Vent Set Commercial Kitchen Exhaust Fans



Centrifugal/Vent Set Belt Driven/

XF-C/CPS

Commercial Kitchen Exhaust Fan Build in Accordance with the NFPA-96, UL cUL Grease Construction, listed, CSA Certified

Roof Mounted Fans:

Description: Fan shall be a single width, single inlet, backward inclined flat blade, belt driven centrifugal vent set for restaurant application.

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. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada.

Fan shall bear the AMCA Certified Ratings Seal for Sound and Air performance. Construction: The fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The scroll wrapper shall be a minimum 14 gauge steel and the scroll side panels shall be a minimum 12 gauge steel. The entire fan housing 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. The fan shall have a minimum 1-1/2 inch outlet discharge flange. Bearing support shall be minimum 10 gauge welded steel. Side access inspection ports shall be provided with quick release latches for access to the motor compartment without removing the weather cover. 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 LorenizedTM 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 centrifugal backward inclined, nonoverloading flat blade type. Blades shall be continuously welded to the backplate and deep spun inlet







shroud. Wheel hub shall be keyed and securely attached to the fan shaft. Wheel inlet shall overlap an aerodynamic aluminum 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 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 or roller type in a cast iron pillowblock housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

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. 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. Backward Inclined Flat Blades: Efficiency is slightly less than that of the airfoil design. Blades are single thickness metal inclined away from the direction of rotation. Air leaves the impeller at



a velocity less than its tip speed. Relatively deep blades provide efficient expansion with the blade passages.

Wiring:

Factory wiring provides great savings in installation time and cost. All motors are factory wired to standard disconnect located on the outside fan housing. The motors are available in 120V/1/60, 230V/1/60, 208V/3/60, 575V/3/60, or 460V/3/60. The fan and motor assembly is CSA certified and UL list.

XF-B/CPS EXHAUST FAN ON ROOF



Specification: Kitchen Exhaust Fan Model No. XF-C XXX Fan shall be a single width, single inlet, backward inclined flat blade, belt driven, upblast, centrifugal vent set model XF-CXXX, XXXX CFM at XXX" W.C. total static pressure. The XX HP Motor shall be Nema design B with class B insulation rated for continuous duty. The fan shall be manufactured at an ISO 9001 certified facility. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada. Fan shall bear the AMCA certified ratings seal for air performance.

The fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The scroll wrapper shall be a minimum 14 gauge steel and the scroll side panels shall be a minimum 12 gauge steel. The entire fan housing shall have continuously welded seams for leak-proof operation.

The fan housing shall a minimum 1-1/2 inch outlet discharge flange and bolted flanged inlet. Bearing support shall be minimum 10 gauge welded steel.

Side access inspection ports shall be provided with quick release latches for access to the motor compartment without removing the weather cover. Unit shall be shipped in ISTA certified transit tested packaging. Steel fan components shall be LorenizedTM. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Wheel shall be steel centrifugal backward inclined, non-overloading flat blade type. Blades shall be continuously welded to the back plate and deep spun inlet shroud. Wheel hub shall be keyed and securely attached to the fan shaft. 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 selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

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.

- optional with factory fabricated elbow, NFPA-96 approved cleanout with high temperature gasketing, cold rolled steel 24" duct extension, 24" high perimeter roof curb, and curb cap.

- Optional statin coat steel, primed and painted high velocity discharge nozzle bolted to fan discharge.

- Optional motor starter shipped loose for field installation

XF-C/CPS