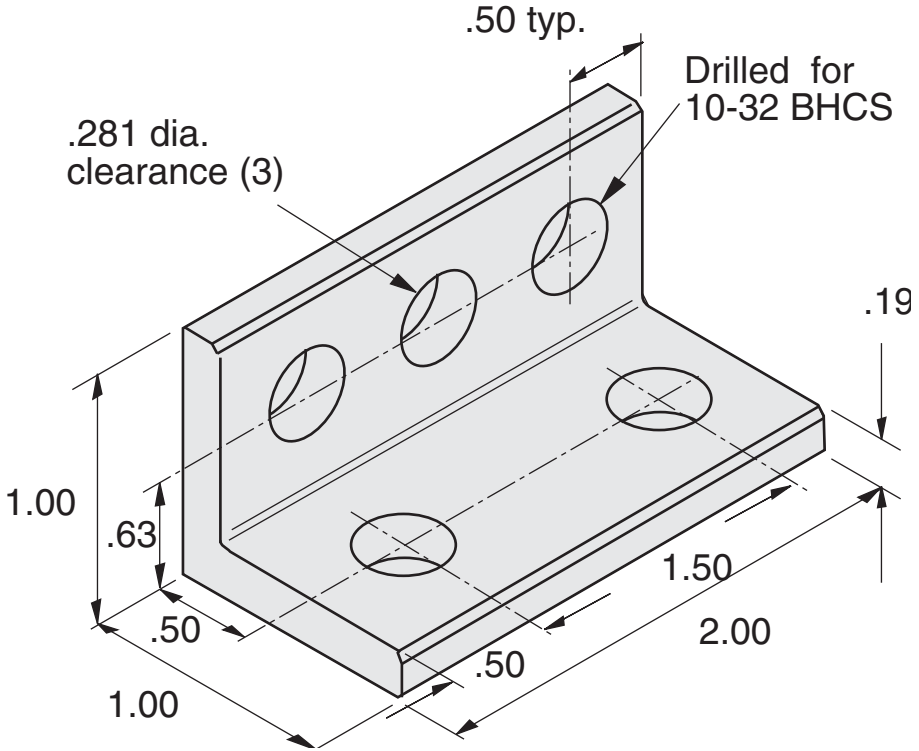
Load Capacity = 50lbs

Bearing Material is DELRIN (White)

**1/4" SLOTS**



**11-96**

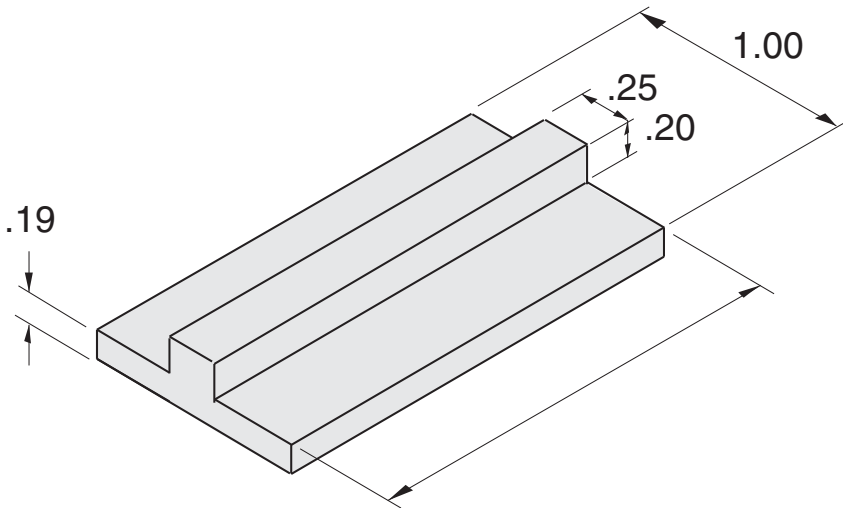


**1/4" SLOTS**

- Recommended Hardware
- (2) 11-231 BHCS
  - (2) 11-210 T-nut
  - (2) 10-32 x 5/8 BHCS

Note: see part no. 11-98 for example

Material - Aluminum  
Finish - Clear Anodize



**1/4" SLOTS**

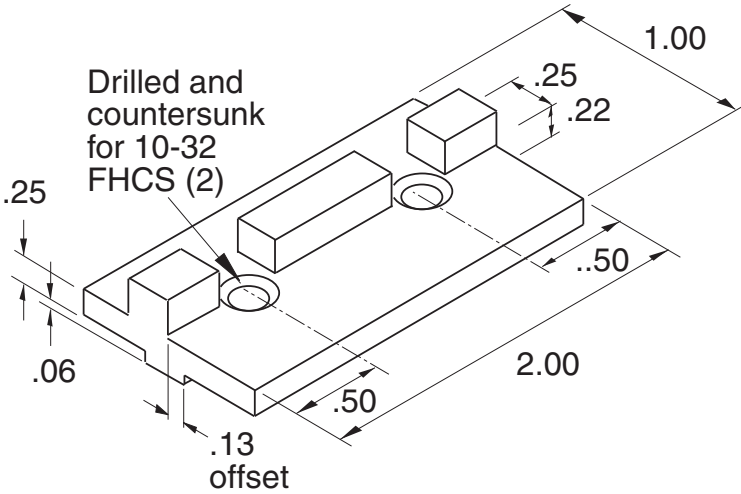
Stock Length 60"

Material - UHMW (White)

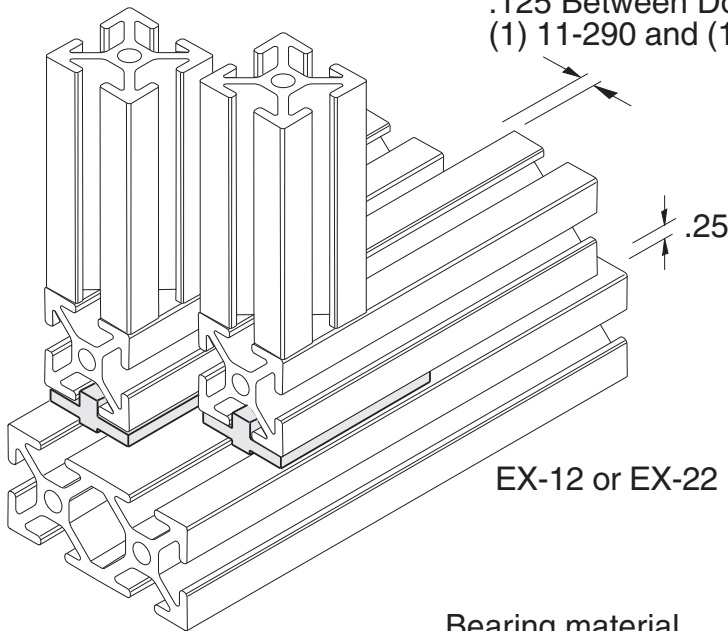
# Offset Bearing Block (Plastic)



**11-290**



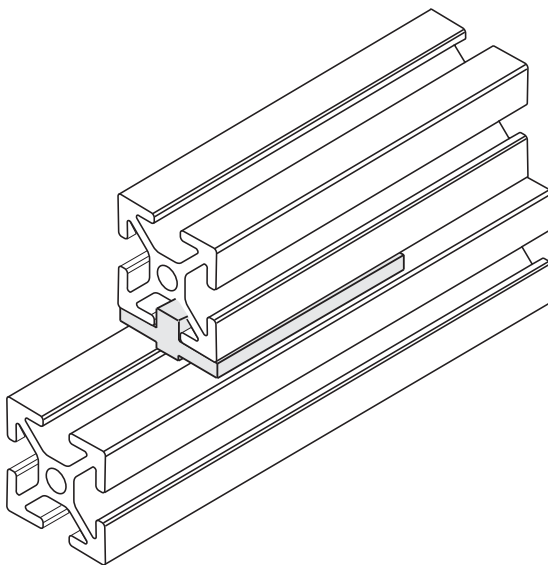
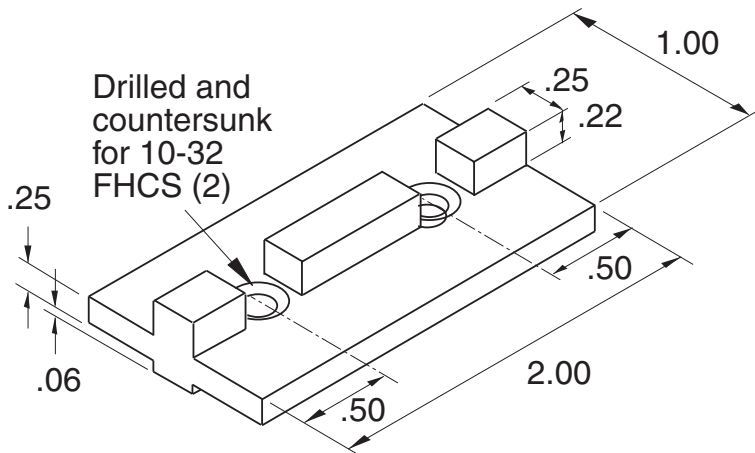
.25 Between Doors with (2) 11-290  
.125 Between Doors with (1) 11-290 and (1) 11-291



1/4" SLOTS

Bearing material is DELRIN (White)

Hardware Included



**1/4" SLOTS**

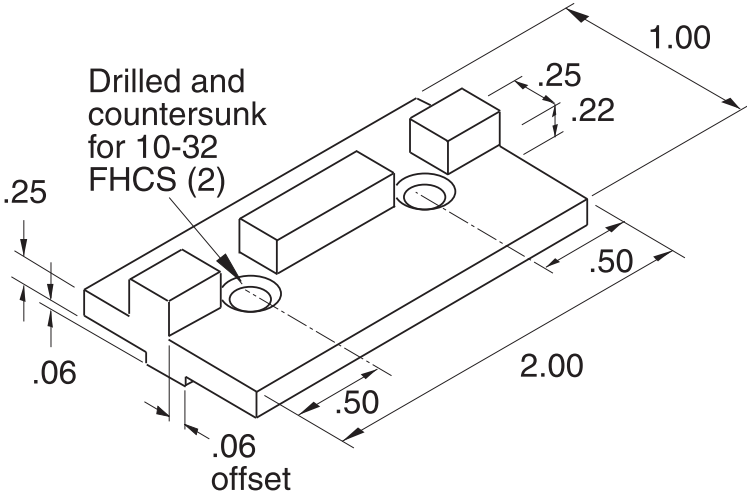
Bearing material is DELRIN (White)

Hardware Included

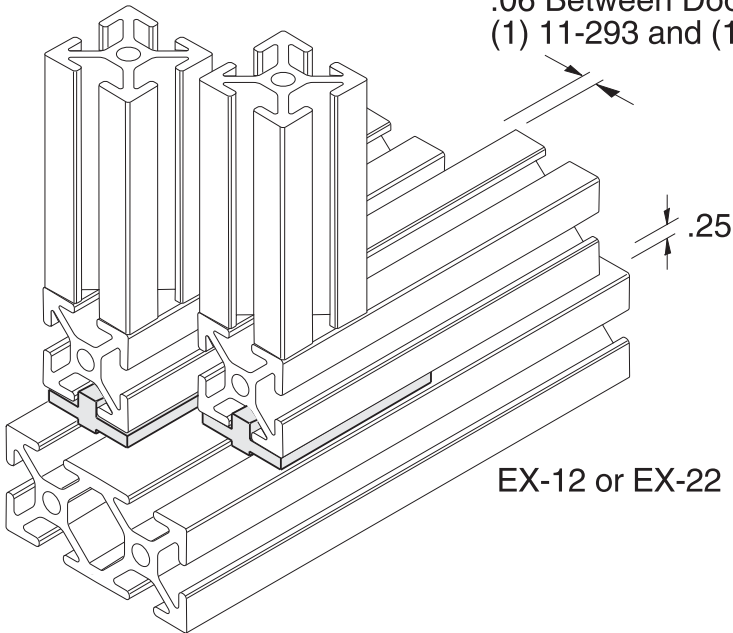
# Offset Bearing Block (Plastic)



**11-293**



.13 Between Doors with (2) 11-293  
.06 Between Doors with (1) 11-293 and (1) 11-291



Hardware Included

Bearing material is DELRIN (White)

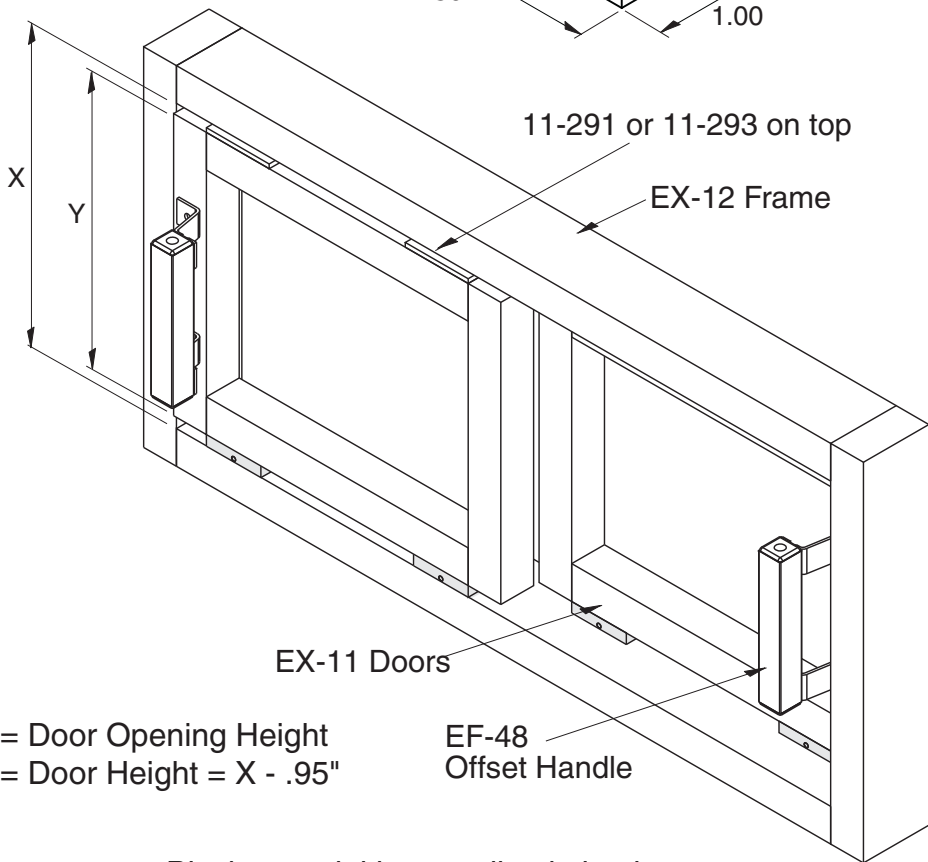
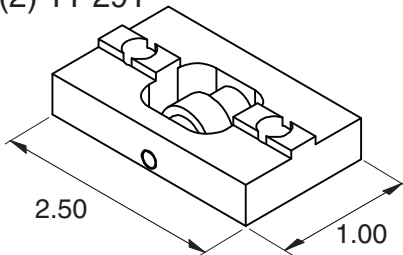
1/4" SLOTS

**Door Roller Block - 1/4" Slot (lift out)**

1/16" offset	<b>11-288</b>
on center	<b>11-289</b>

**Door Clearance Between Sliders**

- = .13" using (4) 11-288 and (4) 11-293
- = .06" using (2) 11-288 with (2) 11-293  
and (2) 11-289 with (2) 11-291



X = Door Opening Height  
Y = Door Height = X - .95"

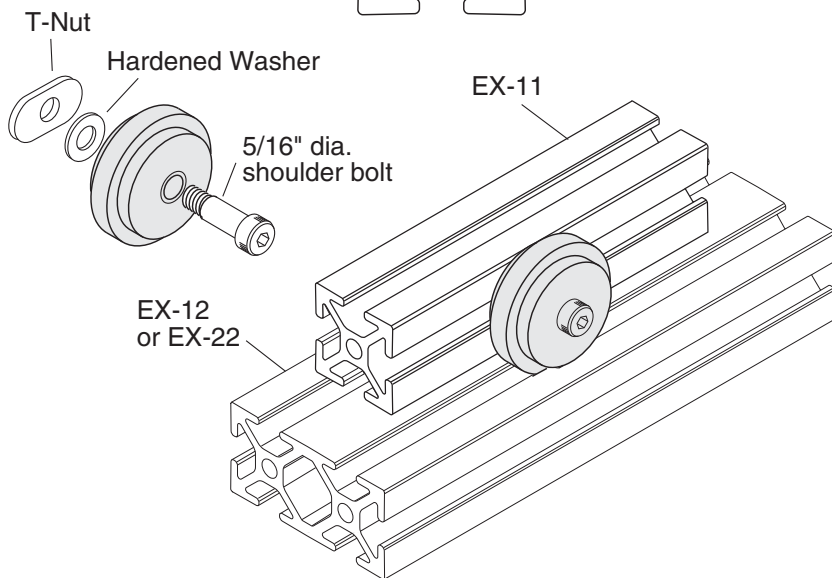
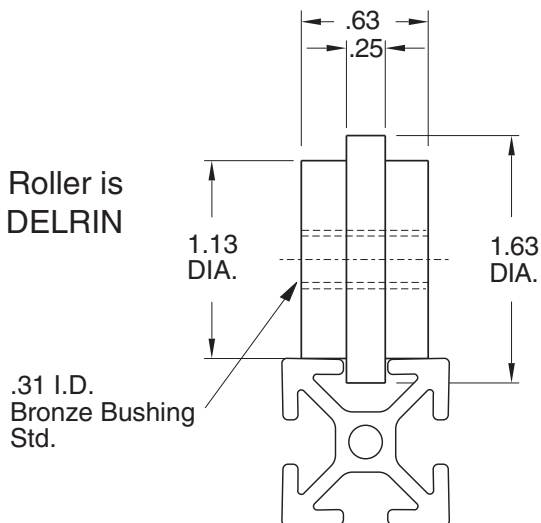
EF-48  
Offset Handle

Block material is anodized aluminum  
Roller is DELRIN

Hardware Included

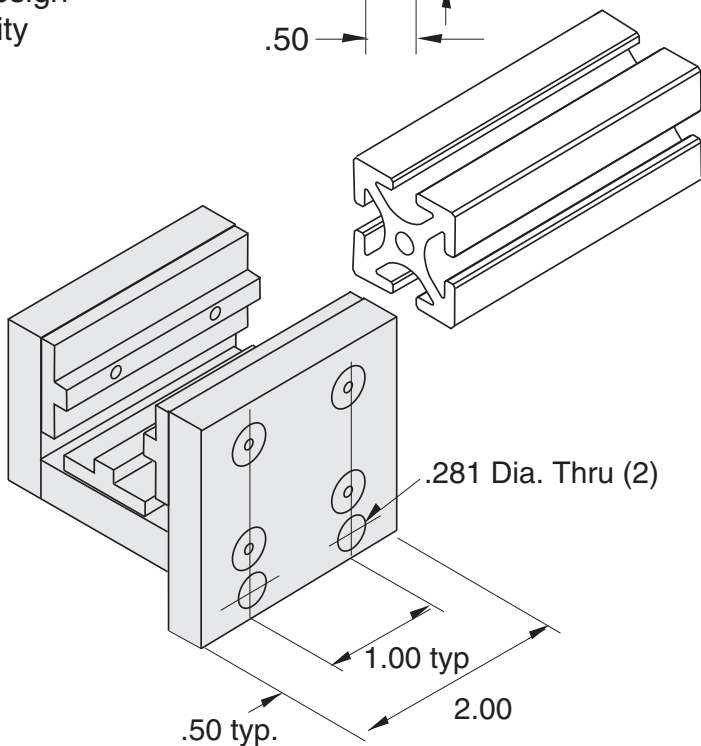
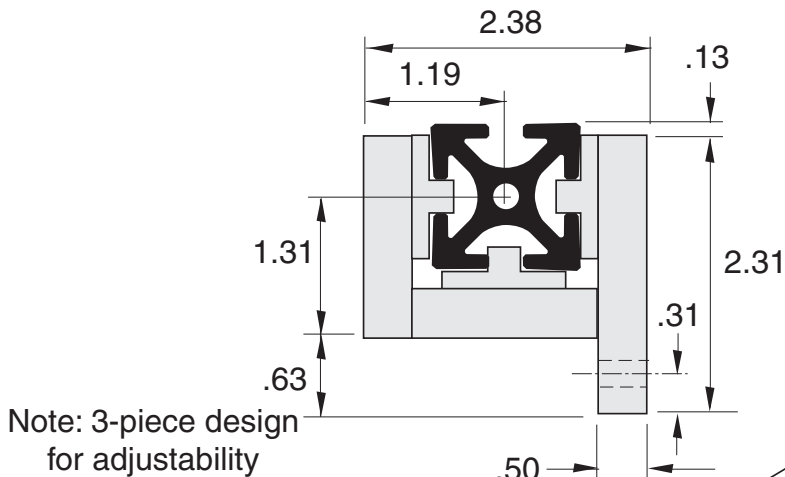
**1/4" SLOTS**

11-266



1/4" SLOTS

Hardware Included



Recommended Hardware  
 (2) 11-233 BHCS  
 (2) 11-205 T-nut

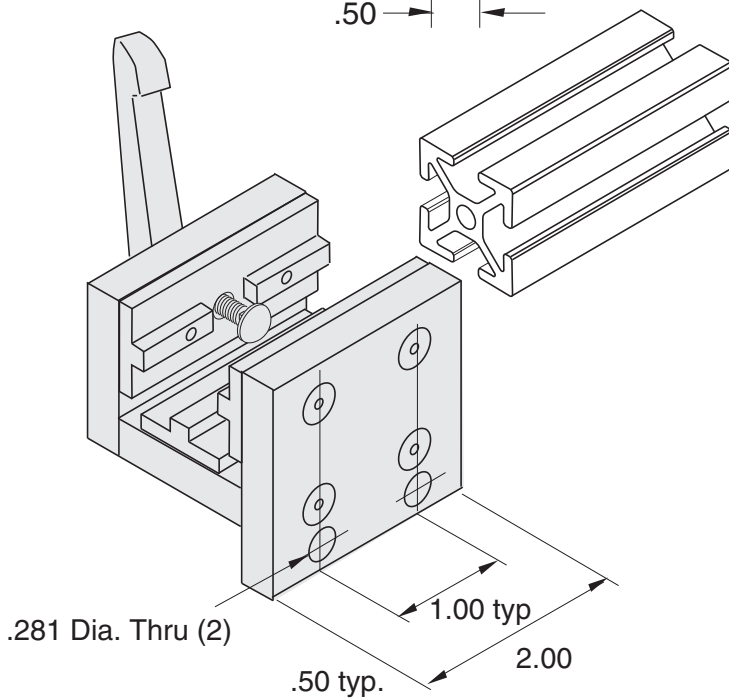
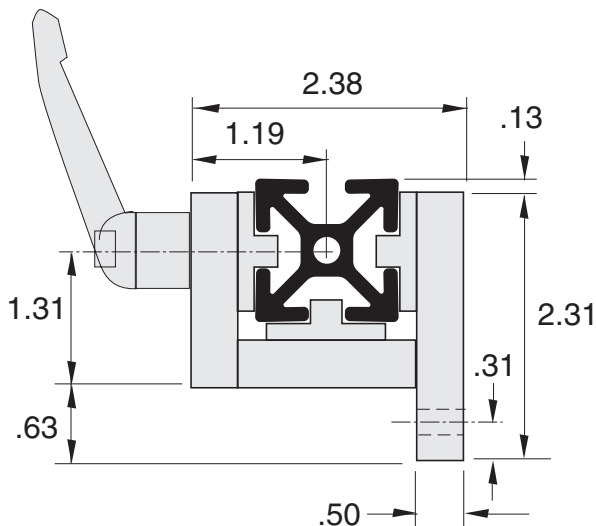
Bearing Material - DELRIN  
 Plate Material - Aluminum  
 Finish - Clear Anodize



# Single Mount Linear Bearing with Locking Handle



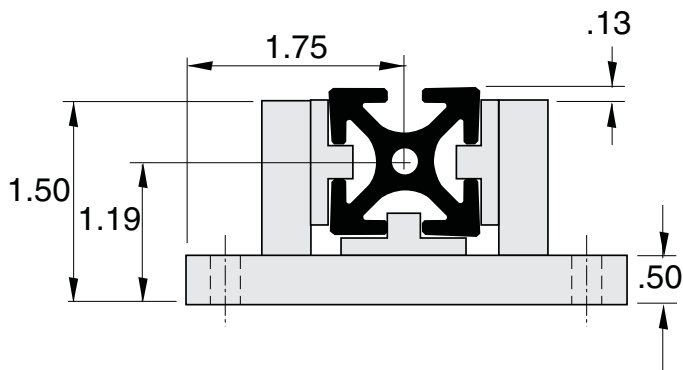
**11-91LH**



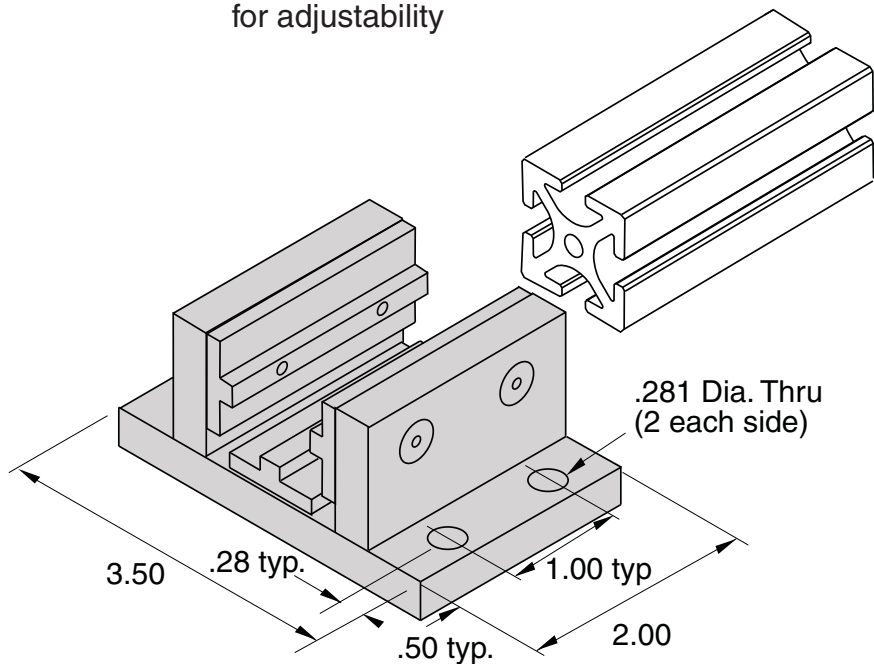
**1/4" SLOTS**

Recommended  
Hardware  
(2) 11-233 BHCS  
(2) 11-205 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum  
Finish - Clear Anodize



Note: 3-piece design  
for adjustability



**1/4" SLOTS**

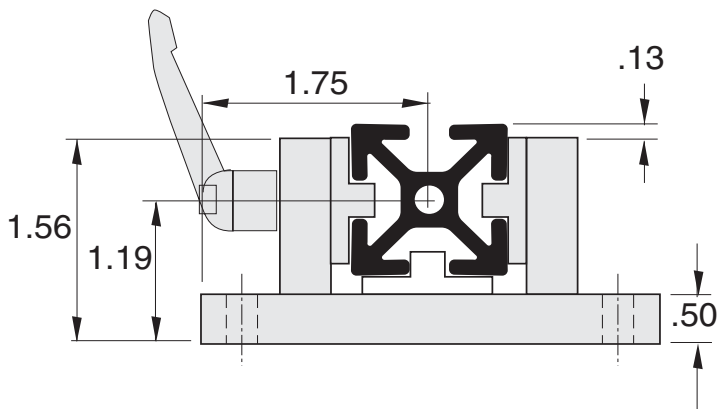
Recommended  
Hardware  
(4) 11-233 BHCS  
(4) 11-205 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum  
Finish - Clear Anodize

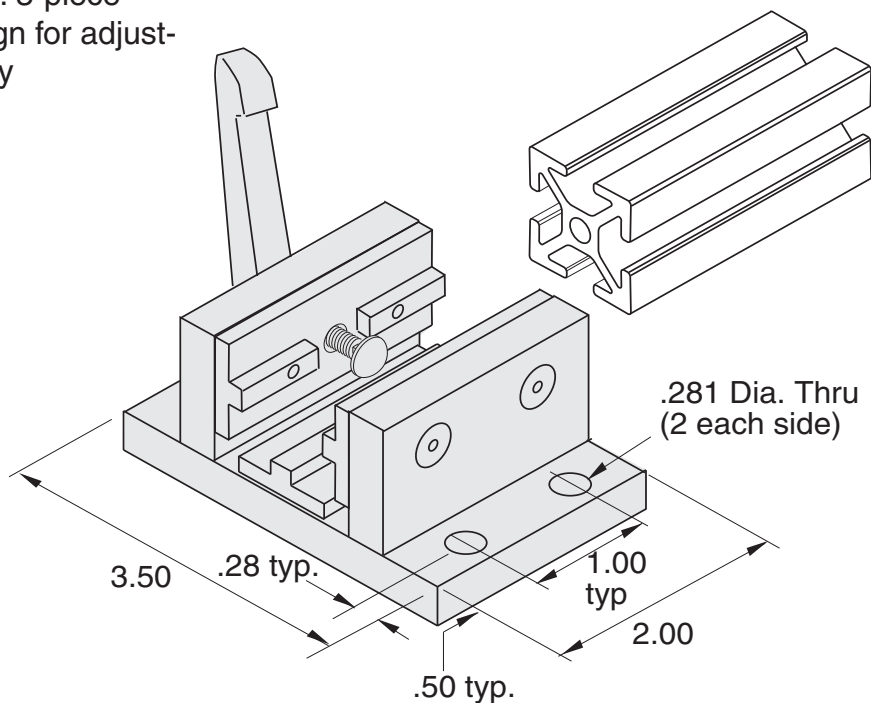
# Single Mount Linear Bearing with Locking Handle



**11-93LH**



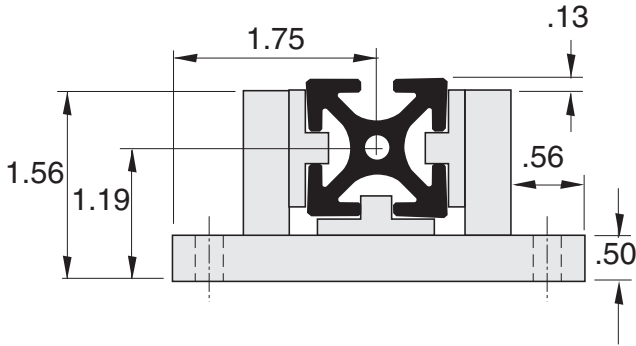
Note: 3-piece  
design for adjust-  
ability



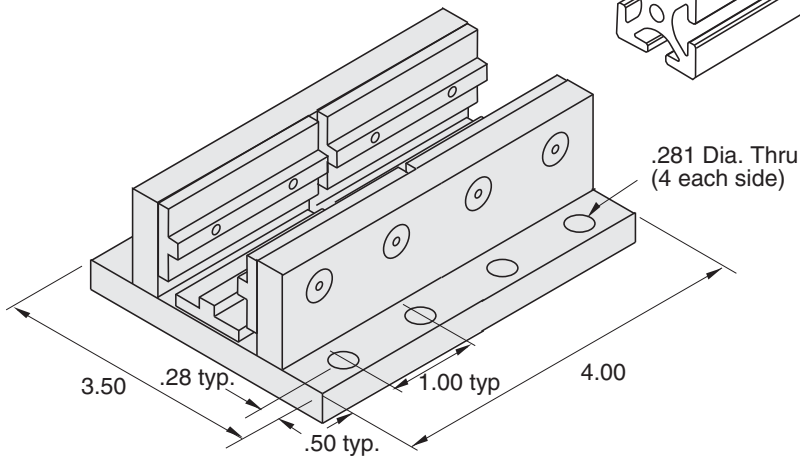
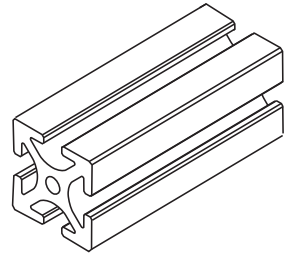
**1/4" SLOTS**

Recommended  
Hardware  
(4) 11-233 BHCS  
(4) 11-205 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum  
Finish - Clear Anodize



Note: 3-piece design  
for adjustability



**1/4" SLOTS**

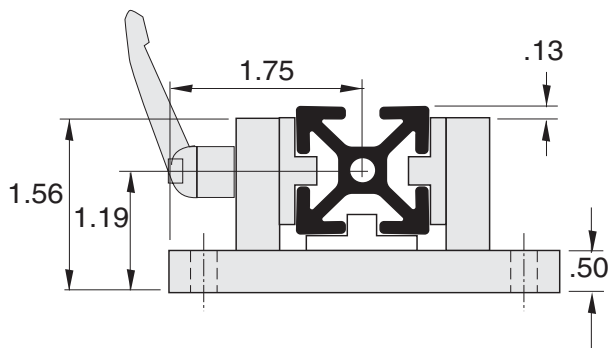
Recommended  
Hardware  
(8) 11-233 BHCS  
(8) 11-205 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum  
Finish - Clear Anodize

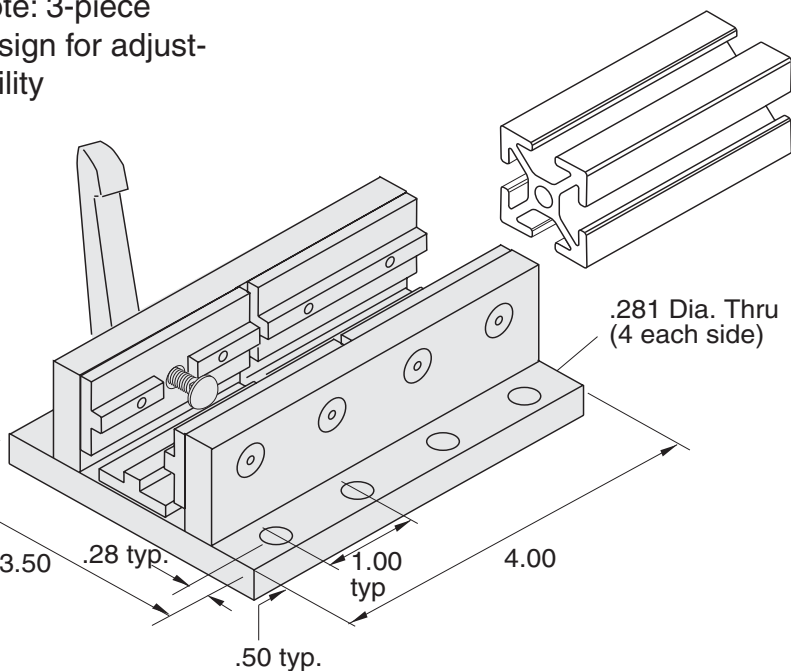
# Double Mount Linear Bearing with Locking Handle



**11-92LH**



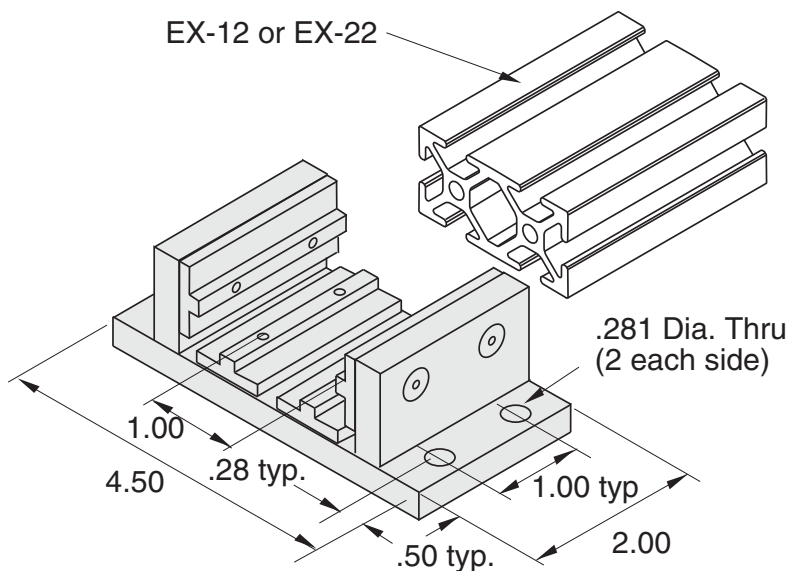
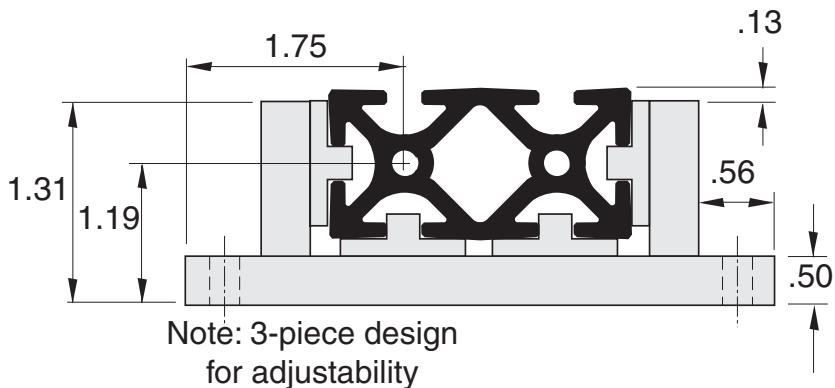
Note: 3-piece design for adjustability



**1/4" SLOTS**

Recommended Hardware  
 (8) 11-233 BHCS  
 (8) 11-205 T-nut

Bearing Material - DELRIN  
 Plate Material - Aluminum  
 Finish - Clear Anodize



Recommended  
Hardware  
(4) 11-233 BHCS  
(4) 11-205 T-nut

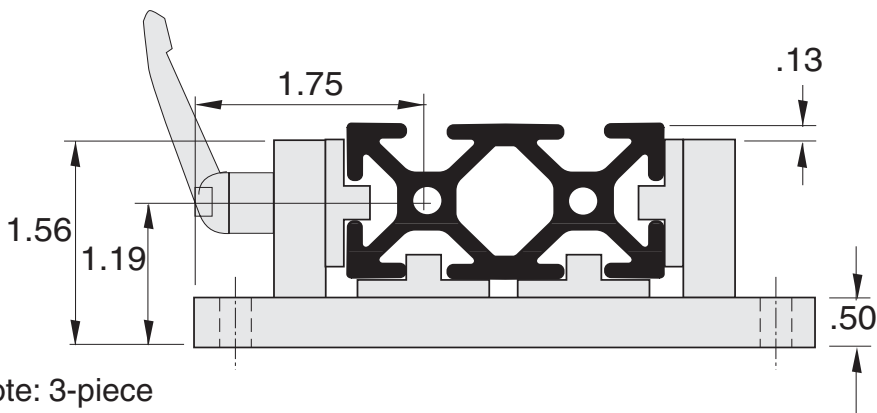
Bearing Material - DELRIN  
Plate Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

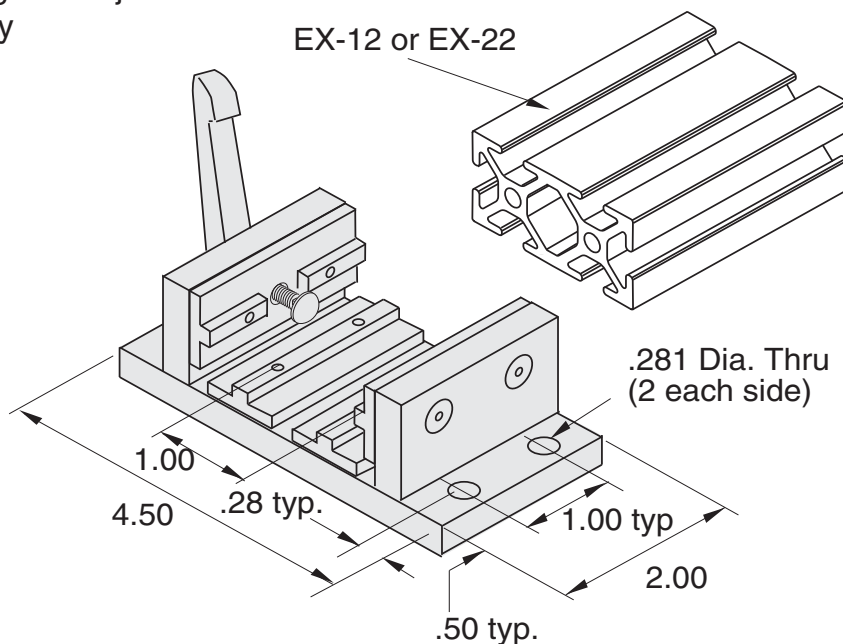
# Single Mount Linear Bearing with Locking Handle



**11-94LH**



Note: 3-piece  
design for adjust-  
ability

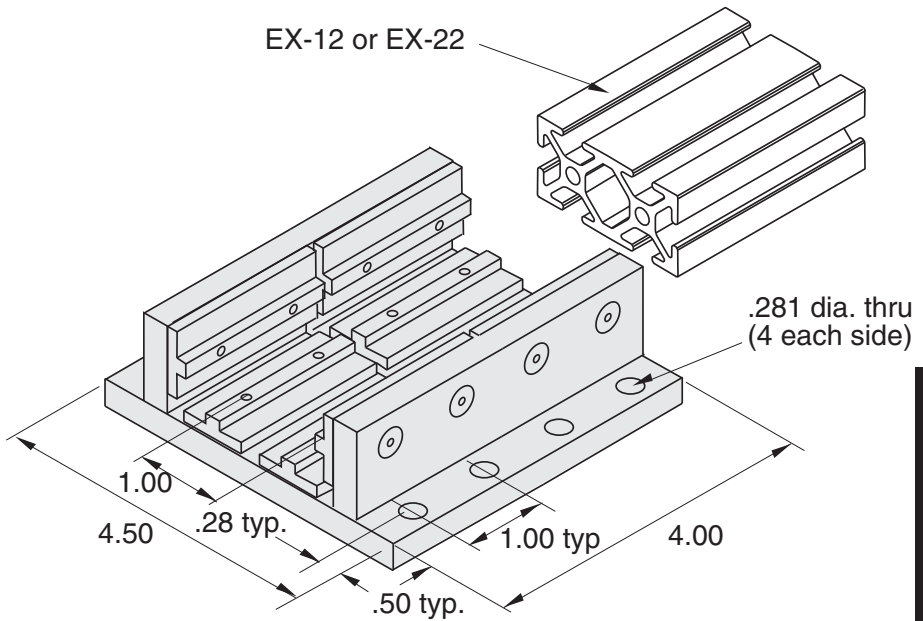
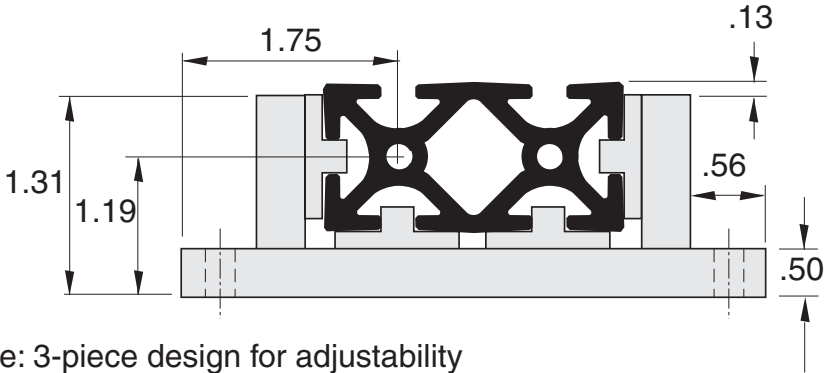


**1/4" SLOTS**

Recommended  
Hardware  
(4) 11-233 BHCS  
(4) 11-205 T-nut

Bearing Material - DELRIN  
Plate Material - Aluminum  
Finish - Clear Anodize

**11-95**



**1/4" SLOTS**

Recommended  
Hardware  
(8) 11-233 BHCS  
(8) 11-205 T-nut

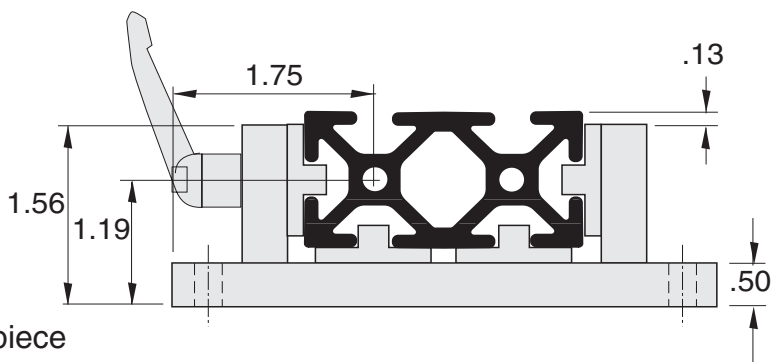
Bearing Material - DELRIN  
Plate Material - Aluminum  
Finish - Clear Anodize



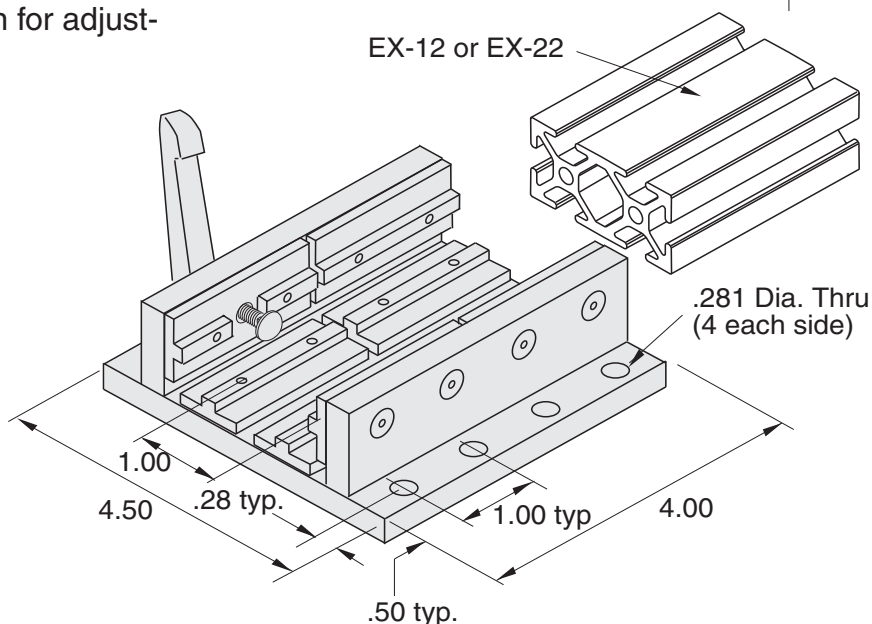
# Double Mount Linear Bearing with Locking Handle



**11-95LH**



Note: 3-piece design for adjustability

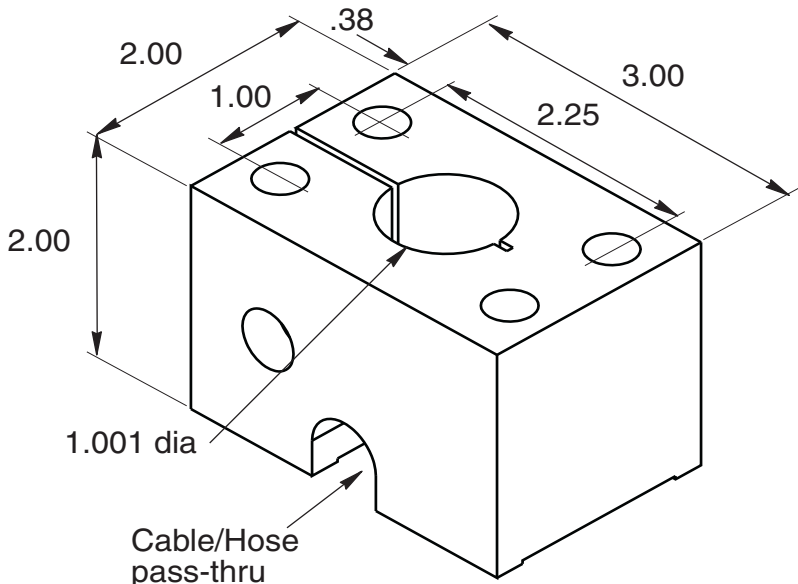


**1/4" SLOTS**

Recommended Hardware  
 (8) 11-233 BHCS  
 (8) 11-205 T-nut

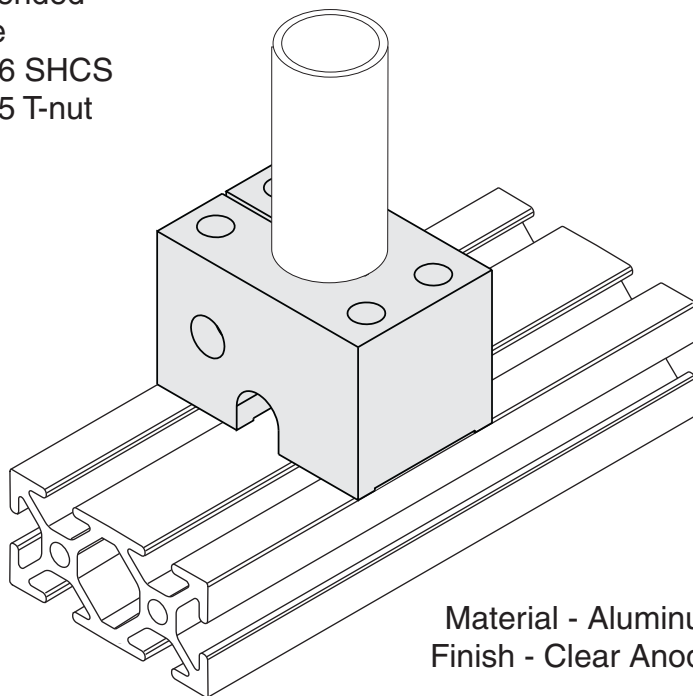
Bearing Material - DELRIN  
 Plate Material - Aluminum  
 Finish - Clear Anodize

with locking handle	<b>11-500</b>
with locking 5/16 SHCS	<b>11-501</b>



For shafts, see page 496

Recommended  
Hardware  
(4) 11-226 SHCS  
(4) 11-205 T-nut



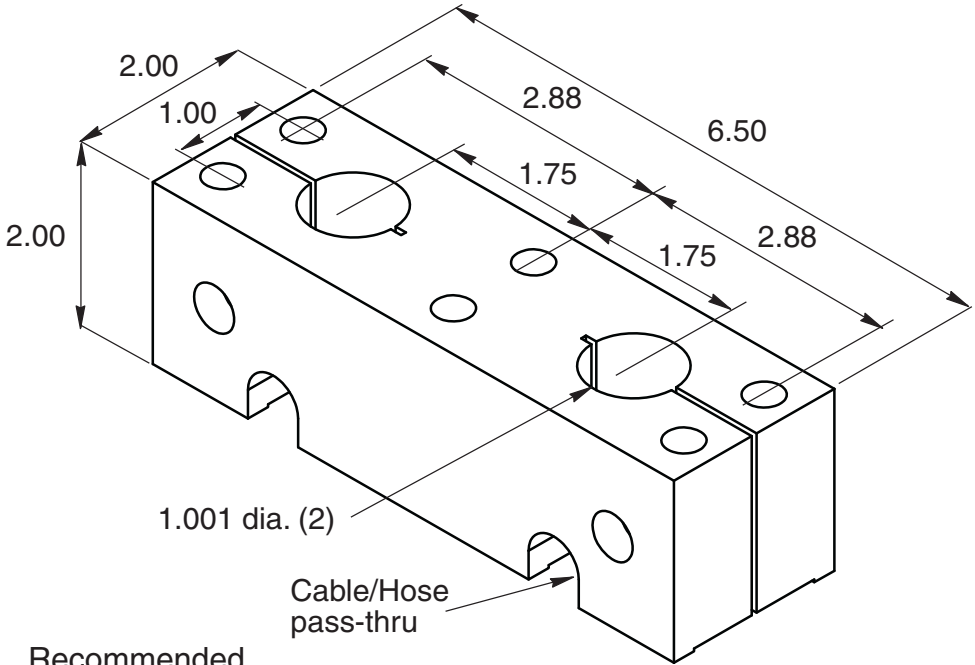
Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

# Double Shaft Base



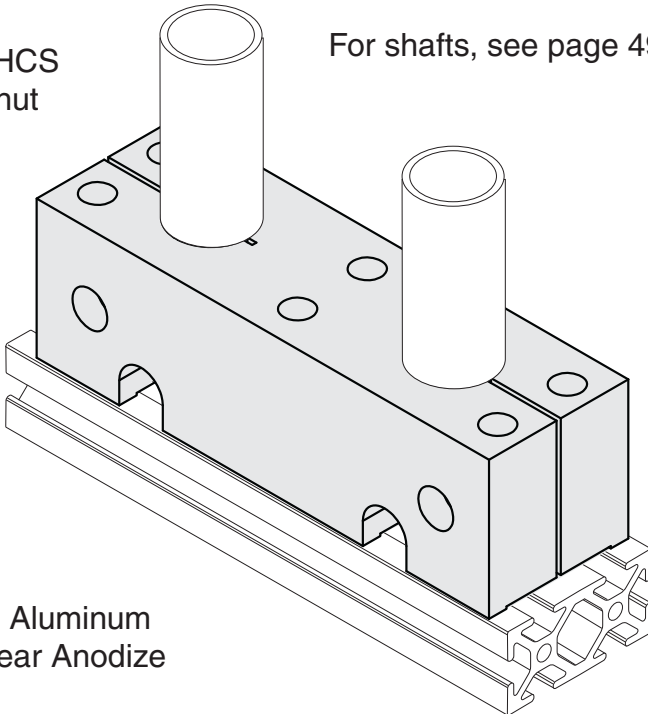
<b>11-502</b>	<b>with locking handle</b>
<b>11-503</b>	<b>with locking 5/16 SHCS</b>



Recommended Hardware

- (6) 11-226 SHCS
- (6) 11-205 T-nut

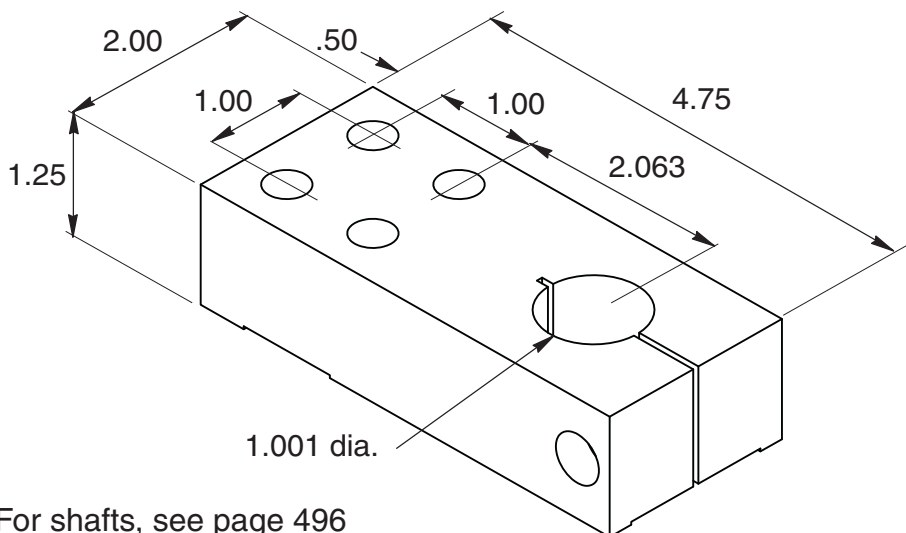
For shafts, see page 496



Material - Aluminum  
Finish - Clear Anodize

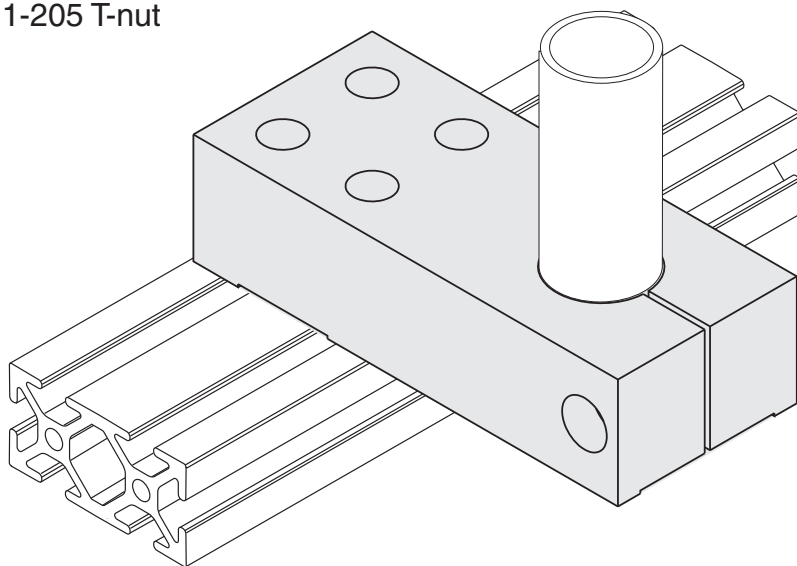
1/4" SLOTS

with locking handle	<b>11-504</b>
with locking 5/16 SHCS	<b>11-505</b>



For shafts, see page 496

Recommended  
Hardware  
(4) 11-223 SHCS  
(4) 11-205 T-nut



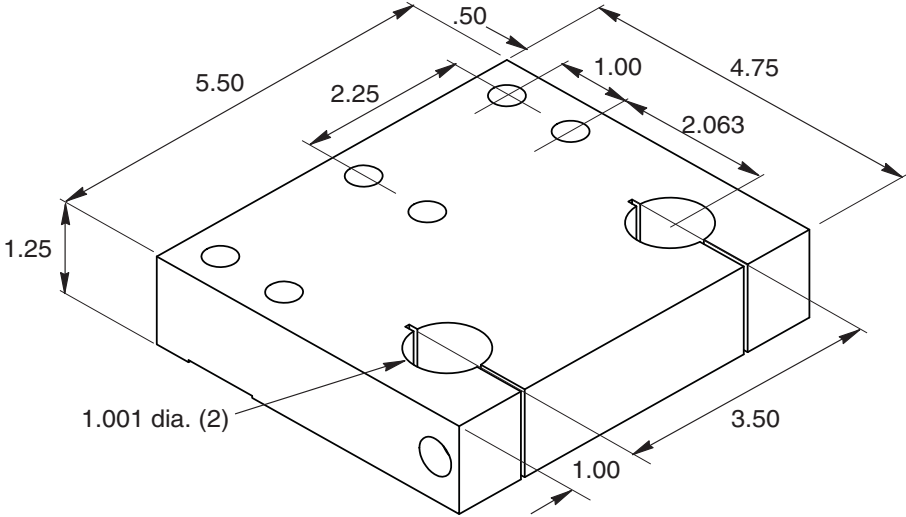
Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

# Double Shaft Mounting Base

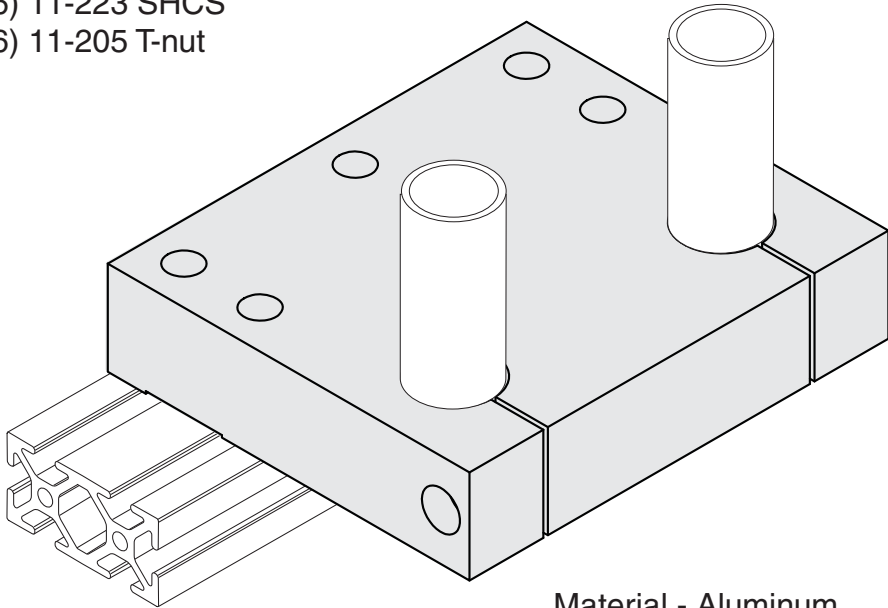


<b>11-506</b>	<b>with locking handle</b>
<b>11-507</b>	<b>with locking 5/16 SHCS</b>



For shafts, see page 496

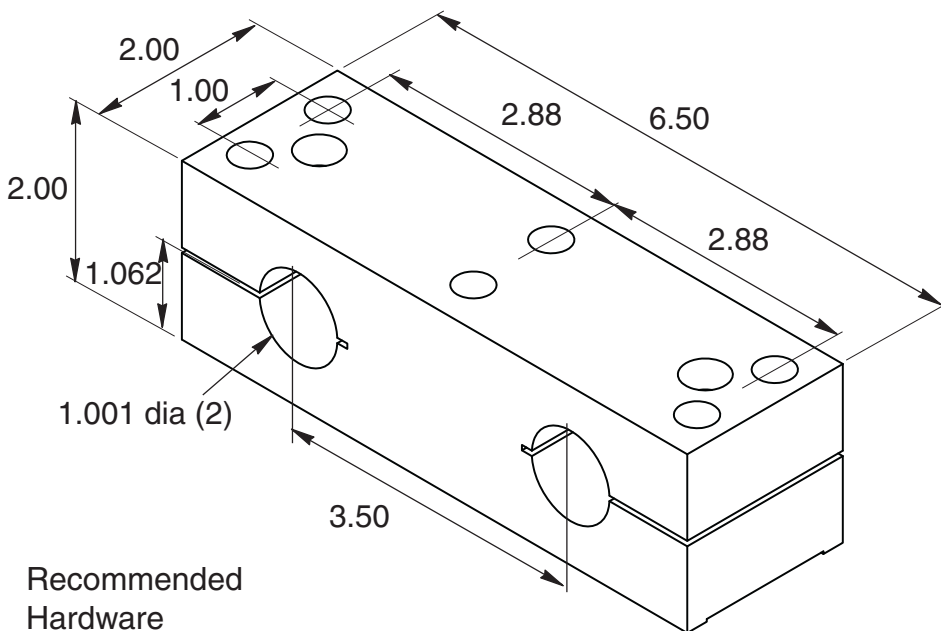
- Recommended  
Hardware
- (6) 11-223 SHCS
  - (6) 11-205 T-nut



1/4" SLOTS

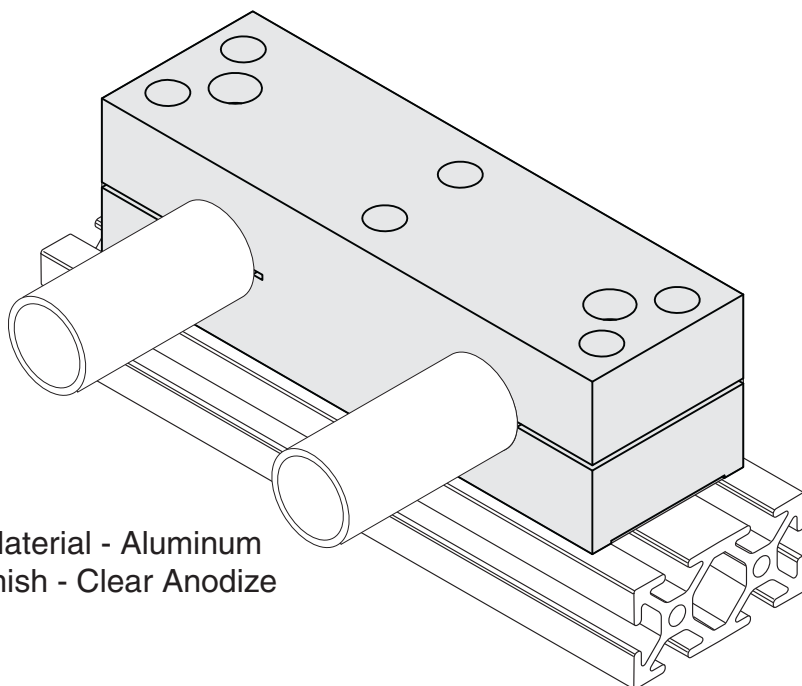
Material - Aluminum  
Finish - Clear Anodize

with locking handle	<b>11-508</b>
with locking 5/16 SHCS	<b>11-509</b>



Recommended  
Hardware  
(4) 11-224 SHCS  
(4) 11-205 T-nut

For shafts, see page 496



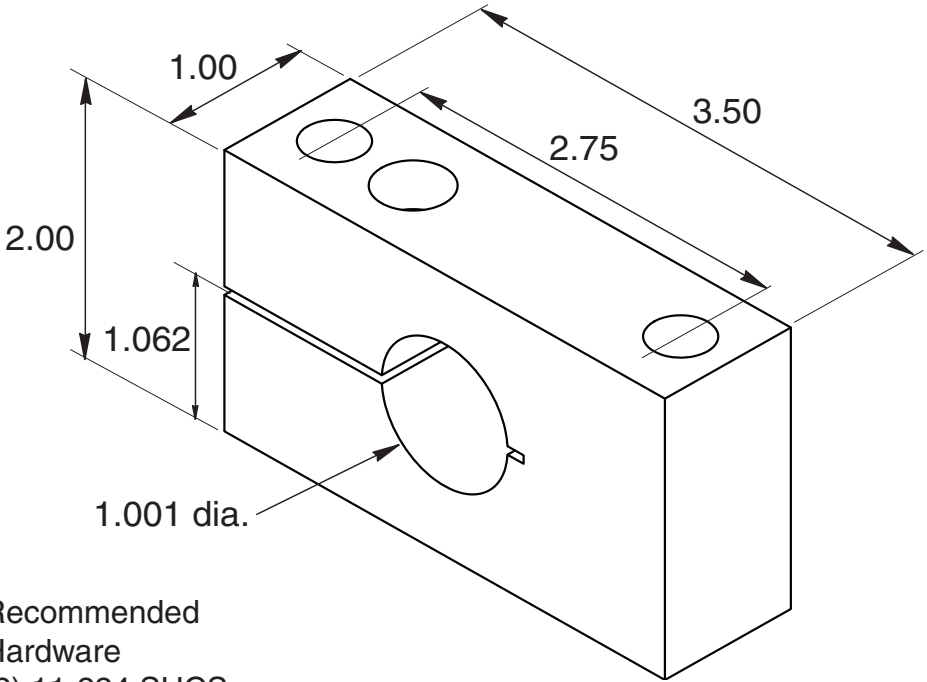
Material - Aluminum  
Finish - Clear Anodize

**1/4" SLOTS**

# Single Shaft Mounting Block



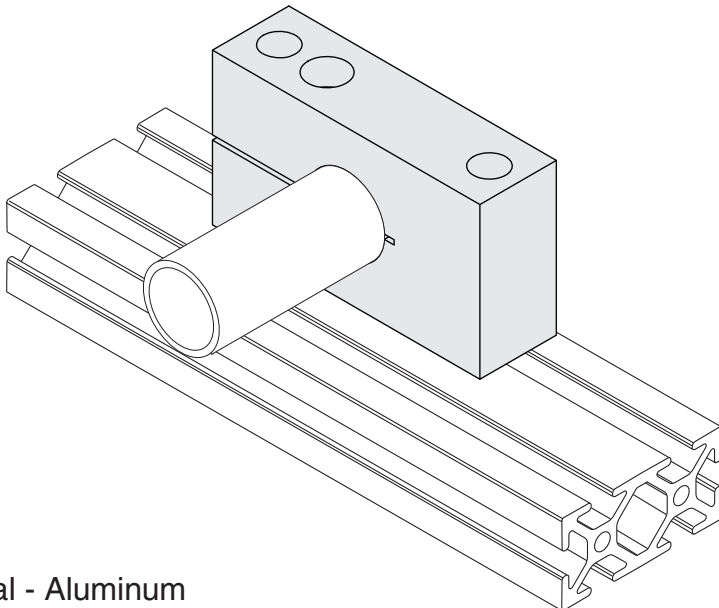
<b>11-510</b>	with locking handle
<b>11-511</b>	with locking 5/16 SHCS



Recommended Hardware  
(2) 11-224 SHCS  
(2) 11-205 T-nut

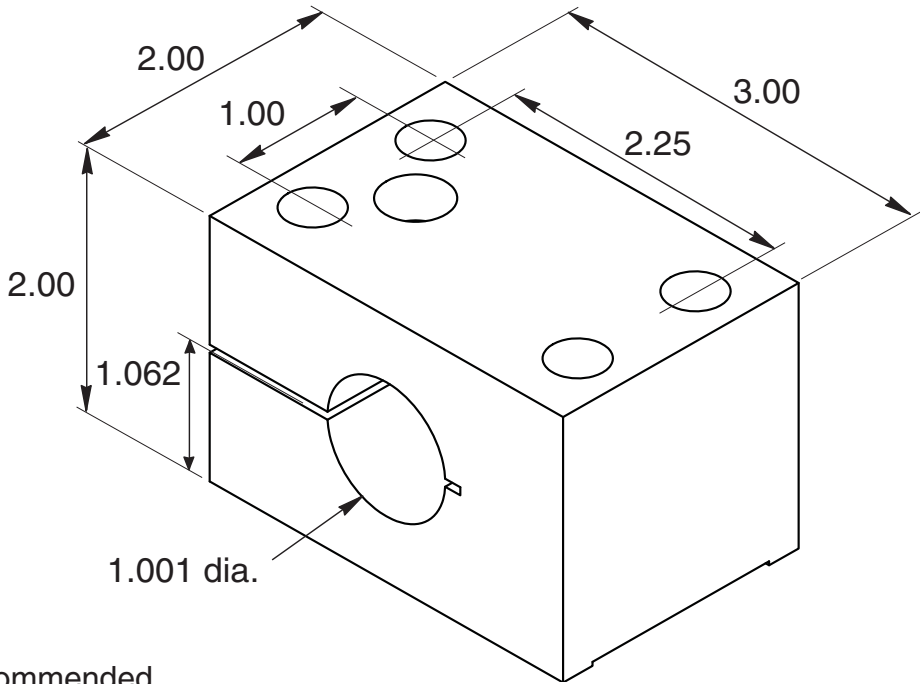
For shafts, see page 496

**1/4" SLOTS**



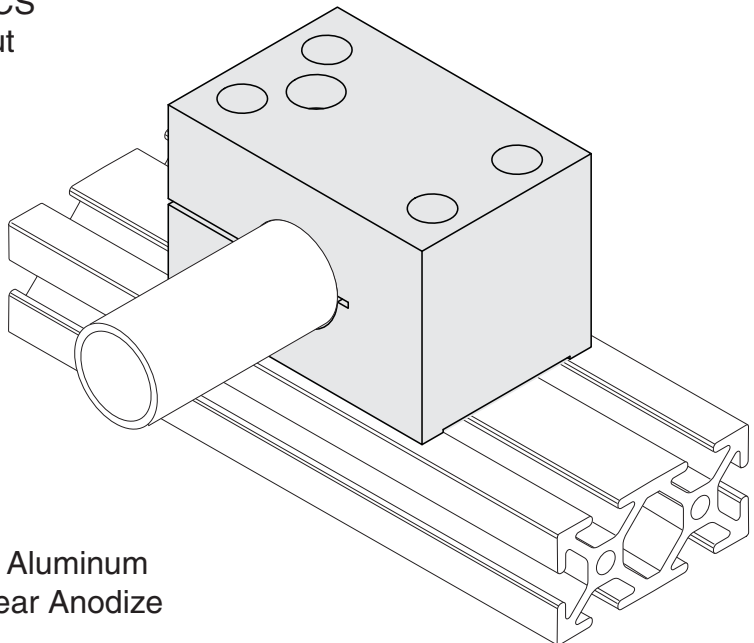
Material - Aluminum  
Finish - Clear Anodize

<b>with locking handle</b>	<b>11-512</b>
<b>with locking 5/16 SHCS</b>	<b>11-513</b>



Recommended  
Hardware  
(4) 11-226 SHCS  
(4) 11-205 T-nut

For shafts, see page 496

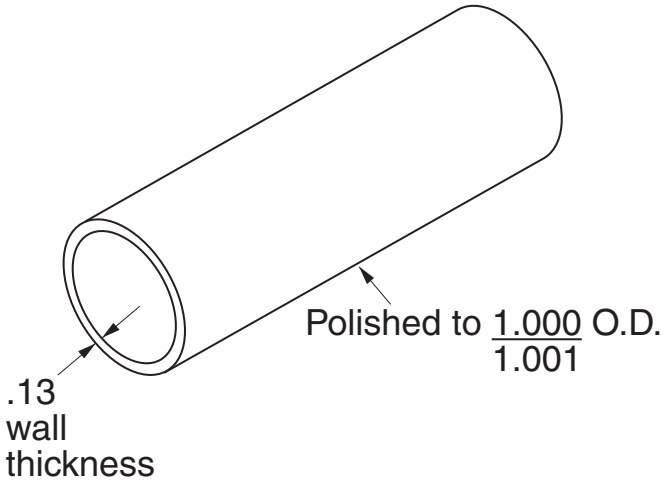


**1/4" SLOTS**

Material - Aluminum  
Finish - Clear Anodize



**EB-218**

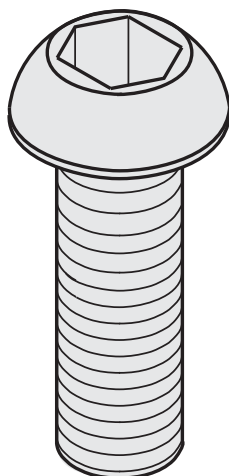


**EB-218** Anodized Aluminum  
Stock Length = 71"

**EB-219** Polished Steel  
Stock Length = 71"

1/4" SLOTS

Note: For any length other than stock length for all of the above, add EM-1 cutting charge



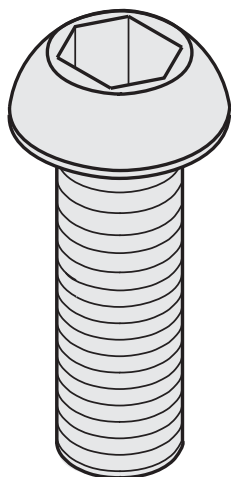
<b>11-230</b>
<b>11-231</b>
<b>11-232</b>
<b>11-233</b>
<b>11-234</b>
<b>11-235</b>

<b>Part No.</b>	
11-230	1/4"-20 thd x 3/8" long
11-231	1/4"-20 thd x 1/2" long
11-232	1/4"-20 thd x 5/8" long
11-233	1/4"-20 thd x 3/4" long
11-234	1/4"-20 thd x 1.0" long
11-235	1/4"-20 thd x 1.25" long

Finish - Black Oxide

**Stainless Steel  
Button Head Cap Screw**

**11-456**



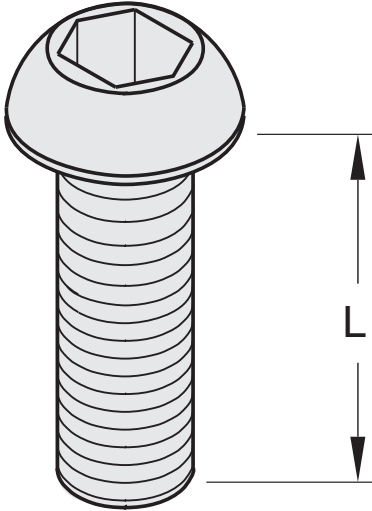
1/4-20 thd
L- inch
<b>11-456 -.38</b>
<b>11-456 -.50</b>
<b>11-456 -.63</b>
<b>11-456 -.75</b>

**1/4" SLOTS**

Metric Button Head Cap Screw



**11-454**



	length
<b>11-454-10</b>	10mm
<b>11-454-12</b>	12mm
<b>11-454-16</b>	16mm
<b>11-454-20</b>	20mm
<b>11-454-25</b>	25mm

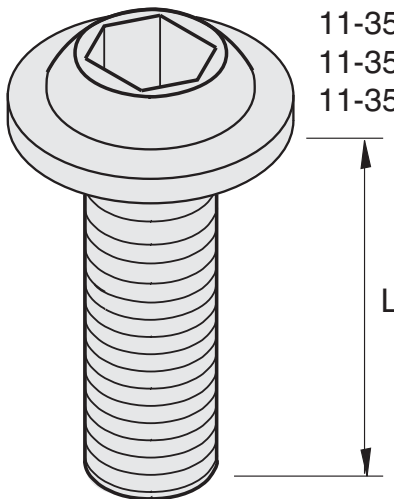
m6 thd

Material - Steel  
Finish - Black Oxide

**11-350**  
**11-351**  
**11-352**

**Flanged Button Head Cap Screw**

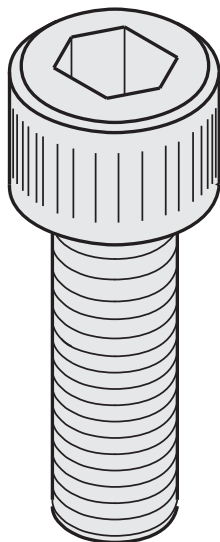
Part No.	
11-350	$\frac{1}{4}$ -20 thd x $\frac{3}{8}$ " long
11-351	$\frac{1}{4}$ -20 thd x $\frac{1}{2}$ " long
11-352	$\frac{1}{4}$ -20 thd x $\frac{3}{4}$ " long



Finish - Black Oxide

1/4" SLOTS

<b>11-220</b>
<b>11-221</b>
<b>11-222</b>
<b>11-223</b>
<b>11-224</b>
<b>11-225</b>
<b>11-226</b>



<b>Part No.</b>	
11-220	$\frac{1}{4}$ -20 thd x $\frac{3}{8}$ " long
11-221	$\frac{1}{4}$ -20 thd x $\frac{1}{2}$ " long
11-222	$\frac{1}{4}$ -20 thd x $\frac{5}{8}$ " long
11-223	$\frac{1}{4}$ -20 thd x $\frac{3}{4}$ " long
11-224	$\frac{1}{4}$ -20 thd x 1.0" long
11-225	$\frac{1}{4}$ -20 thd x 1.25" long
11-226	$\frac{1}{4}$ -20 thd x 1.50" long

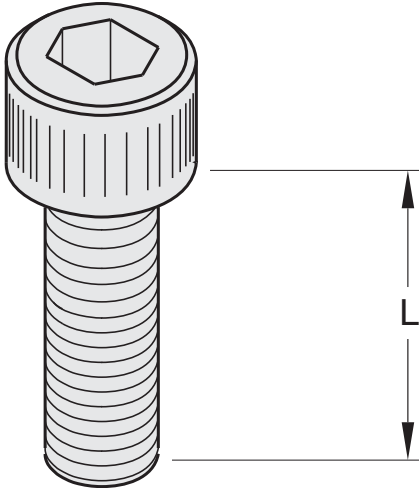
**1/4" SLOTS**

**Finish - Black Oxide**

# Metric Socket Head Cap Screw



**11-450**



m6 thd

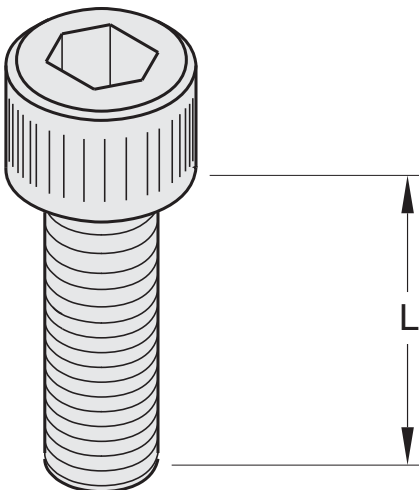
	length
<b>11-450-10</b>	10mm
<b>11-450-12</b>	12mm
<b>11-450-16</b>	16mm
<b>11-450-20</b>	20mm
<b>11-450-25</b>	25mm

Material - Steel  
Finish - Black Oxide

# Stainless Steel Socket Head Cap Screw

**11-452**

**1/4" SLOTS**



1/4-20 thd

	L-inch
<b>11-452 -.5</b>	
<b>11-452 -.63</b>	
<b>11-452 -.75</b>	
<b>11-452 -1.0</b>	

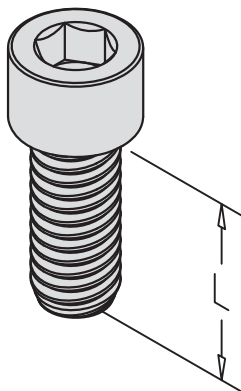
**Socket Head** **11-220K**

Fractional  
(1/4 - 20 thd)

Part No	Thread Length
11-220K	.375
11-221K	.50
11-222K	.63
11-223K	.75
11-224K	1.00

Metric  
(M6 x 1.0 thd)

Part No	Thread Length
11-450K-10	10
11-450K-12	12
11-450K-16	16
11-450K-20	20
11-450K-25	25



Material - Steel  
Finish - Bright Zinc Plated

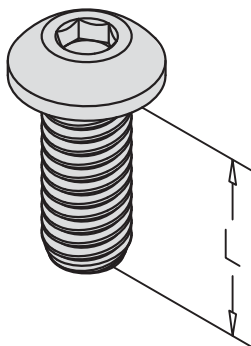
**Button Head** **11-230K**

Fractional  
(1/4 - 20 thd)

Part No	Thread Length
11-230K	.375
11-231K	.50
11-232K	.63
11-233K	.75
11-234K	1.00

Metric  
(M6 x 1.0 thd)

Part No	Thread Length
11-454K-10	10
11-454K-12	12
11-454K-16	16
11-454K-20	20
11-454K-25	25



Material - Steel  
Finish - Bright Zinc Plated

**1/4" SLOTS**

## Zinc Plated Hex Cap Screw

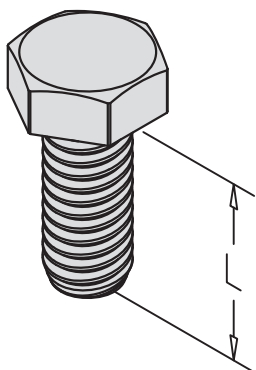


**11-458**

Fractional  
(1/4" - 18 thd) L = inch

11-458-.38  
11-458-.50  
11-458-.63  
11-458-.75  
11-458-1.00  
11-458-1.25

Material - Steel  
Finish - Bright Zinc Plated



Metric  
(M6 x 1.25 thd) L = mm

11-458M-12  
11-458M-16  
11-458M-20  
11-458M-25  
11-458M-30

Material - Steel  
Finish - Yellow Zinc Plated

## Flat Head Socket Cap Screws

**EF-157**

1/4-20 thd.

**EF-158**

#10-32 thd.

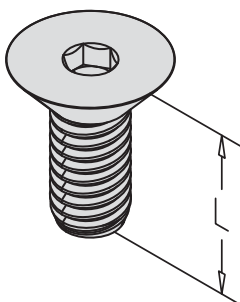
**Steel**

(1/4" - 20 thd) L = inch

EF-157-.50  
EF-157-.63  
EF-157-.75  
EF-157-1.0

(#10-32 thd) L = inch

EF-158-.50  
EF-158-.63



**Stainless Steel**

(1/4" - 20 thd) L = inch

EF-157SS-.50  
EF-157SS-.63

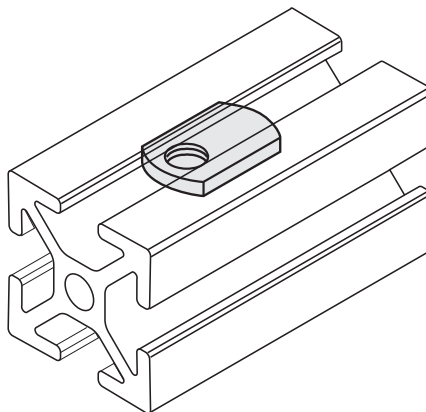
(#10-32 thd) L = inch

EF-158SS-.50  
EF-158SS-.63

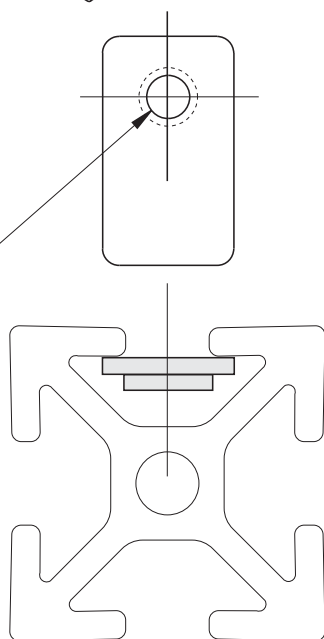
Material - Steel  
Finish - Black Oxide

Material - Stainless Steel

<b>11-210</b>
<b>11-211</b>
<b>11-212</b>
<b>11-213</b>
<b>11-214</b>
<b>11-239</b>



- Part No.  
**11-210** 1/4-20 thd  
**11-211** 10-32 thd  
**11-212** m6 thd  
**11-213** 8-32 thd  
**11-214** 6-32 thd  
**11-239** m5 thd



**1/4" SLOTS**

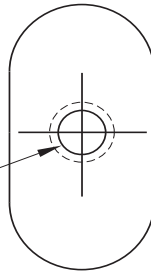
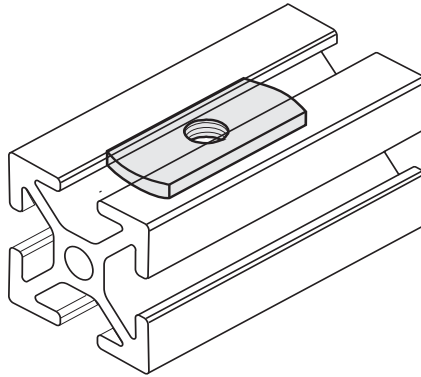
**Material - Steel**  
**Finish - Zinc Plated**



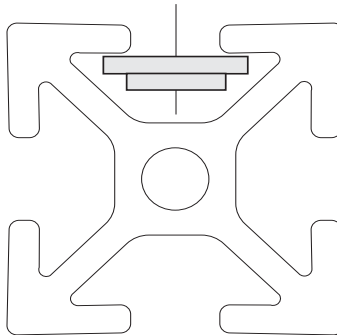
# Economy T-Nut (Centered Thread)



<b>11-215</b>
<b>11-216</b>
<b>11-217</b>
<b>11-219</b>
<b>11-215SS</b>



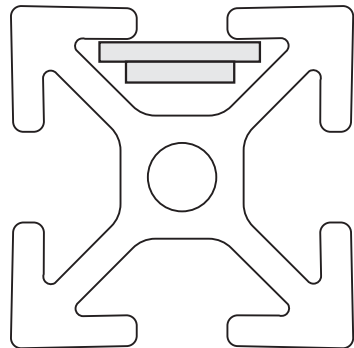
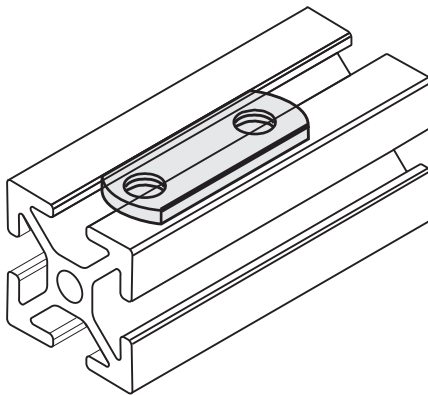
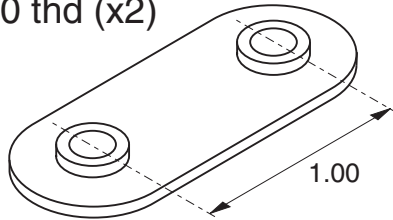
- Part No.  
**11-215** 1/4-20 thd  
**11-216** 10-32 thd  
**11-217** 8-32 thd  
**11-219** 6-32 thd  
**11-215SS** 1/4-20 thd  
 Stainless  
 Steel T-nut



**1/4" SLOTS**

Material - Steel  
 Finish - Zinc Plated

1/4-20 thd (x2)



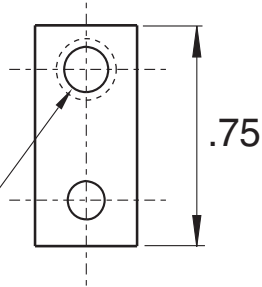
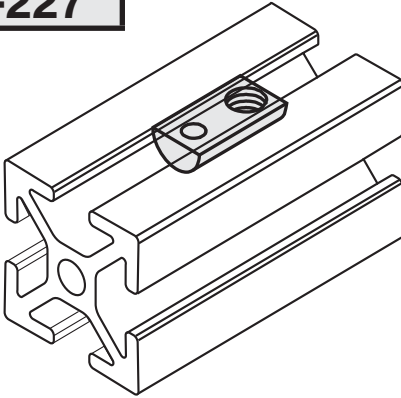
**1/4" SLOTS**

Material - Steel  
Finish - Zinc Plated

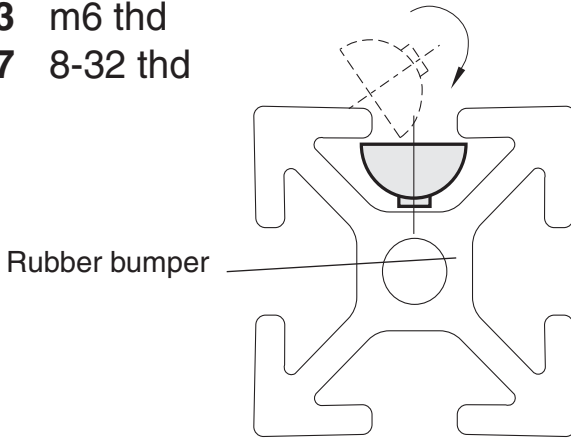
# Pivot T-Nut with Rubber Bumper



11-201
11-202
11-203
11-227



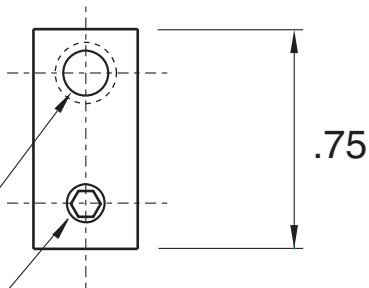
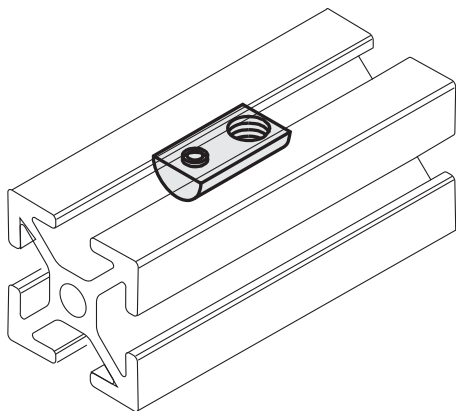
- Part No.  
**11-201** 1/4-20 thd  
**11-202** 10-32 thd  
**11-203** m6 thd  
**11-227** 8-32 thd



1/4" SLOTS

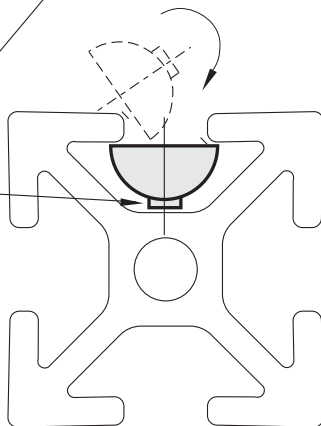
Material - Steel  
Finish - Zinc Plated

<b>11-340</b>
<b>11-341</b>
<b>11-342</b>



- 11-340** 1/4-20 thd
- 11-341** 10-32 thd
- 11-342** m6 thd

10-32 setscrew  
included



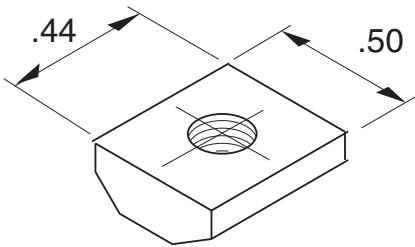
**1/4" SLOTS**

Material - Steel  
Finish - Zinc Plated

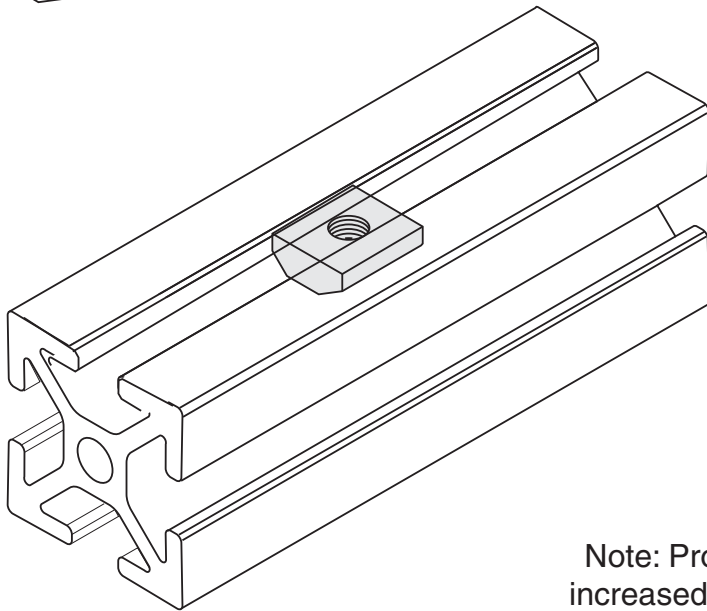
# Heavy Duty T-Nut



<b>11-205</b>
<b>11-206</b>
<b>11-207</b>
<b>11-208</b>
<b>11-209</b>



- 11-205** 1/4-20 thd
- 11-206** 10-32 thd
- 11-207** m6 thd
- 11-208** 8-32 thd
- 11-209** 6-32 thd



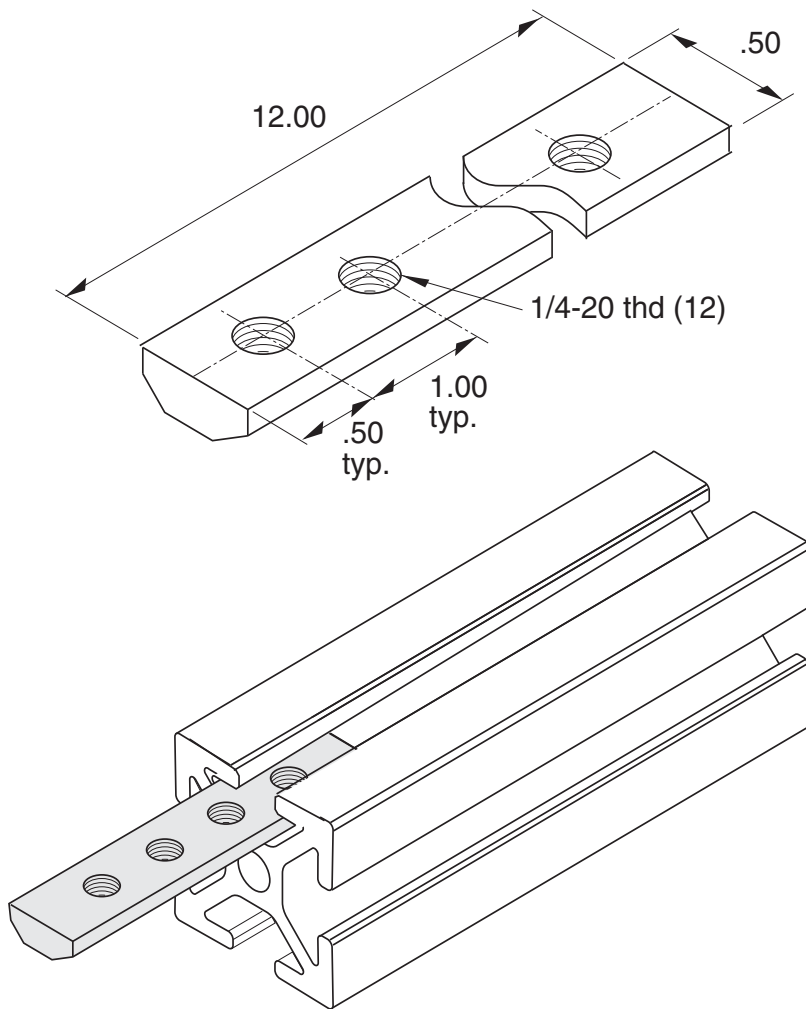
Note: Provides increased thread engagement

Material - Steel  
Finish - Zinc Plated

1/4" SLOTS

.26 slot width

**11-218**



Special Lengths can be provided on request  
Material is zinc plated steel

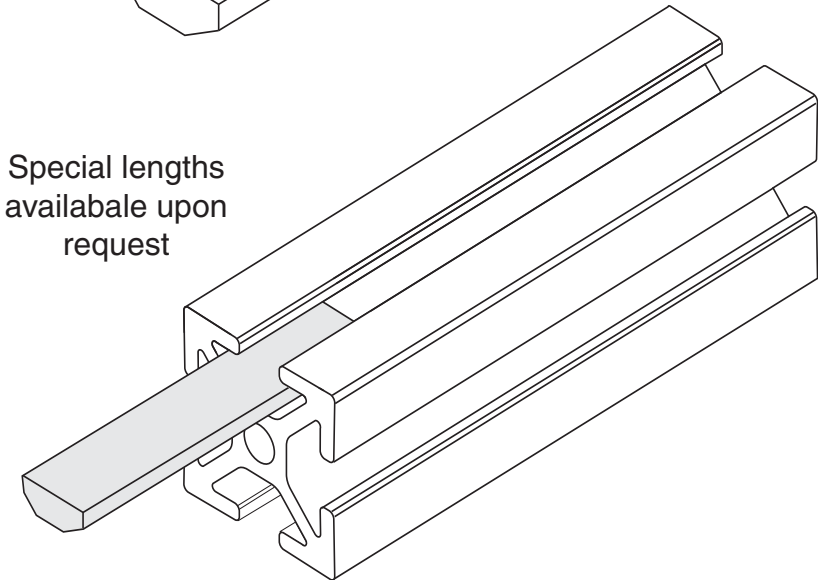
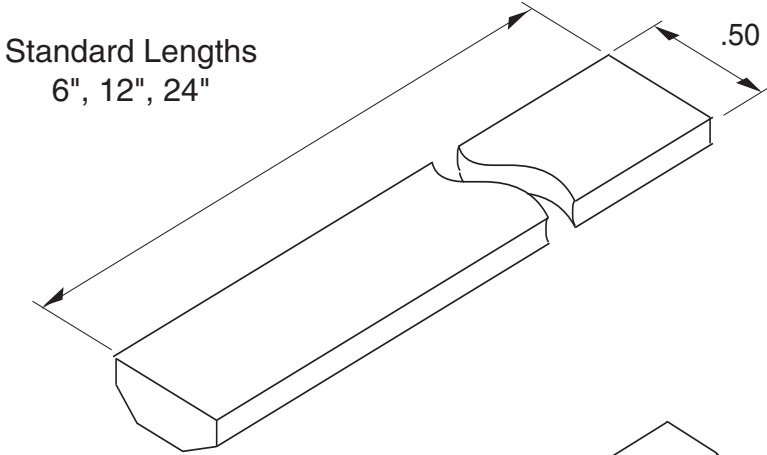
Material - Steel  
Finish - Zinc Plated

**1/4" SLOTS**

# Blank Continuous T-nut



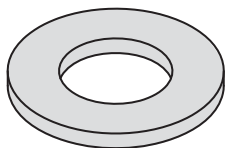
**11-218B** .25 inch slot size



Note: Factory supplied tapped  
holes can be supplied per  
customer specification

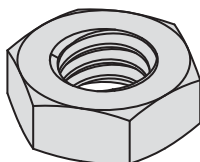
Material - Steel  
Finish - Zinc Plated

1/4" SLOTS



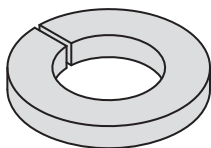
- 11-240** Washer Hardened Steel Heavy Duty (Black Oxide)
- 11-240SS** Washer (Stainless Steel)
- 11-240S** Washer (Zinc Plated)

Material - Steel  
Finish - Black Oxide



- 11-241** 1/4-20 Hex Nut
- 11-241M** M6-1.0 Hex Nut

Material - Steel  
Finish - Zinc Plated



- 11-240L** Locking Washer

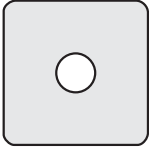
Material - Steel  
Finish - Zinc Plated



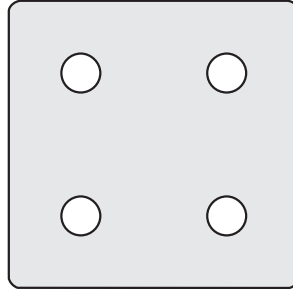
# Plastic End Plates



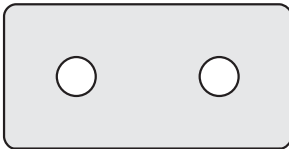
<b>11-250</b>
<b>11-257</b>
<b>11-258</b>
<b>11-259</b>
<b>11-277</b>



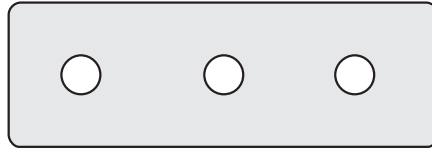
**11-250**  
use with Extrusion EX-11



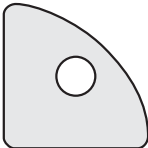
**11-258**  
use with Extrusion EX-22



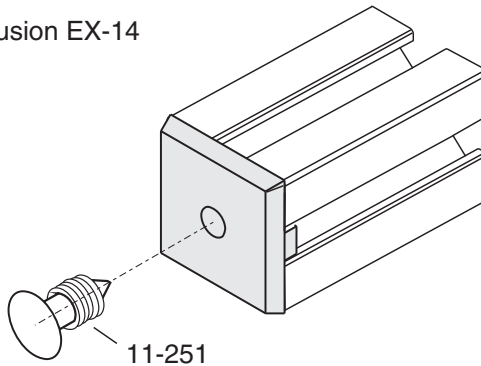
**11-257**  
use with Extrusion EX-12



**11-259**  
use with Extrusion EX-13



**11-277**  
use with Extrusion EX-14

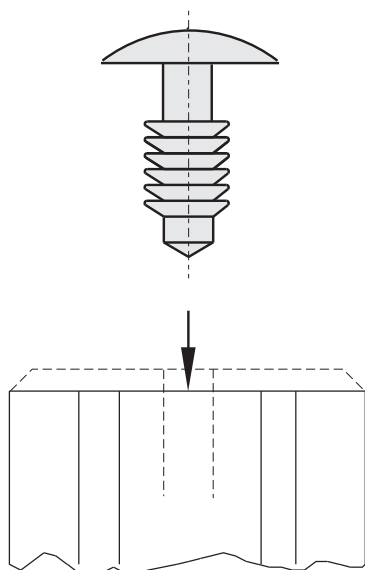


Note: For metal covers,  
consult the factory

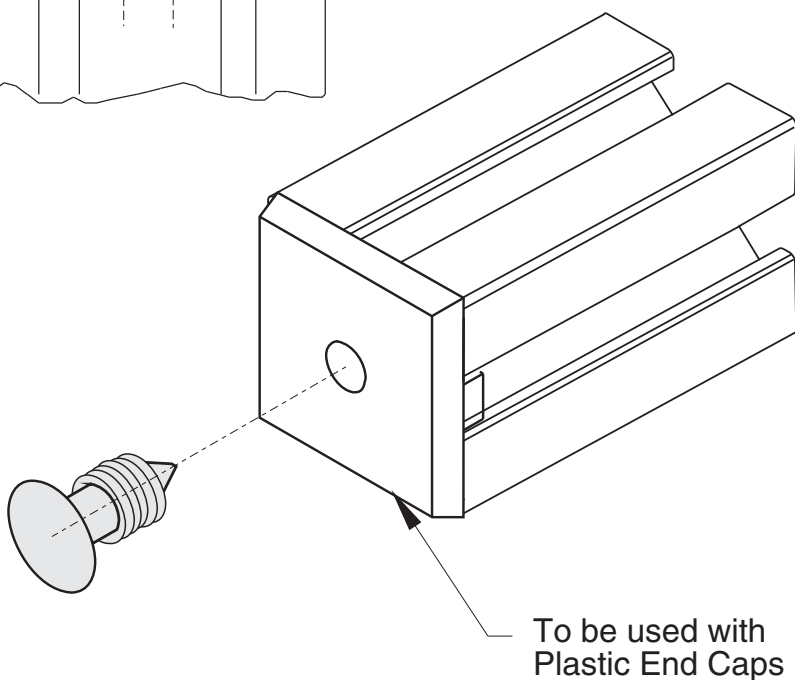
Push Lock Fasteners  
Included with each end plate

Material - Black ABS

1/4" SLOTS



Note: thread bolt hole for permanent installation



To be used with Plastic End Caps

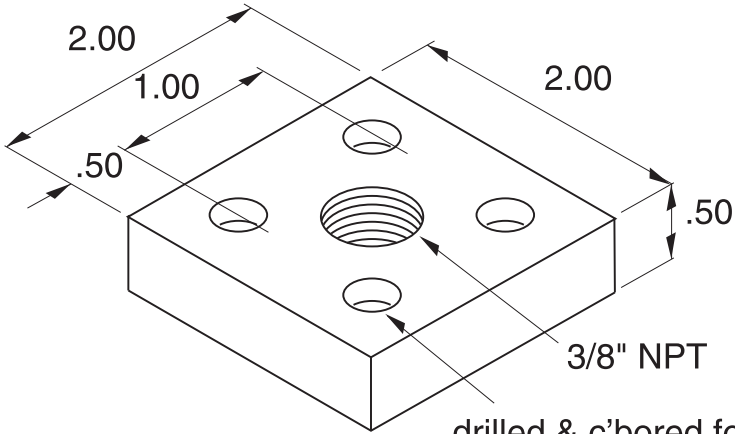
**1/4" SLOTS**

Material - Nylon

# Pressure Manifold Plate



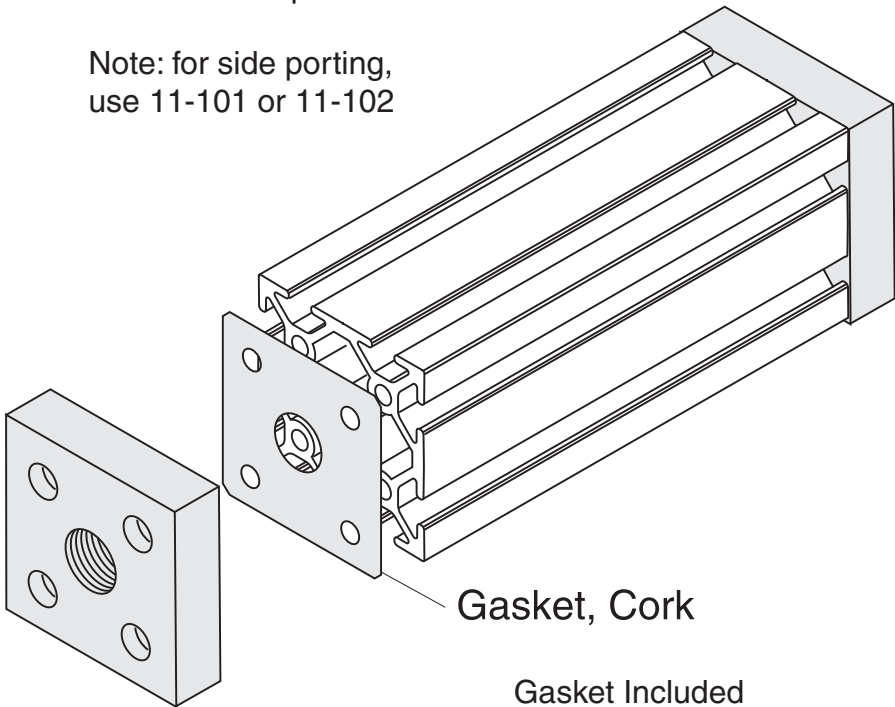
**11-100**



Cross Sectional  
Area = 1.63 sq. in.

drilled & c'bored for  
1/4-20 shcs (4)

Note: for side porting,  
use 11-101 or 11-102



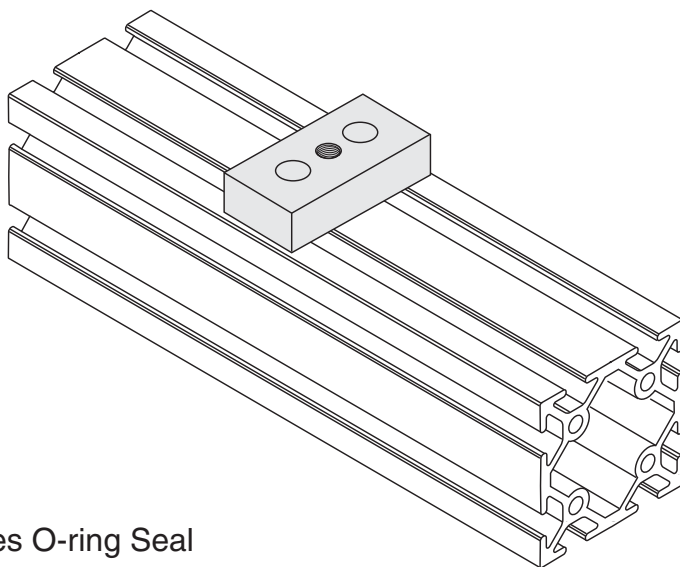
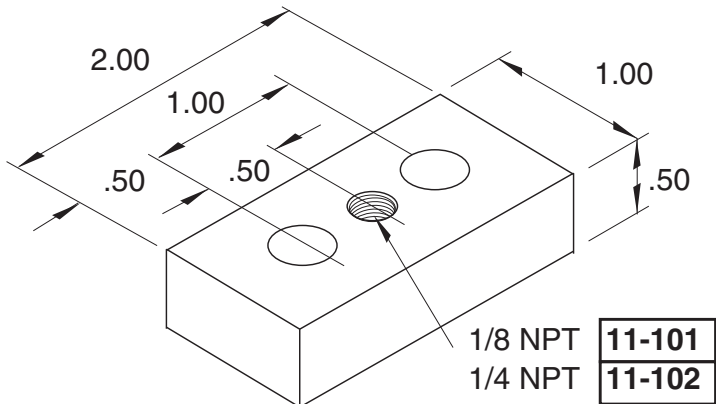
Gasket, Cork

Gasket Included  
Requires (4)11- 224 SHCS

Material - Aluminum  
Finish - Clear Anodize

**11-101**

**11-102**



Includes O-ring Seal

Requires

(2) 11-221 SHCS

(2) 11-210 T-Nut

O-ring Material - Buna N

Material - Aluminum

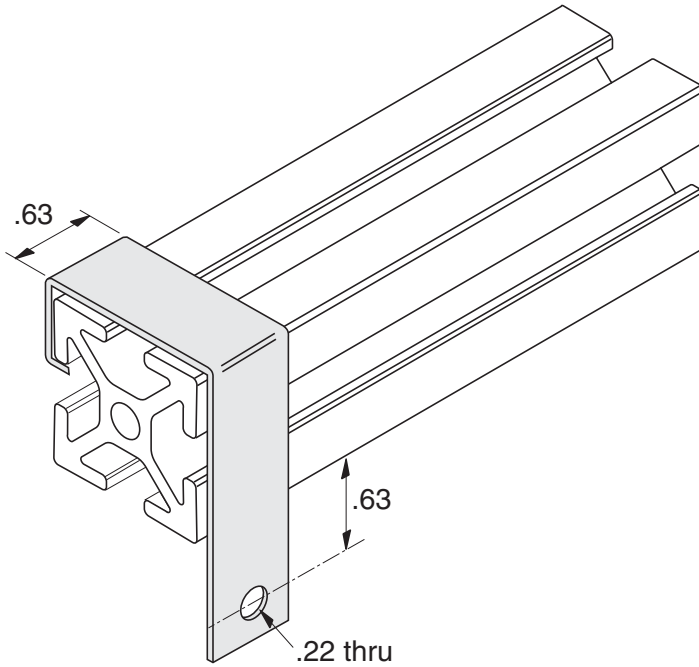
Finish - Clear Anodize

**1/4" SLOTS**

# Hanger Clip



11-190

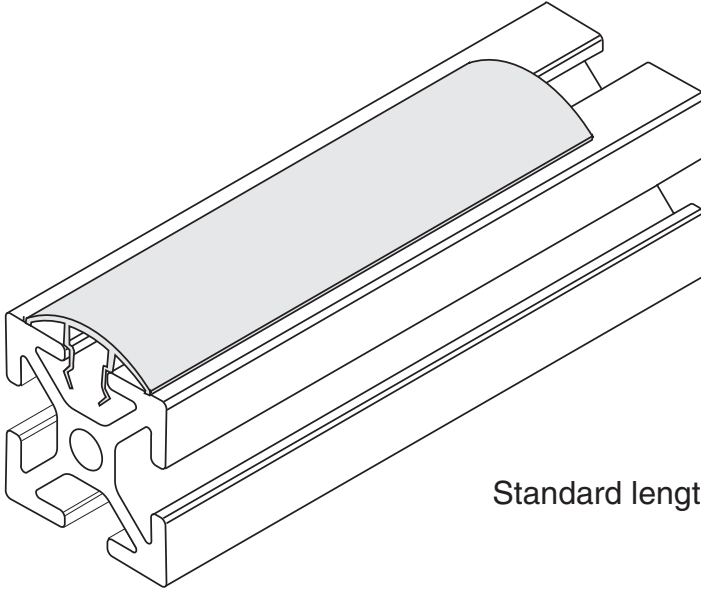


1/4" SLOTS

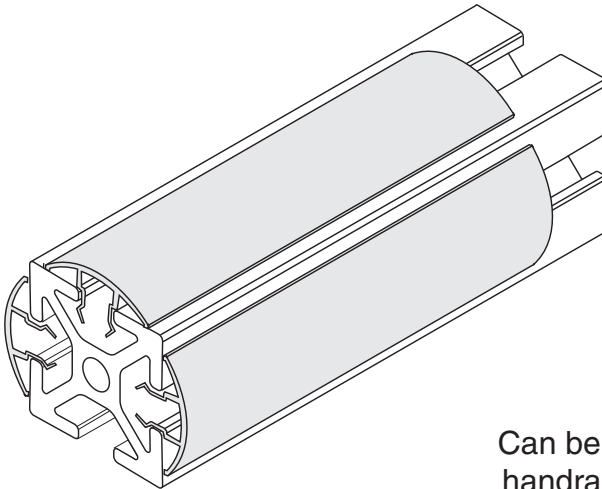
Material Steel  
Finish: Zinc Plated

use on all 1/4" slot extrusions  
with 1.0" sides

**11-320**



Standard length 72"



Can be used as  
handrail covers

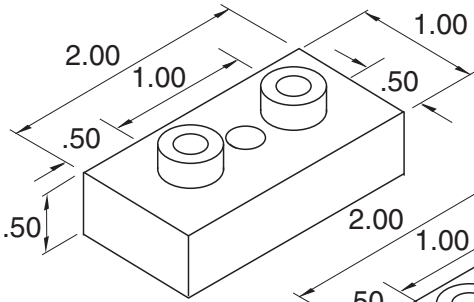
Material - Rigid PVC  
Color - Black

**1/4" SLOTS**

# Drill Fixture

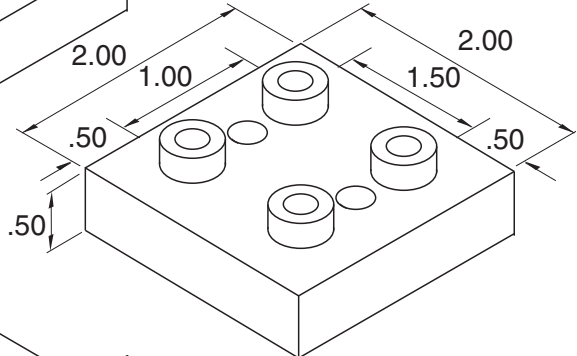


<b>11-150</b>
<b>11-151</b>

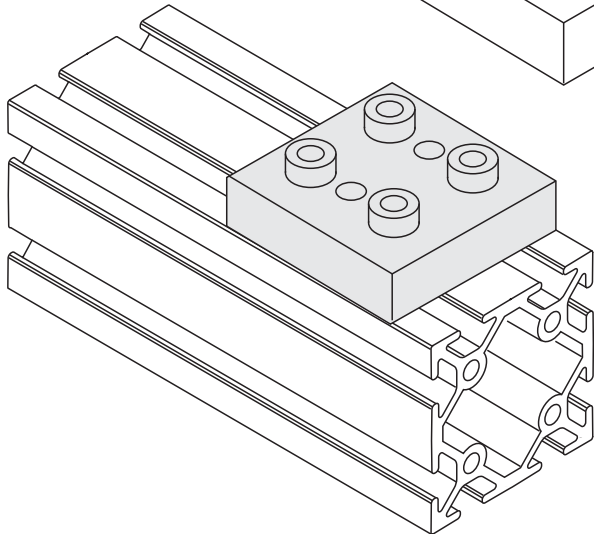


Hardware Included

**11-150**



**11-151**



**1/4" SLOTS**

Use on EX-11, EX-12, EX-13, EX-22 for drilling access holes for universal style corners

Material - Aluminum  
Finish - Clear Anodize





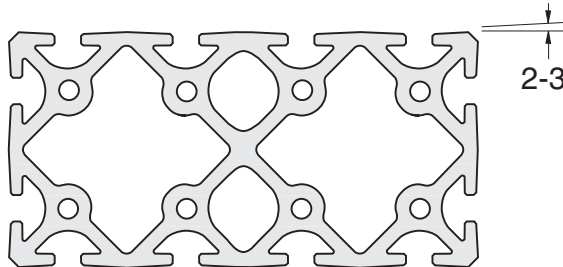
## FRAME-WORLD Extruded Aluminum Specifications and Tolerances

- **Flatness:** within .004" per inch of width
- **Twist:** will not exceed .25° per foot with a maximum of 1.5° total in (16) feet.
- **Straightness:** within .0125" per foot and within a maximum of .120 in (16) feet
- **Length:** +.125" for standard length  
+.015" for cut pieces
- **Yield Strength:** 35,000 PSI
- **Tensile Strength:** 38,000 PSI
- **Surface Finish:** Etch and clear anodize standard  
Powder Coating in color is also available.

## Metric Sizes for FRAME-WORLD Extrusions and Accessories

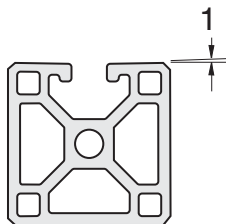
FRAME-WORLD extrusions and accessories are designed using standard American dimensions, and use American dimension fasteners. Metric size fasteners are stocked as catalog items and conversion of extrusion profile to nominal or nearest metric size in whole mm is simple: 1 inch = 25 mm, 1.5 inches = 38 mm, 3 inches = 76 mm.

## Self Locking Feature (5/16" wide slots)



Our EX-1, EX-2, EX-26, EX-3 and EX-36 extrusion has a 2-3 degree decline form the extrusion edge to slot centerline.

## Self Locking Feature (5/16" wide slots)



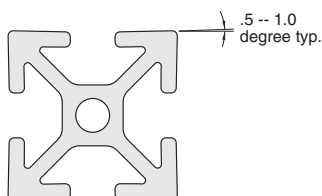
Our EX-6, EX-7, EX-8, EX-52, EX-54, EX-61, EX-63, EX-64, EX-65, EX-66, EX-67, EX-68 and EX-69 extrusions have a 1 degree decline from the extrusion edge.

When fasteners are properly tightened, this feature serves as a lock mechanism to form a shake-proof connection.

### Recommended torque on fasteners

5/16-18 or m8 thread - 15 to 20 ft/lbs.

## Self Locking Feature (1/4" wide slots)



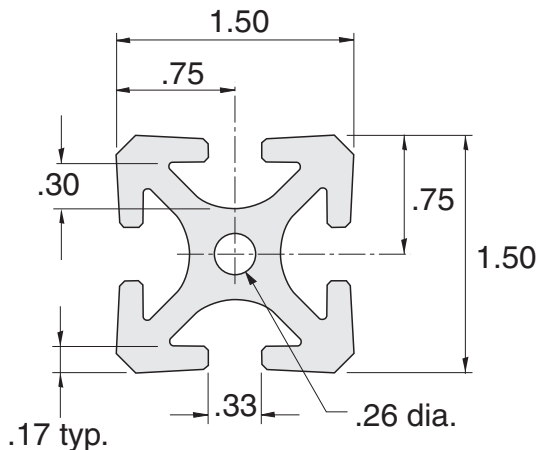
The FRAME-WORLD EX-11, EX-12, EX-13, EX-14, EX-22, EX-70, EX-71, EX-72, EX-73 and EX-24 extrusions have a .5 – 1.0 degree decline from extrusion edge to slot centerline.

This feature serves as a lock mechanism forming a shake-proof connection to keep all fasteners tight.

### Recommended torque on fasteners

1/4-20 or m6 thread - 12 to 17 ft/lbs.

## EX-1

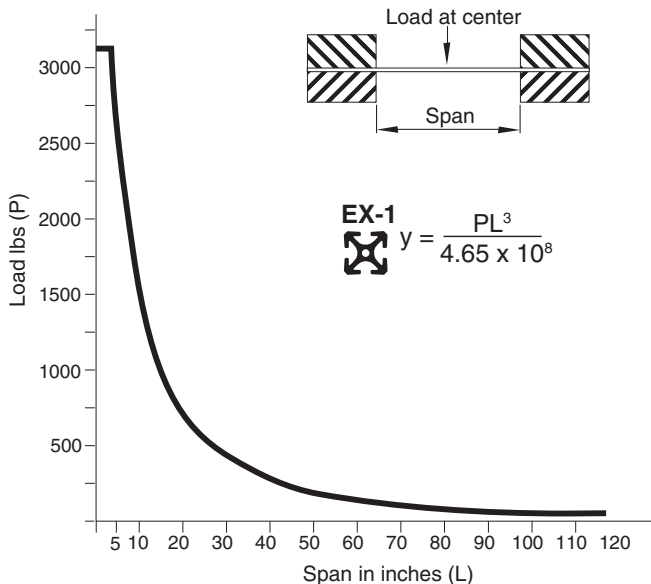


- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.164 Sq. In.
- Weight/ft = 1.4522 lbs.
- 96", 144.25", 192.63" Lengths standard.

### Section Properties:

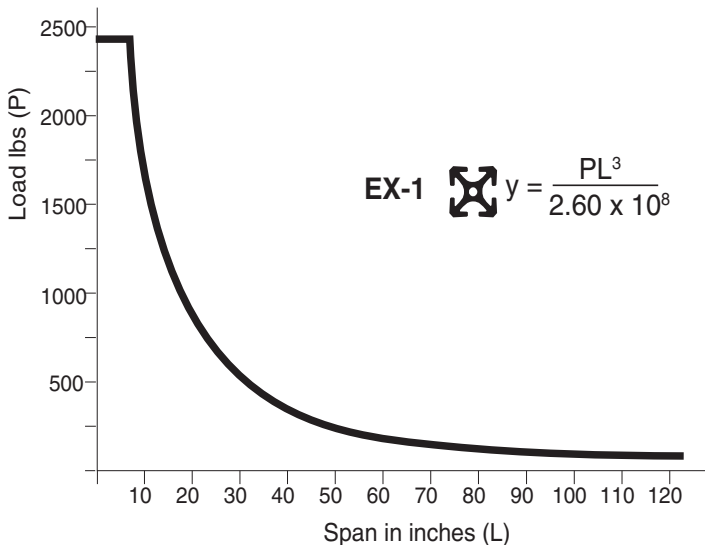
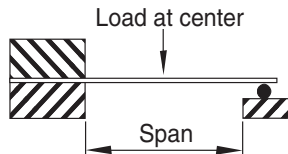
Moment of Intertia in <sup>4</sup>	.242
Section modulus in <sup>3</sup>	.323

Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

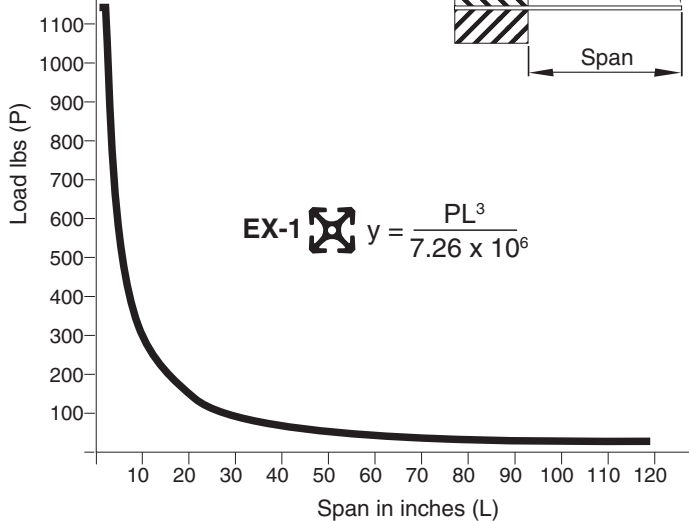
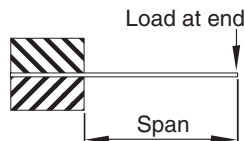


**EX-1**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

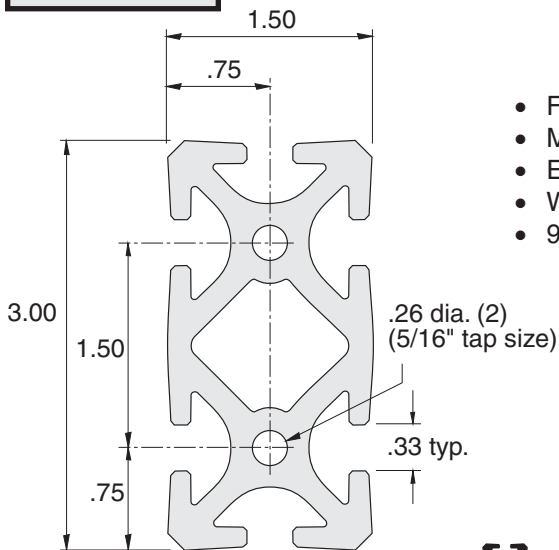


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**TECHNICAL**

## EX-2



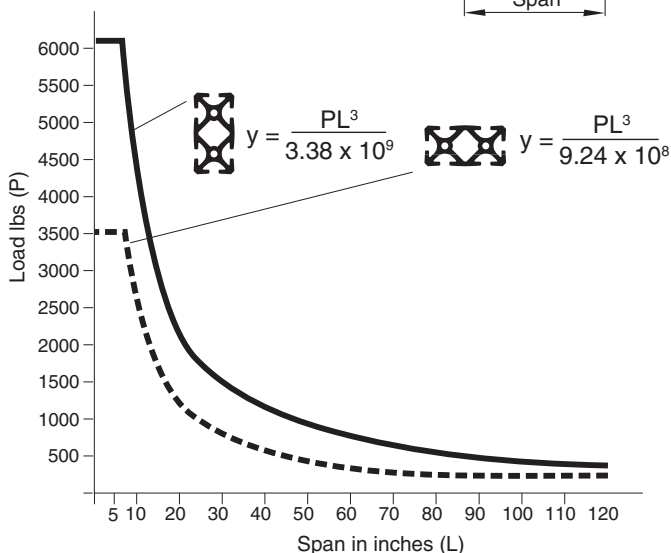
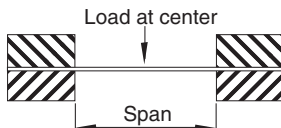
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 2.051 Sq. In.
- Weight/ft = 2.471 lbs.
- 96", 144.25", 192.63" Lengths standard.

### Section Properties:

Moment of Intertia in <sup>4</sup>	1.76	.481
Section modulus in <sup>3</sup>	1.173	.641

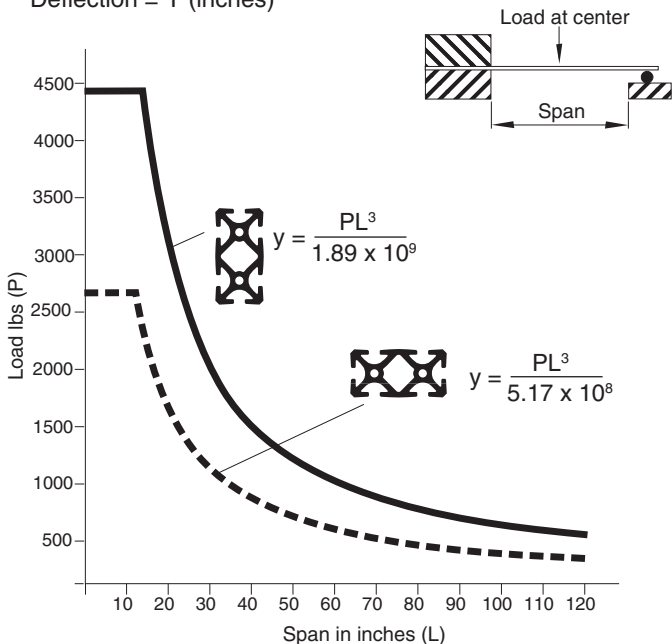


Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

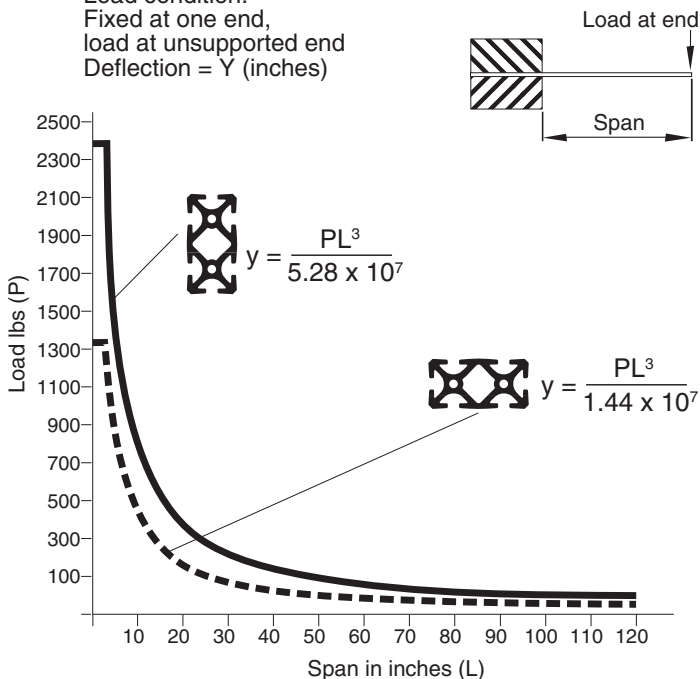


**EX-2**

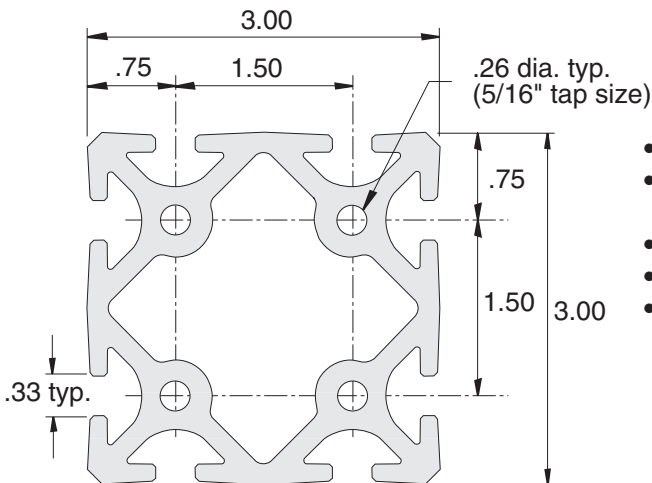
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**EX-3**



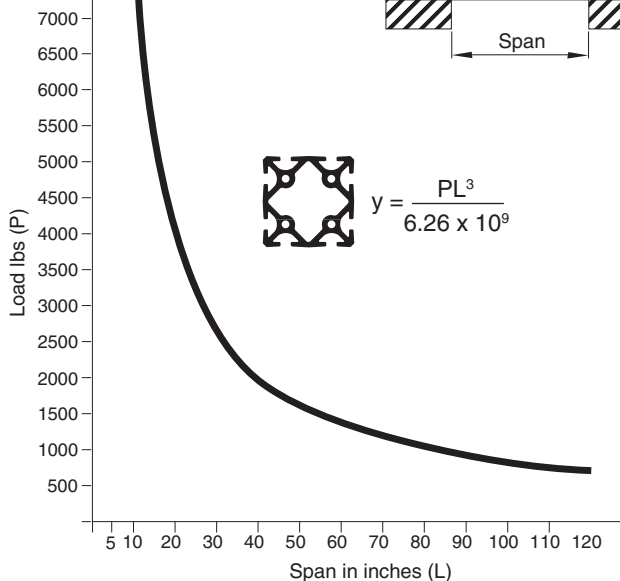
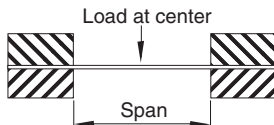
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 3.188 Sq. In.
- Weight/ft = 4.037 lbs.
- 96", 144.25", 192.63" Lengths standard.



**Section Properties:**

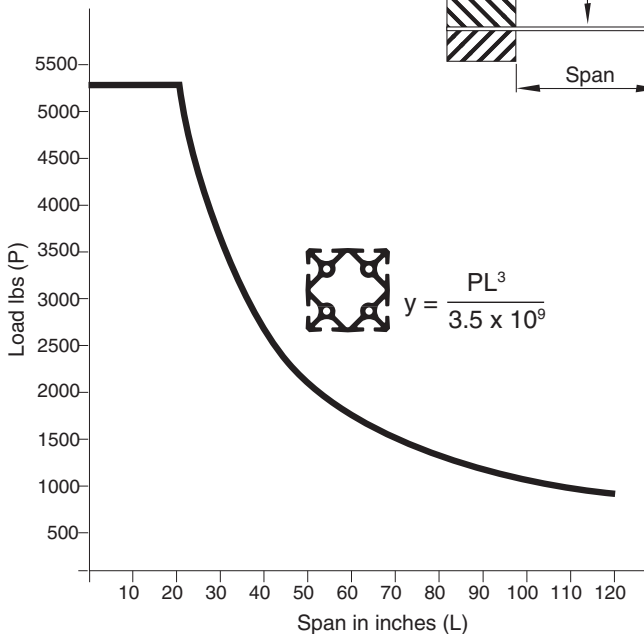
Moment of Intertia in <sup>4</sup>	3.26
Section modulus in <sup>3</sup>	2.173

Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

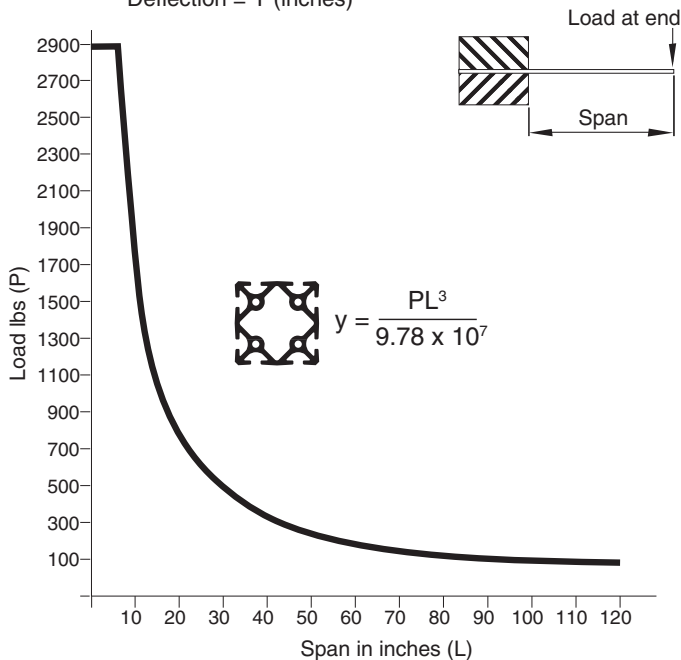


**EX-3**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

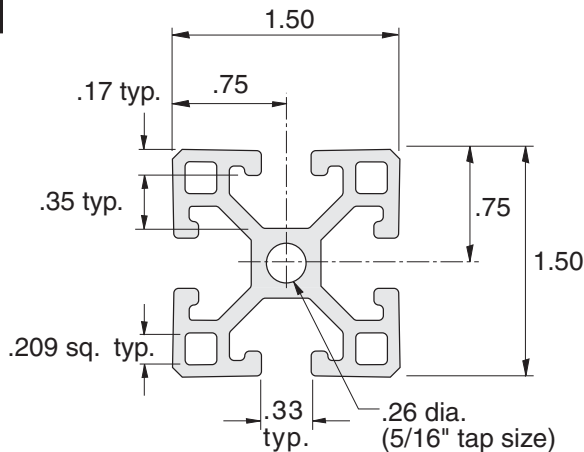


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)





## EX-6

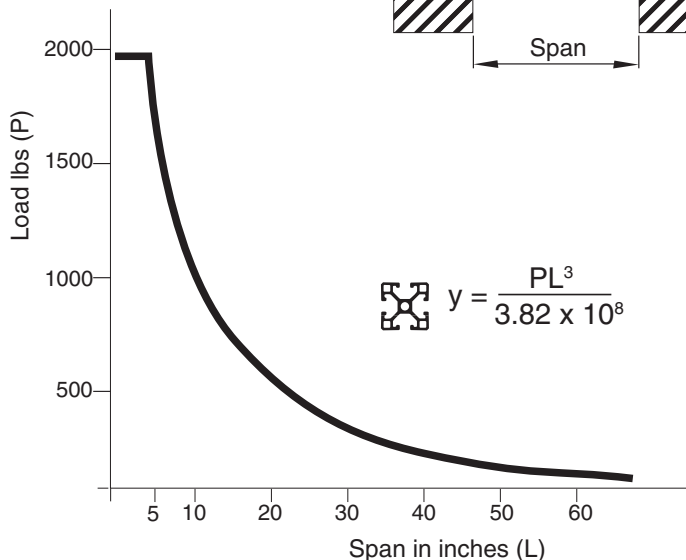
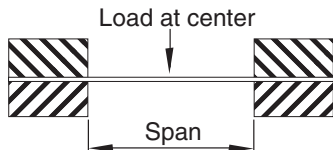


- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .878 Sq. In.
- Weight/ft = 1.029 lbs.
- 96", 144.25", 192.63" Lengths standard.

### Section Properties:

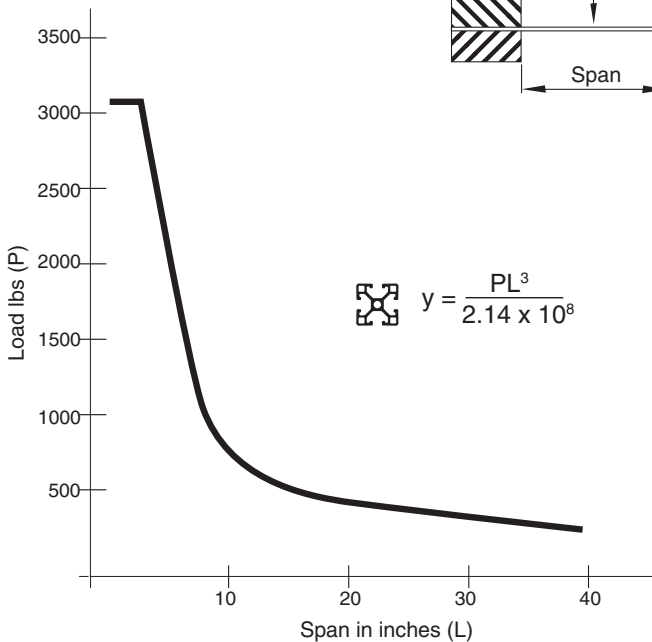
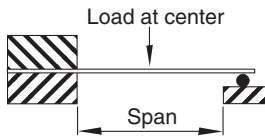
Moment of Inertia in <sup>4</sup>	.199
Section modulus in <sup>3</sup>	.265


Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



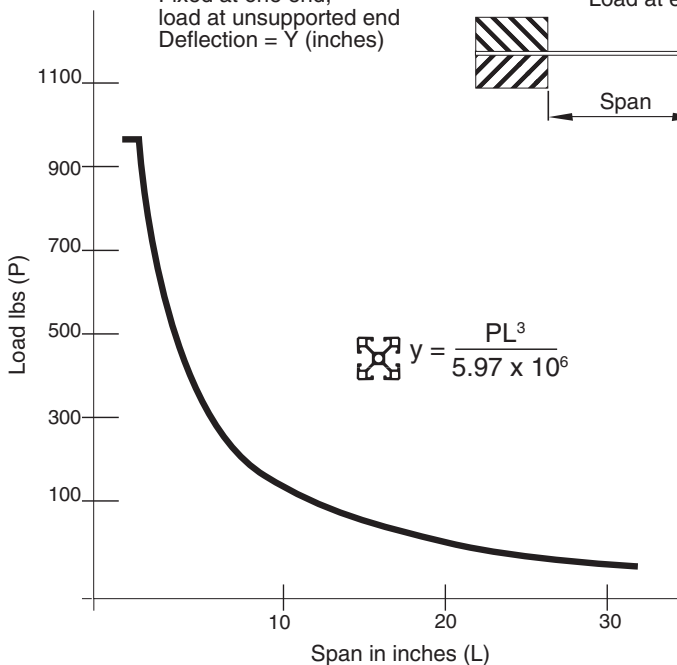
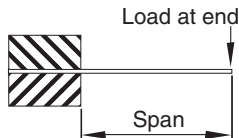
**EX-6**


Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



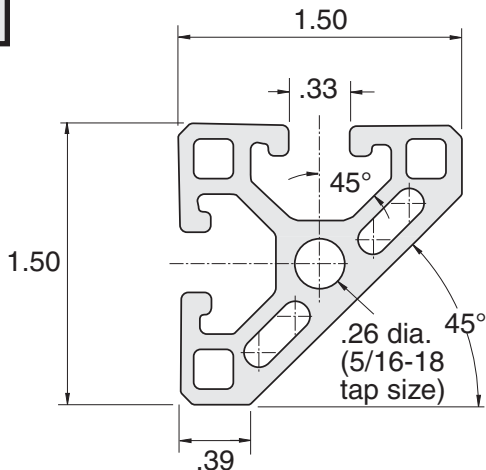
  $y = \frac{PL^3}{2.14 \times 10^8}$

Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



  $y = \frac{PL^3}{5.97 \times 10^6}$

## EX-7



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .729 Sq. In.
- Weight/ft = .854 lbs.
- 96", 192.63" Lengths standard.

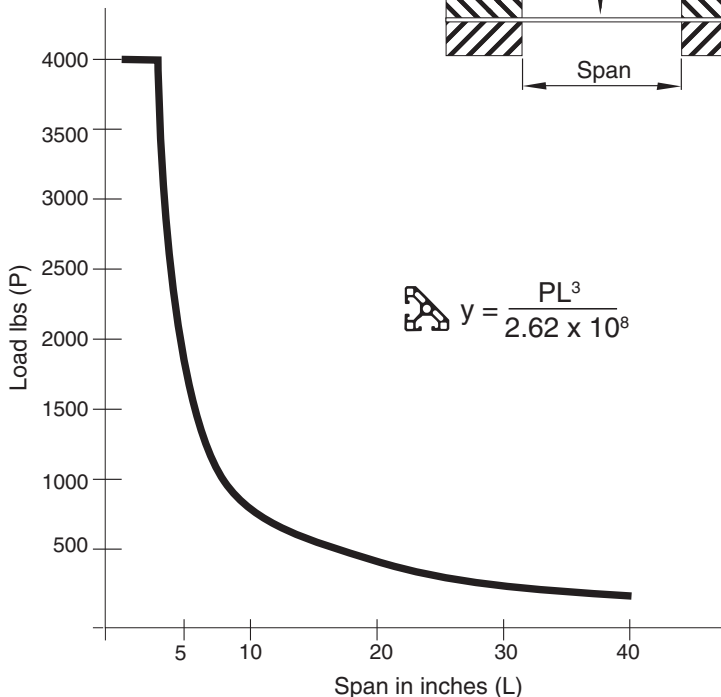
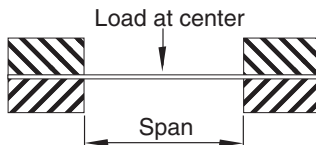
### Section Properties:

Moment of Intertia in <sup>4</sup>	.137
Section modulus in <sup>3</sup>	.195

Load condition:

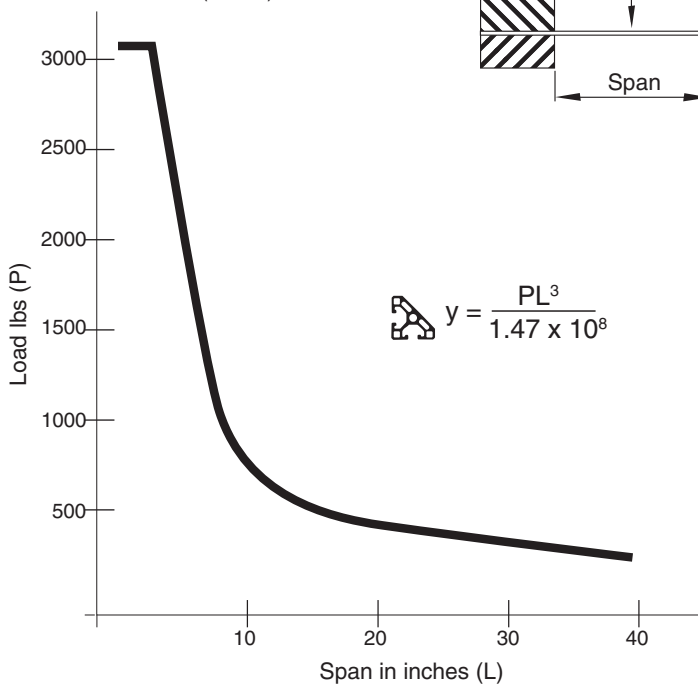
Fixed at both ends, load at center

Deflection = y (inches)

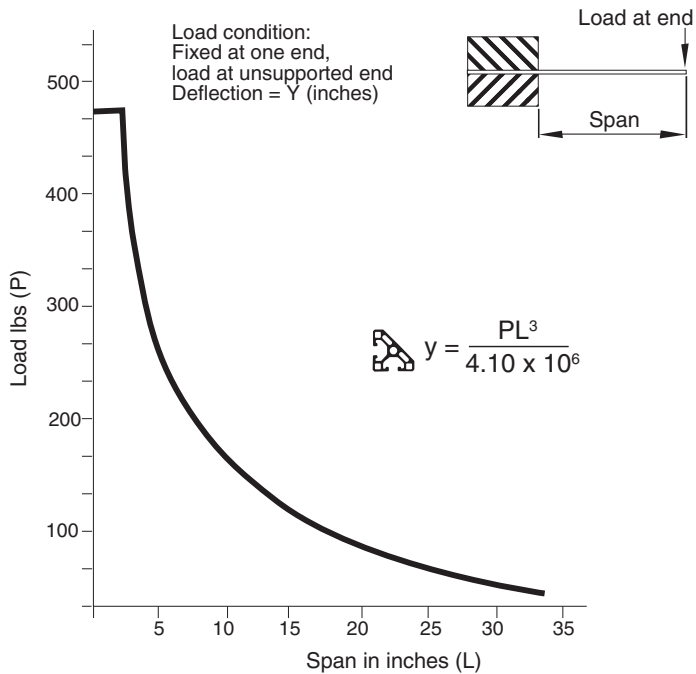


**EX-7**

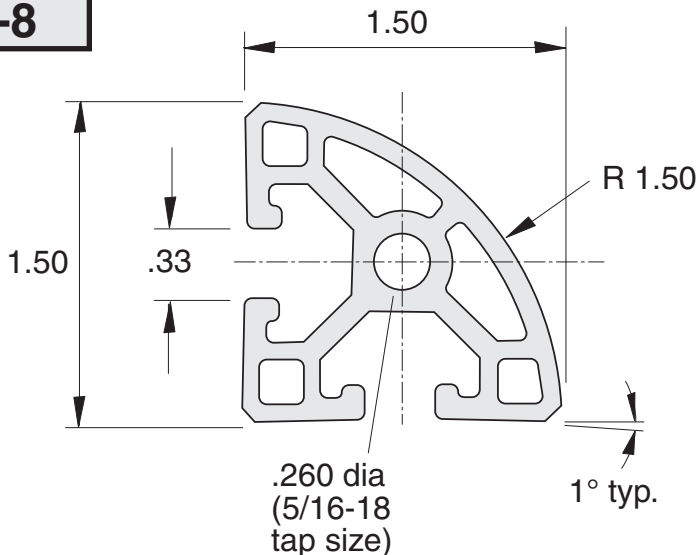
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-8

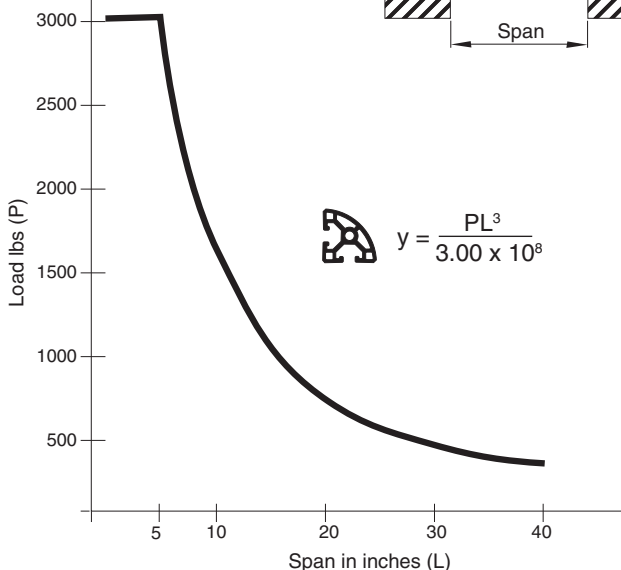
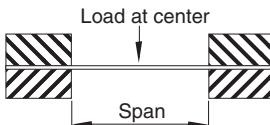


- Finish = Clear anodized
- Material = 6105-T6 Aluminum
- Est. Area = .803 Sq. In.
- Weight/ft = .945 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

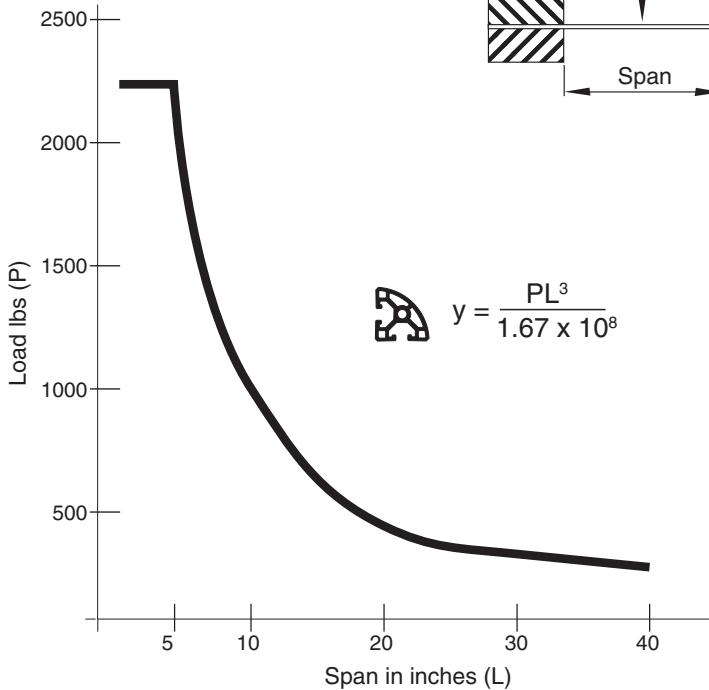
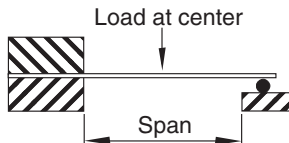
Moment of Intertia in <sup>4</sup>	.156
Section modulus in <sup>3</sup>	.188

Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



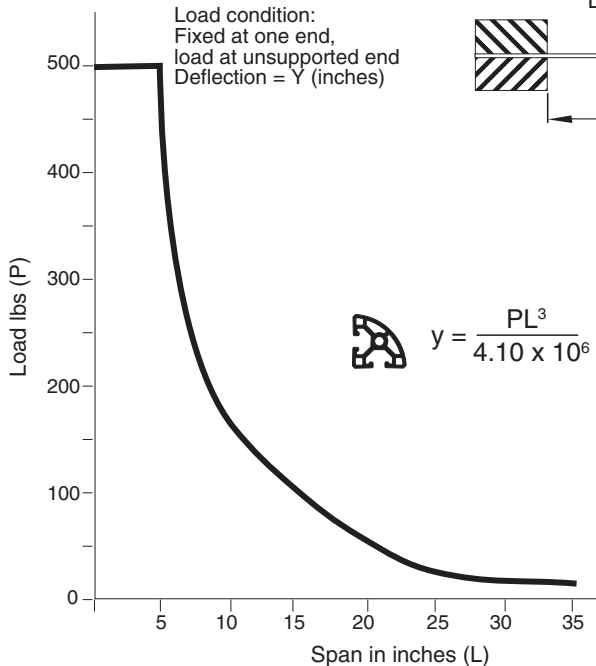
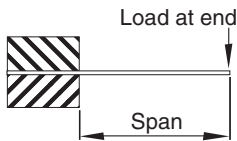
## EX-8

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



$$y = \frac{PL^3}{1.67 \times 10^8}$$

Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



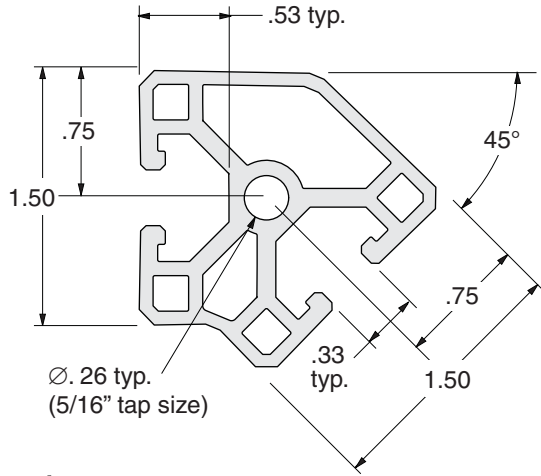
$$y = \frac{PL^3}{4.10 \times 10^6}$$

# 45 Degree Light Extrusion



## EX-82

- 5/16" Slot Size
- Weight/Ft = 1.02 lbs.
- Est. Area = .85 Sq. In.
- Finish = Clear Anodized
- Material = 6105-T5 Aluminum
- 96", 192.63" Standard Lengths

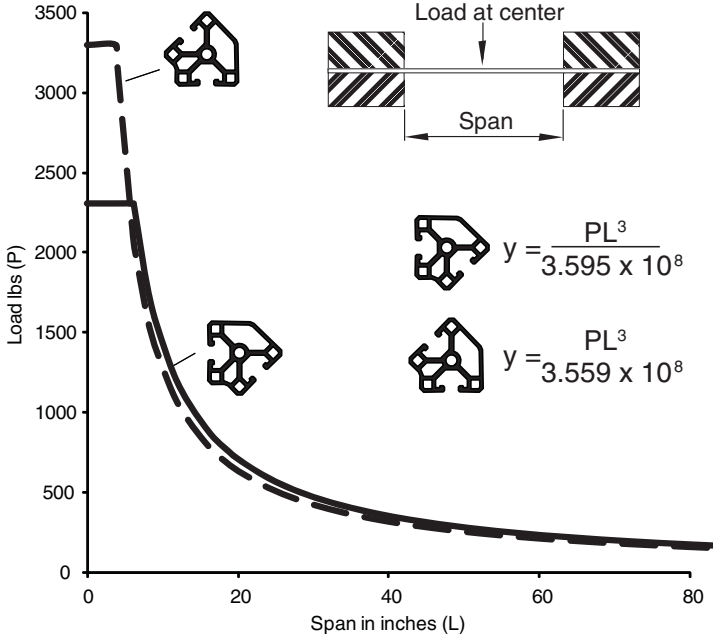


### Section Properties:

Moment of Intertia in <sup>4</sup>	0.1872	0.1854
Section modulus in <sup>3</sup>	0.2035	0.1817



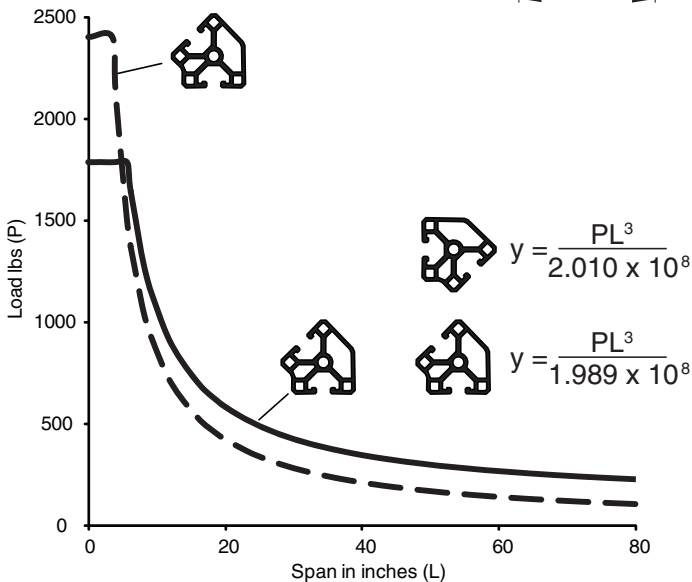
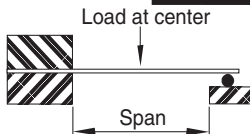
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



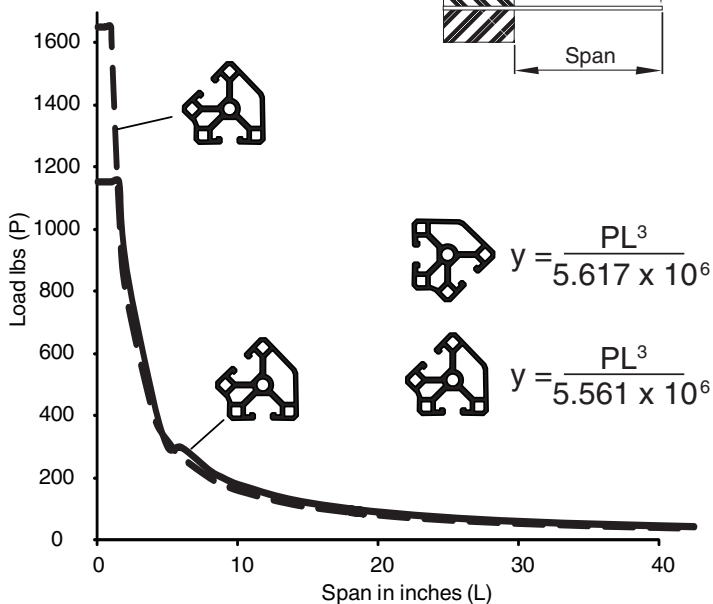
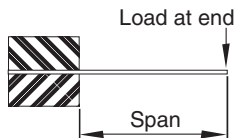
TECHNICAL

**EX-82**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)

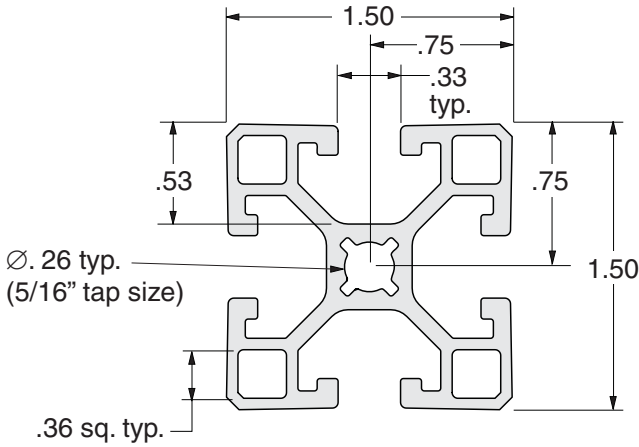




# 1.5" x 1.5" Ultra-Light Extrusion



## EX-9

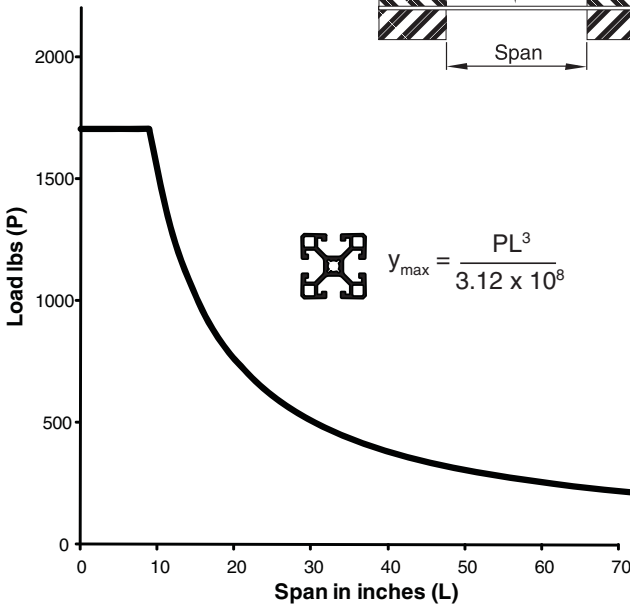
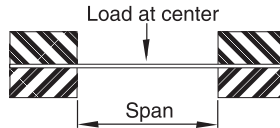


- 5/16" Slot Size
- Weight/Ft = .85 lbs.
- Est. Area = .73 Sq. In.
- Finish = Clear Anodized
- Material = 6105-T5 Aluminum
- 96", 192.63" Standard Lengths

### Section Properties:

Moment of Inertia in <sup>4</sup>	.1623
Section modulus in <sup>3</sup>	.2164

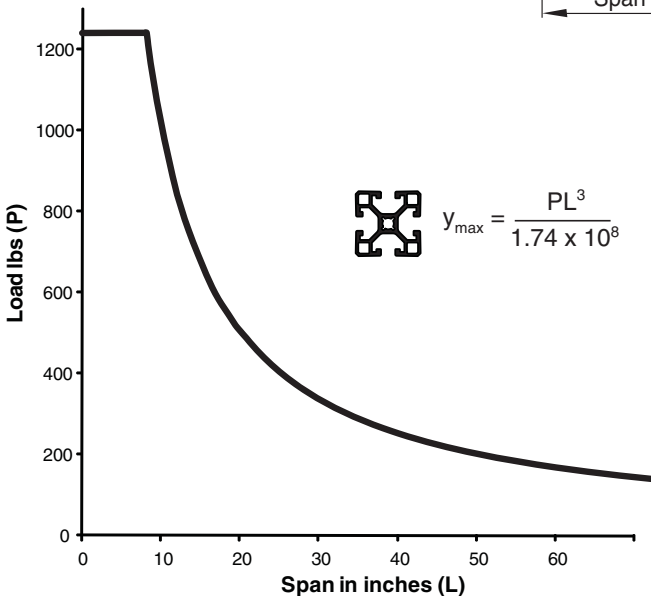
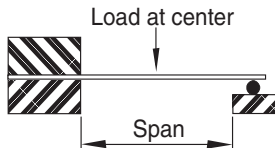
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



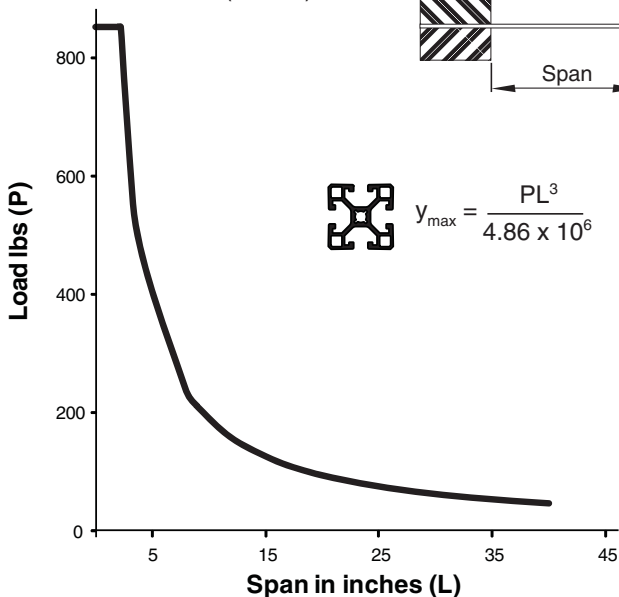
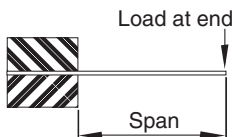
TECHNICAL

**EX-9**

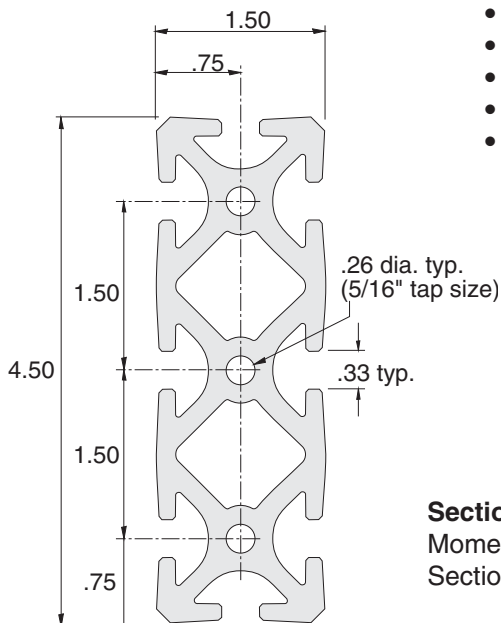
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-26



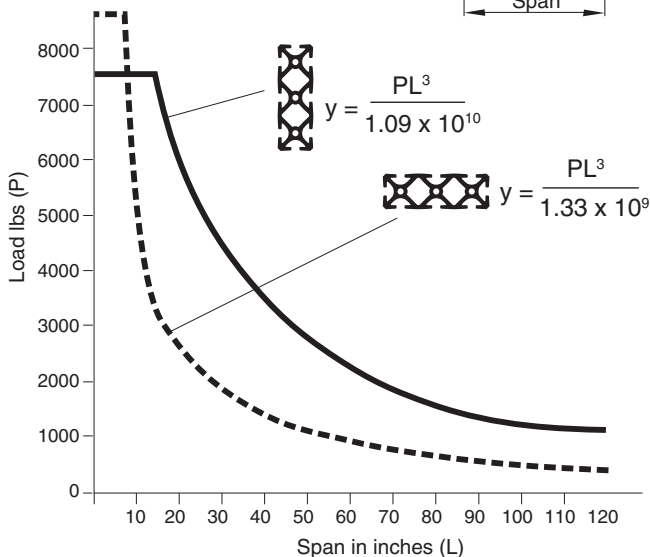
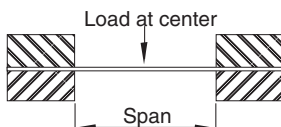
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 3.02 Sq. In.
- Weight/ft = 3.552 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

Moment of Inertia in <sup>4</sup>	5.6781	.6911
Section modulus in <sup>3</sup>	2.5236	.9215

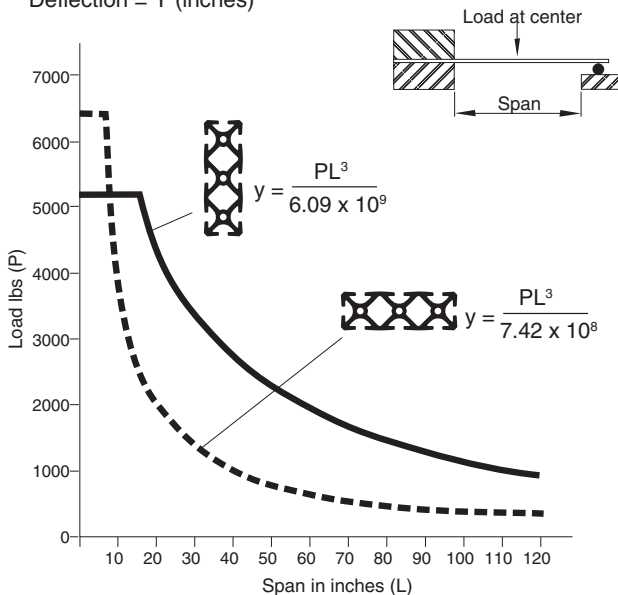


Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

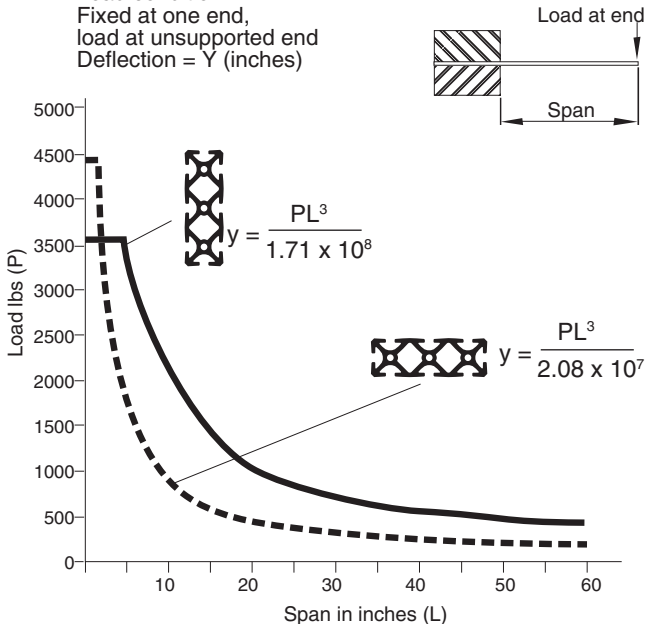


**EX-26**

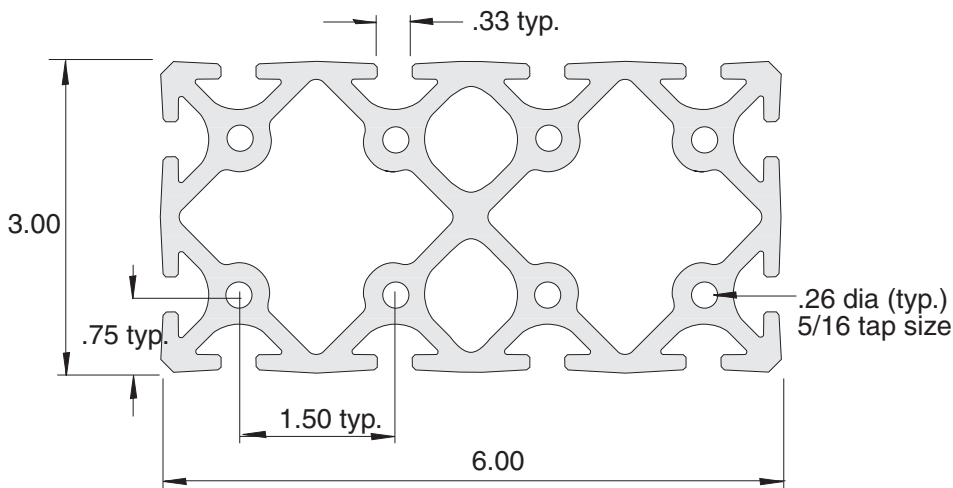
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-36

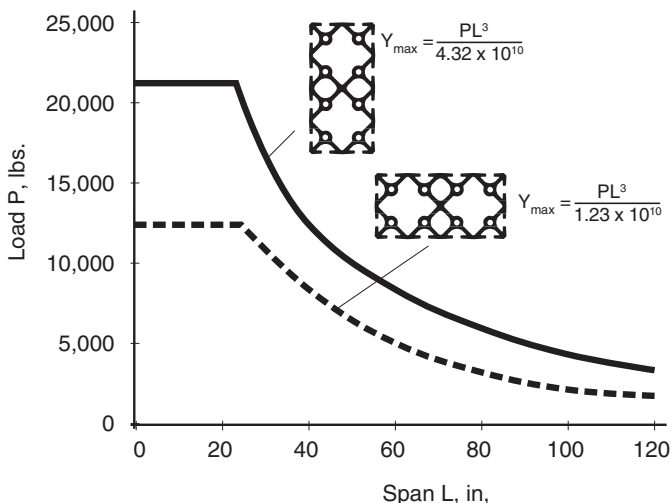
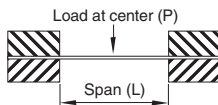


- Finish = Clear anodized
- Material = 6063-T6 Aluminum
- Est. Area = 5.924 Sq. In.
- Weight/ft = 6.967 lbs.
- 96", 192.63" Lengths standard.

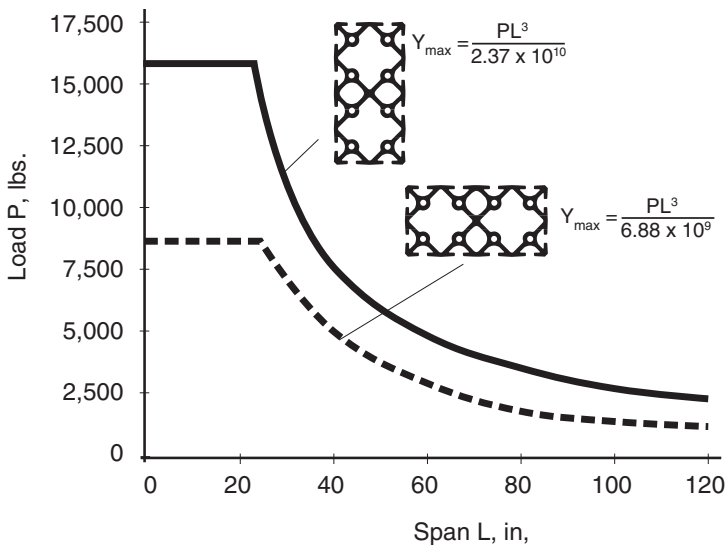
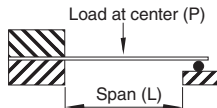
### Section Properties:

Moment of Inertia in <sup>4</sup>	22.05	6.41
Section modulus in <sup>3</sup>	7.35	4.28

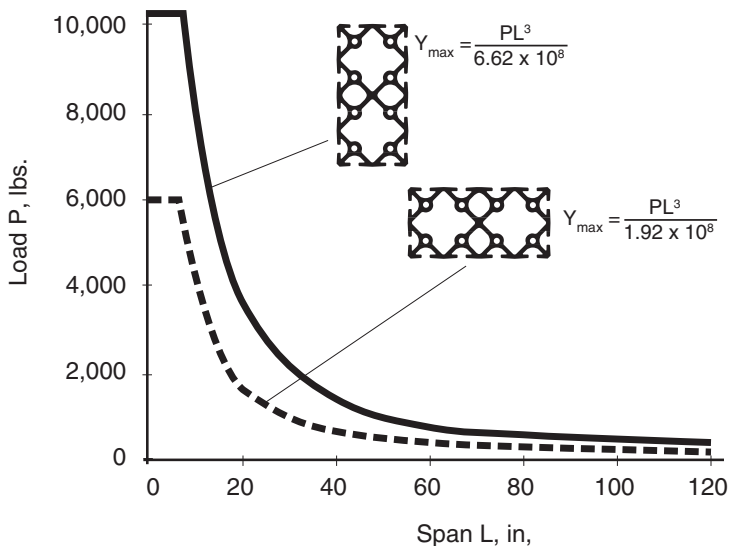
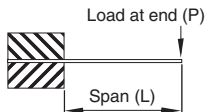
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)

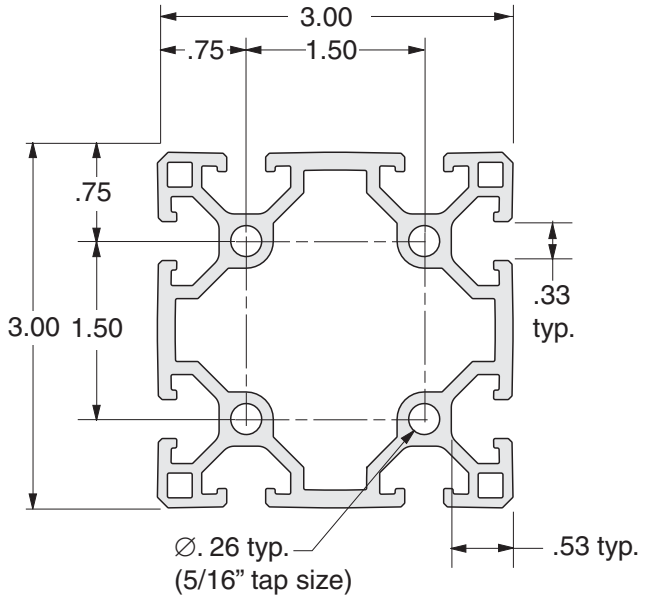


# 3" x 3" Light Extrusion



## EX-37

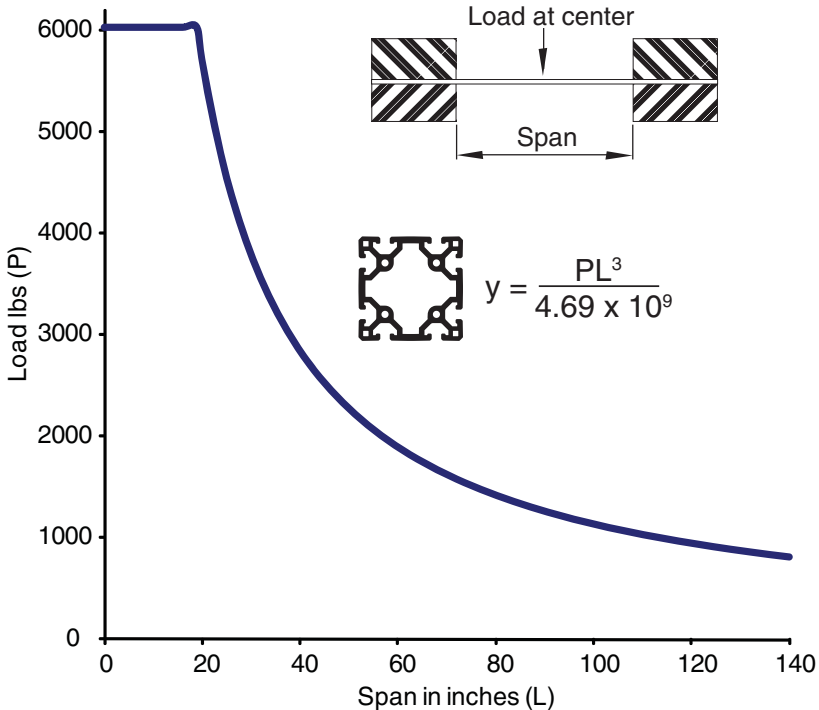
- 5/16" Slot Size
- Weight/Ft = 2.81 lbs.
- Est. Area = 2.35 Sq. In.
- Finish = Clear Anodized
- Material = 6105-T5 Aluminum
- 96", 192.63" Standard Lengths



### Section Properties:

Moment of Intertia in <sup>4</sup>	2.44
Section modulus in <sup>3</sup>	1.63

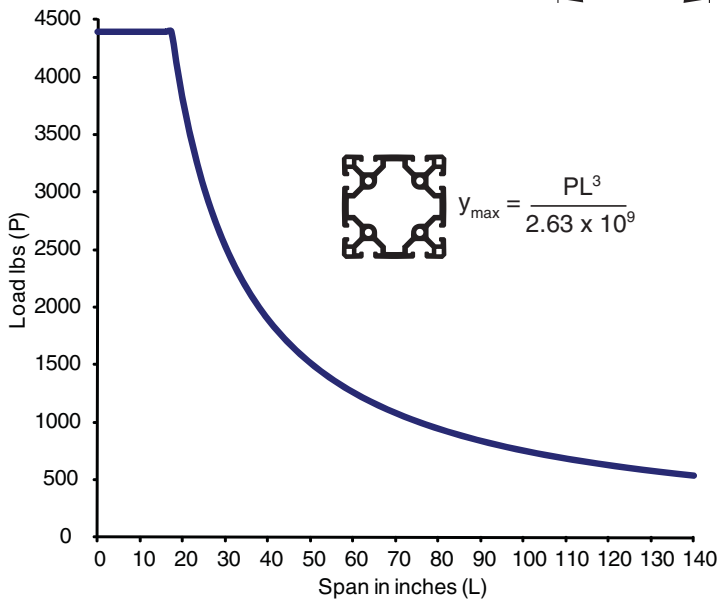
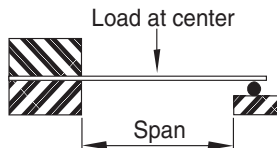
Load condition:  
 Fixed at both ends, load at center  
 Deflection = y (inches)



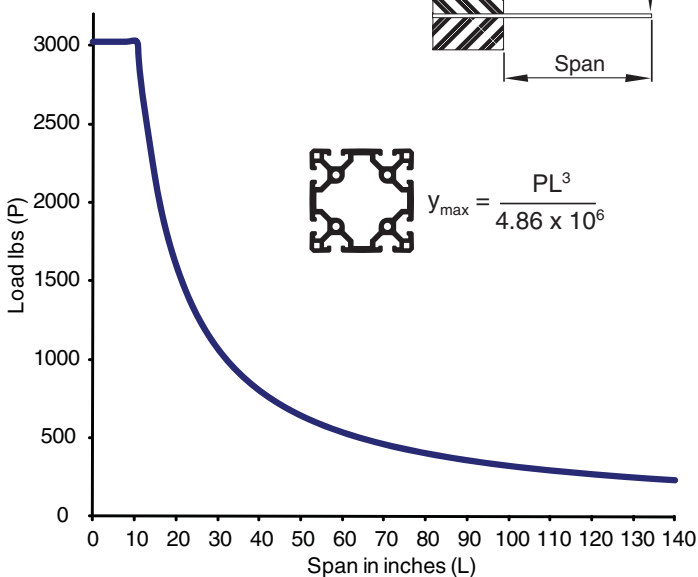
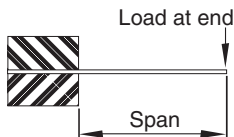
TECHNICAL

**EX-37**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



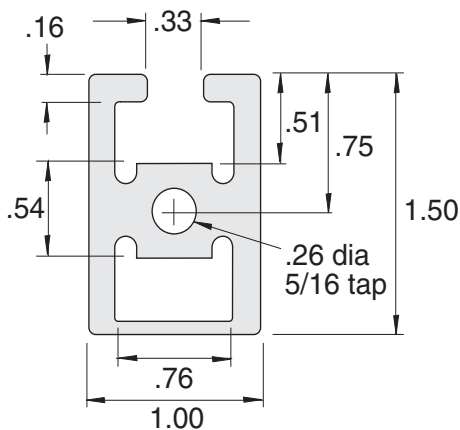
Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**TECHNICAL**



## EX-52



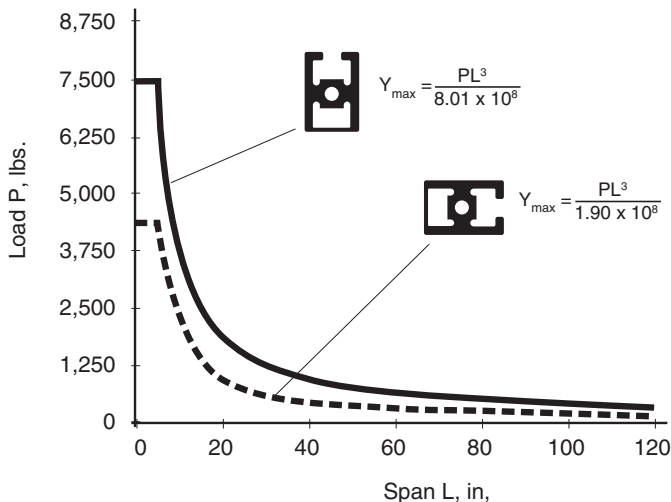
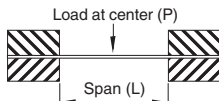
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .818 Sq. In.
- Weight/ft = .954 lbs.
- 96", 192.63" Lengths standard.



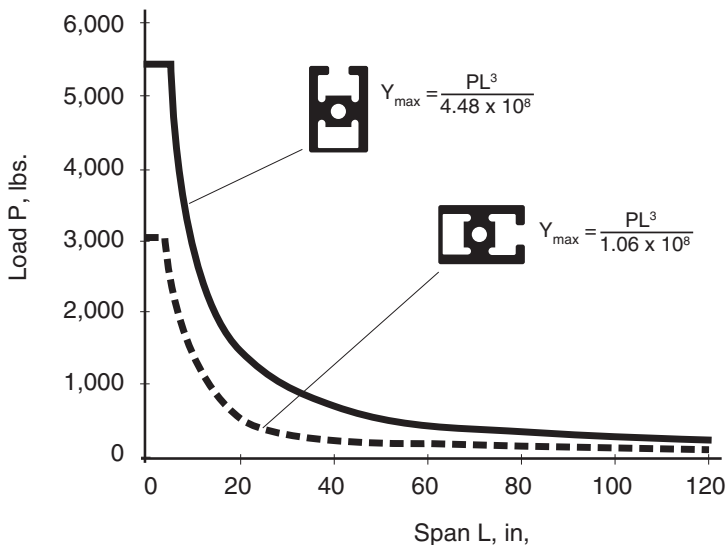
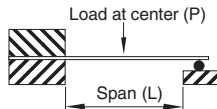
### Section Properties:

Moment of Intertia in <sup>4</sup>	0.417	0.099
Section modulus in <sup>3</sup>	0.549	0.198

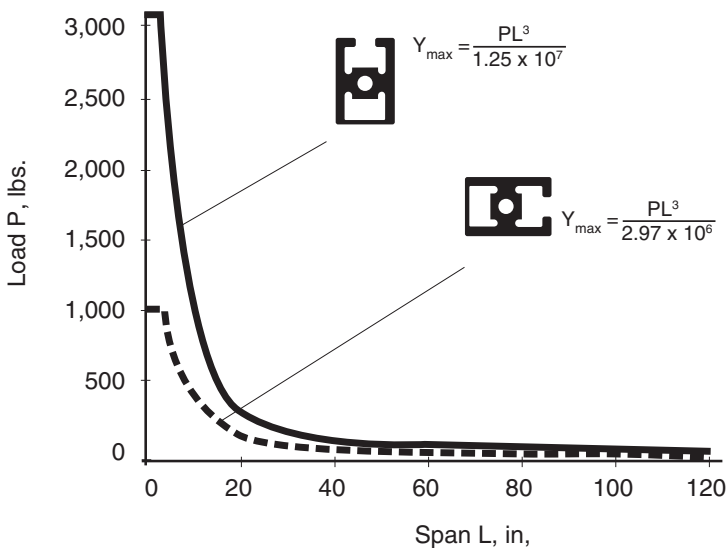
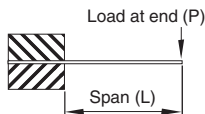
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



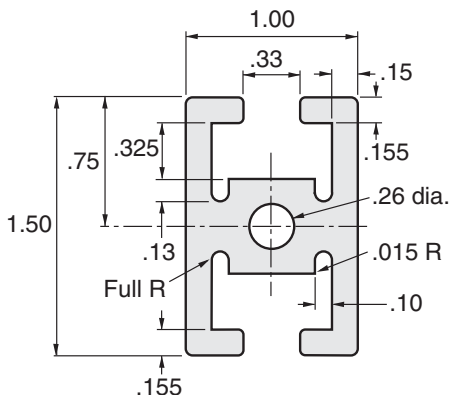
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-54



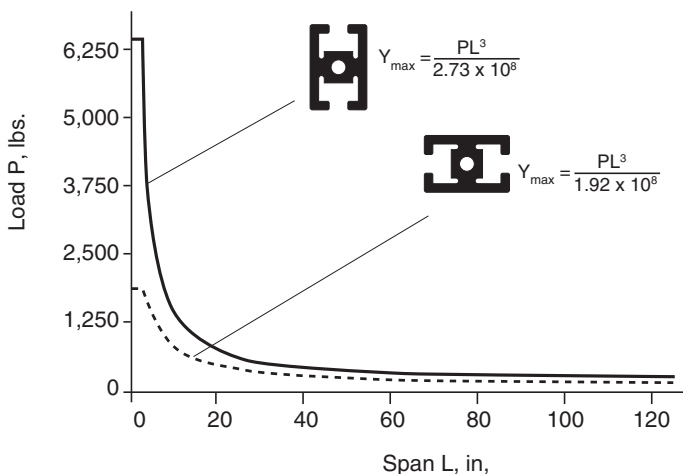
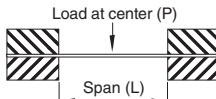
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .840 Sq. In.
- Weight/ft = 1.008 lbs.
- 96", 192.63" Lengths standard.



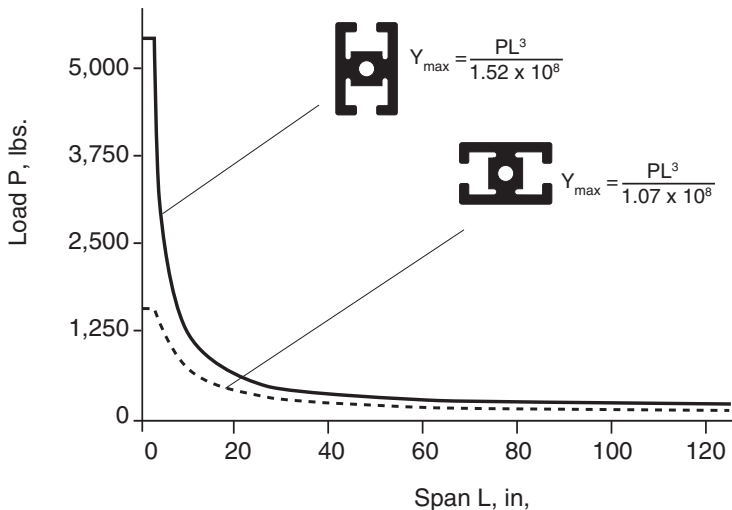
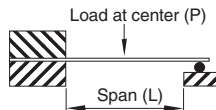
### Section Properties:

Moment of Intertia in <sup>4</sup>	0.142	0.100
Section modulus in <sup>3</sup>	0.189	0.200

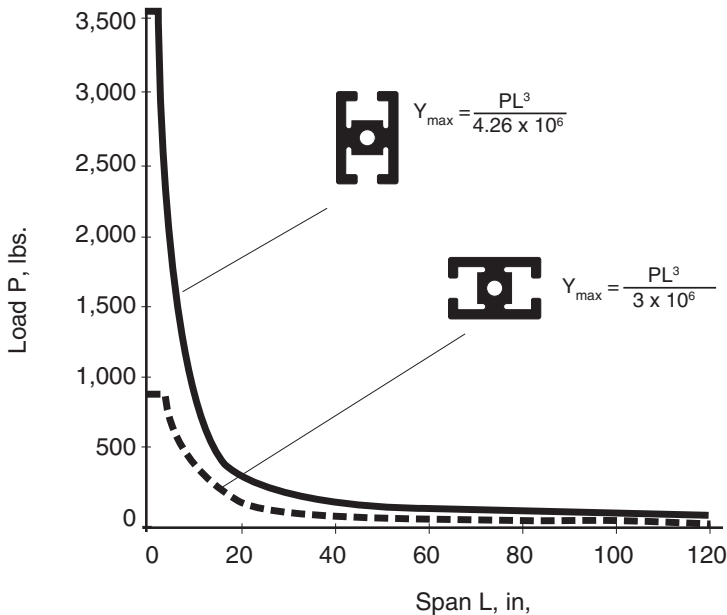
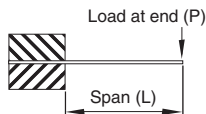
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



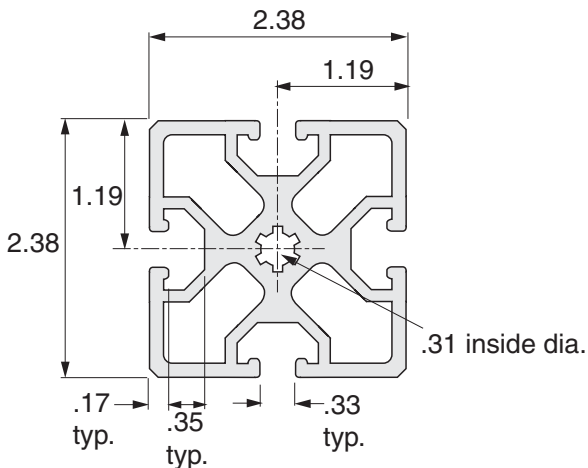
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-60

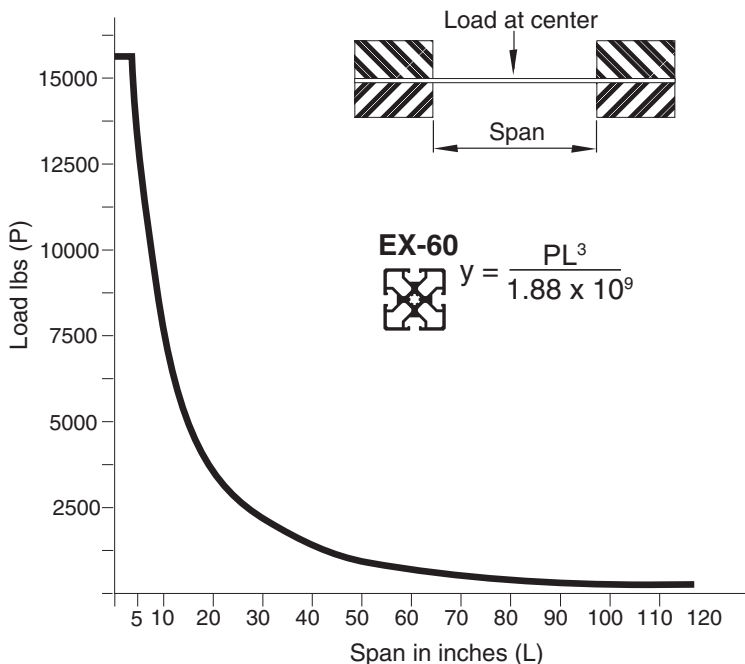


- Finish = Clear anodized
- Material = 6105-T6 Aluminum
- Est. Area = 2.041 Sq. In.
- Weight/ft = 2.400 lbs
- 96", 192.63" Lengths standard.

### Section Properties:

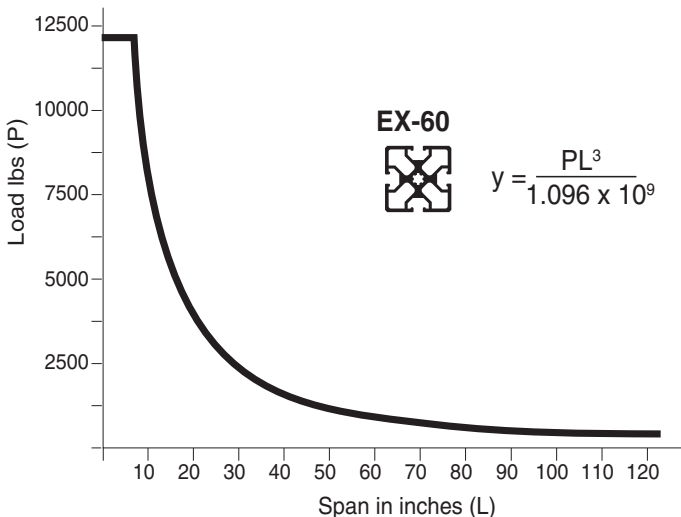
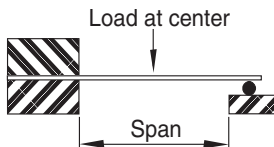
Moment of Inertia in<sup>4</sup> 1.0211  
 Section modulus in<sup>3</sup> 0.860

Load condition:  
 Fixed at both ends, load at center  
 Deflection = y (inches)

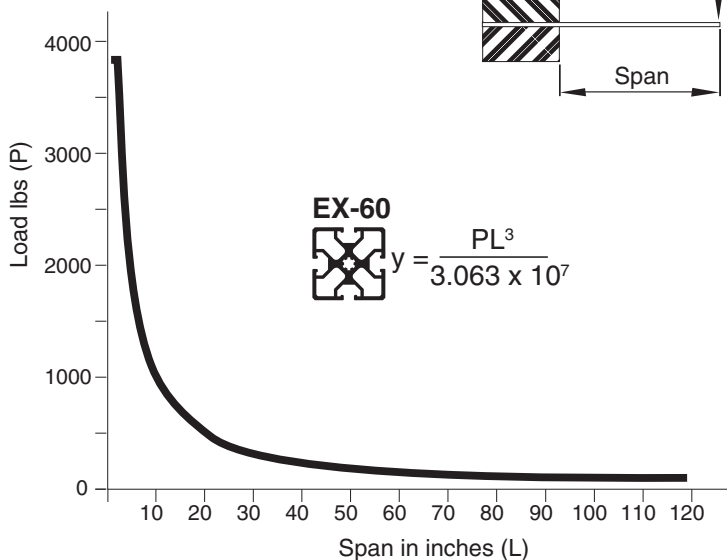
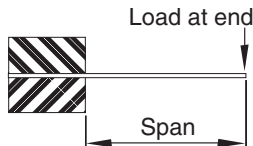


**EX-60**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

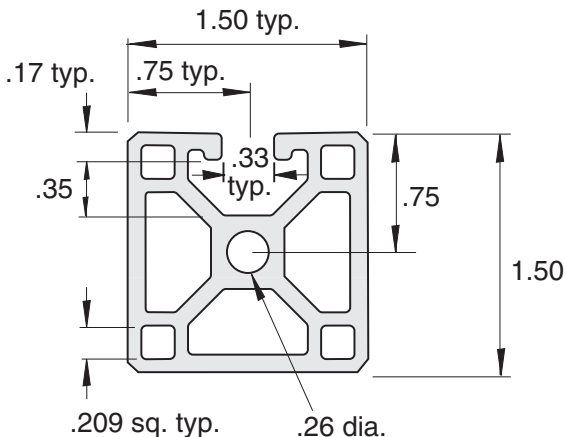


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**TECHNICAL**

## EX-61



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .866 Sq. In.
- Weight/ft = 1.018 lbs
- 96", 192.63" Lengths standard.

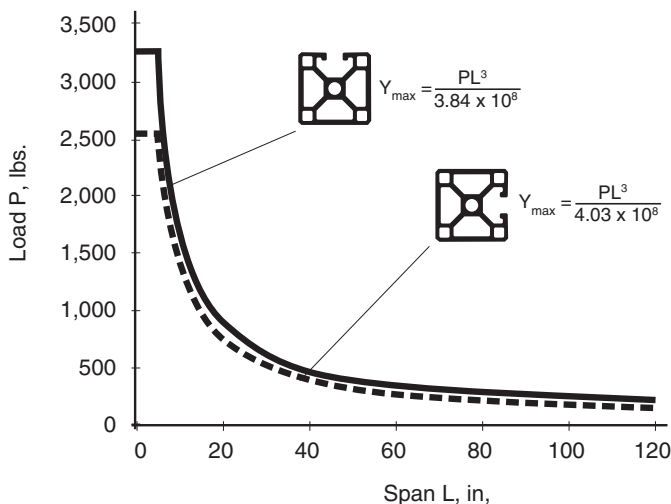
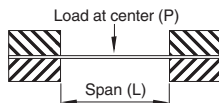
### Section Properties:

Moment of Intertia in<sup>4</sup>  
Section modulus in<sup>3</sup>



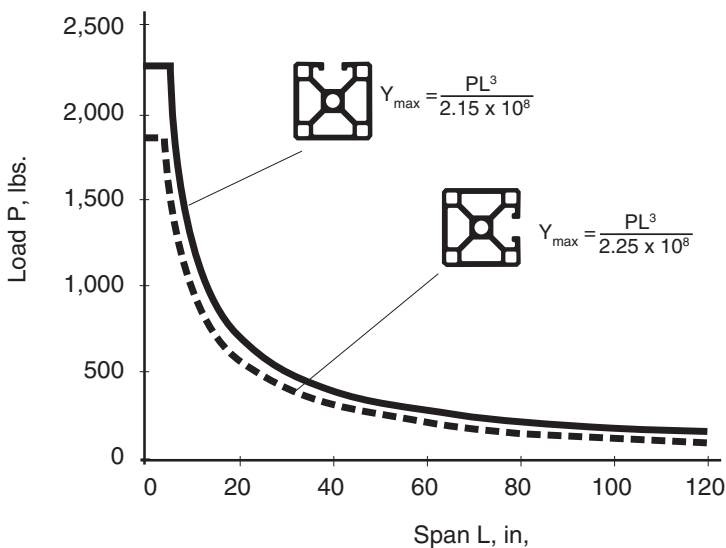
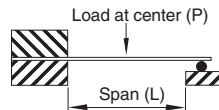
0.200	0.210
0.267	0.276

Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

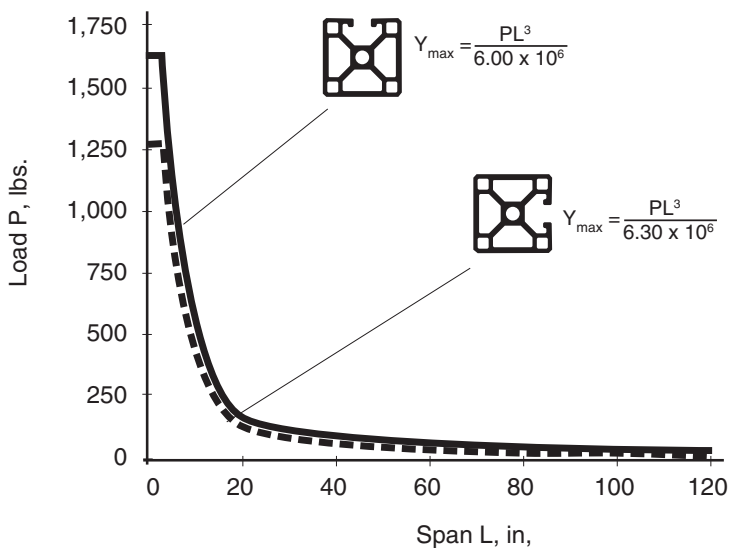
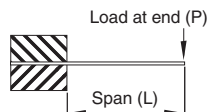


## EX-61

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

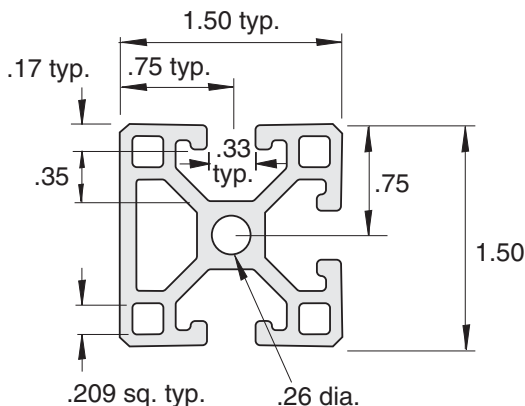


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)





## EX-63



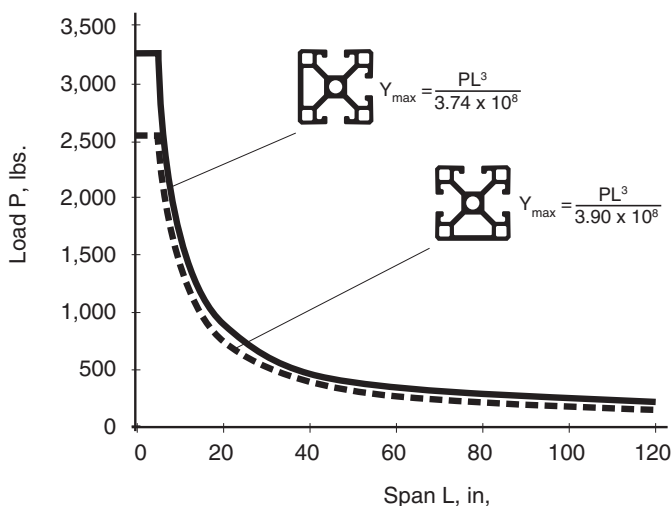
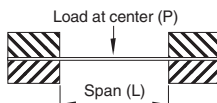
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .833 Sq. In.
- Weight/ft = .980 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

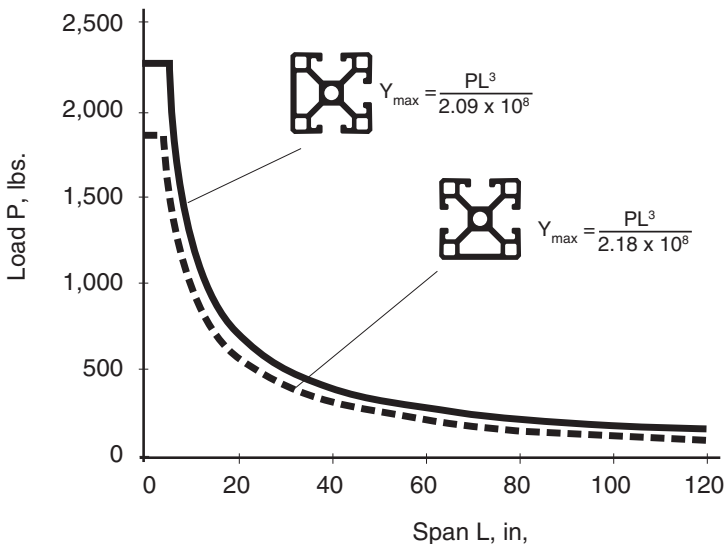
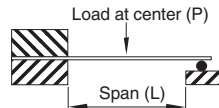
Moment of Intertia in <sup>4</sup>	0.195	0.203
Section modulus in <sup>3</sup>	0.260	0.267



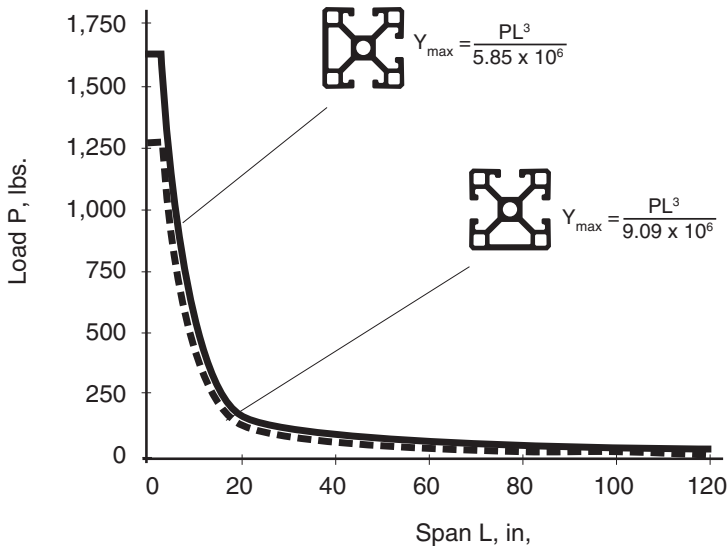
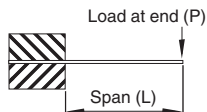
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

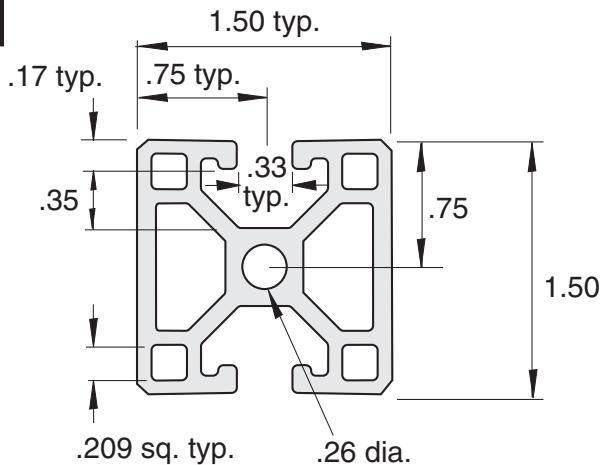


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**TECHNICAL**

## EX-64



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .849 Sq. In.
- Weight/ft = .998 lbs
- 96", 192.63" Lengths standard.

### Section Properties:

Moment of Intertia in<sup>4</sup>  
Section modulus in<sup>3</sup>

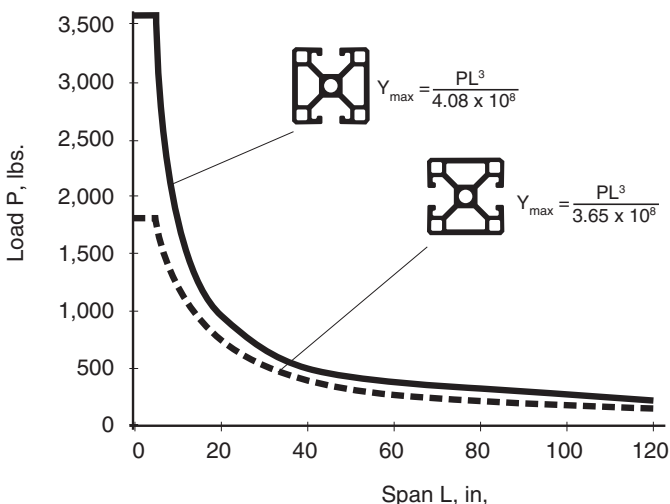
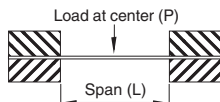


0.190  
0.253

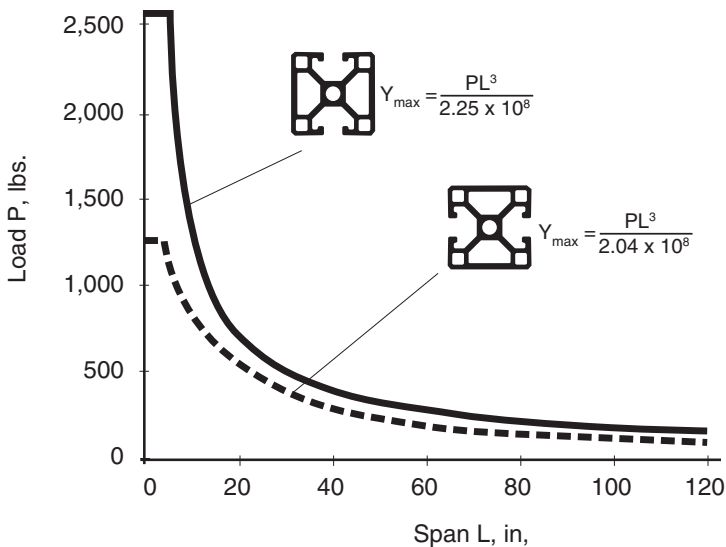
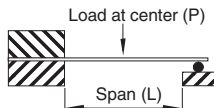


0.210  
0.280

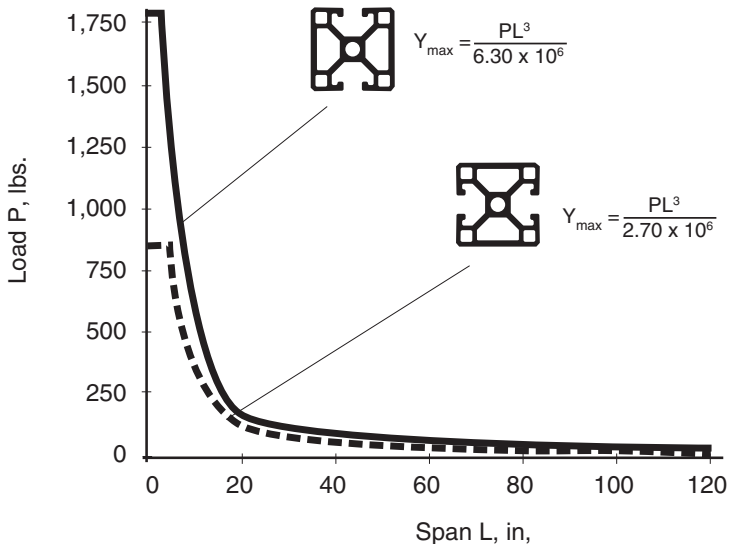
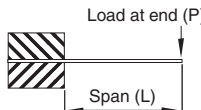
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



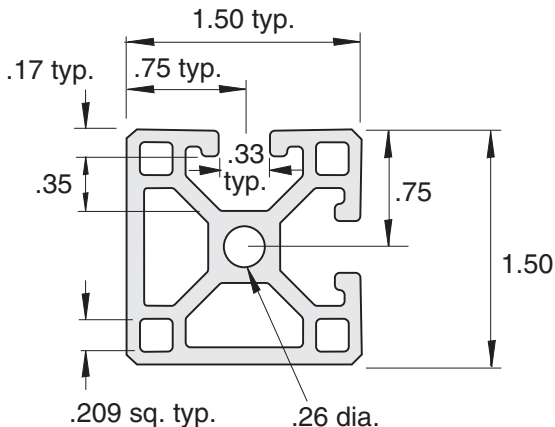
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-65



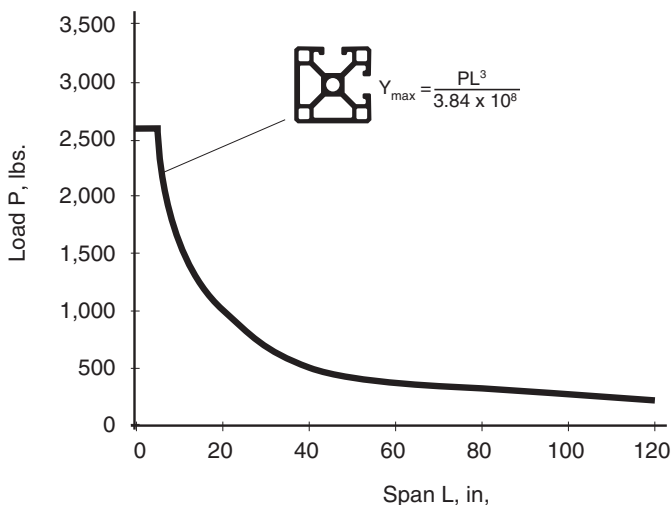
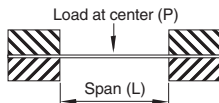
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .849 Sq. In.
- Weight/ft = .998 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

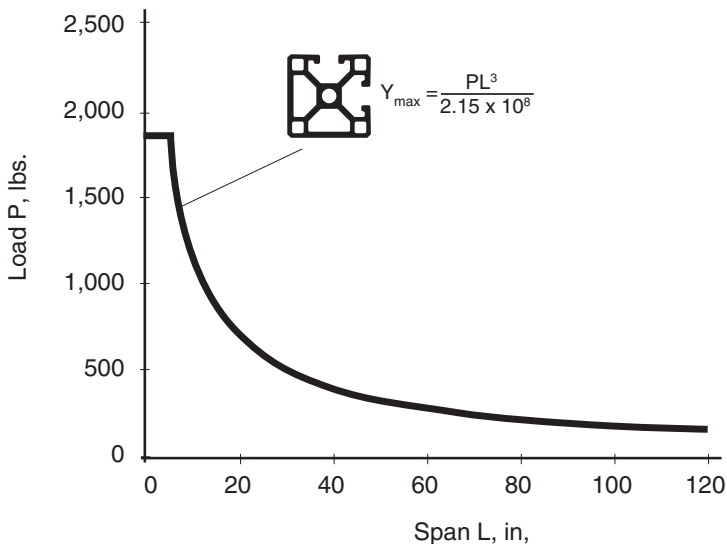
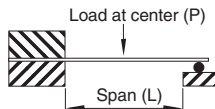


Moment of Inertia in<sup>4</sup> 0.200  
 Section modulus in<sup>3</sup> 0.267

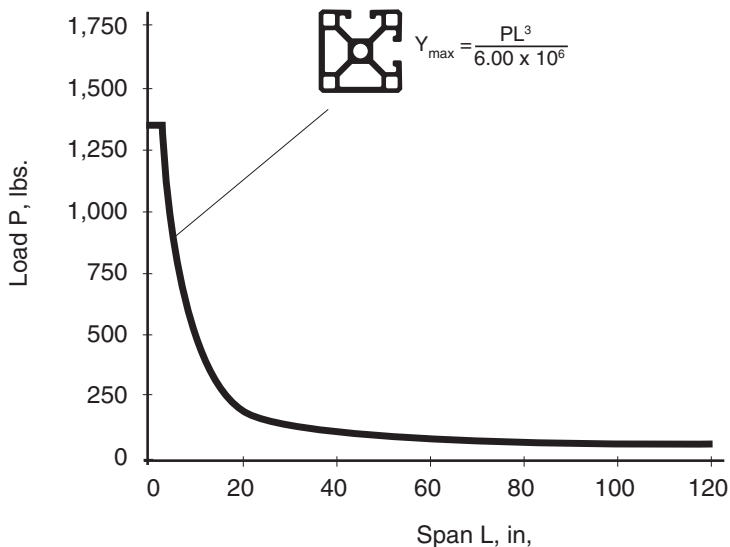
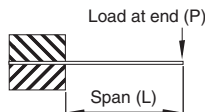
Load condition:  
 Fixed at both ends, load at center  
 Deflection = y (inches)



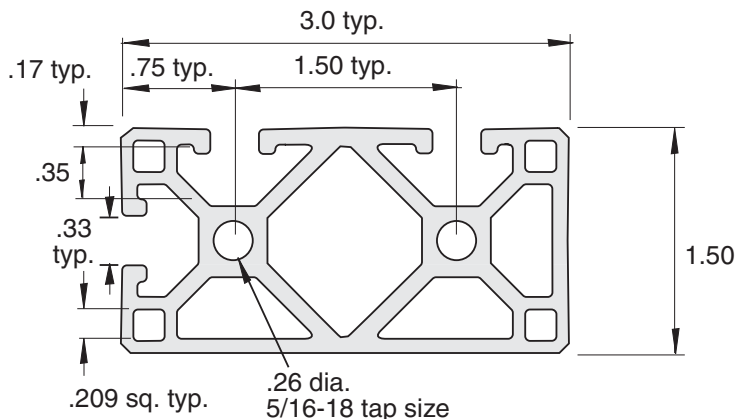
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-66



- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.559 Sq. In.
- Weight/ft = 1.833 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

Moment of Inertia in<sup>4</sup>

Section modulus in<sup>3</sup>



1.385

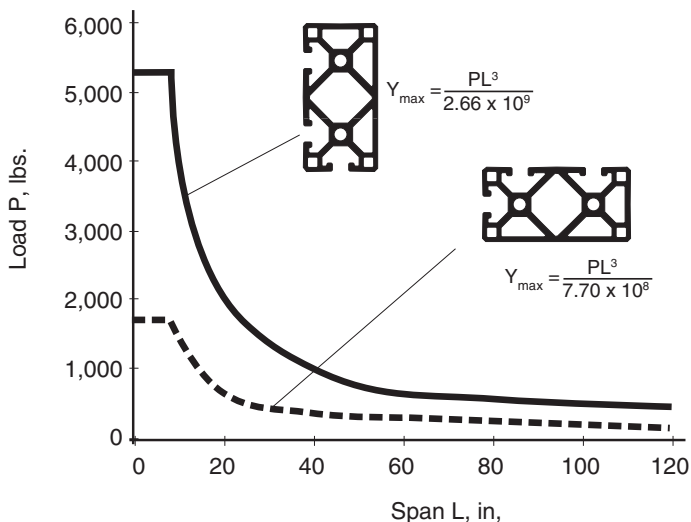
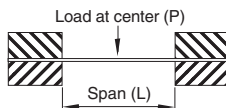
0.923



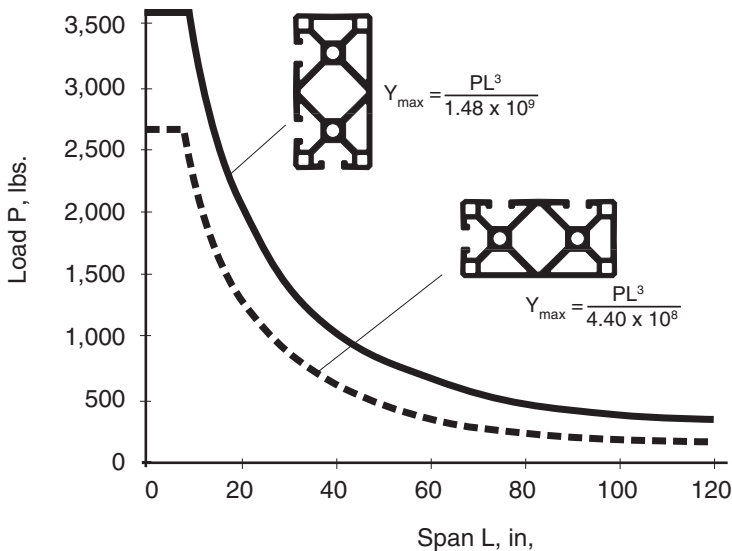
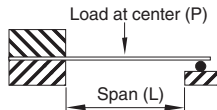
0.401

0.535

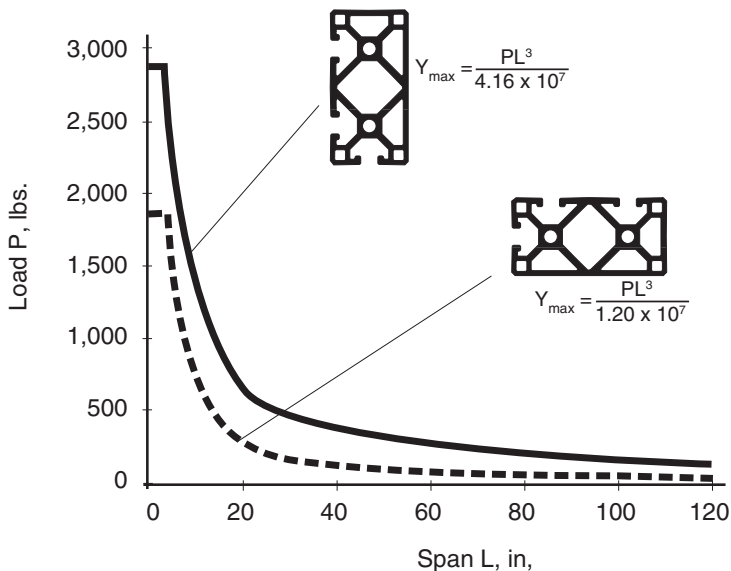
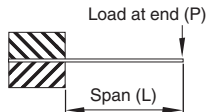
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

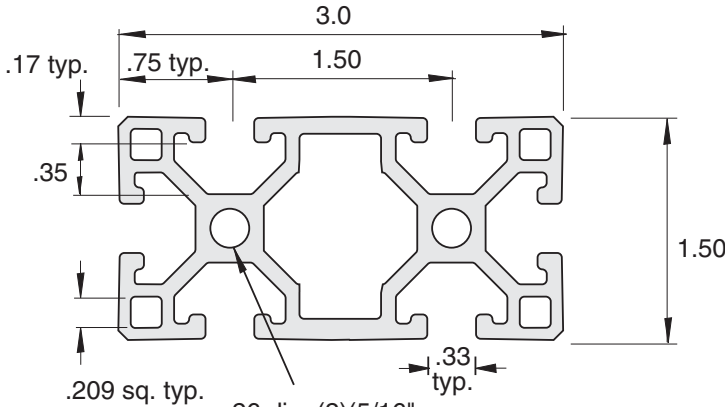


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)





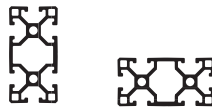
**EX-67**



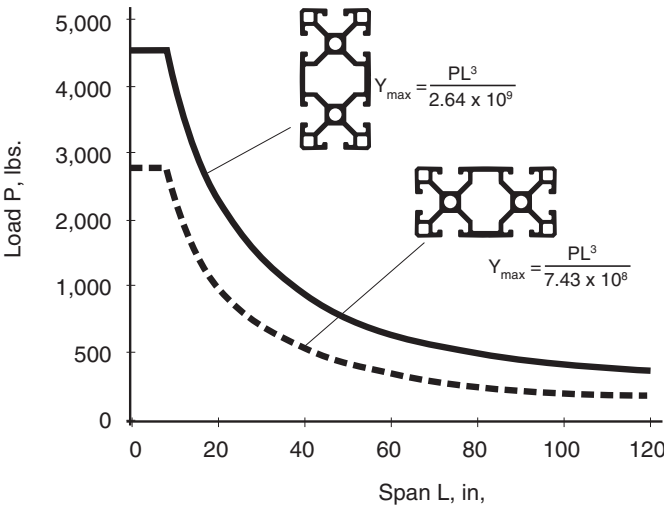
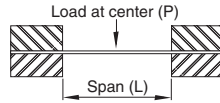
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.569 Sq. In.
- Weight/ft = 1.845 lbs
- 96", 144.25", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	1.376	0.387
Section modulus in <sup>3</sup>	0.917	0.516

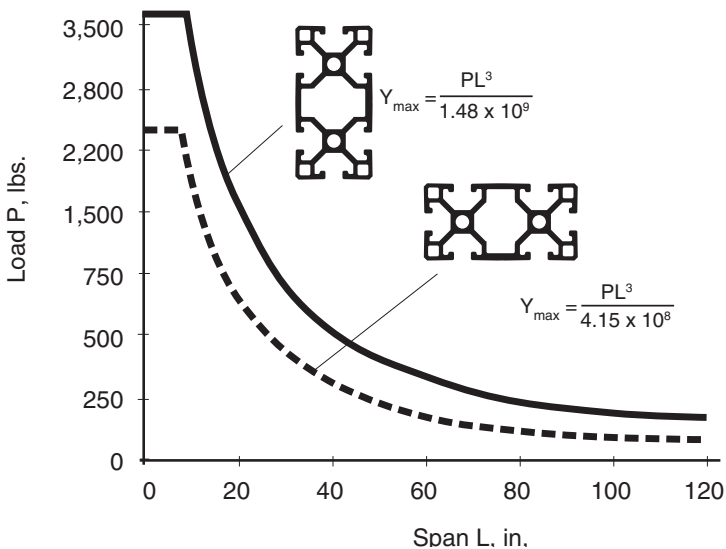
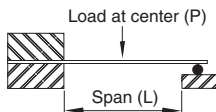


Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

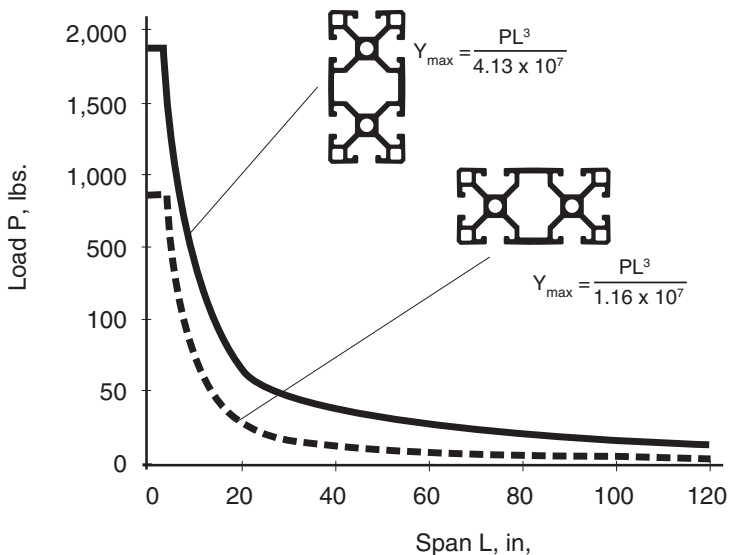
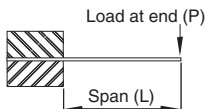


TECHNICAL

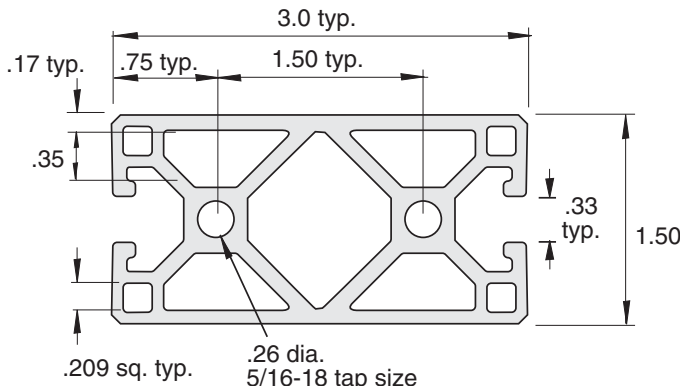
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



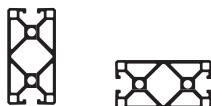
## EX-68



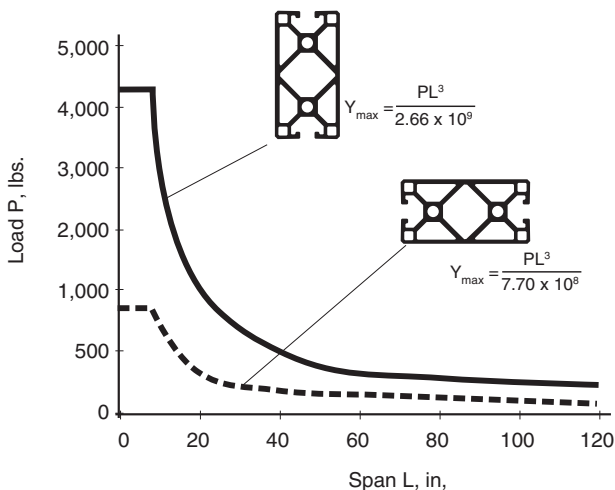
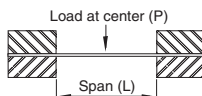
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.599 Sq. In.
- Weight/ft = 1.880 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

Moment of Intertia in <sup>4</sup>	1.385	0.401
Section modulus in <sup>3</sup>	0.923	0.535

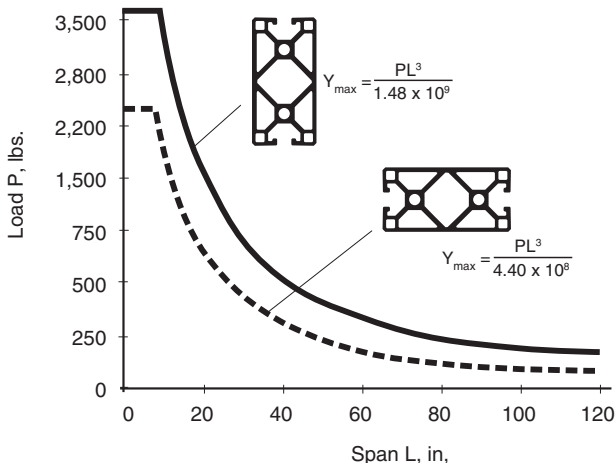
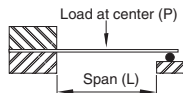


Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

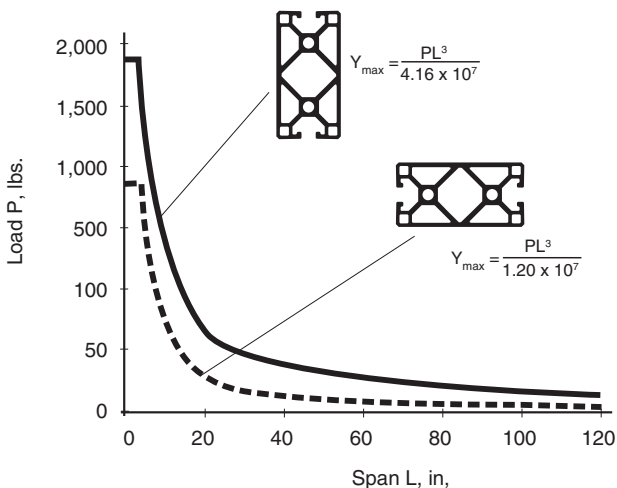
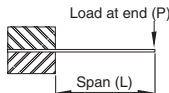


TECHNICAL

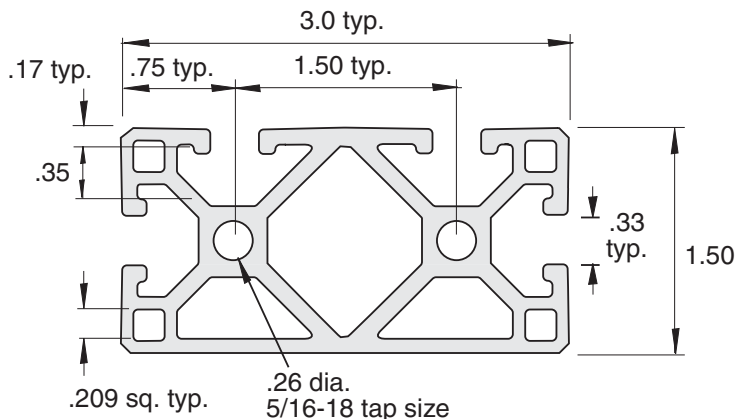
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-69



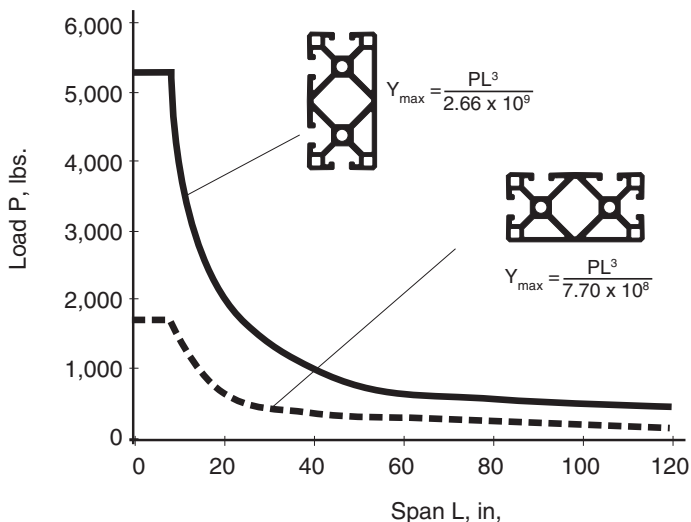
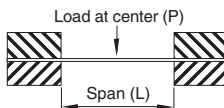
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.554 Sq. In.
- Weight/ft = 1.828 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

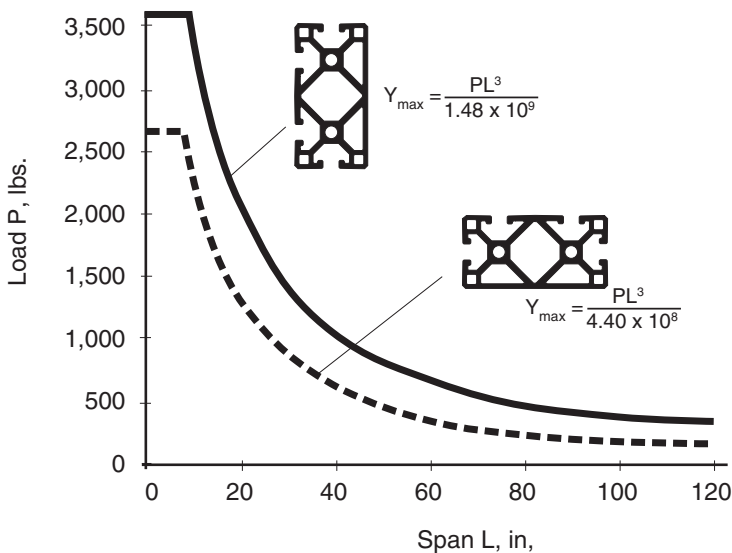
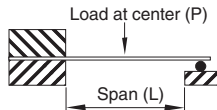
Moment of Inertia in <sup>4</sup>	1.385	0.401
Section modulus in <sup>3</sup>	0.923	0.535



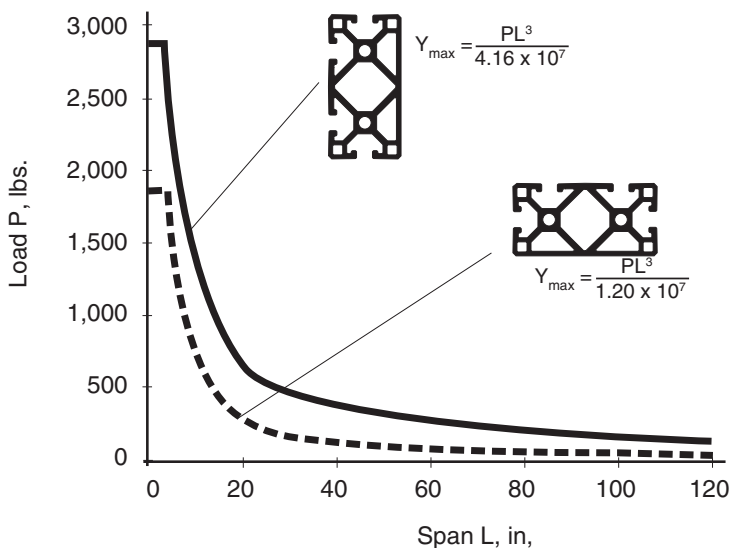
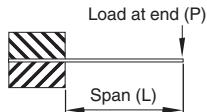
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

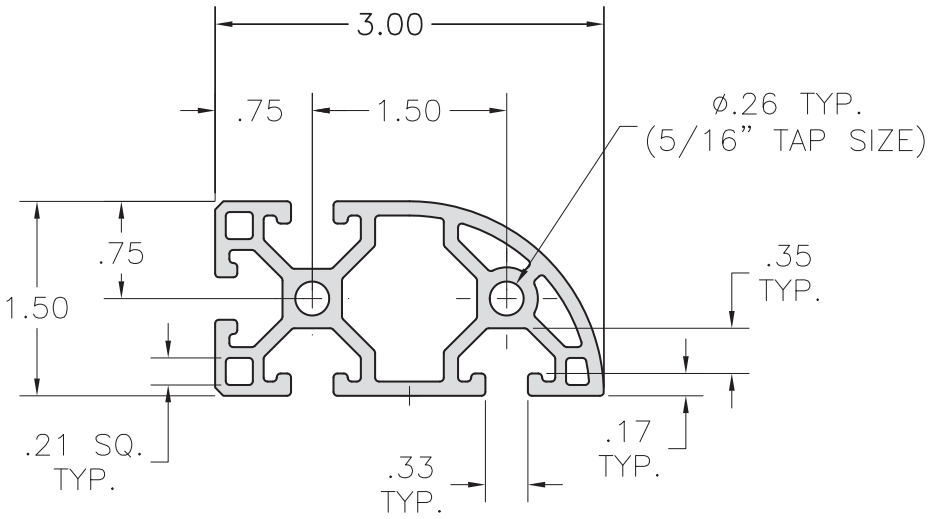


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**TECHNICAL**

**EX-83**



Finish: Clear Anodize  
 Material: 6105-T6 Aluminum  
 Est. Area: 1.464 Sq In.  
 Wt./Ft. 1.722 lbs.  
 Std. Length: 144.25"

Section Properties:  
 Moment of Inertia in<sup>4</sup>  
 Section Modulus in<sup>3</sup>

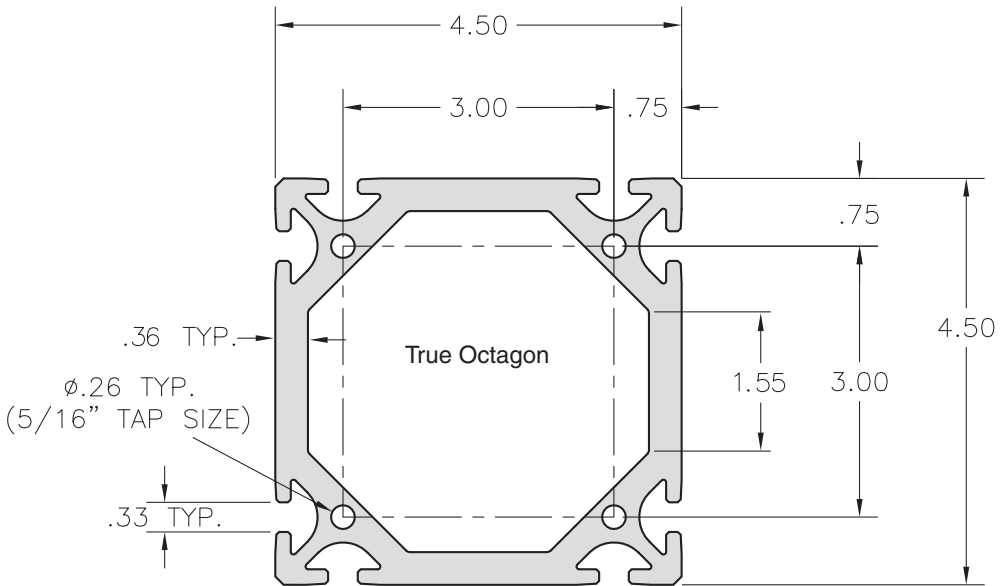


1.229  
 0.779



0.338  
 0.424

**EX-45HD**



Finish: Mill Finish  
 Material: 6105-T6 Aluminum  
 Est. Area: 6.330 Sq In.  
 Wt./Ft. 7.445 lbs.  
 Std. Length: 192.63"  
 Special cut charge required for  
 non-standard length (EM-1-EX45)

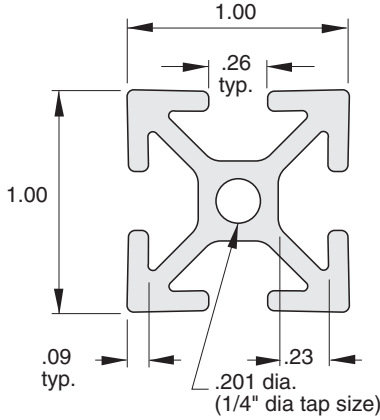
Section Properties:  
 Moment of Inertia in<sup>4</sup>  
 Section Modulus in<sup>3</sup>



16.4  
 6.56



## EX-11

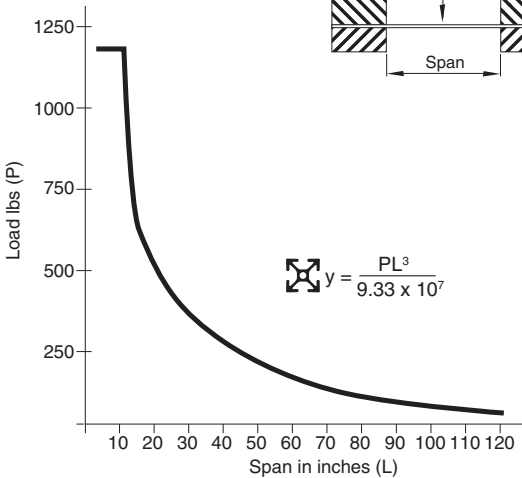
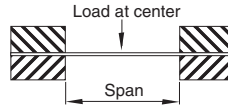


- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .530 lbs.
- 96", 144.25", 192.63" Lengths standard.

### Section Properties:

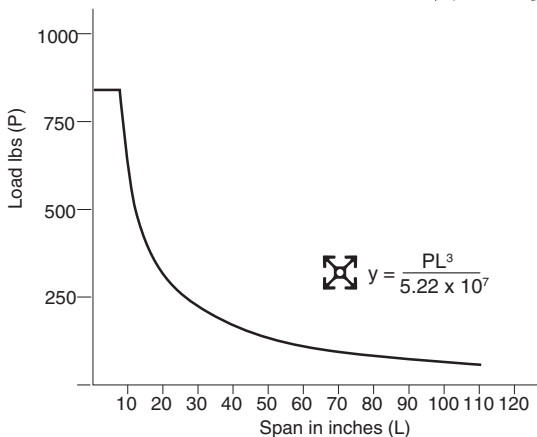
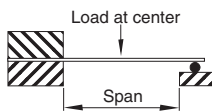
Moment of Intertia in<sup>4</sup> .049  
 Section modulus in<sup>3</sup> .097

Load condition:  
 Fixed at both ends, load at center  
 Deflection = y (inches)

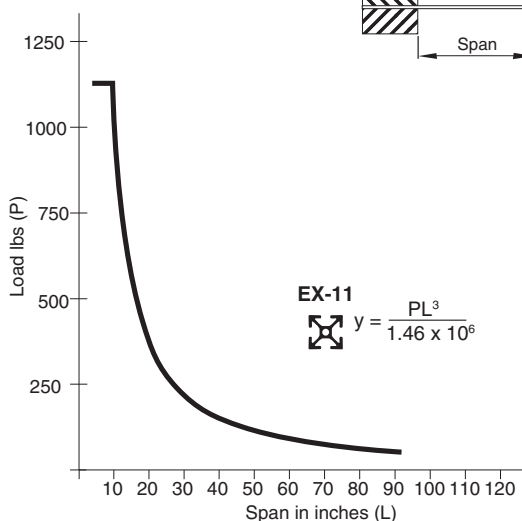
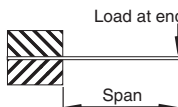


**EX-11**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

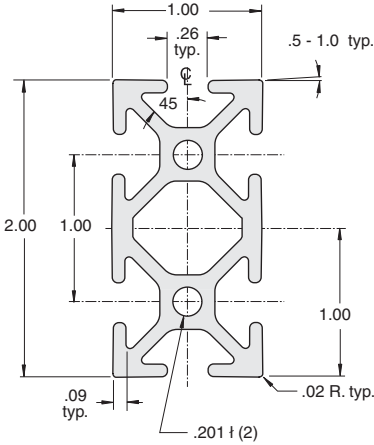


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**TECHNICAL**

## EX-12



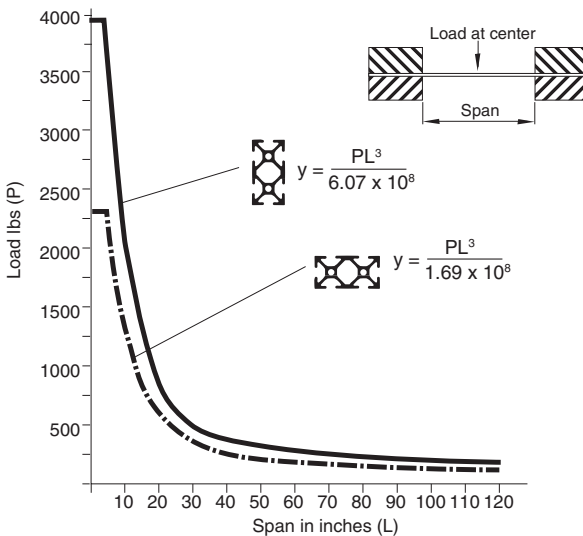
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .807 Sq. In.
- Weight/ft = .949 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

Moment of Intertia in <sup>4</sup>	.316	.088
Section modulus in <sup>3</sup>	.316	.176

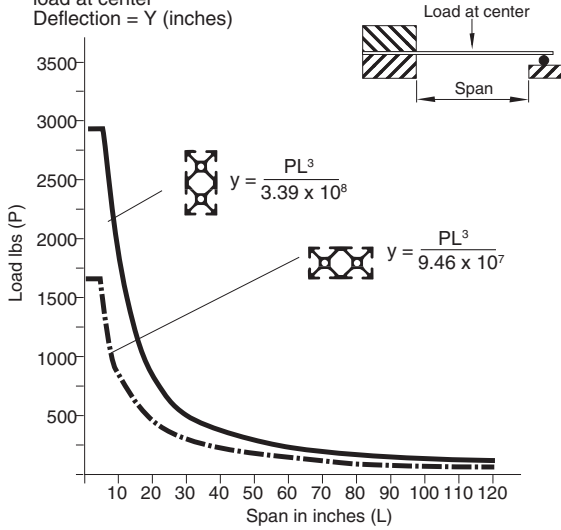


Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

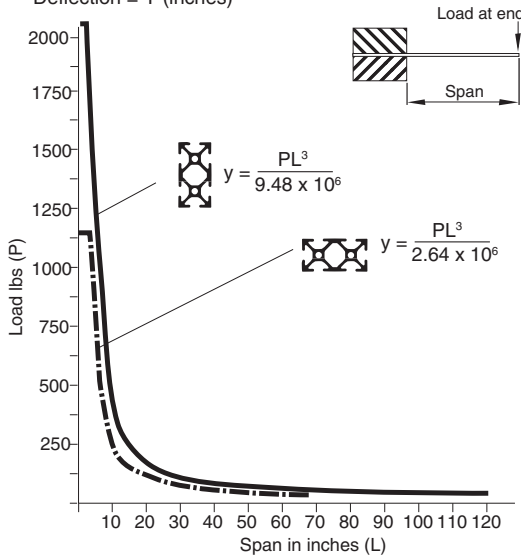


**EX-12**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

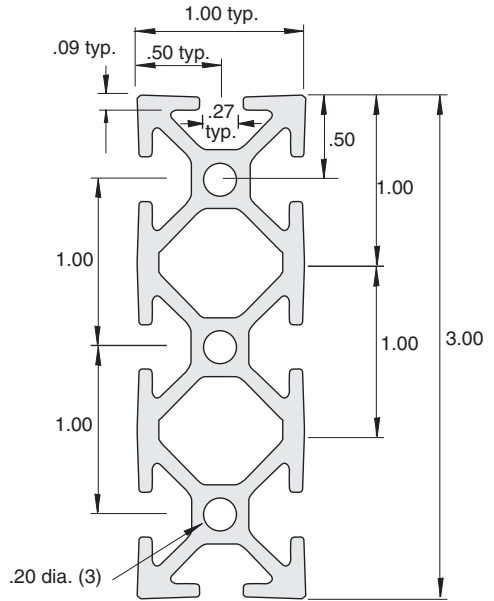


Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-13

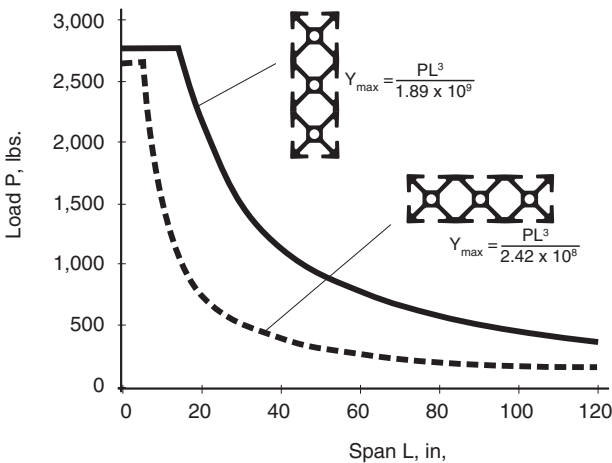
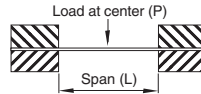
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.162 Sq. In.
- Weight/ft = 1.367 lbs.
- 96", 192.63" Lengths standard.



### Section Properties:

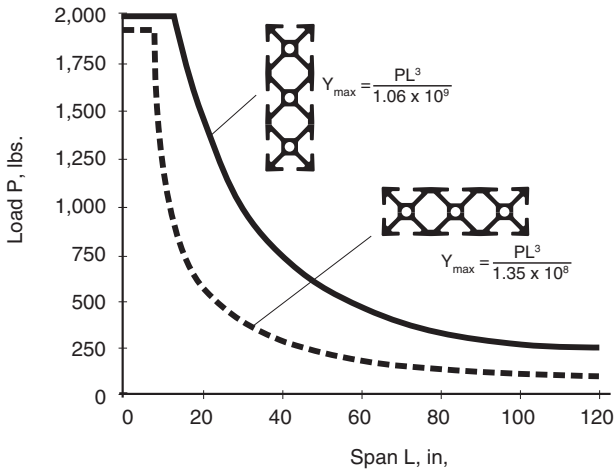
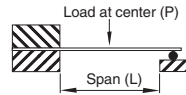
Moment of Intertia in <sup>4</sup>	1.376	0.387
Section modulus in <sup>3</sup>	0.917	0.516

Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

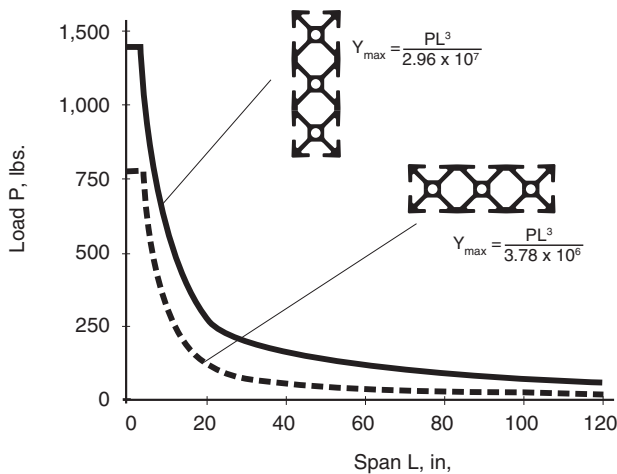
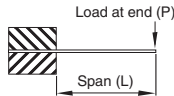


TECHNICAL

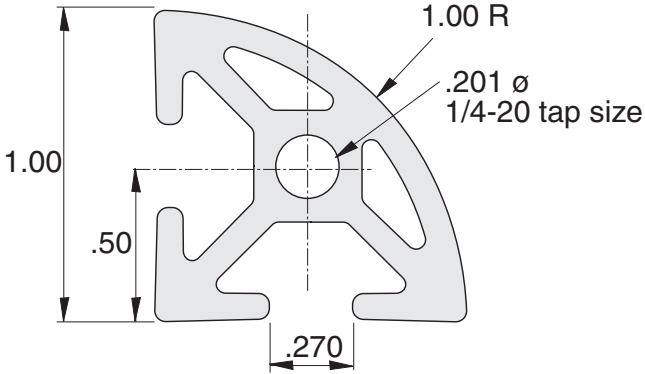
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**EX-14**

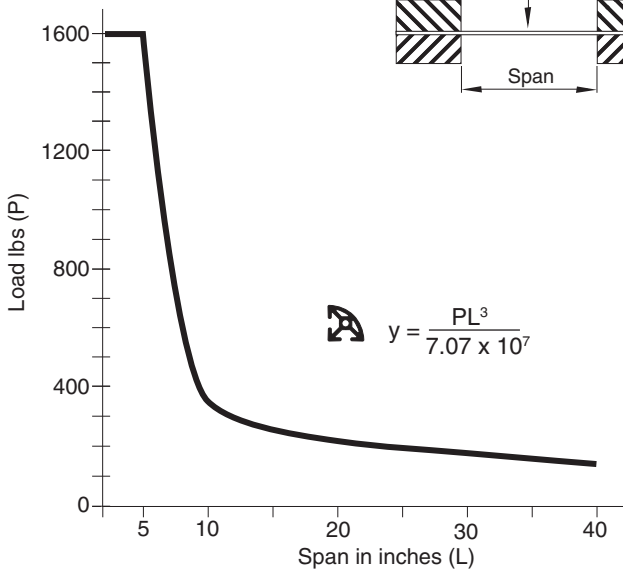
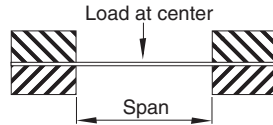


- Finish = Clear anodized
- Material = 6105-T6 Aluminum
- Est. Area = .438 Sq. In.
- Weight/ft = .515 lbs.
- 96", 192.63" Lengths standard.

**Section Properties:**

Moment of Intertia in <sup>4</sup>	.037
Section modulus in <sup>3</sup>	.068

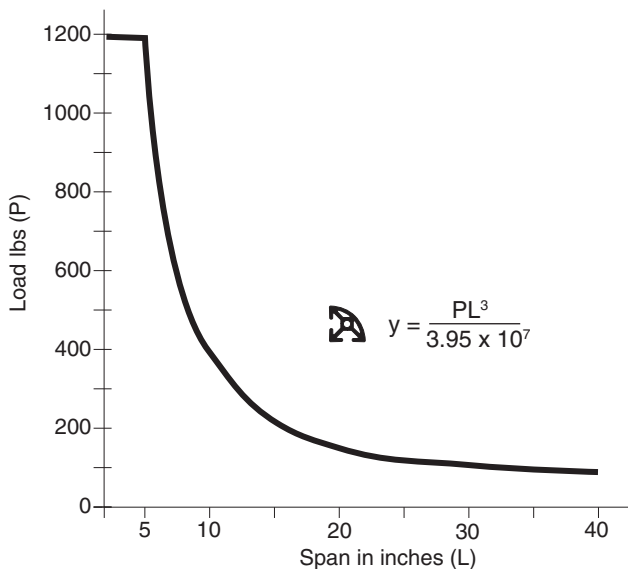
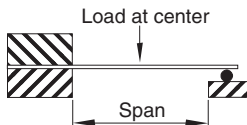
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



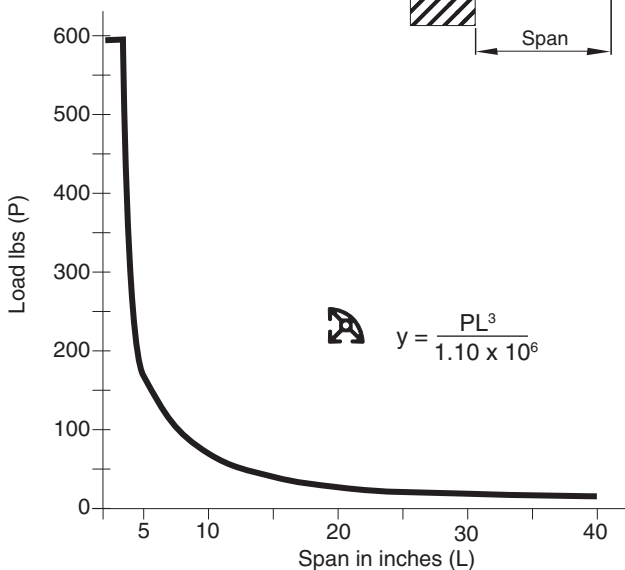
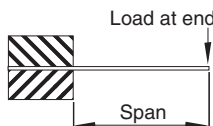
TECHNICAL

**EX-14**

Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



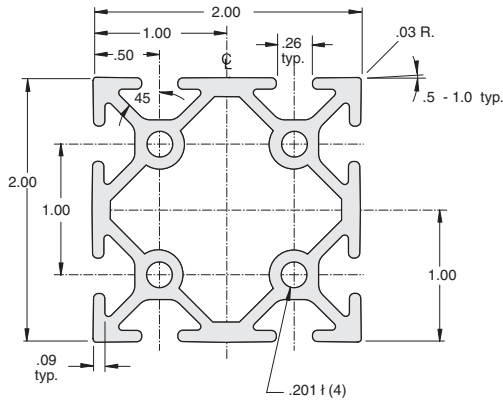
Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



**TECHNICAL**



## EX-22

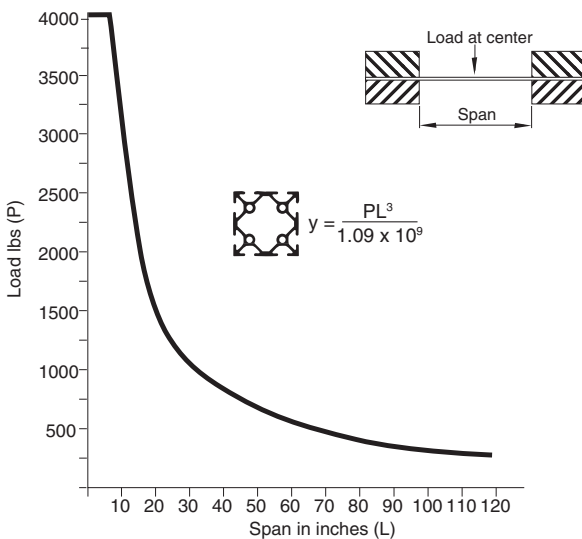


- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = 1.249 Sq. In.
- Weight/ft = 1.468 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

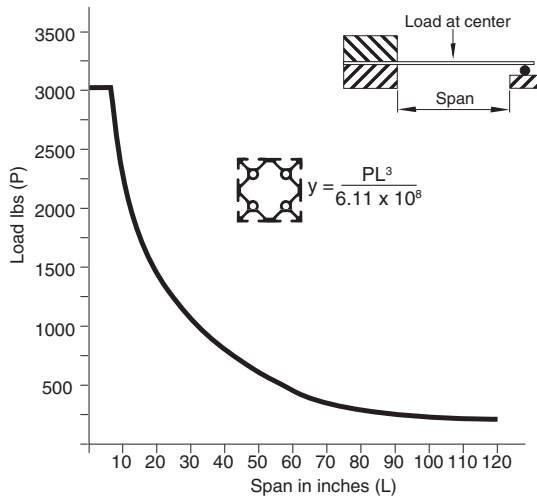
Moment of Inertia in <sup>4</sup>	.569
Section modulus in <sup>3</sup>	.569

Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

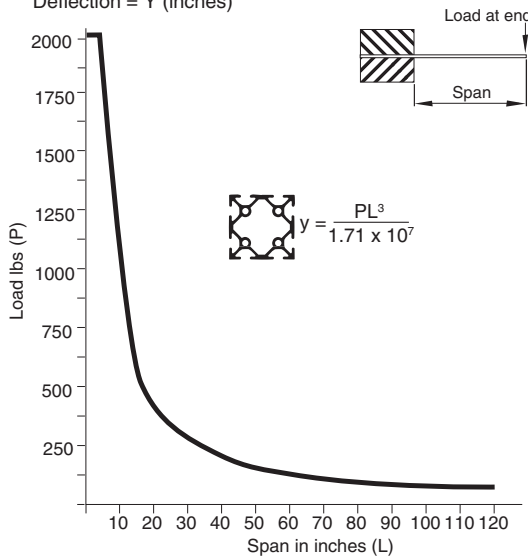


**EX-22**

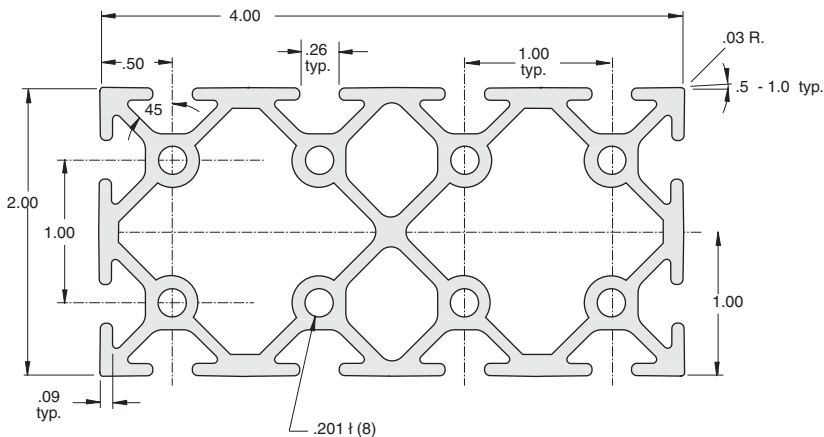
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



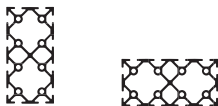
## EX-24



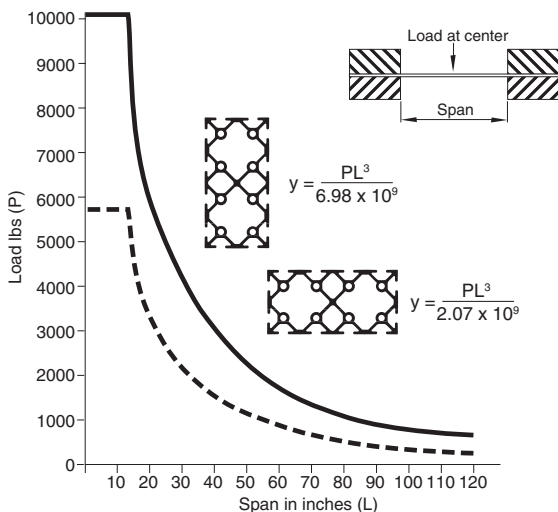
- Finish = Clear anodized
- Material = 6063-T6HT Aluminum
- Est. Area = 2.352 Sq. In.
- Weight/ft = 2.766 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

Moment of Intertia in <sup>4</sup>	3.634	1.078
Section modulus in <sup>3</sup>	1.817	1.078

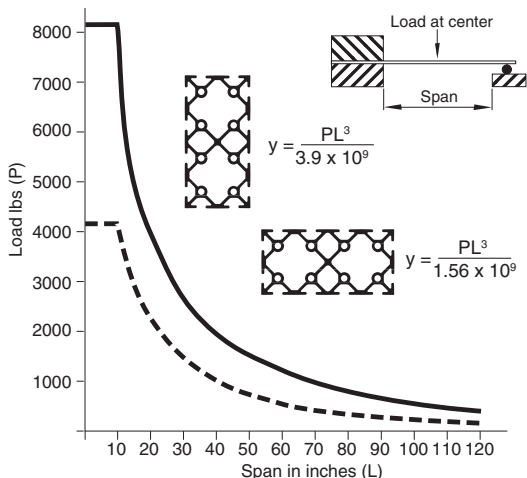


Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)

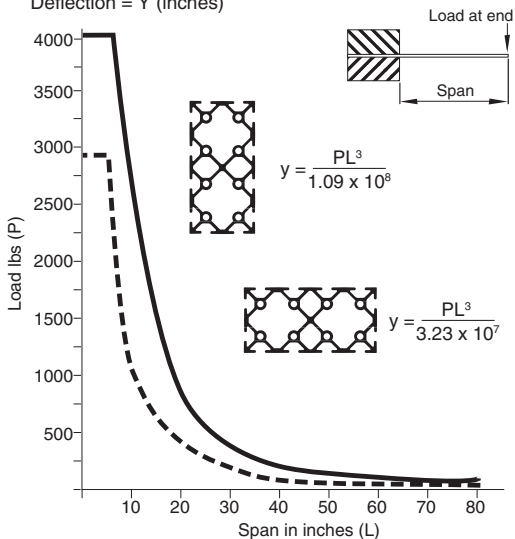


TECHNICAL

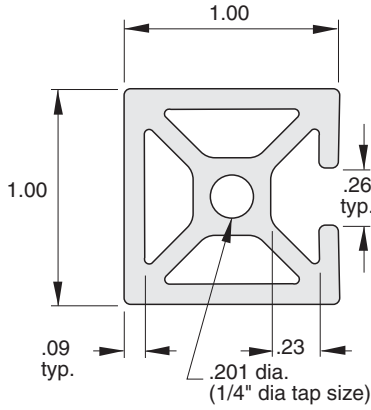
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-70



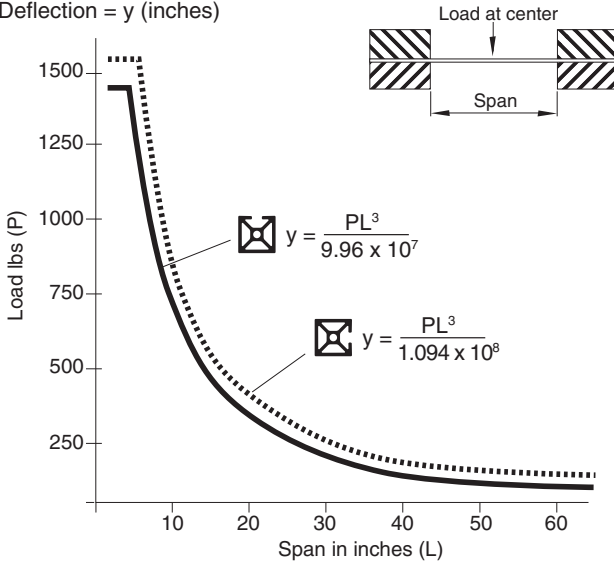
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .576 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

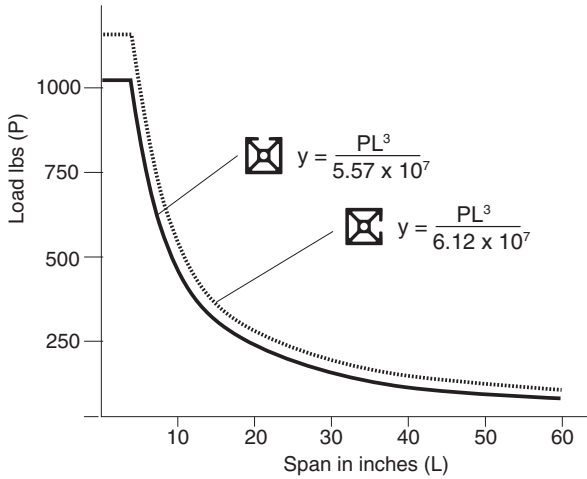
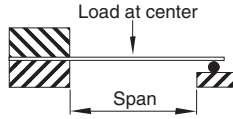
Moment of Intertia in <sup>4</sup>	.057	.052
Section modulus in <sup>3</sup>	.114	.099



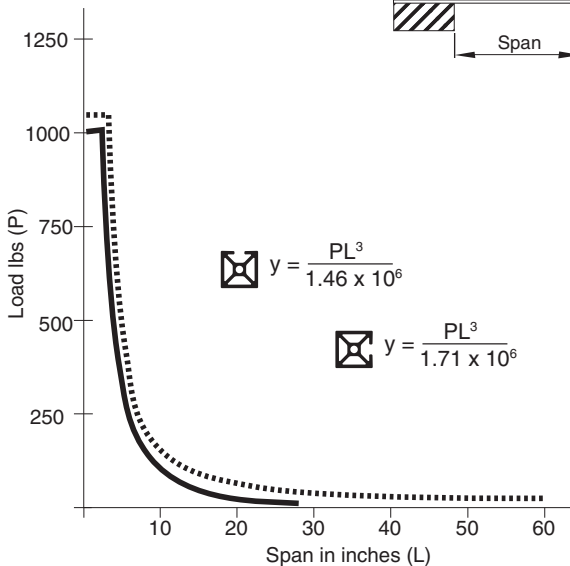
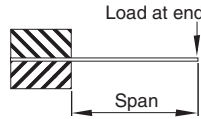
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



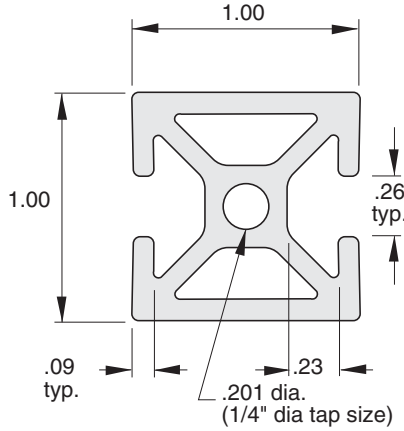
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-71



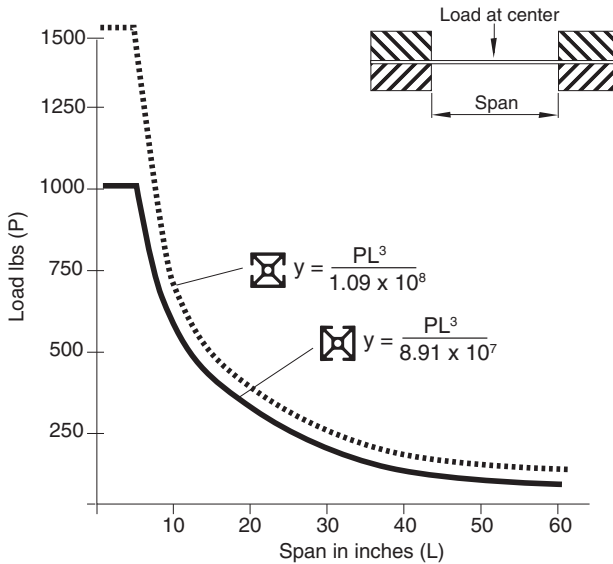
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .550 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

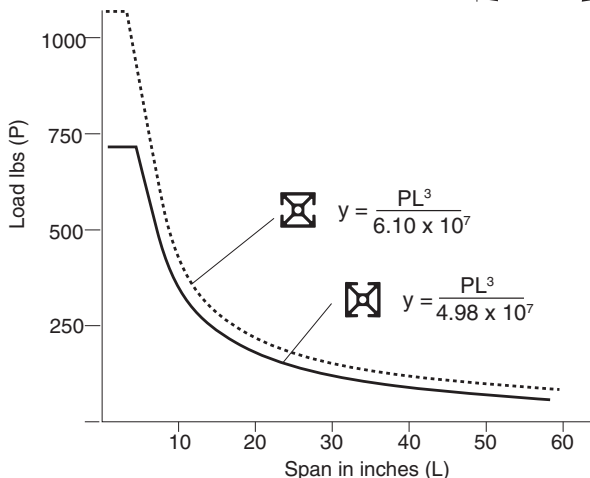
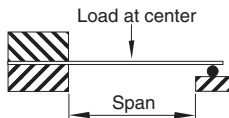
Moment of Intertia in <sup>4</sup>	.057	.046
Section modulus in <sup>3</sup>	.114	.093



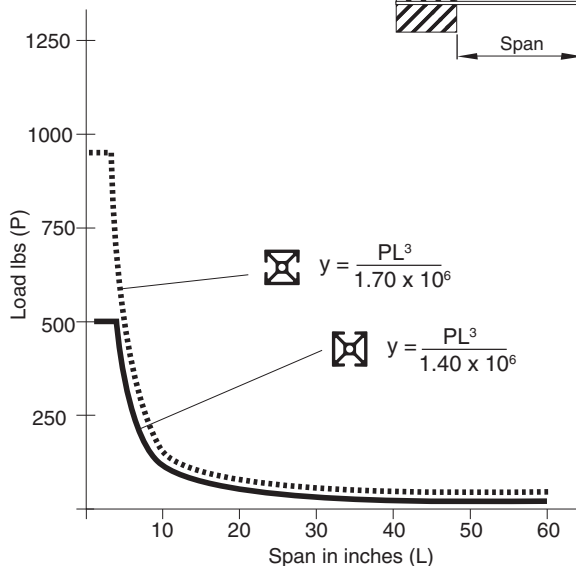
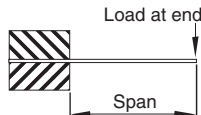
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)

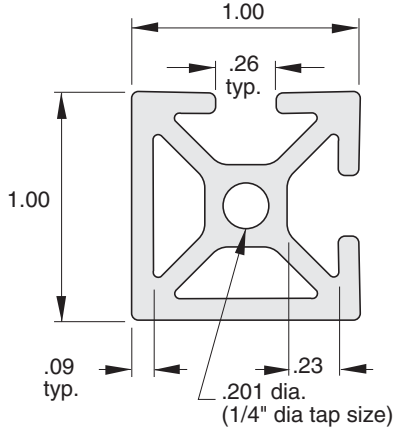


Load condition:  
Fixed end at one end,  
load at unsupported end  
Deflection = Y (inches)





## EX-72

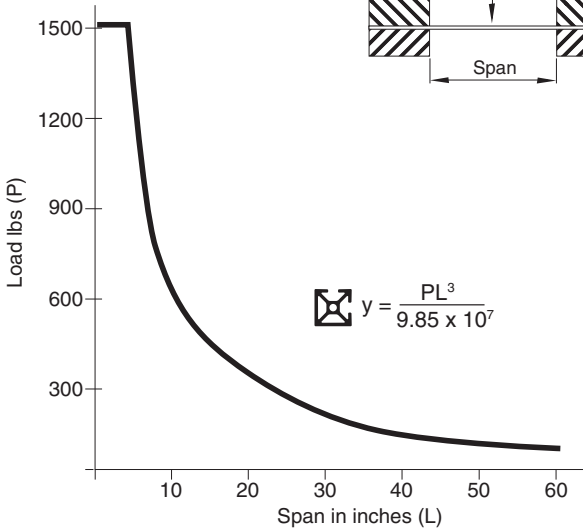
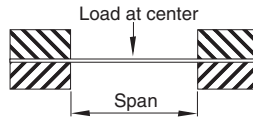


- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .546 lbs.
- 96", 192.63" Lengths standard.

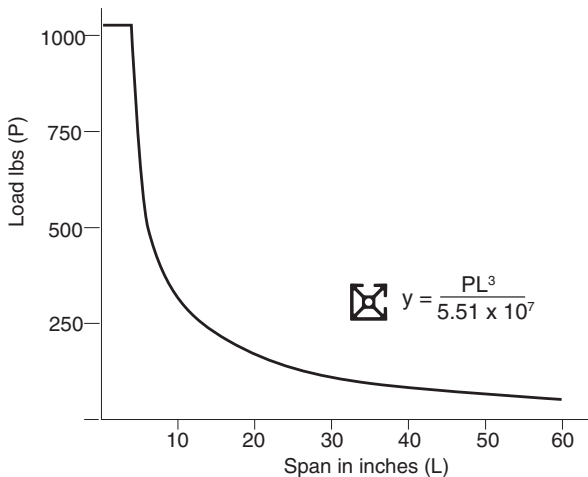
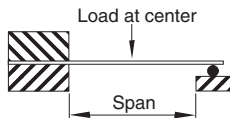
### Section Properties:

Moment of Intertia in<sup>4</sup> .051  
 Section modulus in<sup>3</sup> .098

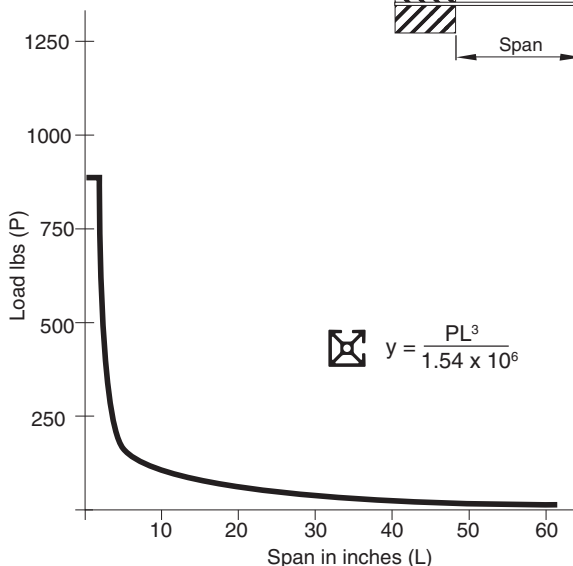
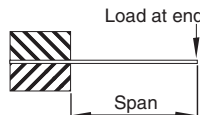
Load condition:  
 Fixed at both ends, load at center  
 Deflection = y (inches)



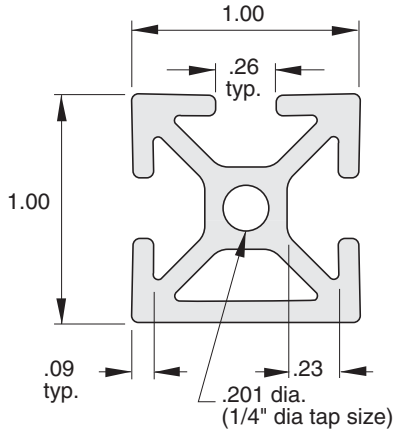
Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)



## EX-73



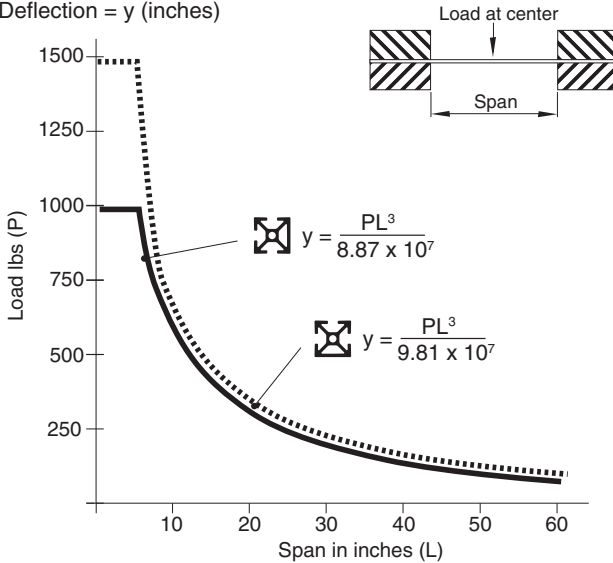
- Finish = Clear anodized
- Material = 6105-T5 Aluminum
- Est. Area = .451 Sq. In.
- Weight/ft = .523 lbs.
- 96", 192.63" Lengths standard.

### Section Properties:

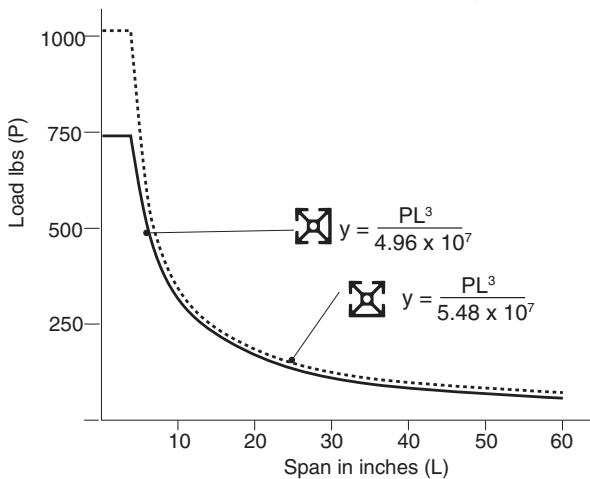
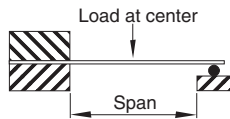
Moment of Intertia in <sup>4</sup>	.051	.046
Section modulus in <sup>3</sup>	.099	.092



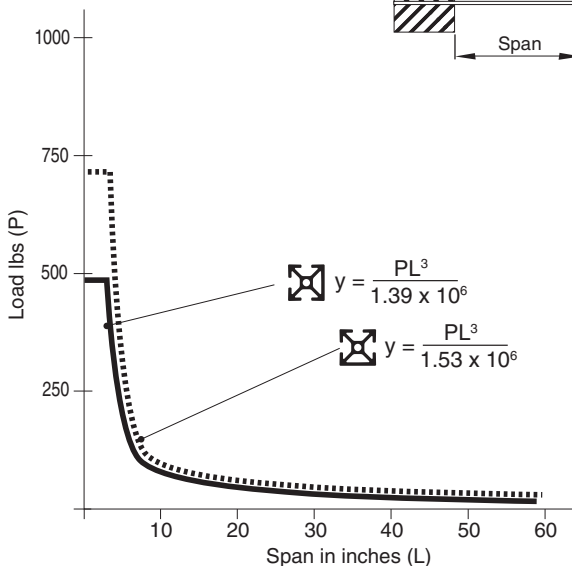
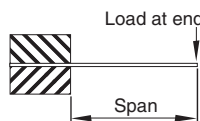
Load condition:  
Fixed at both ends, load at center  
Deflection = y (inches)



Load condition:  
Fixed at one end, sliding at one end,  
load at center  
Deflection = Y (inches)



Load condition:  
Fixed at one end,  
load at unsupported end  
Deflection = Y (inches)

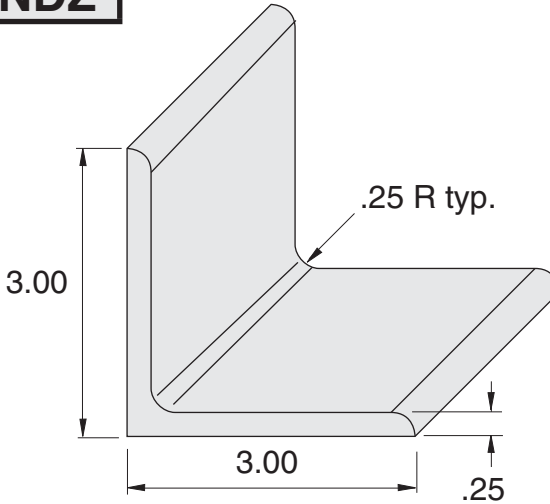


FRAME-WORLD's blank angle bracket profiles are made from aluminum and are provided with a standard mill finish. Clear anodized finish is also available. They are stocked in 8 ft. and 12 ft. lengths.

## EX-15

### EX-15-ANDZ

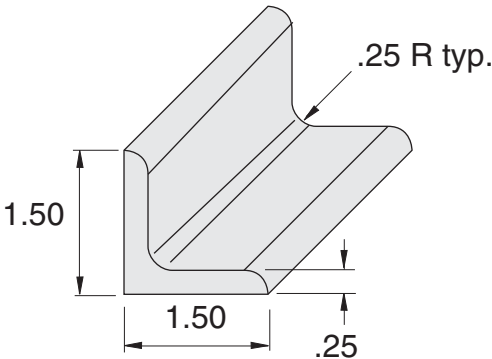
1.68 lb/ft



## EX-16

### EX-16-ANDZ

.81 lb/ft

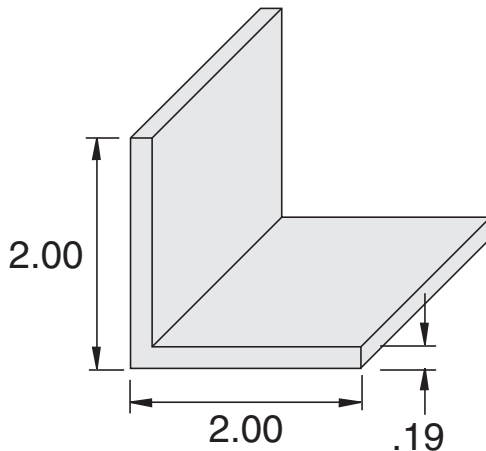


For special lengths, consult the factory.

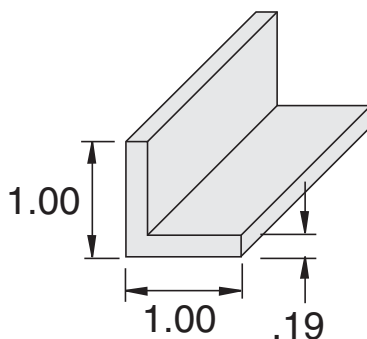
FRAME-WORLD's blank angle bracket profiles are made from aluminum and are provided with a standard mill finish. Clear anodized finish is also available. They are stocked in 8 ft. and 12 ft. lengths.

**EX-17****EX-17-ANDZ**

.83 lb/ft

**EX-18****EX-18-ANDZ**

.40 lb/ft



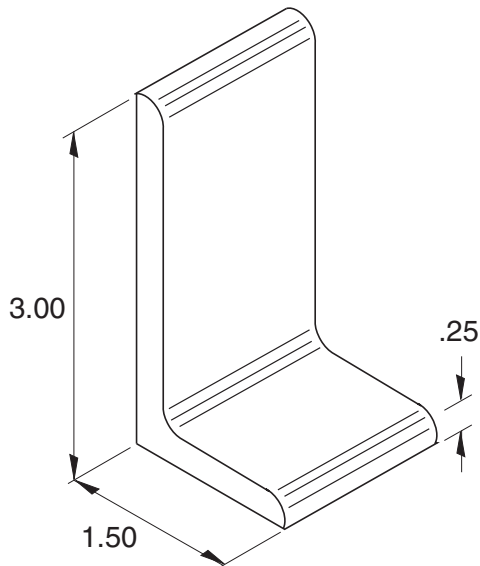
For special lengths, consult the factory.

FRAME-WORLD Blank Angle Profiles are made from aluminum and are provided with a standard mill finish. They are stocked in 8 ft. and 12 ft. lengths

**EX-34**

**EX-34-ANDZ**

1.25 lb/ft

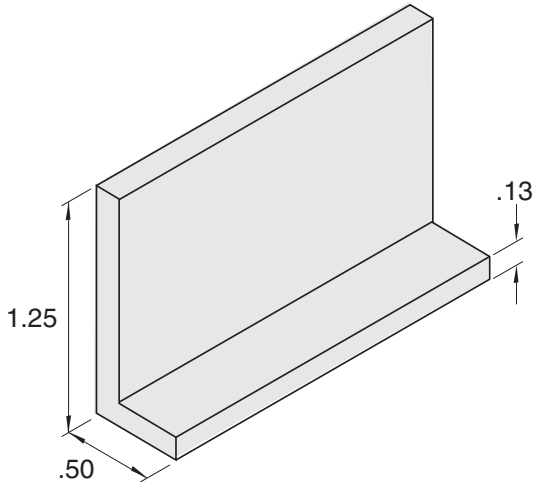


For special lengths, consult the factory.

**Mill Finish**

**EX-53**

.24 lb/ft



Standard Length 96", 192.63"

Material: Aluminum  
Finish: Mill Finish

For special lengths, consult the factory.

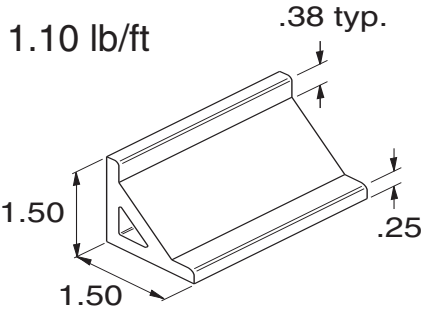


# Angle Bracket Profiles

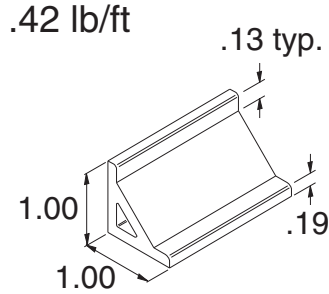


FRAME-WORLD's blank angle bracket profiles are made from aluminum and are provided with a standard mill finish. Clear anodized finish is also available. They are stocked in 8 ft. and 12 ft. lengths.

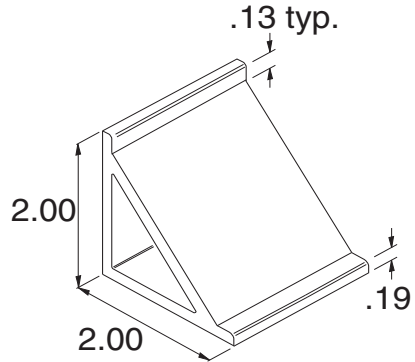
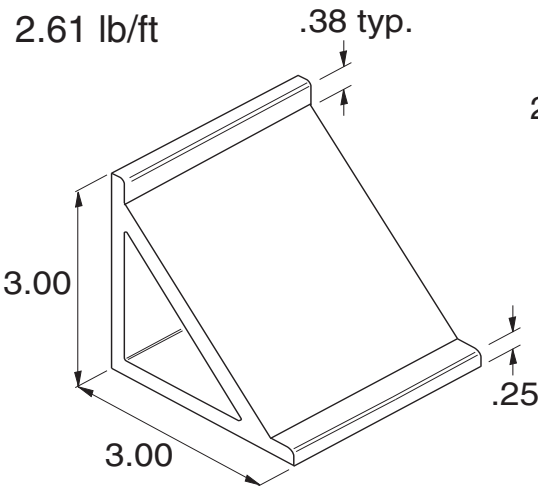
**EX-30**  
**EX-30-ANDZ**



**EX-32**  
**EX-32-ANDZ**



**EX-31**  
**EX-31-ANDZ**



**EX-33**  
**EX-33-ANDZ**

1.33 lb/ft

For special lengths, consult the factory.

TECHNICAL

FRAME-WORLD can provide you with a kit that is ready to assemble. We will provide machining services such as access holes, taps, cuts and counterbores. We can also provide miter cuts and any special milling, drilling or tapping requirements that you may have.

In addition to the items within this catalog, FRAME-WORLD can also provide panels cut to size. Materials can be Acrylic (Plexiglass®), Polycarbonate (Lexan®) expanded PVC (Sintra®) or ABS (Haircell). This also includes any drilling, tapping or machining required for panel mounting.

Customized packaging is also available, such as kits for multiple quantities of the same item (i.e. frame, fixture, panel, etc.) or labeling individual components of one item.

For all special services and for any parts not shown in this catalog, please contact our Application Group.

**Standard Machining Services****Part No.**

1. Cut to length 5/16" or 1/4" slot profiles
  - Any profile shape (except EX-45HD)
  - Length tolerance = +.015"
  - Squareness = .002" per inch

**EM-1**

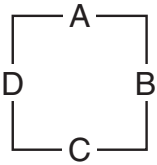
2. Cut to length EX-45HD
  - Length tolerance = +.015"
  - Squareness = .002" per inch

**EM-1-EX-45**

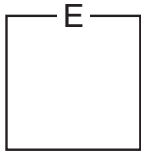
3. End hole tap
  - A. 5/16" slot profiles
    - 5/16"-18 x 1.0 deep thread
      - .260 dia. extruded hole size
      - m8 x 1.25 on request
  - B. 1/4" slot profiles
    - 1/4"-20 x .75 deep thread
      - .201 dia. extruded hole size
      - m6 x 1.0 on request

**EM-2****EM-2**

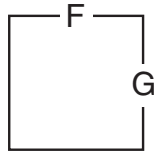
4. T-slot identification



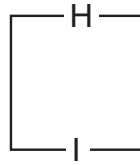
**EX-1  
EX-6  
EX-9  
EX-11**



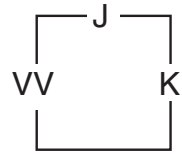
**EX-61  
EX-70  
EX-52**



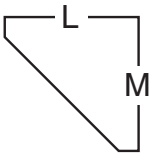
**EX-65  
EX-72**



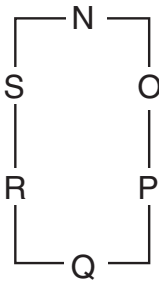
**EX-64  
EX-71  
EX-54**



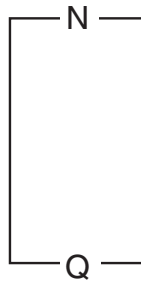
**EX-63  
EX-73**



**EX-7  
EX-14  
EX-8  
EX-82**



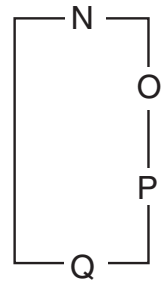
**EX-67  
EX-2  
EX-12**



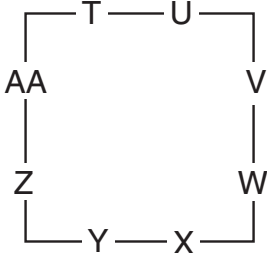
**EX-68**



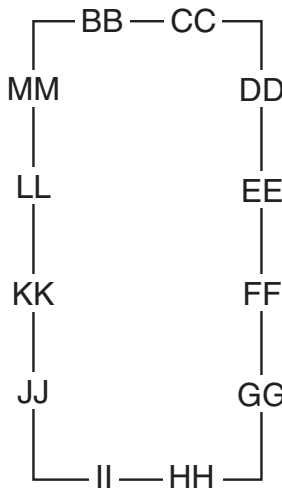
**EX-66**



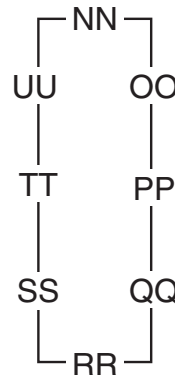
**EX-69**



**EX-3  
EX-37  
EX-22**



**EX-36  
EX-24**



**EX-26**

Part No.

5. Access Hole Drill

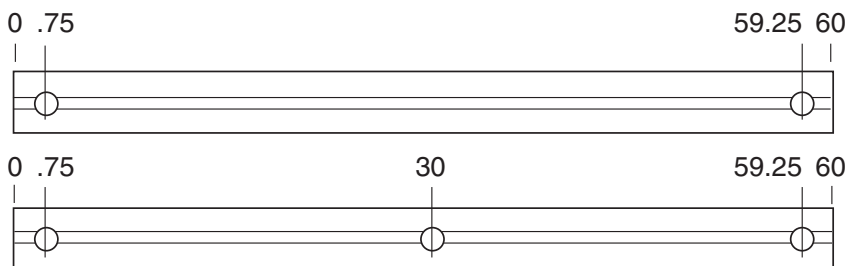
- A. For 5/16" wide slot profiles  
the drill dia. = .31"  
all the way through
- B. For 1/4" wide slot profiles  
the drill dia. = .25"  
all the way through.

EM-3

EM-3

Example:

(2) pcs EX-1 x 60.0" with EM-3's on A & B at .75 from each end and on B at 30.0"



Total EM-1 cuts = 2

Total EM-3 Drills = 10

6. C'bore or C'sink Hole Drill

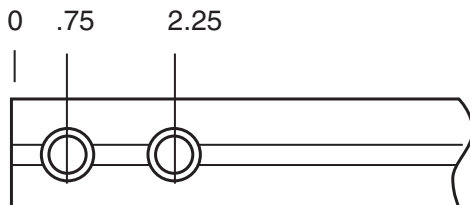
EM-3C

Specify type and location for a countersink hole in a panel or extrusion.

Example:

For a panel: Drill and C'sink for 5/16-18 FHCS per dwg (must submit sketch of panel)

For an extrusion: Drill and C'bore for 5/16-18 SHCS slot [A] @ 0.75, 2.25 from end.

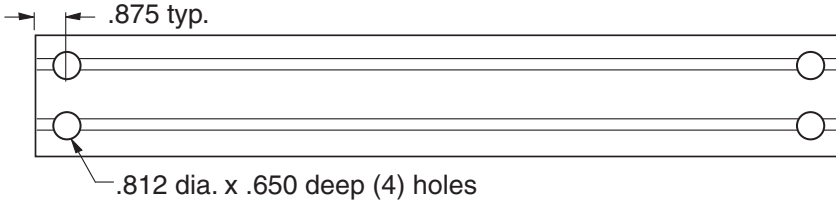


Part No.

7. Anchor Fastener Counter Bores

- A. For 5/16" slot profiles the counterbore  
dia. = .812 x .650 deep  
location is .875 from the end

**EM-5**



Example

(2) EX-2 x 30.0" with EM-5's at O & P both ends

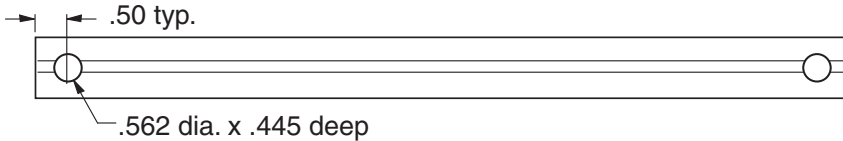
Total EM-1 cuts = 2

Total EM-5 counterbores = 8

Total EF-62 anchor fasteners = 8

- B. For 1/4" slot profiles the counterbore  
dia. = .562 x .445 deep  
location is .500 from the end

**EM-7**



Example

(2) EX-12 x 50.0" with EM-7's at N & Q both ends

Total EM-1 cuts = 2

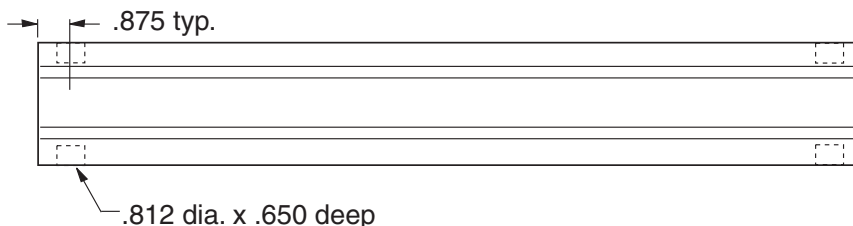
Total EM-7 counterbores = 8

Total 11-242 anchor fasteners = 8

**Part No.**

- C. For 5/16" slot profiles using double anchor fasteners EF-63 & EF-64 the counterbore dia. = .812 x .650 location is .875 from the end

**EM-5**

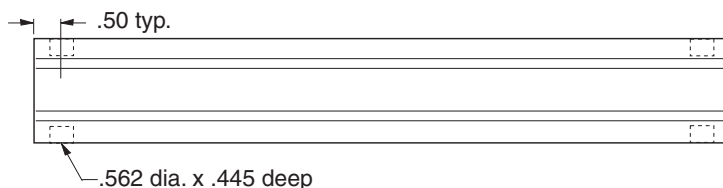


Example

- (2) EX-2 x 30.0" with EM-5's at N & Q both ends  
Total EM-1 cuts = 2  
Total EM-5 counterbores = 8  
Total EF-64 anchor fasteners = 4

- D. For 1/4" slot profiles using double anchor fasteners 11-248 & 11-249, the counterbore dia. = .562 x .445 deep location is .500 from the end

**EM-7**



Example

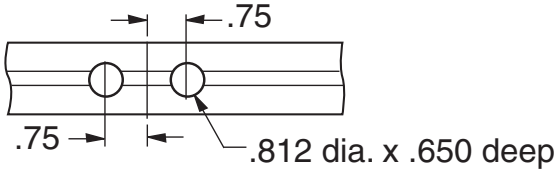
- (2) EX-12 x 20.0" with EM-7's at N & Q both ends  
Total EM-1 cuts = 2  
Total EM-7 counterbores = 8  
Total 11-249 anchor fasteners = 4

Part No.

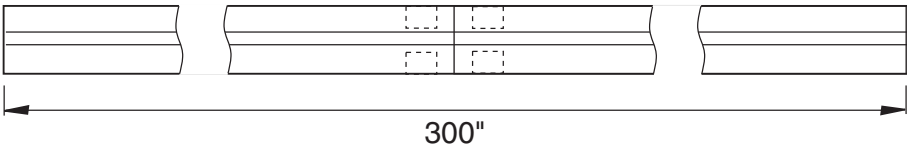
8. Anchor Butt Fastener Counterbores

- A. For 5/16" wide slot profiles the counterbore dia. = .812 x .650 deep. Location is .75 from the end

**EM-8**



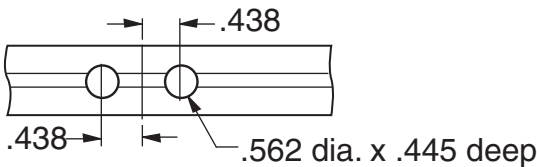
Example: (for a 300" long piece)



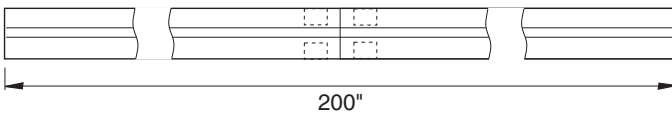
- (2) EX-1 x 150.0
- (2) EM-1
- (4) EM-8
- (2) EF-61

- B. For 1/4" wide slot profiles the counterbore dia. = .562 x .445 deep. Location is .438 from the end

**EM-9**



Example: (for a 200" long piece)



- (2) EX-11 x 100.0
- (2) EM-1
- (4) EM-9
- (2) 11-243

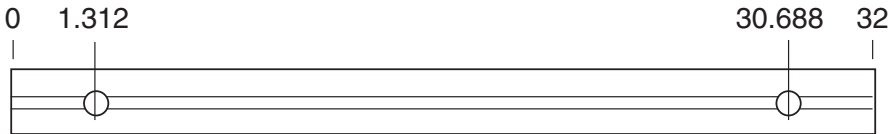
**Part No.  
EM-13**

9. Set Screw Anchor Fastener Counterbore

For 5/16" wide slot profiles using and EF-49 fastener,  
an EM-13 counterbore dia = .625 dia x 1.00 deep  
at a distance of 1.312" from the end of the extrusion.

Example:

EX-65 ; 32.000" ; EM-13 [F] @ 1.312, 30.688



10. Wire Mesh and Plastic Panels Cut to Size

Panels any side  $\leq$  48.0"

Panels any side  $>$  48.0"

**EM-4S**  
**EM-4L**

- A. Wire Mesh and Plastic Panels  
are sold by the number of square feet
- B. To calculate square feet,  
multiply the length by width (in inches)  
and then divide by 144.  
Round up to nearest square foot.

C. Example:

(1) EB-38-1 that is 24" x 47"

Order:

(8) sq ft EB-38-1 (1) @ 24" x 47"

(1) EM-4S

Total Sq. Ft. =  $\frac{47.0 \times 24.0}{144.0} = (8)$  sq. ft. EB-38-1



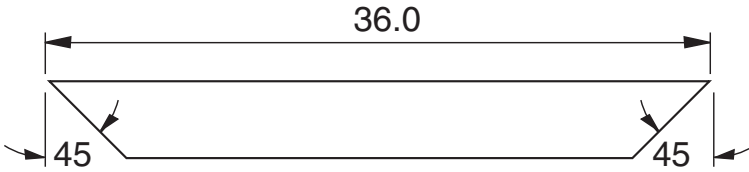
11. Clearance Hole in a Panel **EM-3P**  
For clearance holes drilled into panel material,  
include an EM-3P. Please provide a sketch.

12. Notch in Panel or Mesh **EM-4N**  
For notches in panels or mesh, include  
an EM-4N for each notch. Please provide a sketch.

13. Extrusion Mitre Cuts & Counter Bores **EM-6**  
Miter cut per end **EM-10**  
Counter bore & hardware per end

(1) EM-6/Cut Piece

Example:



Order:

- (1) EX-1 x 36.0
- (2) EM-6
- (2) EM-10 (times (2) for double slot, i.e. EX-2)

Note: for custom angles, consult the factory.

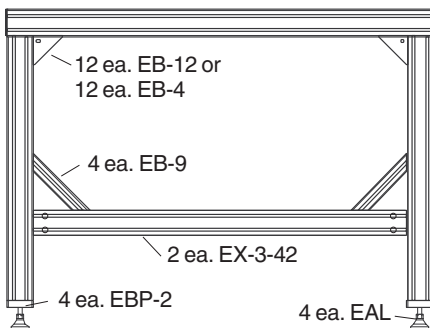
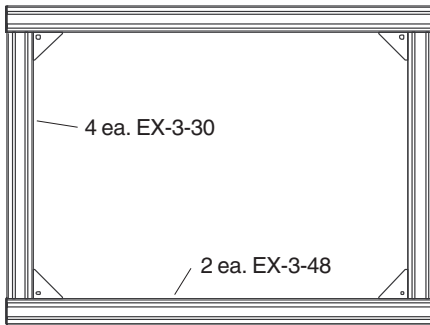
When comparing all costs in the fabrication of a typical machine or table frame using FRAME-WORLD components versus steel weldments, most users realize a 15 to 25% savings. Here are the reasons, or extra steps and equipment in weldment structures:

- Welding fixtures and clamps
- Welding time
- Grinding equipment and grinding of welds
- Clean and degrease
- Drill, tapping or reaming mounting holes
- Deburr
- Primer
- Paint frame and touch up after mounting

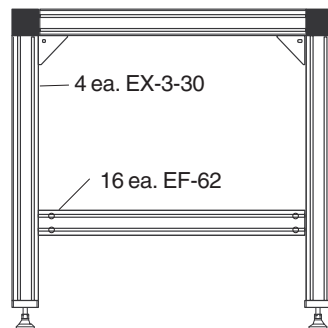
It's easy to see the savings and esthetic effect of FRAME-WORLD.

### Parts List

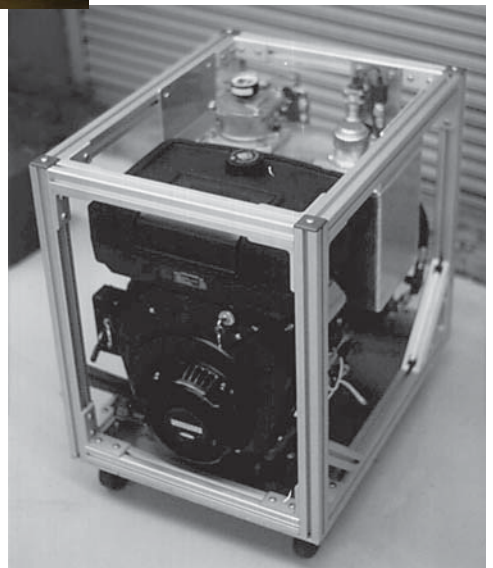
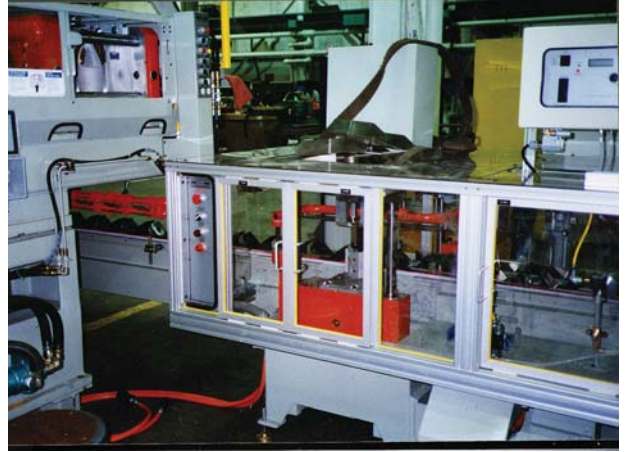
- 8 - EX-3-30 Extrusion
- 2 - EX-3-48 Extrusion
- 2 - EX-3-42 Extrusion
- 4 - EB-9 Angle Bracket
- 12 - EB-12 Angle Bracket
- 4 - EBP-2 Leveling Plate
- 4 - EAL Adjustable Leg
- 4 - EF-19-C Plastic End Plate
- 16 - EF-62 Anchor Fastener



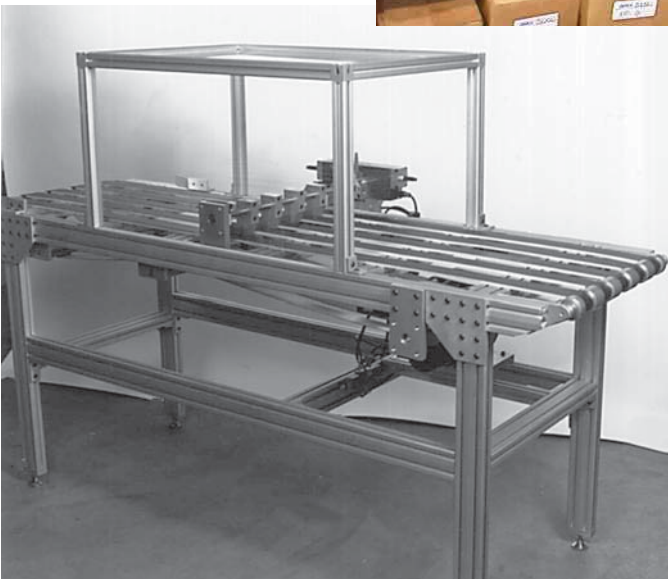
4 ea. EF-19-C

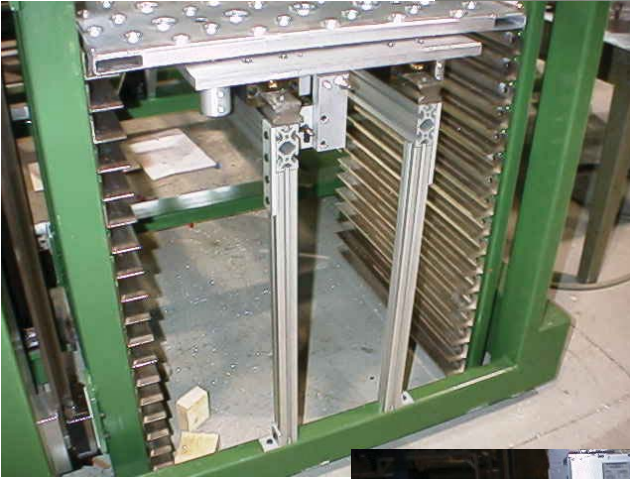


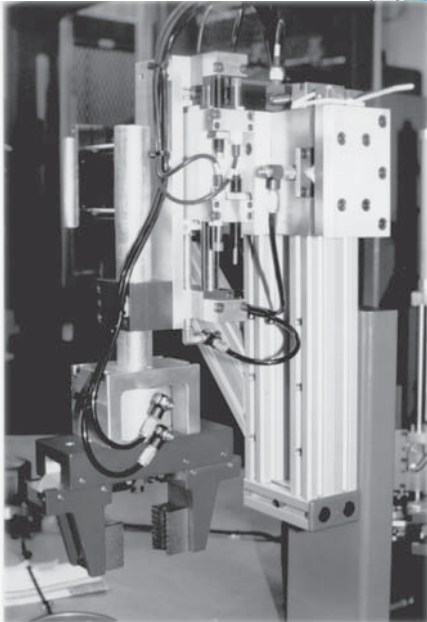
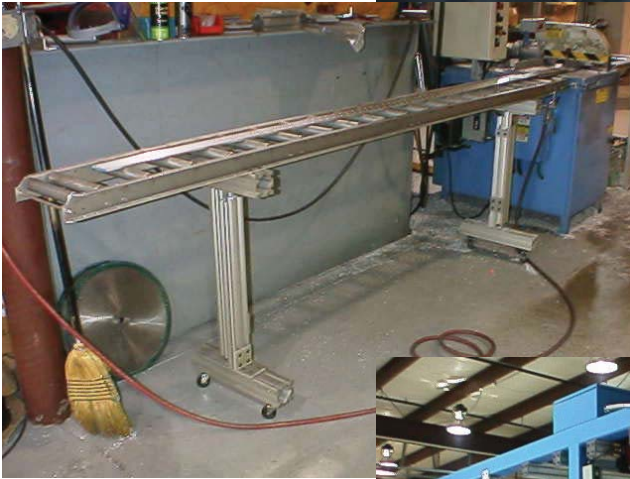




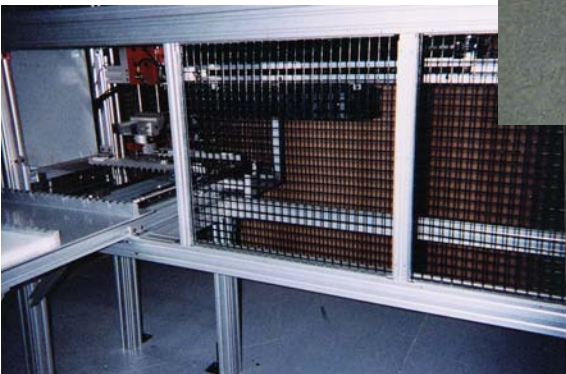


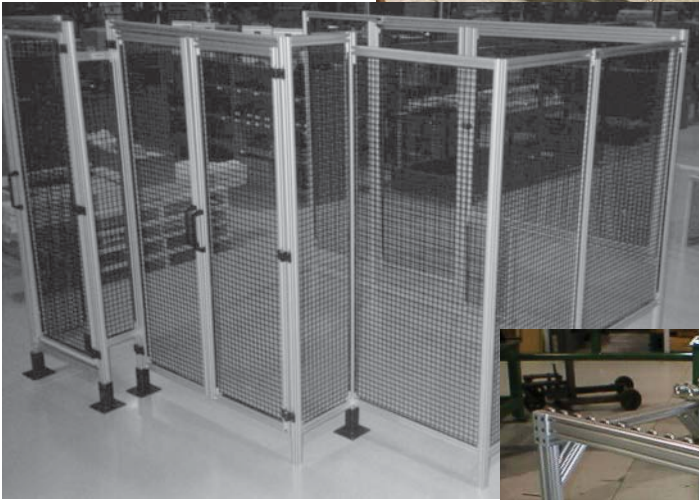
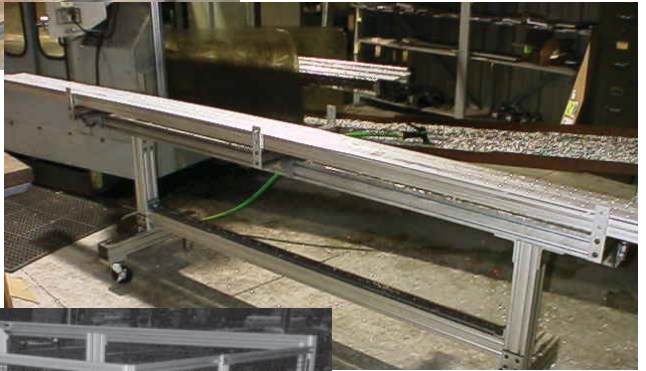


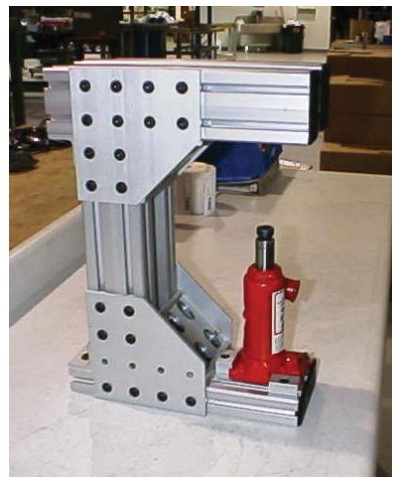
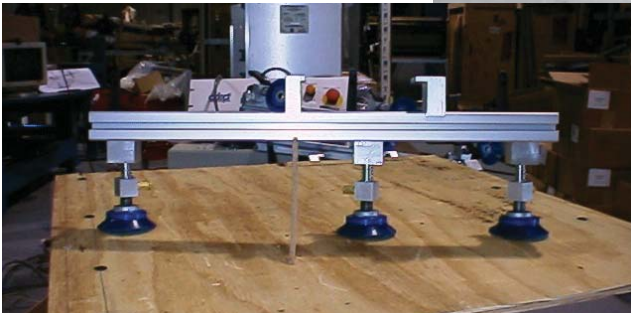
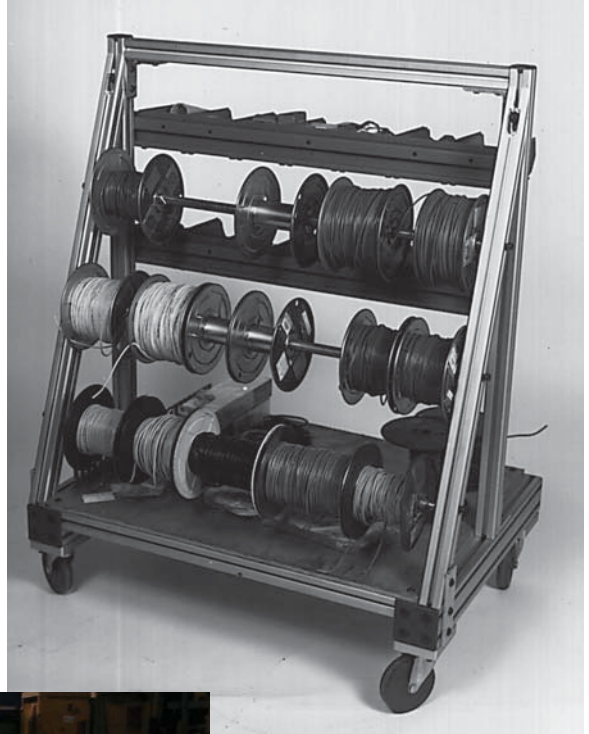






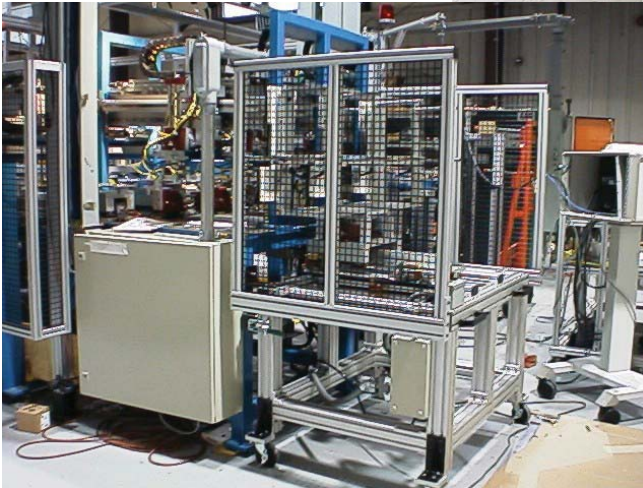












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