

Typical Specifications

Model: TUBSC

Description: The fan shall be a belt driven high temperature upblast propeller roof fan.

Certifications: Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories as a "Power Ventilator for Smoke Control Systems" and UL listed as "Power Ventilator for Smoke Control Systems Certified for Canada". Fan shall bear the AMCA Certified Ratings Seal for Air Performance.

Construction: The fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The bearings and drives shall be mounted on a minimum 10 gauge welded steel power assembly. The motor shall be mounted to a minimum 14 gauge steel motor base welded to the outside of the minimum 14 gauge welded steel fan housing. Minimum 10 gauge adjustable motor plate shall utilize threaded studs for positive belt tensioning. The motor shall be protected by a minimum 16 gauge weather cover. The fan housing shall be continuously welded to a fan base with integral venturi and continuously welded curb cap corners. Fan shall have hinged butterfly discharge dampers of aluminum or steel construction with a rain gutter to prevent rain infiltration. The damper assembly shall be protected by a continuously welded steel windband of minimum 18 gauge steel with minimum one inch flanges for maximum strength and rigidity. Damper assembly shall be furnished with fusible links that melt at 165°F allowing dampers to open automatically when power is off. Dampers shall meet UL 793 snow load testing of butterfly dampers (10 lb/sqft). Unit shall be tested to operate at 500°F for 4 hours per IRI requirements and operate at 1000°F for 15 minutes per SBCCI requirements. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating: All steel fan components shall be Lorenized[®] with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Propeller: Propeller shall be a high-efficiency fabricated steel design with blades securely fastened to a minimum 7 gauge steel hub. The hub shall be keyed and locked to the fan shaft utilizing two setscrews or a taperlock bushing. Propeller shall be balanced in accordance with AMCA Standard 204-05, *Balance Quality and Vibration Levels for Fans*.

Motor: Motor shall be 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 tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and 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% of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product: Fan shall be type TUBSC as manufactured by Loren Cook Company of Springfield, Missouri.