

**TRADELINE®**

# HE220A,B Bypass Flow-Through Humidifier

## INSTALLATION INSTRUCTIONS

### READ AND SAVE THESE INSTRUCTIONS

## APPLICATION

The HE220A,B Bypass Flow-Through Humidifier uses the warm air furnace blower to provide humidification for the whole house. The HE220A,B works with virtually any Honeywell humidity control, but for optimal performance, use with the Honeywell Perfect Climate Comfort Center™ control.

## INSTALLATION

### **⚠** WARNING

**Hazardous Voltage.**  
**Can cause personal injury or equipment damage.**  
Do not cut or drill into any air conditioning or electrical accessory.

### **⚠** CAUTION

**Freezing Water and High Water or Static Pressure Hazard.**  
**Can cause water damage or permanent equipment damage.**

- The humidifier must be located where the ambient temperature is above 32°F (0°C) and below 160°F (71°C).
- Be sure supply plenum static pressure is no greater than 0.3 in. w.c. and water pressure is no greater than 125 psi.

### IMPORTANT

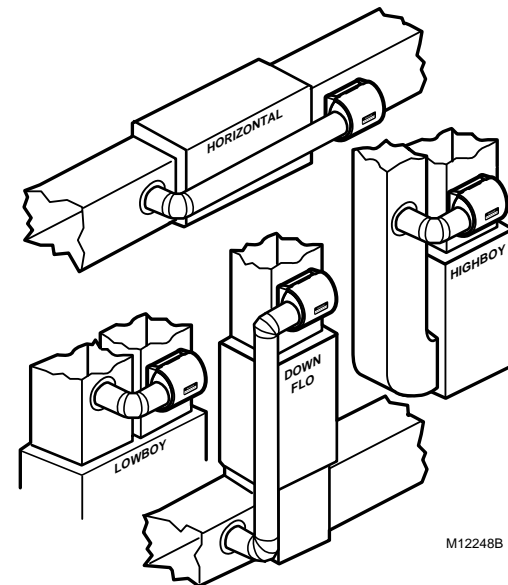
*To assure optimal product performance, be sure the template is level before marking.*

1. Determine the best location for the humidifier and draw a level line on the plenum. See Fig. 1.

### IMPORTANT

*Mount the humidifier at least 3 in. (76 mm) above the furnace jacket to allow adequate space for the solenoid valve and drain line. Check that there is adequate space above the humidifier to remove and install the humidifier cover. Do not install on a furnace jacket.*

2. Tape the template in position and trace around the template.
3. Remove the template and carefully cut the rectangular opening.
4. Disassemble the humidifier. Remove the cover and take out the humidifier pad assembly. See Fig. 2.



**Fig. 1. Typical humidifier installation locations.**

**NOTE:** Sidewalls are interchangeable for either left or right bypass installation. To change direction, remove the screws holding each sidewall, switch sidewall locations and reinstall the screws.

5. Position the humidifier housing in the opening (be sure it is level), so the locking tabs are in place on the lower sheet metal edge of the opening.
6. Secure the humidifier housing to the opening at the top and bottom using sheet metal screws.



7. Locate the other plenum and cut an opening for a 6 in. (152 mm) collar.
8. Install the 6 in. (152 mm) collar.

NOTE: Be sure to install a duct damper for summer shutoff on systems with air conditioning.

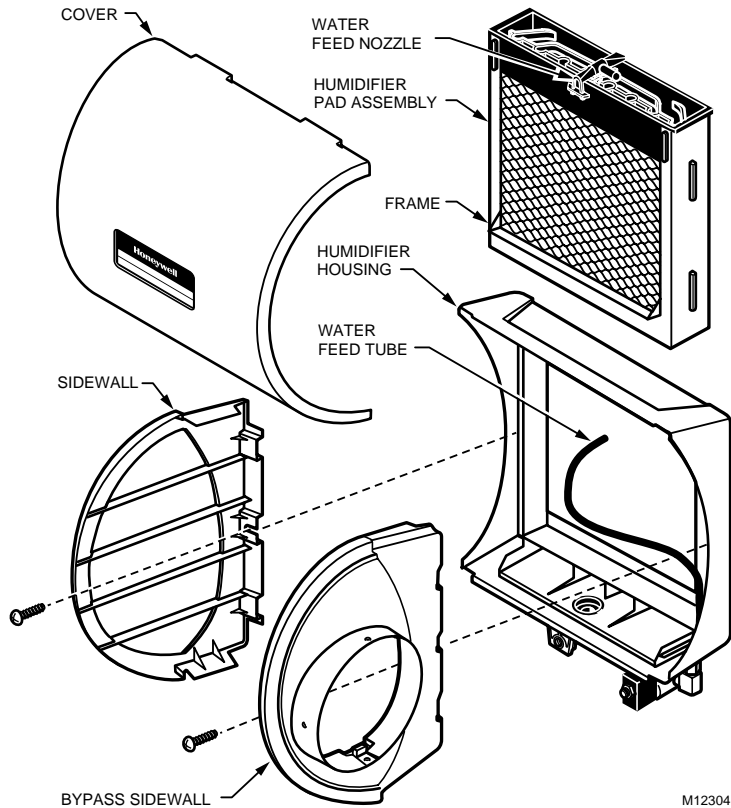


Fig. 2. Humidifier components.

9. Install a 6 in. (152 mm) diameter duct from the collar to the humidifier.

NOTE: Some installations require a 90° elbow attachment to the collar.

10. Seal the duct connections with duct tape.

NOTE: To avoid sagging and stress on the humidifier, add support when ducting is longer than 4 ft (120 cm).

11. Reinstall the humidifier pad assembly in the humidifier housing.

NOTE: Be sure the water feed tube is not pinched or kinked.

12. Hinge the cover in place and secure with the thumbscrew located at the bottom of the cover.

## WIRING



### CAUTION

#### Hazardous Voltage.

#### Can cause personal injury or equipment damage.

- Disconnect power supply before installing or servicing.
- On multispeed blower applications, do not wire the high voltage side of the transformer to the same power source that services the furnace blower or the transformer may burn out prematurely.

All wiring must comply with applicable local codes, ordinances and regulations.

1. Mount the transformer in a convenient location.

#### IMPORTANT

Install transformer on the outside of a grounded metal junction box using only a 7/8 in. (22 mm) knockout hole. Place mounting tabs into the knockout hole and firmly tighten the locking screw. Field wiring connections and grounding means for the transformer and enclosure shall be in accordance with the National Electrical Code (NEC) and the Canadian Electrical Code (CEC).

2. Connect wires to the 120V side of the transformer.

#### For humidity control wiring connections:

1. Wire the humidifier solenoid valve, current sensing relay or sail switch, humidity control and transformer. Refer to the humidity control installation instructions for mounting and wiring information.

#### IMPORTANT

- For proper operation, the humidifier must be energized during blower motor cycles.
- Current sensing relay or sail switch is not needed with the Automatic Humidity Control.

NOTE: Select models of fan centers include humidifier taps so the current sensing relay or sail switch are not needed.

## PLUMBING SADDLE VALVE

Hot or cold water, either hard or softened, can be used in the humidifier.

1. Use the self-piercing saddle valve (included) to tap into the water supply line at an appropriate location.



### WARNING

#### Chemical Hazard.

#### Can cause personal injury or equipment damage.

Do not use any line connected to an air conditioner.

## **IMPORTANT**

- *The saddle valve is not designed to be used to regulate water flow. The valve is either open or closed.*
- *To prevent debris from clogging the solenoid in-line filter, be sure to install the saddle valve handle pointing toward the ceiling.*

NOTE: Lightly clean the copper tubing ends with fine sandpaper before making any connections.

2. Use 1/4 in. O.D. copper tubing and connect the saddle valve to the inlet side of the solenoid valve.
  - a. Place the brass compression nut over the copper tubing.
  - b. Slide the brass ferrule over the tubing.

NOTE: Do not over-tighten the compression nut. Moderate tightness will prevent leaking.

- c. Insert the tubing into the solenoid valve fitting and support the valve while tightening the compression nut.

NOTE: Slope drain tube downward for correct drainage.

3. Connect a 1/2 in. drain tube to the humidifier drain fitting and run to a suitable drain.

## **CHECKOUT**

1. Open the saddle valve.

NOTE: The furnace blower must be on for the humidifier to operate.

2. Set the thermostat setpoint 10°F (6°C) above the room temperature.
3. Set the Convertible Humidity Control to a high humidity setting, or place the H1006A Automatic Humidity Control in the test position.
4. Observe the water running out of the drain line to be sure the humidifier is working properly.
5. Check for leaks.
6. Reset the thermostat and Convertible Humidity Control to a comfortable setting, or the Automatic Humidity Control to the desired frost factor setting.

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