

SECTION 07600 - FLASHING, SHEET METAL, SPECIALTIES AND ACCESSORIES

PART I - GENERAL

1.01 DESCRIPTION

- A. The work includes: Metal counter flashing.
Metal wall flashing and coping.
Scuppers.
Gutters and Downspouts (except at standing seam metal roofs).
Roof Scuttle.
Miscellaneous roof accessories.
Equipment curbs.

1.02 QUALITY ASSURANCE

- A. Comply with the recommendations of S.M.A.C.N.A. (Latest Edition).
- B. Sheet metal details, including copings, related to the membrane roofing installation specified in sections 07500 and 07530 shall be installed by the membrane roofing installer
- C. Unfinished 24 ga. Sheet metal is not acceptable for use on any roofing component. Only non-corrosive or pre-finished metals, as specified below, shall be allowed.

PART II - PRODUCTS

2.01 FLASHING AND SHEET METAL MATERIALS

- A. Zinc-coated Steel: Commercial quality, ASTM A 525, G90 hot-dip galvanized (24 gauge) except as otherwise indicated. Pre-finished with Kynar 500/Hylar 5000 coating.
 - 1. Gutters up to 15" girth; use 26 gage.
 - 2. Gutters 16" to 20" girth; use 22 gage.
 - 3. Scuppers, conductor heads, and downspouts use 24 gage.
 - 4. Copings up to 18" girth; use 24 gage.
 - 5. Coping over 18" girth; use 22 gage.
 - 6. All counterflashings shall be 24 gage.
- B. Copper: ASTM B 370, cold-rolled except where soft temper is required for forming; 16 oz. except as otherwise indicated.
 - 1. Copings 10" to 14" wide; use 20 oz.
 - 2. Copings over 14" wide; use 24 oz.
- C. Aluminum coping: ASTM B 209, alloy 3003, temper H14, 0.032" thick except as otherwise indicated. Provide pre-finished KYNAR 500 colors as noted.
 - 1. Copings over 14" wide or gutters over 16" girth, use 0.040" min. thickness,
 - 2. Gutters up to 15" girth; use 0.032" min. thickness.
 - 3. Gutters 16" to 20" girth; use 0.040" min. thickness.

4. Downspouts use 0.025" min. thickness.
5. Scuppers, conductor heads and counter flashing use 0.040" min. Thickness.

D. Colors: Pre-finish all exposed copings, flashing, counterflashing, trim, scuppers, gutters and downspouts in the following KYNAR colors:

1. "Northern Tower" Prototype: (exposed flashings, copings, gutters): Sierra Tan", by Una-Clad, (Firestone Metals, Inc.) Pac-Clad (Peterson Aluminum) and Berridge Manufacturing Co, and "Beige" by Dyna-Clad (DMI).
 - a. Scuppers and Downspouts shall be: "Sierra Tan" by Una-Clad (Firestone Metals, Inc.), Berridge Manufacturing Co., Pac-Clad (Peterson Aluminum) or Integris metals, "Beige" by Dyna-Clad (DMI).
2. "Chicago Prototype" (exposed flashing, coping, trim, gutters): "Sierra Tan" by Una-Clad (Firestone Metals, Inc.), Pac-Clad (Peterson Aluminum) and Berridge Manufacturing Co., "Beige" by Dyna-Clad (DMI).
3. "Southern" Prototype: "Almond", as manufactured by Una-Clad (Firestone Metals, Inc.) Metal-Era or Integris Metals, "Putty" by Dyna-clad (DMI).

2.02 MISCELLANEOUS FLASHING AND SHEET METAL ACCESSORIES

- A. Solder: For use with steel or copper, provide 50 - 50 tin/lead solder (ASTM B 32), with rosin flux.
- B. Fasteners: Same metal as flashing/sheet metal. Match finish of exposed heads with material being fastened.
- C. Mastic Sealant: Polyisobutylene; nonhardening, nonskinning, nondrying, nonmigrating sealant.
- D. Adhesives: Type recommended by flashing sheet manufacturer for waterproof/weather-resistant seaming and adhesive application of flashing sheet.
- E. Reglets: Metal or plastic units, compatible with flashing indicated, noncorrosive.
- F. Metal accessories: Provide sheet metal clips, straps, anchoring devices and all accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive.
- G. Roofing cement ASTM D-2822 asphaltic.

2.03 FABRICATED UNITS

- A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA "Architectural Sheet Metal Manual". Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form exposed sheet metal work without buckling with exposed edges folded back to form hems.
 1. Coping Joints: Up to 10" wide, use S.M.A.C.N.A. joint types J5 thru J12. Over 10" wide, use S.M.A.C.N.A. joint types J8 thru J12. Architectural Sheet Metal Manual table 3-1 "Coping Design", for the specific metal thickness, type and coping width.
 2. Pre-engineered/manufactured coping cap systems complying with FM wind uplift and S.M.A.C.N.A. standards are acceptable if approved by Walgreens Project Architect.

- B. Expansion Provisions: Where lapped or bayonet-type expansion provisions in work cannot be used, or would not be water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1" deep, filled with mastic sealant.
- C. Sealant Joints: Where movable, non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant, in compliance with SMACNA standards.
- D. Separations: Provide for separation of metal from noncompatible metal or corrosive substrates, with bituminous coating or other permanent separation.
- E. Gutters and Downspouts and Trim: Provide manufacturers standard KYNAR shop finish, color as per Article 2.01.D. For gutters at standing seam metal roofs, see Section 07610.
 - 1. Provide protective cover of 1/8" thick bent steel plate to a height of 3'-0". Finished to match downspout color. Option at rear of store only, Neenah cast iron downspout shoe #R-4925, profile to match downspout, paint to match downspout.

2.04 ROOF SCUTTLE

- A. 2'-6" x 3'-0" Type "S" with "Ladder UP" safety post, model 2, by Bilco, provide fire-rated units as required by local authorities.

2.05 EQUIPMENT CURB S/SUPPORTS/FLASHING

- A. Equipment Rails; 18 ga galvanized steel, monolithic construction with integral base plate, continuous welded cover seams, factory installed 2x6 wood nailer #ER-4A by Roof Products & Systems Corp., Bensenville, Illinois (630) 766-5240 or (800) 774-5240.
- B. Equipment Curbs; 18 ga galvanized steel with continuous welded cover seams, factory installed wood nailer, factory installed 1 1/2 thick 3 pound density rigid insulation and reinforcing as required to support equipment, including duct hangers and insulation pans on roof top units.
- C. Prefabricated Pipe Penetrations (at satellite dish):
 - 1. Curbs: 18 ga. metal curb with 1-1/2" x 1-1/2" wood nailer #RC-4A by Portals Plus, Inc., Bensenville, Illinois (630) 766-5240 or equal by The Pate Company, Broadview, IL. (708) 681-1920.
 - 2. Pipe Portal Curb Cover: Acrylic coated, rib reinforced, ABS plastic, double pipe portal by Portal Plus Inc., Bensenville, Illinois (630) 766-5240 or 0.050" thick aluminum cover by The Pate Company, Broadview, IL (708) 681 -1920).
 - 3. Flexible Cap: EPDM or Neoprene (BUR or Mod. Bit roofs) compression molded cap # C-126 and C-212 by Portals Plus, Inc. (630) 766-5240 or equal by The Pate Company, Broadway, IL (708) 681-1920.

PART III EXECUTION

3.01 INSTALLATION REQUIREMENTS:

- A. Comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units as required to be secure and permanently watertight/weathertight.

END OF SECTION