

Typical Specifications

Model: FCE-HP

Description: Fan shall be a fiber-reinforced polyester resin, roof mounted, belt driven, downblast centrifugal exhaust ventilator.

Certifications: Fan shall be manufactured at an ISO 9001 certified facility.

Construction: The fan shall be of bolted construction with stainless steel fasteners. Fasteners in the airstream shall be encapsulated in resin to further protect against corrosion. Structural parts shall be made of either fiber reinforced polyester resin or epoxy coated steel. All fiberglass resin to be formulated to achieve a Class I flame spread below 25. All resin surfaces shall have additional chemical, flame and ultraviolet protective top coating. The fan base shall have solid curb cap corners for maximum leak protection. Motor, bearing and drives shall be mounted on a heavy duty epoxy coated steel power assembly, and enclosed in a ventilated motor compartment for protection against corrosive airstream. An integral conduit chase shall be provided through the curb cap and into the motor compartment to facilitate wiring connections. A neoprene shaft seal shall be provided. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM. Unit shall be shipped in ISTA certified transit tested packaging.

Wheel: Wheel shall be centrifugal airfoil backward inclined, constructed of fiber-reinforced vinylester resin, molded and formed in one solid piece. Wheels constructed of separately molded shroud, floats and backplate and then assembled are considered unacceptable. Wheel shall include a precision machined aluminum hub encapsulated in resin. Wheel inlet shall overlap an aerodynamic inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-05, *Balance Quality and Vibration Levels for Fans*.

Motor: Motor shall be Totally Enclosed NEMA design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings: Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron pillow block housing selected for a minimum L50 life in excess of 250,000 hours at maximum cataloged operating speed.

Belts & Drives: Belts shall be oil and heat resistant, static conducting. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product: Fan shall be model FCE-HP as manufactured by Loren Cook Company of Springfield, Missouri.