



# NetShelter® VX Networking Enclosure

## Installation





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This manual is available in English on the enclosed CD.

Dieses Handbuch ist in Deutsch auf der beiliegenden CD-ROM verfügbar.

Este manual está disponible en español en el CD-ROM adjunto.

Ce manuel est disponible en français sur le CD-ROM ci-inclus.

Questo manuale è disponibile in italiano nel CD-ROM allegato.

本マニュアルの日本語版は同梱の CD-ROM からご覧になれます。

Instrukcja Obsługi w języku polskim jest dostępna na CD.

O manual em Português está disponível no CD-ROM em anexo.

**Инструкция по использованию на русском языке прилагается на диске (CD).**

Bu kullanım kılavuzunun Türkçe'si, ilişikte gönderilen CD içerisinde mevcuttur.

您可以从包含的 CD 上获得本手册的中文版本。

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# Preliminary Information

## Product Description

American Power Conversion (APC) NetShelter® VX Enclosures are used for storage of industry-standard (EIA-310), rack-mount hardware, which includes servers, voice, data, networking, internetworking, and APC power-protection equipment. The NetShelter VX Networking Enclosure is particularly suited to equipment with a high density of cabling, such as patch panels and telecommunications equipment. APC offers the following NetShelter VX Networking Enclosure models:

Model	Rack Mounting Height	Mounting Holes	Side Panels	Baying Hardware
AR2312BLK	42U	Square	Yes	No
AR2313BLK	42U	Square	No	Yes
AR2314BLK	42U	#12-24 Threaded	Yes	No
AR2315BLK	42U	#12-24 Threaded	No	Yes
AR2318BLK	47U	Square	Yes	No
AR2319BLK	47U	Square	No	Yes

APC offers the following side panels kit for enclosures without side panels. Each kit consists of one side panel and mounting hardware.

Model	Description
AR8364BLK	42 U side panel
AR8367BLK	47 U side panel

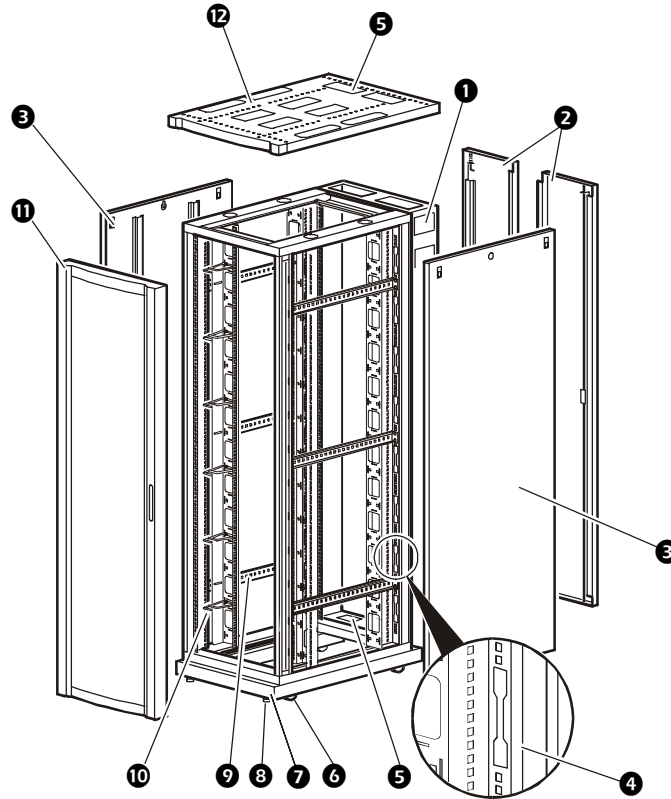
APC offers the following door kits for enclosures without doors. Each kit consists of one or more doors and mounting hardware.

Model	Description
AR8369BLK	42 U, front door
AR8370BLK	42 U, rear doors
ARU8454BLK	47 U, front door
AR8455BLK	47 U, rear doors

# Product Inventory

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## Features of the enclosure



- |                          |                                |
|--------------------------|--------------------------------|
| ❶ Rear cabling channel   | ❷ Front and rear skirts        |
| ❸ Split rear doors       | ❸ Adjustable leveling feet     |
| ❹ Side panels with locks | ❹ Adjustable horizontal braces |
| ❺ Frame posts            | ❺ Vertical rails               |
| ❻ Cable access           | ❻ Reversible front door        |
| ❼ Casters                | ❼ Roof                         |

**Hardware, grommets, and covers**

Item	Quantity			
	AR2312BLK AR2318BLK	AR2313BLK AR2319BLK	AR2314BLK	AR2315BLK
<b>Baying hardware</b>				
M6 × 12 low-profile, socket-head screws	—	3	—	3
3-mm hex wrench	—	1	—	1
<b>Mounting hardware</b>				
M6 × 16 pan-head, Phillips/slotted screws	60	60	—	—
M6 caged nuts	60	60	—	—
Plastic cup washers	60	60	—	—
Caged nut installation tool	1	1	—	—
#12-24 screws	—	—	60	60
Open-ended wrench (13mm/14mm)	1	1	1	1
5-mm hex wrench	1	1	1	1
Door/side panel keys	2	2	2	2
<b>Grommets and covers (included in bag)</b>				
4 × 4 in. grommets	2	—	2	4
4 × 8 in. grommets	3	—	3	6
4 × 4 in. cover	4	4	4	4

# Before Installation

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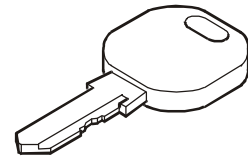
Read all instructions. Warning symbols indicate important instructions that must be followed to prevent injury or damage.



- **Use at least two people to unpack and assemble the enclosure.**
- **To prevent the enclosure from tipping over, stabilize the enclosure before installing the components.**
- **Do not extend more than one component from the enclosure at a time.**
- **Load the heaviest components first, and place them toward the bottom of the enclosure to prevent the enclosure from becoming top-heavy.**

## Location of keys and mounting hardware

The keys are inside the enclosure, fastened to the front left, vertical, side-facing mounting rail. The bag containing the mounting hardware is fastened to the floor of the enclosure.



## Tools provided

A 5-mm hex wrench and caged nut tool are in the bag with the mounting hardware. A leveling and unpacking wrench is in the document pouch.



5-mm hex wrench



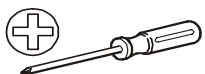
Caged nut tool



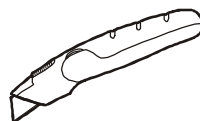
Leveling and open-ended wrench

## Tools required

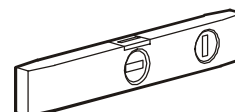
Use the following tools (not provided) to unpack and adjust the enclosure:



#2 Phillips screwdriver



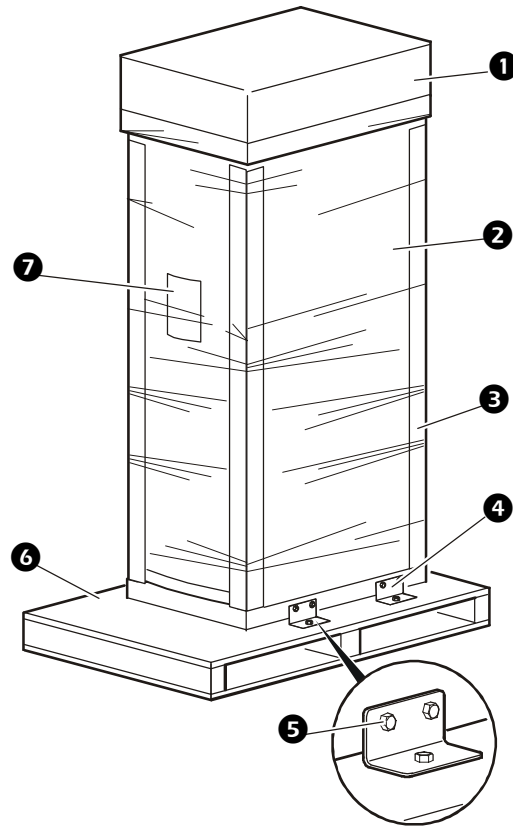
Utility knife



Level



## Enclosure packaging



- |                               |  |
|-------------------------------|--|
| ❶ Cardboard top cover         | ❺ 13-mm bolts  |
| ❷ Stretch wrap                | ❻ Shipping pallet  |
| ❸ Cardboard corner protectors | ❼ Document pouch containing the open-ended wrench, warranty card, and literature |
| ❹ Pallet brackets             |  |

## How to unpack the enclosure

1. Move the shipping pallet to a firm, level surface in an open area. Inspect the enclosure. If you detect shipping damage, contact APC Customer Support at the phone number on the yellow sticker on the front of the enclosure.
2. Remove the open-ended wrench from the pouch on the front of the packaging.
3. Refer to the label on the packaging to determine where to cut the wrapping. Using heavy-duty shears or a utility knife, carefully remove the plastic stretch wrap surrounding the enclosure.
4. Remove the cardboard cover and the four cardboard corner protectors.
5. Remove the four brackets that anchor the enclosure to the shipping pallet. Use the 13-millimeter end of the open-ended wrench (stored inside the document pouch on the front of the enclosure packaging) to remove the bolts that secure the brackets to the pallet.
6. With one person on each side of the enclosure, carefully roll it toward the rear of the pallet until the rear casters clear the back edge of the pallet. Continue to slide the enclosure rearward until the rear casters touch the floor.
7. While one person carefully tips the enclosure slightly away from the pallet, have the other person pull the pallet away from the enclosure.



**Note**

Save the pallet if you plan to reship the enclosure.

## Please recycle



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

## Disclaimer

APC is not responsible for damage sustained during reshipment of this product.

## Inventory

After unpacking the enclosure, verify that all required components and hardware have been shipped with the enclosure. See “Product Inventory” on page 2 for a list of components.



**Note**

If any items are missing, contact APC Customer Support using the appropriate number or Web address listed on the back cover of this manual.

## **Configuration**

Before installing your enclosure, plan its location. Consider the space needed by the equipment and the ergonomics of keyboards and video monitors.

The NetShelter Configurator, available on the APC Web site, helps you plan your configuration to maximize the available U-space of your enclosures.



**Warning**

**To avoid damage or injury, level and stabilize the enclosure in its permanent location before loading equipment.**

# Installation

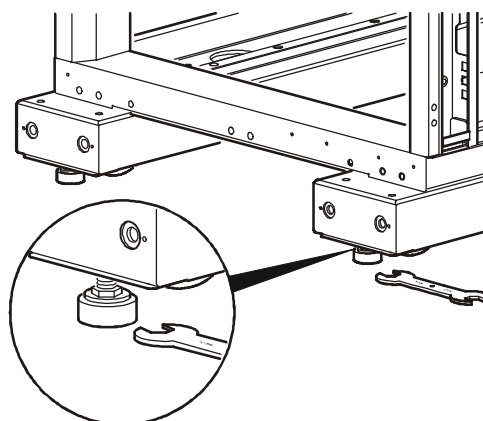
## How to Level and Stabilize the Enclosure

### How to level the enclosure

Level each enclosure before installing equipment.

Leveling feet are attached under the enclosure at the corners. The leveling feet help provide a stable base if the floor is uneven, but they cannot compensate for a badly sloped surface. You can remove the casters and leveling feet to allow the base of the enclosure to rest directly on the floor.

1. Move the enclosure to a level location.
2. For each leveling foot, fit the 14-millimeter end of the open-ended wrench (provided) to the hex head just above the round pad on the bottom of the foot. Turn the wrench clockwise to extend the leveling foot until it makes firm contact with the floor.
3. Use a level to determine which feet need further adjustment to level the enclosure. Adjust them as necessary.



### How to remove the casters and leveling feet (optional)

Lay the enclosure on its side.



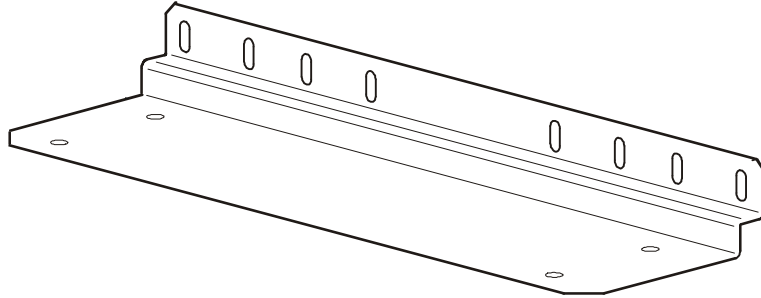
**To avoid personal injury or damage to the enclosure, two people should support the enclosure.**

1. Remove the four hex nuts from each of the casters and remove the casters.
2. For each leveling foot, fit the 14-millimeter end of the open-ended wrench (provided) to the hex head just above the round pad on the bottom of the leveling foot. Turn the wrench clockwise to extend and remove the leveling foot.

## Stabilizing kits (optional)

APC offers additional products (not provided) for stabilizing the enclosure:

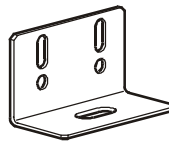
- Stabilizer Plate Kit (AR8120BLK)—includes one plate and mounting hardware for attaching it to the enclosure. Use up to three plate kits to stabilize to the front and sides. You can also bolt stabilizer plates to the floor for additional stability.



### Note

To use the Stabilizer Plate Kit at the front of the enclosure, remove the front skirt of the enclosure. See “How to remove the skirts” on page 19.

- Bolt-Down Bracket Kit (AR8112BLK)—includes four brackets and mounting hardware for attaching to the interior or the exterior of the base of the enclosure. These brackets must be bolted to the floor to stabilize the enclosure.



## Seismic anchorage

The Bolt-Down Brackets (AR8112BLK) have been tested by APC for seismic anchorage and APC considers these to meet UBC Zone-4 compliance.

# How to Remove and Install the Side Panels

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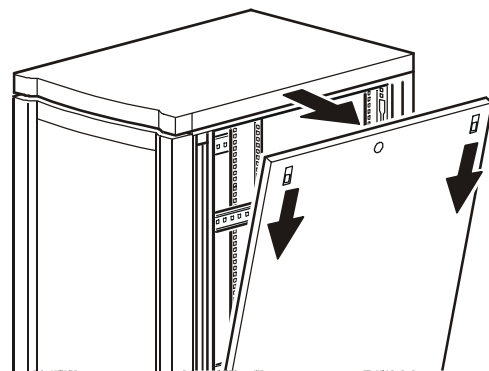
Remove the side panels when you need to access the interior of the enclosure or when you are joining two enclosures together.



**To avoid personal injury or damage to the enclosure, one person should support the side panel while another releases the side panel from its frame.**

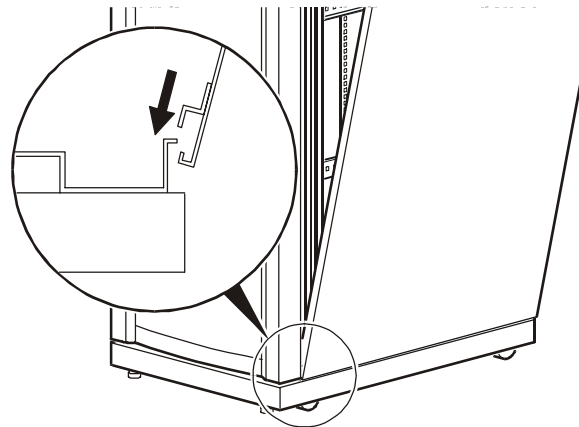
## To remove the side panels:

1. Use the key to unlock the panel, if necessary.
2. Slide both panel latches down at the same time and tip the top of the panel toward you.
3. Release the latches and lift the panel up and off the narrow horizontal lip at the bottom of the enclosure frame.



**To reinstall the side panel:** Engage the bottom of the panel securely with the narrow lip of the enclosure frame before pushing the top of the panel forward into place.

When installing the side panels on an enclosure without sides, remove the plastic grommets from the rear, side-facing, cable-access openings on the rear cabling channel. Also, remove all the baying hardware from the sides.

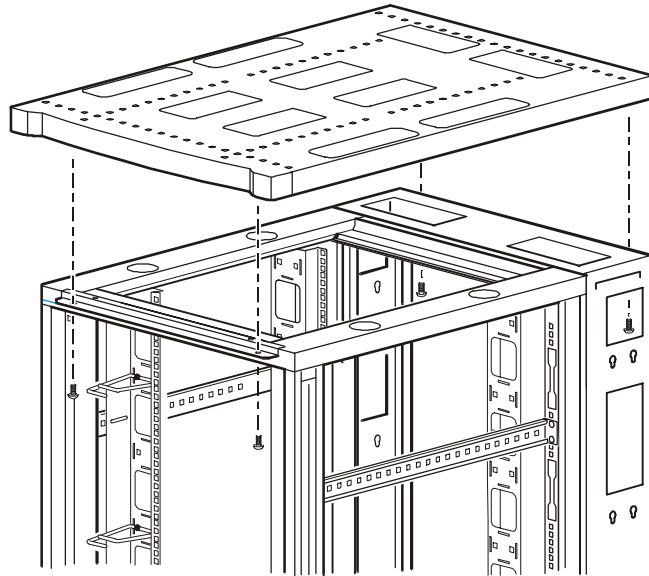


See “How to move baying hardware” on page 22.

# How to Remove the Roof

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To remove the roof from the enclosure, remove the four hex-head screws from the inside corners. Use the 5-mm hex wrench (provided).



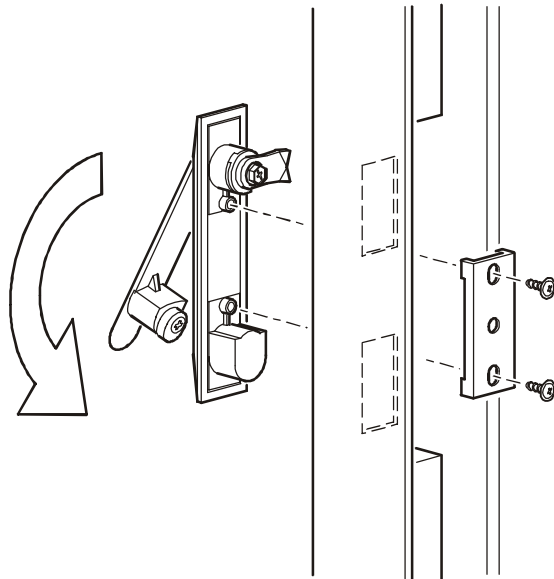
# How to Reverse the Front Door

1. Remove both side panels.



See “How to Remove and Install the Side Panels” on page 10.

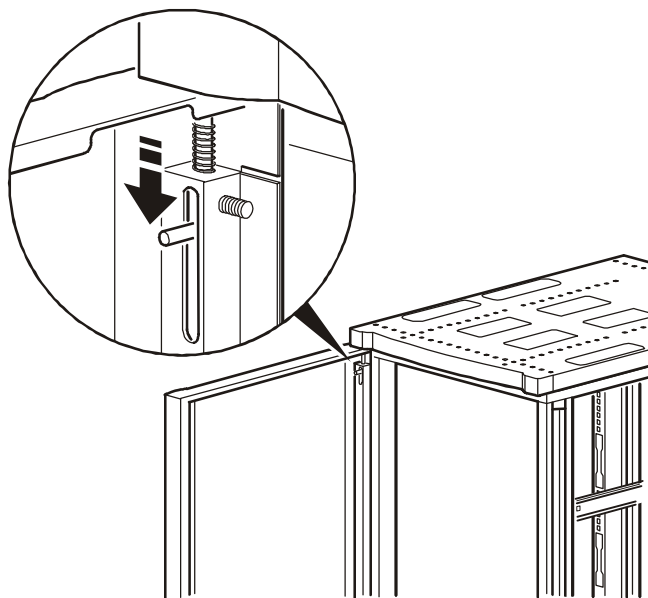
2. Remove the two Phillips-head screws from the rear of the door handle assembly, and remove the handle assembly from the door.
3. Rotate the door handle assembly 180° and reinstall it, using the hardware removed in step 2.



Warning

**To avoid personal injury or damage to the enclosure, one person should support the door while another removes the door from its frame.**

4. Open the door and pull down on the spring-loaded hinge pin attached to the top of the door. Lift the door from its frame and safely set it aside.



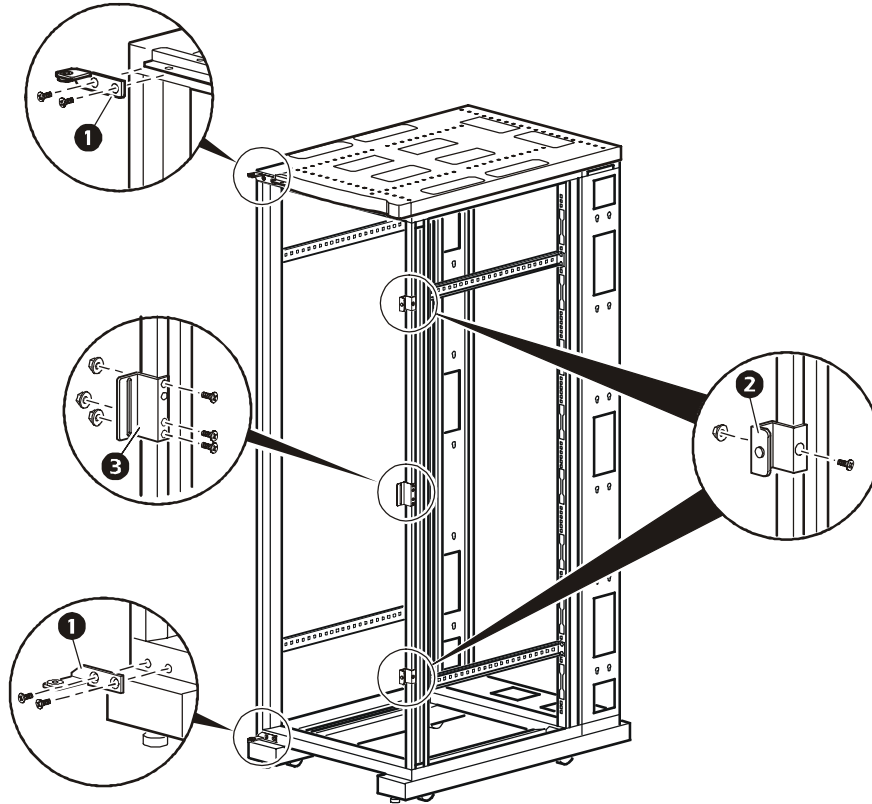




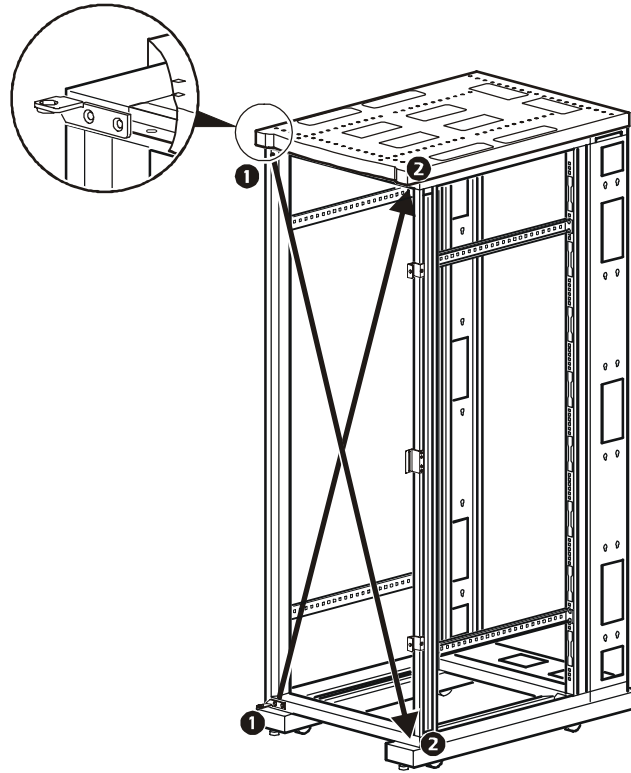
Remember the location of and distance between all items that you remove so that you can reinstall them properly.

**Note**

5. Use a Phillips screwdriver (not provided) to remove the hinge-pin brackets **1**, bumper brackets **2**, and latch bracket **3** from the enclosure frame.



6. Reinstall the hinge-pin brackets on the opposite side of the enclosure.
  - a. Remove the small plastic plugs covering the insertion holes in the base and in the top of the enclosure frame. Reinstall them in the holes on the opposite side of the enclosure.
  - b. Relocate the two hinge-pin brackets from their original position **1** to their new position **2**. Secure them by tightening the screws.

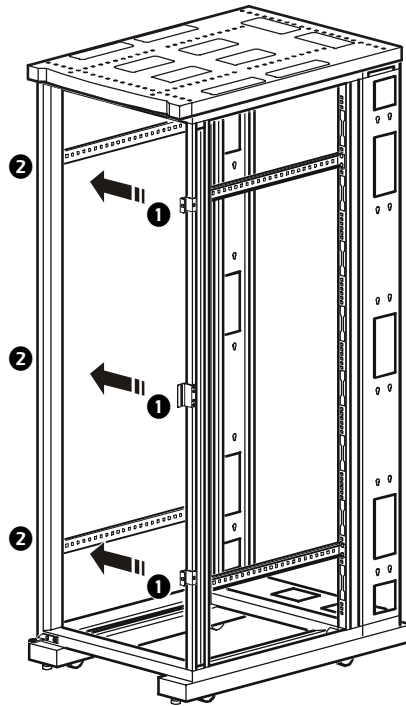


7. Relocate the latch bracket and the two door bumper brackets from their original position **1** to their new position **2**.



Note

Maintain the original spacing between the latch plate and bumpers, as well as their vertical relationship with the enclosure frame.



8. Loosely attach the hinge-pin brackets.
9. Reinstall the door assembly.



Warning

**To avoid personal injury or damage to the enclosure, one person should support the door while another installs the door in its frame.**

- a. Align the lower door hinge-pin with the hole in the bottom of the hinge-pin bracket, and slide the hinge-pin into the hole.
  - b. Pull down the upper hinge-pin.
  - c. Align the upper hinge-pin with the hole in the upper hinge-pin bracket, and release the hinge-pin into the hole.
  - d. Make sure that the door opens and closes properly.
10. Firmly tighten the countersunk screws to secure the hinge-pin brackets to the enclosure frame.
  11. Reinstall the side panels.



See “How to Remove and Install the Side Panels” on page 10.

# Vertical Mounting Rails

The vertical mounting rails are factory-installed in the proper position for use with rack-mountable equipment that has a depth of 18 inches (457 millimeters).

You can reposition the two front, the two rear, or all four of the vertical rails along the horizontal braces to accommodate your equipment. The illustration shows the two front vertical rails, but the procedure is the same for all of the vertical rails.

1. Remove the side panels from the enclosure.



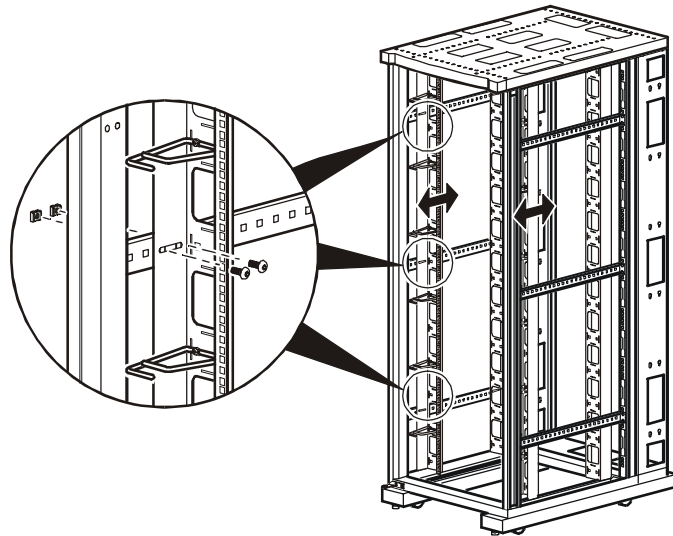
See “How to Remove and Install the Side Panels” on page 10.

2. Use the 5-mm hex wrench (provided) to remove the hex-head screws in the slots of the vertical rails.
3. Locate the new position for the vertical rails.
4. Insert caged nuts into appropriate holes at the new positions on the horizontal braces.



See “How to install and remove caged nuts” on page 17.

5. Place the mounting rail at the new position. Insert a hex-head screw through the rail into each caged nut in the upper and lower horizontal braces. Tighten the screws to secure the vertical mounting rail to the horizontal braces.
6. Repeat step 2–5 for the opposite side of the enclosure.



## Note

To achieve the desired mounting depth, you may need to remove the cable rings from the mounting rails.



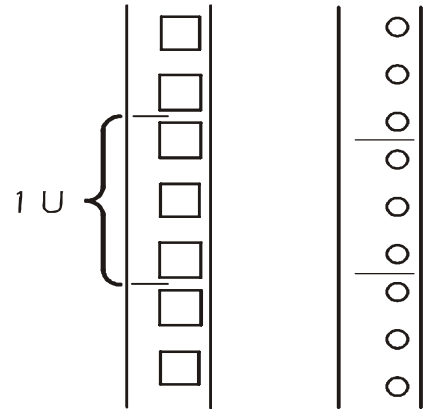
See “Removing and installing cable rings” on page 18.

# How to Install Equipment

This section provides general information on installing rack-mount equipment in the enclosure. Read the documentation provided with the equipment you are installing for more specific instructions.

## How to identify one U-space on the mounting rail

When installing equipment, locate the top and bottom of a U-space on the mounting rails. Every third hole on the mounting rails of a NetShelter enclosure is numbered to indicate the middle of a U-space. A U-space consists of one of these numbered holes and one hole directly above and below it.



Enclosures with square holes require that you install caged nuts in the mounting rails before installing some equipment. For enclosures with tapped holes, use the M6 screws provided with the enclosure.

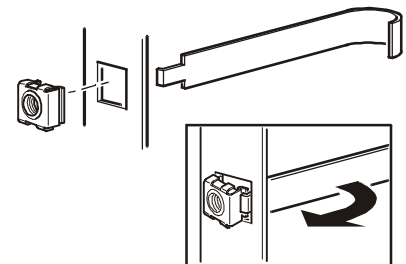
## How to install and remove caged nuts

*To install a caged nut:*



**Install the caged nut horizontally. Do not install the caged nut vertically with the sides of the caged nut engaging the top and bottom of the square hole.**

1. Insert the caged nut into the square hole by hooking one side of the caged nut assembly through the far side of the hole.
2. Place the caged nut tool (provided) on the other side of the caged nut and pull to snap it into position.



*To remove a caged nut:*

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

## Grounding studs

There are fourteen grounding studs on the enclosure in the following locations:

Number of studs	Location
4	Base
1	Rear cabling channel
1	Roof
2	Front door
4	Rear doors
2	Side panels (only on enclosure with sides)

APC offers an optional grounding kit (AR8390) for grounding the enclosure.

## Removing and installing cable rings

You can install a 2 U cable ring to any part of the enclosure that will accept its two-hole spacing (vertical or horizontal). Install caged nuts where necessary, and use two screws to secure each cable ring.

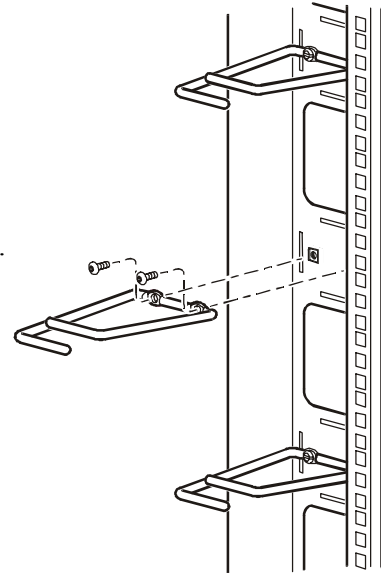


See “How to install and remove caged nuts” on page 17.

Additional cable management kits are available from APC.



See “Cable Management Options” on page 20.

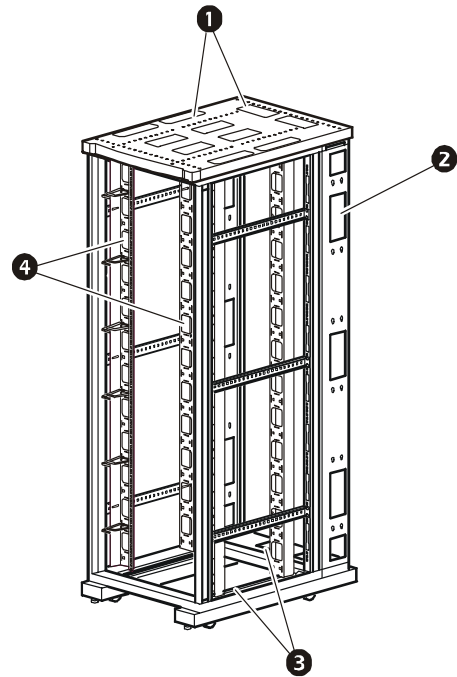


# Cable Management

## Location of cable-access openings

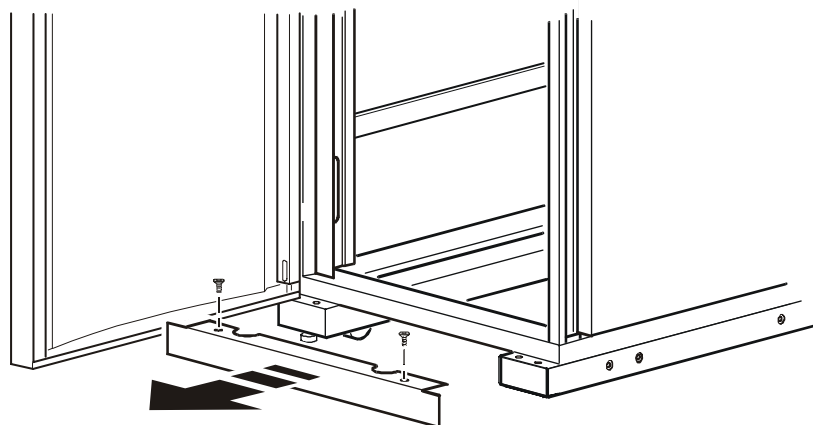
There are cable-access openings in the roof **1**, sides **2**, base **3**, and mounting rails **4** of the enclosure. The rear cabling channel on the back of the enclosure provides clearance for wiring between the doors and the mounting rails. You can use this clearance for routing data and power cables—data cables on one side, and power cables on the other side.

Before routing wires through the side access holes on the enclosure with sides, ensure that the protective grommets (provided) are installed into the cable-access openings.



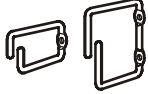
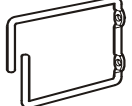
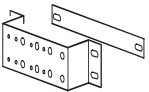



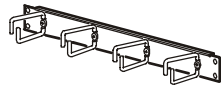
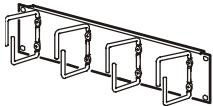
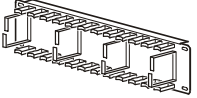
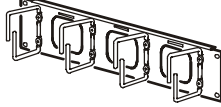
## How to remove the skirts

For additional cable access or to install the stabilizer plate, remove the skirts at the front and rear of the enclosure by removing the two countersunk screws in each skirt.



# Cable Management Options

APC offers the following products for managing cables in your enclosure:

Product	SKU	Description	Figure
Cable management rings	AR8113A	Fastens cables to posts, mounting rails, or braces.	
Cable management rings for networking	AR8121	Fastens cables to mounting rails of a Networking Enclosure.	
Cable containment kit	AR8116BLK	Fastens cables within the rear cabling channel.	
Side cable management tray	AR8114BLK	Routes cables vertically between side braces.	
Rear cable management tray (42U enclosure)	AR8118BLK	Routes cables vertically in the center of the rear cabling channel.	
Side channel cable trough	AR8008BLK	Routes cables from the front to the rear of the enclosure. For use on the mounting rails or with AR8428 organizers.	
19-inch 1U horizontal cable organizer	AR8425A	Routes cables horizontally on the front or back of the 19-inch EIA rack.	
19-inch 2U horizontal cable organizer	AR8426A	Routes cables horizontally on the front or back of the 19-inch EIA rack.	
19-inch 2U patch cord organizer	AR8427A	Routes cables horizontally on the front or back of the 19-inch EIA rack.	
19-inch 2U horizontal cable organizer pass-through	AR8428	Routes cables horizontally or front to rear.	



# How to Join Enclosures

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You can expand your system configuration by joining two enclosures. Enclosures without sides include pre-installed baying hardware. Enclosures with sides do not include baying hardware.

To join two NetShelter VX enclosures with sides or a NetShelter VX enclosure and a NetShelter VS enclosure, you must purchase a baying hardware kit (AR8376BLK) from APC. To join an enclosure with sides to one without sides, you do not need additional hardware.

## Before joining enclosures

The procedures in this chapter explain how to join two enclosures:

- one with sides, and one without sides
- two enclosures without sides

To join an enclosure with sides to an enclosure without sides:

1. Remove the side panel from the enclosure with sides.



See “How to Remove and Install the Side Panels” on page 10.

2. Move the baying hardware from one enclosure to the other.



See “How to move baying hardware” on page 22.

To join two enclosures without sides:

3. Connect the front of the enclosures:



See “Make the front connections” on page 25.

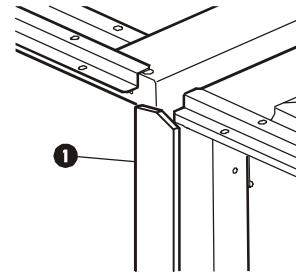
4. Connect the rear of the enclosures:



See “Make the rear connections” on page 25.

## How to move baying hardware

Baying hardware is pre-installed on both sides of the enclosure that is without side panels. The baying trim ❶ is pre-installed on the front, right post of the enclosure that is without side panels, using the baying brackets. When joining an enclosure with sides to an enclosure without sides, you must move some of the baying hardware.



The procedures for moving baying hardware vary according to whether the enclosure with sides is to the right or left of the enclosure without sides. If the enclosure with sides is on the right, you do not move the trim.



### Note

When a procedure refers to the enclosure on the right or the enclosure on the left, the point of orientation is always from the front.

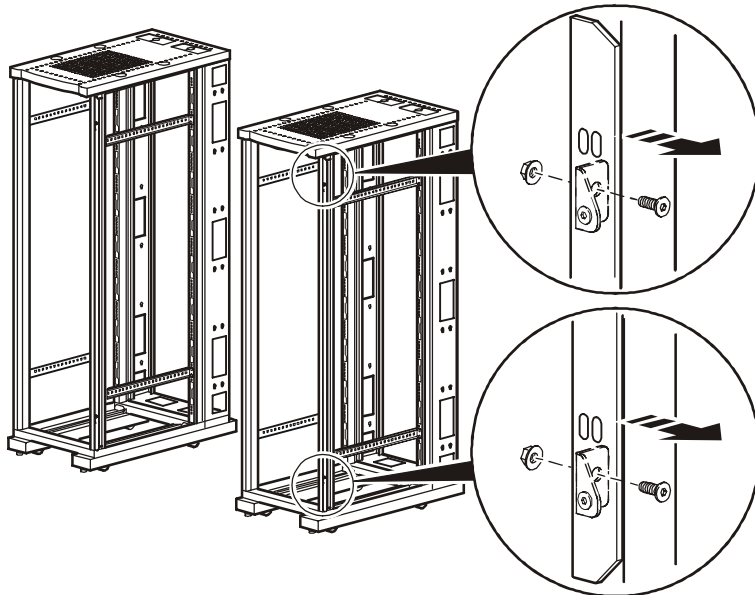
## When the enclosure with sides is on the left

1. Carefully slide the enclosures apart.
2. Remove the right side panel from the enclosure on the left.

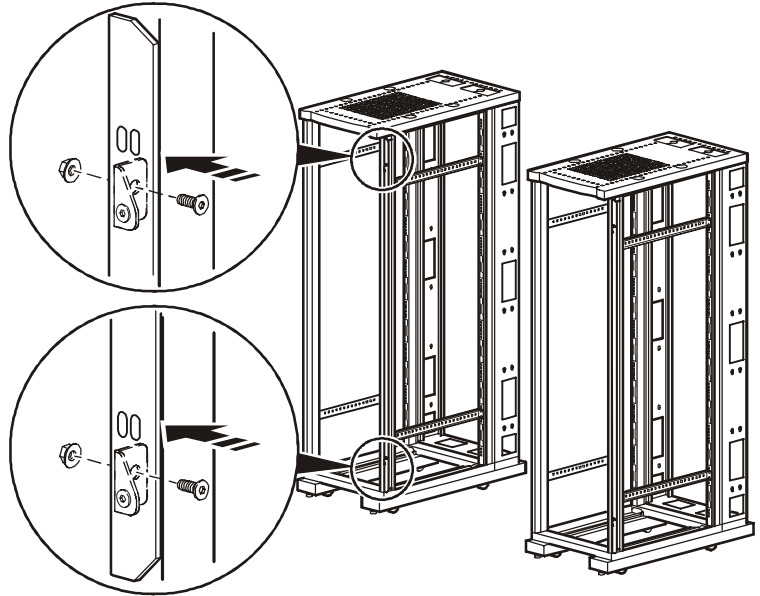


See “How to Remove and Install the Side Panels” on page 10.

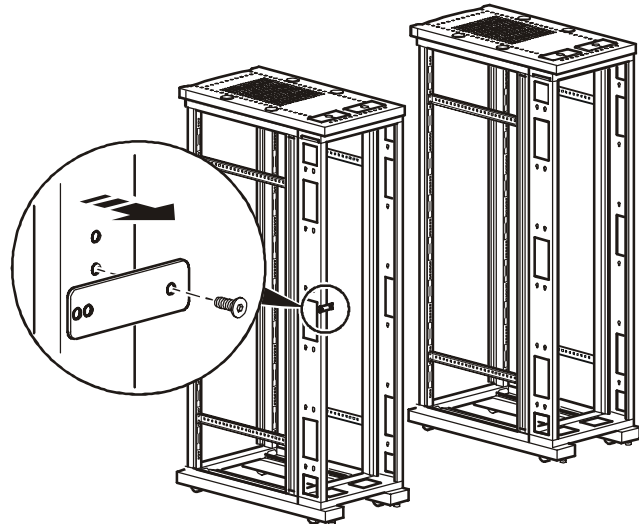
3. Remove the pan-head socket screws and nuts that hold the baying brackets to the front right vertical frame of the enclosure on the right. Leave the baying trim attached to the brackets. Save the two pan-head socket screws and nuts for use in step 4.



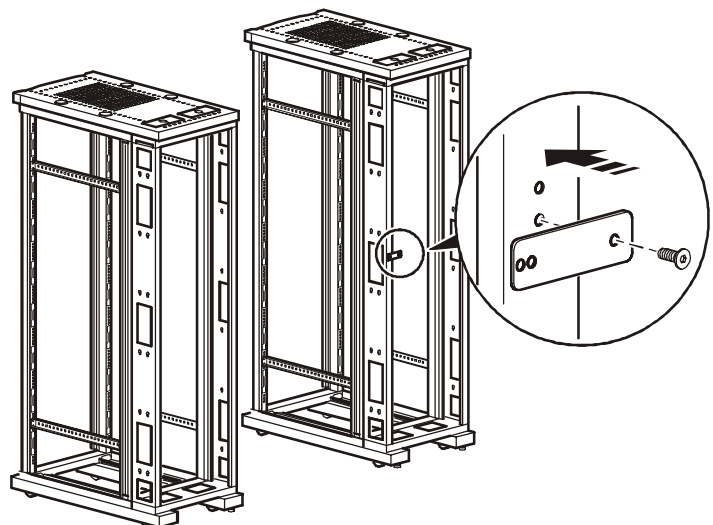
- Using the two pan-head socket screws and nuts, fasten the baying brackets (with baying trim attached) that you removed in step 3 to the front right vertical frame of the enclosure on the left.



- Remove the low-profile socket screw from the baying plate on the right rear of the enclosure without sides. Save the screw and baying plate for use in the next step.



- Using the low-profile socket screw, secure the baying plate removed in step 5 to the right rear of the enclosure with sides.



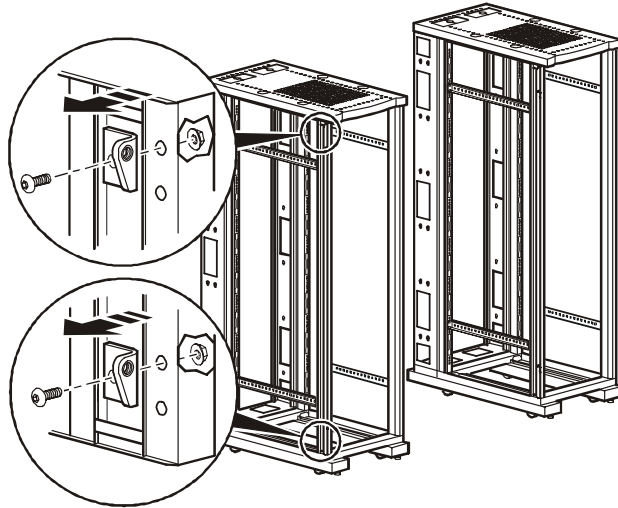
### When the enclosure with sides is on the right

1. Carefully slide the enclosures apart.
2. Remove the left side panel of the enclosure with sides.

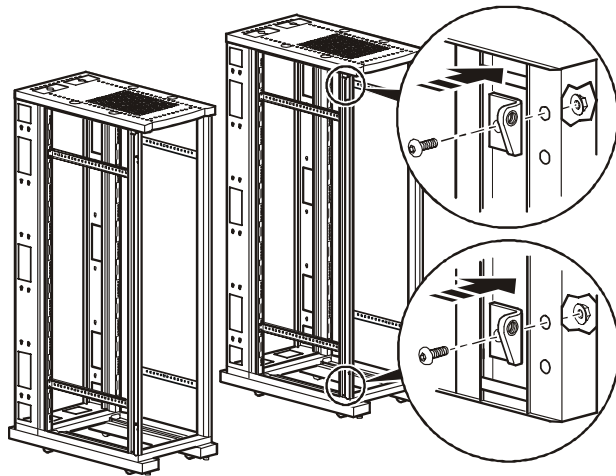


See “How to Remove and Install the Side Panels” on page 10.

3. Remove the pan-head screw and nut securing each of the baying brackets from the front left vertical frame of the enclosure on the left without sides. Save the pan-head screws, nuts, and baying brackets for use in the next step.



4. Using the pan-head screws and nuts, secure the baying brackets to the front left vertical frame of the enclosure on the right.



5. Install the side panel removed in step 2 on the left of the enclosure without sides (optional).

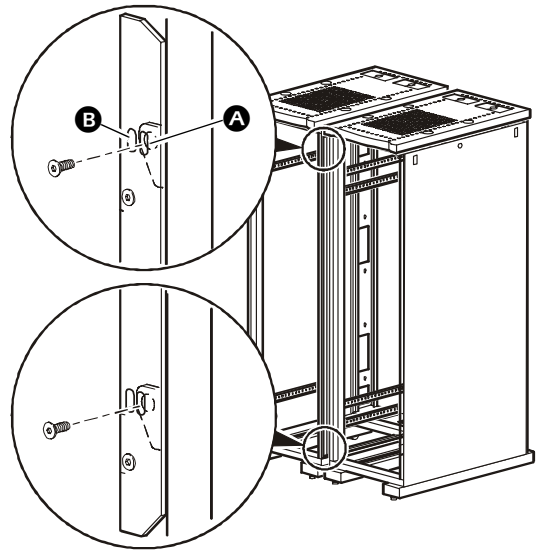


See “How to Remove and Install the Side Panels” on page 10.

### Make the front connections

First slide the enclosures together and align them. Make sure that the holes in the baying brackets are aligned with the holes in the baying trim. The connection procedure varies according to your row configuration: 24-inch or 600-millimeter centers. When you are joining enclosures configured on 24-inch centers, align them using hole **A**. When joining enclosures configured on 600-millimeter centers, align them using hole **B**.

Make sure that the enclosures are level and are at the same height by adjusting the leveling feet.



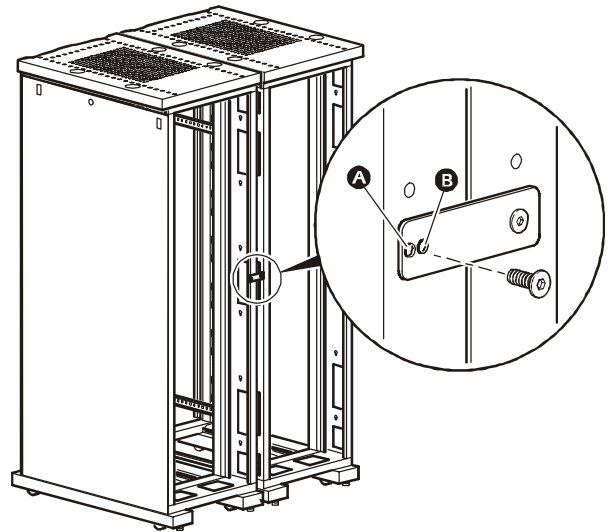
See “How to level the enclosure” on page 8.

Insert a low-profile screw through the baying trim into each of the two brackets and tighten it using the 3-mm hex wrench.

### Make the rear connections

When joining enclosures configured on 24-inch centers, use hole **A**. When joining enclosures configured on 600-millimeter centers, use hole **B**.

Insert a low-profile screw through the baying plate and into the threaded hole in the frame. Tighten the screw using the 3-mm hex wrench.



# Specifications

Item	AR2312BLK AR2314BLK	AR2313BLK AR2315BLK
	Measurement	
Height	81.50in (207cm)	81.50in (207cm)
Width	29.50in (74.9cm)	29.00in (73.7cm)
Depth	42.20in (107.4cm)	42.20in (107.4cm)
Net weight	372 lb (168.7kg)	294 lb (133.4 kg)
Total open area (front door)	1123 in <sup>2</sup> (7245.2cm <sup>2</sup> )	1123 in <sup>2</sup> (7245.2cm <sup>2</sup> )
Total open area (rear door)	1092.99 in <sup>2</sup> (7051.5cm <sup>2</sup> )	1092.99 in <sup>2</sup> (7051.5cm <sup>2</sup> )
Open area per U (front door)	26.74 in <sup>2</sup> (172.5cm <sup>2</sup> )	26.74 in <sup>2</sup> (172.5cm <sup>2</sup> )
Open area per U (rear door)	26.02 in <sup>2</sup> (167.9cm <sup>2</sup> )	26.02 in <sup>2</sup> (167.9cm <sup>2</sup> )
Clearance (for wiring between front door and vertical rail)	8.80 in (22.4cm)	8.80 in (22.4cm)
Weight rating: static load	2000 lb (907kg)	2000 lb (907kg)
Weight rating: dynamic load	2000 lb (907kg)	2000 lb (907kg)

Item	AR2318BLK	AR2319BLK
	Measurement	
Height	90.2 in (229.2cm)	90.2 in (229.2cm)
Width	29.50in (74.9cm)	29.00in (73.7cm)
Depth	42.20in (107.4cm)	42.20in (107.4cm)
Net weight	412lb (186.8kg)	378lb (171.5kg)
Total open area (front door)	1855.69 in <sup>2</sup> (11972.16cm <sup>2</sup> )	1855.69 in <sup>2</sup> (11972.16cm <sup>2</sup> )
Total open area (rear door)	1759.59 in <sup>2</sup> (11352.19cm <sup>2</sup> )	1759.59 in <sup>2</sup> (11352.19cm <sup>2</sup> )
Open area per U (front door)	26.74 in <sup>2</sup> (172.5cm <sup>2</sup> )	26.74 in <sup>2</sup> (172.5cm <sup>2</sup> )
Open area per U (rear door)	26.02 in <sup>2</sup> (167.9cm <sup>2</sup> )	26.02 in <sup>2</sup> (167.9cm <sup>2</sup> )
Clearance (for wiring between front door and vertical rail)	8.80 in (22.4cm)	8.80 in (22.4cm)
Weight rating: static load	2000lb (907kg)	2000lb (907kg)
Weight rating: dynamic load	2000lb (907 kg)	2000lb (907kg)

# Warranty and Service

## Limited warranty

APC warrants the NetShelter VX Networking Enclosure to be free from defects in materials and workmanship for a period of five years from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its own sole option, 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. This warranty applies only to the original purchaser.

## Warranty limitations

**Except as provided herein, APC makes no warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.** Some jurisdictions do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

**Except as provided above, in no event will APC be liable for direct, indirect, special, incidental, or consequential damages arising out of the use of this product, even if advised of the possibility of such damage.**

Specifically, APC 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 substitutes, claims by third parties, or otherwise. This warranty gives you specific legal rights and you may also have other rights, which vary according to jurisdiction.

## Obtaining service

To obtain support for problems with your NetShelter VX Networking Enclosure:

1. Note the serial number and date of purchase. The serial number is on the top of the enclosure frame inside the rear door.
2. Contact Customer Support at a phone number on the back cover of this document. A technician will try to help you solve the problem by phone.
3. If you must return the product, the technician will give you a return material authorization (RMA) number. If the warranty expired, you will be charged for repair or replacement.
4. Pack the unit carefully. The warranty does not cover damage sustained in transit. Enclose a letter with your name, address, RMA number and daytime phone number; a copy of the sales receipt; and a check as payment, if applicable.
5. Mark the RMA number clearly on the outside of the shipping carton.
6. Ship by insured, prepaid carrier to the address provided by the Customer Support technician.

## APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Visit the APC Web site to access documents in the APC Knowledge Base and to submit customer support requests.
  - **www.apc.com** (Corporate Headquarters)  
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
  - **www.apc.com/support/**  
Global support searching APC Knowledge Base and using e-support.
- Contact an APC Customer Support center by telephone or e-mail.
  - Regional centers:

Direct InfraStruXure Customer Support Line	(1)(877)537-0607 (toll free)
APC headquarters U.S., Canada	(1)(800)800-4272 (toll free)
Latin America	(1)(401)789-5735 (USA)
Europe, Middle East, Africa	(353)(91)702000 (Ireland)
Japan	(0) 3 5434-2021
Australia, New Zealand, South Pacific area	(61) (2) 9955 9366 (Australia)

- Local, country-specific centers: go to **www.apc.com/support/contact** for contact information.

Contact the APC representative or other distributor from whom you purchased your APC product for information on how to obtain local customer support.

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