

# FHRV HOODED ROOF VENTILATORS

## PRODUCT SPECIFICATION GUIDE

### 1.0 GENERAL

- A. Fans shall be model FHRV Belt Drive Hooded Roof Ventilators, as manufactured by Continental Fan Manufacturing Inc., of Buffalo, NY, and of the size and capacity as indicated on the drawings and fan schedule.
- B. Fans shall be rated and tested in accordance with ANSI/AMCA Standard 210.
- C. All motors and electrical components shall conform to NEMA standards.

### 2.0 FAN HOUSING

- A. Fan shall be axial flow impeller, roof mount, and belt drive configuration consisting of a hood assembly, a tubular fan section and a curb base panel.
- B. Fan housing interior surface shall be protected with a layer of synthetic surfacing veil.
- C. Fan housing, hood assembly and curb base shall be constructed of UV inhibited Hetron 99 P polyester resin with Class I flame spread of 25 or less.
- D. Fan belt tube shall be completely sealed, and shall isolate the bearings from ambient and/or contaminated airstreams.
- E. Fan housing and motor base shall be protected by a fiberglass motor cover.
- F. Curb cap shall be integrally molded to fan housing and fiberglass constructed.
- G. The hood is designed to minimize airflow restriction, structural members are solid fiberglass.

### 3.0 FAN IMPELLER

- A. Axial impeller shall be constructed of fiberglass and have airfoil, helical design shaped blades secured to a fiberglass hub assembly.
- B. Blade pitch angles shall be factory set.
- C. Axial impeller hub shall be designed to incorporate a split taper bushing, and be keyed directly to motor shaft. Bushing shall be protected by a removable fiberglass cap.

### 4.0 FAN MOTOR AND DRIVE

- A. Motor shall be TEFC industrial duty and conform to NEMA standards.
- B. Motor shall be of voltage, horsepower, RPM and enclosure as indicated on the fan schedule.
- C. Fan sheaves shall be cast iron and appropriately sized and aligned.
- D. Fan belts shall be static conducting, plus oil and heat resistant.
- E. Fan shaft shall be 316 stainless steel with polypropylene shaft seal.
- F. Fan shaft bearings shall be lubricated, self-aligning ball or roller type with external grease fittings. Bearings shall have a minimum L10 life of 50,000 hours.

### 5.0 OPTIONAL FAN ACCESSORIES

- A. Where indicated, fan shall be provided with the following optional accessories:
  - FRP roof curb
  - Inspection door
  - Direct drive
  - Disconnect switch - mount, or mounted and wired
    - NEMA 3R non-fused safety disconnect switch
    - NEMA 4X non-fused safety disconnect switch
  - Dampers
  - Polyethylene mesh birdscreen
  - Stainless steel birdscreen
  - Special resins
  - Graphite impregnation with static grounding
  - Explosion proof & special duty motors

### 6.0 FAN TESTING

- A. Axial impeller shall be balanced and mounted in fan assembly.
- B. Fan assembly shall be run and tested prior to shipment.
- C. A test report shall be maintained on file for each individual fan.