# Typical Specifications

**Model:** **CFS**

**Description:** Fan shall be a roof mounted, belt driven, filtered, double width, double inlet centrifugal supply blower with tiered aluminum hood.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada.

**Construction:** The fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The louvered hood shall be constructed of extruded aluminum with continuously welded and mitered corners. The removable topcap shall be constructed of minimum 0.064 aluminum. Filters shall be washable expanded aluminum media with two inch formed galvanized frame. The aluminum curb cap shall have continuously welded corners. The internal blower scroll wrapper and scroll side panels shall be a minimum 16 gauge steel and shall have continuously welded seams for leakproof operation. A performance cut-off shall be furnished to prevent the recirculation of air in the fan housing. Bearing support shall be minimum 12ga welded steel. Lifting lugs shall be provided for ease of installation. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM. Unit shall be shipped in ISTA certified transit tested packaging.

**Coating:** 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.

**Wheel:** Wheel shall be steel, non-overloading, centrifugal backward inclined, airfoil type. Blades on all sizes shall be continuously welded to the backplate and deep spun inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap aerodynamic aluminum inlet cones 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 Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing and 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 model CFS as manufactured by
Loren Cook Company of Springfield, Missouri.