

Subject: Flatwall Headwall System (P670E) Installation Instructions

Introduction

This procedure provides instructions for installing the Flatwall Headwall System (P670E). Before starting this procedure, read and understand all of the instructions for the parts being installed. Refer to the as-built drawings for the particular unit being installed. The as-built drawings take precedence over these instructions.

Tools required:

As-built drawings	#2 phillips head screwdriver
Level	Stud finder
9/16" deep socket	Socket wrench (ratchet)
3/16" drill bit	5/8" spade bit
Electric drill or power screwdriver	Safety glasses
Broom	Dustpan
Heat shield blanket	

Parts required:

(1)	50884	Bag assembly
(1)	53143-01	Screw, #12, self-drilling, hex head

50884, Bag assembly, includes the following items:

(2)	393	Screw (package of 10)
(1)	50167	Screw
(1)	15384	Toggle wing
(1)	50885	Bottom retainer

Related Documents: *Flatwall Headwall System Hanger (P671F)*
Installation Instructions (IS800)

Preparing the Wall for Installation



WARNING:

The installation method differs for each wall and construction type. Failure to determine the wall and construction type could result in the collapse of the Flatwall Headwall System. Personal injury or equipment damage could occur.

1. Before proceeding, refer to the local or state building codes, and determine the wall type and construction type:
 - **Seismic** walls are constructed to prevent damage from an earthquake.
 - **Non-seismic** walls are **not** constructed to prevent damage from an earthquake.
 - **Fire-rated** walls are constructed to prevent the spread of fire.
 - **Non-fire-rated** walls are **not** constructed to prevent the spread of fire.
2. Do one of the following:
 - For **seismic** walls, install wall backing plates according to the Office of Statewide Health, Planning, and Development (OSHPD)-approved drawings and the as-built drawings.
 - For **non-seismic** walls (both **fire-rated** and **non-fire-rated**), make sure the walls are constructed with at least 20-gauge steel studs on 16" centers and covered with a minimum of 5/8" (15.875 mm) drywall.
3. Make sure the electrical contractor installed all electrical connections of normal power, critical branch or emergency power, and low voltage power, such as Nurse Call or telephone, in accordance with all applicable state and local codes, and the following:
 - National Fire Protection Association®¹ (NFPA) NFPA 70: *National Electrical Code*® (NEC®)
 - Canadian Standards Association (CSA®²) C22.1: *Canadian Electrical Code—Safety Standard for Electrical Installations*
 - CSA Z318.5: *Commissioning of Electrical Gas Equipment and Standards in Health Care Facilities*
 - CSA Z318.7: *Commissioning of Communication Systems in Health Care Facilities*

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2. CSA® is a registered trademark of Canadian Standards Association, Inc.

NOTE:

When the field conduit connectors are installed in concentric knockouts that are punched to impair the electrical connection of the raceway system to the ground, the electrical contractor must install #10 American Wire Gauge (AWG) ground jumpers, meeting the requirements of Article 250 of the NEC¹, from the reference ground point to the grounding bushings on the conduit connectors. The ground jumpers and ground bushings are to be provided by the electrical contractor.

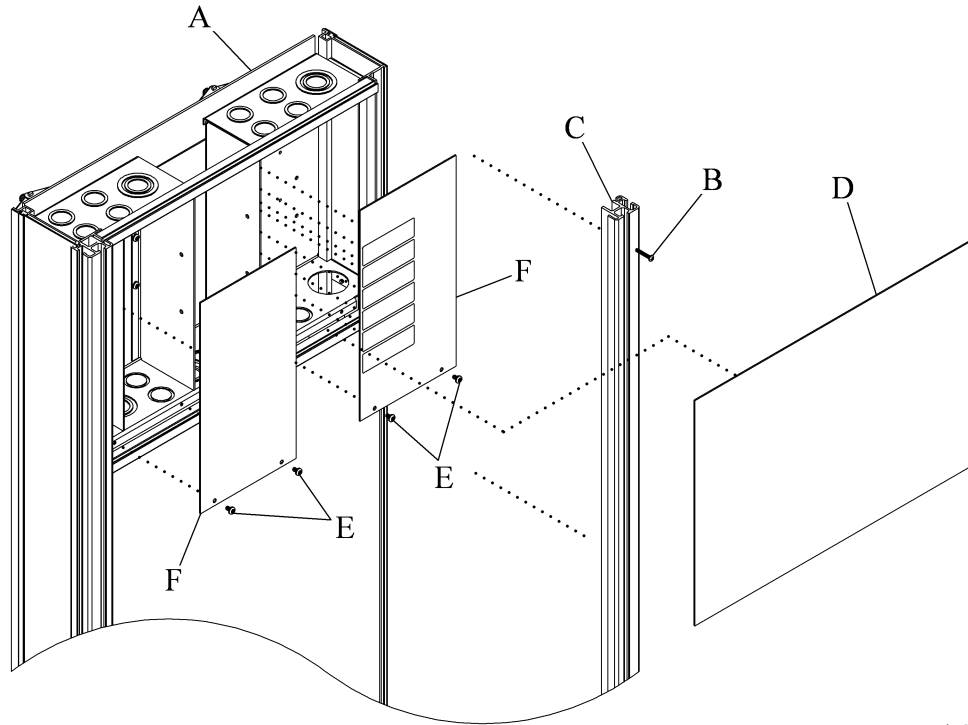
4. Make sure the medical gas contractor connected and tested the medical gas tubing in accordance with all applicable state and local codes, and the following:
 - The latest edition of the NFPA 99: *Standard for Health Care Facilities*
 - CSA Z305.1: *Non-Flammable Medical Gas Piping Systems*
 - CSA Z318.6: *Commissioning of Medical Gas Systems in Health Care Facilities*
5. Make sure the hanger assembly is installed correctly. Refer to the *Flatwall Headwall System Hanger (P671F)—Installation Instructions (IS800)*.

Installing the Flatwall Headwall System

1. Unpack the Flatwall Headwall System.
2. Refer to the as-built drawings, and make sure the unpacked unit meets the requirements for the configuration of the room.
3. At either side of the headwall assembly (A), do the following (see figure 1 on page 4):
 - a. Remove and retain the two #6-32 x 1" pan head screws (B) that secure the top section of the corner track (C) to the headwall assembly (A).
 - b. Remove and retain the corner track (C) from the headwall assembly (A).
 - c. Slide the upper-most laminated steel panel (D) out of the headwall assembly (A). Retain the laminated steel panel (D).
 - d. Remove and retain the two #8 x 1/4" pan head screws (E) from each junction box cover (F).
 - e. Remove and retain the two junction box covers (F) from the headwall assembly (A).

1. NEC[®] is a registered trademark of National Fire Protection Association, Inc.

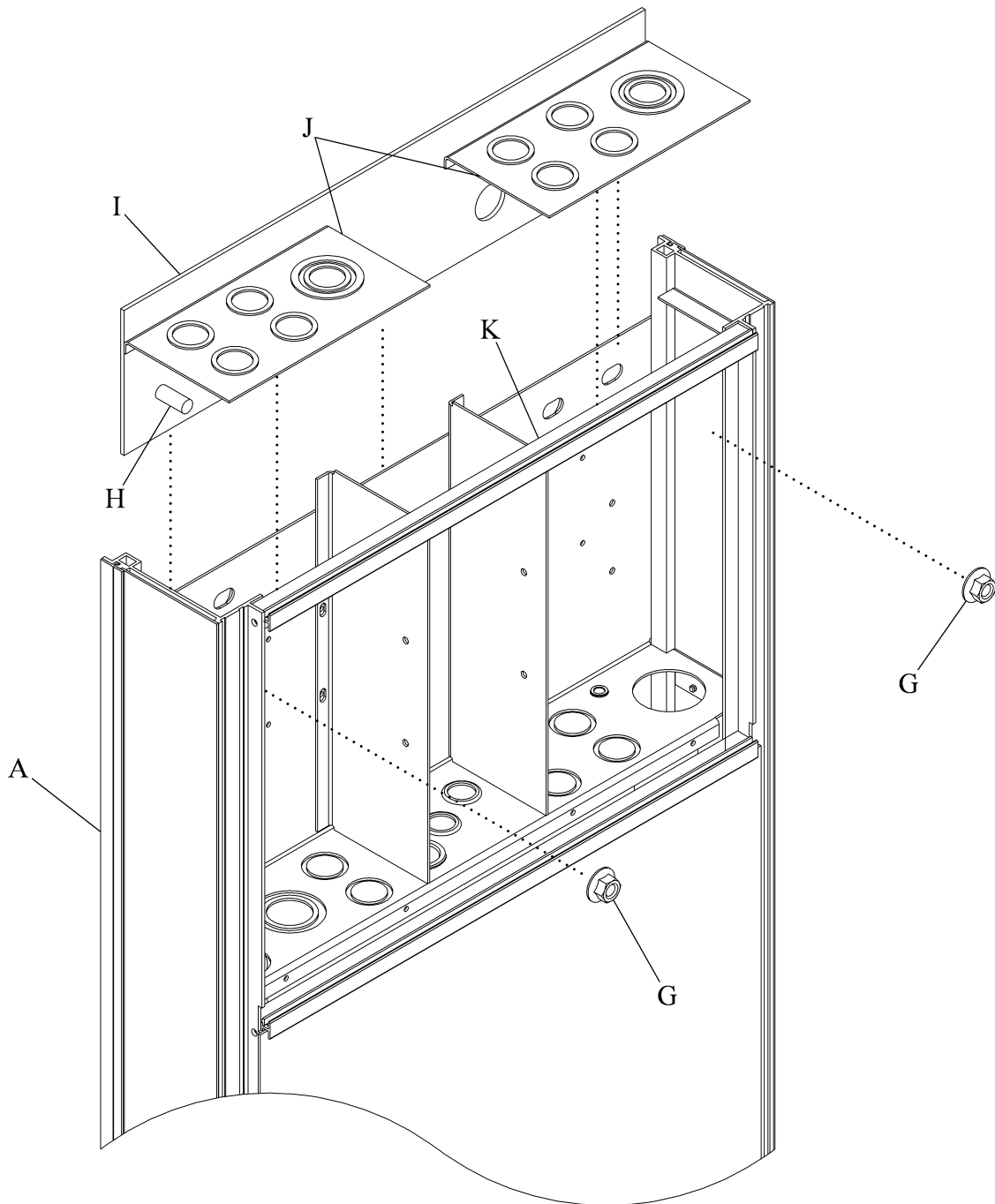
Figure 1. Headwall Assembly Laminated Steel Panel and Junction Box Covers



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4. Remove and retain the nuts (G) from the 3/8" diameter studs (H) on the hanger assembly (I) (see figure 2 on page 5).
5. With personnel on each side of the headwall assembly (A), lift the headwall assembly (A) onto the 3/8" diameter studs (H).
6. Push the headwall assembly (A) onto the hanger assembly (I) until the headwall assembly (A) is seated against the wall.
7. Make sure the front edge of the knockout plate (J) on the hanger assembly (I) sits under the aluminum bar (K) at the front top of the headwall assembly (A) and the medical gas piping routes through the center of the hanger assembly (I).
8. Finger-tighten the nuts (G) on the 3/8" diameter studs (H) to secure the headwall assembly (A) to the hanger assembly (I).
9. Make sure the headwall assembly (A) is level on the hanger assembly (I).
10. Securely tighten the nuts (G) on the 3/8" diameter studs (H).

Figure 2. Headwall Assembly and Hanger Assembly



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WARNING:

When connecting the medical gas tubing to the building service drops, make sure cross-connection does **not** occur. Serious injury or equipment damage could occur.



WARNING:

When connecting the medical gas tubing to the building service drops, protect the adjacent electrical conduit from the heat of the brazing torch. Failure to do so could result in serious injury or equipment damage.

11. Have the medical gas contractor connect the medical gas tubing to the building service drops. Make sure cross-connection does not occur, and use a heat shield blanket to protect the adjacent electrical conduit from the heat of the brazing torch.
12. Have the electrical contractor do the following:
 - a. Make the connections to normal power and/or critical branch or emergency power circuits.
 - b. Using the pull cords provided, pull in the low voltage wire and cabling to the appropriate locations.
 - c. For internal wiring and hook-up information, refer to the wiring diagram in the as-built drawings.
13. Remove the hardware from the bag assembly.
14. To stabilize the bottom of the headwall assembly (A) on a **non-fire-rated** or **non-seismic** wall, do the following (see figure 3 on page 7):
 - a. Find the holes in the bottom that secure the bottom retainer (M) to the headwall assembly (A), and mark the location of the holes on the wall.

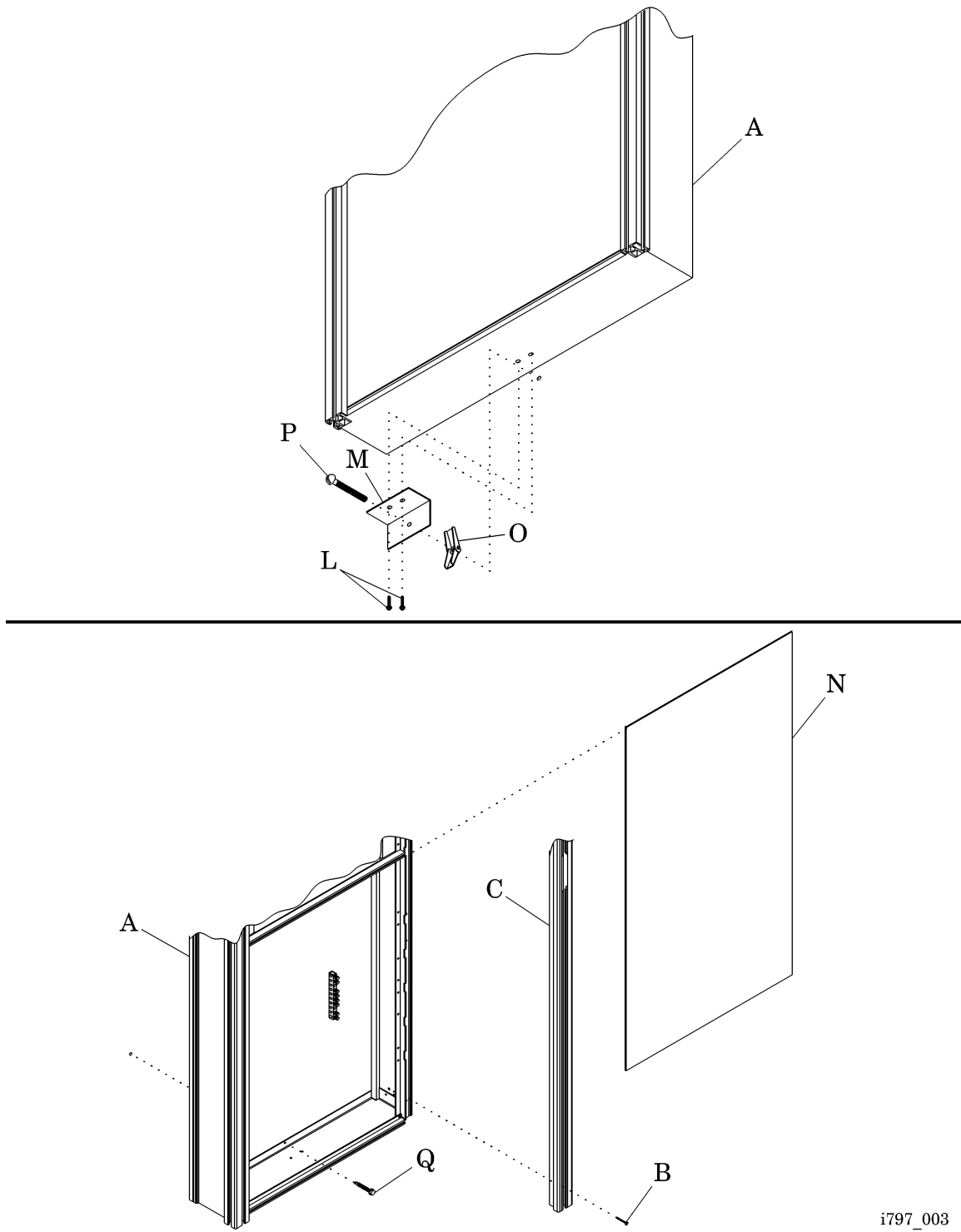


WARNING:

Wear eye protection. Failure to do so could result in eye injury.

- b. Put on safety glasses.
- c. At the locations marked on the wall, drill 5/8" diameter holes.
- d. Clean up any wall debris.
- e. Install the toggle wing (O) and round head screw (P) in the bottom retainer (M).
- f. Install the two screws (L) to secure the bottom retainer (M) to the headwall assembly (A).
- g. Tighten the round head screw (P) to secure the headwall assembly (A) to the wall.

Figure 3. Headwall Assembly Stabilizing



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15. To stabilize the bottom of the headwall assembly (A) on a **fire-rated** or **seismic** wall, do the following:
 - a. Remove the five #6-32 x 1" pan head screws (B) that secure the lower section of the corner track (C) to the headwall assembly (A).
 - b. Remove the corner track (C) from the headwall assembly (A).
 - c. Slide the lowest laminated steel panel (N) out of the headwall assembly (A).
 - d. Find the wall stud beneath the headwall assembly (A).



WARNING:

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- e. Put on safety glasses.
 - f. At the wall stud, drill a 3/16" diameter hole through the headwall assembly (A) and into the backing plate.
 - g. Clean up any metal debris.
 - h. Install the self-drilling screw (Q) to secure the headwall assembly (A) to the backing plate.
 - i. Slide the lower-most laminated steel panel (N) into the headwall assembly (A).
 - j. Install the five #6-32 x 1" pan head screws (B) to secure the lower section of the corner track (C) to the headwall assembly (A).
16. Do the following:
 - a. Install the four #8 x 1/4" pan head screws (E) to secure the two junction box covers (F) to the headwall assembly (A) (see figure 1 on page 4).
 - b. Slide the upper-most laminated steel panel (D) into the headwall assembly (A).
 - c. Install the two #6-32 x 1" pan head screws (B) to secure the top section of the corner track (C) to the headwall assembly (A).
 17. Have the electrical contractor install all low voltage devices, such as Nurse Call and telephones, on the headwall assembly (A).