SECTION 1

General

1.1 SYSTEM DESCRIPTION

1.1.1 Provide MDL Clima Convector (CVK) fan coil units where perimeter cooling/heating is shown as represented by MDL Solutions @ 289 799-3414 Chris@mdlsoln.com.

1.1.2 Clima Convector Fan Coil devices shall be installed at/in floor shall be robust in design and provide suitable for Residential/commercial high rise application.

1.1.3 The water source heating equipment shall be certified for outputs based on EN442 standards.

1.2 QUALITY ASSURANCE

1.2.1 Each Units shall be fully tested at the factory.

1.2.2 All aluminum components shall be certified to meet ASTM G53 UV-resistance

1.2.3 Surface temperature shall remain safe at all times based on DHSS DN 4 1992 regulation and subsequent revision.

1.2.4 All units shall be individually packaged and labeled for eased on site locating and installation

PART 2 Mechanical Parts

2.1 Canal

2.1.1 The Canal shall be fabricated with 16 gauge zinc magnesium coating steel and will be powder coated in black with RAL 9005. Cabinet shall be watertight with Stainless Steel condensate pan with Optional Condensate Pump and Float Switch.

2.1.2 The Top grille shall provide supply air

2.1.3 The Cabinet shall come with power screw levelling legs. The unit shall be easily leveled once final floor is complete.

2.1.4 The Cabinet shall be fabricated with heat exchanger support bracket. Standard configuration will be side mounted.

2.1.5 All Valve connections shall be made outside of the cabinet unless separate enclosures are supplied.

2.1.6 The Cabinet shall be fabricated such that there are no exposed corners or gaps.

2.1.7 The unit shall come with locate and fasten support structure.

2.1.8 The Canal shall be factory Parts W arranted for 10 Years

2.2 Heat Exchanger

2.2.1 The Heat exchanger shall be of copper and aluminum construction. Shall be composed of round, seamless circulation tubes copper, and brass connections.

2.2.2 The Fins shall be connected to the heat exchanger by expansion method only.

2.2.3 The Heat exchanger shall be factory pressure tested to 300 PSI.

2.2.4 The Heat exchanger shall be easily removable from cabinet if required.

2.2.5 The Heat exchanger shall be coated with dirt repellent and dust proof lacquer in graphite grey with 70%

gloss to match cabinet.

2.2.6 The Heat exchanger shall be standard same end supply/ return. Opposite end heat exchangers shall be optionally available – with prior coordination.

2.2.7 The Heat exchanger shall have ASTM G53 certification.

2.2.8 Each individual heat exchanger shall have EN442 certification. Output Correction factors will not be considered equivalent to establish output capacities.

2.2.9 Each Heat exchanger shall be of low thermal mass.

2.2.10 Each Heat exchanger shall come with 1/8”air vents

2.2.11 The Heat Exchanger fins shall be corrugated by design.

2.2.12 The Heat Exchanger shall be shipped with vacuum sealed protection.

2.2.13 The Heat Exchanger shall be factory Parts W arranted for 10 Years

2.3 FRAMES

2.3.1 The Frame shall be of aluminum construction. OPTIONALLY WITH CUSTOM COLOUR.

2.3.2 The Frame shall be reinforced in all 4 corners using stainless steel angles no welds or tacking .

2.3.2 Frame shall come standard L- design or F-design. OPTIONALLY Continuous.

2.3.3 The Frame shall be lacquered.

2.3.3 The Frame shall be factory mounted on the canal cabinet and OPTIONALLY come with Air supply duct collars.

2.3.4 The Frame shall be delivered with removable wooden pieces to prevent deformation during transport.

2.3.5 The Frame shall be delivered with protective tape to prevent damage during construction.

2.3.6 Frames shall be standard natural aluminum in colour OPTIONALLY anodized to others available.

2.3.7 The Frame shall be factory Parts W arranted for 10 Years

2.4 GRILLES

2.4.1 The Grilles shall be of Aluminum / W ooden or Stainless Steel Construction

2.4.2 The Grilles shall only come roll up grilles for continuous applications or linear.

2.4.3 Rigid grilles shall be fabricated with mechanical connection between two crossway supporting slants. Free flow air arrest value not below 61.5%

2.4.5 The Grilles shall be factory Parts W arranted for 10 Years

PART 2B – ELECTRICAL PARTS

2.5.1 The fan motor shall be ECM and provide 100% variable operation

2.5.2 The Fan system shall come with 24Vdc fans. Power supply OPTIONALLY supplied.

2.5.3 The fan system shall maintain sound noise pressure levels below 30 dBA at all times.

2.5.4 Clima Convector fan system shall be controlled by a 0-10V signal

2.5.5 Fans warranted for standard 2 years. OPTIONAL extended W arranty

PART 3 - EXECUTION

3.1 INSTALLATION

.1 Maintain factory installed pipe caps until water connections are made.

.2 Install units in accordance with manufacturer’s instructions and install all accessories specified herein.

.3 Locate units according to the drawings and ensure that mounting position allows full access to the service panels, filters, etc.

.4 In order to totally block off the cold draughts from the window it shall be preferable that the fin tube element be mounted window side and fan mounted room side.

END OF SECTION