



REINFORCED FIBREGLASS COUNTERFLOW COOLING TOWER

The structure consists of pultruded fiberglass sections an all-purpose isophthalic polyester resin system with a 5~7-mil surface veil UV inhibitor applied in compliance with CTI STD-137 will be provided. All structural joints are through bolted for maximum strength and rigidity. Flame spread rating is 25 or less per ASTM E-84 will be available as option. Fiberglass Transverse partition walls will be installed between each cell, extending from the underside of the fan deck to normal water level. This installation allows isolation on a cell-by-cell basis for maintenance and/or reduced heat load operating flexibility. A pultruded fiberglass fan deck is supplied, which incorporates a non slip surface. The fan deck is designed for 60 psf and is capable of supporting either the motor or gear set at any location directly over a supporting beam. Each panel is supplied in 6 to 18 ft x 2 ft sections for overlaying and screwing to the fiberglass structure below. Handrails, knee rails and toe boards are installed around the periphery of the fan decking in accordance with OSHA requirements. Casing shall be of Fiberglass.



Both perimeter columns and interior columns will extend to the basin floor. Framework members will be through bolted at all connections. Perimeter braces will be secured to the flat concrete floor of the basin utilizing stainless steel studs with resin insert cartridges. Nuts, bolts, washers, nails and anchor bolts shall be 300 series SS. All base anchor castings shall be of the same material as the anchor bolts. The diagonal bracing straps will be made of a fiberglass material. Mechanical equipment is secured with HDG steel bolts to ensure torque values are maintained. Fan deck access is provided by a semi-freestanding fiberglass stairway situated at one end of the tower. The stairway is supported from a concrete base at grade level (by others) and tied back to the main tower structure at suitable intervals to maximize rigidity.

Access to the plenum chamber and fill/distribution area is provided by one 30" X 30" entrance Fiberglass hatch per cell on the fan deck with a ladder extending down to the top of the fill. A local platform is installed directly under the deck access hatch at drift eliminator level to provide a viewing access for the plenum chamber, and down to the spray system and top of fill area.