

## **Subject: Elements™ Headwall System (P2008A)—Installation Instructions**

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Tools required:	Screwdriver Hex wrench set Adjustable wrench 7/16" hex head socket	Phillips head screwdriver Level Rubber hammer Ratchet socket wrench
Parts required:	Self-drill screws, 7/16" hex head, 12-24, 1 1/2" Screw, cap, 9/64" hex head, #8-32, 5/8", zinc Screw, hex, 1/4-20, 5/8", zinc	Plastic gas hose protectors Nut, Keps® <sup>1</sup> hex, 1/4-20, .238, zinc

### **Codes and Standards**

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

National Fire Protection Association®<sup>2</sup> (NFPA): NFPA 99: *Health Care Facilities* and NFPA 70: *National Electrical Code*® (NEC®)

**NOTE:**

The smoke index rating of the decorative plastic parts in the Elements™<sup>3</sup> Headwall System is less than 999.

### **Safe Working Load**

Worst case frame module weights (without accessories) are as follows:

120" (305 cm)—237 lb. (108 kg)

96" (244 cm)—206 lb. (93 kg)

84" (213 cm) floor-standing, surface-mount—191 lb. (87 kg)

For surface-mount frame module heights less than 7' (213 cm), their worst case delivered weight can be computed based on the height H, (where H is the height in feet) as follows:

Weight in lb. = (H x 15.25) + 42

(example: 3' (91 cm) = (3 x 15.25) + 42 = 88 lb. (40 kg))

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

3. Elements™ is a registered trademark of Hill-Rom Services, Inc.



**WARNING:**

Do not go over the frame module safe working load (SWL) maximum ratings. To do so could cause injury or equipment damage.

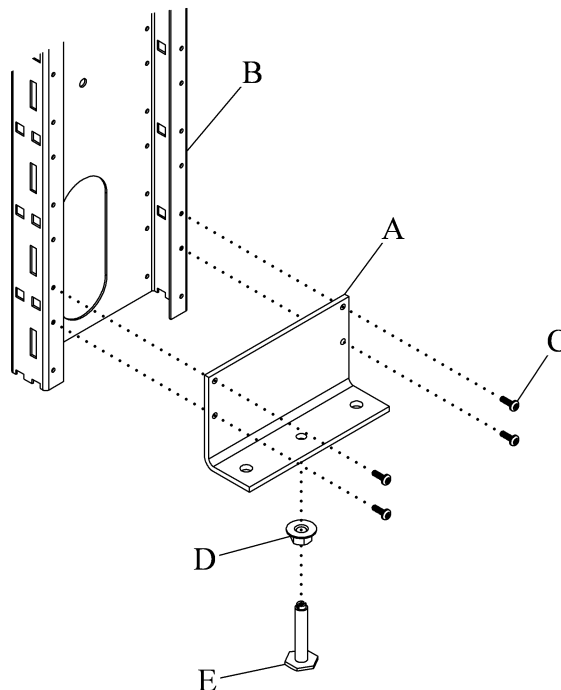
**NOTE:**

The maximum SWL for a frame module is derated by the addition of accessories.

A frame module is that which is between two non-adjacent, Hill-Rom provided, 16-gauge metal structural studs (vertical channels); with full width being 16" (41 cm), 24" (61 cm), or 32" (81 cm), and a maximum of 10' (305 cm) high. A number of these frame modules can be combined in any manner to comprise a unit of the product. The frame module structure is covered by frame module access panels or frame module service panels. The P2008A1 series and P2008A3 series frame modules can alternatively be partially closed by facility provided 5/8" (15.8 mm) thick sheetrock in lieu of frame module access panels, if access to the internal part of that same area is unnecessary with respect to maintenance, service, and inspection of the internal components of the frame module; and must be in accordance with all national, state, and local building codes.

The floor-supported frame modules are provided with 7-gauge steel leveler brackets (A) that are secured to the vertical channels (B) with four screws (C). Each leveler bracket (A) contains a 3/8"-16 machine nut (D) and bolt (E) for leveling purposes at the product installation, which is centered between two 3/8" (9.5 mm) through holes to attach the frame module to the facility floor using facility provided hardware. This must be accomplished in accordance with the installation instructions herein, and in accordance with all national, state, and local building codes (see figure 1 on page 2).

**Figure 1. Leveler Bracket**





When installed in accordance with the stated instructions herein, the rated SWL for each frame module, without accessories, is as follows:

**NOTE:**

The accessory weight and SWL ratings identified in Table 2, “Accessories Safe Working Load,” on page 5 are to be added together for each accessory that will be placed on a frame module, summed up for an accessory load total, and this total weight (plus any additional weight applied by the facility to the product) must never exceed the frame module SWL ratings of Table 1, “Frame Module Safe Working Load,” on page 3.

Where the term “not rated” is stipulated for an accessory SWL, the rated accessory SWL is considered negligible with respect to the product safety listing by the listing agency. As such, this does not mean that the accessory load is completely ignored, it just means that it is not rated. Therefore, it becomes necessary that the installer and/or facility persons identify a worst-case load for that accessory, and add it to the weight shown for that accessory for the purpose of the above calculation.

**NOTE:**

The stated accessory SWL ratings in Table 2, “Accessories Safe Working Load,” on page 5 are only valid when installed on P2008A frame modules, and in accordance with the corresponding accessory instructions and/or as stipulated in this P2008A installation instruction.

**Table 1. Frame Module Safe Working Load**

<b>Part Number</b>	<b>Description</b>	<b>Maximum Rated Safe Working Load (SWL)</b>
P2008A1	Floor-Standing In-Wall Model Series frame module—Installed in a health care facility's non-load bearing wall structure in accordance with the installation requirements specified herein. The frame module height limit is between 8' (244 cm) and 10' (305 cm).	1150 lb. (521 kg)

Part Number	Description	Maximum Rated Safe Working Load (SWL)
P2008A2	Floor-Standing Surface-Mounted Model Series frame module—Attached to minimum 16-gauge metal studs (or equivalent) of a health care facility's wall structure in accordance with the installation requirements specified herein.	1150 lb. (521 kg) for 8' (244 cm) to 10' (305 cm) frame module heights and proportionately de-rated from 8' (244 cm) to 3' (91 cm) frame module heights (example: For a 3' (91 cm) frame module height, SWL is $\frac{3}{8} \times 1150$ lb. (521 kg) = 431 lb. (196 kg))
P2008A3	Back-to-Back In-Wall Model Series frame module—Installed in a health care facility's non-load bearing wall structure in accordance with the installation requirements specified herein. The frame module height limit is between 8' (244 cm) and 10' (305 cm).	1150 lb. (521 kg) on each side of each frame module (6" (15 cm) vertical channels only)
P2008A5	Floor-Standing In-Wall Surface-Mounted Mix Series frame module—Surface-Mounted frame modules are attached to minimum 16-gauge metal studs (or equivalent) of a health care facility's wall structure the In-Wall frame modules are installed in a health care facility's non-load bearing wall structure in accordance with the respective installation requirements specified herein. Frame module height limit is between 8' (244 cm) and 10' (305 cm).	1150 lb. (521 kg) for each frame module 1150 lb. (521 kg) each side of the Back-to-Back In-Wall frame modules.

**Table 2. Accessories Safe Working Load**

<b>Part Number</b>	<b>Description</b>	<b>Weight</b>	<b>Maximum Rated Safe Working Load (SWL)</b>
P101702	Waste receptacle	3.5 lb. (1.6 kg)	Not rated
P158AISS	Transfer pole	2.65 lb. (1.20 kg)	40 lb. (18 kg) (10 lb. (5 kg) per hook)
P17000101	Post utility mount	4.15 lb. (1.88 kg)	40 lb. (18 kg)
P17000202	IV pole/infusion holder	5.4 lb. (2.4 kg)	80 lb. (36 kg) (20 lb. (9 kg) per hook)
P17000601	Universal holder	0.45 lb. (0.20 kg)	43 lb. (20 kg)
P17000701	Universal pole holder	0.80 lb. (0.36 kg)	35 lb. (16 kg)
P17001001	IV hanger	0.30 lb. (0.14 kg)	12 lb. (5 kg) (6 lb. (3 kg) per hook)
P17010102	Basket—3" (8 cm) high, 5" x 22" (13 cm x 56 cm)	2.0 lb. (0.9 kg)	25 lb. (11 kg)
P17010202	Basket—4" (10 cm) high, 9 1/2" x 18" (24.13 cm x 46 cm)	4.5 lb. (2.0 kg)	18 lb. (8 kg)
P17010302	Basket—5" (13 cm) high, 5 1/2" x 6 1/2" (13.97 cm x 16.51 cm)	1.2 lb. (0.5 kg)	9 lb. (4 kg)
P17010402	Basket—4" (10.16 cm) high, 4 5/8" x 11 5/8" (11.75 cm x 29.538 cm)	1.4 lb. (0.6 kg)	9 lb. (4 kg)
P17010501	Basket, pivoting—4" (10 cm) high, 10" x 10" (25 cm x 25 cm)	2.4 lb. (1.1 kg)	6 lb. (3 kg)
P17011101	Chart holder	1.35 lb. (0.61 kg)	Not rated
P17012001	Sharps container mount	3.0 lb. (1.4 kg)	Not rated
P17012002	Sharps container	3.0 lb. (1.4 kg)	Not rated
P17013001	Glove box holder	6.5 lb. (2.9 kg)	Not rated
P17020101	Utility shelf	7.7 lb. (3.5 kg)	60 lb. (27 kg)
P17020101	Charting shelf	7.7 lb. (3.5 kg)	60 lb. (27 kg)
P17020201	Small mayo tray	2.85 lb. (1.29 kg)	15 lb. (7 kg)
P17020301	Large mayo tray	3.1 lb. (1.4 kg)	15 lb. (7 kg)
P17020401	Utility chart light	1.85 lb. (0.84 kg)	Not applicable
P17030501	Universal light mount	0.60 lb. (0.27 kg)	43 lb. (20 kg)

<b>Part Number</b>	<b>Description</b>	<b>Weight</b>	<b>Maximum Rated Safe Working Load (SWL)</b>
P17030701	Integrated Diagnostic System 747	0.75 lb. (0.34 kg)	Not rated
P17040201	Spectrum mount	0.55 lb. (0.25 kg)	Not rated
P17040401	Utility hook	0.50 lb. (0.23 kg)	Not rated
P17050402	Satellite equipment rack mount	1.7 lb. (0.8 kg)	15 lb. (7 kg)
P17070101	Standard slide adapter	0.30 lb. (0.14 kg)	Not rated
P17070201	Bird blender slide	0.30 lb. (0.14 kg)	Not rated
P17071001	Dual clip assembly	0.75 lb. (0.34 kg)	Not rated
P17072001	Cable organizer	0.40 lb. (0.18 kg)	Not rated
P17073001	Vertical cord wrap	0.50 lb. (0.23 kg)	Not rated
P17073101	Horizontal cord wrap	0.50 lb. (0.23 kg)	Not rated
P2352A01	IMD arm	9.5 lb. (4.3 kg)	115 lb. (52 kg)
P53301021000	Shelf—13 3/4" x 13 1/4" (39.93 cm x 33.66 cm)	5.5 lb. (2.5 kg)	75 lb. (34 kg)
P53301051000	Shelf—13 1/4" x 19 1/2" (33.66 cm x 49.53 cm)	6 lb. (3 kg)	75 lb. (34 kg)
P53311030000	Cuff utility basket	1.2 lb. (0.5 kg)	25 lb. (11 kg)
P53321207000	Glove box holder	2.55 lb. (1.16 kg)	Not rated
P53321210000	Integrated Diagnostic System 767	0.65 lb. (0.29 kg)	Not rated
P53321230000	Blood pressure gauge mount	0.30 lb. (0.14 kg)	Not rated
P53340001000	Blood pressure gauge	2.4 lb. (1.1 kg)	Not rated
P54000863000	Blood pressure gauge mount	0.25 lb. (0.11 kg)	Not rated
P7925D120W	Prima <sup>a</sup> procedural light	20 lb. (9 kg)	Not applicable
P962-00	Tilt swivel arm	5.4 lb. (2.4 kg)	80 lb. (36 kg)
P963C01	Incandescent arm lamp	4.55 lb. (2.06 kg)	Not applicable
P997L00	VHM monitor arm	7.5 lb. (3.4 kg)	30 lb. (14 kg)
P997L004	VHM monitor arm	8.5 lb. (3.9 kg)	40 lb. (18 kg)

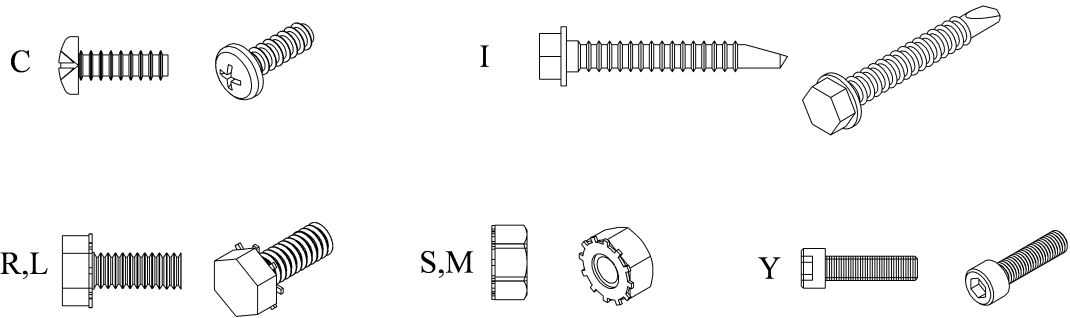
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## Fastener Identification

The fasteners in this document are referred to by a callout (see figure 2 on page 7) (see table 3 on page 7).

**Figure 2. Fasteners**



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**Table 3. Fasteners**

Item Letter	Part Number	Description
C	5255504	Screw, self-drill, phillips pan head, #8-18 x 1/2"
I	531301	Screw, self-drill, 5/16" hex, #12-14 x 1 1/2"
R or L	5324305	Screw, 7/16" hex, 1/4-20 x 5/8"
S or M	53242	Nut, Keps® <sup>a</sup> , 7/16" hex, 1/4-20
Y	128831	Screw, cap, 9/64" hex, #8-32 x 5/8", zinc plated

a. Keps® is a registered trademark of Illinois Tool Works, Inc.

## Setup

1. Before you start the installation, refer to the as-built drawings to find the correct location for the headwall system.
2. Make sure the facility's power has been run to the installation site, wall boxes, and junction boxes and where applicable, have been installed in the wall.
3. Unpack the Elements<sup>™</sup> Headwall System and set the carton with the access panels aside in a safe location.
4. Read all of these installation instructions and make sure the instructions are for your hardware and as-built drawings.



### **SHOCK HAZARD:**

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.

### **NOTE:**

The installation site is likely to have more than one grounded or isolated power source: normal power and emergency power.

## Which Instructions to Use

Do **one** of these:

- If the Elements<sup>™</sup> Headwall System is to be configured as a **recessed in-wall or back-to-back mounted system**, go to “Install the Elements<sup>™</sup> Headwall System—In-Wall Frame Modules Recessed or Back-to-Back Mounted Installation” on page 9.
- If the Elements<sup>™</sup> Headwall System is to be configured as a **surface mounted system**, go to “Install the Elements<sup>™</sup> Headwall System—Surface Mounted Installation” on page 15.

## Install the Elements™ Headwall System—In-Wall Frame Modules Recessed or Back-to-Back Mounted Installation

### Module Installation

**SHOCK HAZARD:**

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 positioned, 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. Turn off all power to the installation site.

**NOTE:**

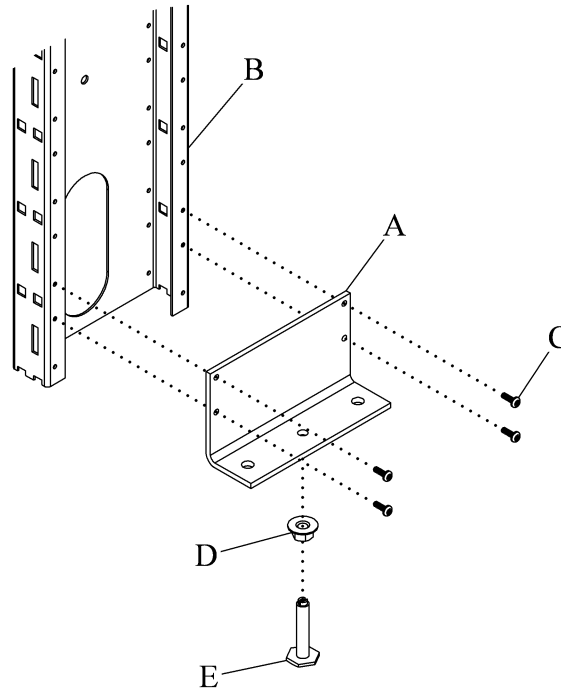
Make sure the facility wall vertical studs that will be attached to each end of the head-wall assembly are installed but not attached permanently. Adjustment of these studs is necessary to correctly install the frame modules.

**NOTE:**

Consult the as-built drawings to make sure the installation sequence of each frame module is in accordance with the as-built drawings and that the location of the gas manifold and junction box is correct.

2. Make sure the leveler bracket (A) has not loosened from the vertical channel (B). If necessary, tighten the four screws (C) to make sure the leveler bracket (A) is tightly attached to the vertical channel (B) (see figure 3 on page 10).
3. Loosen the nut (D) on the bolt (E) to permit the adjustment of the vertical channel (B).
4. If installed, flex the bottom c-channel (F) (not supplied) slightly to permit the frame module (G) to be put between top c-channel (H) (not supplied) and bottom c-channel (F) of the facility wall (see figure 4 on page 12).
5. Put the first frame module (G) in the facility recessed wall in accordance with the as-built drawings.
6. Adjust the bolt (E) and vertical channel (B) to make sure the first frame module (G) is level and plumb.
7. Slide the facility wall stud (I) against the first frame module in accordance with the as-built drawings and all national, state, and local codes.

**Figure 3. Elements™ Headwall System—Recessed or Back-to-Back Mounted Installation**

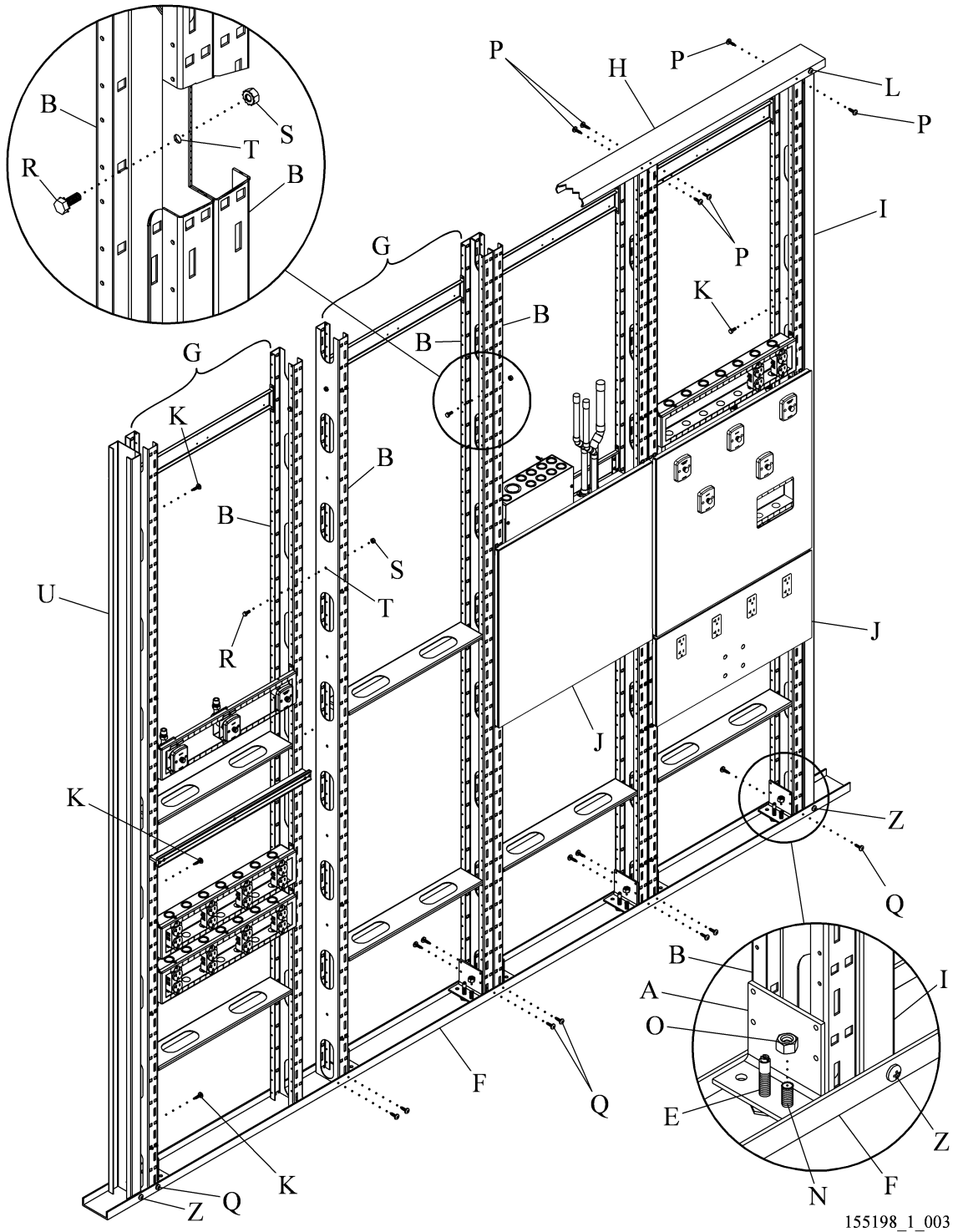


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8. Make sure the facility wall stud (I) is level and plumb, and attached to the frame module (G) with the self-drill screws (K) (not provided) in three places (top, middle, and bottom).
9. Put the subsequent frame modules (G) as shown in the as-built drawings, in the bottom c-channel (F) (if installed) and top c-channel (H) as identified in step 4 on page 9.
10. Adjust the bolt (E) to move the vertical channel (B) and make sure the panels (J) are in a straight line (relative to the first frame module (G)), level, and plumb.
11. Tighten the nut (D) to lock the bolt (E) in position after the frame modules (G) are aligned (see figure 3 on page 10).
12. Install the screws (R) and nuts (S) at three places (top, middle, and bottom) and tighten the screws (R) and nuts (S) between each frame module (G) (see figure 4 on page 12).
13. Install the screw (L) (not supplied) to attach the facility wall stud (I) to the top c-channel (H).
14. If the bottom c-channel is installed, install the screw (Z) (not supplied) to attach the facility wall stud (I) to the bottom c-channel (F).

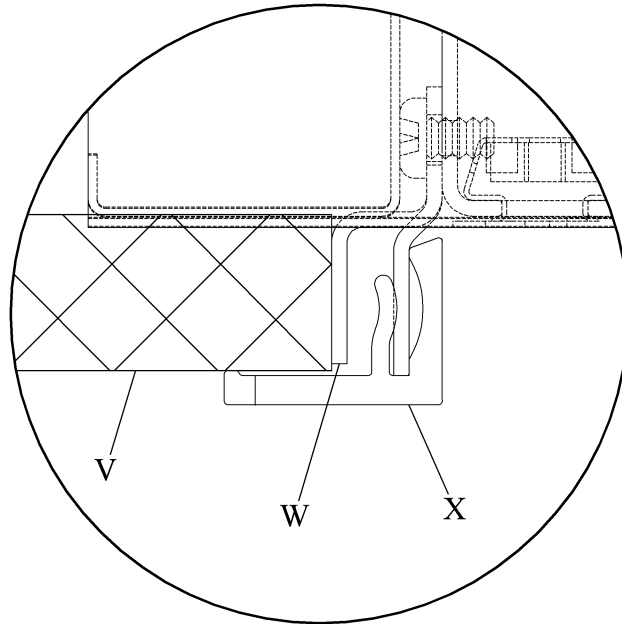
15. If the bottom c-channel (F) is not installed, install the floor anchor bolt (N) in accordance with all national, state, and local codes, through the leveler bracket (A) and tighten the nut (O) to attach the facility wall stud (I) to the floor.
16. Install the screw (P) (not supplied) to attach the vertical channel (B) to the top c-channel (H).
17. If the bottom c-channel (F) is installed, install the screw (Q) to attach the vertical channel (B) to the bottom c-channel (F).
18. If the bottom c-channel (F) is not installed, install the concrete anchors (N) in accordance with all national, state, and local codes, through the leveler bracket (A) to attach the vertical channel (B) to the floor.
19. Install the screw (P) to attach the vertical channel (B) to the top c-channel (H).
20. If the bottom c-channel (F) is installed, install the screw (Q) (not supplied) to attach the vertical channel (B) to the bottom c-channel (F).
21. If the bottom c-channel (F) is not installed, install the concrete anchor (N) in accordance with all national, state, and local codes, through the leveler bracket (A) to attach the vertical channel (B) to the floor.
22. Install the three screws (K) (not supplied) to attach the vertical channel (B) of the last module (G) to the facility wall stud (U).
23. Make sure the panels (J) are in a straight line, level, and plumb, and if not previously installed, install the contractor furnished concrete anchors (N) and (O) (not supplied) in accordance with all national, state, and local codes to attach the frame module (G) to the floor.

Figure 4. Multiple Modules—Recessed and Back-to-Back Mounted Installation



24. Install 5/8" (1.59 cm) drywall (V) (not supplied) up to the locating trim brackets (W) on the outside of the vertical channels (B) (see figure 5 on page 13).
25. Install the wall trim (X) on the trim brackets (W) with a mallet.

**Figure 5. Wall Trim Installation**



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26. Refer to the as-built drawings and find the frame module internal wire configuration and gas supply lines hook-up data.



**WARNING:**

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

27. 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*®<sup>1</sup> (NEC®)

**NOTE:**

It is possible the removal of some service panels is necessary to access the electrical wiring connection in the Elements™ Headwall System.

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28. 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:**

Install a plastic protector around all of the openings that gas hoses go through. Failure to do so could cause injury or equipment damage.

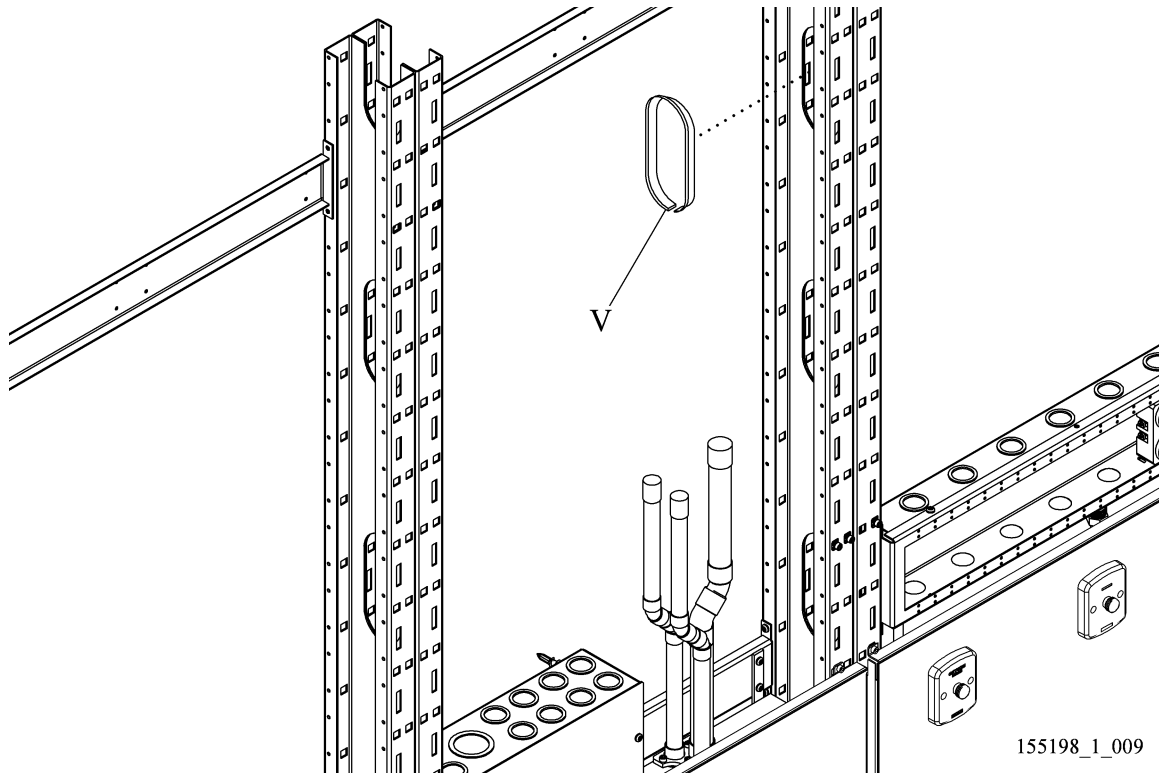
29. Install the plastic protector (V) around all of the openings that gas hoses go through (see figure 6 on page 14).

**NOTE:**

It is possible that removal of some service panels will be necessary to access the gas hoses in the Elements™ Headwall System.

30. Install the panels (refer to “Access Panel Installation” on page 20) in accordance with the as-built drawings.

**Figure 6. Plastic Protector Installation**



## Install the Elements™ Headwall System—Surface Mounted Installation

### Module Installation

**SHOCK HAZARD:**

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.

1. Turn off all power to the installation site.
2. Unpack the headwall unit and set the carton with the panels aside in a safe location.

**NOTE:**

Consult the as-built drawings to make sure the installation sequence of each frame module is in accordance with the as-built drawings, and that the location of the gas manifold and junction box are correct.

3. Make sure the leveler bracket (A) has not loosened from the vertical channel (B). If necessary, tighten the four screws (C) to make sure the leveler bracket (A) is tightly attached to the vertical channel (B) (see figure 7 on page 17).
4. Loosen the nuts (D) on the bolts (E) to permit the adjustment of the vertical wall studs (B).
5. Find the bed centerline and put the first frame module (F) against the wall (see figure 8 on page 18).
6. Adjust the bolts (E) and vertical wall studs (B) as necessary to make sure the frame module (F) is in a straight line, level, and plumb. Shim the frame modules (F) if necessary to make allowance for irregular facility walls.
7. Tighten the nuts (D) to lock the bolts (E) in position.
8. Install two screws (I) in each of three horizontal wall supports (J). Make sure the screws (I) attach the horizontal wall supports (J) to the facility wall studs (K).
  - Alternatively, facility provided metal plates (16-gauge thick, 50 KSI minimum) may be mounted to the facility wall (as will be required for California seismic compliance) and each frame module then be attached by the horizontal supports (J) to the 16-gauge metal plates using the two screws (I).

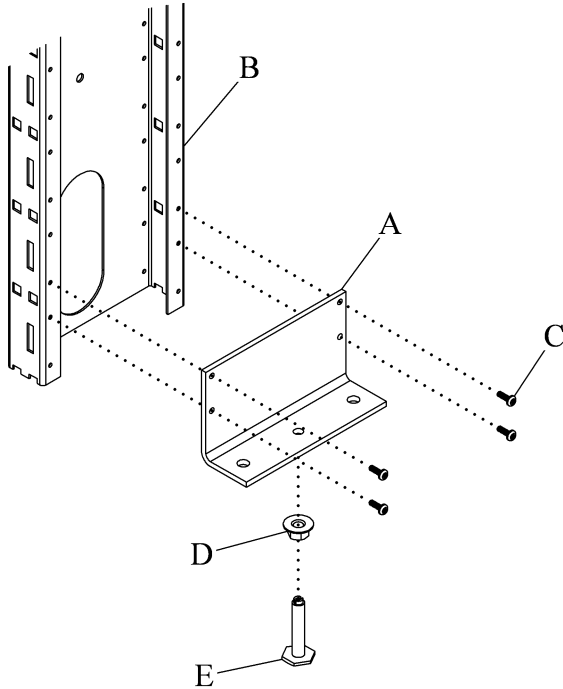
**NOTE:**

Location of the necessary three horizontal wall supports will be determined by the as-built drawings.

9. Put the next adjacent frame module (F) against the wall next to the one you just installed.
10. Install the three bolts (L) and nuts (M) through holes (N) at approximately the top, center, and bottom of the vertical channels (B) to attach the adjacent vertical channels (B). Do not tighten the three bolts (L) and nuts (M) until told to do so.
11. Adjust bolt (E) and nut (D) to make sure the cage nut holes (O) of the vertical channels (B) are aligned. Make sure you keep them in line with those on the first frame module (F).
12. After the cage nut holes (or panels) are aligned, tighten the three bolts (L), nuts (M), and nut (D) to lock the vertical channels in place.
13. Install two screws (I) in each of three horizontal wall supports (J). Make sure the screws (I) attach the horizontal wall supports (J) to the facility wall studs (K).
  - Alternatively, facility provided metal plates (16-gauge thick, 50 KSI minimum) may be mounted to the facility wall (as will be required for California seismic compliance) and each frame module then be attached by the horizontal supports (J) to the 16-gauge metal plates using the two screws (I).
14. Do step 8 through step 13 on page 15 through page 16 for the balance of the headwall frame modules (F).
15. Refer to the as-built drawings and find the headwall assembly internal wire configuration and gas supply lines hook-up information.

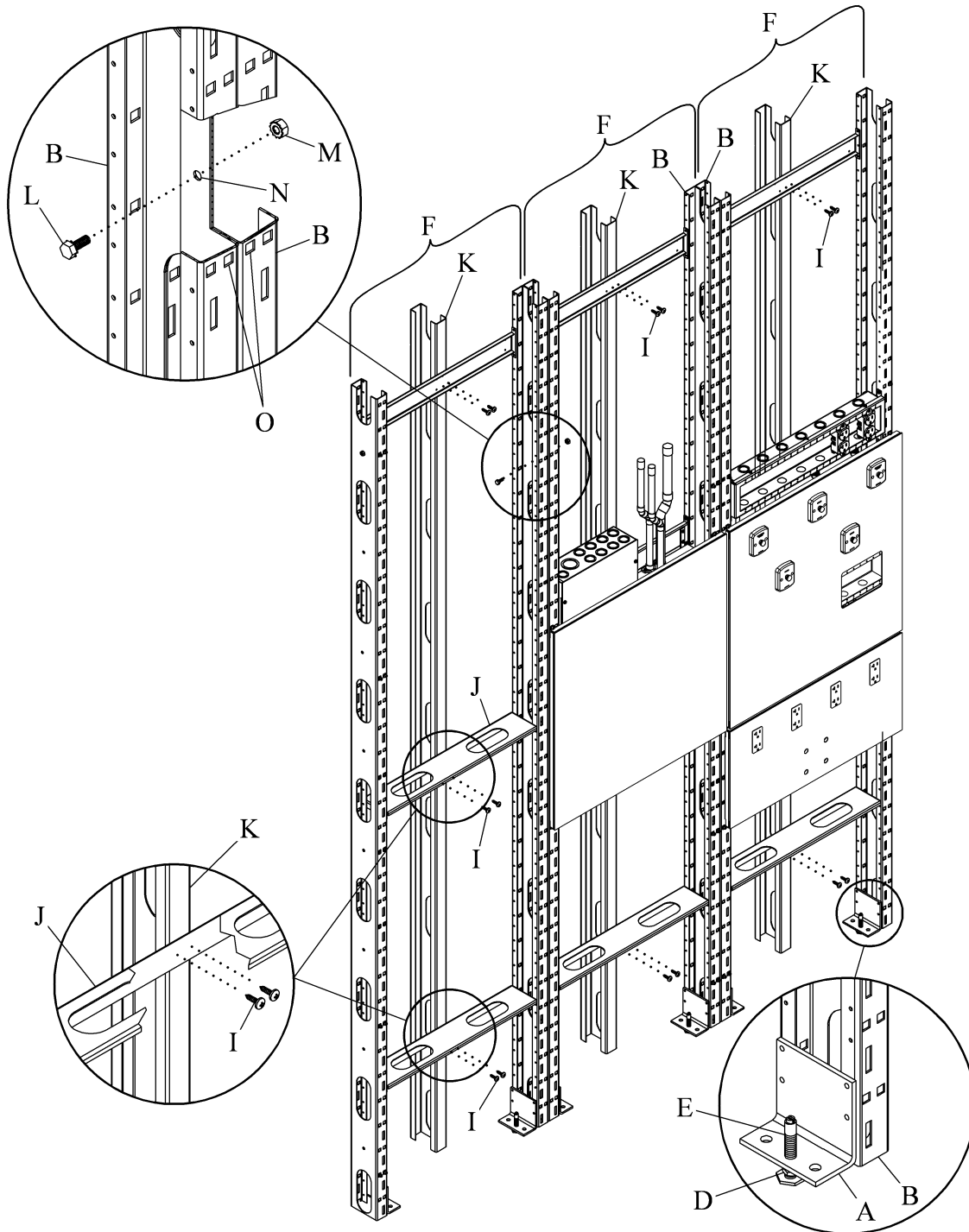


Figure 7. Elements™ Headwall System—Surface Mounted Installation



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**Figure 8. Multiple Modules—Surface Mounted Installation**



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**WARNING:**

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

16. 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*®<sup>1</sup> (NEC®)

**NOTE:**

It is possible that removal of some service panels is necessary to access the electrical wiring connection in the Elements™ Headwall System.

17. 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:**

Install a plastic protector around all of the openings that gas hoses go through. Failure to do so could cause injury or equipment damage.

18. Install the plastic protector (V) around all of the openings that gas hoses go through (see figure 6 on page 14).

**NOTE:**

It is possible that removal of some service panels will be necessary to access the gas hoses in the Elements™ Headwall System.

19. Install the panels (refer to “Access Panel Installation” on page 20) in accordance with as-built drawings.

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## Access Panel Installation

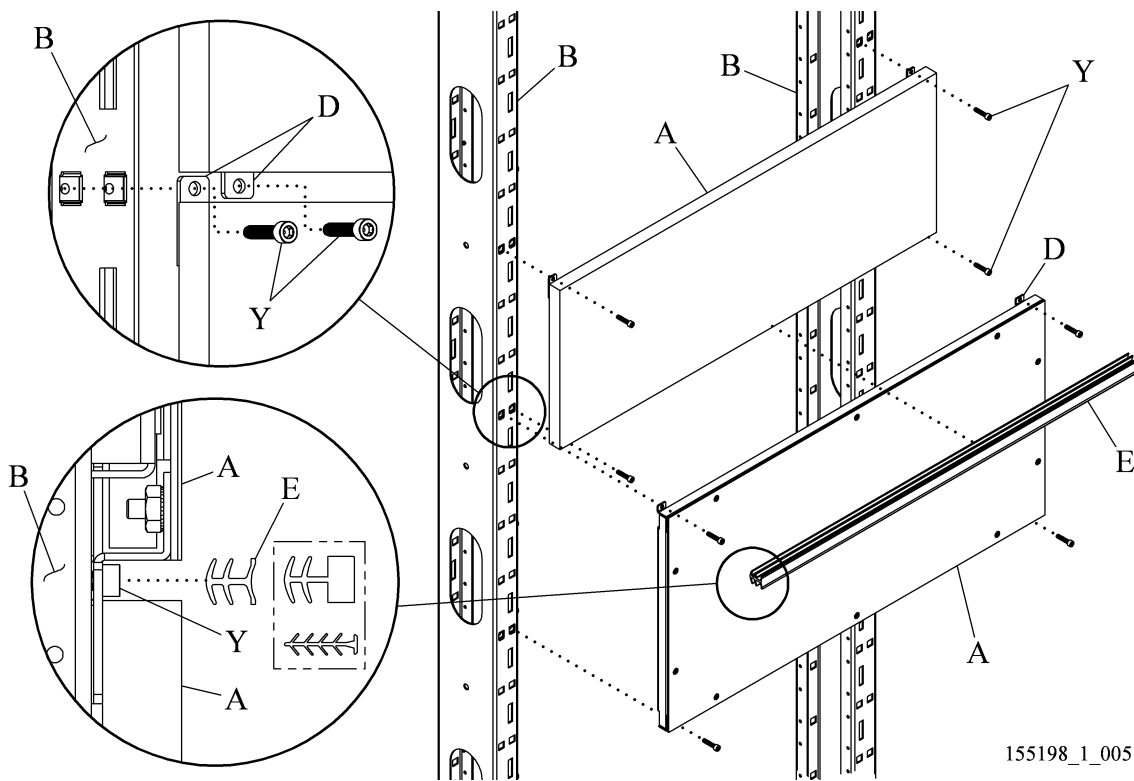
1. Put the access panel (A) on the vertical wall studs (B) as detailed in the as-built drawings (see figure 9 on page 20).
2. Install the four screws (Y) through the tabs (D) to attach the access panel (A) to the vertical wall studs (B).
3. Install the gap filler (E) as necessary to fill in the area between the access panels (A).

**NOTE:**

The horizontal gap filler is one piece of filler that extends across the headwall. Vertical gap filler is cut to fit at the factory.

4. Do step 1 through step 3 as necessary for the balance of the access panels (A).

**Figure 9. Panel Installation**



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## Acoustic Installation

**NOTE:**

Acoustic installation of the Elements™ Headwall System requires the contractor to make sure acoustic caulk is correctly applied between the top and bottom (if installed) c-channel outer surfaces and the mating surfaces of the rough-in framework and floor. Make sure each module has an adequate amount of acoustic caulk applied to maximize the sound damping properties of the acoustic caulk.

**NOTE:**

Acoustic rated drywall will be used in place of standard drywall on the back of the acoustic installation frame modules.

1. Put a bead of acoustic caulk (A) between the top c-channel (B) and the facility wall header (see figure 10 on page 22).
2. Put a bead of acoustic caulk (A) between the bottom c-channel (C) (if installed) and the facility floor.
3. Put a bead of acoustic caulk (A) between the outside surface of the frame modules (D) and the mating surface of the facility wall stud (E).
4. Install the rest of the frame modules as described in the applicable sections of this document. Make sure each frame module (F) has a bead of acoustic caulk (A) between the mating surfaces (G) of the frame modules (F).

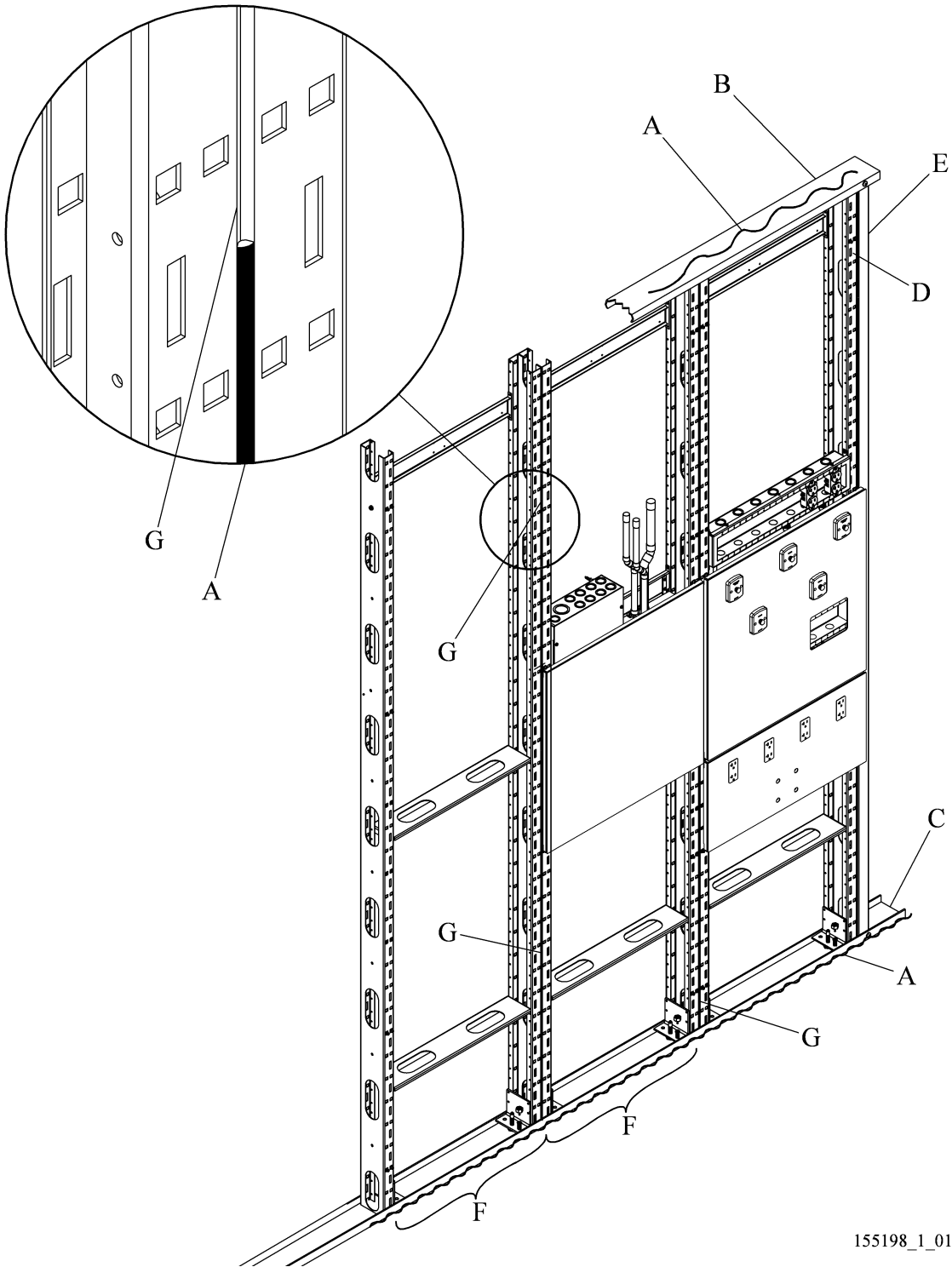


**WARNING:**

When you install the acoustic rated drywall to the frame modules, make sure the mount screws or other hardware do not puncher or cut the medical gas hoses or electrical wires. Failure to do so could cause injury and equipment damage.

5. Install acoustic rated drywall in accordance with the as-built drawings, and all national, state, or local codes.

**Figure 10. Acoustic Installation**



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## Vertical Bed Bumper Installation

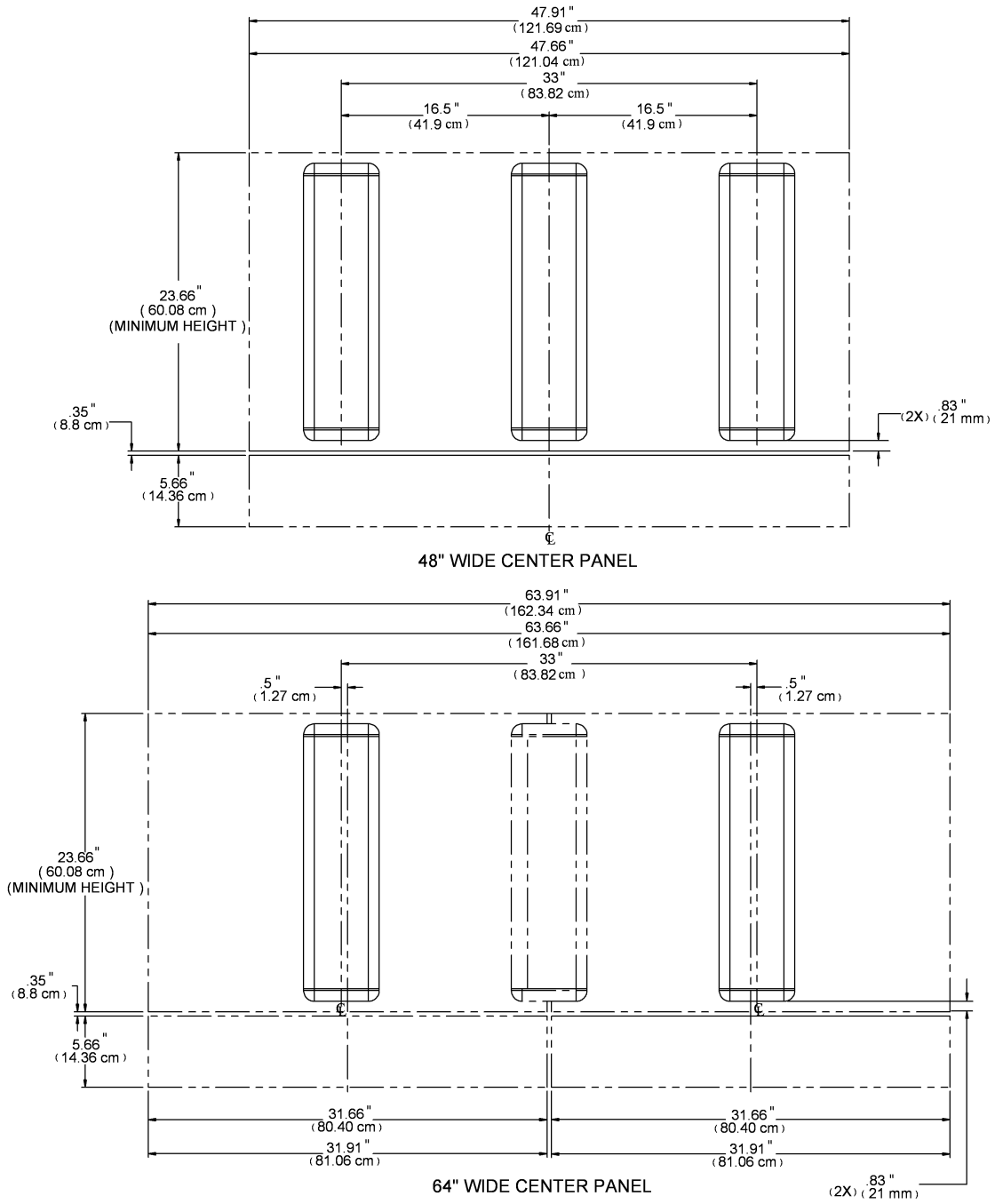
**NOTE:**

The vertical bed bumper mount holes are pre-drilled at the factory. Consult the as-built drawings to make sure the bed bumpers are correctly positioned on the headwall.

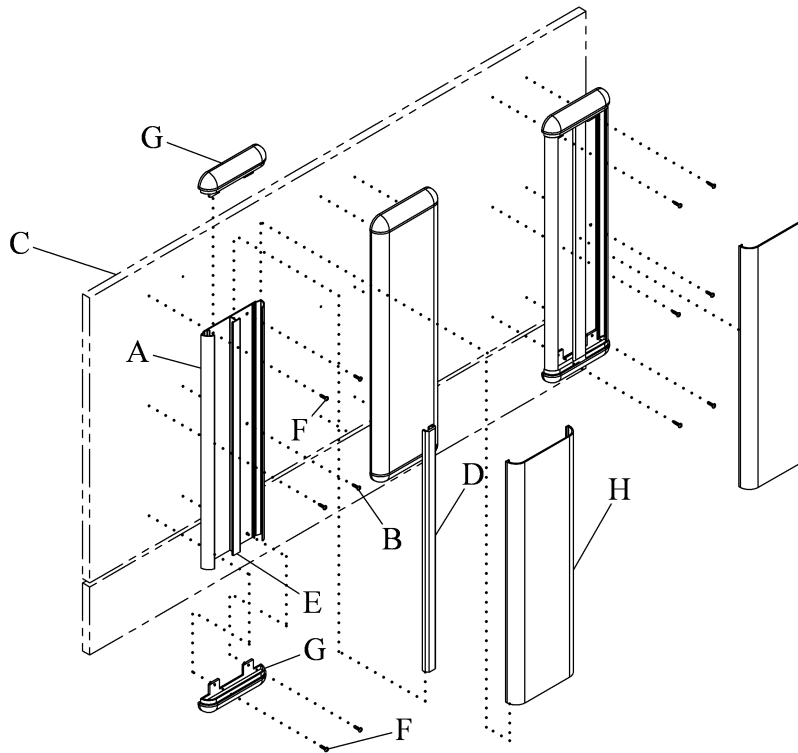
1. Position the vertical bed bumpers in accordance with the as-built drawings and as shown in figure 11 on page 24.
2. Align the holes in the aluminum retainer (A) with the holes in the headwall panels and install the two screws (B) that attach the aluminum retainer (A) to the panel (C) (see figure 12 on page 25).
3. Slide the impact cushion (D) into position on the spline (E) of the aluminium retainer (A).
4. Install the two screws (F) that attach the end cap (G) and aluminium retainer (A) to the panel (C).
5. Slide the vinyl cover (H) into position on the aluminium retainer (A).



Figure 11. Vertical Bed Bumper Dimensions



155198\_1\_015

**Figure 12. Vertical Bed Bumper Installation**

155198\_1\_014

### Horizontal Bed Bumper Installation

**NOTE:**

The horizontal bed bumper mount holes are pre-drilled at the factory. Consult the as-built drawings to make sure the bed bumpers are correctly positioned on the headwall.

1. Position the horizontal bed bumpers in accordance with the as-built drawings and as shown in figure 13 on page 26.
2. Align the holes in the aluminum retainer (A) with the holes in the headwall panels and install the four screws (B) that attach the aluminum retainer (A) to the panel (C) (see figure 14 on page 27).
3. Slide the impact cushion (D) into position on the spline (E) of the aluminium retainer (A).
4. Install the two screws (F) that attach the end cap (G) and aluminium retainer (A) to the panel (C).
5. Slide the vinyl cover (H) into position on the aluminium retainer (A).







**NOTES:**

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