

GENERAL:

Furnish and install fan coil (FC or FCU) with type, size, and capacity as indicated on plans. Protect coil from construction dust and debris before project closeout with temporary disposable filters at unit and at return grille.

FC's shall be completely factory assembled including water coil, condensate drain pan, fan motor, filters and controls in an insulated casing in a vertical configuration. Units shall be rated and tested in accordance with ARI standard 210. Units shall be UL listed and labeled in accordance with UL 1995 for indoor blower coil units.

Vertical fan coil units shall have ducted side return air entry option as detailed on the drawings. Filters shall be accessible from side coil access panels. Provide 1 year supply of air filters as specified.

CABINET/BLOWER:

Unit casing shall be constructed of zinc coated, heavy gauge galvanized steel. Exterior surfaces shall be cleaned, and phosphatized, painted finish is optional. Casing is completely insulated with fire-retardant, permanent, odorless glass fiber material. Knockouts shall be provided for unit electrical power, water and/or refrigerant piping connections. Captive screws shall be standard on all access panels. Provide mounting subbase for vertical floor mount configurations. Subbase shall be constructed of heavy gauge, zinc coated galvanized steel with finish to match air handler unit.

Evaporator fan shall be a double inlet, double width, forward curved, centrifugal-type fan(s) with belt drive shall be standard. Thermal overload protection shall be standard on motor. Fan and motor bearings shall be permanently lubricated. Motor efficiency shall comply with NCSBC Volume X Energy Code.

WATER COILS:

Water coils shall be specifically designed and circuited for application. Provide 2-row heating coil and four or six row chilled water coil to meet design loads. Finned coil surface shall consist of aluminum plate fins securely bonded to seamless copper tubing. Coils shall be designed to allow drainage, designed for 150 psig working pressure, and tested at 350 psig.

Unit Drain pan shall be of corrosive resistant construction and have positive slope toward the drain. Provide and install a secondary overflow drain pan for each unit that is installed above a ceiling or on a mechanical platform. Install a float switch that will shut down the air handler and close the chilled water control valve upon activation. See control diagram and sequence of operation.

MANUFACTURER:

Units manufactured by Trane, First Co., or Magic*Aire are acceptable provided all specifications are met or exceeded.

VIBRATION ISOLATION:

Provide all equipment with vibration isolation bases equal to Vibration Mounting and Controls, Inc. (VMC), and shall be installed in strict accordance with manufacturer's instructions. Provide neoprene-in-shear mounts, VMC no. R-2 or approved equal, rated for load. Arrangement shall be in accordance with applicable details on drawings.

WARRANTY:

Provide unit with 5-year parts warranty and 2-year factory labor warranty.

END OF SECTION