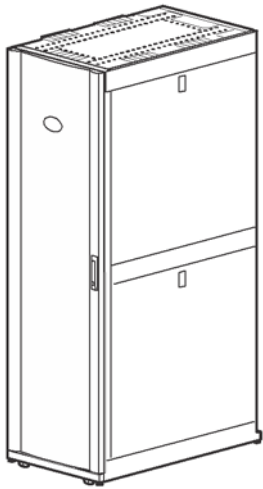


Unpacking, Installation, and Customization Manual

NetShelter™ SX Networking Cabinet

AR3140
AR3340
AR3347

990-3548C-001
Publication Date: May 2019



APC by Schneider Electric Legal Disclaimer

The information presented in this manual is not warranted by APC by Schneider Electric to be authoritative, error free, or complete. This publication is not meant to be a substitute for a detailed operational and site specific development plan. Therefore, APC by Schneider Electric assumes no liability for damages, violations of codes, improper installation, system failures, or any other problems that could arise based on the use of this Publication.

The information contained in this Publication is provided as is and has been prepared solely for the purpose of evaluating data center design and construction. This Publication has been compiled in good faith by APC by Schneider Electric. However, no representation is made or warranty given, either express or implied, as to the completeness or accuracy of the information this Publication contains.

IN NO EVENT SHALL APC BY SCHNEIDER ELECTRIC, OR ANY PARENT, AFFILIATE OR SUBSIDIARY COMPANY OF APC BY SCHNEIDER ELECTRIC OR THEIR RESPECTIVE OFFICERS, DIRECTORS, OR EMPLOYEES BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL, OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS, CONTRACT, REVENUE, DATA, INFORMATION, OR BUSINESS INTERRUPTION) RESULTING FROM, ARISING OUT, OR IN CONNECTION WITH THE USE OF, OR INABILITY TO USE THIS PUBLICATION OR THE CONTENT, EVEN IF APC BY SCHNEIDER ELECTRIC HAS BEEN EXPRESSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. APC BY SCHNEIDER ELECTRIC RESERVES THE RIGHT TO MAKE CHANGES OR UPDATES WITH RESPECT TO OR IN THE CONTENT OF THE PUBLICATION OR THE FORMAT THEREOF AT ANY TIME WITHOUT NOTICE.

Copyright, intellectual, and all other proprietary rights in the content (including but not limited to software, audio, video, text, and photographs) rests with APC by Schneider Electric or its licensors. All rights in the content not expressly granted herein are reserved. No rights of any kind are licensed or assigned or shall otherwise pass to persons accessing this information.

This Publication shall not be for resale in whole or in part.

Table of Contents

- Introduction 1**
- Important Safety Information..... 2**
 - Safety Instructions for the NetShelter SX Networking Cabinet..... 3
 - Labels 3
- Unpack the Cabinet 4**
 - Disclaimer..... 4
 - Inspection..... 4
 - Please Recycle..... 4
 - Unpacking Procedure 4
- Component Identification..... 5**
 - Hardware Bag..... 6
 - Required Tools (not provided) 6
 - Airflow Management Kit 6
- Preparation 7**
 - Move the Cabinet..... 7
 - Level the Cabinet..... 8
 - Join the Cabinets..... 9
 - 42/48 U Joining Trim Kit - AR7600 (Optional) 10
 - Stabilization Options..... 11
 - Ground the Cabinet..... 12
- Cabinet Installation..... 13**
 - Side Panels..... 13
 - Roof..... 13
 - Doors..... 14
 - Door removal..... 14
 - Door installation..... 15
 - Front door reversal..... 16
- Equipment Installation 18**
 - Vertical Mounting Rails..... 18
 - Adjust the Vertical Mounting Rails 19

| | |
|--|-----------|
| Install Equipment in the Cabinet | 21 |
| Identify one U-space on the vertical mounting rail | 21 |
| Cage nuts | 22 |
| Equipment installation accessories (not provided) | 23 |
| Completing the Installation | 24 |
| Airflow Management | 24 |
| Foam Airflow Management Panel Installation | 24 |
| Airflow management accessories (not provided) | 25 |
| Cable Routing and Cable Management | 27 |
| Vertical 0 U Accessory Channels | 27 |
| Vertical Cable Managers | 27 |
| Cable management accessories (not provided) | 28 |
| Specifications | 32 |
| Limited Factory Warranty | 33 |
| Terms of Warranty | 33 |
| Non-transferable Warranty | 33 |
| Exclusions | 33 |
| Warranty Claims | 34 |

Introduction

The APC by Schneider Electric NetShelter™ SX Networking 750-mm wide cabinets are high-quality cabinets for storage of industry-standard (EIA-310), 19-in rack-mount hardware, which includes servers and voice, data, networking, internetworking, and power protection equipment.

This manual covers the following models:

| Model | Cabinet Mounting Height | External Cabinet Width | Cabinet Depth |
|--------|-------------------------|------------------------|-----------------------|
| AR3140 | 42 U [†] | 750 mm (29.53 in) | 1070 mm (42.13 in) |
| AR3340 | 42 U [†] | | 1200 mm (47.24 in) |
| AR3347 | 48 U [†] | | 1200 mm (47.24 in) |

[†] One U= 44.45 mm (1.75 in).

For a complete list of accessories and more information, see www.apc.com.

Important Safety Information

Read the instructions carefully to become familiar with the device before trying to install, operate, service or maintain it. The following messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a Danger or Warning safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **will result in death** or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **can result in death** or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **can result in minor** or moderate injury.

NOTICE

NOTICE addresses practices not related to physical injury including certain environmental hazards, potential damage or loss of data.

Safety Instructions for the NetShelter SX Networking Cabinet

This manual contains important instructions that must be followed during the installation and customization of the cabinet.

| |
|--|
| ⚠ WARNING |
| TIP HAZARD <ul style="list-style-type: none">• This cabinet is easily tipped. Use extreme caution when unpacking or moving.• When moving the cabinet on its casters, push only from the front or back.• Before moving the cabinet on its casters, load 158 kg (350 lb) of equipment into the bottom of the cabinet for extra stability.• Make sure the leveling feet are up when moving the cabinet on its casters. Failure to follow these instructions can result in death or serious injury. |
| ⚠ WARNING |
| HEAVY EQUIPMENT HAZARD <p>At least two people are required to unpack the cabinet.</p> Failure to follow these instructions can result in death or serious injury. |

Labels

Look for additional safety information affixed to the cabinet. See “Labels” on page 7 for more information.

Unpack the Cabinet

Disclaimer

APC by Schneider Electric is not responsible for damage sustained during shipment of this product.

Inspection

Inspect the packaging and contents for shipping damage. Make sure that all parts are accounted for. Report any damage immediately to the shipping agent. Report missing contents, damage, or other problems immediately to APC by Schneider Electric or your reseller.

Please Recycle



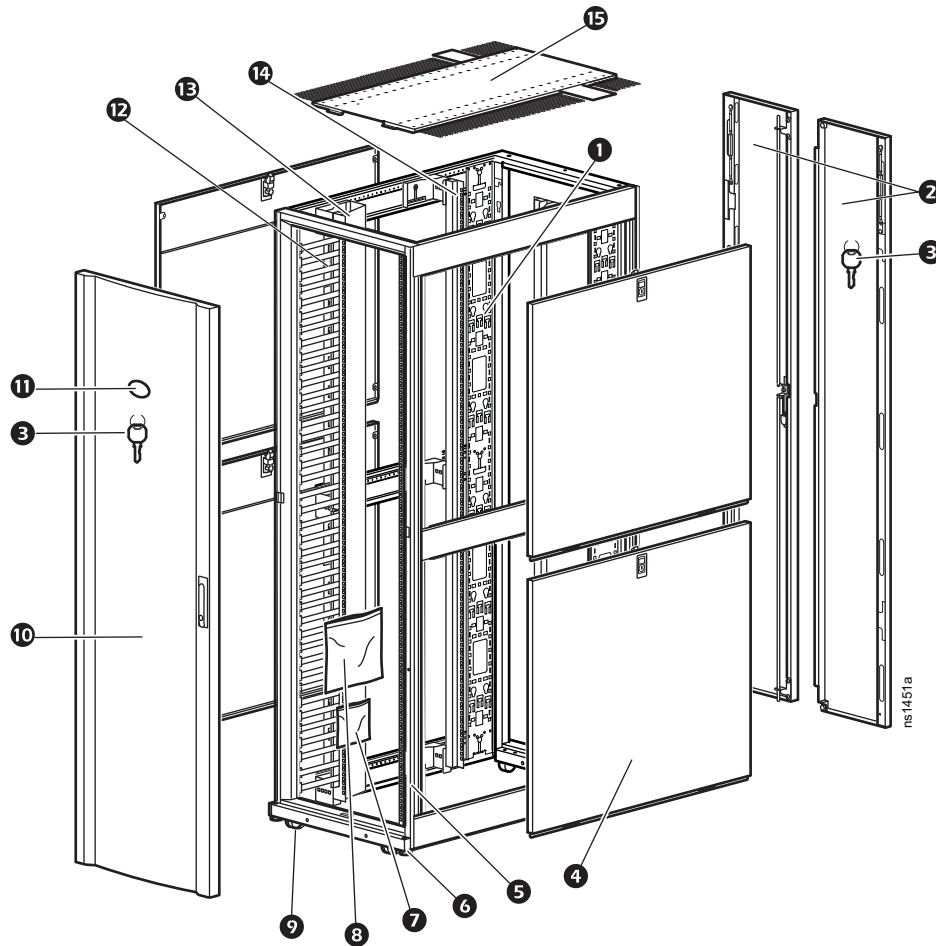
The shipping materials are recyclable. Save them for later use, or dispose of them appropriately.

Unpacking Procedure

| ⚠ WARNING |
|--|
| TIP HAZARD <ul style="list-style-type: none">• This cabinet is easily tipped. Use extreme caution when unpacking or moving.• When moving the cabinet on its casters, push only from the front or back.• Before moving the cabinet on its casters, load 158 kg (350 lb) of equipment into the bottom of the cabinet for extra stability.• Make sure the leveling feet are up when moving the cabinet on its casters. Failure to follow these instructions can result in death or serious injury. |
| ⚠ WARNING |
| HEAVY EQUIPMENT HAZARD <p>At least two people are required to unpack the cabinet.</p> Failure to follow these instructions can result in death or serious injury. |

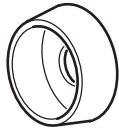
1. Move the shipping pallet to a firm, level surface in an open area.
2. See the label on the packaging to determine where to cut the wrapping. Using sturdy shears or a utility knife, carefully remove the plastic stretch wrap surrounding the cabinet.
3. Remove the four cardboard corner protectors.
4. Using a 13-mm wrench (not provided) or similar, remove and retain the two pallet-mounting brackets with mounting hardware that anchor the cabinet to the shipping pallet.
NOTE: Save the pallet-mounting brackets. The brackets can be used for additional cabinet stabilization during and after installation.
5. With one qualified person on each side of the cabinet, carefully roll it toward the rear of the pallet until the rear casters clear the back edge of the pallet. Continue to slide the cabinet off the pallet until the rear casters touch the floor. While one qualified person tips the cabinet slightly away from the pallet, have the other person carefully pull the pallet away from the cabinet. Set the cabinet gently on its casters.

Component Identification

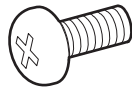


- | | |
|---|---------------------------------------|
| ❶ Adjustable Vertical 0 U Accessory Channel | ❾ Casters |
| ❷ Removable Rear Split Doors | ❿ Removable and Reversible Front Door |
| ❸ Key for Doors and Side Panels | ⓫ Nameplate (if equipped) |
| ❹ Removable Side Panels with Locks | ⓬ Vertical Cable Managers |
| ❺ Cabinet Frame | ⓭ Mounting Rail Cable Manager |
| ❻ Adjustable Leveling Feet | ⓮ Vertical Mounting Rails |
| ❼ Hardware Bag (see page 6) | ⓯ Roof |
| ❽ Airflow Management Kit (see page 6) | |

Hardware Bag



Plastic cup washers (60)



M6 x 16
Phillips slot
screws (60)



M5 x 12
screws (4)



Cage nuts
(60)



7-mm hole
plugs (4)



TORX® T30/#2 Phillips wrench

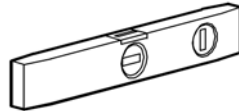


Cage nut tool

Required Tools (not provided)



Phillips head screwdriver

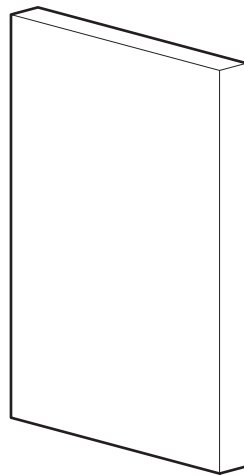


Level

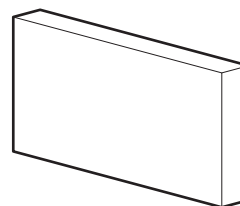


13/14-mm wrench

Airflow Management Kit



3 U Foam panel
42 U [AR3140 and AR3340] (12)
48 U [AR3347] (14)



1 U Foam Panel (4)

Preparation

Move the Cabinet

⚠ WARNING

TIP HAZARD

- This cabinet is easily tipped. Use extreme caution when unpacking or moving.
- At least two people are required to unpack the cabinet.
- Before moving the cabinet on its casters, load 158 kg (350 lbs) of equipment into the bottom of the cabinet for extra stability.
- When moving on its casters, make sure the leveling feet are up, and push the cabinet from the front or rear.

Failure to follow these instructions can result in death or serious injury.



①



②

Labels: The following labels can be found on the cabinet, and serve to communicate the following information:

Label ①: Generic Tip Hazard.

Label ②: Extend Slide-Mounted Hardware One Piece at a Time. Do not extend loaded top-mounted sliding hardware unless the cabinet is secured to the floor.

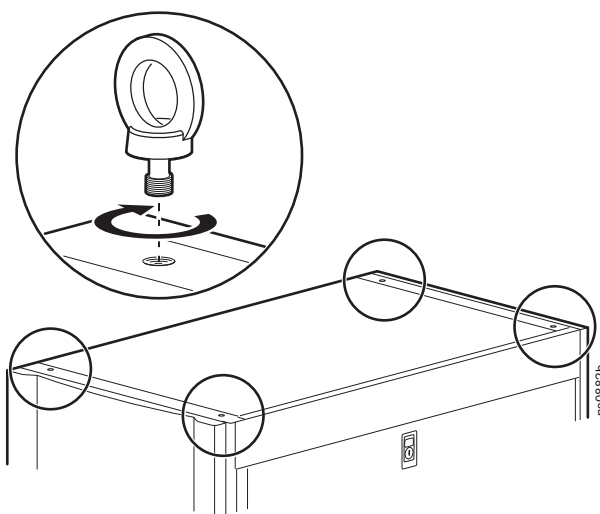
Casters: The cabinet can be moved on its casters with up to 1020 kg (2,250 lb) of equipment installed. Once in place, lower the leveling feet. With the leveling feet lowered, the static cabinet can be loaded to 1364 kg (3,000 lb).

NOTE: Some labels on cabinet indicate caster related information. See label ③ to right.



③

Eye bolts: The cabinet can be lifted using eye bolts with up to 567 kg (1,250 lbs) of equipment installed. Use M10 eye bolts with a shoulder rated for 181 kg (400 lbs).



Level the Cabinet

NOTE: The leveling feet of the cabinet provide a stable base on an uneven floor. They cannot compensate for a badly sloped surface.

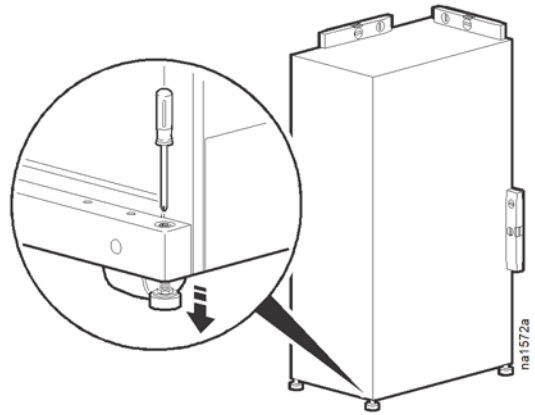
1. Ensure the cabinet is in its intended location. Remove the front and rear doors. See “Door removal” on page 14 for more information.

NOTE: Before removing the front door, disconnect the ground wires and any other wire connections that may interfere with the removal of the doors.

2. Insert a Phillips head screwdriver into the screw above the leveling foot. Turn the screw to the right to extend the leveling foot until it makes firm contact with the floor.

NOTES:

- This method works best with an empty, or near empty cabinet.
- If the cabinet is loaded with equipment, a 13-mm open ended wrench can also be used to lower the leveling feet.
- Door removal is not required if using the 13-mm open-ended wrench.



3. Adjust each foot and, using a level, adjust the feet until the cabinet is level and plumb.
4. If desired, join the cabinets. See “Join the Cabinets” on page 9.
5. If desired, install the front and rear doors. See “Door installation” on page 15.

DANGER

HAZARD OF ELECTRIC SHOCK

When installing the doors, remember to reconnect all ground and other connection wires.

Failure to follow these instructions will result in death or serious injury.

Join the Cabinets

Join two or more cabinets together using the supplied joining hardware. Joining cabinets together may assist in alignment and provide limited increased stability.

NOTE: Cabinets can be joined with or without side panels installed.

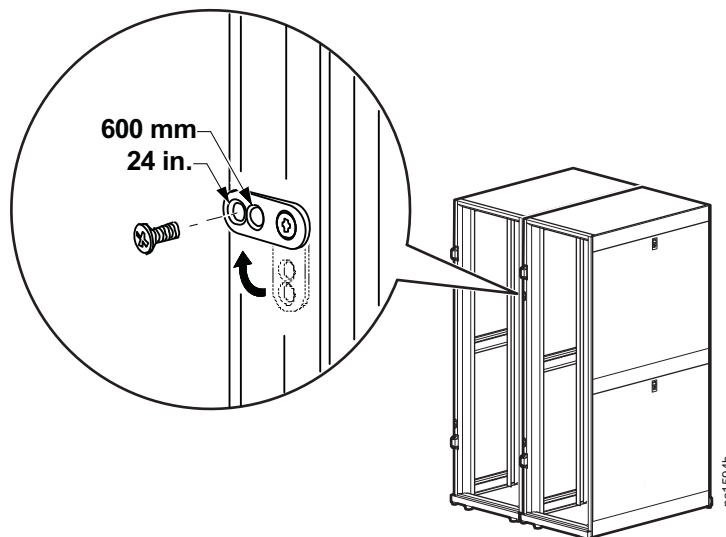
⚠ WARNING

TIP HAZARD

Joining cabinets provides limited stability to the cabinets. Secure the cabinet to the floor before installing equipment.

Failure to follow these instructions can result in death or serious injury.

1. Make sure that the leveling feet are down and the cabinets are level. See “Level the Cabinet” on page 8.
2. Remove the front and rear doors, if applicable. See “Door removal” on page 14 for more information.
3. Locate the joining brackets. Choose between 24-in centers or 600-mm centers (see the detail view below).



4. Align the cabinets and join them using one M5 x 12 flat-head screw (provided in the hardware bag) per bracket. There are two brackets for the front and two brackets for the rear.
5. Reinstall the doors. See “Door installation” on page 15 for more information.

⚡ ⚠ DANGER

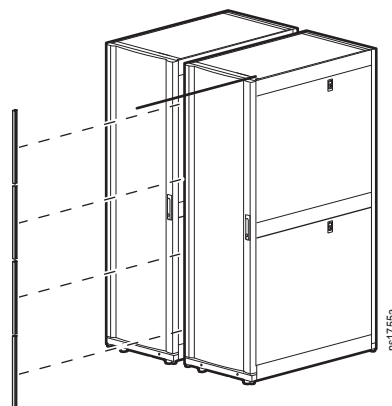
HAZARD OF ELECTRIC SHOCK

When installing the doors, remember to reconnect all ground and other connection wires.

Failure to follow these instructions will result in death or serious injury.

42/48 U Joining Trim Kit - AR7600 (Optional)

Joining trim is available for order. This item fills the gap present between cabinets spaced on 24-in centers.

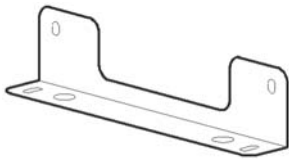
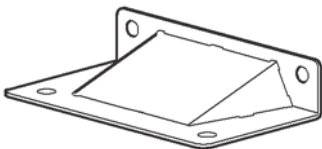

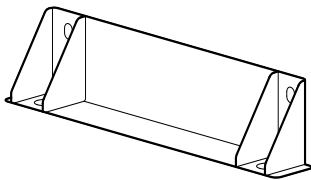


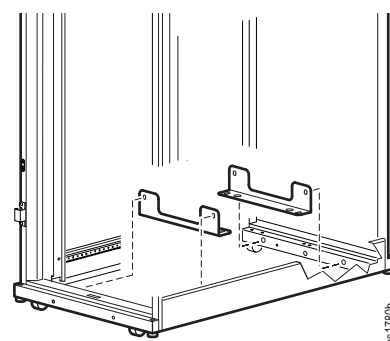
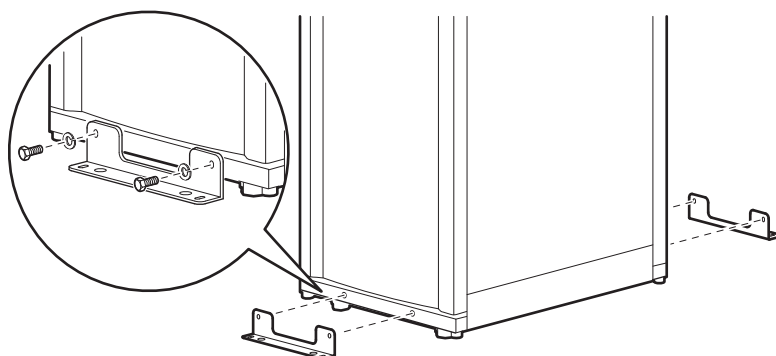
Stabilization Options

Hardware options are available to provide additional stabilization to the installation. The cabinet can be bolted to the floor internally or externally, as shown below.

See www.apc.com for a complete list of available stabilization options.

NOTE: Only use the stabilization accessories with the casters or leveling feet installed.

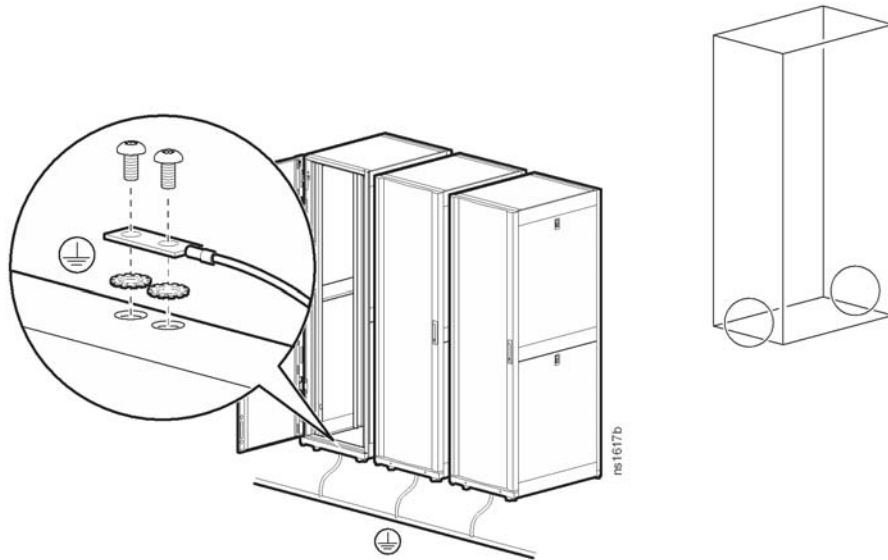
| Accessory | Part Number | Description | |
|-----------------------------------|--------------------|--|---|
| Pallet/bolt-down brackets | Provided | Attaches to cabinet and floor internally or externally to provide additional stability without blocking cable access. Designed for use in low and moderate seismic regions. |  |
| NetShelter SX stabilizer plate | Option (AR7700) | Attaches externally to the cabinet and floor to provide additional stability. Designed for use in low and moderate seismic regions. |  |
| Bolt-down kit | Option (AR7701) | Attaches to cabinet and floor internally or externally to provide additional stability without blocking cable access. Designed for use in low and moderate seismic regions. |  |
| High-seismic region bolt-down kit | Option (AR7701A-S) | Attaches to rack and floor, internally and externally, to provide additional stability without blocking cable access. With the appropriate mounting hardware, meets high seismic region (UBC Zone-4) requirements. |  |



Ground the Cabinet

Each cabinet should be bonded directly to a common ground using one of the designated grounding locations (two M6 threaded inserts) at the bottom of the cabinet.

- Use a Common Bonding Network Jumper kit (for example, Listed [KDER] Panduit® RGCBNJ660PY or equivalent).
- Use paint-piercing washers between ground terminal and cabinet frame or remove paint on frame under ground terminals per NEC NFPA 70 Article 250.12.
- Torque screws to 6.9 N•m (60 lb-in).
- Do not ground cabinets in a cascading style.



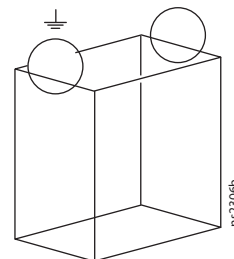
⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK

The cabinet must be connected to the building Common Bonding Network (CBN).

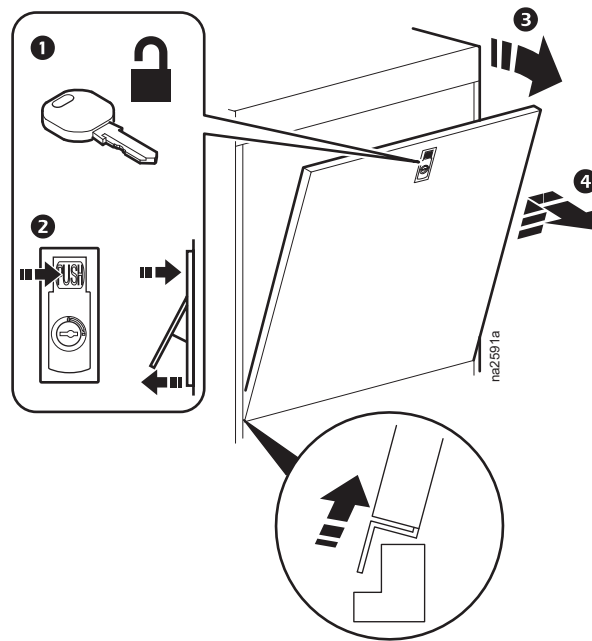
Failure to follow these instructions will result in death or serious injury.

NOTE: If needed, additional functional grounding points are available at the top of the cabinet. Do not connect the building CBN to these functional grounding points.

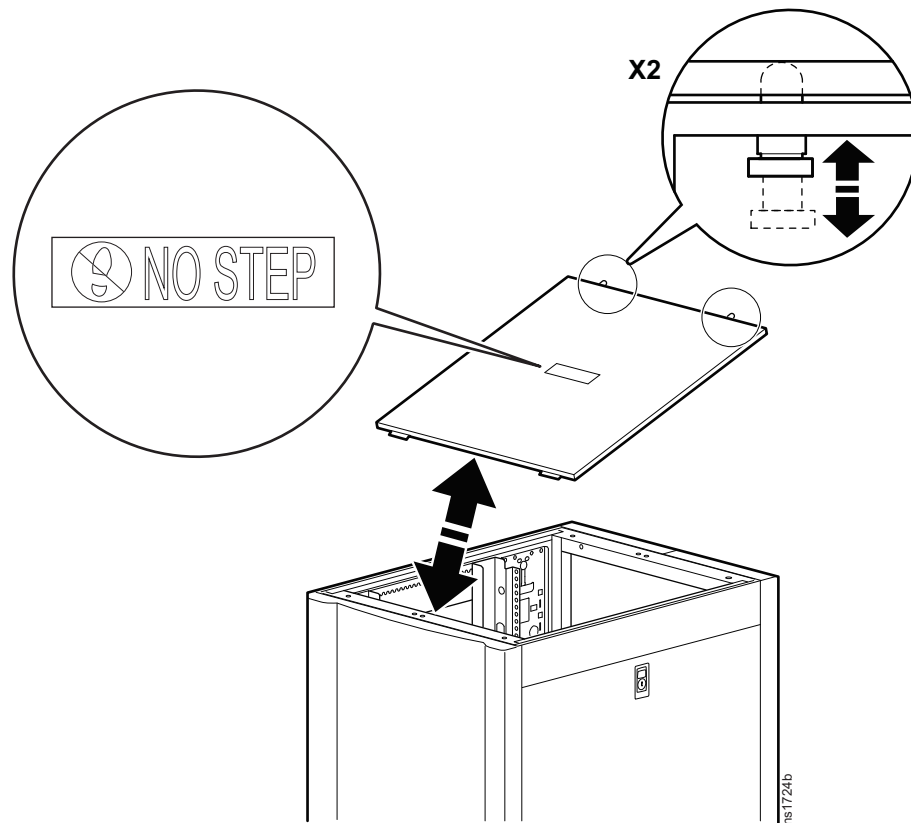


Cabinet Installation

Side Panels



Roof

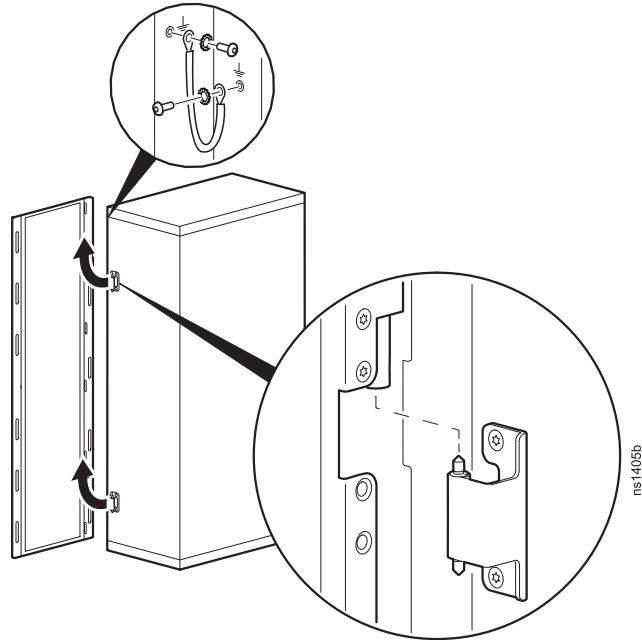


Doors

Door removal

This procedure can apply to the front or rear doors.

If you intend to reinstall the door in the same position, disconnect the ground wire. Otherwise, use the TORX wrench (provided) to remove the ground wire completely. Then lift the door up off the hinges.



Door installation

This procedure can apply to the front or rear doors

NOTE: The front door can be attached on either the left or right side of the cabinet. When facing the cabinet, this procedure installs the door on the left side, causing the door to open from the right.

⚠ ⚠ DANGER

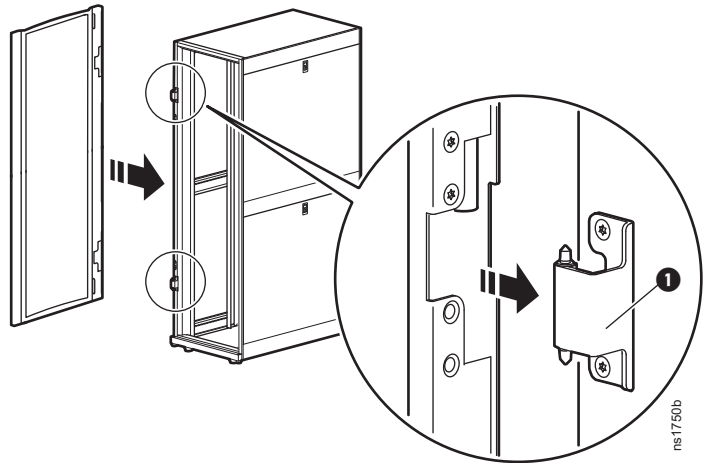
HAZARD OF ELECTRIC SHOCK

When installing the doors, remember to reconnect all ground and other connection wires.

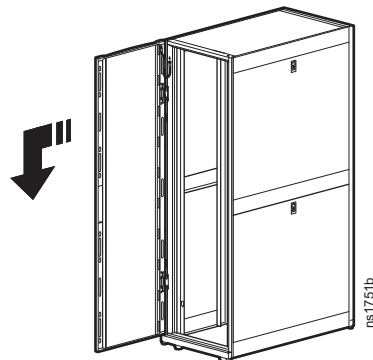
Failure to follow these instructions will result in death or serious injury.

1. With the door at a 90-degree angle to the front of the cabinet, position the door over the hinge pins **1**.

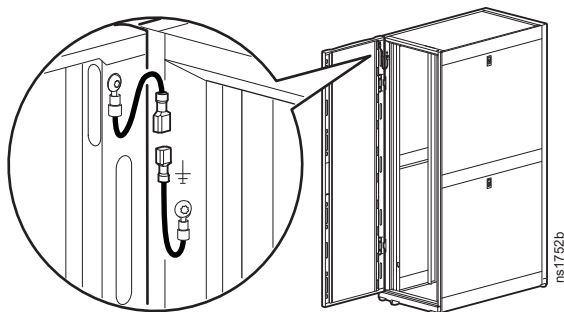
NOTE: Doors self-align on hinge pins when properly reinstalled.



2. Use slight pressure to pull the door away from the cabinet, then lower the door.



3. Connect the ground wire.



Front door reversal

The front door can be attached on either side of the cabinet. When facing the cabinet, this procedure installs the door on the right side, causing it to open from the left.

NOTE: If installed, the front door will need to be removed. See “Door removal” on page 14 before you proceed.

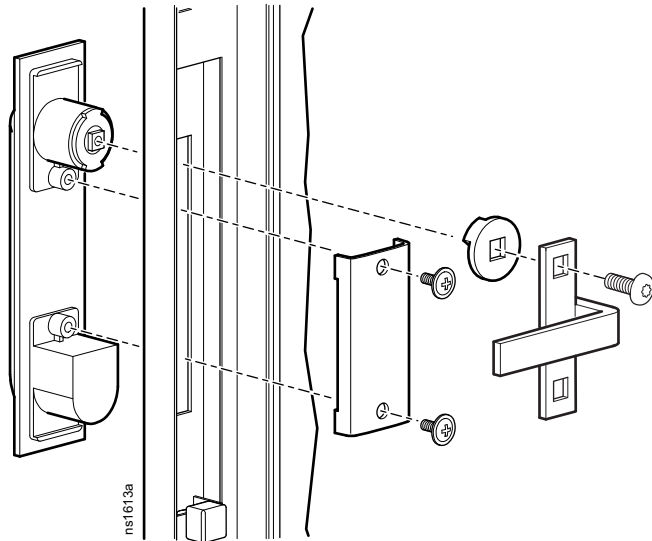
⚠ DANGER

HAZARD OF ELECTRIC SHOCK

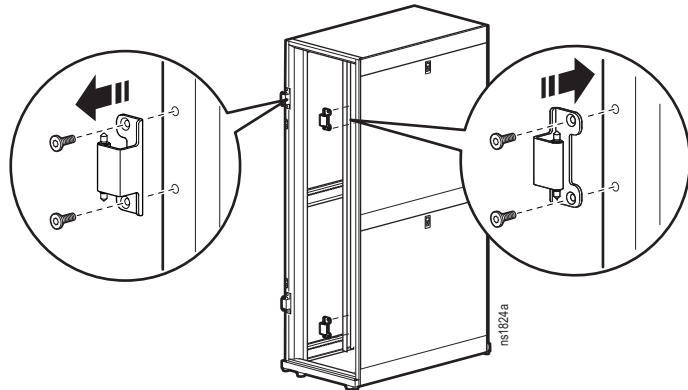
When installing the doors, remember to reconnect all ground and other connection wires.

Failure to follow these instructions will result in death or serious injury.

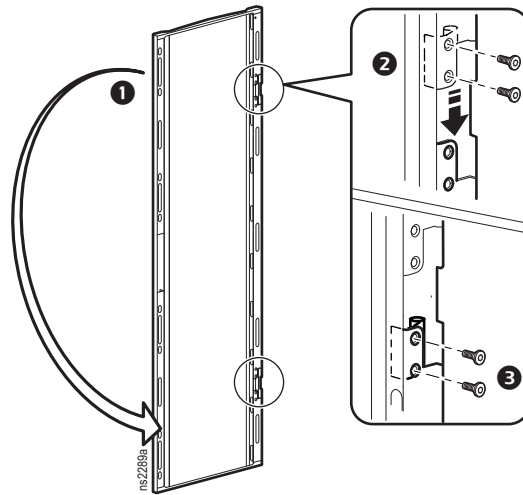
1. Remove the handle assembly.
2. Remove the nameplate (if equipped).



3. Remove the hinges. Rotate the hinges 180 degrees and install them on the opposite side of the front door frame of the cabinet.

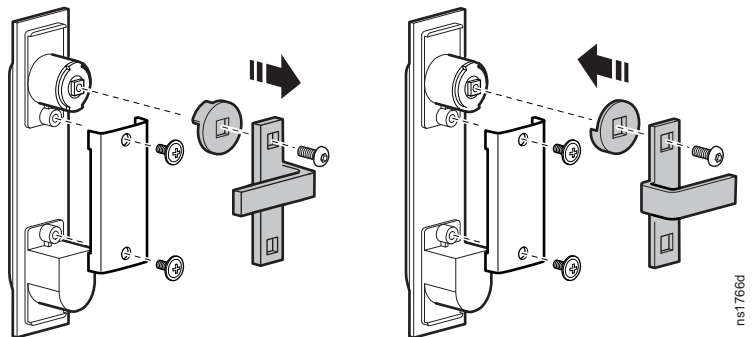


4. Rotate the door. Reposition and install the hinges in the door as shown.

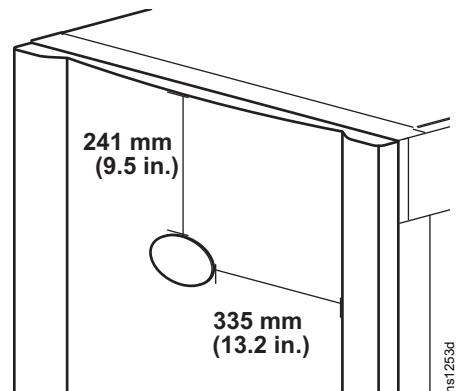


5. Install the door on the right side of the cabinet and connect the ground wire. See "Door installation" on page 15.

6. Install the handle on the door with the washer rotated 90-degrees from its original position, and the latch rotated 180 degrees from its original position.



7. Remove the nameplate from the bottom of the door and install as shown, if applicable.



Equipment Installation

NOTE: NetShelter SX cabinets are intended for use with Listed equipment. Carefully evaluate the safety of any configuration using un-Listed equipment.

Vertical Mounting Rails

Equipment is secured to the vertical mounting rails. The installation of some equipment may require adjusting the position of the vertical mounting rails.

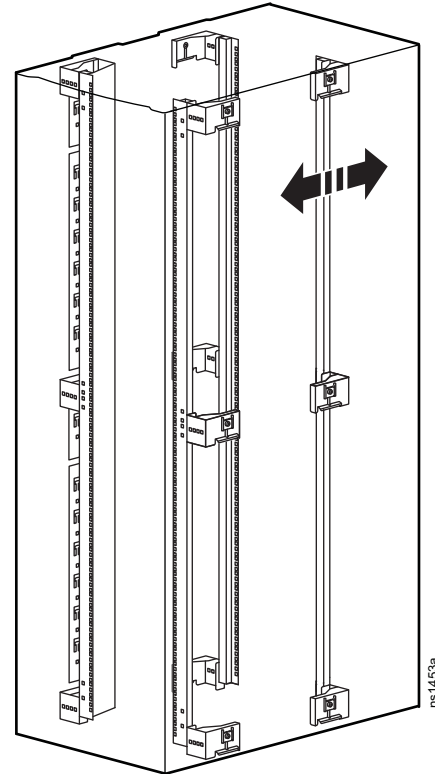
The vertical mounting rails can be moved towards the front or rear of the cabinet to accommodate different rails or equipment of various depths.

Default depth of factory installed vertical mounting rails:

- 1070-mm deep cabinet: 558.8 mm (22 in)
- 1200-mm deep cabinet: 749.3 mm (29.5 in)

The minimum rail depth is 279.4 mm (11 in). The maximum rail depth is as follows:

- 1070-mm deep cabinet: 819 mm (32.25 in)
- 1200-mm deep cabinet: 959 mm (37.75 in)



Adjust the Vertical Mounting Rails

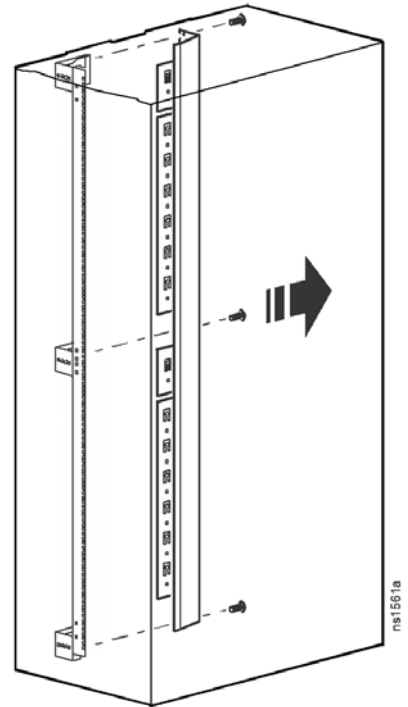
⚠ CAUTION

FALLING EQUIPMENT HAZARD

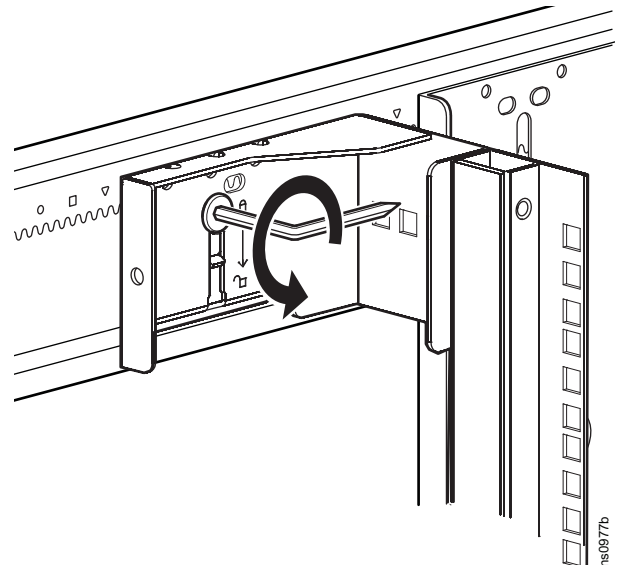
Vertical mounting rails must have all rail-mounted equipment removed before any adjustments are attempted.

Failure to follow these instructions can result in minor or moderate injury.

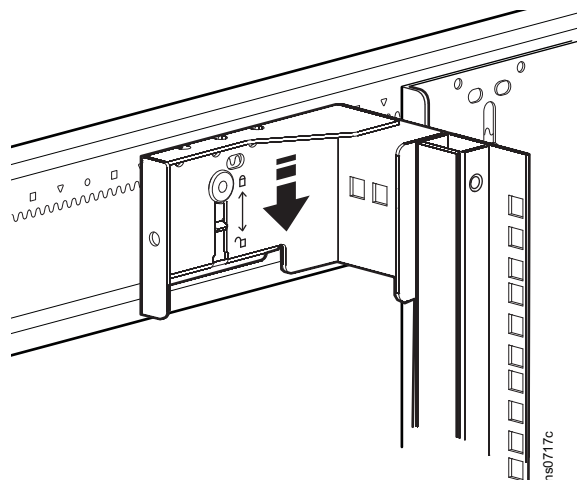
1. Remove the cable manager from the front left vertical mounting rail.



2. Use the Torx T30/#2 Phillips wrench (provided) to loosen each of the three screws, located at the top, bottom, and middle of the rail.



3. Lower the three flat brackets, which unlock the vertical mounting rail, and slide the vertical mounting rail to the desired location.

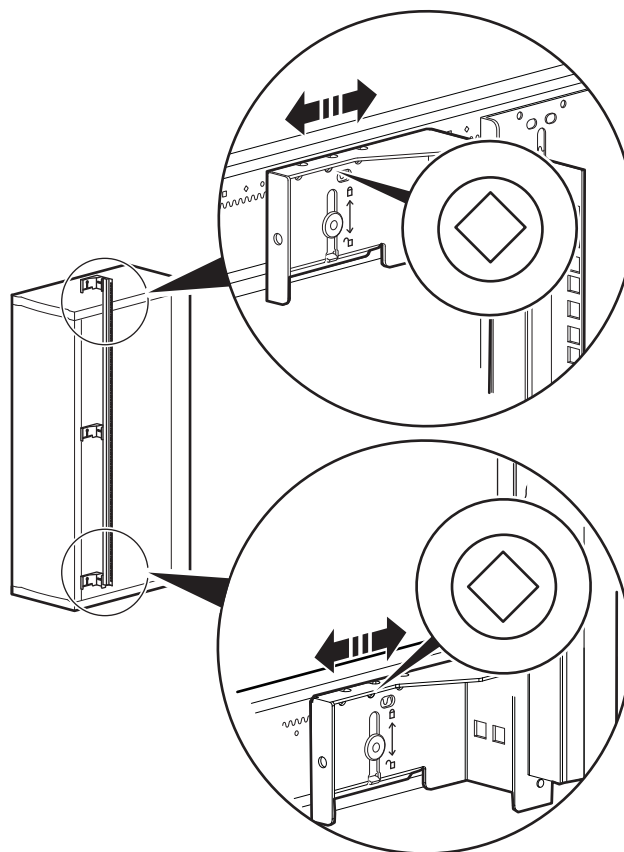


NOTE: Vertical mounting rails adjust in 6-mm (1/4-in) increments.

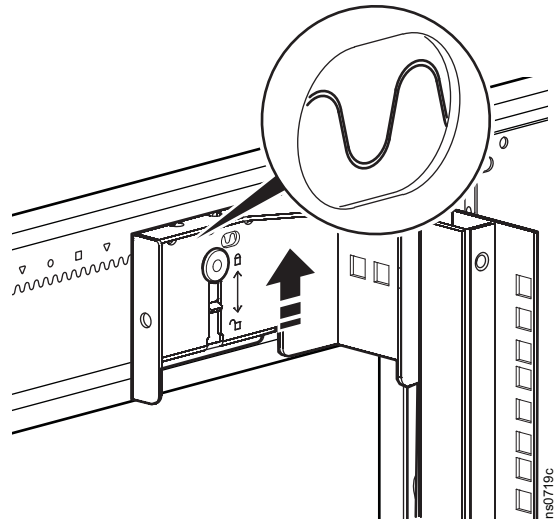
4. Locate the visible symbol (in the illustration, a diamond), along the vertical mounting rail. To align the vertical mounting rail, make sure the same symbol is visible through all three corresponding holes.

NOTE: In the factory-standard position, diamonds are visible.

5. Ensure all vertical mounting rails have the same visible symbol.



6. When the vertical mounting rail is aligned (top, middle, and bottom), raise the flat bracket until the teeth in the bracket engage fully with the teeth in the side brace. Then tighten the screws, locking the rail in place.



Install Equipment in the Cabinet

⚠ WARNING

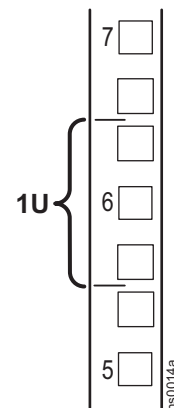
TIP HAZARD

- This cabinet is easily tipped. Follow all tipping precautions during and after equipment installation.
- Secure the cabinet to the floor before installing equipment.
- Install the heaviest equipment first toward the bottom of the cabinet to prevent the cabinet from becoming top heavy.
- Do not extend equipment on sliding rails until minimum of 158 kg (350 lbs) of equipment is installed into the bottom of the cabinet. Alternately, the stabilizer plate or bolt-down brackets can also be installed. Do not extend more than one piece of equipment on sliding rails at a time.

Failure to follow these instructions can result in death or serious injury.

Identify one U-space on the vertical mounting rail

- Review the equipment manufacturer's installation instructions.
- When installing equipment, locate the top and bottom of a U-space on the mounting rails.
- Every third hole on the mounting rails is numbered to indicate the middle of a U-space.
- A U-space consists of a numbered hole, and the hole immediately above and below it, as shown.



Cage nuts

APC by Schneider Electric offers a cage nut hardware kit (AR8100) for use with square holes.

⚠ CAUTION

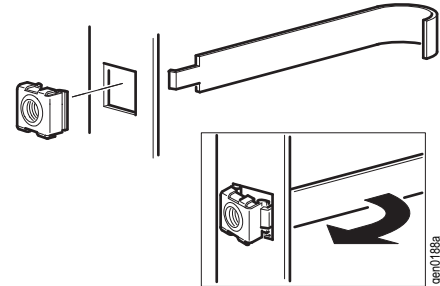
FALLING EQUIPMENT HAZARD

Do NOT install cage nuts vertically with the ears engaging the top and bottom of the square hole.

Failure to follow these instructions can result in minor or moderate injury.

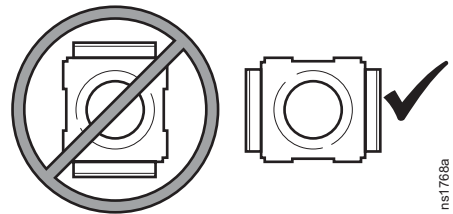
Install a cage nut:

1. From inside of the cabinet, insert the cage nut into the square hole.
2. Hook one ear of the cage nut assembly through the far side of the hole.
3. Place the cage nut tool on the other side of the cage nut and pull to snap into position.



NOTES:

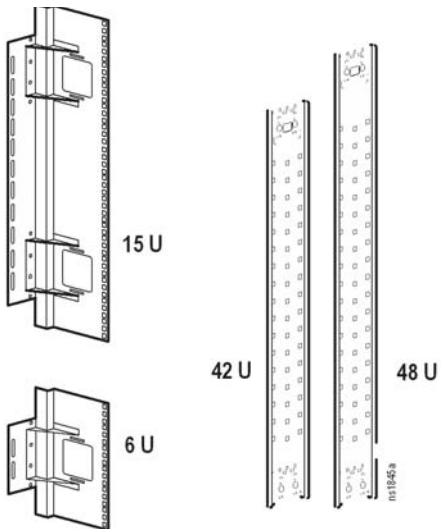
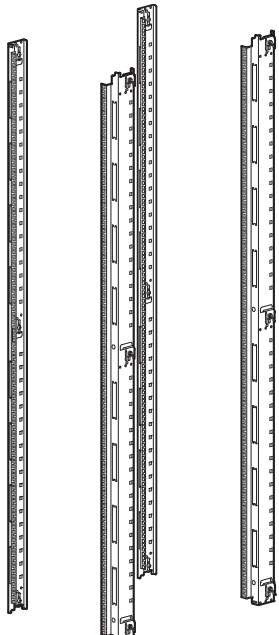
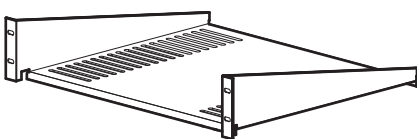
- Install cage nuts horizontally, with the ears engaging the sides of the square hole.
- Install the cage nuts on the interior of the vertical mounting rail.



Remove a cage nut:

1. Remove any attached screw.
2. Grasp the cage nut and squeeze the sides to release it from the square hole.

Equipment installation accessories (not provided)

| Accessory | Part Number | Description | |
|---|--|---|--|
| Recessed rail kit | AR7508 (for a 42 U enclosure) AR7578 (for a 48 U enclosure) | Use the recessed rail kit to install equipment that has a different mounting depth from the other equipment in the enclosure. |  <p>15 U</p> <p>42 U</p> <p>48 U</p> <p>6 U</p> <p>ns1845a</p> |
| NetShelter SX 42 U, 23-inch, EIA Mounting Rails | AR7510 | For NetShelter SX Networking 42 U, 750-mm wide enclosures (AR3140 and AR3340) only, the mounting rails accommodate 23-in rack mountable equipment. |  |
| Fixed shelf 50-lb | AR8105BLK | Cantilever fixed shelf to enable the mounting of a monitor or other equipment into the rack environment or to allow cable pass-through from the front to rear of the enclosure. |  <p>ns1494a</p> |

Completing the Installation

Airflow Management

NOTICE

EQUIPMENT DAMAGE HAZARD

Improper airflow can damage installed components. Verify that the system provides the specified airflow for installed components.

Failure to follow these instructions can result in equipment damage.

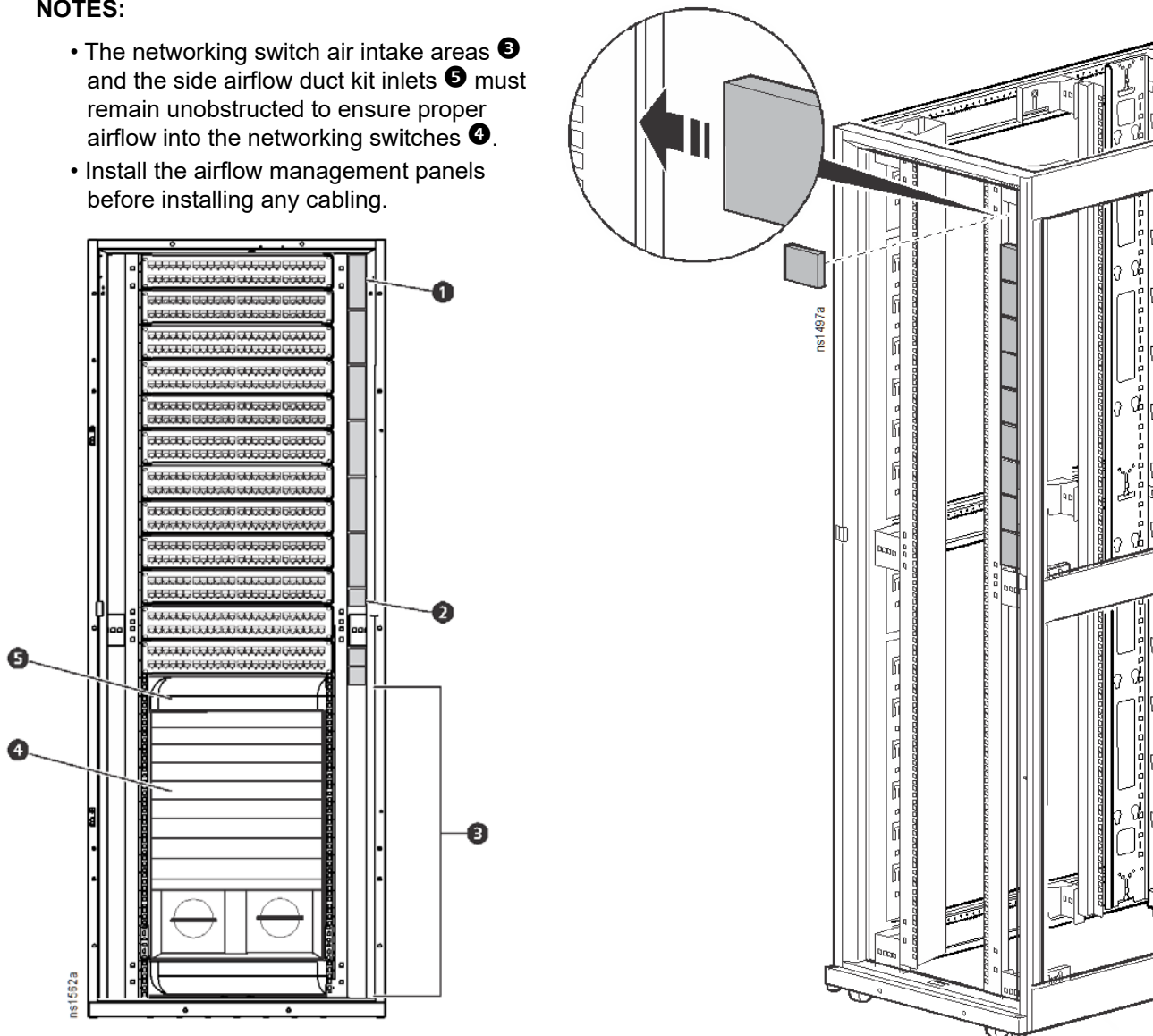
Foam airflow management panels assist in maintaining the required airflow. The panels install toollessly and direct airflow by covering empty vertical cabinet space.

Foam Airflow Management Panel Installation

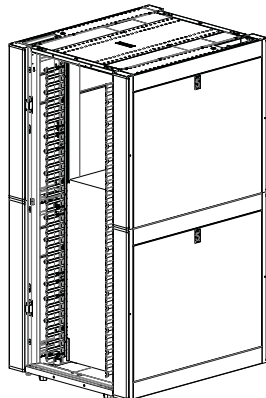
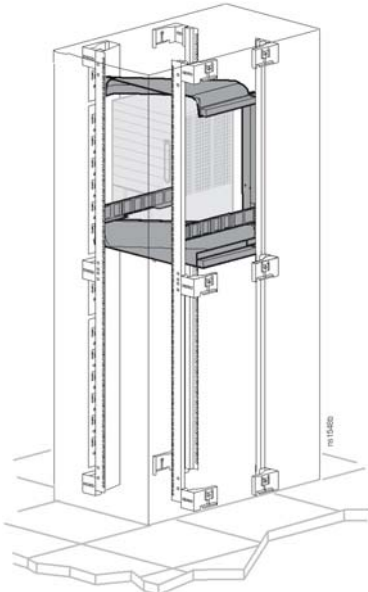

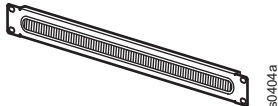
Install airflow management panels in the channel along the right vertical mounting rail next to inactive equipment such as patch panels, as seen below. 1 U **2** and 3 U **1** panels help isolate hot air and prevent it from entering the cold aisle. The left side of the cabinet does not require panels.

NOTES:

- The networking switch air intake areas **3** and the side airflow duct kit inlets **5** must remain unobstructed to ensure proper airflow into the networking switches **4**.
- Install the airflow management panels before installing any cabling.



Airflow management accessories (not provided)

| Accessory | Part Number | Description | |
|---|--|---|---|
| NetShelter SX Side Airflow Solution Kit | Required for Cisco Nexus 7018 Switch (AR7742 & AR7747) | Installs onto the NetShelter SX 1200-mm Networking Cabinet (AR3340 or AR3347) and increases the width of the cabinet by 127 mm (5 in) on each side, providing the side-to-side airflow required by the switch. Internal baffles isolate hot and cold air in the cabinet. |  |
| Side Airflow Duct Kit | AR7715 | <p>The NetShelter Side Airflow Duct Kit is intended for use with Cisco® Catalyst 6509, 6509-E, and 6513 Switches and Cisco MDS 9509 and 9513 Multilayer Switches.</p> <p>For networking switch applications, the Side Airflow Duct Kit allows for improved cable management solutions while maintaining adequate airflow and separation of hot and cold aisles to cool switches. The Side Airflow Duct Kit maintains separation of hot and cold aisles via ducts and baffle panels.</p> |  |
| Airflow Management Blanking Panel | AR8136BLK (Qty. 10) AR8136BLK200 (Qty. 200) | Covers an empty vertical enclosure space to maintain proper airflow. |  |
| 1 U horizontal cable organizer with brush strip | AR8429 | 19-in, 1 U cable pass-through assists with containing air in the cabinet and providing an aesthetic solution for cable routing. |  |

| Accessory | Part Number | Description | |
|-------------------------------|---------------------|---|--|
| KoldLok® raised floor grommet | AR7720 (Qty. 10) | Designed to seal openings in new raised floor cutouts prior to the installation of communications or power cabling. | |
| | AR7730 (Qty. 10) | | |
| | AR7740 (Qty. 10) | | |

Cable Routing and Cable Management

The NetShelter SX Networking Cabinet has cable access openings on its roof, sides, and bottom.

Four vertical cable managers and two Vertical 0 U accessory channels are included with the cabinet and offer a variety of other cable management accessories.

Vertical 0 U Accessory Channels

The vertical 0 U accessory channels provide toolless mounting capabilities for Rack Power Distribution Units (PDUs), cable containment brackets, and cable tie-off locations.

The factory-default position for the vertical 0 U accessory channels is in the rear of the cabinet.

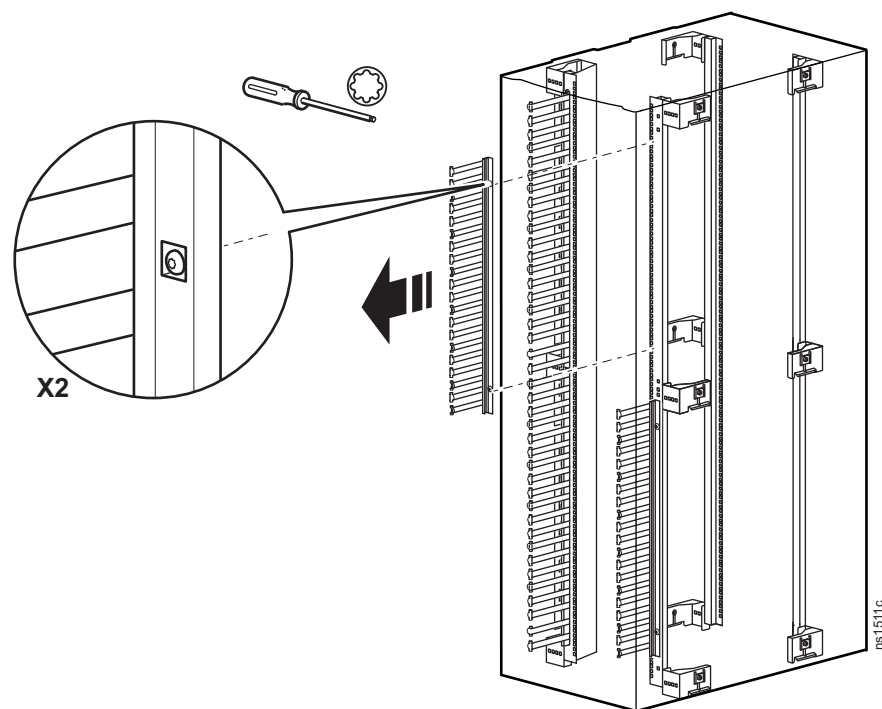
You can position the vertical accessory channels anywhere along the side braces or remove them completely. Adjustment is similar to adjusting the vertical mounting rails (see “Adjust the Vertical Mounting Rails” on page 19).

Additional vertical 0 U accessory channels are available for order.

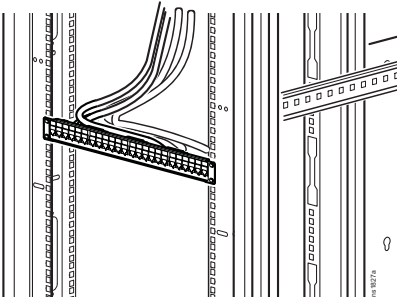
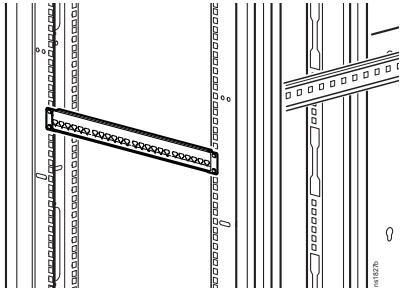
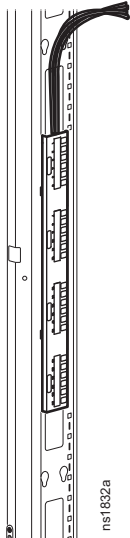
Vertical Cable Managers

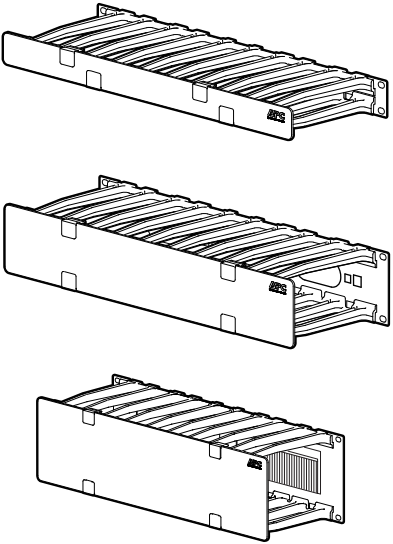
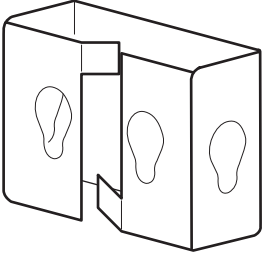
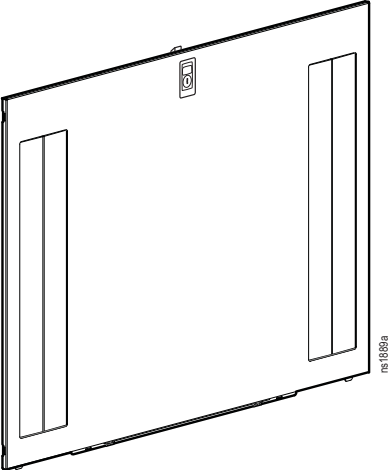
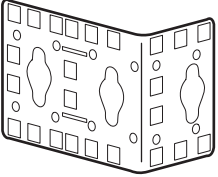
Remove vertical cable managers for cable routing purposes.

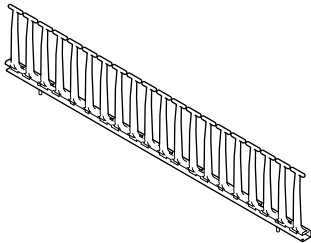

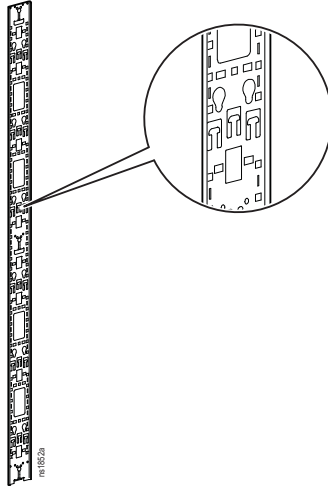
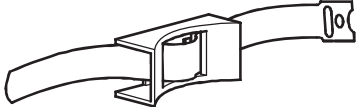
Re-install vertical cable managers on the vertical 0 U accessory channels.

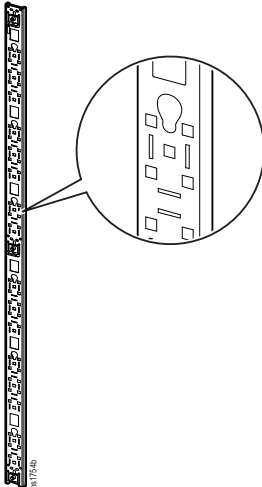
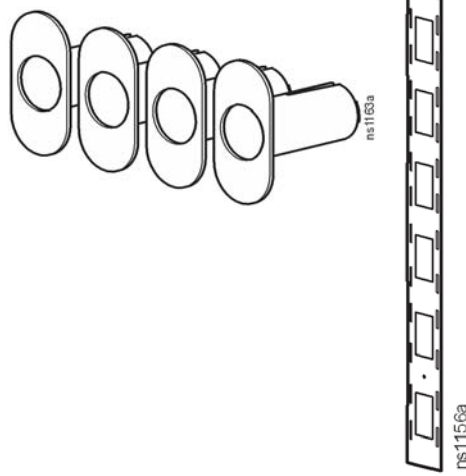
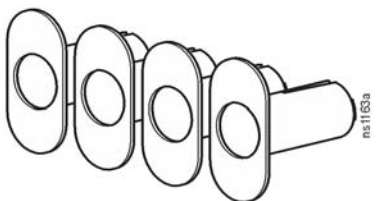


Cable management accessories (not provided)

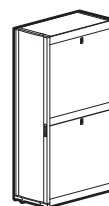
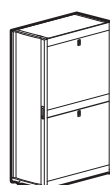
| Accessory | Part Number | Description | |
|-----------------------------|--------------------------------------|--|--|
| 1 U data distribution panel | AR8451 (shown) | Holds four data distribution cables, for a total of 24 ports. |  |
| 2 U data distribution panel | AR8452 | Holds eight data distribution cables, for a total of 48 ports. | |
| CAT 6 Patch Panel | CAT6PNL-24 (shown) CAT6PNL-48 | 24-port RJ45 to 110 568 A/B color-coded patch panel. 48-port RJ45 to 110 568 A/B color-coded patch panel. |  |
| 0 U data distribution panel | AR8457 | Installs in a vertical 0 U accessory channel. Holds four data distribution cables, for a total of 24 ports. |  |

| Accessory | Part Number | Description | |
|---|---|---|---|
| 19-inch horizontal cable organizers | AR8602A: 1 U, 4 in AR8612: 1 U, 6 in (shown) AR8600A: 2 U, 4 in AR8603A: 2 U, 6 in AR8606: 2 U, 6 in (shown) AR8605: 3 U, 6 in (shown) | Routes cables horizontally on the front or back of the 19-in EIA cabinet. |  |
| Cable containment brackets (Qty. 6) | AR7710 | Contains cables along the vertical 0 U accessory channel. Installs without tools. |  |
| Side panel with access holes | AR7305A (Qty. 2) | For a NetShelter SX Networking 42U, 1070-mm deep enclosure (AR3140) only. Allows cable pass-through to adjacent enclosures. Openings contain brushes to restrict airflow. |  |
| 0 U accessory mounting bracket (Qty. 2) | AR7711 | 0 U, multi-purpose accessory mounting bracket for 1 U and 2 U equipment, including Rack PDUs. |  |

| Accessory | Part Number | Description | |
|--|--|---|--|
| Vertical cable manager | AR7717A | For NetShelter SX Networking 42U enclosures (AR3140 and AR3340) only. Installs in the vertical mounting flanges and in the vertical 0 U accessory channels. The vertical cable manager has smooth plastic cable guides at 1 U increments to allow patch cords to enter and exit in an organized manner. |  |
| Vertical cable organizer for NetShelter 0 U accessory channel | AR8442 (Qty. 2) | Eliminates cable stress by organizing cable layout within the rear channels of the enclosure. Uses 0 U space within the enclosure. Consists of two pieces of equal size. When stacked, both pieces span the entire height of the enclosure. Two pieces can be installed side by side in the vertical 0 U accessory channel. Can be used in any APC enclosure. |  ns1107b |
| NetShelter SX 42 U vertical cable organizer NetShelter SX 48 U vertical cable organizer | AR7502 (Qty. 2) AR7572 (Qty. 2) | Installs in the enclosure along the side braces. Provides toolless mounting capabilities for APC Rack Power Distribution Units (PDU) and APC cable containment brackets. Provides tie-off locations for cables. |  ns1852a |
| Toolless hook and loop cable managers (Qty. 10) | AR8621 | Includes ten 457-mm (18-in) hook and loop black cable straps that install in the square holes in the vertical 0 U accessory channel or the vertical mounting rail. |  ns2213a |

| Accessory | Part Number | Description |
|---|--------------------|--|
| NetShelter SX 42 U narrow vertical 0 U cable organizer | AR7511 (Qty. 2) | <p>For NetShelter SX Networking 42U enclosures (AR3140 and AR3340) only. The narrow vertical 0 U accessory channel complements the standard vertical 0 U accessory channel by offering additional cable management options. The narrow channel can be used in the front of the enclosure to mount fiber cable spools and vertical cable managers or in the middle of the enclosure for cable tie off. In addition, keyholes are provided to mount one vertical Rack PDU per organizer.</p>  |
| Vertical fiber organizer | AR8443A | <p>The vertical fiber organizer provides a method to manage fiber cabling within a cabinet and mounts toollessly into the vertical 0 U accessory channel.</p>  |
| Fiber organizer spools | AR8444 (Qty. 4) | <p>Can be mounted toollessly to the vertical fiber organizer or a vertical 0 U accessory channel.</p>  |

Specifications



AR3140

AR3340

AR3347

| | | | |
|--|--|--|--|
| Height | 1 991 mm (78.40 in) | 1 991 mm (78.40 in) | 2 258 mm (88.90 in) |
| Width | 750 mm (29.53 in) | 750 mm (29.53 in) | 750 mm (29.53 in) |
| Depth | 1 070 mm (42.13 in) | 1 200 mm (47.24 in) | 1 200 mm (47.24 in) |
| Net weight | 155.95 kg (343.10 lb) | 161.36 kg (355.00 lb) | 185.45 kg (408.00 lb) |
| Total open area (front door) | 788 972 mm ² (1,222.91 in ²) | 788 972 mm ² (1,222.91 in ²) | 900 417 mm ² (1,395.65 in ²) |
| Total open area (rear door) | 866 920 mm ² (1,343.73 in ²) | 866 920 mm ² (1,343.73 in ²) | 989 243 mm ² (1,533.33 in ²) |
| Open area per U (front door) | 18 787 mm ² (29.12 in ²) | 18 787 mm ² (29.12 in ²) | 18 787 mm ² (29.12 in ²) |
| Open area per U (rear door) | 20 645 mm ² (32 in ²) | 20 645 mm ² (32 in ²) | 20 645 mm ² (32 in ²) |
| Perforation pattern percentage | 69% | 69% | 69% |
| Percent of perforated area (front) | 88% | 88% | 88% |
| Percent of perforated area (rear) | 96% | 96% | 96% |
| Clearance (for wiring between front door and vertical mounting rail) | 238.76 mm (9.40 in) | 216.9 mm (8.5 in) | 216.9 mm (8.5 in) |
| Weight rating: static load [†] | 1363.6 kg (3,000 lb) | 1363.6 kg (3,000 lb) | 1363.6 kg (3,000 lb) |
| Weight rating: rolling | 1022.7 kg (2,250 lb) | 1022.7 kg (2,250 lb) | 1022.7 kg (2,250 lb) |

[†] Lower the leveling feet if the static weight is over 1022.7 kg (2,250 lb).

Limited Factory Warranty

The limited warranty provided by in this Statement of Limited Factory Warranty applies only to Products you purchase for your commercial or industrial use in the ordinary course of your business.

Terms of Warranty

APC by Schneider Electric warrants its products to be free from defects in materials and workmanship for a period of five years (two years in Japan) from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its sole discretion, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. Repair or replacement of a defective product or part thereof does not extend the original warranty period. Any parts furnished under this warranty may be new or factory- remanufactured.

Non-transferable Warranty

This warranty applies only to the original purchaser who must have properly registered the product. Product may be registered at www.apc.com.

Exclusions

APC by Schneider Electric shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user's or any third person's misuse, negligence, improper installation or testing. Further shall not be liable under the warranty for unauthorized attempts to repair or modify wrong or inadequate electrical voltage or connection, inappropriate on-site operation conditions, corrosive atmosphere, repair, installation, start-up by non-APC by Schneider Electric designated personnel, a change in location or operating use, exposure to the elements, Acts of God, fire, theft, or installation contrary to recommendations or specifications or in any event if the serial number has been altered, defaced, or removed, or any other cause beyond the range of the intended use.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, OF PRODUCTS SOLD, SERVICED OR FURNISHED UNDER THIS AGREEMENT OR IN CONNECTION HERewith. DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTION AND FITNESS FOR A PARTICULAR PURPOSE. APC BY SCHNEIDER ELECTRIC EXPRESS WARRANTIES WILL NOT BE ENLARGED, DIMINISHED, OR AFFECTED BY AND NO OBLIGATION OR LIABILITY WILL ARISE OUT OF, RENDERING OF TECHNICAL OR OTHER ADVICE OR SERVICE IN CONNECTION WITH THE PRODUCTS. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES. THE WARRANTIES SET FORTH ABOVE CONSTITUTE APC BY SCHNEIDER ELECTRIC'S SOLE LIABILITY AND PURCHASER'S EXCLUSIVE REMEDY FOR ANY BREACH OF SUCH WARRANTIES. APC BY SCHNEIDER ELECTRIC WARRANTIES RUN ONLY TO PURCHASER AND ARE NOT EXTENDED TO ANY THIRD PARTIES.

IN NO EVENT SHALL APC BY SCHNEIDER ELECTRIC, ITS OFFICERS, DIRECTORS, AFFILIATES OR EMPLOYEES BE LIABLE FOR ANY FORM OF INDIRECT, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, ARISING OUT OF THE USE, SERVICE OR INSTALLATION, OF THE PRODUCTS, WHETHER SUCH DAMAGES ARISE IN CONTRACT OR TORT, IRRESPECTIVE OF FAULT, NEGLIGENCE OR STRICT LIABILITY OR WHETHER APC BY SCHNEIDER ELECTRIC HAS BEEN ADVISED IN ADVANCE OF THE POSSIBLY OF SUCH DAMAGES. SPECIFICALLY, APC BY SCHNEIDER ELECTRIC IS NOT LIABLE FOR ANY COSTS, SUCH AS LOST PROFITS OR REVENUE, LOSS OF EQUIPMENT, LOSS OF USE OF EQUIPMENT, LOSS OF SOFTWARE, LOSS OF DATA, COSTS OF SUBSTITUANTS, CLAIMS BY THIRD PARTIES, OR OTHERWISE.

NO SALESMAN, EMPLOYEE OR AGENT OF APC BY SCHNEIDER ELECTRIC IS AUTHORIZED TO ADD TO OR VARY THE TERMS OF THIS WARRANTY. WARRANTY TERMS MAY BE MODIFIED, IF AT ALL, ONLY IN WRITING SIGNED BY AN APC BY SCHNEIDER ELECTRIC OFFICER AND LEGAL DEPARTMENT.

Warranty Claims

Customers with warranty claims issues may access the APC by Schneider Electric worldwide customer support network by visiting **www.apc.com/support**. Select your country from the country selection pull-down menu. Open the Support tab at the top of the web page to obtain contact information for customer support in your region.

Worldwide Customer Support

Customer support for this product is available at www.apc.com.