

# NetShelter<sup>®</sup> SX Recessed Rail Kit—Installation

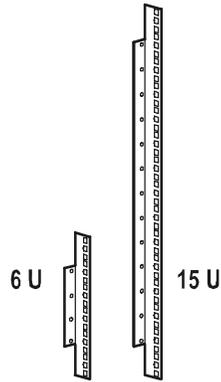
## Inventory



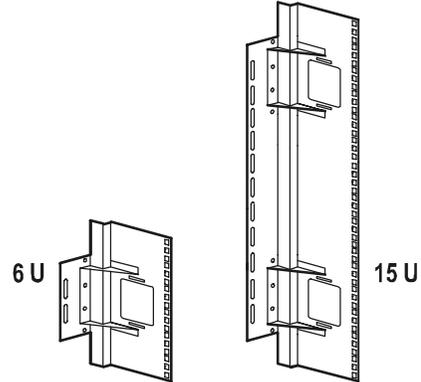
**1** M6 x 12 Torx<sup>®</sup> screw (12)



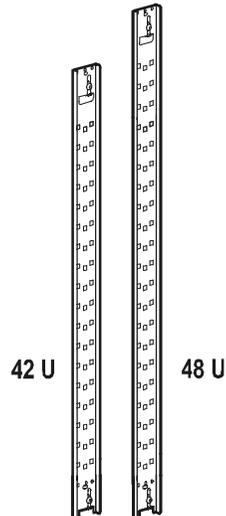
**2** M6 cage nut (12)



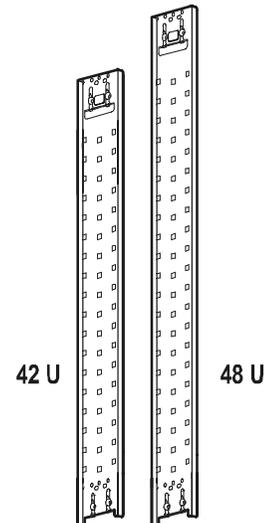
**3** 6-U and **4** 15-U 600-mm vertical mounting rail (2 each with AR7503 and AR7504)



**5** 6-U and **6** 15-U 750-mm vertical mounting rail (2 each with AR7508 and AR7578)



**7** 42-U (AR7503) and **8** 48-U (AR7504) 600-mm vertical mounting flange (2 each)



**9** 42-U (AR7508) and **10** 48-U (AR7578) 750-mm vertical mounting flange (2 each)

## Tools required (provided)



cage nut tool



Torx T30/#2 Phillips wrench

## How to install and remove cage nuts

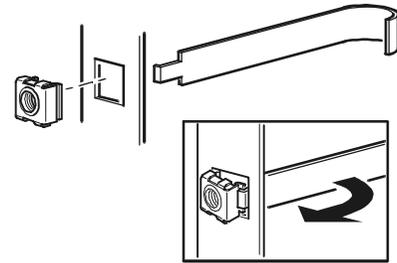
*To install a cage nut:*



**Warning**

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

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



*To 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.



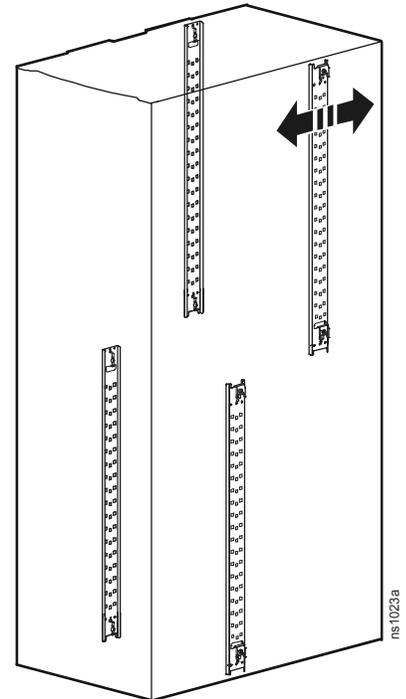
**Note**

The recessed rail kits are provided with enough M6 x 12 screws and M6 cage nuts for most installations. Additional screws and cage nuts may be used to provide greater support for mounting rails with more than six holes.

# Installation and Operation of the Vertical Mounting Flanges

## Location of the vertical mounting flanges

Determine the location to install the mounting flanges. The vertical mounting flanges **7** **8** **9** **10** can be mounted on the top or bottom of the enclosure. The mounting flanges are adjustable toward the front or the rear of the enclosure to accommodate equipment with other depths.

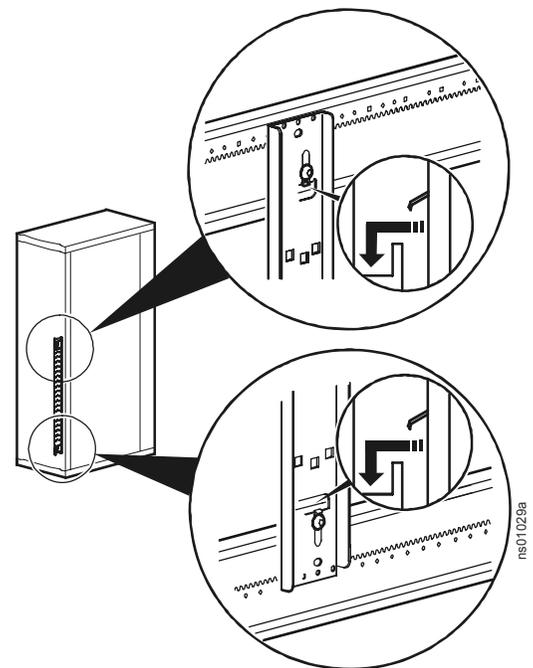


## Installation of the vertical mounting flanges

1. Place the vertical mounting flange onto the enclosure side brace. Make sure that both the top and the bottom of the flange are attached to either the top and middle or the middle and bottom side braces of the enclosure, depending on your mounting flange location.
2. Repeat step 1 for the opposite side of the enclosure.



**Note** All vertical mounting flanges are attached to the enclosure using the same procedure.



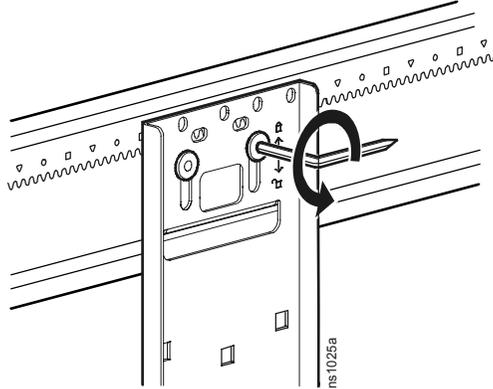
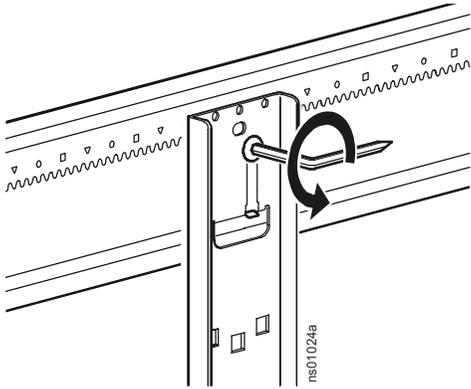
## How to adjust the vertical mounting flanges on the side braces



**Warning**

To avoid personal injury or damage to the enclosure, perform this procedure without any equipment installed on the mounting flanges.

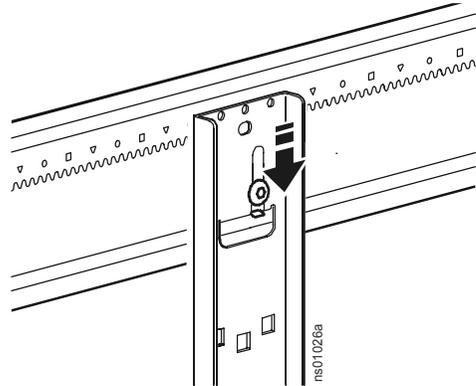
1. Use the Torx T30/Phillips #2 wrench to loosen, but not remove, the Torx screws in the slots of each mounting flange.



**Note**

Loosen both screws on the mounting flange of the 750-mm rack.

2. Lower the flat bracket and move the mounting flange to the location you selected.



3. To align the vertical mounting flanges properly, note the symbol (for example, the diamond) visible through the hole on the top of the flange, and ensure that the same symbol is visible through the corresponding hole at the bottom of the flange. When the flanges are aligned properly, only one symbol is visible at a time through any of the holes.

On the 750-mm rack there are circles 18.75 in (476 mm) behind the front mounting flange designating the location for networking and telecommunications equipment.



Vertical mounting flanges adjust in 1/4-in (6-mm) increments.

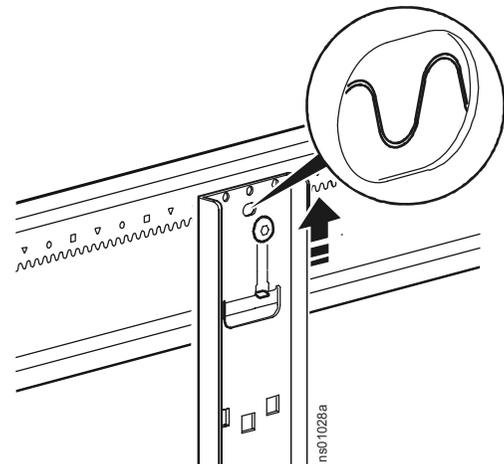
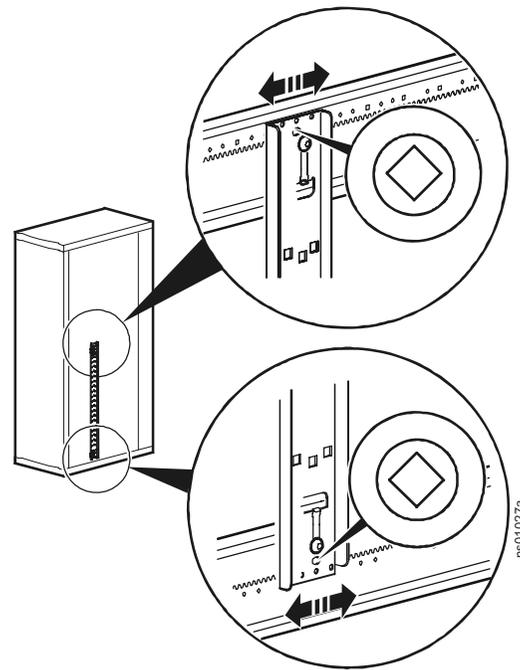


Vertical mounting flanges placed across from each other must have the same visible symbol.

4. When the vertical mounting flange is in the proper location, slide each screw up until the teeth in the bracket engage fully with the teeth in the side brace, and tighten the screws.



Use the large center hole just below the flat bracket for leverage and to help position the teeth of the bracket while tightening the screws on the mounting flange of the 750-mm rack.

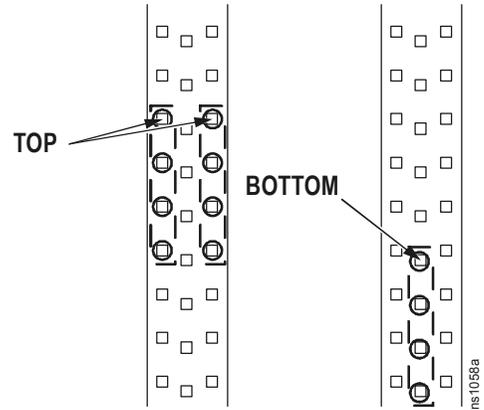


# Installation of the Mounting Rails

## Vertical mounting flange configurations and mounting rails

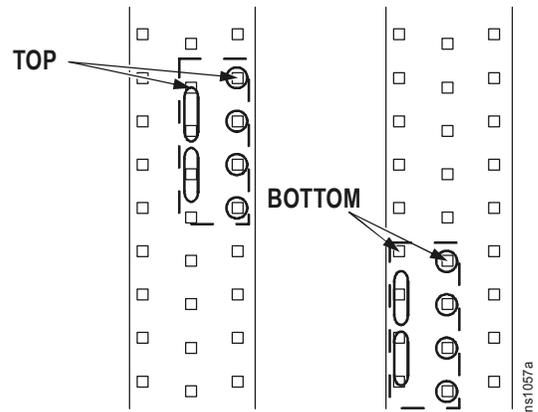
### 600-mm vertical mounting flange configurations.

The 6-U and 15-U vertical mounting rails use different holes on the 600-mm mounting flanges, depending on whether the flanges are mounted on the top or bottom half of the enclosure. Use the outside holes for top configurations and the middle holes for bottom configurations.



### 750-mm vertical mounting flange configurations.

The 6-U and 15-U vertical mounting rails use different holes on the 750-mm mounting flanges depending on whether the flanges are mounted on the top or bottom half of the enclosure. For top configurations, use the two holes farthest away from the side of the enclosure to which the equipment will be mounted. For bottom configurations, use the two holes closest to the side of the enclosure to which the equipment will be mounted.

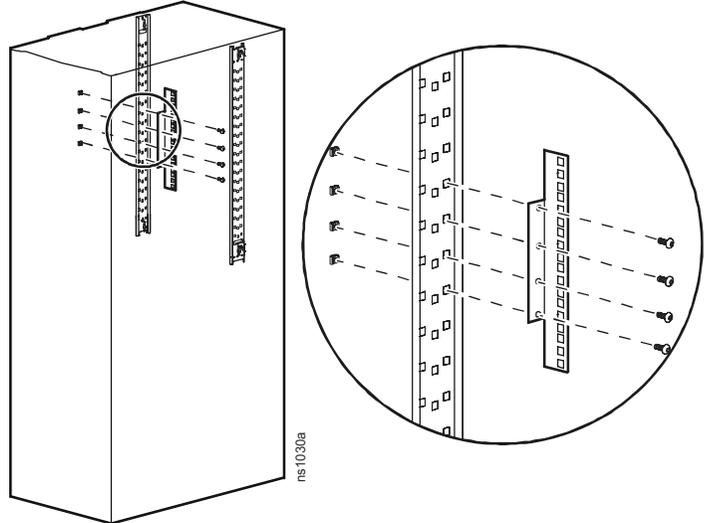


## 600-mm 6-U mounting rail installation (AR7503 and AR7504)



A top mounting flange configuration is shown here.

1. Align the four holes on the 6-U mounting rail **3** with four holes on the vertical mounting flange in the location you selected.
2. Install four cage nuts **2** in the side-facing holes (chosen in step 1) of the vertical mounting flange.
3. Install a 6-U mounting rail on the vertical mounting flange using four M6 x 12 socket pan head Torx screws **1** and the cage nuts installed in step 2.
4. Repeat steps 1 through 3 for the opposite side of the enclosure.

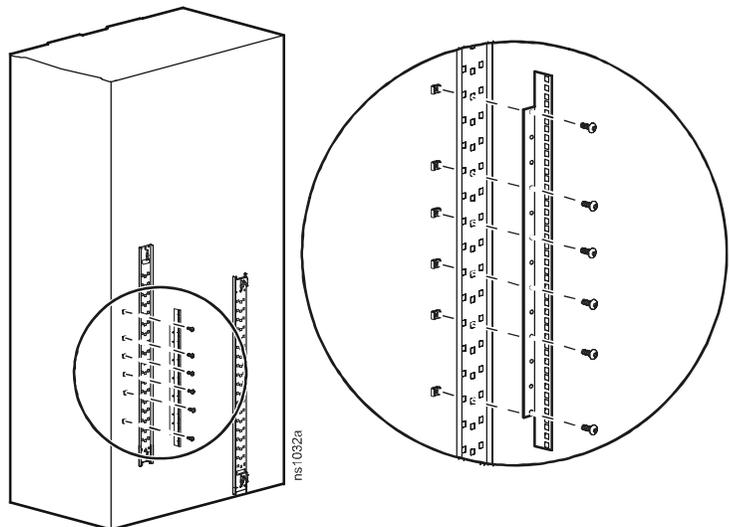


## 600-mm 15-U mounting rail installation (AR7503 and AR7504)



A bottom mounting flange configuration is shown here.

1. Choose six holes on the 15-U mounting rail **4** and align those holes with holes on the vertical mounting flange in the location you selected.
2. Install six cage nuts **2** in the side-facing holes (chosen in step 1) of the vertical mounting flange.
3. Install a 15-U mounting rail on the vertical mounting flange, using four M6 x 12 socket pan head Torx screws **1** and the cage nuts installed in step 2.
4. Repeat steps 1 through 3 for the opposite side of the enclosure.



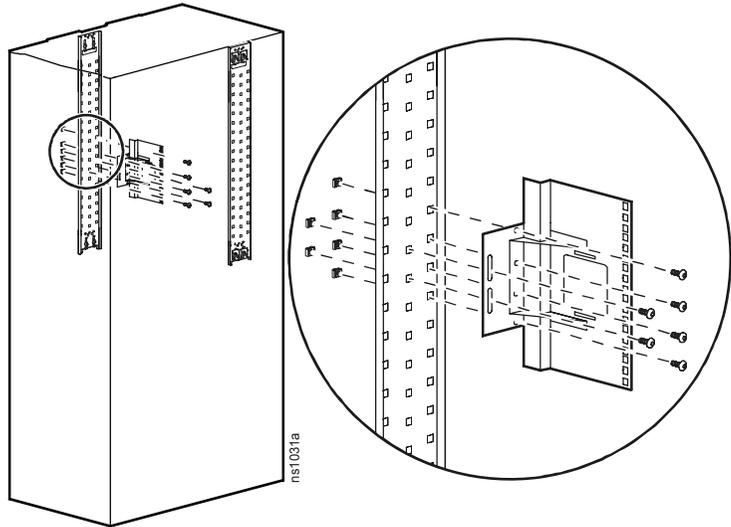
## 750-mm 6-U mounting rail installation (AR7508 and AR7578)



A top mounting flange configuration is shown here.

### Note

1. Align the four small holes on the 6-U mounting rail **5** with four holes on the vertical mounting flange in the location you have selected.
2. Install four cage nuts **2** in the side-facing holes (chosen in step 1) of the vertical mounting flange. Install an additional two cage nuts in the side-facing holes even with the slots on the 6-U mounting rail.
3. Install a 6-U mounting rail on the vertical mounting flange using six M6 x 12 socket pan-head Torx screws **1** and the cage nuts installed in step 2.
4. Repeat steps 1 through 3 for the opposite side of the enclosure.



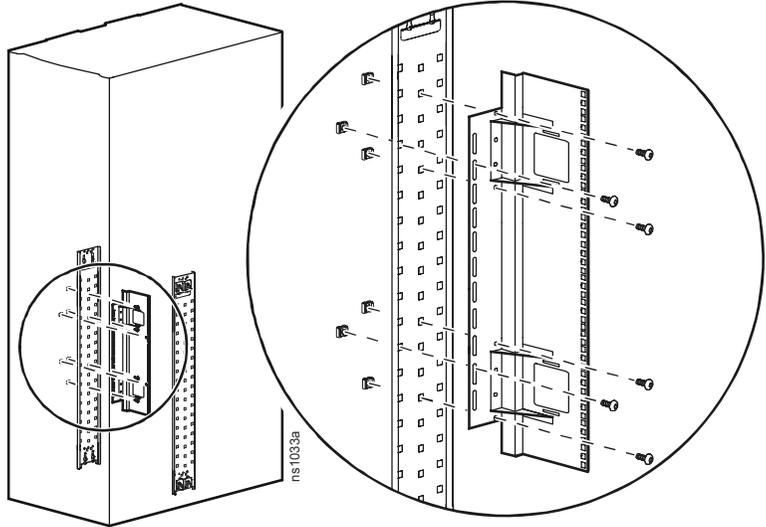
## 750-mm 15-U mounting rail installation (AR7508 and AR7578)



Note

A bottom mounting flange configuration is shown here.

1. Choose four small holes on the 15-U mounting rail **6** and align those holes with holes on the vertical mounting flange in the location you have selected.
2. Install four cage nuts **2** in the side-facing holes (chosen in step 1) of the vertical mounting flange. Install an additional two cage nuts in the side-facing holes even with the slots on the 15-U mounting rail.
3. Install a 15-U mounting rail on the vertical mounting flange using six M6 x 12 socket pan-head Torx screws **1** and the cage nuts installed in step 2.
4. Repeat steps 1 through 3 for the opposite side of the enclosure.





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Dieses Handbuch ist in Deutsch auf der APC Webseite ([www.apc.com](http://www.apc.com)) verfügbar.

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