

1.0 GENERAL

- A. Fans shall be model HRVD Direct Drive or HRVB 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. HRVD or HRVB Hooded Roof Ventilators shall be furnished as either supply or exhaust as indicated on the drawings and fan schedule.
- C. HRVD or HRVB Hooded Roof Ventilators configured for supply shall be furnished with filters as indicated on the drawings and fan schedule.
- D. Fans shall be rated and tested in accordance with ANSI/AMCA Standard 210.
- E. All motors and electrical components shall conform to NEMA standards.

2.0 FAN HOUSING - DIRECT DRIVE MODEL HRVD

- A. Fan shall be axial flow, roof mount, and direct drive configuration consisting of a hood section and fan housing with curb base.
- B. Fan housing and curb base shall be of welded heavy gauge steel construction.
- C. Fan motor base shall consist of heavy gauge steel welded directly to fan housing.
- D. Fan housing and motor base shall be coated with baked polyester powder coat finish with a zinc rich primer.
- E. Fan shall have an aluminum hood with bird screen.

2.1 FAN HOUSING - BELT DRIVE MODEL HRVB

- A. Fan shall be axial flow, roof mount, and belt drive configuration consisting of a hood section and fan housing with curb base.
- B. Fan housing and curb base panel shall be of welded heavy gauge steel construction.
- C. Fan motor, shaft and bearings support base shall consist of heavy gauge steel welded directly to fan housing.
- D. Fan housing and motor base shall be coated with an air dried gray enamel finish
- E. Fan shall have an aluminum hood with bird screen.

3.0 FAN IMPELLER

- A. Axial impeller shall be constructed of spark resistant, die cast aluminum airfoil shaped blades secured to a die cast aluminum hub assembly.
- B. Axial impeller blades shall be of adjustable pitch construction with multiple hub-to-blade arrangements to maximize air performance. 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 drive shaft.

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 steel, turned, ground and polished.
- F. Fan shaft bearings shall be lubricated, self-aligning ball type in cast iron pillow block mounts with external grease fittings.

5.0 OPTIONAL FAN ACCESSORIES

- A. Where indicated, fan shall be provided with the following optional accessories:
 - Filtered intake unit
 - Gravity shutter for exhaust only
 - Pre-fabricated roof curbs
 - Custom curb base to match existing curb
 - Baked epoxy powder coat finish, two layers
 - 2" thick disposable filters, for filtered intake unit
 - Variable pitch sheaves for easy & accurate adjustment
 - Disconnect switches – mounted, or mounted and wired
 - NEMA 3R non-fused
 - NEMA 4X non-fused
 - Motor operated damper for supply or exhaust
 - Explosion proof motors
 - Special duty motors
 - Inspection door

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.