



VPN: ISBXL

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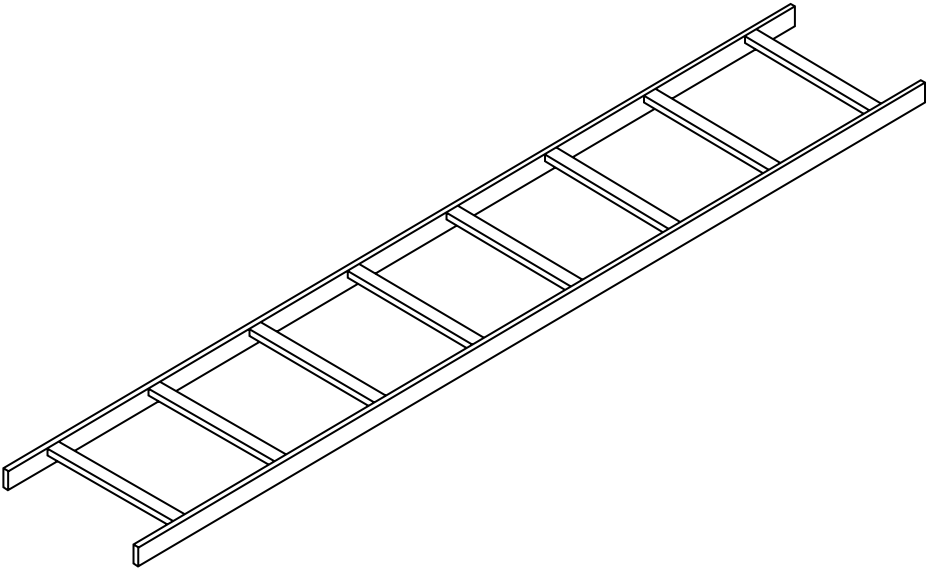
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1000 Park Drive • Lawrence, PA 15055-1018 • 724-746-5500 • Fax 724-746-0746



RM649-R2	RM657	RM664	RM861
RM650	RM658-R2	RM665-R2	RM862
RM651	RM659-R2	RM666	RM863
RM652	RM660	RM667-R2	RM864
RM653-R2	RM661	RM668	RM865
RM654-R2	RM662	RM669-R2	RM866
RM655	RM663	RM860	RM867
RM656			

## Ladder Racks and Accessories



**CUSTOMER  
SUPPORT  
INFORMATION**

Order toll-free in the U.S.: Call **877-877-BBOX** (outside U.S. call **724-746-5500**)  
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Mailing address: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018  
Web site: [www.blackbox.com](http://www.blackbox.com) • E-mail: [info@blackbox.com](mailto:info@blackbox.com)



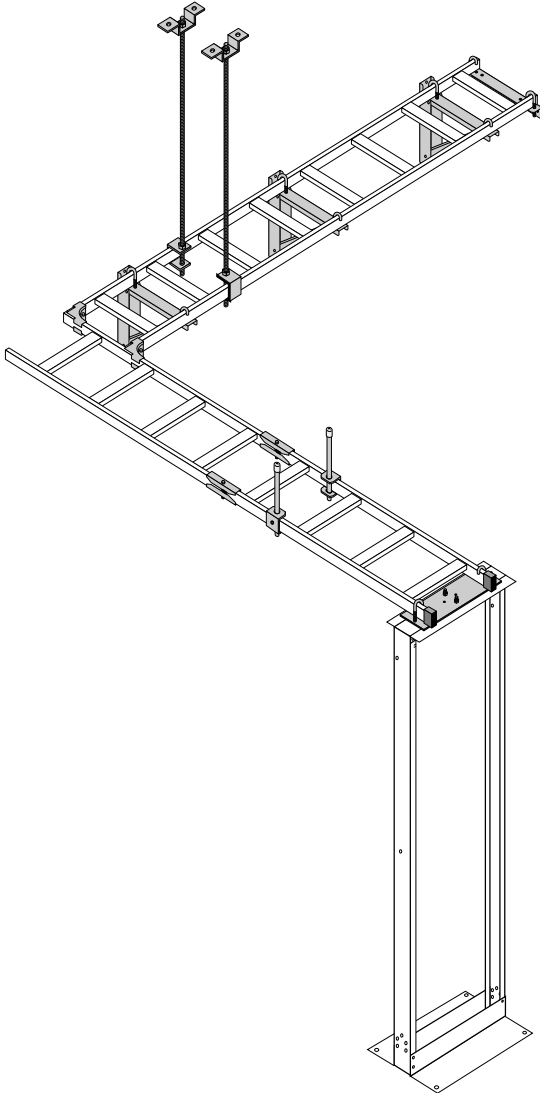
### TRADEMARKS USED IN THIS MANUAL

UL is a registered trademark of Underwriters Laboratories Inc.

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## LADDER RACKS AND ACCESSORIES

Ladder Racks and their accessories are designed to route and manage data cables, computer cables, communication cables, and wiring in new or existing buildings. The Ladder Racks are fabricated from seamless tubular steel and are mig-welded to assure the strength and durability for the life of an installation. When used with its accessories, the Ladder Rack is the total solution to cable management for ceilings, walls, computer rooms, and wiring closets.



**Available Models**

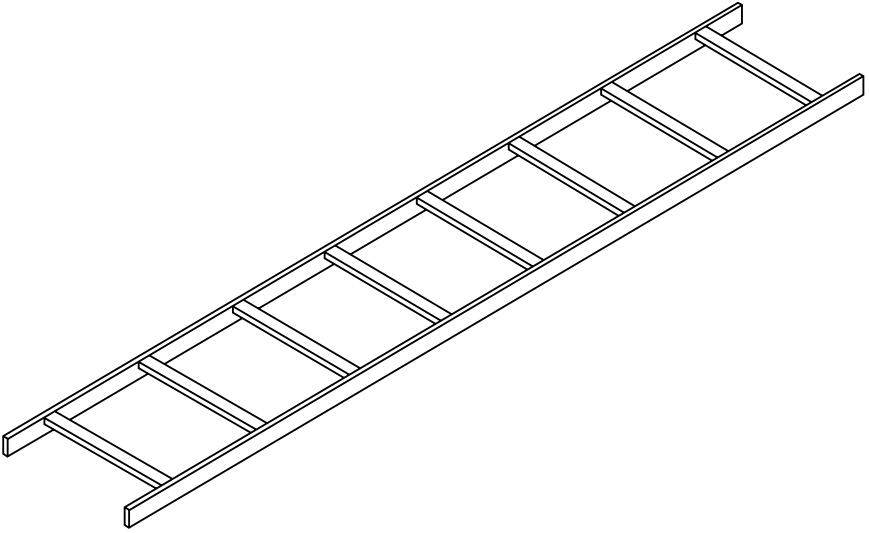
Ladder Racks and accessories are available in either black or gray. Models include:

Black Ladder Rack 6 x 12 (RM650)  
Gray Ladder Rack 6 x 12 (RM663)  
Black Ladder Rack 10 x 12 (RM651)  
Gray Ladder Rack 10 x 12 (RM664)  
Black Ladder Rack-to-Runway Mounting Plate (RM653-R2)  
Gray Ladder Rack-to-Runway Mounting Plate (RM665-R2)  
Black Ladder Rack Cable Runway Radius (RM652)  
Gray Ladder Rack Cable Runway Radius (RM666)  
Black Ladder Rack Triangular Support Brackets (RM654-R2)  
Gray Ladder Rack Triangular Support Brackets (RM667-R2)  
Black Ladder Wall-Angle Rack Support Brackets (RM655)  
Gray Ladder Wall-Angle Rack Support Brackets (RM668)  
Black Ladder Rack Cable Retaining Post (RM658-R2)  
Gray Ladder Rack Cable Retaining Post (RM669-R2)  
90° Junction Splice (RM656)  
Butt Splice (RM657)  
Threaded Ceiling Kit (RM659-R2) and Threaded Rod (RM660)  
End Cap Kit (RM661)  
J-Bolt Kit (RM662)  
Foot Kit for Ladder Rack (RM649-R2)  
Vertical Wall Bracket (RM860)  
Adjustable Butt-Splice Kit (RM861)  
Adjustable Junction Splice Kit (RM862)  
Gray Stringer Radius Drop Kit (RM863)  
Black Stringer Radius Drop Kit (RM864)  
Grounding Kit (RM865)  
Gray Radius Drop Kit (RM866)  
Black Radius Drop Kit (RM867)

## LADDER RACKS AND ACCESSORIES

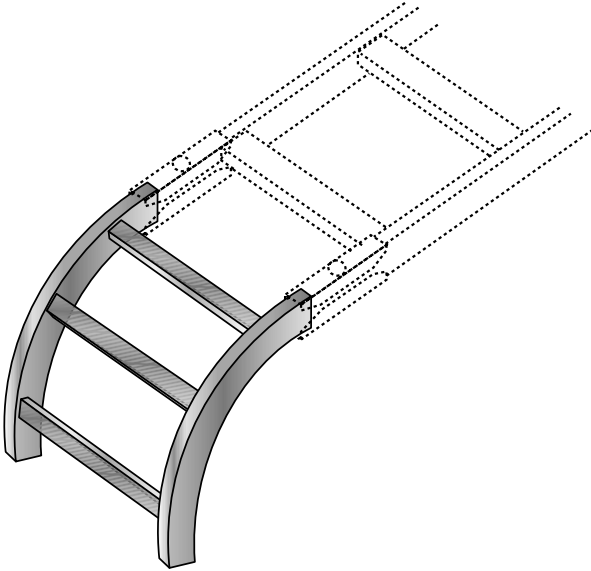
### Ladder Racks (RM650, RM663, RM651, RM664)

The Ladder Rack is available in two sizes (6' x 12" or 10' x 12") and two colors (black and gray). The side rails are made of  $\frac{3}{8}$ " x  $1\frac{1}{2}$ " tubing; stringers are made of  $\frac{1}{2}$ " x 1" tubing. The RM650 and RM663 are 71" long; RM651 and RM664 are 119.5" long. Both models have an inside width of 11.25" and an outside width of 12".



### Cable Runway Radius (RM652, RM666)

The Cable Runway Radius creates a smooth, gradual bend for cable placement where a 90° run is required. See the illustration below to see how it looks when attached to the Ladder Rack. In order to attach the Cable Runway Radius to the Ladder Rack, you'll need to use the Butt Splice (RM657).

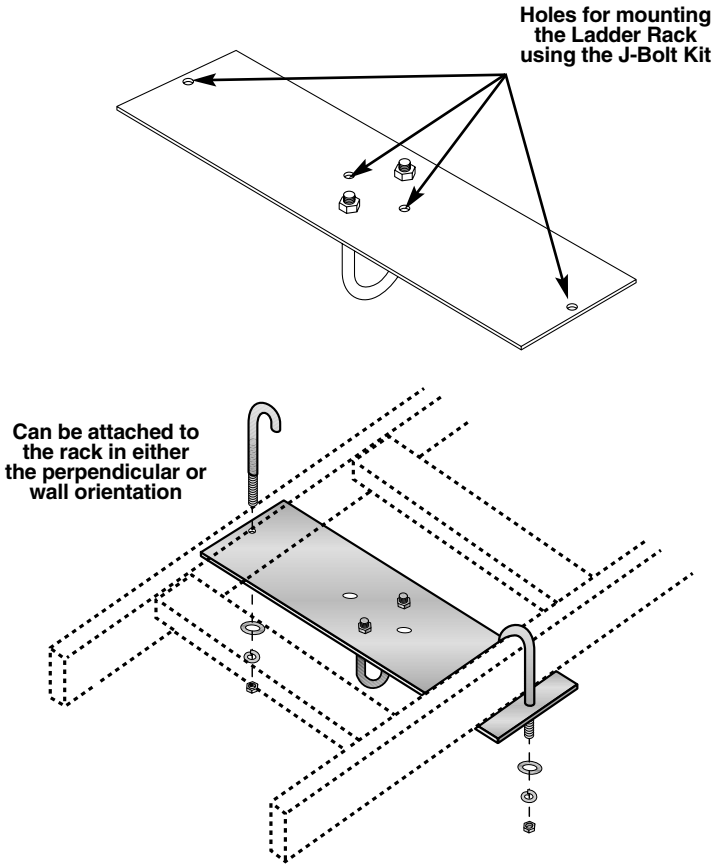


The Radius is constructed of  $\frac{3}{8}$ " x  $1\frac{1}{2}$ " tubular steel. It has an outside corner bend width of 12" and a 33° angle between stringers.



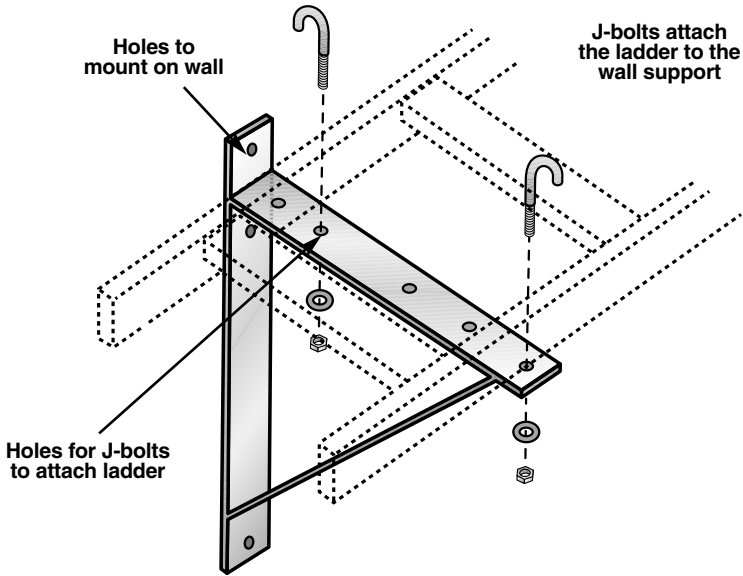
## Rack-to-Runway Mounting Plate (RM653-R2, RM665-R2)

This is a universal mounting plate used to secure the Ladder Rack to the top of equipment racks. It can be mounted either parallel or perpendicular. The illustration below shows how to attach the mounting plate to the Ladder Rack with J-bolts and hex nuts. (Each mounting plate comes with four  $\frac{5}{16}$ "-18 x  $2\frac{1}{4}$ " J-bolts and four  $\frac{3}{8}$ "-18 hex nuts with attached lockwashers.) Mounting-plate dimensions are 19"W x 5.375"L.



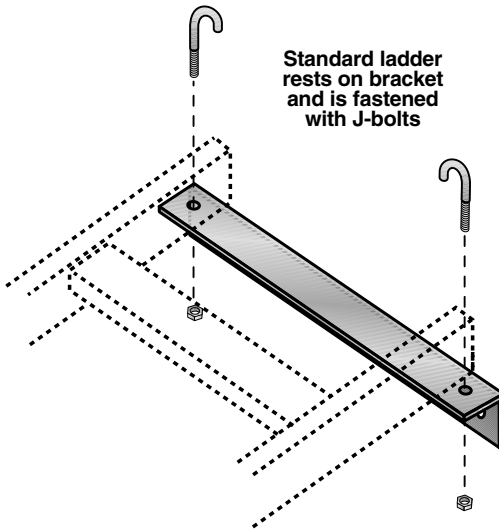
**Triangular Support Bracket (RM654-R2, RM667-R2)**

The Triangular Support Bracket provides parallel wall support for the Ladder Rack. It's 12" wide and attaches to the Ladder Rack with two  $\frac{5}{16}$ "-18 x  $2\frac{1}{4}$ " J-bolts and two  $\frac{5}{16}$ "-18 hex nuts with attached lockwashers.



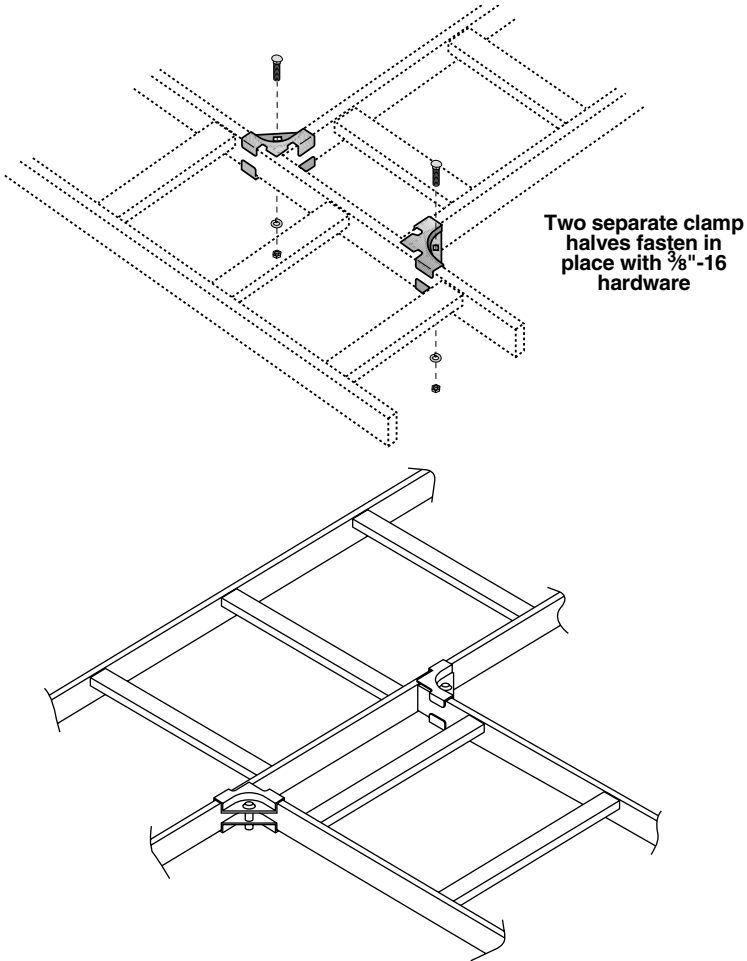
### Wall-Angle Rack Support Bracket (RM655, RM668)

This bracket provides perpendicular wall support for the Ladder Rack. It comes with two  $\frac{3}{16}$ "-18 x 2 $\frac{1}{4}$ " J-bolts and two  $\frac{3}{16}$ "-18 hex nuts with attached lockwasher. Bracket dimensions are 2" x 2" x  $\frac{3}{16}$ ". The illustration below shows how to attach it to the Ladder Rack.



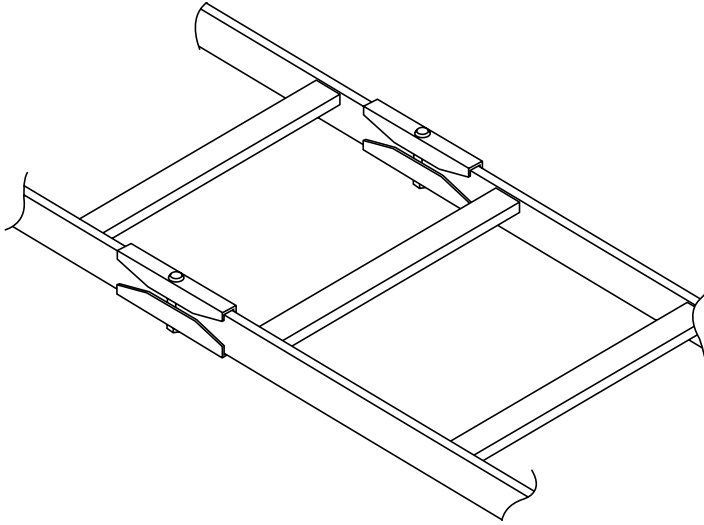
**90° Junction Splice (RM656)**

Use this splice to complete a right-angle Ladder Rack “T” (90°) junction (see the illustration below). Everything you need to make a splice is included: four corner clamp latches, two  $\frac{3}{8}$ "-16 x 1 $\frac{3}{8}$ " round head square neck bolts, two  $\frac{3}{8}$ "-16 hex nuts, and two split lockwashers.

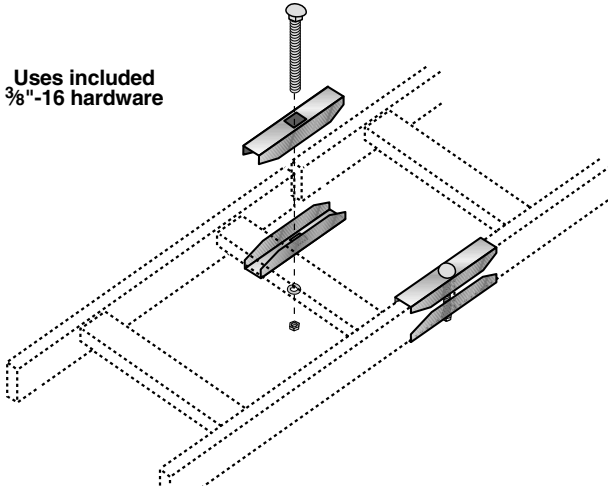


### Butt Splice (RM657)

The Butt Splice joins Ladder Racks end to end to form a continuous extended runway. It includes four splice plates, two  $\frac{3}{8}$ "-16 trimmed head bolts, two  $\frac{3}{8}$ "-16 hex nuts, and two split lockwashers.

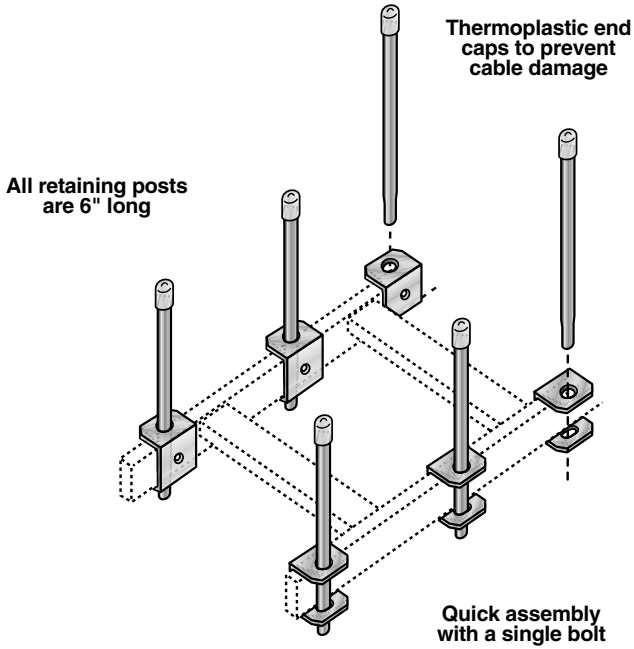


Uses included  
 $\frac{3}{8}$ "-16 hardware



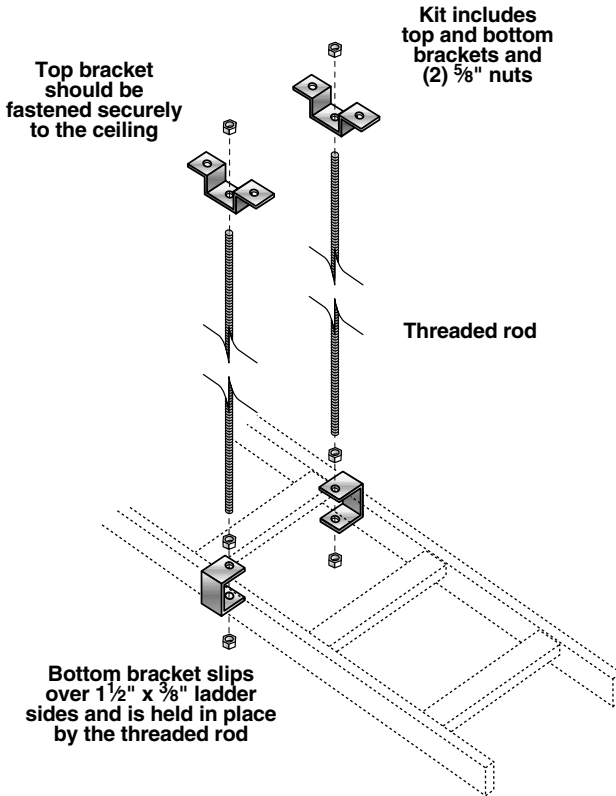
**Cable Retaining Post (RM658-R2, RM669-R2)**

Cable Retaining Posts mount on the Ladder-Rack-side stringers to form side legs for cable retention. The post extends 6" above the top of the Ladder Rack. Each post comes with one post, one bracket, one end cap, and one 1/4"-20" x 1" hex capscrew and hex nut with attached lockwasher.



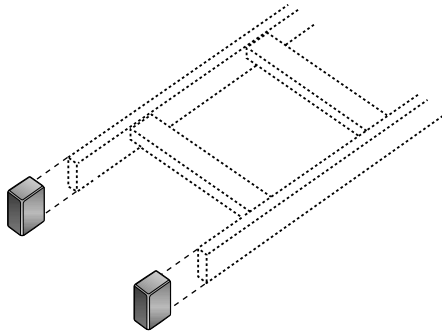
## Threaded Ceiling Kit (RM659-R2) and Threaded Rod (RM660)

These accessories are used to suspend the Ladder Rack from the ceiling. We recommend leaving a 5-foot space between kits. Since the Threaded Ceiling Kit contains brackets and nuts only, you'll need to use it with the Threaded Rods.

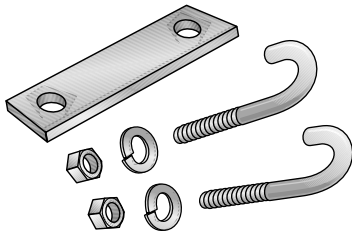


**End Cap Kit (RM661)**

End caps protect and cover the exposed ends of the Ladder Rack. They reduce the chance of cable damage or personal injury. Each Kit contains two end caps.

**J-Bolt Kit (RM662)**

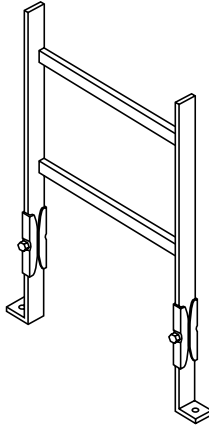
Use J-bolts to attach the Ladder Rack to the Wall-Angle Rack Support Bracket (RM655). This kit contains two  $\frac{5}{16}$ "-18 x 2 $\frac{1}{4}$ " J-bolts and two  $\frac{5}{16}$ "-18 hex nuts with attached lockwashers.





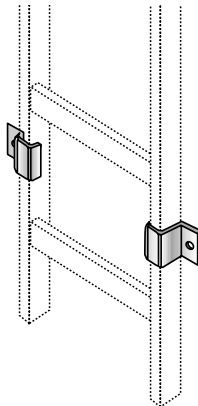
### Foot Kit for Ladder Rack (RM649-R2)

Use this kit to secure the Ladder Rack to a wall or floor of a computer room, wiring closet, or data center. The foot kit brackets are attached to the Ladder Rack and then can be bolted in the location you choose. Everything you need to attach the foot kit to the Ladder Rack is included: two feet, four splice plates, and two trimmed head square neck bolts and nuts. Note that this kit does not include hardware for attaching to the floor or wall.



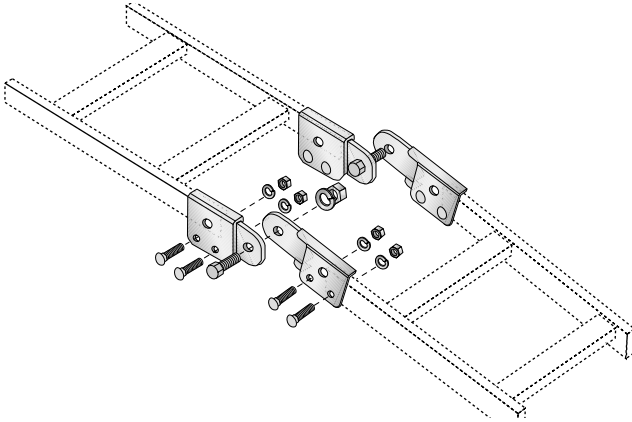
### Vertical Wall Bracket (RM860)

Use this bracket to secure the Ladder Rack section to a wall or other flat surface. The bracket includes two pieces that are made of zinc-plated steel. Surface-mounting hardware is not included.



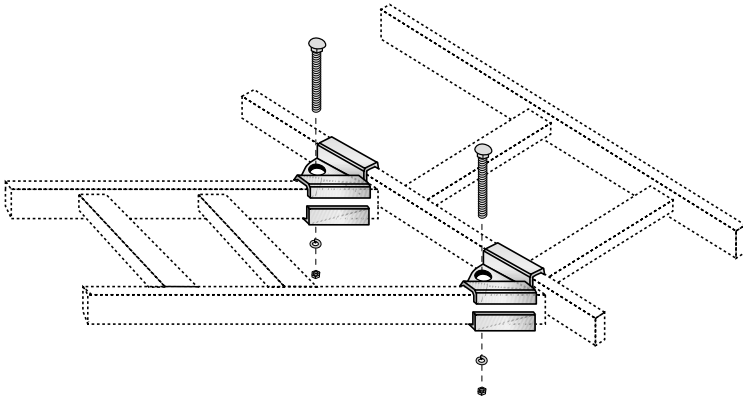
### Adjustable Butt-Splice Kit (RM861)

Provides a change in up-and-down direction of the cable runway. It can be adjusted to any angle from 0 to 90°. Each kit connects one Ladder Rack section to another. Kit components are zinc-plated steel. Includes mounting hardware. The Adjustable Butt-Splice Kit is UL® classified.



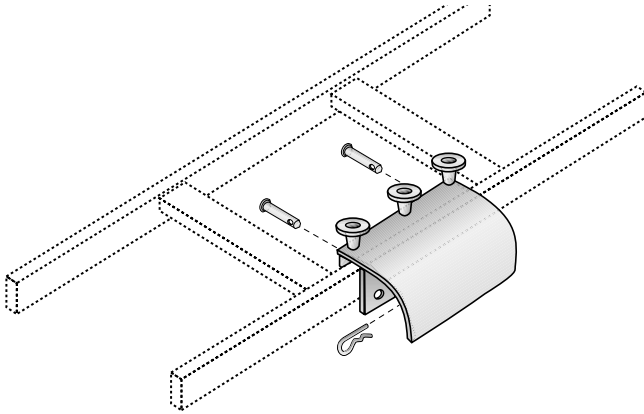
### Adjustable Junction Splice Kit (RM862)

Connects two Ladder Rack sections at any junction angle. Each kit connects one section to another. Kit components are zinc-plated steel. Includes mounting hardware.



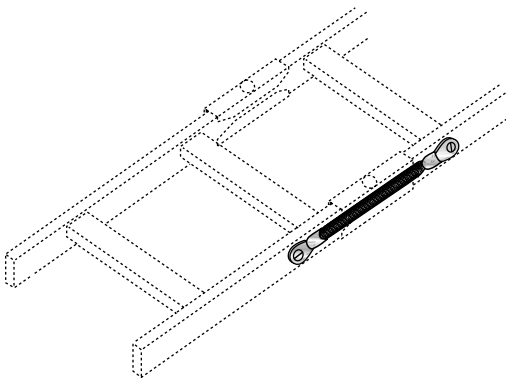
### Stringer Radius Drop Kit (RM863, RM864)

The Stringer Radius Drop Kit mounts over the Ladder Rack stringer to provide bending radius when dropping cable. It includes cable spools to separate cable and all mounting hardware. Made of extruded hardware.



### Grounding Kit (RM865)

An 8" braided copper grounding strap provides continuous ground across Ladder Rack splices. Use one for every two Ladder Rack sections. This requires drilling mounting screw holes in Ladder Rack stringers. The Grounding Kit includes mounting hardware.



**Radius Drop Kit (RM866, RM867)**

The Radius Drop Kit mounts over the Ladder Rack cross member to provide bending radius when dropping cable. It includes cable spools to separate cable and all mounting hardware. Made of extruded aluminum.

