

Sample Specifications

General

Furnish and install Model PCCR/PCCH _____ Gas Fired heating, electric cooling 100% outside-air make up air unit per plans and specifications. Capacity and Energy Efficiency shall not be less than scheduled. Unit shall be provided with factory installed options listed below.

Approvals

Unit shall be design certified to conform to Electrical Testing Laboratories (ETL) or other nationally recognized testing laboratory. Furnace shall be A.G.A. Certified.

Cabinet

Cabinet shall be constructed of G-90 galvanized steel with minimum gauge thickness of: Bases - 16 gauge; Corner Posts and Tops - 18 gauge; Access Panels - 20 gauge. The interior of the evaporator air side is to be thermally insulated with 1 inch thick fiberglass with an R value of 4.2. A closed cell neoprene liner is to be installed on the underside of the base pan for noise reduction and weather seal to the roof curb. The cabinet is to be mounted on two steel rails or curb cap to facilitate installation.

Non-Rust Base. Base pan shall be poured with minimum 1/4" hot asphalt to prevent rain water or condensate from contacting base bottom.

Electro-Deposition Acrylic Paint Finish. All exterior parts shall be thoroughly cleaned chemically, zinc-phosphate coated and sealed with chromic rinse. Paint shall be electrically deposited by immersion dipping in a cationic electro-deposition paint system. It shall then be baked for a minimum twenty minutes at 400°F and shall have a minimum paint film thickness of 1 mil.

Stainless Steel Hardware. All exterior hardware including nuts, bolts, screws and washers shall be stainless steel (Type 304).

Assembly and Test

The unit shall be completely factory assembled and wired and thoroughly leak and safety control tested. After assembly, each unit is to be charged and run tested.

Refrigerant System

The refrigerant system shall include the compressor with crank-case heater, air-cooled condenser coil, high latent heat evaporator coil, thermal expansion valve, filter-drier, sight glass-moisture indicator, suction line accumulator and refrigerant pressure service valves. The evaporator and condenser coils are to be copper tube-aluminum plate fin. (The scroll compressor is to be equipped with hot gas bypass for up to 50% capacity reduction. PCC071 through 181) (The semi-hermetic compressor is to be equipped with hot gas bypass and cylinder unloading. PCC201 through 361) The refrigerant compressor shall be warranted by the manufacturer for 5 years from date of installation.

Air Side

The direct drive condenser fans designed for vertical air discharge are to be driven by inherently protected sealed ball bearing fan motors. The 100% outside air evaporator supply blower shall be a forward curved type DIDW mounted on a solid steel shaft supported in sealed ball bearings. Both the blower and housing are to be galvanized steel. Blower drive shall be belt type with adjustable pulley. One inch metal mesh cleanable type filters are to be mounted behind the outside air intake panel. The outside air face velocity cannot exceed 320 feet per minute through the evaporator coil.

Drain Pan

The condensate drain pan shall be fabricated from G-90 steel, painted in an electro-deposition paint system, and overcoated with an asphalt based mastic. The bottom shall be insulated with 1" fiberglass insulation. The drain pan shall be furnished with single or dual 3/4" or 7/8" (threaded) drain fittings exposed to the exterior of the cabinet.

Controls

Controls shall be factory configured for the design application with both the required hardware, operating parameters and typical default control setpoints. The control panel is factory mounted on the unit and is prewired to the unit sensors and actuators.

Furnace

Furnace shall be indirect gas fired heating which is 80% thermally efficient. Unit to be equipped for use with natural gas and include an integral power vent system and spark ignition. Gas control system shall be two stage (electronic modulation) with factory mounted duct thermostat.

Heat Exchanger

Heat exchanger and burners to be constructed of 409 (321) stainless steel.

Filters to be one inch (cleanable metal mesh) or two inch (disposable) (deep pleat) (cleanable metal mesh).

Full Perimeter Curb

The unit manufacturer's factory built curb is to meet the National Roofing Contractors Association August 1985 guidelines for roof mounted installations. Shipped completely assembled, the curb is to be 14 inches high and of all-welded, 16 gauge galvanized steel construction with a 2 x 4 pressure treated wood nailer strip furnished on the outside.

Option and Accessories (Check List)

Phase loss and low voltage monitor.

Motorized Outside Air Damper.

Seacoast Construction / Mill and Chemical Service Option of complete unit.

Electric Power through the roof curb.

Non-Fused Disconnect factory mounted and wired.

Clogged Filter Indicator.

Heat Recovery Water Heater (Desuperheater).

Whitaker coated coils or **Heresite®** baked phenolic coils.

Copper-Fins, Copper Tube coils.

Outdoor Air Coil Guards.

Hot Gas Reheat.

Reheat Plus (Liquid Subcool Coil)

High Efficiency Blower Motor.

Convenience Outlet.

Room Sensor Override

Remote Console

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