

## SECTION 07620

### SHEET METAL FLASHING AND TRIM

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes sheet metal flashing and trim in the following categories:
  - 1. Exposed trim, gravel stops, and fasciae.
  - 2. Copings.
  - 3. Metal flashing.
  - 4. Reglets.
  - 5. Soffits.

##### 1.2 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Shop Drawings of each item specified showing layout, profiles, methods of joining, and anchorage details.
- C. Samples of sheet metal flashing, trim, and accessory items, in the specified finish. Where finish involves normal color and texture variations, include Sample sets composed of 2 or more units showing the full range of variations expected.
  - 1. 8-inch- (200-mm-) square Samples of specified sheet materials to be exposed as finished surfaces.
- D. LEED Documentation Submittals:
  - 1. Credit MR 2.1 and 2.2: Comply with Division 1 Section "Construction Waste Management."
  - 2. Credit MR 4.1 and 4.2: Product Data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content. Include statement indicating costs for each product having recycled content.
  - 3. Credit MR 5.1: Product Data indicating location of material manufacturer for regionally manufactured materials.
    - a. Include statement indicating cost and distance from manufacturer to Project for each regionally manufactured material.

#### PART 2 - PRODUCTS

##### 2.1 METALS

- A. Zinc-Coated Copper: ASTM B370, H00 cold-rolled copper sheet, not less than 16 oz./sq. ft. (0.55 mm thick), both sides coated with tin-zinc not less than 0.5 mils thick using the hot-dipped process.

1. Product: FreedomGray by Revere Copper.

## 2.2 MISCELLANEOUS MATERIALS AND ACCESSORIES

- A. Solder for Zinc-Coated Copper: ASTM B32, pure tin solder, lead free.
- B. Fasteners: Same metal as sheet metal flashing or other noncorrosive metal as recommended by sheet metal manufacturer. Match finish of exposed heads with material being fastened.
- C. Asphalt Mastic: SSPC-Paint 12, solvent-type asphalt mastic, nominally free of sulfur and containing no asbestos fibers, compounded for 15-mil (0.4-mm) dry film thickness per coat.
- D. Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of Work, matching or compatible with material being installed; noncorrosive; size and thickness required for performance.
- E. Roofing Cement: ASTM D 4586, Type I, asbestos free, asphalt based.

## 2.3 FABRICATION, GENERAL

- A. Sheet Metal Fabrication Standard: Fabricate sheet metal flashing and trim to comply with recommendations of SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of the item indicated.
- B. Comply with details shown to fabricate sheet metal flashing and trim that fit substrates and result in waterproof and weather-resistant performance once installed. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
- C. Form exposed sheet metal Work that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems.
- D. Seams: Fabricate nonmoving seams in sheet metal with flat-lock seams. Tin edges to be seamed, form seams, and solder.
- E. Expansion Provisions: Space movement joints at maximum of 10 feet (3 m) with no joints allowed within 24 inches (610 mm) of corner or intersection. Where lapped or bayonet-type expansion provisions in Work cannot be used or would not be sufficiently weatherproof and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).
- F. Separate metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact with asphalt mastic or other permanent separation as recommended by manufacturer.
- G. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of sheet metal exposed to public view.
- H. Fabricate cleats and attachment devices from same material as sheet metal component being anchored or from compatible, noncorrosive metal recommended by sheet metal manufacturer.
  - 1. Size: As recommended by SMACNA manual or sheet metal manufacturer for application but never less than thickness of metal being secured.

## 2.4 SHEET METAL FABRICATIONS

- A. General: Fabricate sheet metal items in thickness or weight needed to comply with performance requirements but not less than that listed below for each application and metal.
- B. Through-wall Flashing: Fabricate from the following material:
  - 1. Zinc-Coated Copper: 16 oz./sq. ft. (0.55 mm thick).
  - 2. Conform to SMACNA figure 4-3C modified. Turn up rear leg of receiver 8 inches at backup wall system tuck under felt paper at sheathing.
- C. Metal Fasciae: Fabricate from the following material:
  - 1. Zinc -Coated Copper: 20 oz./sq. ft. (0.7 mm thick).
  - 2. Conform to SMACNA figures 2-1 and 2-5C.
- D. Copings: Fabricate from the following material:
  - 1. Zinc -Coated Copper: 24 oz./sq. ft. (0.82 mm thick).
  - 2. Conform to SMACNA figure
  - 3. Locks and Seams: SMACNA figure
- E. Receiver and Counterflashing: Fabricate from the following material:
  - 1. Zinc -Coated Copper: 16 oz./sq. ft. (0.55 mm thick).
  - 2. Conform to SMACNA figure 4-3 C.
- F. Step Flashing: Fabricate from the following material:
  - 1. Zinc-Coated Copper: 16 oz./sq. ft. (0.55 mm thick).
  - 2. Conform to SMACNA figure
- G. "Z" Flashing: Fabricate from the following material:
  - 1. Zinc -Coated Copper: 16 oz./sq. ft. (0.55 mm thick).

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. General: Unless otherwise indicated, install sheet metal flashing and trim to comply with performance requirements, manufacturer's installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Anchor units of Work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install Work with laps, joints, and seams that will be permanently watertight and weatherproof.
- B. Install exposed sheet metal Work that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
- C. Expansion Provisions: Provide for thermal expansion of exposed sheet metal Work. Space movement joints at maximum of 10 feet (3 m) with no joints allowed within 24 inches (610 mm) of corner or intersection. Where lapped or bayonet-type expansion provisions in Work

cannot be used or would not be sufficiently weatherproof and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

- D. Through-wall Flashing: Completely soldered lap joints except at brick veneer control joints. At these locations, separate the flashing at the control joint turned up ends 2 inches to form a pan. Lap the rear leg of the through-wall flashing 3 inches onto the adjacent piece and sealed with mastic. Set the gap between the ends of the two pans in the field according to the temperature at the time of installation. A gap of 1/8 inch at 100 degrees F., 1/4 inch at 50 degrees F., 3/8 inch at 0 degrees F. Install a cover piece over the top of the abutting pans, covering the gap, and soldered to the vertical face of the flashing.

END OF SECTION