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Installation Instructions

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SURFACE MOUNTED ARRAY™ Patient Headwall

Installation Guidelines



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Photos and drawings illustrated in this manual may not be of your specific project or configuration. The techniques and instructions are representative of the product provided.

These installation guidelines describe how to install the SSH Array™ Patient Care Headwall.

Prior to installation, please carefully read and familiarize yourself with all of the instructions,

Prior to installation, ensure that the building wall is constructed with a minimum of 20gauge steel studs on 16" (400mm) centerline spacing. Failure to adhere to this specification may result in the collapse of the wall, with possible personal injury.



Building wall must be flat and vertical. Any bowing or irregularities in the building wall will be exaggerated on the finish of the Array Headwall.

Type of building wall [standard, seismic, and/or fire-rated] is determined by the construction drawings. Use fasteners that are appropriate to the wall type. Fasteners are supplied by the installer.

Prior to installing the Array Headwall, system components such as electrical, communication and medical gas should have been installed to a nearby location.

Review the approved submittal drawings for the location of junction boxes and medical gas piping.

The Array Headwall will be shipped in a crate that is marked with the headwall serial number [see submittal drawings] as well as the Room Number [when available]

The crate contains:

1. The basic structure [shipped in sections if wider than 48"] with electrical devices pre-installed and wired to junction boxes at the top of each section, medical gas outlets, pre-installed and piped for connection at the top of the section, and rough-in boxes for communication [low voltage] pre-installed and piped for connection to junction box(es) at the top of the section. [pull string included]
2. Bottom Support/Finisher Bracket(s) [when base is by HSI]
3. Top and Bottom 'J' panel holder**
4. Vertical Equipment tracks, if specified**
5. Access panels**
6. Medical Gas Front Latch Assembly [e.g. Front bodies]**
7. Device cover plates**
8. Fasteners for between sections, panels, and equipment rail [note fasteners to building wall are not provided]

** Items shipped after structure installation for protection and safety unless otherwise requested.



Locate and Mark on the building wall the center line of where the Array Headwall will be located. This is typically the same centerline as the bed, however this may vary, please check the contract drawings for the desired centerline. Also mark where the studs are within the building wall (if solid backing has not been provided).

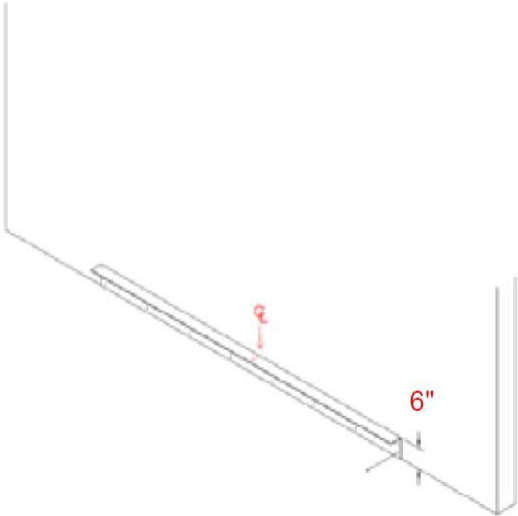
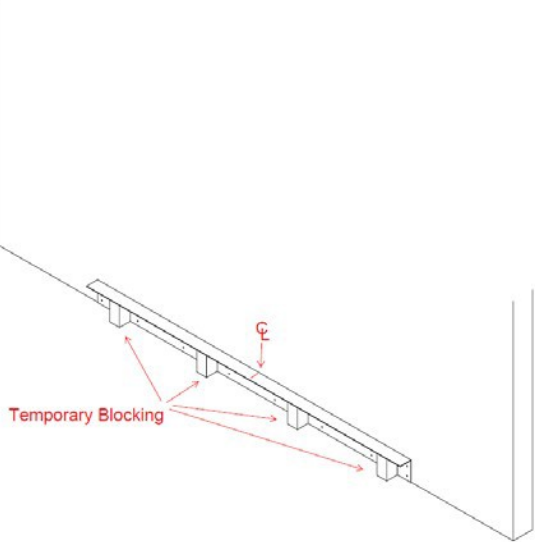
The Bottom Support/Finisher Brackets

Locate the Bottom Support/Finishers, aligning the centerline previously located on the building wall.



The Bottom Support/Finishers must be level and the top as specified in the approved submittal drawings above the finish floor. This is key in positioning and leveling the headwall.

You will need to drill the support to match the existing studs, using two screws [installer supplied] at each in-wall stud to maximize the rigidity of the support. To ensure that the Bottom Support does not move during installation, place 2x4 spacers under the support while installing the headwall.



Center Section

1. Lift the center section [if a multiple section headwall] out of the crate; place it on the Bottom Support/Finisher bracket.
2. Center this on the Center-line marking on the wall
3. Fasten the center section to the building wall using appropriate fasteners for the type of building wall. [Fasteners are not furnished with the headwall, you will need to use fasteners approved by the architect or engineer for the specific seismic and/or building wall type.]
4. Attach the section to the bottom Support/Finisher with the screws and nuts provided. Screw heads from under and the nuts inside the headwall



Be sure that the Section is plumb and level. This will be key to location of other sections and especially the panels.





Best Practice

Screw the headwall sections to the wall using the mounting pans toward the back of the headwall. These pans will be in line with the blocking diagram provided during the engineering phase. Please be sure you are mounting the headwalls into the studs previously marked if you have not placed blocking in the wall.

DO NOT use the back pans with junction boxes or medical gas back bodies to tie the structure to the building wall. Back pans with pipes or flex tied to them CAN be used so long as there are not electrical boxes or back bodies on the pans as well. Using pans with electrical or medical gas may cause the pans to bow and the devices will not align with the finish panels.



Adjacent Section

1. Lift the next Section out of the crate, place it on the bottom support/finisher, and slide it against the adjacent section just installed. Follow submittal drawings to identify the order of the sections.
2. Using the 1/4-20 bolts and nuts, tie the Sections together through the pre-drilled holes in the studs.
3. Fasten Section to the building wall using appropriate fasteners for the type of building wall
4. Attach Section to the Bottom Support/Finisher Bracket with the screws and nuts provided [when base is by HSI]





Any Additional Sections

1. Repeat as above





Check that the alignment between sections is correct and that the bolts between sections are tight.
Check that the fasteners that attached each section to the building wall are tight and that the sections do not move.
Check that the sections are tightly attached to the Bottom Support/Finishers Bracket.

Remove the temporary 2x4 supports from under the Bottom Support/Finishers Bracket

Top and Bottom Panel “J” bracket

For single section headwalls this bracket will be pre-installed.
For multiple section headwalls, attach the top and the bottom “J” brackets onto the Sections using the flat head screws provided. Note that there may be some production variation – best practice is to use the brackets that are marked for that specific headwall.

Connections

- Electrical contractor can now make the connections at the junction boxes for the receptacles
- Nurse Call/Communication contractor can pull in cabling for nurse call, data etc. [Do not install LV devices at this time]

- Medical gas connections can be made by the medgas contractor.
- Medgas Front Latch should be temporarily installed for the testing.

Testing

Electrical and medgas test should be done at this stage.

Special Notes on testing Medical Gas piping NFPA (2005)
For Pressure Lines [i.e. OXY, AIR,]

Initial Pressure Test [5.2.12.2.3.5]. 150psi maintained until each joint as been examined for leakage

Initial Standing Pressure Test [5.2.12.2.2.7.4]. 20% above working pressure, usually 65psi maintained for 24 hours with less than 5psi drop.



For Vacuum Lines

Initial Pressure Test [5.2.12.2.3.6]. 15psi maintained until each joint as been examined for leakage

Initial Standing Pressure Test [5.2.12.2.2.8.1]. 19" HgV for 24 hours which shall not drop to less than 12"HgV.

Do Not test vacuum system with pressures above 15psi

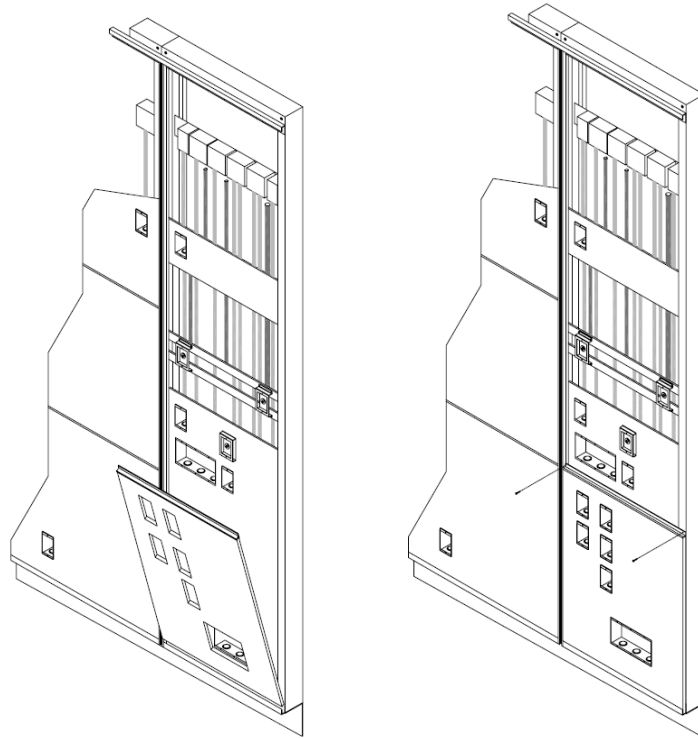
Installing front panels [See project drawings for panel location]

Bottom panel

1. Lower the bottom edge of the lower panel into the "J" bracket at the bottom of the headwall structure
2. Move the panel back at the top until the reveal that is attached to the top of the panel is against the Array structure.
3. Screw the reveal extrusion into the studs with the provided screws



Use the full complement of screws.



Middle Panels

1. Lower the bottom edge of the panel to engage the “Z” clip on the back of the panel onto the top of the reveal [or equipment rail] extrusion AND the internal cross member.
2. Move the panel back at the top until the reveal that is attached to the top of the panel is against the Array structure. Be sure that the “Z” clip is fully engaged at the bottom of the panel
3. Screw the reveal extrusion into the Array structure with the provided screws



Use the full complement of screws.

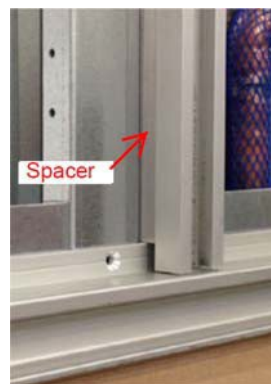


Vertical Equipment Track [if specified]

Screw the vertical tracks to the studs with the supplied screws. Note, there is a spacer strip that goes between the track extrusion and the stud to bring the track out even with the panel fronts.



Place track up into the upper "J" bracket with the spacer behind it. Line up screw holes



Bottom of track should overlap the horizontal extrusion as shown, Spacer is between vertical track and stud



Top Panel

1. Tilt the panel and insert it into the “J” bracket at the top of the headwall structure
2. Move the bottom of the panel back to allow the “Z” clip to engage the top of the reveal extrusion at the top of the panel below. Slide the panel downward to engage the “Z” clip.
3. Be sure that the panel is fully down and seated onto the extrusion and that the “Z” clip on the back has engaged the internal retainer as well as the panel reveal]



Monitor Slide [if provided by others]



If the monitor slide is screwed to the panel, the MAX load is 20 lbs [9kg]. We strongly advise that the monitor bracket be braced back to the building wall.

Monitor Slide [if provided by HSI]

Mounting brackets will be provided behind the panel. MAX load is 40 lbs [18kg]. Panel will be predrilled as well as the backer. Once the panel is installed the monitor bracket is located on the front of the panel and attached with the provided #10 SMS screws.

Device Cover Plates

Device cover plates and medgas latching plates may now be installed.

Removal of Panels



To remove the top panel, you will need a special tool. One set is provided.



Additional units can be purchased at Home Depot (QEP 4⁷/₈" Suction Cup or at most hardware stores)

Removing the top panel

Remove all device coverplates [if any]

Attach the suction cup(s) to the lower part of the panel.

Slide the panel up until the bottom until the "Z" clears the reveal extrusion and the "Z" clip on the back of the panel releases from the retainer within the headwall. Pull the panel away from the headwall, it will now slip down and can be removed.



CAUTION; Be sure when removing the upper panel, that it does not detach from the suction cup as it will fall and it will cause damage to the panel, and may cause bodily harm.

Cleaning

Once completed, the Axiom-Array Headwall can be cleaned with any cleanser approved for the selected laminate, and a soft cloth.

It is important to use ALL of the screws provided

If you use of a power screw gun set your torque to not exceed the limit of the screws 17 Inch/lbs for #8 and 8 inch/lbs for #6



NOTE: stripped screw due to over-tightening can be a life-safety issue.

NOTE: stripped screw and/or holes are NOT a warranty item