

PART I – GENERAL**WORK SPECIFIED HEREIN**

All labor, materials, equipment and services necessary to provide the flashing and sheet metal work and related items as indicated or specified.

SUBSTITUTIONS

In accordance with Section 01600.

SUBMITTALS

- Unless otherwise noted, the contractor shall prepare all shop drawings, product literature, etc. only as required to properly coordinate and construct the project.
- Review of submittals by the Professional of Record is limited to specific shop drawings as called for in the Project Manual.

QUALITY ASSURANCE

- Standards: Quality, procedures and methods recommended by *SMACNA Architectural Sheet Metal Manual, 5th Edition*.
- Coordinate trade jurisdiction with respect to installing sheet metal items.
- Provide the sheet metal items in sufficient time to avoid delays to the construction progress.

PART II – PRODUCTS**MATERIALS**

- Galvanized Sheet Metal: *ASTM A-653 lock-forming, gauges as indicated (0.58 mm (24 gauge) minimum) (0.72 mm (22 gauge) @ copings)*.
- Solder: *ASTM B-32, Grade Sn50, 50% tin and 50% lead, used with rosin flux.*
- Mastic Sealant: *CAN/CGSB 37.29 polyisobutylene; non-hardening, non-skinning, non-drying, non-migrating sealant*
- Caulking: *ASTM C-920, Type M, Grade NS, Class 25, use NT, M, A, O.*
- Reglets and counterflashing: *As manufactured by Fry Reglet Corporation, Type MA, ST.*
- Nails, Screws, Rivets: *Same material as flashing sheet, or other as recommended by manufacturer of flashing sheet.*
- Cleats: *Metal and gauge as sheets being anchored, 50 mm (2") wide, punched for 2 anchors.*
- Roofing Felt: *ASTM D-226, 7 kg (15 pound) type or 14 kg (30 pound) type.*
- Bituminous Coating: *FS TT-C-494 or SSPC paint - 12, dry film 15 mils per coat.*

PART III – EXECUTION**WORKMANSHIP**

Surfaces to receive sheet metal shall be clean, dry, and free from projections or other defects that would affect the application. Report any unsatisfactory surfaces to the Professional of Record.

Where dissimilar materials abut, provide proper separation or protection to minimize the possibility of galvanic action.

Provide for thermal expansion of running trim, flashing, expansion joints, and other items exposed for more than 4 500 mm (15 feet) continuous length. Maintain a watertight installation at expansion seams. Locate expansion seams as shown, or if not shown, at the following maximum spacing for each general flashing use:

- Flashing, expansion joints, and trim - at 3 048 mm (10 foot) intervals, and 610 mm (24") on each side of corners and intersections.
- Sealant-type expansion joints - where sealant-filled expansion joints are used, embed and hooked flanges of the joint members not less than 25 mm (1.0") into the sealant. Form joints to completely conceal the sealant. When ambient temperature is moderate at the time of installation (4°C to 21°C, set joint members for 50% movement either way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant type joints at temperatures below 4°C. Installation of sealant is specified in Section 07900.

Fabricate and install sheet metal with lines, arrows, and angles sharp and true, and plane surfaces free from objectional wave, warp or buckle. Hem exposed edges to form a 13 mm (1/2") wide hem on the side concealed from view.

Forming, anchoring, expansion and contraction details shall conform to the current edition of the *SMACNA Architectural Sheet Metal Manual*.

SOLDERING

- Except where other methods of joining are indicated or specified, solder all joints, and connections of sheet metal work.
- Remove grease and dirt from metal surfaces to be joined.
- Remove all flux residue by scrubbing, neutralizing with ammonia or a 5-10% solution of washing soda and followed by a clear water rinse.
- Assemble parts and solder using regular non-corrosive rosin flux. Heat metal thoroughly to completely sweat solder through full contact area.

SCUPPER, LEADER BOXES AND DOWNSPOUTS

- Provide galvanized metal scuppers, leader boxes and downspouts as indicated.
- Construct scuppers in accordance with Figure 1-26 of *SMACNA Architectural Sheet Metal Manual* and as detailed (0.58 mm (24 ga.) min.)

- Construct downspouts in accordance with Figure 1-32B and Figure 1-34 of *SMACNA Architectural Sheet Metal Manual* and as detailed (0.72 mm (22 ga.) min.), gutter straps 18 ga. min.

GUTTERS AND DOWNSPOUTS

- Provide gutters and downspouts as indicated (0.72 mm (22 ga.) min. unless noted otherwise).
- Construct gutters in accordance with Figure 1-2, Style A of *SMACNA Architectural Sheet Metal Manual* and as detailed.

END OF SECTION