# SECTION 07722 (07 72 34)

## RA ROOF SCUTTLES AND AUTOMATIC FIRE VENTS

GENERAL

* 1. SECTION INCLUDES
     1. Roof scuttles, automatic fire vents, and associated accessories.
  2. REFERENCES
     1. Florida Building Code (FBC) High Velocity Hurricane Zones (HVHZ).

Factory Mutual Approval Guide (FM): Roof Assembly Classifications.

OSHA (Occupational Safety and Health Act).

Underwriters Laboratory, Inc. (UL): Fire Hazard Classification Rating.

* 1. RELATED SECTIONS
     1. 05500 - Metal Fabrications.
     2. 0610 0- Carpentry.
     3. Division -7 Roof Assembly Sections
     4. 13825 -Security Access and Surveillance.
  2. SUBMITTALS
     1. Submit properly identified manufacturer’s catalog cuts and technical data for review before starting work.
     2. Provide Shop drawings.
  3. SPECIAL WARRANTIES
     1. By Membrane Producer: Provide a 20-year Special Warranty from the roof membrane producer covering correction of defects in the Roof Scuttles and Automatic Fire Vents component of Roof Assembly.
     2. By Roof Scuttles and Automatic Fire Vents Producer and Installer: Provide a 5 year Special Warranty in which the Roof Scuttles and Automatic Fire Vents producer/installer agrees to correct the work by replacing roof scuttles and/or fire vents units having defect after the producer exhausts attempts to repair.
        1. See 07500 for full requirements of this Special Warranty that shall accompany the Roof Assembly Special Warranty.
        2. At time of project closeout, submit this signed Special Warranty to the roof membrane producer, signed by producer of roof scuttles and/or automatic fire vents for transmittal to Contractor, A/E, and board.

PRODUCTS

* 1. MANUFACTURERS
     1. Subject to compliance with the specified requirements, provide products by one of the following manufacturers:
        1. Basis of Design: Bilco Company, New Haven, CT.
        2. Other acceptable manufacturers:
           1. Babcock-David Hatchaway, Inc.
           2. O’Keefe’s Inc.
  2. METAL ROOF SCUTTLES
     1. Unit: Bilco Type; single leaf with ship stair access.
        1. Primary: NB-50T 30 inch x 54 inch.
        2. Secondary: E-50T 36 inch x 36 inch with ladder and extension post.
     2. Flush Aluminum Cover: 11-gage aluminum (mill finish) with 3 inch beaded, welded flange and 1 inch thick fiberglass insulation covered by an 18-gage aluminum liner.
     3. Integral Steel Curb: 12 inches above finished roofing, 14 gage paint bond galvanized steel with 1 inch thick rigid fiber board insulation; 3-1/2 inch extended flange with holes for mounting; integral metal flashing to receive roof flashing.
     4. Hardware:
        1. Compression spring operator and shock absorbers.
        2. Steel manual turn handles with spring latch for interior and exterior operation.
        3. Steel hold open arm with vinyl covered grip handle for easy release.
        4. Padlock hasps.
        5. Neoprene draft seal.
        6. Components cadium plated finish.
     5. Hinges: Heavy-duty pintle type.
     6. Extension Safety Post: Bilco Model 1 “Ladder Up” Safety Post; attached where fixed ladder is used. On sloped roofs use hatch with safety post.
     7. OSHA compliant roof hatch safety railing system as required by OSHA Standard #1910.23 and 1910.27. Safety Railing System shall include all hardware for complete installation.
  3. FIRE VENT
     1. Automatic Fire Vent labeled as being FM approved or UL listed, STC-45 rated.
        1. Unit: Bilco type DSH 4890A fire vent; double leaf type.
        2. Upper Covers: 11 gage aluminum (mill finish) with 4 inch beaded flange with formed channel reinforcing members welded to underside and fiberglass insulation thickness to maintain R-Value of roof assembly, covered by an 18 gage aluminum liner.
        3. Integral Steel Curb: 18 inches above finished roofing at hinges sides, 11 gage steel with rigid fiber board insulation thickness to maintain R-Value of roof assembly; 3-1/2 inch extended flange with holes for mounting; integral metal cap flashing to receive roof flashing.
        4. Hardware:
           1. Compression spring operator and shock absorbers.
           2. Upper and lower cover latches controlled by frictionless positive hold release mechanisms with separate latching point for each cover and with both pairs of upper and lower covers controlled by single 165 degree fusible link located on underside of lower covers. Latches easy to reset after fire or test.
           3. Inside and outside manual pull release cables with red vinyl grips.
           4. Thermoplastic rubber gasket fitted into retainer on upper doors.
           5. Components cadium plated finish.
           6. Hinges: Heavy-duty pintle type.
  4. FABRICATION
     1. Fabricate with welded or sealed mechanical corner joints, and with cant strips and base profile coordinated with roof insulation thickness.
     2. Sloping Roofs: Where slope of roof deck exceeds 1/4 inch per foot, fabricate curb/support units with height tapered to match slope, to result in level installation of tops of units.

EXECUTION

* 1. INSTALLATION
     1. Install according to manufacturer’s instructions and accepted Shop Drawings.
     2. Coordinate dimensions with rough-in sheets or Shop Drawings of equipment to be supported.
     3. Provide wood nailers at tops of curbs. Coordinate with thickness of insulation and roof flashings as indicated, and tapered where necessary to compensate for roof deck slopes of 1/4 inch per foot and less.
     4. Connect sensing device to building security system.

END OF SECTION