

# Typical Specifications

**Model:** AFB-C

**Description:** Fan shall be a belt drive, fixed pitch, tube axial fan.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA certified ratings seal for air performance.

**Construction:** Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. Housing shall be minimum 12 gauge steel with continuously welded seam and integral inlet and outlet flanges pre-punched for mounting. Copper lube lines shall be extended from the bearings to the outside of the housing. Adjustable motor plate shall be attached to a welded motor sub-base and shall utilize threaded studs for positive belt tensioning. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM.

**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 fixed pitch, one piece cast aluminum, six blade airfoil design. The propeller shall be keyed and secured to the shaft with a split taper bushing, and retaining plate. Propeller shall be balanced in accordance with AMCA Standard 204-05, *Balance Quality and Vibration Levels for Fans*, Category BV-3.

**Motor:** Motor shall be heavy duty type furnished at the specified voltage, phase and enclosure.

**Bearings:** Bearings are designed and tested specifically for use in air handling applications. Bearings are heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 400,000 hours for horizontal units, and L50 life in excess of 250,000 hours for vertical units at maximum cataloged operating speed.

**Shaft:** Fan 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.

**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 AFB-C as manufactured by Loren Cook Company of Springfield, Missouri.