PART 1 General

1.1 SYSTEM DESCRIPTION

1.1.1 Provide Jaga MICRO-CANAL units where perimeter heating is shown. Alternates Shall not be accepted.

1. 1.1.2 MICRO-CANAL hydronic heating device floor or sill mounted device (horizontal discharge) shall be quiet, robust and efficient in design and provide suitable heating for any public, commercial, or residential space.

1.1.3 The water source heating equipment shall be certified for outputs based on EN442 and EN16430 standards

1.2 QUALITY ASSURANCE

1.2.1 Each Units shall be fully tested at the factory.

1. 1.2.2 Insulation and adhesives shall meet NFPA-90A requirements for flame spread and smoke generation

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

1.2.4 Surface temperature remains safe at all times based on DHSS DN 4 1992 regulation and subsequent revision.

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

PART 2 Mechanical Parts

2.1 Canal

1. 2.1.1 The Canal shall be fabricated with 18 gauge sendzimir galvanized steel and will be coated with 70% gloss anthracite grey epoxy polyester RAL 7024 baked at 392°F.
2. 2.1.2 The Canal shall be fabricated with 3 perforated holes through which piping and electrical conduit may be accommodated. Concrete proof plugs shall occupy the holes until required.
3. 2.1.3 The front grille shall provide. The front grille is secured to the canal via a ball bearing spring system.
4. 2.1.4 The Canal shall contain the ultra-low temperature, six-pass heat exchanger, support clips, tangential activator and electrical connections.

2.1.5 The Canal shall have K-values of 45.4 BTU/ft2F and R-Values of 0.022ft2/BTU

1. 2.1.6 The Canal shall be factory Parts Warranted for 10 Years

2.1.7 OPTIONAL Pedestal leveling legs for installations in raised Access-Floors

2.1.8 OPTIONAL Corners pieces and empty canals with grilles shall be fabricated to match on site measurements

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 pure red copper, and two brass collectors.

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

2.2.3 The Heat exchanger shall be rated to 290 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

2.2.6 The Heat exchanger shall have ASTM G53 certification.

2.2.7 Each individual heat exchanger shall have EN442 and EN1640 certification. Output Correction factors will not be considered equivalent to establish output capacities.

2.2.8 Each Heat exchanger shall be of ultra-low thermal inertia in design.

2.2.9 The Heat Exchanger fins shall be corrugated by design.

1. 2.2.10 The Heat Exchanger shall be factory Parts Warranted for 10 Years.
2. 2.2.11 The Heat Exchanger shall be furnished with NPT threaded connections. Adapters from NPT to BSP not allowed.

2.3 FRAMES (GRILLE HOLDER)

2.3.1 The Frame shall be of stainless-steel construction.

2.3.2 The Frame shall be factory mounted on the canal.

1. 2.3.7 The Frame shall be factory Parts Warranted for 10 Years

2.4 GRILLES

2.4.1 Stainless steel floor grille composed of triangular panels fitted in the width and welded support panels fitted in the length.

- profile: 4.5 x 2 – 124.5mm.

- mutual distance 2mm.

- length profiles: 10 x 2mm

- material: AISI 304

2.4.2 OPTION - The Grilles can be powder-coated Stainless Steel

2.4.3 The Grilles shall be factory Parts Warranted for 10 Years

PART 2B – ELECTRICAL PARTS

2.5.1 The fan motor shall be Electronically Commutated, Brushless DC with ball bearings and provide 100% variable operation

2.5.2 The fan motors shall be 24VDC, low voltage.

2.5.3 The fan system shall maintain sound noise pressure levels below 35 dBA at all times.

2.5.4 ECM fans warranted for standard 2 years. OPTIONAL extended Warranty

2.5.6 ECM fans will be triggered with hot water flow above 85F. No control signal needed to the fans.

2.5.7 Fans are provided with Sendzimir galvanized steel plate cover and integrated stainless steel air filter, electrostatically powder coated black, glossiness 70%.

PART 3 - EXECUTION

* 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 covers the full length of the perimeter.
     5. Distance between window and Micro-Canal should allow extra space for window coverings. Which under no circumstance should window coverings hang over the Micro-Canal.

END OF SECTION