



## S2 42U Dynamic Standard and Enterprise Racks Unpacking Instructions

This document provides unpacking information for the IBM® S2 42U Dynamic Standard Rack and IBM S2 42U Dynamic Expansion Rack. The *IBM S2 42U Dynamic Standard Rack and IBM S2 42U Dynamic Expansion Rack Installation Guide*, which is on the IBM Documentation CD that comes with the rack, contains instructions for installing the rack. For details about preparing a location for the rack, see the *IBM @server xSeries Rack Planning Guide*, which is available at <http://www.ibm.com/systems/support/>.

**Important:** You will need a minimum of 3 m (10 ft) in front of the pallet to unpack the rack.

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### Tool requirements and rack contents

You will need a utility knife or scissors to unpack the rack. The package contains the following items:

- IBM S2 42U Dynamic Standard Rack or IBM S2 42U Dynamic Expansion Rack
  - Front and rear rack doors
  - Side panels (expansion racks do not come with side panels)
- Ramp

**Note:** To move a configured rack over a long distance, you must install the outriggers and package the rack using the original pallet, ramp, and packaging material. If the stability of the configuration is unknown, remove components from the top of the rack to make sure that the configured rack is safe to move (see safety Statement 11 on page 8).

- Keys for the rack doors
- Hardware kit containing miscellaneous rack components (located inside the rack, on the bottom, if the rack comes empty)
  - Wrench (used to raise the leveling pads and remove the rack retaining brackets)
  - One front stabilizer bracket and mounting bolts
  - Two I-bolts
  - Miscellaneous parts (includes screws, nuts, tools, and other hardware)
  - Hardware kit for attaching racks in a suite (expansion rack only)
  - *Rack Safety Information* document
  - IBM Documentation CD, which includes the *IBM S2 42U Dynamic Standard Rack and IBM S2 42U Dynamic Expansion Rack Installation Guide*

If documentation updates are available, you can download them from the IBM Web site. The rack might have features that are not described in the documentation that comes with the rack, and the documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the rack documentation.

**Note:** Changes are made periodically to the IBM Web site. Procedures for locating documentation might vary slightly from what is described in this document.

To check for updates, complete the following steps.

1. Go to <http://www.ibm.com/systems/support/>.
2. Under **Product support**, click **System x**.
3. Under **Popular links**, click **Publications lookup**.
4. In the **Product family** field, select **Rack/Storage Enclosures**.
5. In the **Type** field, select **9956**.
6. Click **Continue**.

For more information about rack cabinets and options, see <http://www.ibm.com/systems/xbc/cog/rackcabinetsoptions/rackcabinetsoptions.html>.

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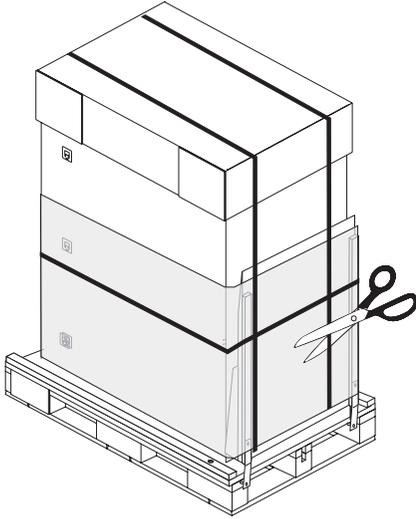
## Unpacking a standard or expansion rack

This section describes how to unpack and prepare an S2 42U rack to be moved to its installation site.

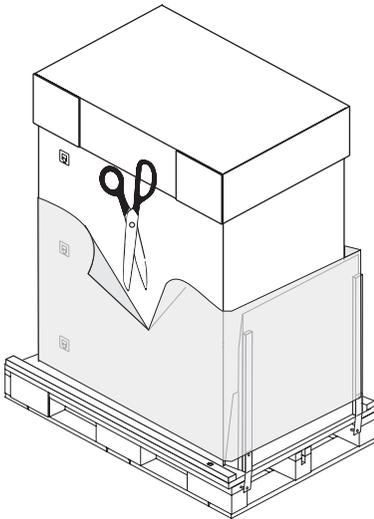
### Removing the packaging material

To remove the protective packaging from the rack, complete the following steps:

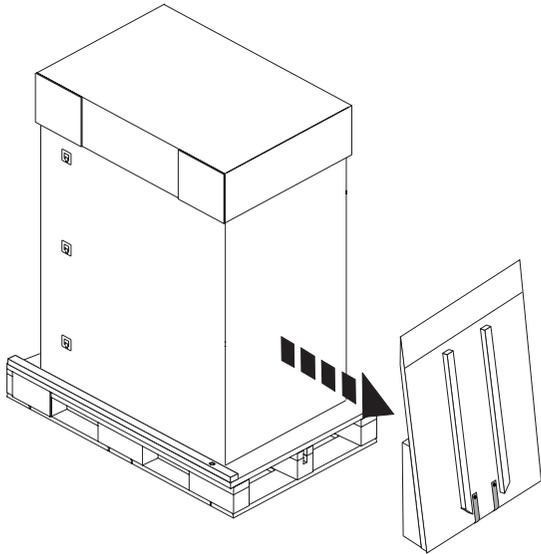
1. Cut the two vertical bands and one horizontal band from around the rack packaging.



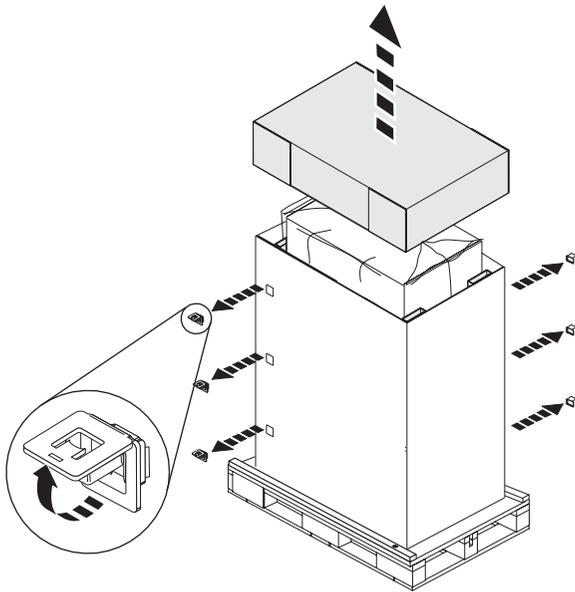
2. Carefully remove the stretch plastic wrap with a utility knife or scissors.



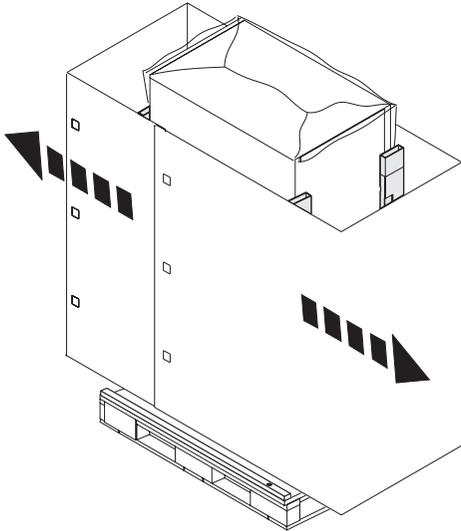
3. Carefully remove the ramp and set it aside.



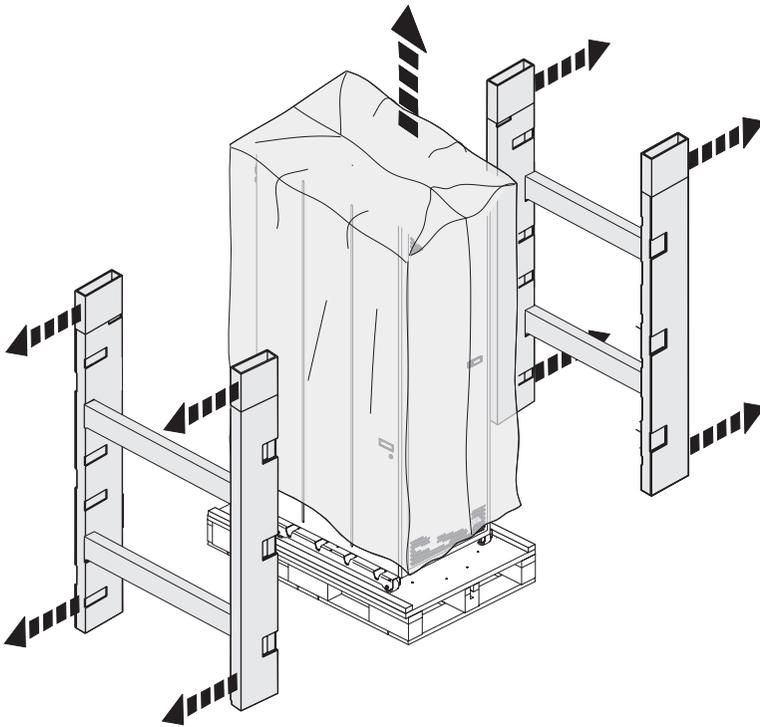
4. Pull the top cap off the top of the rack; then, open the six plastic clips on the front and rear of the rack.



5. Pull off the cardboard packaging that surrounds the rack.



6. Remove the two protective frames, any other packaging material, and the plastic bag that covers the rack.



## Removing the rack from the pallet

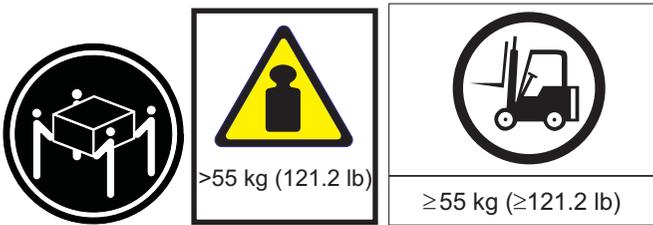
Before you move the rack cabinet off the pallet and to its final location, read the following important safety guidelines.

Statement 13:

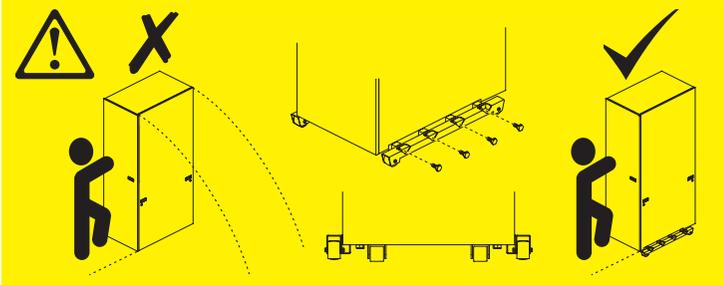


**CAUTION:**

The weight of this part or unit is more than 55 kg (121.2 lb). It takes specially trained persons, a lifting device, or both to safely lift this part or unit.



	<p><b>Use Only Professional Movers!</b></p> <p>يجب الاستعانة بخبرات نقل متدربة</p> <p>Utilizar somente transportadores profissionais</p> <p>Faire appel à des professionnels seulement pour déplacer l'équipement.</p> <p>只能使用专业搬运机</p> <p>Maak gebruik van professionele verhuizers</p> <p>Faites exclusivement appel à des déménageurs professionnels.</p> <p>Nur professionelle Transportunternehmen mit der Durchführung beauftragen.</p> <p>Να μετακινείται μόνο από επαγγελματίες μεταφορείς</p> <p>העזרו במובילים מקצועיים בלבד</p> <p>Csak hivatásos szállítóval költöztesse</p> <p>Avvalersi solo di trasportatori esperti</p> <p>機器を移動する際には専門の業者に依頼してください。</p> <p>전문 운송 인력만이 이동시킬 수 있습니다.</p> <p>Należy korzystać wyłącznie z usług wyspecjalizowanych firm.</p> <p>El traslado del equipo debe realizarlo personal especializado</p> <p>Trebaju raditi samo profesionalni transportni radnici</p> <p>Použite pouze profesionální stěhováky</p> <p>Brug kun professionelle flyttefolk.</p> <p>Käytä vain ammattitaitoista kuljetusliikettä</p> <p>Utstyret må kun flyttes av godkjent flyttepersonell</p> <p>Contacte apenas transportadoras profissionais</p> <p>Используйте только профессиональных грузчиков</p> <p>Na presun použite len profesionálov</p> <p>Använd endast professionell flyttpersonal</p>
<p><b>Use Only Professional Movers!</b></p>	



**Statement 11:**



**CAUTION:**

Removing components from the upper positions in the rack cabinet improves rack stability during relocation. Follow these general guidelines whenever you relocate a populated rack cabinet within a room or building:

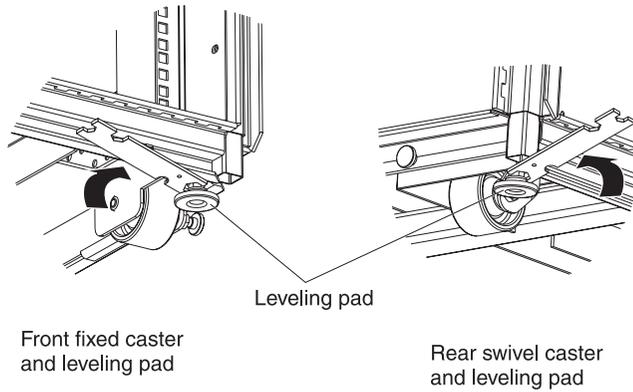
- Reduce the weight of the rack cabinet by removing equipment starting at the top of the rack cabinet. When possible, restore the rack cabinet to the configuration of the rack cabinet as you received it. If this configuration is not known, you must do the following:
  - Remove all devices in the 22U position and above.
  - Ensure that the heaviest devices are installed in the bottom of the rack cabinet.
  - Ensure that there are no empty U-levels between devices installed in the rack cabinet below the 22U level.
- If the rack cabinet you are relocating is part of a suite of rack cabinets, detach the rack cabinet from the suite.
- Inspect the route that you plan to take to eliminate potential hazards.
- Verify that the route that you choose can support the weight of the loaded rack cabinet. Refer to the documentation that comes with your rack cabinet for the weight of a loaded rack cabinet.
- Verify that all door openings are at least 760 x 2083 mm (30 x 82 in.)
- Ensure that all devices, shelves, drawers, doors, and cables are secure.
- Ensure that the four leveling pads are raised to their highest position.
- Ensure that there is no stabilizer bracket installed on the rack cabinet.
- Do not use a ramp inclined at more than ten degrees.
- Once the rack cabinet is in the new location, do the following:
  - Lower the four leveling pads.
  - Install stabilizer brackets on the rack cabinet.
  - If you removed any devices from the rack cabinet, repopulate the rack cabinet from the lowest position to the highest position.

If a long distance relocation is required, restore the rack cabinet to the configuration of the rack cabinet as you received it. Pack the rack cabinet in the original packaging material, or equivalent. Also, lower the leveling pads to raise the casters off of the pallet and strap the rack cabinet to the pallet.

To remove the rack from the pallet, complete the following steps:

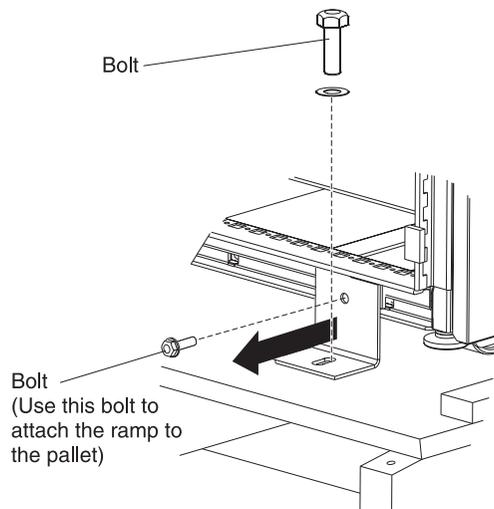
1. Read the safety information before you move the rack off the pallet.
2. Know the weight of the rack cabinet. To help determine the weight of the rack, see the *Installation Guide*. A general guideline is to assume a weight of 23 kg (50 lb) per rack U-space.
3. Use the following weight limit guidelines:
  - If the rack cabinet is empty, at least two people are required to move the rack.
  - If the rack cabinet weight is between 142 and 227 kg (between 313 and 500 lb), three or four people are required to move the rack.
  - If the rack cabinet weight is greater than 227 kg (500 lb), professional movers are required to move the rack.

4. Use the provided wrench to raise the four leveling pads (one per corner) to their highest position so that you can roll the rack on its casters.

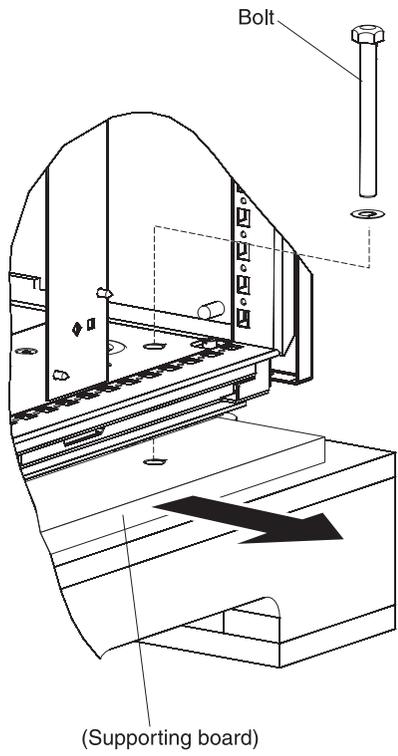


5. Open the front door and remove the two bolts that hold each of the front rack-retaining brackets in place. Save the front rack-retaining brackets and the bolts.

**Note:** The two bolts that attach the rack-retaining brackets to the rack are used to attach the ramp to the pallet in step 8e on page 11.

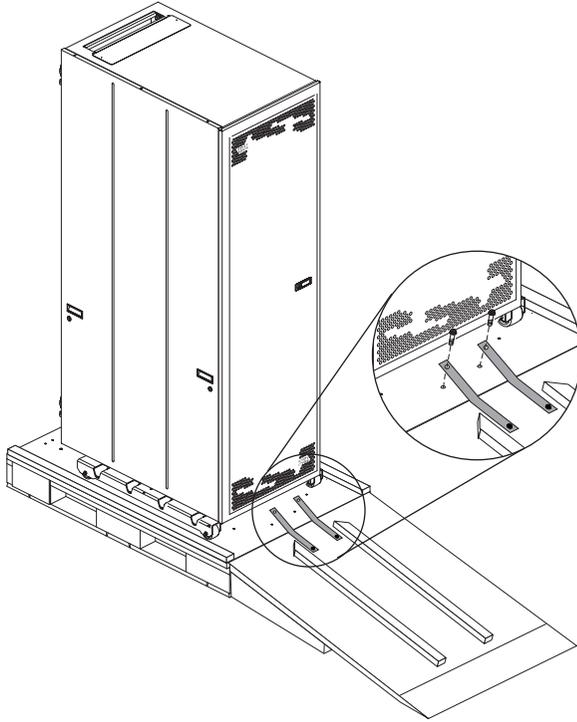


6. Open the rear doors and use the provided wrench to remove the two corner bolts that secure the rear of the rack to the pallet.



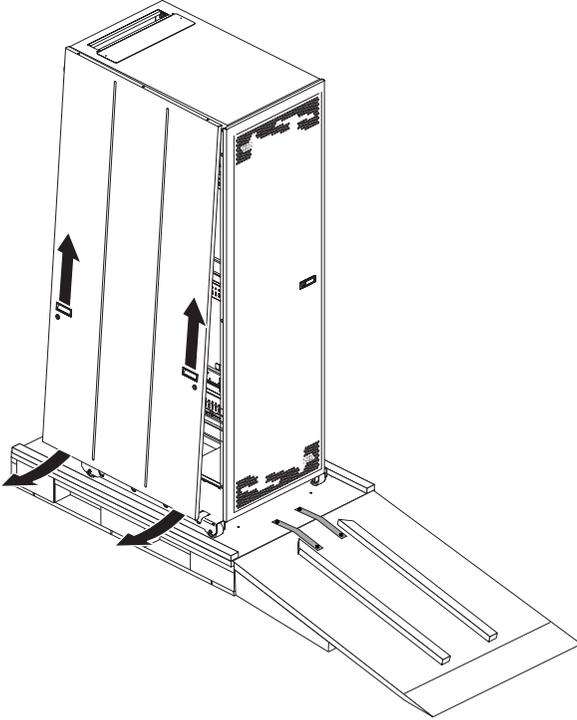
7. At the rear of the rack, remove the supporting board that is between the rack and the pallet. See the illustration in step 6.

8. Attach the ramp to the pallet on the front end of the rack:
  - a. Remove the tape that holds the ends of the connecting straps that are attached to the ramp.
  - b. Position the angled end of the ramp away from the front of the pallet.



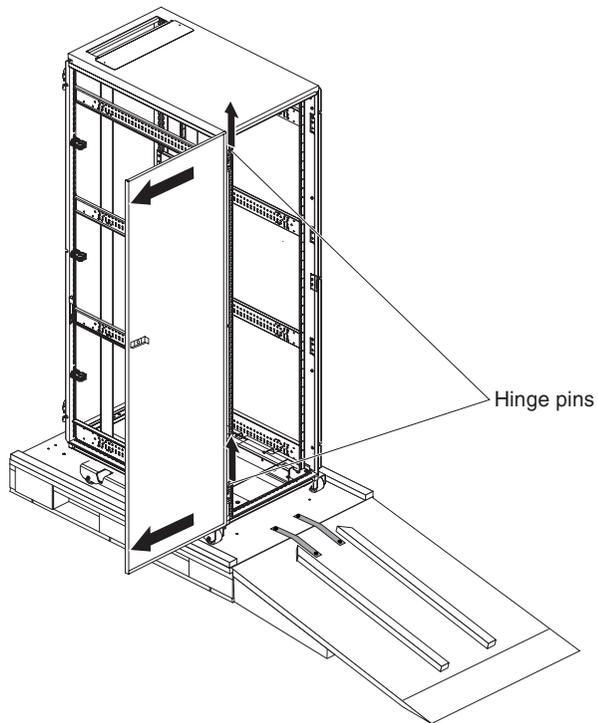
- c. Push the ramp so that it is flush against the front edge of the pallet.
  - d. Align each connecting strap so that the hole in the strap aligns with the hole in the pallet.
  - e. Insert a bolt through the hole in the strap and the hole in the pallet. Use the two bolts that you removed in step 5 on page 9. Make sure that you use the two bolts that attach the rack-retaining brackets to the rack, not the bolts that attach the brackets to the pallet.

9. (Optional) To reduce the weight of the rack if it is fully configured and for easier handling, remove the side panels.



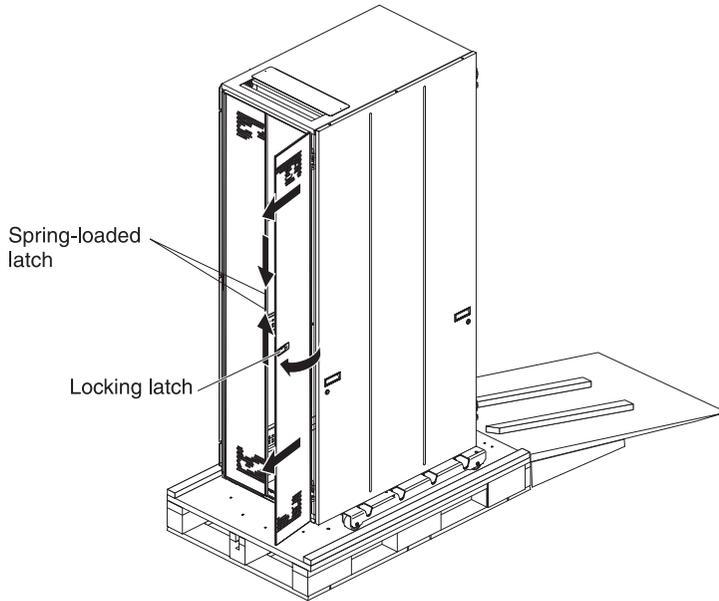
- a. Unlock both button locks on a side panel.
- b. Using the recessed handles, tilt the bottom of the side panel slightly toward you; then, lift the side panel away from the ridge on the top of the rack.
- c. Repeat this procedure to remove the second side panel.

10. (Optional) To reduce the weight of the rack if it is fully configured and for easier handling, remove the front door:
  - a. Unlock and open the door.



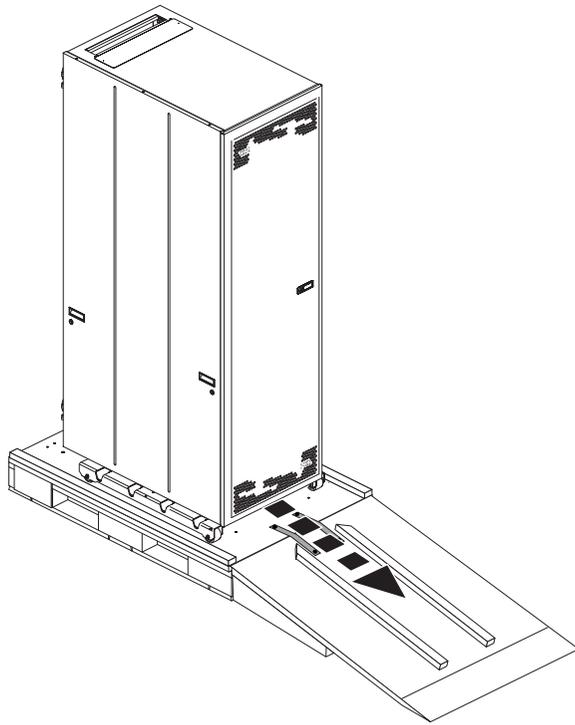
- b. Holding the door firmly with one hand, lift both hinge pins until they lock in the open position. This releases the door from the hinges.
    - c. Grasp the door firmly with both hands and pull it away from the hinges; then, set the door aside.

11. (Optional) To reduce the weight of the rack if it is fully configured and for easier handling, remove the rear doors:
- a. Unlock and open the right-side door.



- b. Hold the door firmly with one hand; then, lift both hinge pins on the inside of the door until they lock in the open position. This releases the door from the hinges.
- c. Grasp the door firmly with both hands and pull it away from the hinges; then, set the door aside.
- d. Open the left-side door by squeezing the blue handles on the spring-loaded latch and pulling the door open.
- e. Hold the left-side door firmly with one hand; then, lift both hinge pins on the inside of the door until they lock in the open position. This releases the door from the hinges.
- f. Grasp the door firmly with both hands and pull it away from the hinges; then, set the door aside.

12. Carefully roll the rack toward the front of the pallet; then, carefully roll the rack down the ramp until the rear casters are on the floor. Move the rack to the final location.



Store the pallet, ramp, and packaging material for use in the future if you have to relocate the rack cabinet.

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