Mounting Appliances with Telescoping Rails

The telescoping rails are certified by Check Point to use with these models:

- Check Point 4200
- Check Point 4600
- Check Point 4800
- Check Point 12200
- Check Point 12400
- Check Point 12600

General Requirements for Racks

The Check Point 4000 and 12000 Appliances are designed for a standard 19-inch (48.26 cm) rack (see specification EIA-310-D).

Front and rear rack doors must have equally distributed holes on at least 65% of the surface area to give sufficient airflow. Make sure that the racks have sufficient clearance to service the Check Point appliances that are mounted on telescoping rails.

<table>
<thead>
<tr>
<th>Rack Side</th>
<th>Clearance Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>36 in (91.44 cm) plus additional clearance, if needed, for the mechanical lift used to move Check Point rails equipment.</td>
</tr>
<tr>
<td>Rear</td>
<td>16 in (40.64 cm) from the rear side of the rack or chassis, whichever is closest to the rear. (Without back door cabinet)</td>
</tr>
<tr>
<td></td>
<td>22 in (55.88 cm) from the rear side of the rack or chassis, whichever is closest to the rear. (With back door cabinet)</td>
</tr>
<tr>
<td>Sides</td>
<td>N/A (no accessible parts)</td>
</tr>
</tbody>
</table>
The telescoping rails can be used with racks that have round holes or square holes. For square hole racks, make sure that you use cage nuts or clip nuts to attach the rails to the rack.

Use the telescoping rails with racks that have these specifications:

- Minimum depth: 25.9 in (66 cm)
- Maximum depth: 31.5 in (80 cm)

## Appliance Physical Specifications

These are the physical specifications of the Check Point appliance models that can be mounted in the telescoping rails.

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Width</th>
<th>Depth</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>4200</td>
<td>17.24 in (43.8 cm)</td>
<td>12.6 in (32.02 cm)</td>
<td>1.72 in (4.4 cm) (1U)</td>
</tr>
<tr>
<td>4600</td>
<td>17.24 in (43.8 cm)</td>
<td>12.6 in (32.02 cm)</td>
<td>1.72 in (4.4 cm) (1U)</td>
</tr>
<tr>
<td>4800</td>
<td>17.24 in (43.8 cm)</td>
<td>16 in (40.63 cm)</td>
<td>1.72 in (4.4 cm) (1U)</td>
</tr>
<tr>
<td>12200</td>
<td>17.24 in (43.8 cm)</td>
<td>16 in (40.63 cm)</td>
<td>1.72 in (4.4 cm) (1U)</td>
</tr>
<tr>
<td>12400</td>
<td>17.24 in (43.8 cm)</td>
<td>22.15 in (56.25 cm)</td>
<td>3.44 in (8.8 cm) (2U)</td>
</tr>
<tr>
<td>12600</td>
<td>17.24 in (43.8 cm)</td>
<td>22.15 in (56.25 cm)</td>
<td>3.44 in (8.8 cm) (2U)</td>
</tr>
</tbody>
</table>

## Appliance Air Vents

Make sure that the appliance air vents have sufficient airflow when the appliance is mounted in a rack.

**Important** - If the appliance vents are blocked, the appliance can become too hot and can be damaged.

The telescoping rails do not block airflow to the appliance. These appliances are specifically designed to install with the telescoping rails. They have been tested in extreme conditions and meet all specifications and requirements.
1U Appliance Airflow
2U Appliance Airflow
Rack Mounting

Telescoping Rails Hardware

<table>
<thead>
<tr>
<th>Item</th>
<th>Hardware Description</th>
<th>Qty.</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rack rail</td>
<td>2</td>
<td>Attaches to the front of the rack (with a screw plate).</td>
</tr>
<tr>
<td>1a</td>
<td>Rack rail (rear)</td>
<td>2</td>
<td>Connects to the rail extensions.</td>
</tr>
<tr>
<td>2</td>
<td>Appliance rail</td>
<td>2</td>
<td>Attaches to the sides of the appliance.</td>
</tr>
<tr>
<td>2a</td>
<td>Appliance rail (rear)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Hardware Description</td>
<td>Qty.</td>
<td>Use</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------</td>
<td>------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Rail extensions</td>
<td>2</td>
<td>Attaches the rack rail to the rear of the rack (with a screw plate). Use with racks that have a depth of more than 26.5 in (67.5 cm).</td>
</tr>
<tr>
<td>4</td>
<td>Rail flanges</td>
<td>2</td>
<td>Attaches the rack rail to the rear of the rack (with a screw plate). Use with racks that have a depth of 26.5 in (67.5 cm) or less.</td>
</tr>
<tr>
<td>5</td>
<td>Small round-head screws</td>
<td>8</td>
<td>Attaches the appliance rails to the appliance.</td>
</tr>
<tr>
<td>5</td>
<td>Small round-head screws</td>
<td>4</td>
<td>Attaches the rack rails to the rail extensions (front holes).</td>
</tr>
<tr>
<td></td>
<td>and nuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Large round-head screws</td>
<td>8</td>
<td>Attaches the rack rails to the racks.</td>
</tr>
<tr>
<td>7</td>
<td>Flat-head screws and nuts</td>
<td>4</td>
<td>Attaches the rack rails to the rail extensions (rear holes) and rail flanges.</td>
</tr>
<tr>
<td>8</td>
<td>Screw plates</td>
<td>4</td>
<td>Attaches the rail flanges and the flanges of the rack rails and the rail extensions to the rack.</td>
</tr>
</tbody>
</table>

**Rack Mounting Tools**

Philips screwdriver. We recommend a screwdriver with a magnetic head to hold screws and retrieve dropped screws.

**Attaching the Appliance Rails**

Use small round-head screws to attach each appliance rail to the side of the appliance.

- 1U three small round-head screws
- 2U four small round-head screws

**To attach the appliance rails:**

1. Set the appliance rail on the side of the appliance.
The piece that locks the telescoping rails points away from the appliance.

2. Attach the appliance rails to the appliance with three small round-head screws.
3. Do steps 1 and 2 again for the other side of the appliance.

**Attaching the Rail Extensions**

If the telescoping rails that are installed on racks that are deeper than 26.9 in (68.5 cm), you must use the rail extensions. Use the correct rail extension holes for the depth of the rack. Do not use the last hole on the rail extension.

<table>
<thead>
<tr>
<th>Hole Number</th>
<th>Minimum Rack Depth</th>
<th>Maximum Rack Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25.9 in (66 cm)</td>
<td>26.5 in (67.5 cm)</td>
</tr>
<tr>
<td>2</td>
<td>26.9 in (68.5 cm)</td>
<td>27.5 in (70 cm)</td>
</tr>
<tr>
<td>3</td>
<td>27.9 in (71 cm)</td>
<td>28.5 in (72.5 cm)</td>
</tr>
<tr>
<td>4</td>
<td>28.9 in (73.5 cm)</td>
<td>29.5 in (75 cm)</td>
</tr>
<tr>
<td>Hole Number</td>
<td>Minimum Rack Depth</td>
<td>Maximum Rack Depth</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>5</td>
<td>29.9 in (76 cm)</td>
<td>30.5 in (77.5 cm)</td>
</tr>
<tr>
<td>6</td>
<td>30.9 in (78.5 cm)</td>
<td>31.5 in (80 cm)</td>
</tr>
</tbody>
</table>

Use two flat-head screws and two round-head screws and nuts to attach the rail extension to the rack rail.

**Note** - For racks that have a depth of 26.5 in (67.5 cm) or less, you can use rail flanges instead of the rail extensions.

**To attach the rail extensions to rack rails:**
1. Align the rail extension and the rack rail according to the correct hole numbers on the depth of the rack.
2. Use two flat-head screws and nuts to attach the rail extension to the rack rail (Item 3). If you are using rail flanges, do not do step 3.
3. Use two round-head screws and nuts to attach the rail extension to the rack rail (Item 2). Make sure that all the screws are loose and that the rail extension can move.
4. Do steps 1 - 3 again for the other rack rail and extension piece.
Preparing the Rack Rails

**Important** - The telescoping rails can be used with racks that have round holes or square holes. For square hole racks, make sure that you use cage nuts or clip nuts to attach the rails to the rack.

Use the screw plates to attach the flange of the rack rail and extension piece to the rack. We recommend that you use two large round screws when you attach the screw plate.

The screw plates have a thick and a thin side.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thick side faces the inside of the rack</td>
</tr>
<tr>
<td>2</td>
<td>Thin side</td>
</tr>
</tbody>
</table>

This diagram shows the thick side of the screw plate facing the inner side of the rack.
Attaching the Rack Rails

Attach the rack rails and rail extensions to the rack. For more about the correct rail extension holes, see Rack Dimensions. Make sure that you have these pieces ready:

- 2 Rack rails
- 2 Rail extensions
- 8 Flat-head screws
- 4 Large round-head screws
- 4 Screw plates

**Note** - You can use the rack rail flanges instead of the rail extensions for appliances that are 25.6 in (65 cm) deep.

To attach the rack rails to the rack:

1. From the front of the rack, align these parts with the number on the rack.
   - Front flange of the rail (behind the rack).
   - Middle hole of the screw plate (behind the rail flange).
2. Use a large round-head screw to attach the front flange of the rail and the screw plate to the rack.

Make sure that the screw plate is behind the front flange.
3. On the front of the rack, put a second large round-head screw.
4. From the rear of the rack, align these parts with the number on the rack.
   - Flange of the rail extension
   - Middle hole of the screw plate.
5. Use a large round-head screw to attach the flange of the rail extension and the screw plate to the rack.
   Make sure that you use the same number for the front and rear of the rack.
6. On the rear of the rack, put a second large round-head screw.
7. Tighten the four flat-head screws on the rail extension.
8. Do steps 1 through 8 again for the other rail.

**Installing the Appliance in the Rack**

Install the appliance in the telescoping rails in the rack.

⚠️ **Important** - A 2U appliance is heavy and two people are required to hold and install the appliance in the rack to prevent personal injury and damage to the appliance.

To install the appliance in the rack:
1. Set the appliance until the appliance rails are level with the rack rails.
2. Move the appliance into the rack until the telescoping rails click.
   The telescoping rails are locked.
3. Push the release clips and move the appliance into the rack.
Removing the Appliance

Unlock the telescoping rails to remove the appliance from the rack.

⚠️ **Important** - A 2U appliance is heavy and two people are required to hold and remove the appliance from the rack to prevent personal injury and damage to the appliance.

**To remove the appliance from the rack:**
1. Move the appliance away from the rack as far as possible.
   - The lock on the telescoping rails stops the appliance from sliding too far.
2. On the rails press and hold the release clips to unlock the telescoping rails.
3. Remove the appliance from the rack.