

SECTION 077200 - ROOF ACCESSORIES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section includes the following:
 - 1. Roof hatches.
 - 2. Pipe penetration portals.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 5 Section "Metal Fabrications" for ladders and support framing.
 - 2. Division 6 Section "Rough Carpentry" for roof deck and nailers.
 - 3. Division 7 Section for roofing types and roofing accessories included as part of roofing Work.
 - 4. Division 7 Section "Flashing and Sheet Metal" for metal flashing.

1.02 SUBMITTALS

- A. General: Submit in accordance with Section 013300.
- B. See Section 013310 for Submittal Schedule.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Roof Hatches:
 - a. Bilco Co.
 - b. Milcor, Inc.
 - 2. Pipe Penetration Portals: Portals Plus Inc.

2.02 MATERIALS, GENERAL

- A. Structural-Quality Galvanized Steel Sheet: ASTM A 446 with G90 coating complying with ASTM A 525, Grade C, or to suit manufacturer's standards.
- B. Commercial-Quality Galvanized Steel Sheet: ASTM A 526 with G90 coating complying with ASTM A 525.
- C. Galvalume-Coated Steel Sheet: ASTM A 792 with class AZ-50 coating, Grade 40, or to suit manufacturer's standards.
- D. Insulation: Manufacturer's standard rigid or semirigid glass-fiber board of thickness indicated.
- E. Wood Nailers: Softwood lumber, pressure treated with water-borne preservatives for

above-ground use, complying with AWWA C2; not less than 1-1/2 inch thick.

- F. Fasteners: Same metal as metals being fastened, or nonmagnetic stainless steel or other noncorrosive metal as recommended by manufacturer. Match finish of exposed fasteners with finish of material being fastened.
 - 1. Where removal of exterior exposed fasteners affords access to building, provide nonremovable fastener heads.
- G. Gaskets: Manufacturer's standard tubular or fingered design of neoprene or polyvinyl chloride, or block design of sponge neoprene.
- H. Bituminous Coating: SSPC-Paint 12, solvent-type bituminous mastic, nominally free of sulfur and containing no asbestos fibers, compounded for 15-mil dry film thickness per coating.
- I. Mastic Sealant: Polyisobutylene; nonhardening, nonskinning, nondrying, nonmigrating sealant.
- J. Elastomeric Sealant: Generic type recommended by unit manufacturer that is compatible with joint surfaces; ASTM C 920, Type S, Grade NS, Class 25, and Uses NT, G, and, A.

2.03 FINISHES

- A. General: Comply with NAAMM "Metal Finishes Manual" for recommendations on applying and designating finishes.
- B. Organic Coating: Thermosetting-modified acrylic enamel primer and topcoat system complying with AAMA 603.8, except with a minimum dry film thickness of 1.5 mils, medium gloss.

2.04 PREFABRICATED CURBS FOR PIPE PENETRATION PORTALS

- A. General: Comply with loading and strength requirements as indicated where units support other work. Coordinate dimensions with rough-in information or shop drawings of equipment to be supported.
 - 1. Fabricate of structural-quality, hot-dip galvanized or galvalume sheet steel, factory-primed and prepared for painting with welded or sealed mechanical corner joints.
 - 2. Provide complete with cant strips and base profile coordinated with roof insulation thickness. Provide preservative-treated wood nailers at tops of curbs, coordinate with thickness of insulation and roof flashing as indicated, tapered as necessary to compensate for roof deck slopes of 1/4 inch per foot and less.
 - 3. Unless otherwise indicated or required for strength, fabricate units of minimum 14-gauge (0.0747-inch-thick) metal, and to minimum height of 12 inches.

2.05 PIPE PENETRATION PORTALS

- A. General: Comply with the requirements specified for prefabricated curbs.
 - 1. Curb Cover: Laminated acrylic coated ABS plastic cover with pre-punched mounting holes and molded sealing rings on the collared opening.

2. Caps: EPDM weathertight pressure seal caps configured for roof penetrations with stainless steel clamps.

2.06 ROOF HATCHES

- A. General: Fabricate units to withstand 40-lbf per sq. ft. external loading and 20-lbf per sq. ft. internal loading pressure. Frame with 9-inch-high, integral-curb, double-wall construction with 1-1/2 inch insulation, cant strips and cap flashing (roofing counterflashing), with welded or sealed mechanical corner joints. Provide double-wall cover (lid) construction with 1 inch insulation core. Provide gasketing and equip corrosion-resistant or hot-dip galvanized hardware including pintle hinges, hold-open devices, interior padlock hasps, and both interior and exterior latch handles.
- B. Type: Single-leaf personnel access.
 1. For Ladder Access: See drawings for size and model of Roof Hatch.
- C. Material: Zinc-coated steel sheets.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. General: Comply with manufacturer's instructions and recommendations. Coordinate with installation of roof deck and other substrates to receive accessory units, vapor barriers, roof insulation, roofing and flashing, as required, to ensure that each element of the Work performs properly and that combined elements are waterproof and weathertight. Anchor units securely to supporting structural substrates, adequate to withstand lateral and thermal stresses, as well as inward and outward loading pressures.
- B. Isolation: Where metal surfaces of units are to be installed in contact with incompatible metal or corrosive substrates, including wood, apply bituminous coating on concealed metal surfaces, or provide other permanent separation.
- C. Cap Flashing: Where cap flashing is required as component of accessory, install to provide adequate waterproof overlap with roofing or roof flashing (as counterflashing).
- D. Operational Units: Test operate units with operable components. Clean and lubricate joints and hardware. Adjust for proper operation.

3.02 CLEANING AND PROTECTION

- A. Clean exposed metal and plastic surfaces according to manufacturer's instructions. Touch up damaged metal coatings.

END OF SECTION 077200