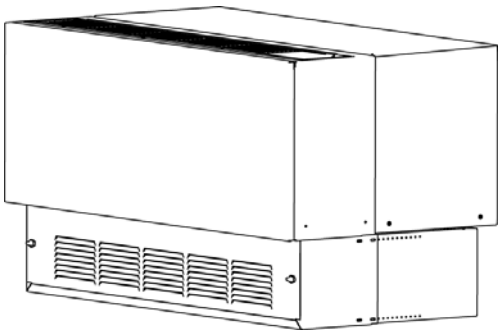
Installation: Hydronic heat section

Applied Packaged Terminal Air Conditioner: NF / NAWC with Hydronic sub base heat

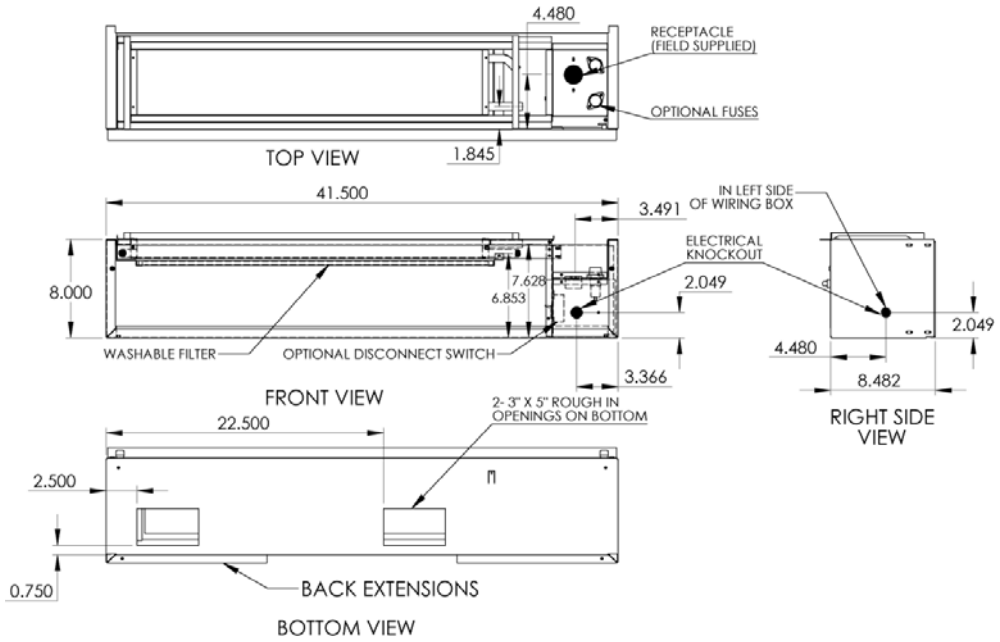
Heating coil installation



HEATING SUB-BASE

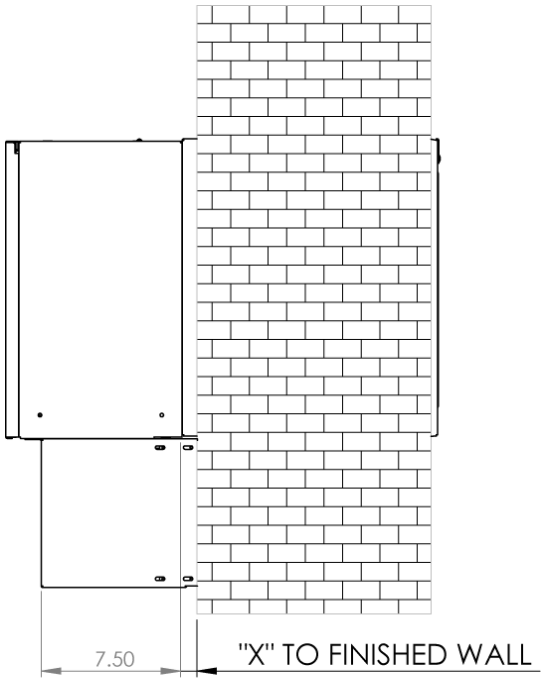
The heating subbase contains a tube-and-fin heat exchanger that is configured for the use with hot water or steam as the heating medium. The subbase also houses the electrical receptacle and provides mechanical protection for the cord and plug. The subbase measures 8" high without leveling feet, and with the leveling feet allows adjustability from 8.2 to 9.2" high off the finished floor surface.

Electrical and plumbing rough-in can be done either through the back of the heating subbase or through the openings provided in the bottom of the subbase.



Telescoping Side Channels

Telescoping side channels close in the gap between the subbase and the wall. The further the wall sleeve penetrates into the room, the larger the gap to fill will be. The side channels have slotted holes and are reversible to enable practically infinite adjustability within the range from zero to 10.75 inches of gap fill, without having to cut or break off any sections. Adjust the side flanges as follows:
Measure the penetration of the bottom of the wall sleeve into the room relative to the finished wall surface, and record as "x". Remove the grille cover from the heating subbase by rotating the two ¼ turn finger and thumb fasteners until the grille cover releases. The total side length of the heating subbase (cover removed) plus side channel closure is calculated as 7.5 + "x". Insert the side channels and secure with the screws provided, set at the total side length calculated. Center the subbase under the wall sleeve opening and adjust the levelling feet to the anticipated correct height. Final height adjustment can be made after the wall sleeve is permanently installed. At that point, the flanges of the side channels can be screwed to the finished wall from inside the subbase if desired, to anchor the entire heating subbase assembly in place. The bottom of the wall sleeve will end up overlapping the subbase by about 0.875 inches.



Plumbing Connections:

The heating coil is supplied with 5/8" O.D. (actual diameter) copper tubing connections. Hot water heating typically requires a Normally Open (NO) water valve, and steam usually requires a Normally Closed (NC) steam valve. The NFWC unit 24 VAC control output to the valve is factory set for NC but can be field-converted to NO duty as described in Section *Heating/Cooling Chassis Installation.*

Remove the cover plate on the right hand side of the heating coil to provide better access to the copper connection tubes. Always pipe the valve to the supply connection. If the heating medium is hot water, connect the valve "outlet" (Supply) to the lower connection and the Return water to the upper connection. If the heating medium is steam, connect the valve "outlet" (Supply) to the upper connection and the Return to the lower connection. Route the steam or water source to the valve's "inlet" connection.

Install the piping, valve, and accessories (as specified by the design engineer) in the space available under the heating coil. Follow all applicable plumbing and electrical codes.