Part 1 General

1.1 PRODUCT OPTIONS AND SUBSTITUTIONS

.1 Refer to Division 01 for requirements pertaining to product options and substitutions.

1.2 QUALITY ASSURANCE

.1 Certify coil capacities, pressure drops and selection procedures in accordance with ARI Standard 410-72.

.2 Pressure test coils to 1.5 times working pressure; minimum test pressure at 1480 kPa.

1.3 SHOP DRAWINGS AND PRODUCT DATA

.1 Comply with requirements of Section 01 33 10.

Part 2 Products

2.1 CONSTRUCTION

.1 Construct extended surface coils with tubes of copper or brass expanded into headers for permanent, leak tight joint.

.2 Construct fins of plate type aluminum or copper with fin collars mechanically bonded to tube, accurately spaced.

.3 Mount coil section in 1.6 mm thick galvanized steel casing designed for bolting to other sections of ductwork. Provide 2 mm thick galvanized steel center support on coils with header heights greater than 915 mm and on coils longer than 1070 mm.

.4 Construct headers of grey cast iron or round, seamless copper.

.5 Coils to be suitable for maximum 1380 kPa working pressure, at 104°C fluid temperature.

.6 Construct coils with maximum length of 3 m per section.

.7 Construct coils with foam sealing strip between casing and fins.

Part 3 Execution

3.1 INSTALLATION

.1 Construct 0.9 mm thick galvanized steel insulated drip pan extending 80 mm from coil face, with drain connection for each cooling coil section.

.2 Support coil sections on steel channel or double angle frames and secure to casings. Arrange supports for cooling coils so not to pierce or short circuit drip pans.

.3 Install moisture eliminator on cooling coils with face velocity greater than 2.5 m/s.

.4 Provide airtight seal between coil and duct or unit cabinets.

.5 Make connections to coils, including valves, air vents, unions and connections from drip pans. Refer to specification details for valving/piping details.

.6 Locate water supply at bottom of supply header and return water connection at top to provide self-venting and reverse return arrangement. Provide float operated automatic air vents at high points complete with stop valve. Ensure water coils are drainable; provide drain connection at low points.

.7 Protect coils so fins and flanges are not damaged. Replace loose and damaged fins. Comb out bent fins.

.8 Install coils level.

.9 Install deep seal trap (minimum 150 mm deep) on drain line from drip pan to floor drain.

END OF SECTION