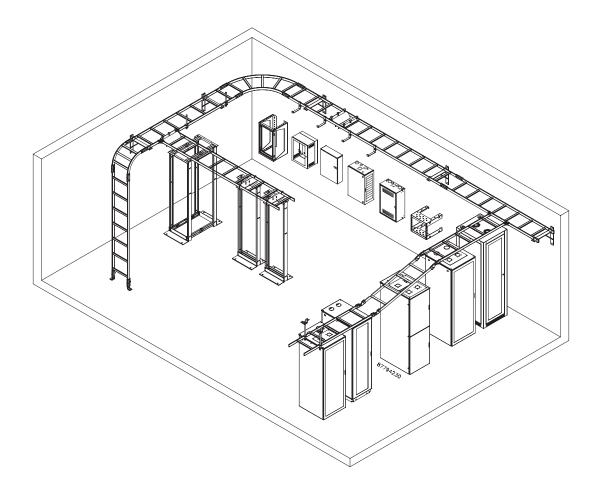


Ladder Rack System



Industry Standards

Painted and Plated Straight Sections:

UL/cULus Classified for Equipment Grounding and Load

Curved Sections and Splice Kits:

UL/cULus Classified for Equipment Grounding

cULus Bonding & Grounding

- Classified as suitable for an equipment ground conductor - CSA C22.2 No. 126.1-02 Section 5.2.8 Load Destruction Test
- Two grounding jumper kits required per each splice kit on painted ladder rack sections

cULus Load Testing

- Load capacity per 10 support lengths is 369.2 lb.; safety factor of 1.5X
 - CSA C22.2 No. 126.1-02 Section 5.1 Electrical Continuity Test

Application

The Ladder Rack System conveniently routes cables via a modular pathway through unused space on the floor, wall or ceiling while keeping cables accessible for easy maintenance. A variety of straight and curved sections are highly adaptable and can accommodate virtually any room layout.

Features

- Section cross members welded on 9-in. (229-mm) centers
- Accessory adjustable cross members
- Butt-splice kits and junction-splice kits
- Each model is boxed or bagged

Specifications

- Straight and curved sections made of 1-1/2-in. steel
- Sections available in 6-, 12-, 18- and 24-in. (152-, 305-, 457- and 610-
- Steel connecting and mounting hardware

Finish

Available in three finishes:

- ANSI 61 gray polyester powder paint
- RAL 9005 black polyester powder paint
- Plated

Accessories

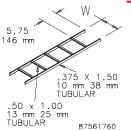
Touch-up Paint



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Ladder Rack Straight Sections (cULus Classified)

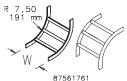


Supports cable on straight runs. Made of 1-1/2 in. x 3/8 in. (38 mm x 8 mm) 16 gauge tubular steel with a painted or plated finish. Nominal installed length is 10 ft. (3.05 m). Each section is 9 ft. 11-1/2 in. (3.03 m) long with cross members welded at 9-in. (229-mm) intervals.

Bulletin: DCR

Catalog Number	Finish	W (in.)	W (mm)	
LSS6G	Gray	6.00	152	
LSS6BLK	Black	6.00	152	
LSS6GZ	Plated	6.00	152	
LSS12G	Gray	12.00	305	
LSS12BLK	Black	12.00	305	
LSS12GZ	Plated	12.00	305	
LSS18G	Gray	18.00	457	
LSS18BLK	Black	18.00	457	
LSS18GZ	Plated	18.00	457	
LSS24BLK	Black	24.00	610	

Ladder Rack Curved Sections (cULus Classified)



Provide a vertical change in direction. They are made of 1-1/2 in. x 3/8 in. (38 mm x 8 mm) tubular steel with a painted or plated finish. Cross members are welded on the inside (inside bends) or outside (outside bends) of the section. Connect to straight section with butt-splice kits. Designed for category 5e, 6, 6A and fiber optic cable.

Bulletin: DCR

Catalog Number	Finish	Vertical Bend Type	W (in.)	W (mm)
LIB6G	Gray	Inside	6.00	152
LIB6BLK	Black	Inside	6.00	152
LIB6GZ	Plated	Inside	6.00	152
LIB12G	Gray	Inside	12.00	305
LIB12BLK	Black	Inside	12.00	305
LIB12GZ	Plated	Inside	12.00	305
LIB18G	Gray	Inside	18.00	457
LIB18BLK	Black	Inside	18.00	457
LIB18GZ	Plated	Inside	18.00	457
LIB24BLK	Black	Inside	24.00	610
LOB6G	Gray	Outside	6.00	152
LOB6BLK	Black	Outside	6.00	152
LOB6GZ	Plated	Outside	6.00	152
LOB12G	Gray	Outside	12.00	305
LOB12BLK	Black	Outside	12.00	305
LOB12GZ	Plated	Outside	12.00	305
LOB18G	Gray	Outside	18.00	457
LOB18BLK	Black	Outside	18.00	457
LOB18GZ	Plated	Outside	18.00	457
LOB24BLK	Black	Outside	24.00	610

90-Degree Horizontal E-Bend Section (cULus Classified)



Provide a 90-degree horizontal change in cable runway direction. Made of 1-1/2 in. x 3/8 in. (38 mm x 8 mm) tubular steel with a painted or plated finish. Connect to straight sections with butt-splice kits. Designed for category 5e, 6, 6A and fiber optic cable.

Bulletin: DCR

Catalog Number	Finish	W (in.)	W (mm)	
L90HB12G	Gray	12.00	305	
L90HB12BLK	Black	12.00	305	
L90HB12GZ	Plated	12.00	305	
L90HB18G	Gray	18.00	457	
L90HB18BLK	Black	18.00	457	
L90HB18GZ	Plated	18.00	457	
L90HB24BLK	Black	24.00	610	

Butt-Splice Kit (cULus Classified)



Joins straight ladder rack sections, inside and outside bends, and 90-degree horizontal e-bends. Each kit connects one section to another. Includes mounting hardware.

Bulletin: DCR

Catalog Number	Finish	Kit Qty.
LBSKG	Gray	2
LBSKB	Black	2
LBSK	Plated	2

Adjustable Butt-Splice Kit (cULus Classified)



Provides a change in up-and-down direction of the cable runway. It can be adjusted to any angle from 0 to 90 degrees. Made of steel with a painted or plated finish. Each kit connects one ladder rack section to another. Includes mounting hardware.

Bulletin: DCR

Catalog Number	Finish	Kit Qty.
LABSKG	Gray	2
LABSKB	Black	2
LABSK	Plated	2



Junction Splice Kit (cULus Classified)



Connects two straight ladder rack sections at a 90-degree angle. Made of steel with a painted or plated finish. Each kit connects one section to another. Includes mounting hardware.

Bulletin: DCR

Catalog Number	Finish	Kit Qty.	
LJSKG	Gray	2	
LJSKB	Black	2	
LJSK	Plated	2	

Adjustable Junction Splice Kit (cULus Classified)



Connects two ladder rack sections at any junction angle. Made of steel with a painted or plated finish. Each kit connects one section to another. Includes mounting hardware.

Bulletin: DCR

Catalog Number	Finish	Kit Qty.	
LAJSKG	Gray	2	
LAJSKB	Black	2	
LAJSK	Plated	2	

Retaining Post Kit

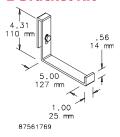


Provides extra ladder rack capacity. Mounts onto rack side stringer. Post is unthreaded 1/2-in. tube. Kit components are plated steel. Includes post cap and mounting hardware.

Bulletin: DCR

Catalog Number	Finish	Kit Qty.	
LRP	Plated	1	
LRPB	Black	1	

L-Bracket Kit



The L-Bracket Kit supports power or other cables that need to be separated from the main cable run. Made of steel with a painted or plated finish. Mounts onto ladder rack stringer. Includes mounting hardware.

Bulletin: DCR

Catalog Number Finish	Kit Qty.
LLBG Gray	1
LLBB Black	1
LLB Plated	1

Radius Drop Kit



Mounts over ladder rack cross member to provide bending radius when dropping cable. Includes cable spools to separate cable and all mounting hardware. Made of extruded aluminum.

Bulletin: DCR

		Cable	Cable	
		Runway	Runway	Kit
Catalog Number	Finish	Width (in.)	Width(mm)	Qty.
LRD6G	Gray	6.00	152	1
LRD6BLK	Black	6.00	152	1
LRD12G	Gray	12.00	305	1
LRD12BLK	Black	12.00	305	1
LRD18G	Gray	18.00	457	1
LRD18BLK	Black	18.00	457	1
LRD24BLK	Black	24.00	610	1

Stringer Radius Drop Kit

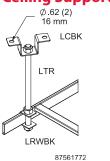


Mounts over ladder rack stringer to provide bending radius when dropping cable. Includes cable spools to separate cable and all mounting hardware. Made of extruded aluminum.

Catalog Number	Finish	Kit Qty.
LSRDG	Gray	1
LSRDBLK	Black	1



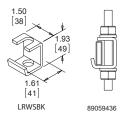
Ceiling Support Kit



Supports ladder rack from ceiling. Components available separately or as a kit. Six-foot-long, 5/8-in. diameter rod is threaded for easy tension adjustment. Made of plated steel. Requires surface mounting hardware (not included).

Bulletin: DCR

			Kit
Catalog Number	Finish	Description	Qty.
LCK	Plated	Kit includes one each:	1
		- LTR Threaded Rod	
		- 5/8-in. nuts (4)	
		- LRWBK Rack Runway Bracket	
		- LCBK Ceiling Bracket	
LTR	Plated	5/8-in. x 6-ft. Threaded Rod	1
LRWBK	Plated	Rack Runway Brackets (10)	1
		5/8-in. nuts (20)	
LRWBKB	Black	Rack Runway Brackets (10)	1
		5/8-in. nuts (20)	
LCBK	Plated	Ceiling Brackets (10)	1
		5/8-in nuts (20)	
LCBKB	Black	Ceiling Brackets (10)	1
		5/8-in nuts (20)	
LRWSBK	Plated	Rack-to-Runway Brackets (10)	1
		Slip-On	
		5/8 in. nuts (2)	
LRWSBKB	Black	Rack-to-Runway Brackets (10)	1
		Slip-On	
		5/8 in. nuts (2)	



Foot Kit



Secures ladder rack to floor, ceiling or wall. Made of steel with a painted or plated finish. One kit secures one ladder rack section. Requires surface mounting hardware (not included).

Bulletin: DCR

Catalog Number	Finish	Kit Qty.	
LFKG	Gray	2	
LFKB	Black	2	
LFK	Plated	2	

Rack-to-Runway Mounting Plate Kit

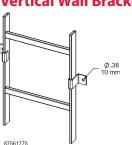


Secures ladder rack to the top of equipment racks. Made of steel with a painted or plated finish. The plate is designed for mounting either parallel or perpendicular to the rack. Includes mounting hardware.

	Fits Ladder	'		
Catalog Number	Width	Finish	Kit Qty.	
LRRMPG	6, 12	Gray	1	
LRRMPBLK	6, 12	Black	1	
LRRMPGZ	6, 12	Plated	1	
LRRMPG18	12, 18	Gray	1	
LRRMPBLK18	12, 18	Black	1	
LRRMPGZ18	12, 18	Plated	1	
LRRMPBLK24	18, 24	Black	1	



Vertical Wall Bracket



Secures ladder rack section to wall or other flat surface. Made of steel with a painted or plated finish. Requires surface mounting hardware (not included).

Bulletin: DCR

Catalog Number	Finish	Kit Qty.	
LVWBG	Gray	2	
LVWBB	Black	2	
LVWB	Plated	2	

Triangle Support Bracket Kit



Supports ladder rack from wall. Bracket is made of steel with painted or plated finish. Brackets have predrilled mounting holes for two sizes of ladder rack. Includes one J-Bolt Kit.

Bulletin: DCR

				Fits Cable	
Catalog Number	A in.	A mm	Finish	Runway	Kit Qty.
LTSB12G	0.00		Gray	6, 12	1
LTSB12BLK	0.00		Black	6, 12	1
LTSB12GZ	0.00		Plated	6, 12	1
LTSB18G	0.00		Gray	12, 18	1
LTSB18BLK	0.00		Black	12, 18	1
LTSB18GZ	0.00		Plated	12, 18	1
LTSB24BLK	24.00	610	Black	12, 18, 24	1

Modular Triangle Support Bracket Kit



Secures and supports ladder rack to wall. Design features three bracket support arms that easily attach to each other with quick-release pins and fold down to ease assembly. Each model accomodates two ladder rack widths. Kit includes one modular bracket assembly, three quick-release pins and two J-bolts with washers and nuts. Bracket made of painted steel with plated hardware.

Bulletin: DCR

		Fits Cable	
Catalog Number	Finish	Runway	Kit Qty.
LMTSB12B	Black	6, 12	1
LMTSB18B	Black	12, 18	1
LMTSB24B	Black	18, 24	1

Wall Angle Support

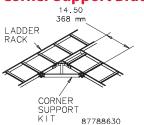


Supports ladder rack from wall or other flat surface. Made of 2-in. x 2-in. 10 gauge steel angle with painted or plated finish. Includes two J-bolts, nuts and screws.

		L	R	S	
Catalog Number	Finish	in./mm	in./mm	in./mm	Kit Qty.
LWASK6G	Gray	8.00	6.00	6.38	1
		203	152	162	
LWASK6BLK	Black	8.00	6.00	6.38	1
		203	152	162	
LWASK6GZ	Plated	8.00	6.00	6.38	1
		203	152	162	
LWASK12G	Gray	14.00	12.00	12.38	1
		356	305	314	
LWASK12BLK	Black	14.00	12.00	12.38	1
		356	305	314	
LWASK12GZ	Plated	14.00	12.00	12.38	1
		356	305	314	
LWASK18G	Gray	20.00	18.00	18.38	1
		508	457	467	
LWASK18BLK	Black	20.00	18.00	18.38	1
		508	457	467	
LWASK18GZ	Plated	20.00	18.00	18.38	1
		508	457	467	
LWASK24BLK	Black	26.00	24.00	24.38	1
		660	610	619	



Corner Support Bracket Kit



Provides additional support for 90-degree ladder rack junction. Made of steel with a painted or plated finish.

Bulletin: DCR

Catalog Number	Finish	Kit Qty.	
LCSKG	Gray	1	
LCSKB	Black	1	
LCSK	Plated	1	

End Cap Kit

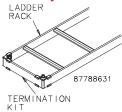


Provides protective covering for ends of ladder rack. Made of black vinyl.

Bulletin: DCR

Catalog Number	Kit Qty.
LEC	2

Runway Termination Kit



Provides a solid termination when the last section of ladder rack ends away from a wall. Made of steel with a painted or plated finish.

Bulletin: DCR

		Fits Cable	
Catalog Number	Finish	Runway	Kit Qty.
LRTK12G	Gray	12	1
LRTK12B	Black	12	1
LRTK12	Plated	12	1
LRTK18G	Gray	18	1
LRTK18B	Black	18	1
LRTK18	Plated	18	1
LRTK24B	Black	24	1

Movable Cross Member

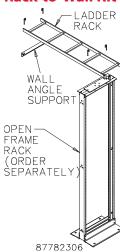


Supports cable at drop locations between welded cross members. Made of steel with a painted or plated finish. For maximum cable protection, use with radius drop kit. Includes hardware for secure mounting to ladder rack stringers.

Bulletin: DCR

				Kit	
Catalog Number	Finish	W (in.)	W (mm)	Qty.	
LMCM12G	Gray	12.00	305	1	
LMCM12BLK	Black	12.00	305	1	
LMCM12GZ	Plated	12.00	305	1	
LMCM18G	Gray	18.00	457	1	
LMCM18BLK	Black	18.00	457	1	
LMCM18GZ	Plated	18.00	457	1	
LMCM24BLK	Black	24.00	610	1	

Rack-to-Wall Kit



Includes one section of straight ladder rack (cULus Classified) and everything needed to fasten the ladder section to an open frame rack and to the wall. Ladder is 54-in. (1372-mm) long by 12-in. (305-mm) wide. All parts have a black painted finish. Order open frame rack separately.

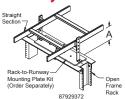
Bulletin: DOFR2

Catalog Number	Description
E45RUBKIT	Each Rack-to-Wall Kit includes one:
	- LSS12BLK [54-in. (1372-mm) long] Ladder Rack*
	- LWASK12BLK Wall Angle Support with j-bolts
	- LRRMPBLK Rack-to-Runway Mounting Kit
	- LEC End Cap Kit

^{*} Ladder Rack is cULus Classified



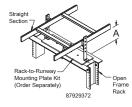
Runway Elevation Kit



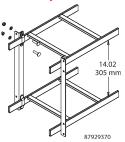
Elevates ladder rack 3 or 6 in. (76 or 152 mm) above rack-to-ladder mounting plate. Use on any width ladder rack. Kit includes two brackets and all mounting hardware. Made of heavy plated steel.

Bulletin: DCR

Catalog Number	A (in.)	A (mm)	Finish	Kit Qty.
LEK3	3.00	76	Plated	1
LEK3B	3.00	76	Black	1
LEK6	6.00	152	Plated	1
LEK6B	6.00	152	Black	1
LEK12	12.00	305	Plated	1
LEK12B	12.00	305	Black	1



Runway Overhead 12-in. Stack Kit



Allows stacking any width of ladder rack runways 12 in. (305 mm) above each other. Each kit contains two complete stacking brackets with all necessary hardware. Use one kit at least every 5 ft. (1.5 m). Brackets and fasteners made of plated steel.

Bulletin: DCR

Catalog Number	Finish	Includes	Kit Qty.
LST12	Plated	2 brackets and hardware	1
LST12B	Black	2 brackets and hardware	1

Runway Center Support Kit

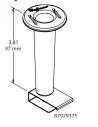


Threaded rod and bracket supports center of ladder rack from ceiling. Kit includes heavy-duty ladder rack cross member, 5/8-in. threaded rod, two J-bolts, protected sleeve and 5/8-in. nut. Use one kit at least every 5 ft. (1.5 m). Made of plated steel.

Bulletin: DCR

		rits Cable		
Catalog Number	Finish	Runway	Kit Qty.	
LCSK6	Plated	6	1	
LCSK12	Plated	12	1	
LCSK18	Plated	18	1	
LCSK24	Plated	24	1	

Spool Divider Kit



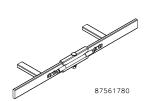
Spools separate cables to improve cable management and to control cable-to-cable distances. Spool and bracket attach to ladder rack cross member and can be located anywhere across the width. Kit includes ten 4-in.-tall spools, brackets and all necessary hardware. Spool made of black plastic and bracket made of plated steel.

Catalog Number	Finish	Kit Includes
LCRDSK	Black plastic spool;	10 spools,
	plated steel bracket	10 brackets and
		mounting hardware



Insulated Ground Jumper Kit





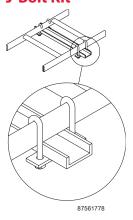
Fastens across splices to provide a secure ground between sections of ladder rack. Made of #6 AWG x 7 strand wire with green THW insulation and two-hole compression lugs mounted on each end. Includes fasteners.

Bulletin: DBG

		L	
Catalog Number	Conductor Type	in./mm	
DGJ	#6-7 Stranded	12.00	
		305	

cULus requires 2 kits per splice on all painted ladder sections

J-Bolt Kit



Connects ladder rack to top of cabinet or to auxiliary support channel. Each kit includes two sizes of J-bolts and makes one support connection. Kit components are plated steel. Includes mounting hardware.

Each kit contains:

- (2) J-Bolts, 5/16 in.
- (2) Nuts, 5/16 in.
- (2) Washers, 5/16 in.
- (2) Lock Washers, 5/16 in.
- (2) Plates

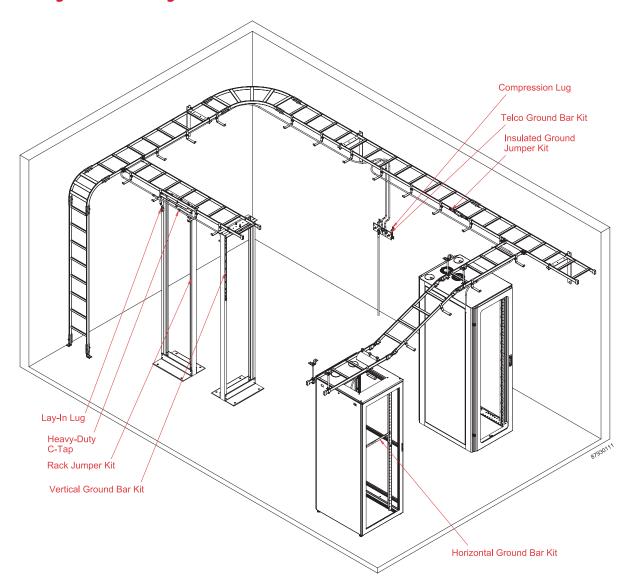
Catalog Number	J (in.)	J (mm)	Finish
LJBK	3.5	89	Plated
LJBK5	5.00	127	Plated
LJBK6	6.00	152	Plated
LJBK7	7.00	178	Plated





Bonding and Grounding Accessories

Bonding and Grounding Overview



Industry Standards

Ground Bar Kits:

UL 467 Listed cUL Listed per CSA C22.2 No. 41 File No. E319377

Application

These components meet open frame rack and cabinet bonding and grounding requirements for telecommunication room and data center applications.

Features

- Components specially designed to efficiently facilitate reliable connections
- Enable system to meet equipment manufacturer grounding requirements
- Components fit EIA 310-D-rated open frame racks

Networking: Cable Runway System / Bonding and Grounding

Bonding and Grounding Accessories

Dual-rated, UL486B listed lay-in lug bonds end of cable securely to rack. Made of electroplated 6061-T6 aluminum. Requires 3/16-in. hex key (not included).

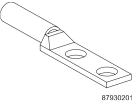
Bulletin: DBG

	For Cable			
Catalog Number	Size Range	Size (in.)	Size (mm)	Pkg. Qty.
DGLG	#14 AWG to 2/0	1.75 x 1.50	44 x 38	10

Lay-In Lug



Compression Lugs



Compression lugs terminate copper or tinned-copper conductors for connection to busbars, cabinets, racks, and cable runway. Colorcoded by conductor size. Made of electroplated, tinned copper. Require two screws (not included).

Bulletin: DBG

Catalon Number	Cable Size	On-Center Dimension Between Holes	Required Screw Size	Color Code	Pkg.
Catalog Number DGCL61	(#) 6	.625	1/4	Blue	Qty.
DGCL62	6	1.00	3/8	Blue	10
DGCL21	2	.625	1/4	Brown	10
DGCL22	2	1.00	3/8	Brown	10
DGCL201	2/0	1.00	3/8	Black	10
DGCL402	4/0	1.00	3/8	Purple	10

Heavy-Duty C-Taps



C-Taps splice two stranded or solid connectors together. Made of copper. Require a crimping tool (not included) to correctly tighten C-Taps around connectors.

Bulletin: DBG

Catalog Number	Conductor Run	Conductor Tap	Pkg. Qty.
DGT1	#2 stranded or solid	#4 stranded, #8 solid	10
DGT2	#2 stranded or solid	#2 stranded or solid	10

Telecommunications Ground Bar Kits

Provide a convenient central location for connecting grounds from telecommunications equipment, computers, and other data center equipment. Made of copper. Kits include ground bar with two mounting brackets, an assortment of connectors, and a tube of antioxidant.

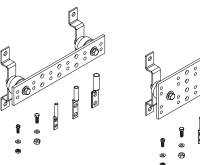
Bulletin: DBG

Standard Product

	Bar Size	No. of 5/16-in.	No. of 7/16-in.
Catalog Number	in./mm	Hole Sets	Hole Sets
DGTB212	2.00 x 12.00 x .25	6	3
	51 x 305 x 6		
DGTB216	2.00 x 16.00 x .25	8	3
	51 x 406 x 6		
DGTB412	4.00 x 12.00 x .25	12	6
	102 x 305 x 6		
DGTB420	4.00 x 20.00 x .25	24	6
	102 x 508 x 6		

2-in wide bar

4-in wide bar



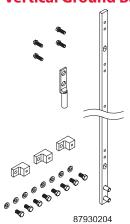


Number and Style of Compression Lugs Included with **Ground Bar Kits**

Catalog Number	#6 Wire Size (DGCL61)	#2 Wire Size (DGCL22)	#2/0 Wire Size (DGCL201)	#4/0 Wire Size (DGCL402)
DGTB212	6 lugs	3 lugs	1 lug	0
DGTB216	6 lugs	3 lugs	1 lug	0
DGTB412	6 lugs	3 lugs	1 lug	1 lug
DGTB420	6 lugs	3 lugs	1 lug	1 lug



Vertical Ground Bar Kits



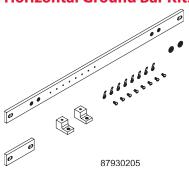
Bonding and Grounding Accessories

Mount vertically on rack, providing a convenient place to connect equipment grounds. Made of electrolytic tough-pitch 110 copper alloy. Kits include ground bar with compression lug for #2 wire, connection hardware, and mounting hardware.

Bulletin: DBG

Catalog Number	Bar Size (in.)	Bar Size (mm)
DG36	36.00 x .625 x .25	914 x 16 x 6
DG72	72.00 x .625 x .25	1829 x 16 x 6

Horizontal Ground Bar Kits

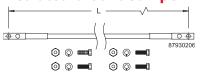


Mount horizontally on rack, providing a convenient place to connect equipment grounds. Made of electrolytic tough-pitch 110 copper alloy. Kits include ground bar with mounting hardware, eight #6-32 x 14 machine screws, and eight #6 ring terminals.

Bulletin: DBG

Catalog Number	Bar Size (in.)	Bar Size (mm)
DG19	1.00 x 19.25 x .25	25 x 489 x 6
DG23	1.00 x 23.25 x .25	25 x 591 x 6

Insulated Ground Jumper Kit



Fastens across splices to provide a secure ground between sections of ladder rack. Made of #6 AWG x 7 strand wire with green THW insulation and two-hole compression lugs mounted on each end. Includes fasteners.

Bulletin: DBG

Catalog Number	Conductor Type	L (in.)	L (mm)	
DGJ	#6-7 Stranded	12.00	305	

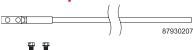
cULus requires 2 kits per splice on all painted ladder sections

Grounds rack or cabinet to common bonding network under floor or overhead. Made of #6 AWG x 7 strand wire with green THW insulation and two-hole compression lug mounted on one end. Includes fasteners.

Bulletin: DBG

Catalog Number	Conductor Type	Length (ft.)	Length (m)
DGRJ	#6-7 stranded	9	2.7

Rack Jumper Kit







Bonding and Grounding Accessories

Notes