

SPECIFICATIONS

General Specifications

Furnish and install where shown on all plans/drawings, Sterling Dura-Vane II Architectural Finned Tube Assemblies as described in the Specifications below or approved equal quality and capacity. AHRI approved ratings must be indicated on submittal.

ENCLOSURE AND ACCESSORIES

Dura-Vane II style finned tube enclosures are to be of style and size as shown on plans. Material will be 16 or optional 14 gauge cold rolled steel finished with baked powder coated polyester paint. The enclosure assembly will include 14 gauge internal support gussets spot welded to the inside of the sheet metal enclosure. The internal gussets are required to support and secure the heavy duty extruded air discharge aluminum grille. The Dura-Vane II grille is to extend beyond the face of the enclosure by .25" and above the enclosure by .125". The extruded aluminum grilles are interlocked to the adjoining enclosure grilles (s) with a grooved pin to maintain alignment. The air slots are to be "pencil proof." Welded male and female slip joints are to be provided at each end to allow for positive engagement and alignment of adjoining enclosures. All bends (lateral) on enclosure are to be formed on bottoming dies to ensure continuity of all adjoining enclosures and accessories. Accessories will be die-formed 18 gauge, cold rolled steel with a baked prime finish suitable for field painting. All vertical edges are to be bent 90° when overlapping enclosure so that no exposed raw edge will extend outward. Overlapping accessories will provide for make-up required in runs where partitions and/or walls may vary from bay to bay. Accessories shall fit between wall and back plate at top and have extended finger tabs at the bottom that are to be bent up and over the enclosure bottom bend to secure the accessory in place when installed.

BACK PLATE

All optional full back plates will be one piece construction, 20 gauge galvanized steel (18 gauge optional) with a die-formed mounting channel into which the enclosure shall self-locate and secure. Self-adhesive sponge air seal gasket to be provided when noted. All standard partial back plates are to be machine roll formed, pre-painted, 20 gauge steel with formed mounting channel into which the enclosure shall self-locate and secure. 18 gauge partial back plates will be provided with baked primer finish. Sponge air seal gasket is to be provided when specified.

BRACKETS/HANGERS

All brackets and hangers are to be die-formed 14 gauge galvanized steel with channel type wiped edge construction for rigidity. Nickel chromium plated ball bearings inserted into a nylon isolator insert are to be used in conjunction with an 18 gauge galvanized die-formed element support cradle to provide friction free lateral movement during expansion and contraction. Brackets are to have pre-formed contour at the top allowing the bracket to interlock with the back plate channel. Brackets are to be self-locating in the vertical (height) position.

Hangers are to provide for vertical element adjustment when pitch is required (steam). Water jobs will not require adjustable hangers. Full engagement enclosure locks are to be supplied with each bracket.

ACCESS DOORS

When indicated, access doors will be provided at mixer shut-off or flow control valves. Doors will be 6" x 9" (or 5" x 6") and hinged at top. Access doors will be located in accessories or enclosure as noted on plans. Door latch head shall require tool for opening.

DAMPERS

Not Available

HEATING ELEMENTS

All copper/aluminum heating elements shall be manufactured with seamless copper tubing mechanically expanded into the diameter of the equally spaced aluminum fins. The ends of the copper tube shall be of finished O.D. (male) and finished I.D. (female, swaged) as to allow the use of standard domestic copper fittings. All steel heating elements shall be manufactured with steel pressure tubing mechanically expanded into the diameter of the equally spaced steel (.024, .032) fins. The ends of the steel tube shall be threaded to accept all domestic NPT threaded fittings or cut square and chamfered for welding in field. All steel element fins shall be painted black enamel finish.

ENCLOSURES "DURA-VANE II" SLIP JOINTED.

Styles:	Flat Top - Top Outlet.
Lengths:	2' thru 8' in 6" increments.
Materials:	Cold rolled steel, stainless steel, aluminum or galvanized steel.
Gauges:	16, 14 Gauge C.R.S., Optional 16, 14 Gauge Stainless Steel or, 14, 12 Gauge Aluminum
Finish:	Baked powder polyester standard color. All electrostatic applied.
Back Plates:	
Types:	Partial standard, full height optional.
Lengths:	Partial 8', Full 2' thru 8', in 6" increments.
Material:	Partial 20 gauge, pre-painted standard. 18 gauge thick C.R.S. baked prime finish optional. Full 20 gauge galvanized, 18 gauge thick C.R.S. optional.
Brackets:	Ball bearing with slide cradle with enclosure securing posi-lock clips.
Hangers:	Bracket Mounted with vertical adjustment for pitch for steam applications. Wall Mounted, fixed position for hot water applications. 14 gauge, die-formed channel type galvanized steel construction.
Elements:	Mechanically expanded.
Types:	Copper tube with aluminum fins, Steel tube with steel fins.
Lengths:	3/4" Cu tube = 2'-0" thru 8'-0" 1", 1-1/4" Cu tube = 2'-0" thru 12'-6" 1", 1-1/4" & 2" Steel pipe = 2'-0" thru 12'-0" All are available in 1" increments. RØ1 thru RØ5 = 2' thru 8' in 1'-0" increments.
Tube ends:	CU/AL - swaged (flared) one end. Swaged (flared) both ends optional. Steel Pipe - NPT threads standard. Chamfered ends for field welding optional.
Dampers:	Not available.
Accessories:	All die-formed with flange at top to engage behind back plate. 90° vertical edges, overlapping, finger tab at bottom to secure in place.
Air Seal:	Optional air seal, factory or field installed, on back of back plate. Material is 1/8" x 3/8" closed cell with adhesive back.