Unit Heater Installation Instructions

Before beginning unit heater installation it is recommended that you first determine the best and safest location for the unit to be installed. Things to consider are headroom, best air coverage, electric and water line access, and a strong support area to hang the unit from. Sound may also be a factor. Unit heater must be installed with at least 1" clearance from combustible surfaces. Before beginning the installation of this unit please refer to the installation illustration page of these instructions.

Water Lines

It is recommended that valves and unions be installed near the heat exchanger tubes. These tubes extend out the side of the unit heater. If there is other equipment installed on this boiler system such as water heaters, dryers or other related components that will be used year round, it is recommended that a bypass valve also be put in the boiler line which would enable you to bypass the unit heater during the time of year when heating is not required. This will eliminate a radiant heat condition which is caused when heat radiating off from the heat exchanger causes the room temperature to rise during a time of year when heat is not desired. This will also boost the performance of other components on the boiler system and will also increase overall boiler efficiency. Unit must be installed so that water inlet and outlet tubes are horizontal. Unit must not be installed with the tubes pointing straight up or straight down.



The heat exchanger tube in the upper most position should be connected to the return water line of the boiler system. Water lines should also include a air bleeder at or near the unit heater at the highest point of the lines. This will allow for proper removal of air from heat exchanger and ensure maximum unit heater performance. For the water and air specifications for this unit please refer to the dimensions and specification page of these instructions.

Wiring Instructions

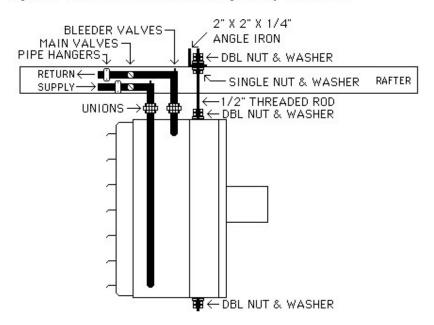
All wiring must be done by a licensed electrician. Power supply wires are 120 volts A.C. and are located on the fan motor. This unit must be properly grounded. It is recommended that an on/off switch be installed on or near this unit. All thermostat wiring and speed control wiring (if applicable) must be done in accordance to the specifications recommended by the components manufacturer. This unit is designed to be used with a line voltage 120-volt thermostat.

Unit Heater Installation illustration.

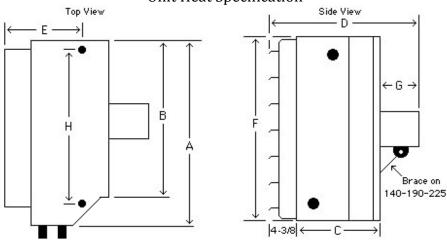
Actual installation may vary.

First check structural strength of rafters to be sure they are capable of carrying the weight of the unit and related installation materials.

Angle iron size is based on a rafter span of 2' on center. If the rafter span is greater than 2' on center heavier angles may be required.



Unit Heat Specification



Model	A	В	С	D	Е	F	G	H=Anchor width	Water Lines=ID	Shipping Weight=Lbs
UH18	13-5/8	10-1/8	10-1/4	19-5/8	10-1/2	10-3/8	5	10-1/2	1	30
UH60	19-5/8	16-1/8	10-1/4	17-1/4	10-1/2	16-3/8	2-3/4	16-1/2	1	53
UH95	23-5/8	20-1/8	10-1/4	18-1/8	10-1/2	20-3/8	3-1/2	20-1/2	1	69
UH140	25-5/8	22-1/8	10-1/4	20	10-1/2	22-3/8	5-1/8	22-1/2	1	85
UH190	27-5/8	24-1/8	10-1/4	21-1/4	10-1/2	24-3/8	6-5/8	24-1/2	1	100
UH225	31-5/8	28-1/8	10-1/4	19-3/4	10-1/2	28-3/8	5-1/8	28-1/2	1	112

Unit Heater Specifications. Internal Specifications using water. Entering Air Temperature = 60°

Model	BTUs EWT-200°	BTUs EWT-180°	CFM - Amps	GPM	APD	Speed s	Approximate FOH-WPD	Approximate LWT at 200°	Approximat e LWT at 180°	НР
UH18	19,732	16,881	180 – 1.4	7	.05	No	2.16	194°	175°	1/30
UH60	64,923	55,506	700 – 1.4	11	.11	Yes	2.73	187°	169°	1/30
UH95	102,058	87,243	935 – 1.6	12	.10	Yes	2.47	182°	165°	1/20
UH140	158,184	135,066	1,770 – 3.9	12	.20	Yes	2.23	172°	156°	1/4
UH190	206,831	176,585	2,278 - 4.9	14	.25	Yes	2.66	169°	154°	1/4
UH225	244,239	208,638	2,690 - 4.1	16	.19	Yes	2.87	168°	153°	1/4

These results have been calculated using a combination of physical testing and computer software designed for the use of developing heat exchangers and related products. These results have been produced by Paukner Metal Products and are believed to be accurate. Actual results may vary depending on installation.