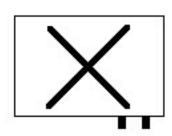
#### **Air Handler Installation Instructions**

Units must be installed with at least 1" clearance from combustible surfaces. It is recommended that the unit be set on blocks, pads, or legs. Unit should not be sitting directly on a cement floor. Before beginning the installation first determine the best installation illustration for the application. Then determine the best location for the filter rack and follow the filter rack installation instructions on the filter rack installation page.

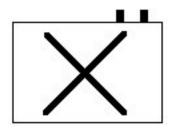
#### **Water Lines**

It is recommended that valves and unions be installed near the heat exchanger tubes. These tubes extend out the front of the air handler cabinet. 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 air handler during the time of year when heating is not required. This will eliminate a radiant heat condition which is caused when heat radiating off the heat exchanger causes the room temperature to rise during a time of year when heat is not desired. This will boost the performance of other components on the boiler system and will also increase overall boiler efficiency. Unit must not be installed with the tubes pointing straight up or straight down.



## Caution

Do not install air handler with heat exchanger tubes pointing straight up or straight down.



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

### Wiring Instructions

All wiring must be done by a licensed electrician. Power supply wires are 120 volt A.C. This unit must be properly grounded. Power supply wires are located in the blower compartment. These wires are black, white, and green and will extend out through the 7/8 inch hole closest to the front on the right or left side of the cabinet using a connector (furnished) to fill the hole. A metal switch box and a on/off switch must be installed on this unit. Thermostat – (controll) wire connections are also located in the blower compartment. Thermostat wires must be extended in to blower compartment through one of the remaining three 7/8 inch holes on the right or left side of the cabinet using a connector (furnished) to fill the hole. See dimension sheet for hole locations. Thermostat wire connections are marked 24 volt. Please refer to wiring diagram.

#### **Blower Speed Instructions**

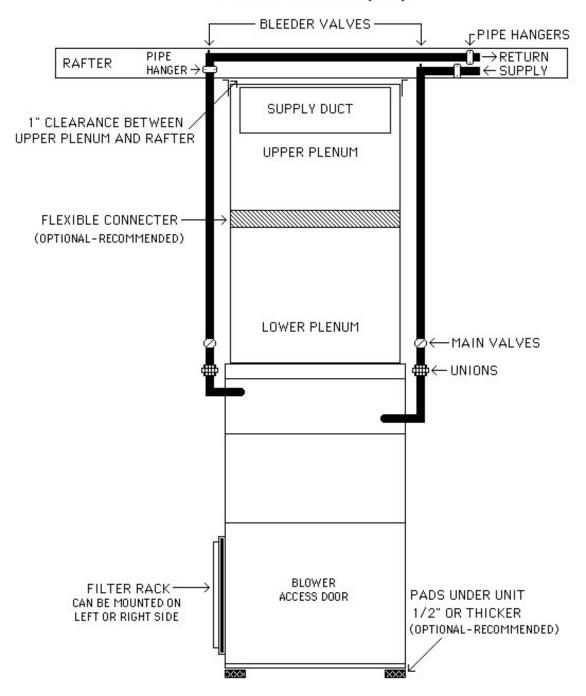
### Blower speed wiring must be done by a licensed electrician or qualified service technician.

To select or change blower speed, first shut off power to unit. Remove four screws holding blower access door and remove access door. Locate control relays on lower left corner of electrical bracket mounted on the front of the blower. Labels located below relays indicate each relays corresponding speed. Determine which speed or speeds are correct for the installation and connect thermostat control wires. **Please refer to wiring diagram.** 

Do not attempt to change blower speed by changing blower motor wires.

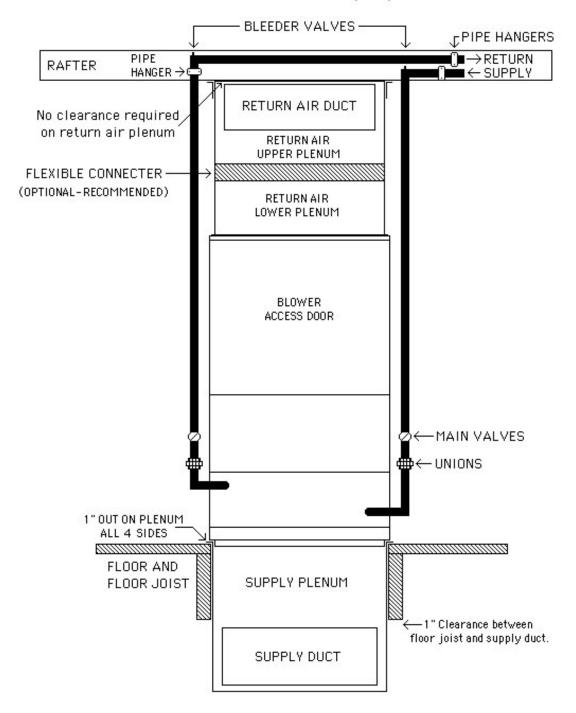
#### TYPICAL AIR HANDLER UPFLOW INSTALLATION

Actual installation may vary.



### TYPICAL AIR HANDLER DOWNFLOW INSTALLATION

Actual installation may vary.

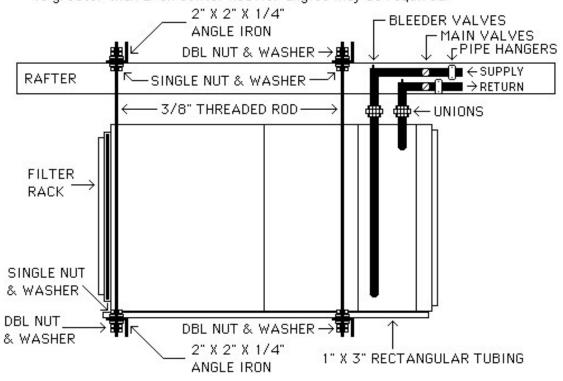


## Horizontal Air Handler hanging Illustration. Air handler can be hung facing left or right.

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.

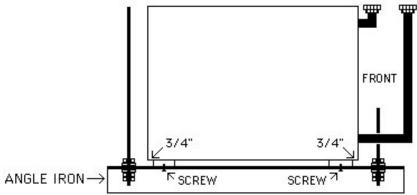
Angle iron size is based on a rafter span of 2' on center. If the rafter span is greater than 2' on center heavier angles may be required.



# Hanging Installation End View

Install 1" X 3" rectangular tubing 3/4" in from sides.

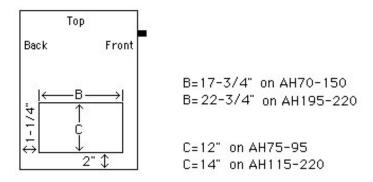
Anchor rectangular tubing to angle iron with 3/4 X #10 screws.



#### Filter rack installation

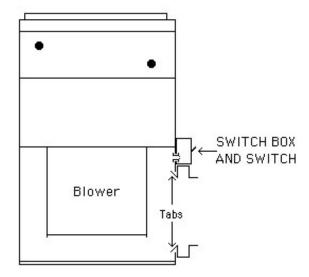
## Measuring the hole for the filter rack

Filter rack measurements can vary slightly.
Always measure filter rack before marking the hole.
Select the side that the filter rack will be installed on and mark and cut hole.

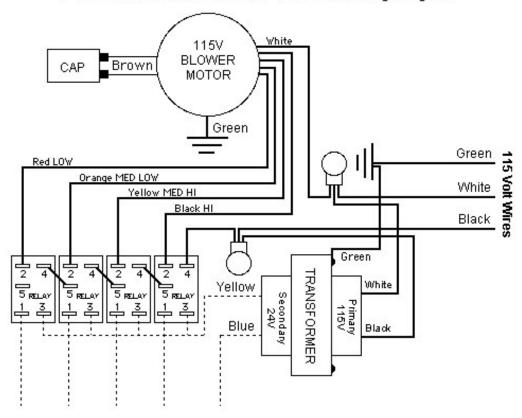


# Mounting the filter rack on the air handler

The filter rack can be mounted so that the filter slides out the front (recommended) or the rear. Position filter rack in hole, and form tabs over cabinet. Note: Filter rack can be installed on the same side as the switch box.



### Paukner Metal Products Air Handler Wiring Diagram



24 Volt wires to Thermostat.

# ---- = 24 Volts

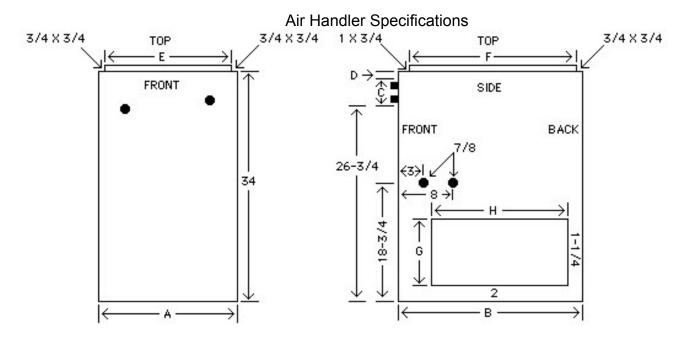
Transformer = White-Rodgers PT# 90-T40M1 Output 24VAC 40VA.

Relay = White-Rodgers PT# 90-370 Coil 24VAC 50/60 HZ

24 Volt wires from thermostat to relays are field supplied. Flat connectors for connecting thermostat wires to relays are supplied by PMP and can be found on the appropriate relay terminals. The Blue wire from the transformer is the feed (supply) wire to the thermostat. This will typically be connected to the Red thermostat wire.

Relay speeds are labeled. Labels are located on electrical bracket on 24 volt end of relays.

Please Note: AH70 has 3 speeds. AH95-220 have 4 speeds.



Air Handler Dimensions. All measurements are in inches.

Model	A	В	С	D	Е	F	G	Н	Water Lines=ID	Shipping Weight= Ibs
AH70	18-1/2	21-1/8	5-5/8	1-1/2	17	19-1/4	12	17-3/4	1	120
AH95	18-1/2	21-1/8	5-5/8	1-1/2	17	19-1/4	14	17-3/4	1	120
AH115	20-3/4	23	5-5/8	1-1/2	19-1/4	21-1/8	14	17-3/4	1	135
AH135	20-3/4	23	5-5/8	1-1/2	19-1/4	21-1/8	14	17-3/4	1	135
AH150	20-3/4	23	5-5/8	1-1/2	19-1/4	21-1/8	14	17-3/4	1	135
AH195	25-3/4	28	5-5/8	1-1/2	24-1/4	26-1/8	14	22-3/4	1	170
AH220	25-3/4	28	5-5/8	1-1/2	24-1/4	26-1/8	14	22-3/4	1	170

Air Handler Specifications. Internal Specifications using water. Entering Air Temperature =  $65^{\circ}$ 

Model	BTUs EWT-200°	BTUs EWT-180°	CFM-Blower Speed-Amps	GPM	APD	Speeds	Approximate	Approximate	Approximate	НР
							FOH-WPD	LWT at 200°	LWT at 180°	
AH70	77,728	65,958	768-L-3.8	10	.22	3	2.12	183°	166°	1/4
AH95	106,241	90,014	1,158-L-5.1	10	.48	4	2.12	177°	161°	1/3
AH115	126,023	106,850	1,467-M-6.6	12	.53	4	2.58	178°	161°	1/2
AH135	151,856	128,753	1,691-H-7.2	13	.63	4	3.21	175°	159°	1/2
AH150	160,813	136,344	1,769-H-7.4	12	.64	4	3.03	172°	156°	1/2
AH195	212,413	179,974	2,500-H-10.5	12	.48	4	2.26	163°	149°	3/4
AH220	233,373	197,884	2,498-H-10.5	14	.54	4	2.66	165°	150°	3/4

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.