



**SPECIAL PROVISIONS  
FOR  
ARCH RIB VENTILATION**

**Scott County  
IM-NHS-074-1(198)5--03-82**

**Effective Date  
April 25, 2017**

**THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**150202.01 DESCRIPTION.**

**A. Louvers.**

Automatic ventilation louvers are to be used for the arch rib ventilation. The louvers are motorized and are activated when the fan is energized. Louvers are located as shown on plans.

**B. Ventilating Fans.**

The ventilation fan is located as shown on the plans. The ventilation fan is used to vent the arch rib to meet OSHA confined space requirements.

**150202.02 MATERIAL.**

**A. Louvers.**

Louvers shall meet the following specifications; shall be furnished and installed recess mounted where shown on plans and/or as described in schedules. Louvers shall consist of: 18 gauge galvanized steel frame with 2 1/2 inch to 3 1/2 inch depth; blades from 0.025 inch roll-formed aluminum; 3/16 inch diameter plated steel, full length, axles turning in acetal bearings; louver shall be equipped with extruded vinyl blade seals; internal 0.064 inch aluminum tie bar (on-blade) with spring assist, and 1 1/2 inch wide attachment flanges. Louver shall include electric actuator to open the louver with spring assist for closing the louver. The electric actuator shall operate at 120V AC and be rated NEMA 4. Louver manufacturer's printed application and performance data including pressure, velocity and temperature limitations shall be submitted for approval showing louver suitable for pressures to 1.0 in. wg, velocities to 2500 fpm and temperatures to 180°F. Testing and ratings to be in accordance with AMCA Standard 500-D.

**B. Ventilating Fans.**

1. The ventilation fan shall meet the following specifications; shall be furnished and installed where shown on the plans and/or described in schedules. The fan panel/drive frame shall

consist of galvanized steel with one-piece drawn venturi, bolted structural steel channels and one-piece motor/bearing plate. Propeller blades shall be reinforced galvanized steel with riveted blades and a keyed hub. Fan shall operate on 120V AC power and shall be at most 3/4Hp. Fan RPM shall be 1750, and shall be capable of 2200 CFM at 0.2 inch of water gauge. Fan shall be 16 inch diameter size and be installed inside of a wall housing box.

2. The fan shall be of the wall-mounted, low-noise direct drive, centrifugal wall exhauster-type, as shown on plans, and licensed to bear the AMCA (Air Movement and Control Association) Certified Ratings Seal.
3. The fan housing shall be provided with full-floating, rubber vibration isolators. The housing shall have dimensions, suitable with the wall opening provided on the bridge arch ribs. The fan shall be rated as indicated herein, and the fan motor shall have single speed, furnished with ball bearings.
4. All necessary accessories such as mesh wall grille, to prevent bird/insect access, integral junction box, neoprene gasket, and stainless steel mounting bolts shall also be provided.

**150202.03 CONSTRUCTION.**

**A. Louvers.**

Louvers shall be recess mounted per manufacturer's recommendations and consistent with information presented in the plans.

**B. Ventilating Fans.**

Fan shall be installed and supported per manufacturer's recommendations.

**C. Electrical work shall be per Special Provisions for Bridge Electrical System.**

**150202.04 METHOD OF MEASUREMENT.**

Lump sum. No method of measurement.

**150202.05 BASIS OF PAYMENT.**

Payment for Arch Rib Ventilation is full compensation for furnishing, fabricating, testing, and installing the ventilation fans and louvers, as described herein.