## Typical Specifications

**Model:** TUBHT

**Description:** The fan shall be a tubeaxial belt drive high temperature upblast propeller roof fan.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. The heavy duty motor, bearings, and drives shall be mounted to heavy gauge galvanized steel motor and bearing brackets. Heavy gauge adjustable motor plate shall utilize threaded tension rods for positive belt tensioning. The motor shall be protected by a heavy gauge G90 galvanized steel weather cover. The support frame shall include heavy duty galvanized schedule 40 piping. The panel assembly shall be heavy duty G90 galvanized steel complete with a one piece venturi for maximum efficiency. The heavy duty G90 galvanized curb cap shall have fully welded corners for added strength and leak protection. Fan shall have hinged butterfly discharge dampers of G90 galvanized steel construction with a rain channel to prevent rain infiltration. Fan tubes shall be heavy-gauge G90 galvanized steel for 24-54" sizes. Size 60" units shall have fan tubes that are carbon steel primed and finished with a gray epoxy paint. Motors, bearings, and belts shall be shielded from the airstream by a heavy duty sheet metal enclosure. When UL793 is specified in the fan schedule, the damper assembly shall be furnished with fusible links that melt at 165°F allowing dampers to open automatically when power is off. When UL793 is specified in the fan schedule, dampers shall meet UL 793 snow load testing of butterfly dampers (10 lb/sq ft). 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. The butterfly damper assembly shall be protected by a heavy duty G90 galvanized steel windband for maximum strength and rigidity. The unit shall include lifting lugs for ease of roof placement. The fan shall bear a permanently attached nameplate displaying model and serial number of unit for future identification. The unit shall be factory run-tested after assembly.

**Propeller:** Propeller shall be heavy gauge steel design with steel hub plate. The hub shall be locked to the turned, ground, and polished fan shaft with taper lock bushings. Propeller shall be balanced in accordance with AMCA Standard 204-96, *Balance Quality and Vibration Levels for Fans*.

**Motors and Electrical:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Bearings and Shaft:** 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.
Drives and Belts: Belts shall be oil and heat resistant, non-static type. 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. Unit to include a minimum of dual groove drive/belt combination. The motor sheave must be factory selected for the specified fan RPM range.

Options and Accessories: Optional accessories shall be provided either factory installed or field installed as detailed in the fan schedules.

Certifications: Fan shall be listed by Underwriters Laboratories as a “Power Ventilator for Smoke Control Systems” (cULus 793) when specified in the fan schedule.

Warranty: Manufacturer’s warranty shall apply for a period of 1 year. See warranty certificate for details.

Product: Fan shall be model TUBHT as manufactured by Soler & Palau USA of Jacksonville, Florida, a division of Soler and Palau Ventilation Group.