

Basis® Headwall Installation Instruction—Vertical

Tools:	9/16" socket and ratchet 5/16" socket Level Phillips screwdriver Torque wrench, 40 to 60 ft lb (4.5 to 6.7 N·m)	Equipment lift, 750 lb (340 kg) capacity Power drill 9/64" hex wrench
Parts:	(1 box) 5314301 (3, 4, or 5) 50815	Self-drill screw, hex head, #12 x 1 1/2" Nut (quantity depends on the on-wall unit width)
	and these options as applicable:	
	(1) P2102AI	Light interconnect
	and/or	
	(1) P2102AT2016	Basis P2016 interconnect
	or	
	(1) P2102AT0052B	Basis 0052 interconnect

NOTE:

This product must be installed by mechanical and electrical contractors who have experience in the installation of medical gas and electrical services.

Codes and Standards

WARNING:

Make sure the facility's medical gases, vacuum lines, and electrical lines have been installed to the general location of the headwall system installation in accordance with all applicable national, state, and local codes, and the latest editions of these:

- National Fire Protection Association®¹ (NFPA): NFPA 99: *Health Care Facilities*
- NFPA 70: *National Electrical Code*® (NEC®)

The smoke index rating of the decorative plastic parts in the Basis®² Headwall System is less than 999.

1. National Fire Protection Association®, National Electrical Code®, and NEC® are registered trademarks of National Fire Protection Association, Inc.

2. Basis® is a registered trademark of WittRock Healthcare Services, Inc.

Setup

 **WARNING:**

Do **not** install the in-wall product in: positive- or negative-pressure rooms; fire- or smoke-rated walls; and/or load-bearing walls. Failure to do so could cause injury or equipment damage.

 **WARNING:**

Do not install the product where there is a risk of inadvertent intrusion into the product during renovations or installations. To do so could cause injury or equipment damage.

1. Make sure of these before you install the product:

In-Wall

- The room is not a positive- or negative-pressure room.
- The wall is not fire- or smoke-rated.
- The wall is not a load-bearing wall.

In-Wall and On-Wall

- There will not be inadvertent intrusion into the product during renovations or installations.
2. Make sure the medical gas rough-ins are installed in the correct locations as shown on the as-built drawings.
 3. Before you start the installation, refer to the as-built drawings to find the correct location for the headwall system.
 4. Make sure of these:
 - a. Wall boxes and junction boxes have been installed as required.
 - b. Facility power has been run to the installation site, wall boxes, and/or junction boxes.

 **WARNING:**

Failure to turn off all power sources to the installation site during the installation could cause injury or equipment damage.

5. Turn off **all** power to the installation site.
6. Unpack the Basis® Headwall System.

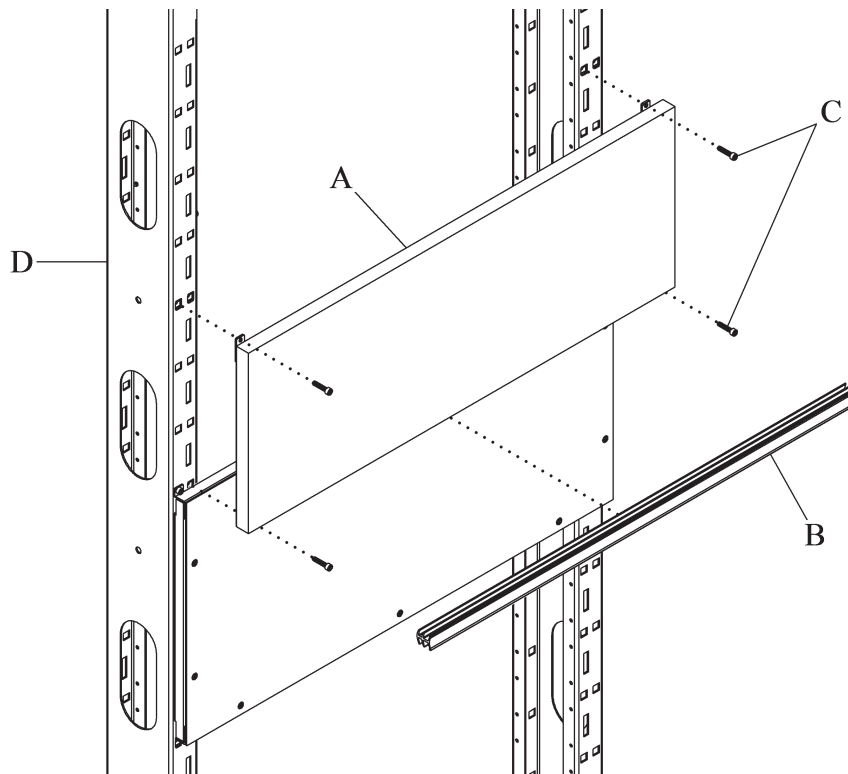
Safe Working Load

Refer to the *Basis® Headwall System Operation and Maintenance Manual* (167468) for the safe working load (SWL) of the modules and accessories.

Access Panel Removal

1. Locate the access panel(s) (A) that needs to be removed. There should be a label on the panel to identify it (see figure 1 on page 3).
2. If installed, remove the filler strips (B) on each side of the access panel (A).
3. Remove the four screws (C) that attach the access panel (A) to the unit (D).
4. Remove the access panel (A). The access panel will be reinstalled after the unit is installed.

Figure 1. Access Panel Removal



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Which Instructions to Use

For **on-wall** installations, go to “On-wall Installation” on page 4.

For **in-wall** or **double-sided unit** installations, go to “In-Wall Installation—Single and Double-Sided Units” on page 7.

On-wall Installation

1. Make sure there is a 16 gauge metal backer plate installed.
2. Make sure the top mount plate is installed. Refer to *Basis® Headwall System Mount Bracket Installation Instructions* (167995).
3. Make sure of the distance from the floor to the **bottom** of the mount bracket for the unit being installed.

Ceiling Height	Unit Height	Bracket Height
96" (243.8 cm)	84" (213.4 cm)	95 3/4" (243.21 cm)
102" (259.1 cm)	90" (228.6 cm)	101 3/4" (258.45 cm)
108" (274.3 cm)	96" (243.8 cm)	107 3/4" (273.69 cm)
114" (289.6 cm)	102" (259.1 cm)	113 3/4" (288.93 cm)
120" (304.8 cm)	108" (274.3 cm)	119 3/4" (304.17 cm)

Installation

WARNING:

Failure to turn off all power sources to the installation site during the installation could cause injury or equipment damage.

WARNING:

Make sure the frame modules are supported when you install them. Failure to do so could cause injury and equipment damage.

WARNING:

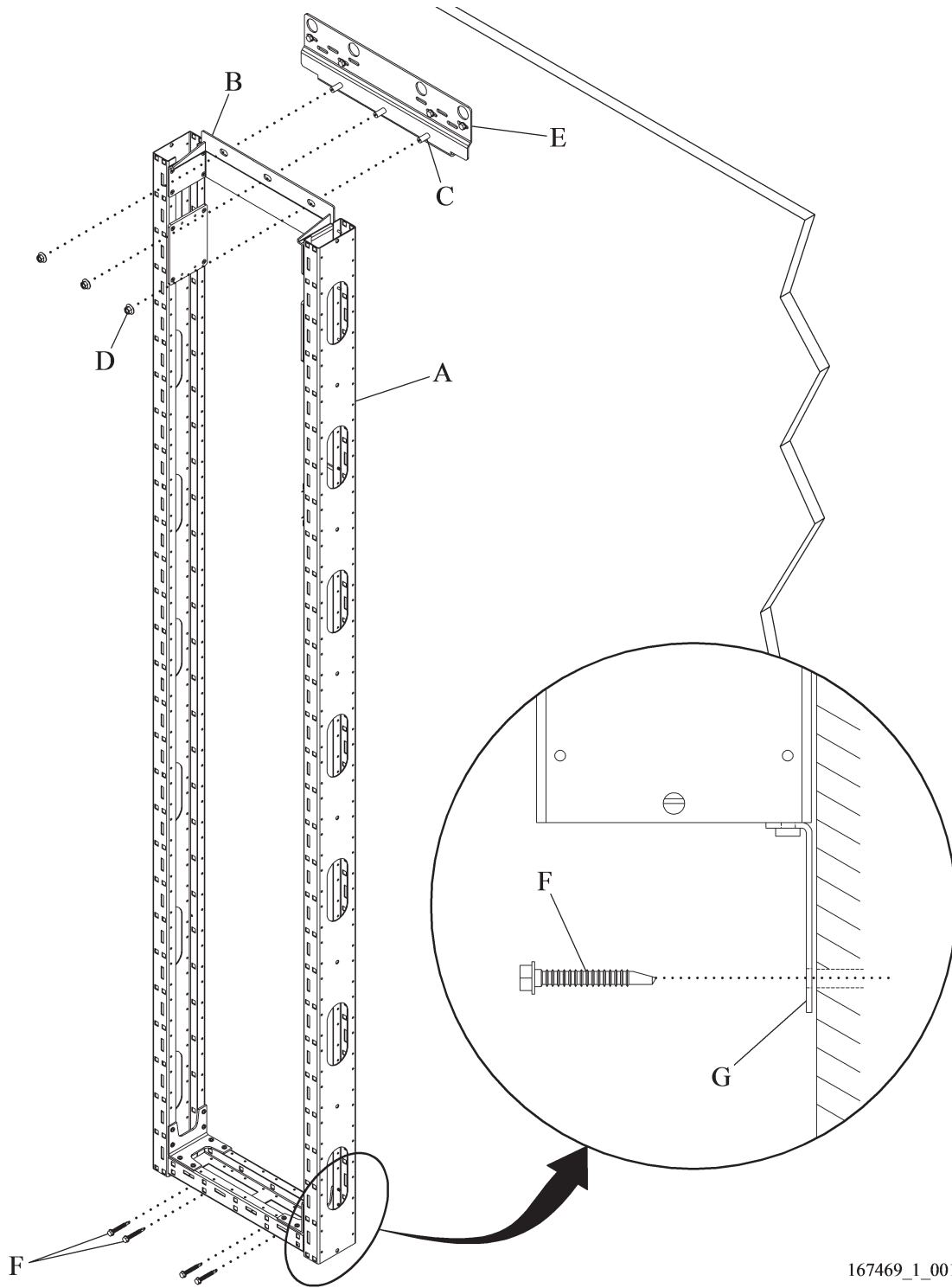
When the frame modules are moved or put into position, make sure a sufficient quantity of persons are available to lift and move the frame modules. Failure to do so could cause injury or equipment damage.

1. Put the unit on the equipment lift so the back of the unit is toward the wall.
2. Raise the unit (A) so the holes in the mount bracket (B) align with the wall bracket studs (C) (see figure 2 on page 6).



3. Install the unit (A) on to the bracket studs (C).
4. Install the nuts (D) to attach the unit to the wall bracket (E). Do not tighten the nuts.
5. Make sure no hoses or electrical cables are between the unit and the wall.
6. Remove the equipment lift.
7. Make sure the unit is level and plumb.
8. Tighten the nuts (D) to 50 ft-lb (68 N·m) of torque.
9. Install two screws (F) per bracket (G) at the bottom of the unit.
10. Install the gas manifolds, go to “Gas Manifold Installation” on page 9.

Figure 2. On-Wall Installation



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In-Wall Installation—Single and Double-Sided Units

NOTE:

For double-sided in-wall units, you will need to remove the accessory rail from one side of the unit.

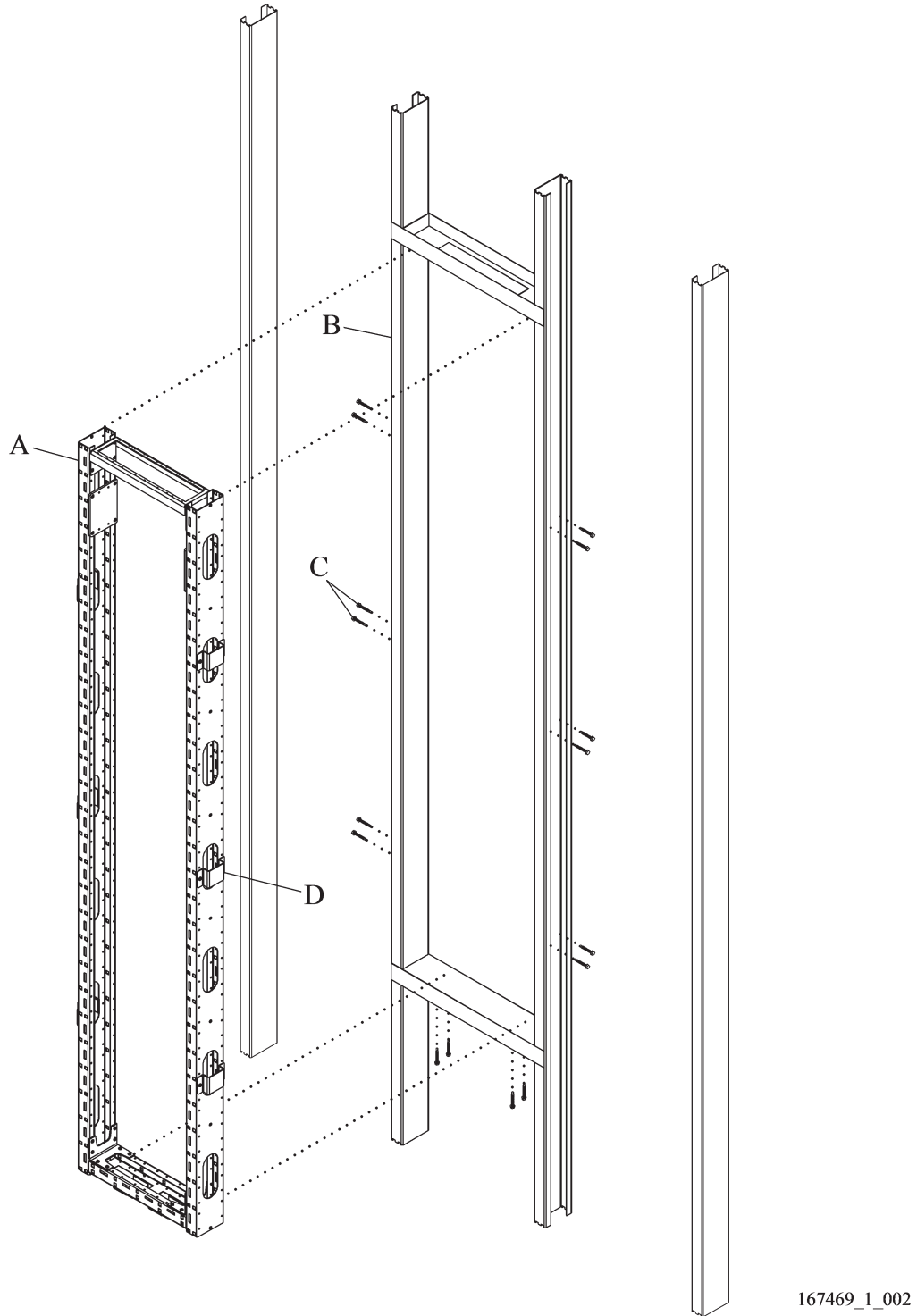
1. Put the unit on the equipment lift so the back is toward the wall.
2. Put the unit (A) inside the wall opening (see figure 3 on page 8).
3. Make sure the front of the unit (A), not the accessory bracket, is flush with the wall stud (B).
4. Make sure the unit is level and plumb.
5. From the outside toward the inside, install two screws (C) per mount bracket (D).
6. Install 5/8" (1.59 cm) dry wall behind the locating trim brackets on the outside of the vertical channels.

NOTE:

To remove the vertical channels for dry wall installation, remove the screws in the channel that attach the channel to the brackets.

7. Install the gas manifolds, go to “Gas Manifold Installation” on page 9.

Figure 3. In-Wall Installation

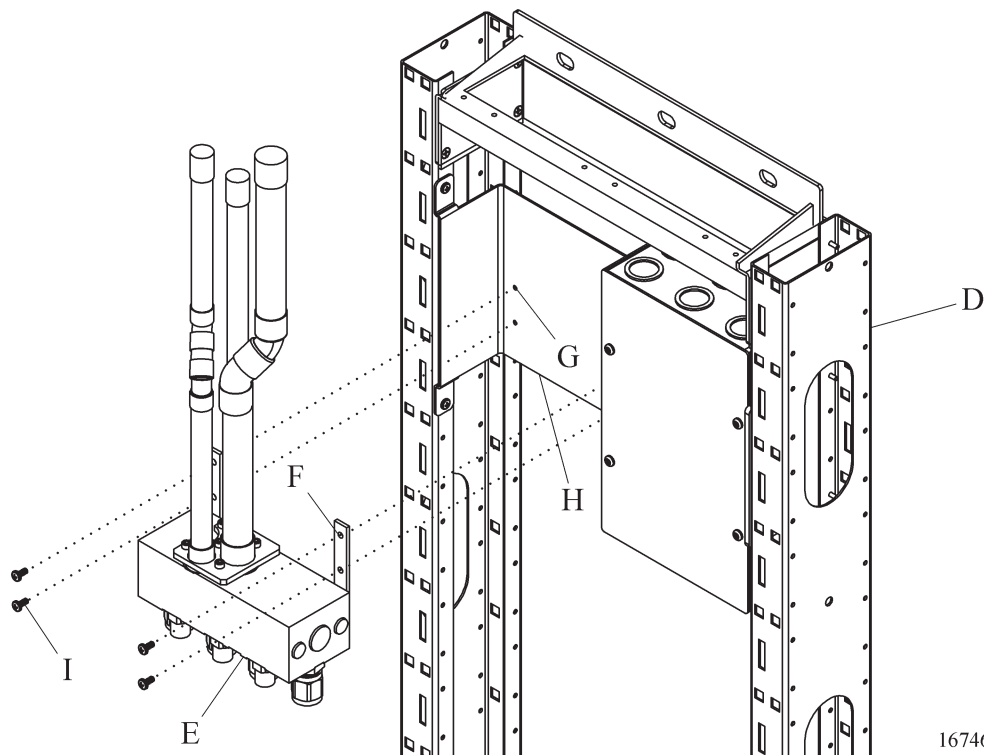


Gas Manifold Installation

The gas manifolds and J-box can be installed on either side of the unit. The J-box will come pre-installed inside the unit. There are three gas manifold configurations based on unit width: 16", 24", and 32" (see figure 5 on page 10).

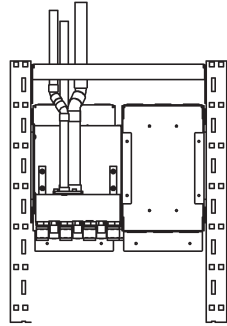
1. Put the manifold assembly (E) inside the unit (D) ([see figure 4 on page 9](#)).
2. Align the bracket holes (F) with the holes (G) on either side of the spacer (H) in the unit (D).
3. Install screws (I) to attach the manifold assembly (E) to the unit (D).

Figure 4. Manifold Installation

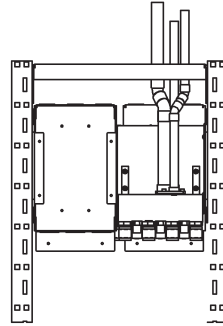


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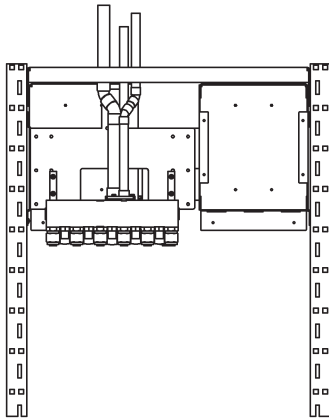
Figure 5. Manifold Configurations



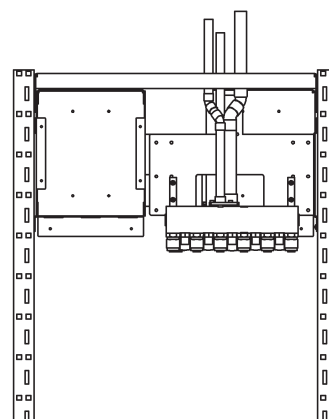
16" RIGHT HAND



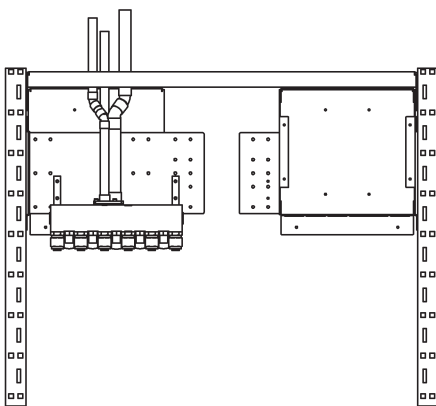
16" LEFT HAND



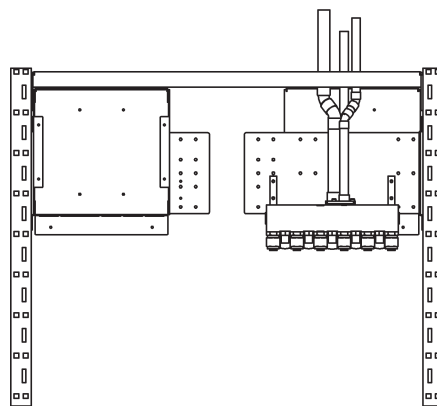
24" RIGHT HAND



24" LEFT HAND



32" RIGHT HAND



32" LEFT HAND

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Final Steps

 **WARNING:**

For mains power supply connections, use wire materials that are applicable for at least 194°F (90°C). Failure to connect the electrical wire correctly could cause injury or equipment damage.

1. Have the **electrical contractor** connect the power circuit wires in accordance with the as-built drawings and applicable national, state, and local codes and these: NFPA 99: *Health Care Facilities* and NFPA 70: *National Electrical Code*® (NEC®).
2. Have the **gas contractor** connect the gas hoses in accordance with the as-built drawings and applicable national, state, and local codes, and NFPA 99: *Health Care Facilities*.

 **WARNING:**

Before use, the product must be examined and tested in accordance with NFPA 99 requirements for leakage, flow and pressure drop, cross-connection, and particulates. Check the electrical system branching circuits for voltage, outlet terminal polarity, and ground impedance. Make sure emergency power receptacles are connected to the emergency power system. Failure to do so could cause injury or equipment damage.

3. Make sure of these before the product is to be used:
 - There is no leakage of the medical-gas system, no cross connects, and system flow, pressure-drop, and particulates are in accordance with NFPA 99 requirements.
 - The ground circuit impedance and voltage are correct.
 - The electrical outlet polarity is correct.
 - The product's emergency power receptacles are correctly connected to the emergency power system.

 **WARNING:**

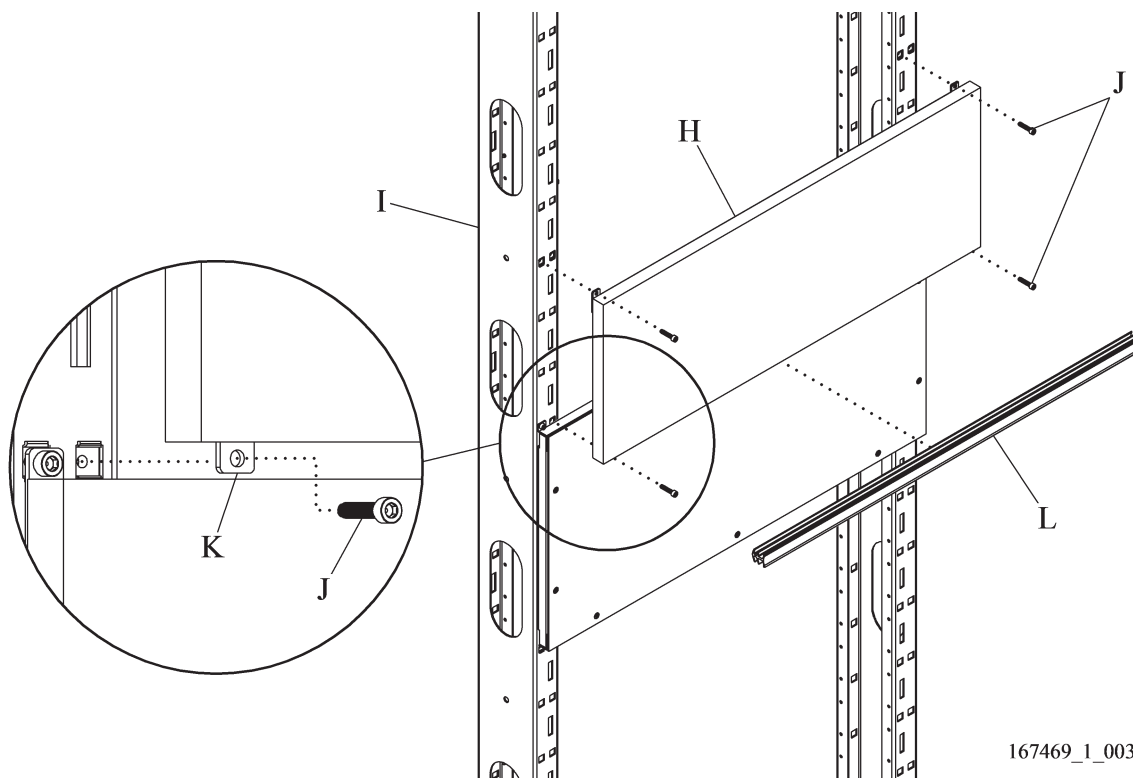
Mechanical overloading of the product could cause injury or equipment damage.

4. Make sure the product is not overloaded mechanically.
5. If an integrated bed locator (P201606 or P0052B1) or an Integris®¹ Patient Light (P696IL) is to be installed, refer to the applicable instructions below to install it. Otherwise, go to step 6.
 - *P0052 Bed Locator Installation Instructions* (150685)
 - *Integris® 201606 stand-Alone Bed Locator Installation Instructions* (133129)
 - *Integris® Patient Light (P696IL)—Installation on the Basis® Vertical Headwall System (P2102)* (178213)

1. Integris® is a registered trademark of WittRock Healthcare Services, Inc.

6. Install any access panels as follows:
 - a. Put the access panel (H), removed earlier, on the vertical wall studs (I). **Make sure** the panels are in a **straight line, level, plumb**, and the **gaps are consistent** between each panel (see figure 6 on page 12).
 - b. Install the four screws (J) through the tabs (K) to attach the access panel (H) to the vertical wall studs (I).
 - c. Install the gap filler (L) as necessary to fill in the area between the access panels (H).

Figure 6. Access Panel Installation



7. This completes the installation of the headwall. If the Basis® Wall Panel System is to be installed, go to WittRock Healthcare instruction 181928, *Basis® Wall Panel System—Installation with the Basis® Headwall System*.