

Remove the electrical junction box cover (situated at the bottom right hand side of the unit) by removing the single junction box cover screw. Bring supply wiring into the unit through the knockout in the bottom of the junction box securing the entry point with a connector. **Power supply wire should be 14AWG and protected by a 15AMP over current protector.** Connect line input to black lead, neutral to white lead and ground to pillar marked G inside junction box.

Start-up

Set the fan speed switch to either **I (low speed)** or **II (high speed)** and activate the system thermostat (field supplied), because of the integral low limit aquastat, it may take several minutes before the fan is activated. When the fan does come on, ensure that the switch is operational by moving position to **O (off)**, then to **II (high speed)**. Best results are obtained by leaving the switch in the **I** position and reserving **II** for a quick heat up or in extreme conditions. If the unit is not operating please refer to the trouble shooting tips at the end of this manual.

Unit operation.

This Pocket Wall Unit has 2 different controls.

1. An internal aquastat, not operated by the user.
2. A surface mounted rocker switch (situated behind the access door) for the user to operate the fan speeds. Min / Off / Max.

Press "I" for Min. fan speed, press "O" for off, press "II" for Max. Fan speed.

Room thermostat control

This Pocket Wall Unit may be run by a field supplied remote wall mounted room thermostat wired into the power supply. Refer to the instructions provided with the thermostat selected. One thermostat can be used to control up to four heater appliances. This field supplied thermostat should be a line voltage thermostat.

Alternatively, field supply a low voltage room thermostat that would be wired directly to the circulator for the zone that the PWU units are installed on. On a call for heat, the circulator would come on and the unit mounted aquastat would bring the fan on once the coil temperature exceeded the lower threshold.

Unit maintenance

The Smiths Environmental Products PWU recess units are designed for years of trouble free operation.

If servicing is required, please contact the installing contractor or

**Smiths Environmental Products
Customer Service
300 Pond Street
Randolph, Ma 02368
Phone: 269 925 8818**

Troubleshooting tips

If the unit fails to operate:

1. Verify that the supply voltage is 120V AC, all wires are connected and the fan switch is in the **I** or **II** position.
2. Verify that hot water is going to and through the unit at 110°F or above. Both supply and return tubes should be hot. If the return is not hot, the coil is air locked, which will prevent the fan from operating when unit is set to heating mode. Bleed air from the coil if necessary. The unit should run.
3. If the PWU still does not run, replace the aquastat.

Caution:

ELECTRICAL SHOCK MAY RESULT. ISOLATE FROM POWER BEFORE OPENING OR SERVICING THIS UNIT



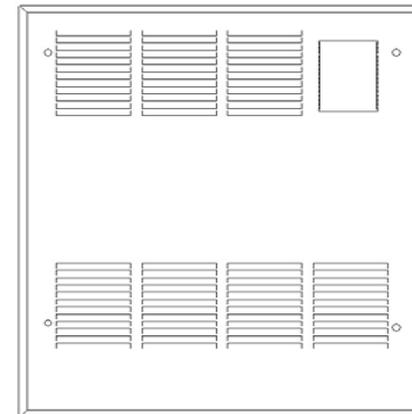
PWU 4/6

PWU 6/8

PWU 8/10

PWU 13/15

Installation & user Guide



The Pocket Wall Unit (PWU) has been designed for a recessed wall application. The unit can be installed either directly to the studwork by using the adjustable side mounting brackets set to suit the associated sheetrock thickness or mounting directly to the sheetrock by removing the side mounted brackets and securing with screws (field supplied) through the holes located in the chassis flanges. The front grille assembly is secured to the side flanges via screws. The area in front of this unit must not be obscured or restricted. Vertical surfaces in front of this unit will impede the air flow and reduce its capacity.

INSTALLATION PROCEDURES

Preparation.

Carefully unpack the unit from the carton. The front cover grille has been packed separately and should be stored safely until required.

Stud Wall (on top of sheet rock)

Remove the side mounting brackets from the unit chassis.

Mark a distance up from the floor to the desired mounting height. Cut the rough between the studwork to the dimensions, which correspond to the unit size being installed. (Table 2) Place the unit chassis with the top facing up, level with the mark between studs and $\frac{1}{2}$ " to the top of the opening and secure with suitable wood screws (field supplied) through the four vacant screw holes (two in each flange). The grille cover will be installed on the chassis after the piping, wiring and air bleeding has been completed.

Stud wall (prior to sheet rock)

Mark a distance up from the floor to the desired mounting height. Select the desired thickness of sheet rock to be used, loosen the screws and adjust the side mounting brackets to the appropriate size, tighten the screws. Place the unit chassis with the top facing up, level with the mark between the studs and secure with suitable wood screws (field supplied) through the four screw holes in the side brackets (two in each flange).

The appropriate size sheet rock can now be fitted around the unit, care must be taken to ensure there is a $\frac{1}{2}$ " gap between the top of the unit and the sheetrock. The grille cover will be installed on the chassis (using the four screws provided) after piping, wiring and air bleeding has been completed.

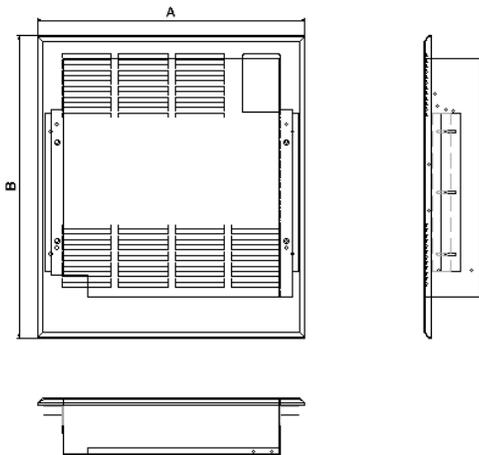


Table 1

Unit	A	B
PWU 4/6	19½"	17 1/8 "
PWU 6/8	19½"	17 1/8 "
PWU 8/10	19½"	21"
PWU 13/15	19½"	31½ "

Note: When fixing unit to studwork ensure there is a $\frac{1}{2}$ " gap between the chassis and the top of the cut-out.

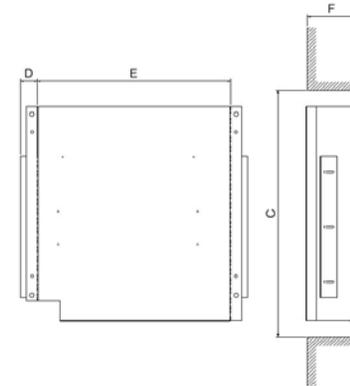


Table 2

Unit	C	D	E	F
PWU 4/6	17½ "	1¼"	14 1/8"	3½"
PWU 6/8	17½ "	1¼"	14 1/8"	3½"
PWU 8/10	17 ½ "	1¼"	18 3/8 "	3½"
PWU 13/15	17½ "	1¼"	28 ½"	3½"

Piping location

Solder the heating system Supply tube to the "back" chassis tube first. Then solder the return line to the "front" chassis tube. After soldering the Return connection (front tube), check that both connections are leak free.

Note: isolation valves are recommended on both supply and return piping to allow for service and balancing if necessary.

When filling the PWU recess unit with system water, it will be necessary to remove the air from it. A built in manual air vent is accessible on the top left hand side of the unit (this is only accessible with the front cover grille removed). Using a slotted screwdriver turn counter clockwise until the air is purged (some water may also be bled along with the air).

Check to make sure that the PWU will receive the flow (GPM) required to achieve its duty point, it may be necessary to balance the system to achieve the desired flow rate.

Electrical.

ALL ELECTRICAL CONNECTIONS MUST COMPLY WITH LOCAL AND/OR NATIONAL CODES AND REGULATIONS. IF IN DOUBT, CONSULT A QUALIFIED ELECTRICIAN.