

SECTION 07 72 33  
ROOF HATCHES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
  - 1. Personnel Series roof hatches installed on or in roofing system indicated on Drawings and specified herein. Includes related hardware and attachments. Does not include mechanical or structural items.
  - 2. Safety railing system.
- B. Related Sections:
  - 1. Division 5 - Metal Fabrications.
  - 2. Division 7 – Roof Accessories.
  - 3. Division 7 – Roof Hatch Railing System.
  - 4. Division 7 - Joint Sealants.
  - 5. Division 9 – Paints and Coatings.
  - 6. Division 15 – Mechanical.
  - 7. Division 16 – Electrical.

1.2 SUBMITTALS

- A. Shop Drawings: Indicate configuration and dimension of components, adjacent construction, required clearances and tolerances, and other affected Work.
  - 1. Hatch Units: Show types, elevations, thickness of metals, and full size profiles.
  - 2. Hardware: Show materials, finishes, locations of fasteners, types of fasteners, locations and types of operating hardware, and details of installation.
  - 3. General: Show connections of units and hardware to other Work. Include schedules showing location of each type and size of unit.
- B. Product Data: Manufacturer's technical data for each type of hatch assembly, including setting drawings, templates, finish requirements, and details of anchorage devices.
  - 1. Include complete schedule, types, locations, construction details, finishes, latching or locking provisions, and other pertinent data.
- C. Manufacturer's Installation Instructions: Indicate installation requirements and rough-in dimensions.
- D. Quality Control Submittals:
  - 1. Statement of qualifications.
- E. Contract Closeout Submittals:
  - 1. Operating and maintenance manuals.

1.3 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Manufacturer/Installer: Company specializing in manufacturing and installation of components specified in this Section with minimum of 5 years documented experience.
- B. Regulatory Requirements:
  - 1. OSHA Compliance: Provide hatch safety railing system as required by OSHA Standard 1910.23 and 1910.27 and as specified in Section.

### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site ready use.
- B. Exercise proper care in handling of Work so as not to injure finished surfaces. Protect Work from damage after it is in place.
- C. Store materials under cover in a dry and clean location off the ground. Remove materials that are damaged or otherwise not suitable for installation from Project site and replace with acceptable materials at no additional cost to Owner.

### 1.5 WARRANTY

- A. Provide manufacturer's written 5-year warranty
- B. Warrant materials and workmanship against defects after completion and final acceptance of Work.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURER

#### 1. Babcock-Davis

9300 73<sup>rd</sup> Avenue North

Brooklyn Park, MN 55428

Toll Free Hotline: 888.412.3726

Toll Free Fax: 888.312.3726

Direct Phone: 763-488-9247

E-Mail: [info@babcockdavis.com](mailto:info@babcockdavis.com)

Internet: <http://www.babcockdavis.com/>

### 2.2 MANUFACTURED UNITS

#### A. Personnel Series Aluminum Roof Hatches:

- 1. Cover and liner: 11 gauge (0.090-inch) aluminum cover with 1 inch rigid fiberboard insulation and 18 gauge (0.040-inch) aluminum cover liner.
- 2. Curb: 11 gauge (0.090-inch) aluminum curb with 1 inch rigid fiberboard insulation.
- 3. Hinges: **[Zinc plated steel]** **[Optional Type 316 stainless steel]** tamper-proof hinge contained within hatch as part of spring assembly.
- 4. Latch: **[Zinc plated steel]** **[Optional Type 304 stainless steel]** slam latch with turn handle and inside/outside padlock hasps.
- 5. Springs: Greased heavy-duty compression springs in telescoping tubes.
- 6. Hardware: **[Zinc plated steel]** **[Optional Type 316 stainless steel]** hold open arm(s) with red vinyl grip handle that automatically locks door when opened. Furnish hatches with interior padlock hasp and EPDM draft seal.
- 7. Mounting Flanges:
  - a. Single Wall Curb with 3.5" horizontal mounting flange

- b. Double Wall Curb with 3.5" horizontal mounting flange
- c. Curb Mount with 3" vertical mounting flange
- 8. Acceptable Product: Model BRHPA [**Indicate size**]

B. Personnel Series Galvanized Steel Roof Hatches:

- 1. Cover and Liner: 14 gauge (0.075 inch) galvanized steel cover with 1 inch rigid fiberboard insulation and 22 gauge (0.0299 inch) galvanized steel cover liner.
- 2. Curb: 14-gauge galvanized steel with 3/4 inch rigid fiberboard insulation at curb perimeter.
- 3. Hinges: [**Zinc plated steel**] [**Optional Type 316 stainless steel**] tamperproof hinge contained within hatch as part of spring assembly.
- 4. Latch: [**Zinc plated steel**] [**Optional Type 304 stainless steel**] slam latch with turn handle and inside/outside padlock hasps.
- 5. Springs: Greased heavy-duty compression springs in telescoping tubes.
- 6. Hardware: [**Zinc plated steel**] [**Optional Type 316 stainless steel**] hold open arm(s) with red vinyl grip handle that automatically locks the door when opened. Furnish hatches with interior padlock hasp and EPDM draft seal.
- 7. Mounting Flanges:
  - a. Single Wall Curb with 3.5" horizontal mounting flange
  - b. Double Wall Curb with 3.5" horizontal mounting flange
  - c. Curb Mount with 3" vertical mounting flange
- 8. Acceptable Product: Model BRHPG [**Indicate size**]

### 2.3 FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish designations prefixed by AA comply with system established by Aluminum Association for designating aluminum finishes.
- C. Aluminum: Mill finish.
- D. Steel: Manufacturer's standard factory-applied powder coat.

### 2.4 SAFETY RAILINGS

- A. Top rail, Mid rail and upright posts: Galvanized Steel Pipe, 1 1/4" ID, A53 Grade B pipe.
- B. Exit: Self Closing Gate; Galvanized Steel Pipe, 1 1/4" ID A53 Grade B pipe, U bolt with hinge attachment and galvanized mounting bolts and nut hardware.
  - 1. Option: Chain, link, galvanized steel
- C. Fittings: Manufacturer's standard aluminum magnesium alloy, cast with set screw pipe mount
- D. Counterflash Mount: CRS, zinc plated mounting bracket with backer plate, pemmed nut for easy installation.
- E. Hardware: Bolts and Tooling: 3/8 inch by 2-1/2 inch, grade Z, zinc plated, wrench for assembly
- F. OSHA Compliance: Provide hatch safety railing system as required by OSHA Standard 1910.23 and 1910.27 and as specified.
  - 1. Top Rail Height: 42 inches +/-3" above finished roof deck.
  - 2. Top-Mid Rail Spacing: 21" diameter maximum.
  - 3. Meets 200lb deflection load when mounted to roof hatch counterflash.
  - 4. Upright post maximum spacing of 8'.

- G. Acceptable Product: Safety Railing for Roof Hatch, Model Number SRCG

### 2.5 SAFETY POSTS

- A. Post: Manufactured of high strength square tubing, 1 ½" x 1 ½" x 1/8". A pull up loop shall be provided at the upper end of the post to facilitate raising the post
- B. Ladder Mounting: Attaches directly to the top two rungs (square or round) of fixed ladder
- C. Balancing spring: A stainless steel constant force balancing spring mechanism shall provide smooth, easy, controlled operation when raising and lowering the safety post
- D. Hardware: Mounting hardware shall be zinc plated steel, providing superior strength
- E. Tubular post shall lock automatically when fully extended. Release lever shall disengage the post to allow it to be returned to its lowered position
- F. Models
  1. SPM1: Steel, Red Powder Coat Finish
  2. SPM2: Steel, Hot Dip Galvanized
  3. SPM3: Aluminum, Mill Finish
  4. SPM4: Stainless Steel, Mill Finish

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper or timely completion.
- B. Verify that deck, curbs, roof membrane, base flashing, and other items affecting Work of this Section are in place and positioned correctly.
- C. Verify tolerances and correct improper conditions.
- D. Do not proceed until unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Install roof accessory items and components per manufacturer's instructions.
- B. Coordinate installation of components of this Section with installation of roof deck, roof structure, roofing membrane, and base flashing.
- C. Coordinate installation of sealant and roofing cement with Work of this Section to ensure water tightness.
- D. Coordinate installation of flashing flanges into reglets, if applicable.
- E. Separate metal from incompatible metal or corrosive substrates, including wood, by coating concealed surfaces, at locations of contact, with bituminous coating or providing other permanent separation.
- F. Flange Seals: Unless otherwise indicated, set flanges of accessory units in a thick bed of roofing cement to form a seal.

### 3.3 ADJUSTING

- A. Adjust movable parts for smooth operation.

- B. Operational Units: Test-operate units with operable components. Clean and lubricate joints and hardware. Adjust for proper operation.
- 3.4 CLEANING
- A. Clean exposed surfaces per manufacturer's written instructions. Touch up damaged metal coatings.

END OF SECTION