SECTION 238219 - FAN COIL UNITS

1.1 SUMMARY

A. Factory-packaged and -tested units rated according to ARI 440, ASHRAE 33, and UL 1995.

B. Vertical, Horizontal or Stacked Fan-Coil Units: Hydronic cooling coil and hot-water, steam, heating, and reheat coil.

C. Vertical, Horizontal Ducted Fan-Coil Units: Hydronic cooling coil and hot-water, steam, heating and reheat coil.

1.2 MANUFACTURED UNITS

A. Fan-Coil Units:

1. Insulation: 1-inch (25-mm) coated glass fiber, foil-covered closed-cell foam, matte-finish closed-cell foam.


3. Chassis: Galvanized steel where exposed to moisture.

4. Cabinet: Steel with factory prime coating, ready for field painting, baked-enamel finish in manufacturer’s standard paint color as selected by Architect, baked-enamel finish in custom paint color as selected by Architect.

5. Filters: Pleated synthetic – cotton/polyester “sock” type media (stainless frame/ hoop inserted into filter media “sock”). Filter installation shall be accomplished without having to remove panel front or side of the unit as the filter could be slid into form the front or through a filter access panel (hinged and secured- thumb quarter turn fasters).


7. Steam Coils: Copper tube .030” minimum with aluminum fins .0075” minimum; distributing type.


   a. Fan: Double width, forward curved, centrifugal.

9. Hydronic Piping Package:

   a. Two way, modulating coil control valves union globe type valves.
   b. Two-piece ball valves, calibrated multi-turn (1490 degree) balance valves, Y-pattern strainers, wrought copper unions, bleeder/vents of coil located over drain pan and risers of stacked units.

10. Unit Control: Unit-mounted space sensor with DDC microprocessor based unitary, controlled or BAS interface.

B. Ducted Fan-Coil Units:
1. Insulation: ½ inch, 1 inch, coated, foil faced glass fiber.
2. Drain Pans: Plastic, Stainless steel, Insulated galvanized steel with plastic liner with 1” drain connection.
3. Chassis: Galvanized steel where exposed to moisture.
4. Cabinet: Steel with baked-enamel finish in manufacturer's standard paint color.
6. Filters: Synthetic cotton/polyester “sock” type media (stainless frame/hoop inserted into filter media “sock”). Filter installation shall be accomplished without having to remove panel front or side of the unit as the filter could be slid into from the front or through a filter access panel (hinged and secured – thumb quarter turn fasters).
8. Steam Coils: Copper tube .030” minimum with aluminum fins, distributing type.
10. Direct-Driven Fans: Double width, forward curved, centrifugal; with permanently lubricated, multispeed motor resiliently mounted in the fan inlet.
11. Belt-Driven Fans: Double width, forward curved, centrifugal; with permanently lubricated, single-speed motor installed on an adjustable, resiliently mounted fan base.
12. Hydronic Piping Package:
   a. Two way modulating coil control valves union globe
   b. Two-piece ball valves, calibrated multi-turn (1460 degree) balance valves, automatic flow-control valves, Y-pattern strainers, wrought copper unions, bleeders/vents of coil located over drain pan, and risers for stacked units.
13. Unit Control: Unit-mounted space sensor and DDC microprocessor based unitary, controller or BAS interface.

END OF SECTION 238219