

- .4 governing local Codes and Regulations.
- .3 Acceptable unit manufacturers are Haakon Industries (Canada) Ltd., MAFNA Air Technologies Inc., Scott Springfield Mfg. Inc., and Racan Carrier Co., with acceptable components as follows:
 - .1 fans: Twin City Fan and Blower, Loren Cook Co., Greenheck Fan Corp., and CML Northern Blower Inc.;
 - .2 heat transfer coils: Daikin, Aerofin Canada Services Inc., Direct Coil, Heatcraft Inc., and McQuay International;
 - .3 steam injection humidifiers: DriSteem Humidifier Company
 - .4 filters: Camfil Farr Canada Inc. and AAF International.
- .4 All components shall be small enough to fit into existing site elevator and to carry through mechanical room corridors. Equipment suppliers shall attend a mandatory site visit in order to take all required measurements.
- .5 Manufacturers are responsible for all co-ordination issues arising from dimensional variances between plans and site conditions.

2. Products

2.1 **MODULAR FAN ASSEMBLY**

- .1 All fans shall be tested in accordance with AMCA Standards 210-70 and 310 Test Codes for Air Moving Devices. Backward inclined fans shall bear the AMCA sticker for both air and sound performance.
- .2 Fan assembly shall consist of 4 direct drive plenum fans mounted on a structural steel, prime coated frame assembly with internal isolation bases, and with motorized isolation dampers at the inlet of each section. Provide open spring mounts with iso stiff springs, sound deadening pads and levelling bolts. Horizontal stiffness shall be equal to vertical stiffness. Spring deflection shall be 2”
- .3 Fan bearings shall be self-aligning pillow block, grease lubricated, extra heavy duty anti-friction ball or spherical roller type selected for an L10 life of 200,000 hours at design operating conditions.
- .4 Plenum fan assembly must have an enclosed safety screen as per OSHA Standards.
- .5 Each supply fan shall be located in a separate section of the airstream, isolated from the other fan via a plenum wall. Plenum wall and all blank off materials shall be provided by the installing contractor, and field built to match existing unit specifications.
- .6 Modular fan assembly shall be designed to be split into 4 sections for transport into the mechanical room.

2.2 **MOTORS**

- .1 Motors shall be designed for severe duty in accordance with IEEE 841 standards and shall meet NEMA MG1 Part 31. Motors shall be operable at 416 Volts, 60 Hz, 3-phase.
- .2 Motor enclosure shall be totally enclosed fan cooled and rated to IP55. A non-metallic cooling fan shall be provided. Frame, end bells and fan cowl shall be manufactured of heavy duty cast iron. The end plates shall be sealed to the frame joints. Enclosure shall be epoxy coated and rated for ASTM B117-90 96 hour salt spray test.