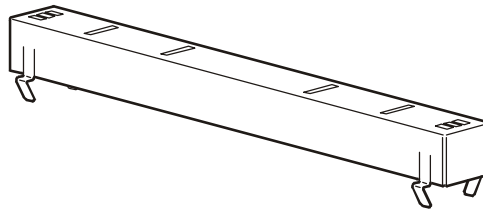# Ladder Bracket Kit (AR8168BLK)—Installation

Overview

Install the Cable Ladders on any NetShelter® SX Enclosure, using the Ladder Bracket Kit for installations that do not use APC Shielding Troughs and Shielding Partitions. Cable Ladders can be used to route power and data cables across aisles or between enclosures.

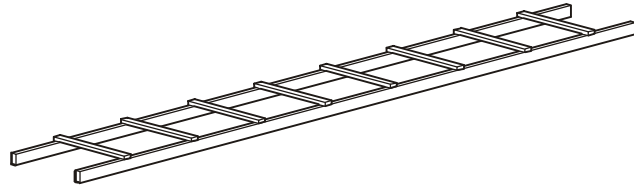## Ladder Bracket Kit—AR8168BLK

Ladder bracket (4)

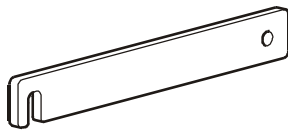## Cable Ladder Kits (not provided)—AR8164ABLK and AR8165ABLK
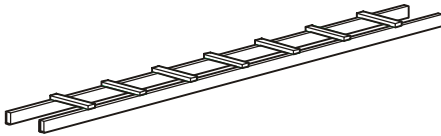
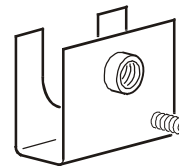6.00-in (15.24-cm) cable ladder
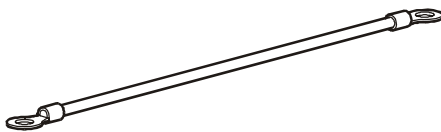(AR8164ABLK)

12.00-in (30.48-cm) cable ladder
(AR8165ABLK)

Items included with Cable Ladder Kits

Adapter bracket (4)

Grounding bracket (2)

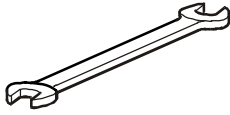8.00-in (20.32-cm)ground strap (2)
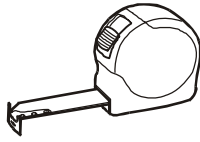
M8x16-mm hex bolt (4)

M6 lock washer (8)

M6 flanged hex nut (4)

Tools required (not provided)

Wrench with 10- and 13-mm ends	Tape measure	Hack saw
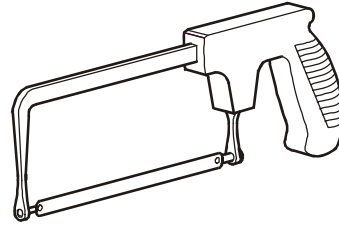
System configuration

Install Cable Ladders to 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 sample configurations:

- Use Cable Ladders to span aisles between rows of enclosures
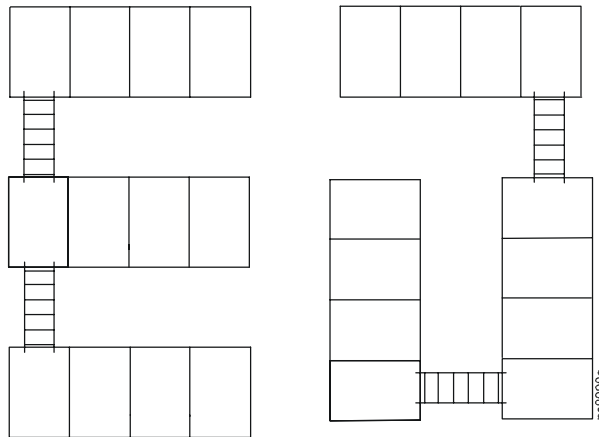
- Use Cable Ladders to span gaps between sets of enclosures along a single row

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 2.00 in (5.08 cm) longer than the width of the aisle that it will span.

⚠ **Caution:** Avoid touching the ends of the ladder after you cut it. The ends may be sharp enough to cause injury.

2. Insert adapter brackets into the ends of the ladder, with hook-ends facing out. Make sure that the rungs of the ladder are on the top of the ladder, and that the hook-ends are facing downward.
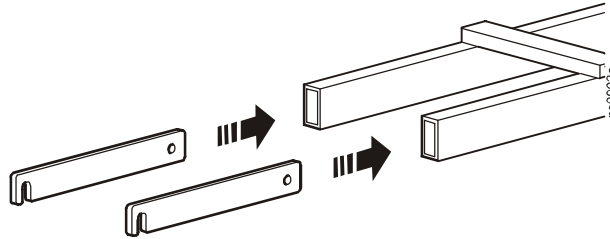
Installing a Cable Ladder to the side of an enclosure
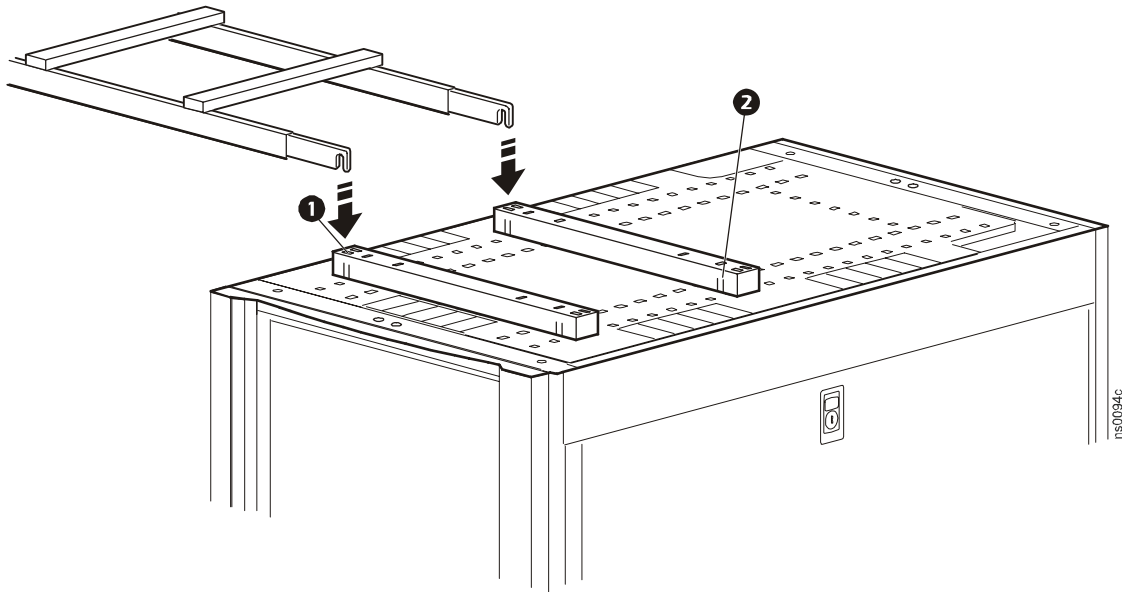
To install a ladder to extend from the side of a NetShelter SX Enclosure:

1. Place the ladder across the aisle where the ladder is to be installed (for bracket positioning).

2. Place the mounting brackets on the roof of the enclosure so that the hooks on the ladder align with the slots ❶ on the end of the mounting brackets where the hooks will attach.

   (!) **Note:** The figure below shows where to attach the hooks of a 12.00-in (30.48-cm) ladder to the left side of an enclosure. Use the same procedure to install a 6.00-in (15.24-cm) ladder.

3. Insert the tabs of the mounting brackets ❷ into the holes on the roof of the enclosure.

4. Insert the hooks that are in the ends of the ladder rails into the slots ❶ on the mounting bracket.

Installing a Cable Ladder to the front or back of an enclosure

To install a ladder to extend from the front or back of the roof of a NetShelter SX Enclosure:

1. Install a mounting bracket on the roof of the enclosure in one of the locations shown below by inserting the tabs of the mounting bracket ❶ into the holes on the roof of the enclosure.

2. Insert the adapter bracket hooks into the slots ❷ on the mounting bracket for a 12.00-in (30.48-cm) ladder or ❸ 6.00-in (15.24-cm) ladder. The figure below shows a wide ladder being attached to the back of the roof of the enclosure.
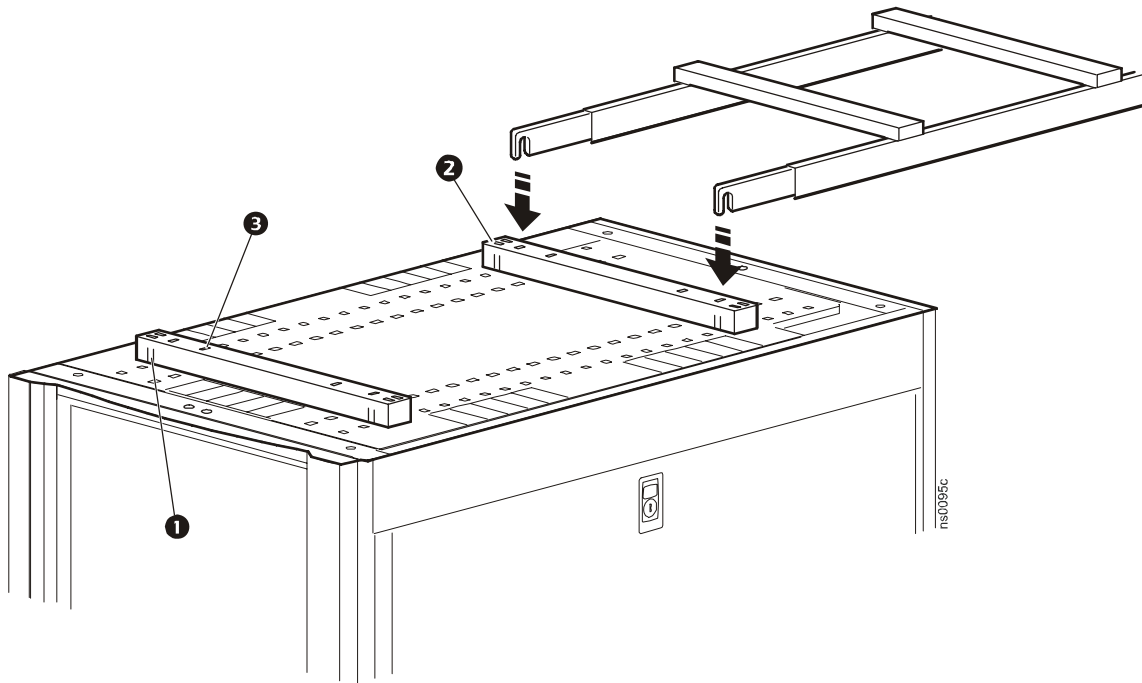

You can attach the other end of the ladder to the front or back of the roof of another enclosure in the same manner or to the side of the roof of another enclosure, as described in "Installing a Cable Ladder to the side of an enclosure" on page 4. To adjust ladder length so that the hooks reach the brackets on the roof of the other enclosure, slide the hooks farther in or out of the ladder on each end of the ladder.

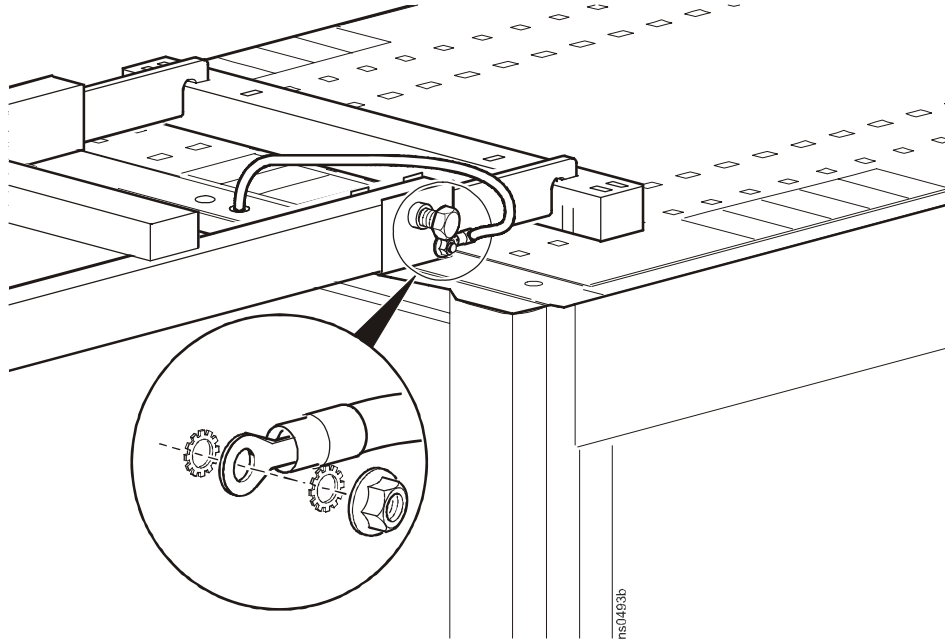## Grounding Cable Ladders

1. Note the location of all ground connection points. There are two ground connection points on each end of the roof.

ns1146a
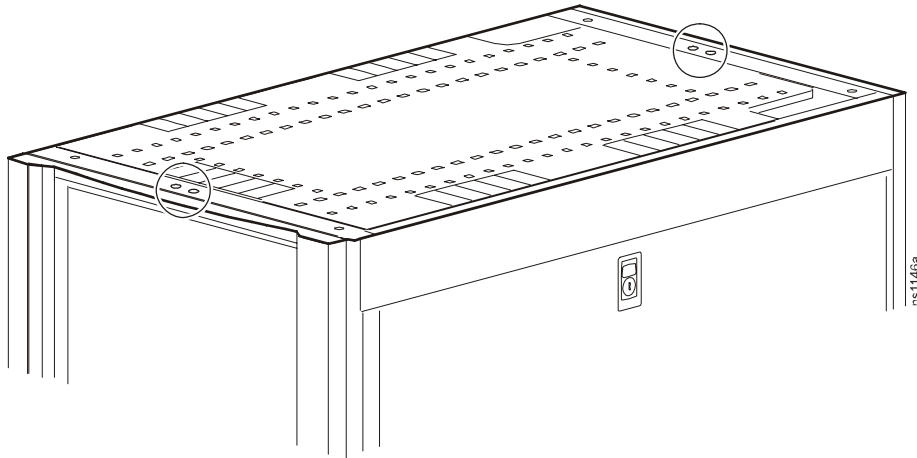
2. Attach a grounding bracket to the end of a cable ladder leg, using an M8 hex bolt.

ns0492b
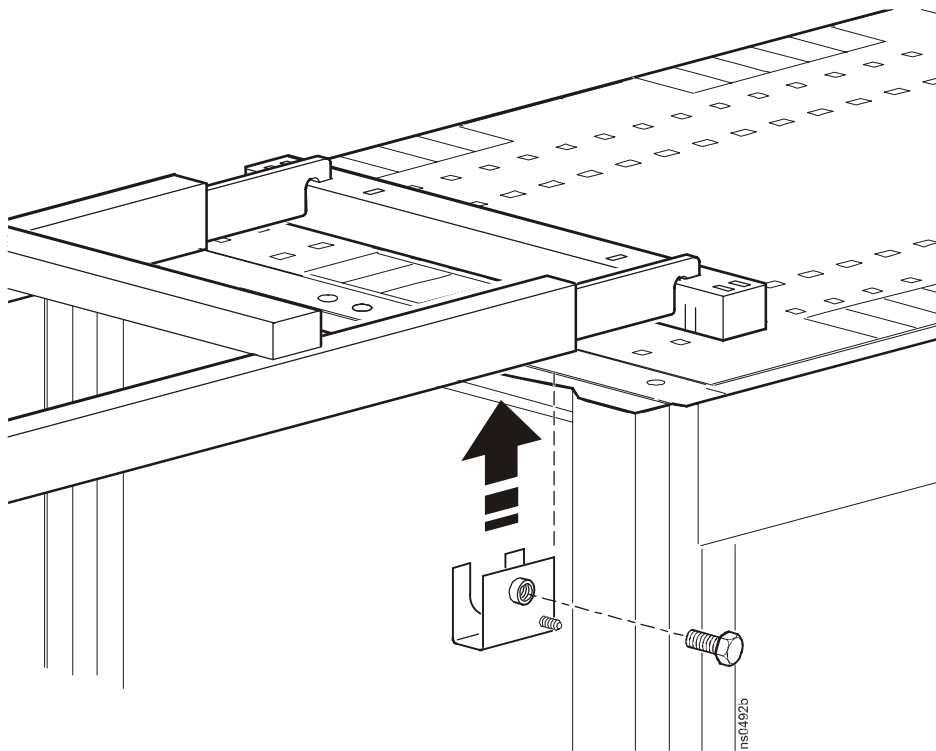
3. Attach an 8.00-in ground strap to the grounding bracket using two M6 lock washers and one M6 flanged hex nut as shown..

4. Route the other end of the ground strap through the nearest cable entry on the roof and attach it to the M8 hex bolt ground connection point as shown, using two M6 locked washers.
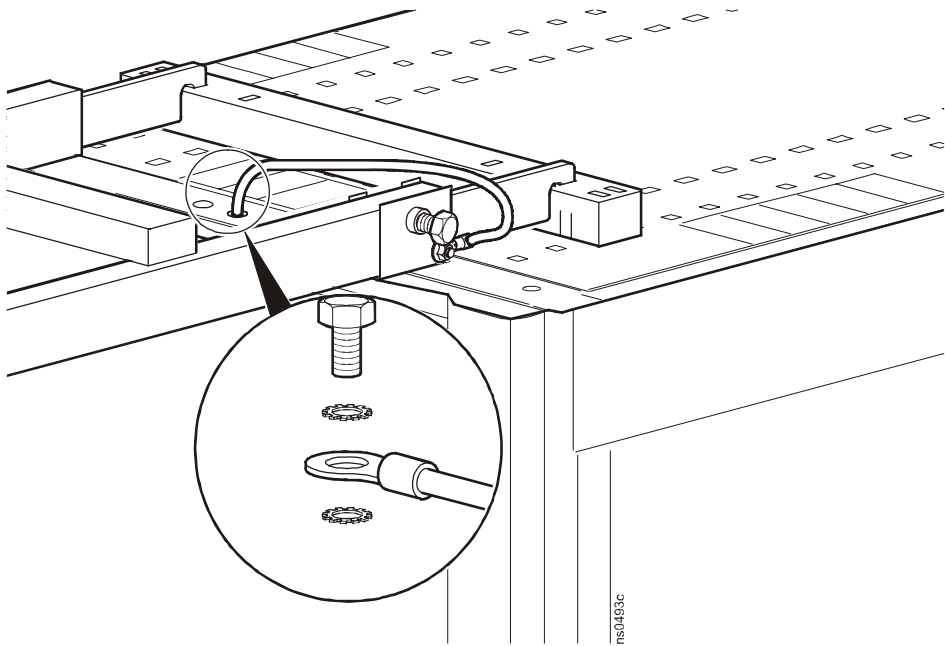
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