



SECTION 07720
ROOF DRAIN AND VENT ACCESSORIES

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Roof Drains.
- B. Roof Vents
- C. Roof Security Vent Flashing
- D. Roof Penetration Flashings

1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry.
- B. Section 07260 - Air Barriers.
- C. Division 07 - Adjacent Roofing Systems.
- D. Section 07620 - Sheet Metal Flashing and Trim.
- E. Section 07920 - Joint Sealants.
- F. Section 15145 - Plumbing Piping.

1.3 REFERENCES

- A. ASME A112.6.4 - Roof, Deck, and Balcony Drains.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, and accessories.
- D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 50 years manufacturing similar products.

- B. Installer Qualifications: Minimum 2 years installing similar products.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's unopened packaging with labels intact and legible until ready for installation.
- B. Store off the ground and under cover. Protect internal parts, ends, inlets, outlets, and specialties against corrosion, dirt, and damage.

1.7 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Marathon Roofing Products Inc., which is located at: 3310 Benzing Rd.; Orchard Park, NY 14127-1538; Toll Free Tel: 800-828-8424; Tel: 716-332-7673; Fax: 716-332-7676; Email:[request info \(mrp@marathondrains.com\)](mailto:request_info_(mrp@marathondrains.com)); Web:www.marathondrains.com|www.mrpsupports.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 ROOF VENTS AND VENT FLASHING

- A. Commercial SOL-A- VENT
 1. Construction: Solar power Nicad battery with hermetically sealed motor to keep out moisture.
 2. Model: MS 8 inches H by 8-3/4 inch base outside diameter by 12-5/8 inch flange outside diameter.
 - a. - A, Plain aluminum.
 - b. - A, Plain aluminum with asphalt coated flange
 - c. - P ,PVC style: base and cap, white PVC.
 - d. - C, Chrome cap on aluminum or PVC vent body.
 3. Model: MS-LP (Low Profile) 5-1/4 inches H by 8-3/4 inch base outside diameter by 15 inch flange outside diameter.
- B. HIGH SECURITY Aluminum Roof Flashing
 1. Construction:
 - a. Heavy Duty .051 inch aluminum.
 - b. Locked on cap secures plumbing vent stacks
 - c. Aluminum vent stack base
 2. Size:
 - a. Base opening: 7 inches.
 - b. Base Flange overall diameter: 15-1/4 inches
 - c. Cap Diameter: 5-3/4 inches

- d. Vent Outlet Diameter 4-3/4 inches
- e. Height: 15-1/4 inches.
- f. Maximum Hub Height over Roof Level: 5-1/4 inches
- g. Flashing Width: 4 inches

C. INSULVENT Aluminum Vent

- 1. Construction:
 - a. Spun heavy gauge aluminum
 - b. Cap design shields against entry of wind-blown rain or snow
 - c. Flange may be coated with PVC, TPO or Asphalt priming
- 2. Type:
 - a. One way vent
 - b. Two way vent
- 3. Options
 - a. PVC coated flange
 - b. TPO coated flange
 - c. Asphalt primed flange
 - d. Foam insert to prevent moisture from condensing on the inside of the standpipe
- 4. Size:
 - a. Base opening: 4 inches.
 - b. Base opening with insulation insert: 3 inches
 - c. Base Flange overall diameter: 10-3/4 inches
 - d. Cap Height: 2-1/2 inches
 - e. Vent Outlet Diameter 4 inches
 - f. Height: 8-1/2 inches.
- 5. Recommended Spacing: 1 per 1,000 SF.

D. LARGE CAPACITY (LC) Vent

- 1. Construction:
 - a. Spun heavy gauge aluminum
 - b. Cap design shields against entry of wind-blown rain or snow
 - c. Flange may be coated with PVC, TPO or Asphalt priming
- 2. Type:
 - a. One way vent
 - b. Two way vent
- 3. Options
 - a. PVC coated flange
 - b. TPO coated flange
 - c. Asphalt primed flange
 - d. Foam insert to prevent moisture from condensing on the inside of the standpipe
- 4. LC Vent Size:
 - a. Base opening: 8 inches.
 - b. Base opening with insulation insert: 6 inches
 - c. Base Flange overall diameter: 13 inches
 - d. Vent Outlet Diameter 8-1/2 inches
 - e. Height: 7-3/4 inches.
- 5. Recommended Spacing: 1 per 1,000 SF.

E. MEDIUM CAPACITY (MC) Vent

- 1. Construction:
 - a. Spun heavy gauge aluminum
 - b. Cap design shields against entry of wind-blown rain or snow
 - c. Flange may be coated with PVC, TPO or Asphalt priming
- 2. Type:
 - a. One way vent
 - b. Two way vent

3. Options
 - a. PVC coated flange
 - b. TPO coated flange
 - c. Asphalt primed flange
 - d. Foam insert to prevent moisture from condensing on the inside of the standpipe
 4. MC Vent Size:
 - a. Base opening: 6-1/2 inches.
 - b. Base opening with insulation insert: 5-3/8 inches
 - c. Base Flange overall diameter: 10 inches
 - d. Vent Outlet Diameter 6-1/2 inches
 - e. Height: 9-1/2 inches.
 5. Recommended Spacing: 1 per 1,500 SF.
- F. ROOFNEK Aluminum Base Standpipe
1. Construction:
 - a. Aluminum base standpipe
 - b. Solvent welded PVC hooded outlet
 - c. 3 cable openings plus 3 additional knockouts
 2. Size:
 - a. Overall Height: 22-3/4 inches
 - b. Flange Diameter: 11-3/4 inches
 - c. Opening Above Deck: 20-3/4 inches
 - d. Flashing Width: 4 inches
- G. EXTRA LARGE CAPACITY (XLC) Vent
1. Construction:
 - a. Spun heavy gauge aluminum
 - b. Cap design shields against entry of wind-blown rain or snow
 - c. Flange may be coated with PVC, TPO or Asphalt priming
 2. Type:
 - a. One way vent
 - b. Two way vent
 3. Options
 - a. PVC coated flange
 - b. TPO coated flange
 - c. Asphalt primed flange
 - d. Foam insert to prevent moisture from condensing on the inside of the standpipe
 4. XCX Vent Size:
 - a. Base opening: 12-1/2 inches.
 - b. Base Flange overall diameter: 17-1/4 inches
 - c. Vent Outlet Diameter 8-1/2 inches
 - d. Height: 7-3/4 inches.
 5. Recommended Spacing: 1 per 2,000 SF.
- H. PREVENT PVC Vent
1. Construction:
 - a. SUPER Heavy duty PVC plastic U.V. stabilized to reduce deterioration or fading from the sun
 - b. Meets 1-150 or 1-300 National Venting Code in combination with inlet vents
 - c. Special insect resistant wire screen standard
 - d. White Finish
 2. Type:
 - a. One way vent
 - b. Two way vent
 3. Vent Size:
 - a. Base opening: 10-1/4 inches.

- b. Base Flange overall diameter: 14-3/4 inches
 - c. Vent Outlet Diameter 13-1/2 inches
 - d. Height: 9 inches.
 - e. Venting Area: 144 sq.in. free area.
- I. Vandal Resistant Epoxy Coated Vent Cap - RD-680
- 1. Construction:
 - a. Vandal resistant epoxy coated cast Iron vent cap
 - b. Vandal resistant galvanized cast Iron vent cap
 - 2. Model/Size:
 - a. RD-680-VC-2134 (51), 2 inch Pipe Size
 - b. RD-680-VC-2134 (76), 3 inch Pipe Size
 - c. RD-680-VC-2134 (102), 4 inch Pipe Size
 - d. RD-680-VC-2134 (152) 6 inch Pipe Size
 - e. RD-680-VC-2134 (203) 8 inch Pipe Size
- J. EX-FLOW/M -105 Plastic Vent
- 1. Construction:
 - a. High-density polyethylene (black) for BUR and Modified bitumen applications
 - b. U.V. stabilized PVC (white) for PVC membrane and polyurethane foam applications
 - 2. Type:
 - a. One way vent
 - b. Two way vent
 - 3. Vent Size:
 - a. Base opening: 5-1/4 inches.
 - b. Base Flange overall diameter: 10-1/2 inches
 - c. Vent Outlet Diameter 13-1/2 inches
 - d. Height: 8 inches.
 - e. Venting Area: 144 sq.in. free area.
- K. Retro-fit Adjustable Drain Guards
- 1. Construction:
 - a. Cast aluminum construction
 - b. Fits drain outlets between 3 inches to 12 inches
 - 2. Drain guard diameter
 - a. 5 inch for small drains
 - b. 8" for normal drains
 - c. 10 inch low profile (2 inches tall)
 - d. 10 inch for normal drains
 - e. 13-1/4 inch for large drain openings
 - f. 18 inch for extra-large drain openings
- L. Aluminum Retro Ring and Dome:
- 1. Construction:
 - a. Replacement for broken or missing roof drain rings and domes
 - b. Low profile 5 inch overall height
 - c. Bolt down security
 - d. Cast aluminum construction
 - e. Cast Iron construction
 - 2. Type/Size: 3 or 4 bolt patterns ranging from 6-1/4 inches to 11-3/4 inches
- M. DEKTITES Roof Flashing
- 1. Construction:
 - a. Black EPDM: Withstands constant temperatures at the roofline of minus 50 degrees C (minus 122 degrees F) to 115 degrees C (239 degrees F) and up to 150 degrees C (302 degrees F) intermittently.

- b. Black Grey EPDM: Withstands constant temperatures at the roofline of minus 50 degrees C (minus 122 degrees F) to 115 degrees C (239 degrees F) and up to 150 degrees C (302 degrees F) intermittently.
 - c. Red Silicone: Withstands constant temperatures at the roofline of minus 50 degrees C (minus 122 degrees F) to 200 degrees C (392 degrees F) and up to 250 degrees C (485 degrees F) intermittently.
2. Size:
- a. DFE 0-35: Pipe Size: 0 to 1 inch, Base: 39 inches, Pitch: 0-60 degrees
 - b. DFE 5-55: Pipe Size: 1/4 to 2-1/8 inch, Base: 54 inches, Pitch: 0-45 degrees
 - c. DFE 5-120: Pipe Size: 1/4 to 4-3/4 inch, Base: 85-3/4 inches, Pitch: 0-45 degrees
 - d. DFE 50-70: Pipe Size: 2 to 2-3/4 inch, Base: 69-1/2 inches, Pitch: 0-45 degrees
 - e. DFE 110-170: Pipe Size: 4-1/2 to 6-3/4 inch, Base: 111-3/4 inches, Pitch: 0-45 degrees
 - f. DFE 160-220: Pipe Size: 6-1/4 to 8-3/4 inch, Base: 143-1/2 inches, Pitch: 0-45 degrees
 - g. DFE 160-300: Pipe Size: 6-1/4 to 11-3/4 inch, Base: 178-1/2 inches, Pitch: 0-45 degrees
 - h. DFE 290-440: Pipe Size: 11-1/2 to 17-3/8 inch, Base: 228-1/2 inches, Pitch: 0-45 degrees
- N. DEKTITES Retro Roof Flashing
1. Construction:
- a. Black EPDM: Withstands constant temperatures at the roofline of minus 50 degrees C (minus 122 degrees F) to 115 degrees C (239 degrees F) and up to 150 degrees C (302 degrees F) intermittently.
 - b. Black Grey EPDM: Withstands constant temperatures at the roofline of minus 50 degrees C (minus 122 degrees F) to 115 degrees C (239 degrees F) and up to 150 degrees C (302 degrees F) intermittently.
 - c. Red Silicone: Withstands constant temperatures at the roofline of minus 50 degrees C (minus 122 degrees F) to 200 degrees C (392 degrees F) and up to 250 degrees C (485 degrees F) intermittently.
2. Size:
- a. RF 801/EPDM: Pipe Size: 3/4 to 2-3/4 inch, Base: 6-1/3 inches, Pitch: 0-40 degrees
 - b. RF 802/EPDM: Pipe Size: 2 to 2-7/8 inch, Base: 10-3/4 inches, Pitch: 0-40 degrees
 - c. RF 803/EPDM: Pipe Size: 3-1/2 to 2-7/8 inch, Base: 14-1/2 inches, Pitch: 0-40 degrees
 - d. RFS-4/EPDM: Pipe Size: 9-1/4 to 16-3/4 inch, Base: 30 by 26-3/4 inches, Pitch: 0-40 degrees
 - e. RF 901/Silicone: Pipe Size: 3/4 to 2-3/4 inch, Base: 6-1/3 inches, Pitch: 0-40 degrees
 - f. RF 902/Silicone: Pipe Size: 2 to 2-7/8 inch, Base: 10-3/4 inches, Pitch: 0-40 degrees
 - g. RF 903/Silicone: Pipe Size: 3-1/2 to 2-7/8 inch, Base: 14-1/2 inches, Pitch: 0-40 degrees
 - h. RFS-24/Silicone: Pipe Size: 9-1/4 to 16-3/4 inch, Base: 30 by 26-3/4 inches, Pitch: 0-40 degrees
- O. MARA-FLEX Roof Flashing
1. Construction:
- a. Made of heavy duty material to provide reliable long life performance
 - b. Rippled portion offers an accordion action to accommodate variable applications

- c. Designed to fit all pitches of roof
- 2. Size:
 - a. Model 225: Pipe Size: 2 inch, Base: 12 inch by 12 inch, 2.5 lbs. Model 225: Pipe Size: 2 inch, Base: 12 inch by 12 inch, 2.5 lbs. Flashing
 - b. Model 240: Pipe Size: 2 inch, Base: 12 inch by 12 inch, 4 lbs. Flashing
 - c. Model 325: Pipe Size: 3 inch, Base: 12 inch by 12 inch, 2.5 lbs. Flashing
 - d. Model 340: Pipe Size: 3 inch, Base: 12 inch by 12 inch, 4 lbs. Flashing
 - e. Model 425: Pipe Size: 4 inch, Base: 12 inch by 12 inch, 2.5 lbs. Flashing
 - f. Model 440: Pipe Size: 4 inch, Base: 12 inch by 12 inch, 4 lbs. Flashing
 - g. Model 525: Pipe Size: 5 inch, Base: 12 inch by 12 inch, 2.5 lbs. Flashing
- P. MARABOOT Aluminum Roof Penetration System
 - 1. Construction:
 - a. Mara-Boot Aluminum base with grooves for EPDM cap.
 - b. EPDM cap made for maximum resistance to weathering, ozone, U.V. and extreme hot and cold temperatures
 - c. Caps mechanically seal to dual beads on the Mara-boot aluminum base and grooves on the inside of the EPDM cap
 - d. Provides permanent, water-tight and maintenance free applications for penetrating roofs
 - 2. EPDM Cap: Each cap accommodates (2) 1/4 inch, 1-1/2 inch, 2 inch pipe sizes or (2) 3/8 inch, 1/2 inch, 3/4 inch and 1 inch pipes sizes
 - 3. Mara-Boot Aluminum base has a 8 inch diameter with a 6 inch stack height and a 14 inch diameter bottom flange
- Q. Snow Guards
 - 1. Construction:
 - a. Made of high strength polycarbonate
 - b. Tested to withstand minus 40 degrees
 - c. U.V. resistance
 - d. Pre-spotted holes for proper installation

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Inspect and mating pipe for form and cleanliness.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Roof Drains
 - 1. Install in the locations indicated.
 - 2. Maintain integrity of waterproof membranes where penetrated.
 - 3. Flashing collar or flange: Install between drain and roofing materials.

- C. Roof Vents and penetration flashings
 - 1. Install in the locations indicated.
 - 2. Maintain integrity of waterproof membranes where penetrated.
 - 3. Flashing collar or flange: Install between drain and roofing materials.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Protect drains for duration of construction period from traffic, dirt, and debris.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION