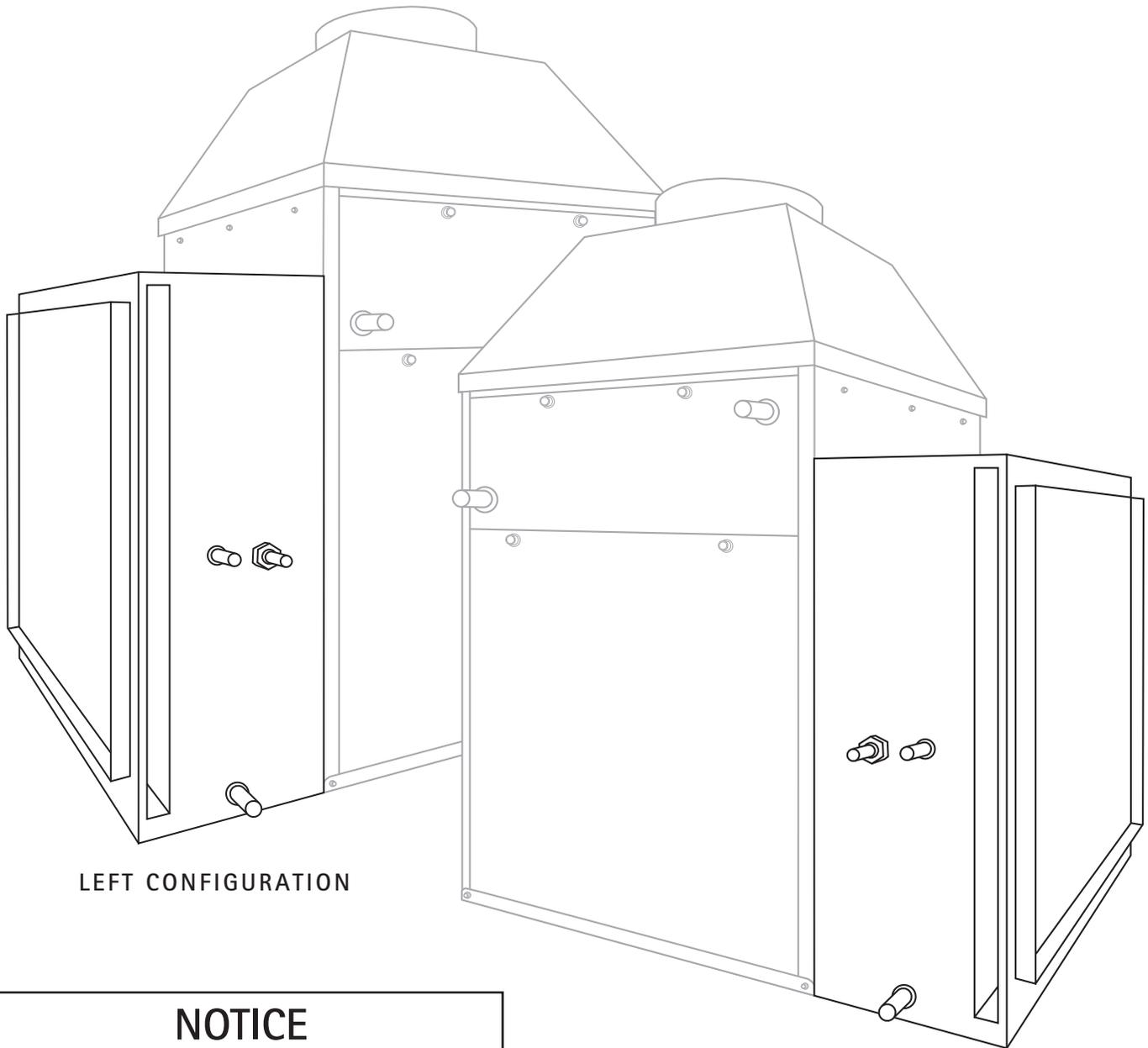


COOLING COIL INSTALLATION MANUAL



NOTICE

For upflow, downflow or horizontal installation,
cooling slabs are side specific.

RIGHT CONFIGURATION

INSTALLATION

SYSTEM REQUIREMENTS

These instructions are intended as a general guide only and do not supersede any national or local codes in any way. Compliance with all local, provincial, or national codes pertaining to this type of equipment should be determined prior to installation.

RedZone HVS cooling coils are airflow direction specific. Ensure the proper coil has been selected prior to installation.

When the cooling coil is installed in an attic, above a finished ceiling, or in any location where condensate overflow would result in property damage, the installer must provide an auxiliary drain pan in addition to the primary and secondary drains. The auxiliary drain pan must be connected to a drainage system separate from the primary condensate drain.

The duct system must be properly installed in order to provide adequate cooling performance. The airflow during cooling should be between 375 - 450 CFM per ton (1 ton equals 12,000 BTU/H) of cooling.

INSTALLATION INSTRUCTIONS

1. Inspect equipment prior to installation for damage, missing parts, and airflow direction
2. Cut out the return air opening on the side or bottom of the HVS air handler. Refer to the HVS air handler manual for proper return air opening size and location.
3. Screw the HVS cooling coil to the air handler using 1/2" self drilling or other suitable fastener through the mounting holes located on the flanges of the cooling coil cabinet. **DO NOT** use screws longer than 1/2" or you may damage the heating coil.
4. Install Condensate Drain:
 - a. Connect a p-trap to the drain pan stub using hose clamps.
 - b. Connect the other end of the p-trap to the drain using suitable tubing.
 - c. Do not install cooling coil without a drain trap. The negative pressure caused by the blower will prevent drainage without a trap installed.
5. Test condensate drain pan and drain line after installation:
 - a. Pour several liters of water into drain pan, enough to fill drain trap and line.
 - b. Check to make sure the drain pan is draining completely, no leaks are found in drain line fittings, and water is draining from the end of the drain line.
 - c. Correct any leaks found.
6. Connect Refrigeration lines to cooling coil
IMPORTANT: Connecting refrigerant lines must be clean, dehydrated, refrigerant-grade copper lines. Consult the outdoor condenser manual for guidance on proper line sizing.

Use care with the refrigerant lines during the installation process. Sharp bends or possible kinking in the lines will cause restriction. Do not remove the caps from the lines or system connection points until connections are ready to be completed.

- a. Route the suction and liquid lines from the fittings on the cooling coil to the fittings on the outdoor unit.
Run the lines in as direct a path as possible, avoiding unnecessary turns and bends.
 - b. Ensure that the suction line is insulated over the entire exposed length and that both suction and liquid lines are not in direct contact with floors, walls, duct work, floor joists, or other piping.
 - c. Connect the suction and liquid lines to the cooling coil.
 - d. Braze with an alloy of silver or copper and phosphorus with a melting point above 1,100°F.
NOTE: Do not use soft solder. Use a wet rag to prevent any damage to seals in the TX Valve.
 - e. Make sure outdoor unit has been put in place according to the Installation Instructions and is connected to the refrigerant lines.
 - f. Evacuate line set and follow outdoor condenser manufacturer's instructions for charging the system.
7. Freezestat
 - a. This cooling coil contains a freeze stat to reduce the chance of the DX air conditioning evaporator coil freezing the hot water coil.
 - b. Wire the freeze stat such that when activated it will cut power to the DX condenser allowing the blower motor to continue operating. Refer to **Figure 12 on page 17** of the HVS Installation Manual for wiring diagram.
8. TX Valve
 - a. The TXV is factory installed as per the manufacturer of the valve's installation requirements.
 - b. Should you need to perform service/adjustment to the TXV, please refer to the enclosed Supplement from the TXV manufacturer. In addition to the Supplement, the manufacturer has published a document titled "Service Bulletin 10-11". That document can be downloaded for reference from our website at <http://www.redzone-products.com/literature>