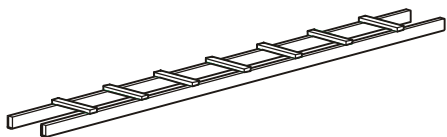


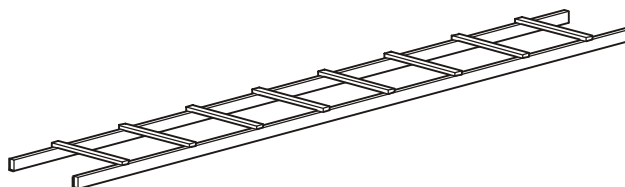
Cable Ladders with Troughs and Partitions

Follow these instructions to install Cable Ladders on NetShelter® VX Enclosures that have APC Shielding Trough and Shielding Partitions installed. Use Cable Ladders to route power and data cables across aisles or between enclosures.

Inventory

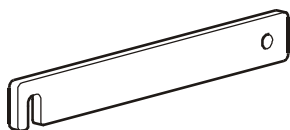


Cable Ladder (6 in; 15 cm)
AR8164AKIT

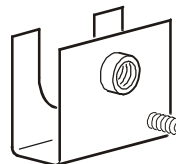


Cable Ladder (12 in; 30 cm)
AR8165AKIT

Ladder bracket kit for troughs and partitions—AR8166ABLK



Adapter bracket (4)



Grounding bracket (2)



8-inch ground strap



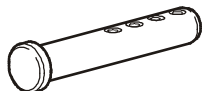
M8 × 16 millimeter hex bolt (2)



M6 lock washer (4)



M6 flanged hex nut (2)

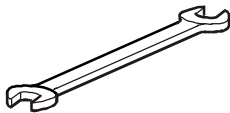


3/16 inch × 1-1/2 inch adjustable clevis pin (4)

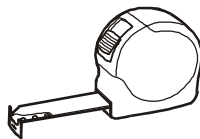


Cotter pin (4)

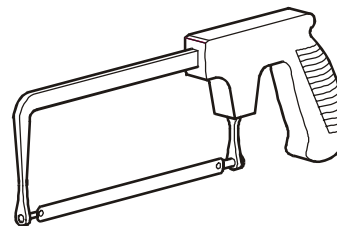
Tools required (not provided)



Wrench with
10- and 13-mm ends



Tape measure

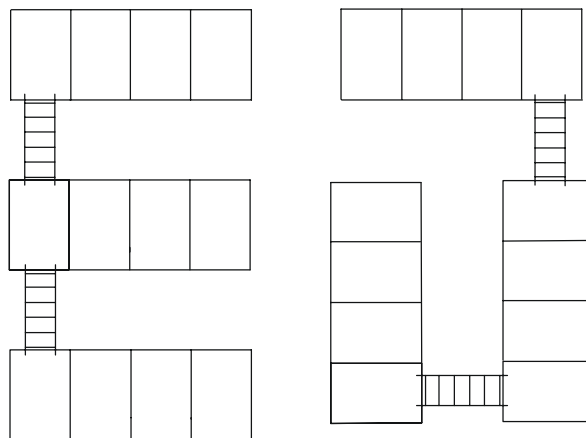


Hack saw

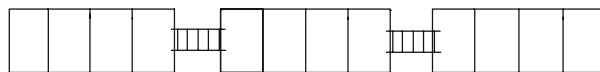
Configurations

Ladders can support any of several physical configurations of enclosures. See the specifications for your system for detailed requirements, including minimum clearances and the maximum number of enclosures supported. The following are some sample configuration illustrations:

- Ladders may be used to span aisles between rows of enclosures.



- Ladders may be used to span gaps between sets of enclosures along a single row.



Before installation

1. If necessary, cut the ladders to the length you need, using any tool that will cut metal without crushing or bending it. Cut each ladder to a length approximately 2 inches (5.1 cm) longer than the width of the aisles that it will span.



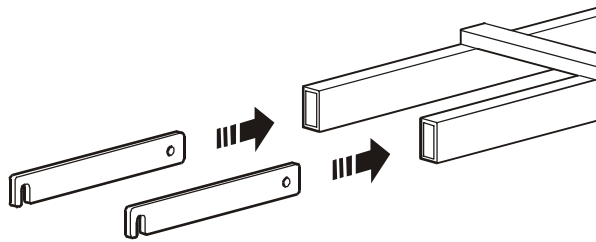
Caution

Avoid touching the ends of the ladder rails after you cut them. The ends may be sharp enough to cause injury.

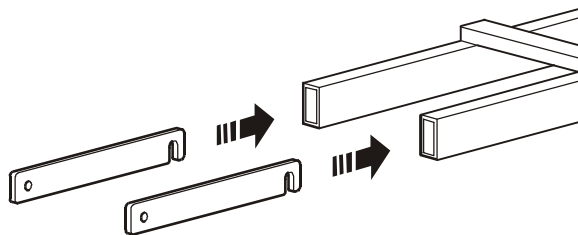
You can make all other necessary adjustments to the ladder length by changing how far you insert the hooks into the rails in step 2.

2. For cable ladder placement:

Between rows: insert adapter brackets into the ends of each ladder. Make sure the rungs are on the top of the ladder, and that the hook ends of each adapter bracket face downward.

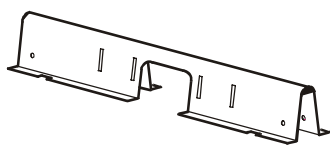


Between aisles: insert hook end of adapter brackets into the ends of each ladder. Make sure the rungs are on the top of the ladder

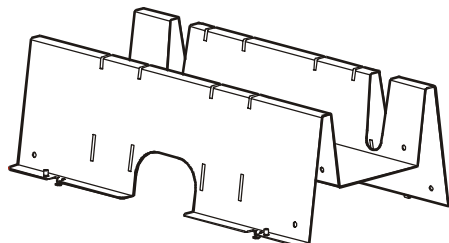


12-inch Cable Ladder placement between rows

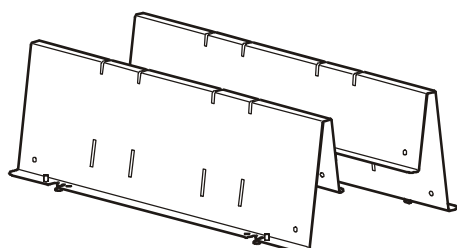
There are four different rooftop Shielding Troughs and Shielding Partitions available from APC that will accept the 12-inch ladder.



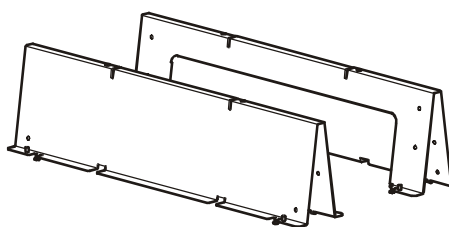
Pass-Through Shielding Partition
AR8163ABLK or AR8173BLK



NetShelter Shielding Trough
AR8161ABLK or AR8171BLK
two placement positions

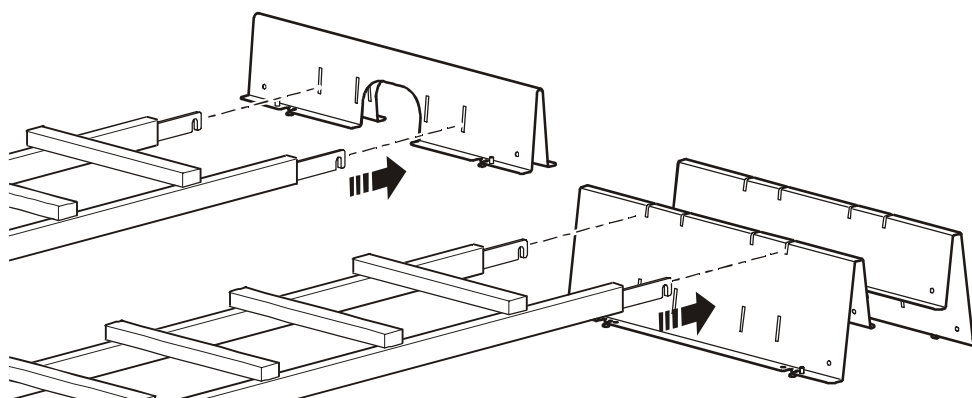


40 kW PDU Shielding Trough
AR8160ABLK
two placement positions



80 kW PDU Shielding Trough (2 pieces)
AR8178BLK

Insert the hook ends of the adapter brackets into the outermost slots on a Shielding Trough or Shielding Partition. Make sure that the slot of each hook end slides down and engages the Shielding Trough or Shielding Partition completely. Then adjust the ladder for length and insert the hook ends at the other end of the ladder into the Shielding Trough of the enclosure on the other side of the aisle.



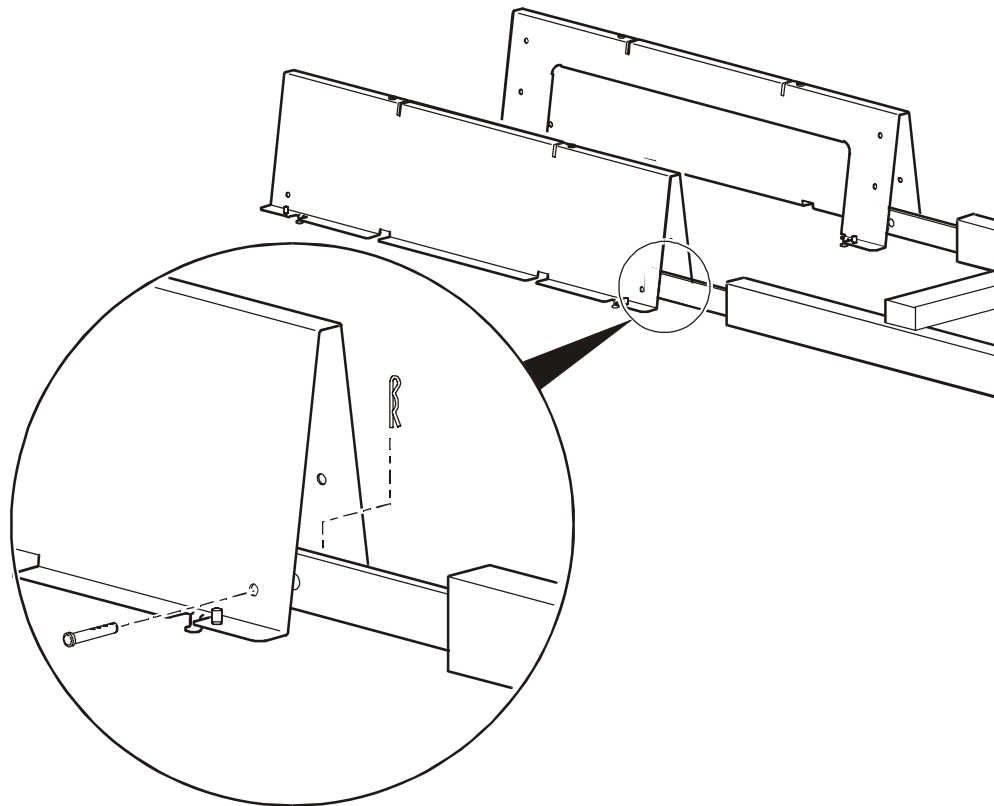
12-inch Cable Ladder placement between aisles



You can place a 12-inch Cable Ladder between aisles using any Shielding Trough or Shielding Partition.

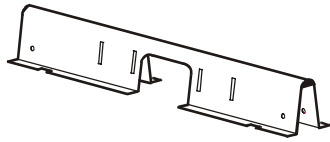
Note

1. Position the hole in the adapter bracket to line up with the end holes in the Shielding Trough or Shielding Partition.
2. Insert an adjustable clevis pin through the outside hole of the Shielding Trough or Shielding Partition, then through the adapter bracket.
3. Insert a cotter pin through a hole in the clevis pin to secure the clevis pin.
4. Repeat steps 1–3 for the each adapter bracket end.

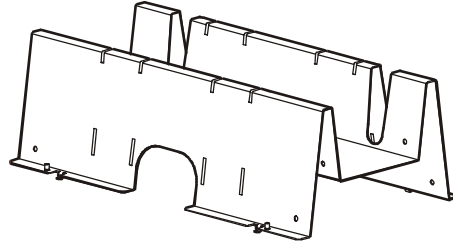


6-inch Cable Ladder placement between rows

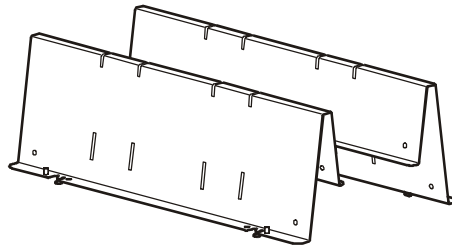
There are three different Shielding Troughs and Shielding Partitions available that will accept the 6-inch ladder.



Pass-Through Shielding Partition
AR8163ABLK or AR8173BLK

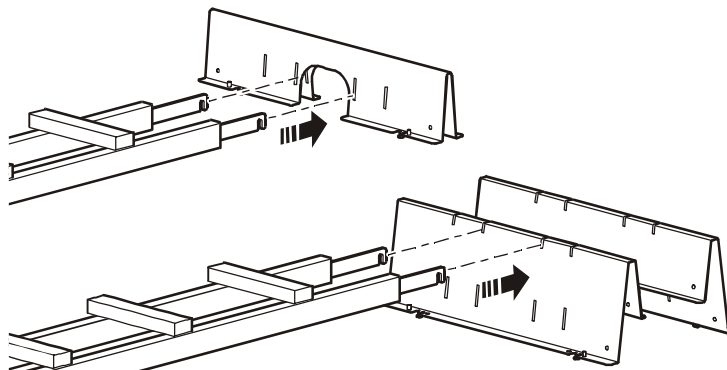


NetShelter Shielding Trough
AR8161ABLK or AR8171BLK
two placement positions



40kW PDU Shielding Trough
AR8160ABLK
two placement positions

Insert the hook ends of the adapter brackets into the outermost slots on a Shielding Trough or Shielding Partiton. Make sure that the slot of each hook end slides down and engages the Shielding Trough or Shielding Partition completely. Then adjust the ladder for length and insert the hook ends at the other end of the ladder into the Shielding Trough of the enclosure on the other side of the aisle.



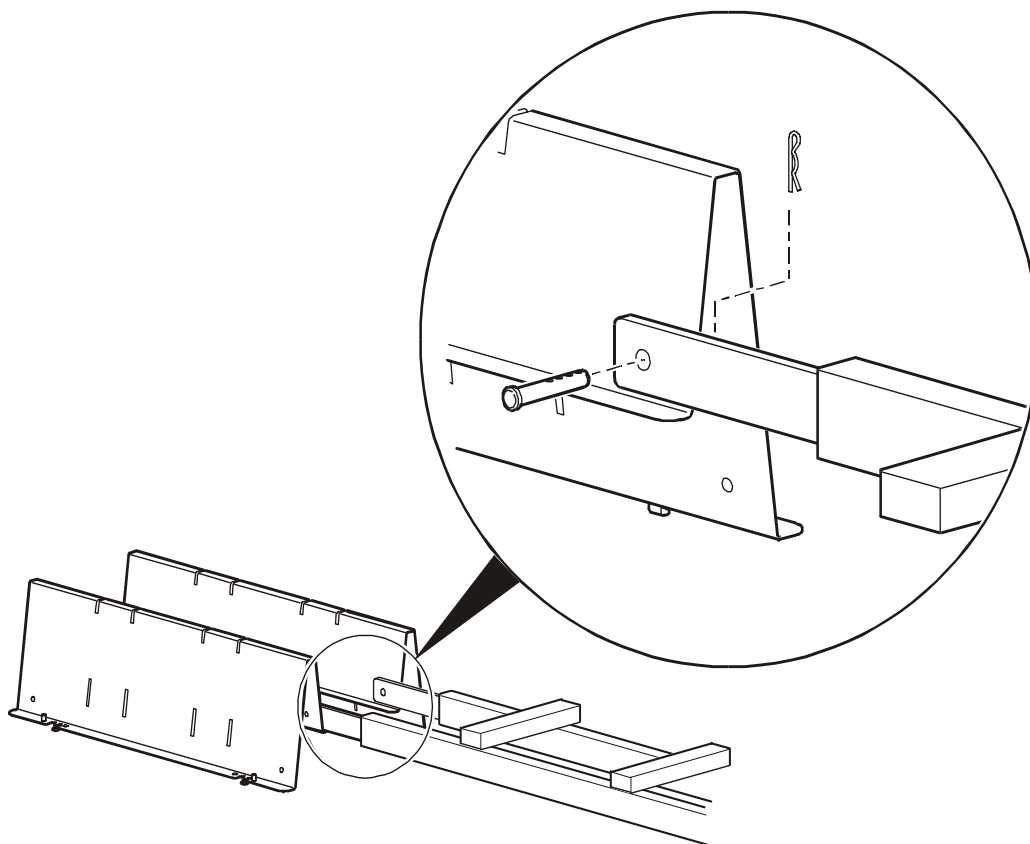
6-inch Cable Ladder placement between aisles



Note

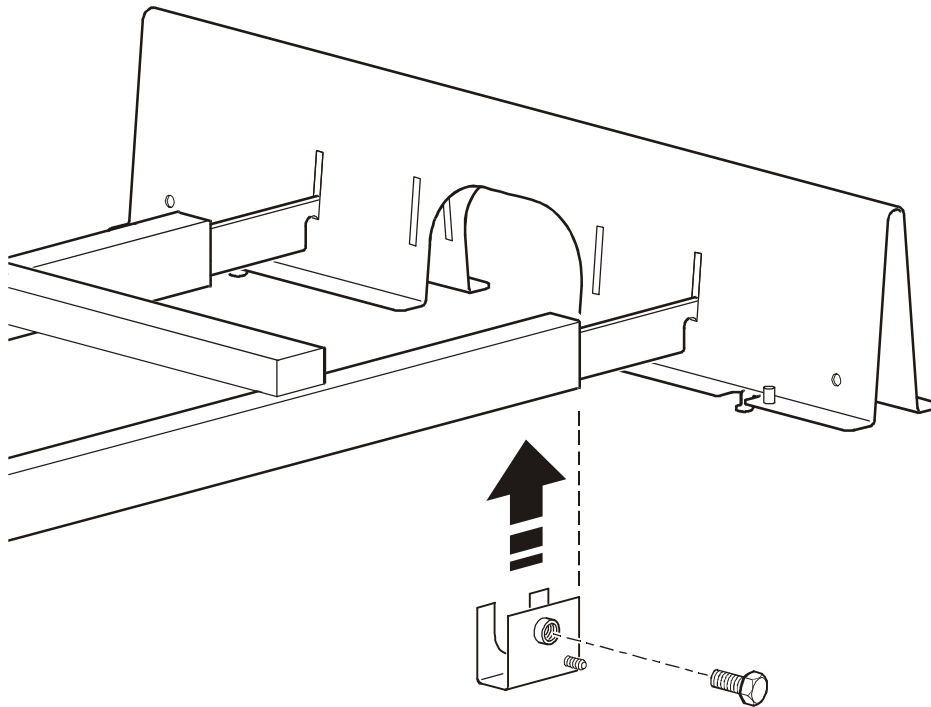
You can place a 6-inch Cable Ladder between aisles using any Shielding Trough or Shielding Partition.

1. Align the hole in the adapter brackets with the end holes in the Shielding Trough or Shielding Partition.
2. Insert an adjustable clevis pin through the hole in the adapter bracket, then through the hole of the Shielding Trough or Shielding Partition.
3. Insert a cotter pin through a hole in the clevis pin to secure the clevis pin.
4. Repeat steps 1–3 for the each adapter bracket end.

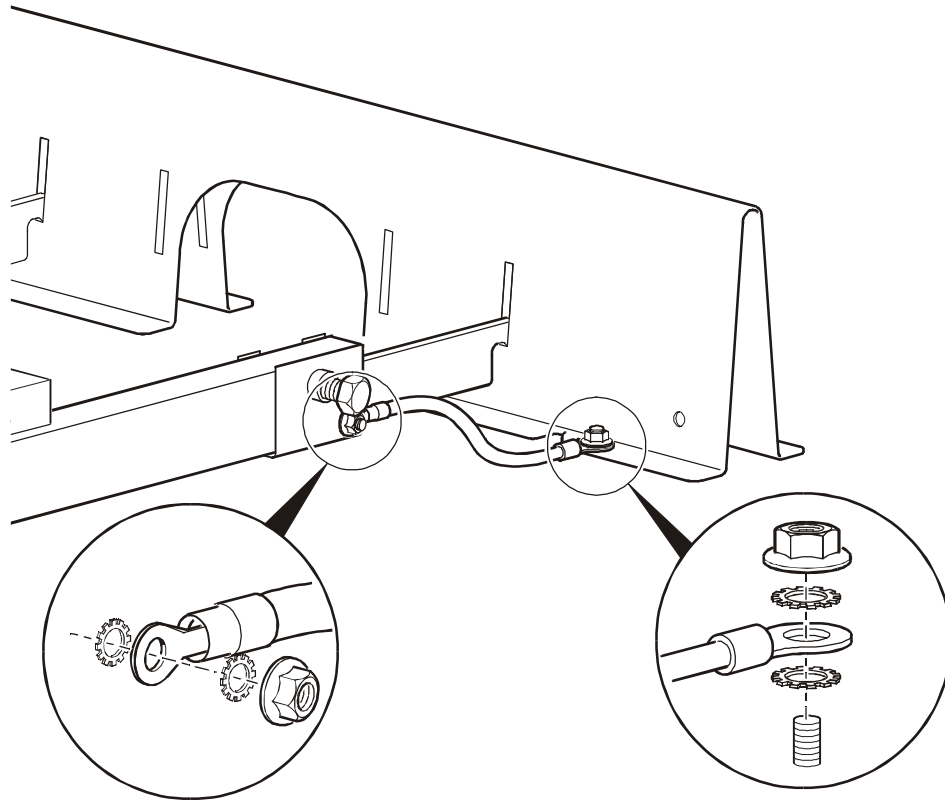


Cable Ladder grounding between rows

1. Attach a grounding bracket to the end of the Cable Ladder leg closest to a grounding stud on a Shielding Trough or Shielding Partition, using an M8 hex bolt.

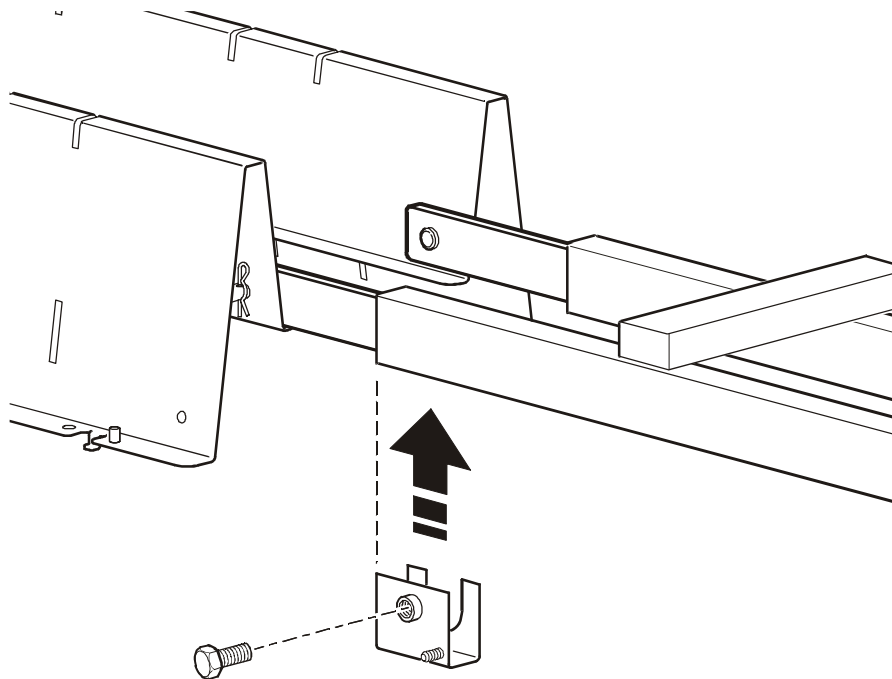


2. Attach a 12-inch ground strap to the grounding bracket and grounding stud on the Shielding Trough or Shielding Partition, using two M6 lock washers and one M6 flanged hex nut, for each end of the ground strap.
3. Repeat steps 1–2 for the other end of the Cable Ladder.

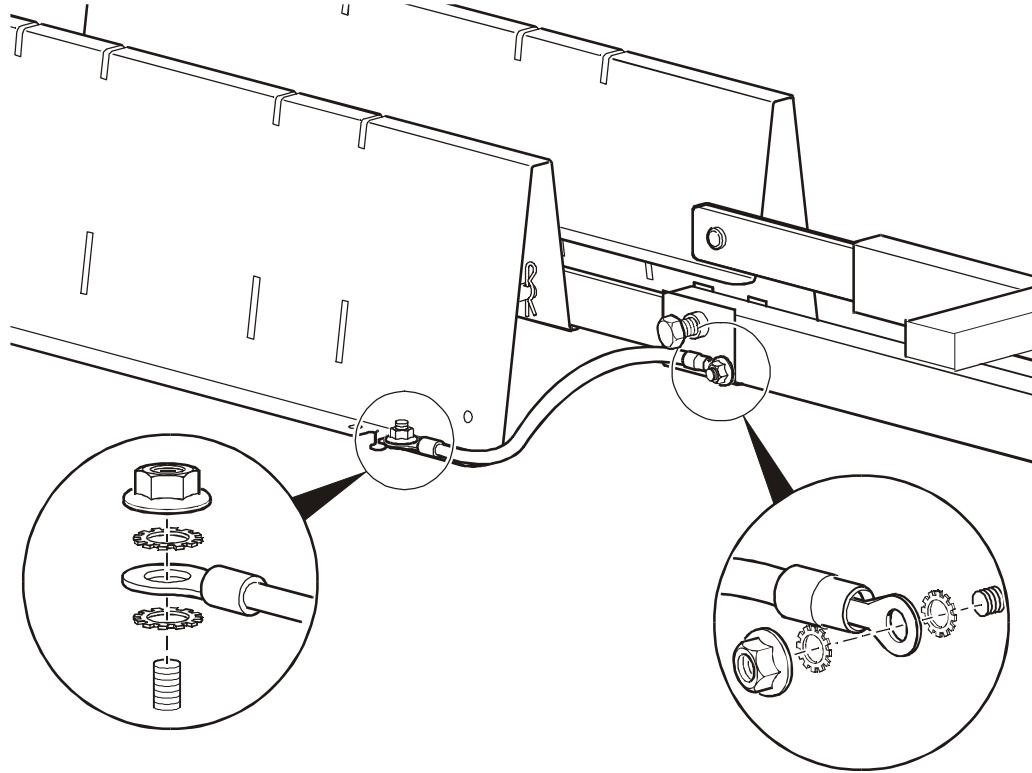


Cable Ladder grounding between aisles

1. Attach a grounding bracket to the end of the cable ladder leg closest to a grounding stud on a Shielding Trough or Shielding Partition, using an M8 hex bolt.



2. Attach a 12-inch ground strap to the grounding bracket and grounding stud on the Shielding Trough or Shielding Partition, using two M6 lock washers and one M6 flanged hex nut, for each end of the ground strap.
3. Repeat steps 1 – 2 for the other end of the Cable Ladder.



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