

SECTION 07620 - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Flashing
- B. Related Requirements:
 - 1. Section 06100 - Rough Carpentry: Wood blocking and nailers.
 - 2. Section 07530 - Elastomeric Membrane Roofing: Roof penetration flashing and seals.
 - 3. Section 07900 - Joint Sealers.
 - 4. Section 09900 - Paints and Coatings.

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
- B. American Architectural Manufacturers Association (AAMA):
 - 1. AAMA 621 - Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) and Zinc-Aluminum Coated Steel Substrates.
- C. ASTM International (ASTM):
 - 1. ASTM A 653 - Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM A 755/A - Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.
 - 3. ASTM A 792/A - Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process
 - 4. ASTM B 749 -Lead and Lead Alloy Strip, Sheet, and Plate Products
 - 5. ASTM D 226 - Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 - 6. ASTM D 523 - Standard Test Method for Specular Gloss
 - 7. ASTM D 4586 - Specification for Asphalt Roof Cement, Asbestos Free.
- D. National Roofing Contractors Association (NRCA):
 - 1. NRCA - Low Slope Roofing Manual.
- E. Sheet Metal and Air Conditioning Contractors National Association (SMACNA):
 - 1. SMACNA - Architectural Sheet Metal Manual, Fifth Edition, 1993.
- F. Steel Structures Painting Council (SSPC):
 - 1. SSPC-Paint 12 - Cold-Applied Asphalt Mastic (Extra Thick Film).
 - 2. SSPC-Paint 20 Type II - Zinc Rich Primers - Organic.

1.3 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA "Architectural Sheet Metal Manual" and NRCA "Low Slope Roofing Manual" standard details and requirements.
- B. Supplier Certification: Provide certification from galvanized sheet steel supplier stating that materials conform to ATSM A 653, G90 hot-dipped galvanized steel.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Stack preformed material to prevent twisting, bending, or abrasion, and to provide ventilation.
- B. Prevent contact with materials during storage that may cause discoloration, staining, or damage.

PART 2 - PRODUCTS

2.1 SHEET MATERIALS

- A. Galvanized Steel: ASTM A 653 Commercial Quality and Lock-Forming Quality, G90 coating designation hot-dip galvanized, mill phosphatized for painting where exposed to view from ground level. Sheet metal gages shall be as shown or as follows where not shown:
 - 1. Flashing and Counter Flashing: 24 gage.

2.2 ACCESSORIES

- A. Fasteners: Galvanized steel finish exposed fasteners to match flashing metal. Furnish exposed fasteners with soft EPDM washers as manufactured by the following:
 - 1. Kwik-Pro Screws, by Hilti.
 - 2. Trugrip GT, by ITW Buildex.
- B. Sealant: Specified in Section 07900.
- C. Sealing Mastic: Single component gun grade butyl or polyurethane sealant as recommended by roofing manufacturer.
- D. Bituminous Coating: SSPC - Paint 12, solvent-type bituminous mastic, nominally free of sulfur, compounded for 15 mil dry film thickness per coat.
- E. Draw Band: Stainless steel.
- F. Underlayment:
 - 1. Asphalt Saturated Felt: ASTM D 266; No. 30 pound asphalt saturated organic roofing felt, nonperforated.
- G. Zinc-Rich Primer: SSPC-Paint 20 Type II.

2.3 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Fabricate cleats of same material as sheet, interlockable with sheet.
- C. Form pieces in longest possible lengths.
- D. Hem exposed edges on underside 1/2 inch; miter and seam corners.
- E. Fabricate corners to form one piece with minimum 18 inches long legs; rivet for rigidity.
- F. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.
- G. Fabricate flashings to allow toe to extend 4 inches over roofing. Return and brake edges.
- H. Fabricate exposed sheet metal components with provisions for thermal expansion.
- I. Continuously weld or solder all joints in curb covers. Touch up damaged galvanizing with zinc rich primer.

2.4 FINISH

- A. Paint metal surfaces exposed to view from ground level in accordance with Section 09900, and as indicated on Drawings, unless otherwise shown to be prefinished.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set.
- B. Verify roofing membrane termination and base flashings are in place, sealed, and secure.
- C. Beginning of installation means acceptance of existing conditions.

3.2 PREPARATION

- A. Field measure site conditions prior to fabricating work.
- B. Install starter and edge strips, and cleats before starting installation.

3.3 INSTALLATION

- A. Install sheet metal flashing and trim in accordance with applicable details of SMACNA "Architectural Sheet Metal Manual" and NRCA "Low Slope Roofing 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. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.
- B. Bed flanges of metal flashings in plastic cement or sealing mastic where required for waterproof performance.
- C. Apply bituminous coating on surfaces in contact with dissimilar materials including the following:
 - 1. Dissimilar metals as defined in SMACNA Appendix A-3.
 - 2. Preservative treated wood.

END OF SECTION