

- .2 Provide factory built air handling units comprising shop fabricated and field assembled components in arrangement as listed on appended Performance Data Sheets and Drawings. Provide units meeting space requirements, performance, capacity, details and components.
- .3 All sections shall be pre-assembled in the shop for proper coordination of connection to frames. Any inaccuracies in the field during assembly of the sections by Mechanical Contractor shall be corrected by the unit manufacturer at no cost.
- .4 The unit manufacturer shall accept total responsibility for the construction and performance of the complete air handling units including all components. Each unit, including all of its components and accessories shall be operationally tested at the factory and certified to comply with all requirements of the Specification.
- .5 The unit manufacturer shall submit certified performance curves for each fan at the rated capacity in accordance with AMCA Standard 210, ASHRAE Standard 51 and ARI-430.
- .6 The units shall be complete with casing, minimum 200 mm outside frame, mushroom outside air intake hood, outside air intake damper, mixing box, return air dampers, filter assembly, supply air fan, motor, VFD drives, belt guard, internal vibration isolators, indirect gas fired heating, cooling coils, stainless steel drain pan, flexible connections, vestibules including gas piping, P.R.V., fan.
- .7 Minimum 600 mm height roof curbs.
- .8 Provide power and control cabinet complete with motor starter(s), relays and DDC controller. Provide all internal wiring. Division 26 shall provide one 480 V/3 ph/60 Hz main power feed, one 480 V/3 ph/60 Hz power feed for vestibule heater, and 120V/1 ph/60 Hz UPS power feed for DDC controller power, one 120V/1 ph/60 Hz power feed for lighting and one 120V/1 ph/60 Hz power feed for receptacles.
- .9 Submit detailed Shop Drawings before commencing fabrication, including electrical schematics, panel layouts and refrigerant piping diagram.

## 2.2 ACCEPTABLE MANUFACTURERS

- .1 Mafna
- .2 Haakon
- .3 Venmar

## 2.3 HOUSING

- .1 General
  - .1 Provide completely insulated, weatherproof and airtight housing, complete with floor. Unit shall be constructed such that deflection of panels and structure will not exceed  $L/180$  of span. Include in design, panel and structural dead loads, roof load of 1.44 kPa and design live load of 2.4 kPa.
  - .2 Provide unit sections with same width and height dimensions.
  - .3 Painting: Unit shall be finished with two component etch bond primer and finish painted with exterior alkyd enamel. All uncoated steel shall be painted with red oxide primer. All metal surfaces shall be pre-painted with vinyl wash primer to ensure paint bonds to metal. Colour to later selection by Owner.
  - .4 Clean interior and exterior surfaces of air handling equipment, at factory with approved de-greasing agent.