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# **Installation Instructions**

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Hospital Systems Inc. 750 Garcia Avenue Pittsburg CA 94565 USA

# Axiom<sup>TM</sup> Flush Headwall



#### **Introduction:**

The Hospital Systems, Inc. Axiom Flush Headwall is made to order for this project. Each headwall consists of the rough-in bracket and the pre-wired and pre-piped headwall that is particular to each location or type.

Before attempting to install, please read and understand all of the instructions. In particular please refer to the final approved submittal drawings as they will take precedence over these instructions



Note: Two types of units are addressed in this instruction bulletin.

- A) units that terminate below the ceiling line [Page 3]
- B) units that terminate at the ceiling line [Page 10]

## Basic Steps for Installing the Axom™ Headwalls

- Prepare stud wall to accommodate headwall
- Mount the rough-in bracket within the wall cavity
- Install medical gas lines at locations shown on approved submittal drawings
- Install electrical and communication conduit as shown on approved submittal drawings
- Install drywall and finish building wall
- Install Axiom Flush Headwall
- Install all electrical and communication wiring and make appropriate connections
- Connect medical gas piping
- Test, close, and clean



Do NOT use powered screwdrivers on devices or coverplates. Stripped holes or screw heads are NOT covered by warranty

## A. Axiom Flush Headwalls that terminate BELOW the ceiling line

## Preparation of the stud wall

Determine the height and centerline for the headwall from the approved submittal drawings. Mount a saddle (sill) at 91/8" (230 mm) above the floor. For horizontal opening see dimensions on approved submittal drawings. See Figure 1 for detail.



Refer to approved submittal drawings for actual opening dimensions

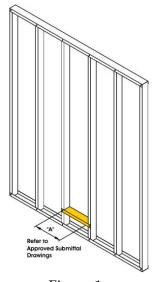
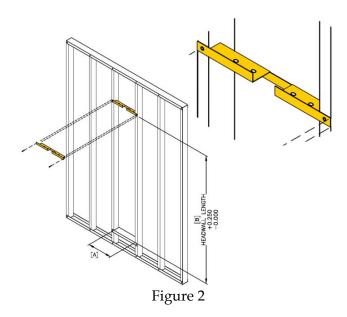


Figure 1

## Mounting of the rough-in bracket

The rough-in bracket locates the electrical, communication, and medical gas entrances at the top of the headwall. The rough-in bracket is screwed to the front of the vertical studs. The vertical location of the bracket is shown on the approved submittal drawings See Figure 2.



## **Installing the Medical Gas Lines**

Medical Gas Lines will enter the Headwall through the top-center. The headwall will accommodate  $\frac{1}{2}$ "ID lines for Oxygen and Medical Air, and  $\frac{3}{4}$ "ID for Vacuum. Note: please refer to the approved submittal drawings to ensure that no changes have been made for this project. Lines are to be stubbed down the wall cavity, and through the notch in the rough-in plate. The stub is to be 15" (380mm) below the rough-in plate. The installer will need to leave some vertical movement to allow the installation of a coupling. Medical gas lines should be tested at this time. Please refer to Figure 3

## **Installing the Electrical and Communication Conduit**

Conduits are terminated at the rough-in bracket. This plate will become the top of the headwall - thus conduits will not need to be removed and re-attached during installation. Refer to the approved shop drawings for correct locations. We suggest using tape [e.g. blue painters tape] over the ends of the conduit connectors to keep out any debris. Please refer to Figure 3.



Be sure to follow the correct knock-out designations from the approved submittals or the conduit will end up in the wrong terminal compartment.

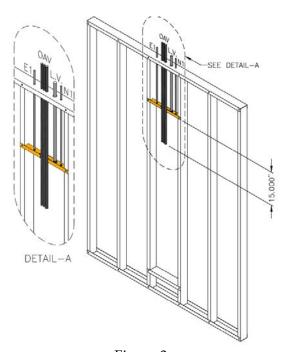
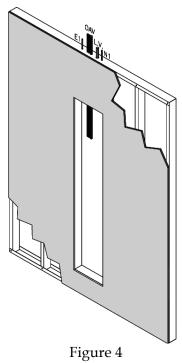


Figure 3

## **Drywall and Wall Finishes**

Drywall contractor will now install drywall. Be sure that the edge of the drywall does not protrude into the prepared cavity, and that no excess drywall or taping compound is left within the cavity. See Figure 4. Building wall can now be completed.



## **Installing the Axiom Flush Headwall**

After the building wall finishes have been applied, the Headwall is now ready to install. Bring it into the area, and remove it from the carton. While still lying on its back remove the top access panel. [Remove the gray snap-in trim, thus exposing the screws that retain the access panel.]



Be sure to keep the snap-in trim and screws in a safe place until you re-install the panels.

Remove the snap-in trim from the aluminum trim around the outside edge of the headwall



Be sure to keep the snap-in trim in a safe place until you attach the headwall to the building wall.

Apply clear calking onto the back of the edge trim and lift the Headwall and insert it into the wall cavity. See Figure 5

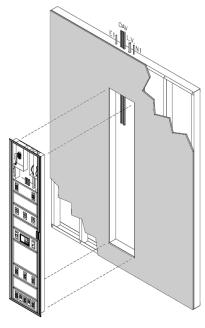
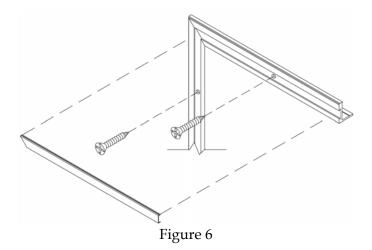


Figure 5

Screw through the holes provided in the extrusion trim around the edge of the headwall. [Through the trim, the drywall and into the studs and track.] Replace snap-in trim See Figure 6



## **Electrical and Communication Wiring and Cables**

Pull electrical and communication wiring into the appropriate terminal compartments. The rough-in bracket has now become the top of the terminal compartments. Connect the incoming wires to the pigtails or terminal strips provided in the headwall. Communication wiring should go through the terminal compartment directly to the device that it will serve. A pull cord has been provided.

## **Connecting the Medical Gas Lines**

Connect the medical gas lines. All brazing must be completed according the NFPA 99 and local codes. Test all medical gas lines and brazed joints according to NFPA-99 and local codes.



The inert gas (i.e.  $N_2$ ,  $CO_2$ ), used in brazing, must not overheat the gas outlets. (Suggestion – have inert gas flow through and away from the outlet.) Damage to the outlet due to overheating is NOT covered by warranty.



All piping and medical gas outlets in the headwalls are debris-free. Please use care when blowing down the system piping that no debris comes into the headwall as damage to the medical gas outlet 'O' rings may occur. Damaged outlets are NOT covered by warranty

#### **Nurse Call and Other Communication Devices**

Install devices per the installation instructions of the device manufacturer. Mounting holes are drilled and tapped for 6-32 screws.

Note: for telephone and/or data jacks, we have provided a module holder and coverplate. These holders will accommodate standard RJ-11, and RJ-45 modules. DO NOT INSTALL standard wall box plates. Additional holders and cover plates as well as modules (in various colors, and blanks) are available from Hospital Systems.

## Re-installing the Access Panel

All access panels for the same type and size of headwall are interchangeable. Note that the panels must be re-inserted in the same position and orientation as removed to insure that all of the holes are in line. Be sure to center the access panel so that the trim will fit evenly all-around Insert the screws and then snap in the trim. See Figure 7



Do NOT use powered screwdrivers. Stripped holes or screw heads are NOT covered by warranty

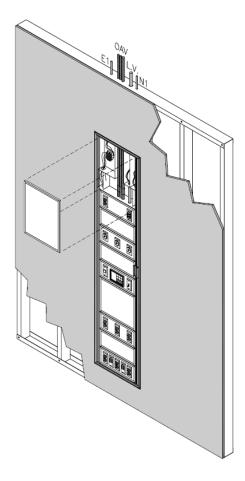


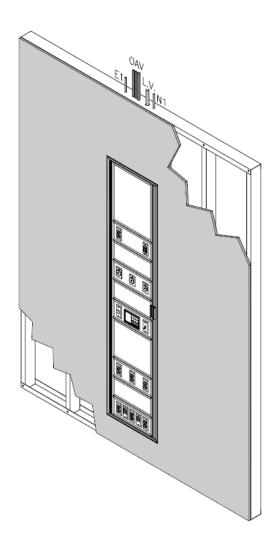
Figure 7

#### **Final Test**

Medgas outlets: Complete the testing as per NFPA-99.

Electrical Test electrical receptacles and other devices per local code

devices: and general practices.



## Cleaning

Use a soft cloth with non-abrasive cleaner (i.e. 409 or Windex) to remove dirt and fingerprints.

## B. Axiom Flush Headwalls that terminate AT the ceiling line

### Preparation of the stud wall

Determine the height and centerline for the headwall from the contract drawings. Mount a saddle (sill) at 91/8" (230 mm) above the floor. For horizontal opening see dimensions on approved submittal drawings. See Figure 1 for detail.

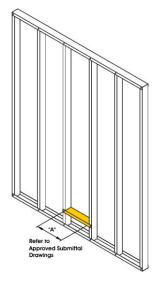
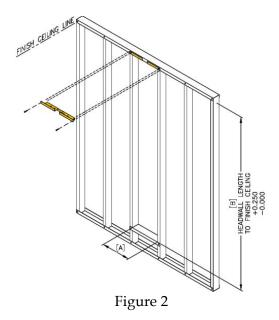


Figure 1

## Mounting of the rough-in bracket

The rough-in bracket locates the electrical, communication, and medical gas entrances at the top of the headwall. The mounting bracket is screwed to the front of the vertical studs. The bottom of the rough-in bracket must be in the same plane as the ceiling line. See Figure 2.



## Installing the Medical Gas Lines.

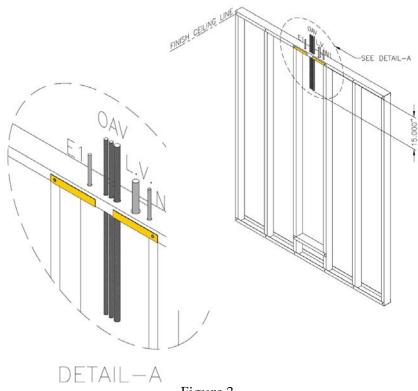
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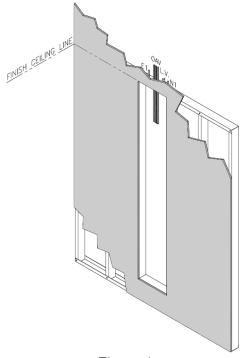


Figure 4

## **Installing the Axiom Flush Headwall**

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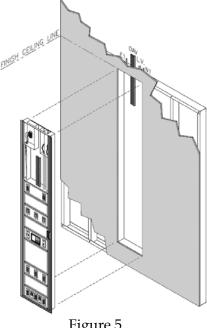
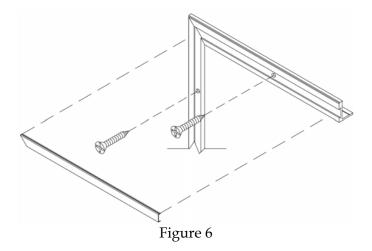


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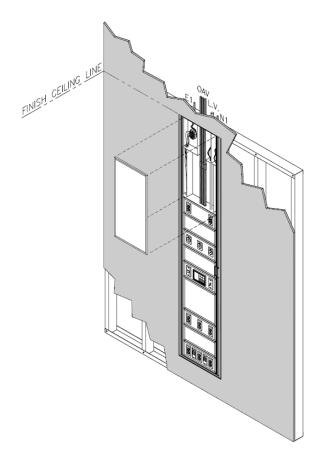


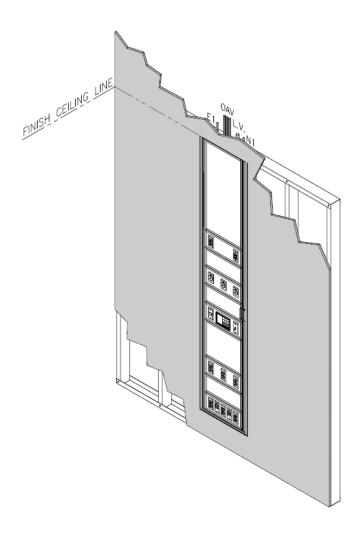
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