

1 General

1.1 **SUMMARY**

.1 Section Includes

- .1 Labour, Products, equipment and services necessary to complete the Work of this section.

1.2 **REFERENCES**

.1 Conform to the latest edition of the following:

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| .1 | ASTM A167 | - | Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip |
| .2 | ASTM A653/A653M | - | Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process |
| .3 | ASTM B370 | - | Standard Specification for Copper Sheet and Strip for Building Construction |
| .4 | ASTM C920 | - | Standard Specification for Elastomeric Joint Sealants |
| .5 | CAN/CGSB-37.29-M | - | Rubber Asphalt Sealing Compound |
| .6 | CSA B111-74 | - | Wire Nails, Spikes and Staples |
| .7 | AODA | - | Accessibility for Ontarians with Disabilities Act |

1.3 **SUBMITTALS**

.1 Shop Drawings and Samples

- .1 Submit in accordance with Section 01 33 00.
- .2 Submit detailed Shop Drawings showing proposed method of shaping, forming, jointing, fastening, and application of sheet metal Work. Submit lists of materials to be used.
- .3 Submit a representative sample section of prepainted metal flashing illustrating "S" lock jointing, minimum 600 mm long. Submit sample well in advance of material fabrication.

1.4 **DELIVERY, STORAGE AND HANDLING**

- .1 Protect the Work of this section from damage. Replace damaged Work which cannot be satisfactorily repaired, restored or cleaned, at no cost to Owner.

1.5 **WARRANTY**

- .1 Warrant Work of this section for one year from damage including but not restricted to loosening and splitting of the flashing seams.

2 Products

2.1 **MATERIALS**

- .1 Prepainted sheet steel: 0.607 mm (24 ga) minimum thickness, commercial quality to ASTM A653/A653M, with Z275 zinc coating designation, prepainted with baked-on "WeatherX" or "Perspectra Series" in colour selected by Consultant.
- .2 Sheet steel: 0.607 mm (24 ga) minimum thickness, commercial quality to ASTM A653/A653M, with Z275 zinc coating designation.
- .3 Utility sheet aluminum: Furnish plain (embossed) pattern, 1.2 mm minimum thickness.
- .4 Stainless steel sheet: Conforming to ASTM A167, Type 316 (302) (304).
- .5 Isolation coating: Henry "410-02" or approved alternative.
- .6 Sealing compound: Rubber asphalt conforming to CAN/CGSB-37.29-M.
- .7 Sealant: One part polyurethane, Sika "RC-1", Tremco "Dymonic", or Sonneborn "NP-1", conforming to ASTM C920, Type S, Grade NS, Class 25.
- .8 Cleats and Starter strips: Furnish a continuous run of starter strips of Z275 galvanized sheet metal, 20 gauge thick, of height shown on Drawings, with metal flashing interlocked to the starter strip. Where shown on the Drawing or where starter strips are exposed to view, use same prepainted metal as for flashing.
- .9 Back-up plates: Of same material and gauge as flashing used, (minimum 300 mm wide).
- .10 Fasteners: Conforming to CSA B111 of same material as sheet metal secured, of type, length and size suitable for the particular conditions. Where exposed fasteners are permitted, use colour matched nylon heads with cupped neoprene washers.

2.2 **SHEET METAL FABRICATION**

- .1 Brakeform prepainted sheet material to form copings shown on Drawings. End joints where adjacent length of metal flashing meet shall be made in accordance with jointing method specified hereinafter.
- .2 Brakeform miscellaneous metal flashings and accessories on roof such as:
 - .1 Sheet metal flashings at roof expansion joints
 - .2 Starter strips
 - .3 Flashings at roof openings
 - .4 Overflow scuppers
- .3 Use competent tradesmen and work accurately to details indicated and as herein specified.
- .4 Hem exposed edges at least 12 mm for appearance and stiffness. Mitre and seal corners with sealant. Provide 25 mm upstand joint at corners.
- .5 Apply a coat of isolation coating on the back side of aluminum in contact with dissimilar materials.
- .6 Downspouts and Overflow Scuppers
 - .1 Fabricate scupper drains, gutters and downspouts in shapes and sizes indicated, with mitered and welded corners. Include steel straps formed from galvanized

sheet of thickness indicated. Include hangers and other attachment devices, end plates, trim, and other accessories required for complete installation.

.1 Gutters, scupper drains and downspouts: Form from galvanized steel sheet not less than 1.5 mm thick before galvanizing, and prepainted.

.2 Profiles

.1 Gutter: Three-sided, size and profile as indicated.

.2 Downspout: Rectangular, four-sided.

.3 Scupper drains: Four-sided.

.3 Additional Parts and Features

.1 Downspout hangers: Rigid construction.

.2 Downspout starters or fascia sump with downspout starter hole.

.3 Expansion joints: Loose-locked waterproof, at least one midway between outfall points.

.4 Transition for downspout to grade: Provide forty-five degree section.

.7 Sealant Boxes and Sealant Fill

.1 Form sealant boxes as open topped boxes with topped edges stiffened by seaming. Make boxes not less than 50 mm larger than the object being flashed, 100 mm depth, and with minimum 100 mm flanges for stripping-in.

3 Execution

3.1 **INSTALLATION**

.1 Install Work to details shown on Drawings.

.2 Exposed fastenings will not be permitted on horizontal Work exposed to view from the building exterior.

.3 Install starter strips where indicated or required to present a true, non-waving, leading edge. Anchor to back-up to provide rigid, secure installation. Secure starter strips with screws only, in accordance with FM 1-49 requirements.

.4 End joints where adjacent lengths of metal flashing meet shall be made using an "S-lock" joint. Execute by inserting the end of one coping length in a 25 mm deep "S" lock formed in the end of adjacent length. Extend concealed portion of the "S" lock 25 mm outwards and nail to substrate prior to installation of subsequent sheets. Face nailing of joints will not be permitted.

.5 End joints where adjacent lengths of metal flashing meet shall be made using a 300 mm long back-up flashing secured in place before installing flashing. Apply two beads of caulking compound on each side on the face of the back-up plate to seal ends of metal flashing. Leave 12 mm wide space between ends of adjacent lengths of metal flashing. Fabricate back-up plates of the same material and finish as the metal flashing with which it is being used. Make back-up plate profile of the flashing allowing for metal thickness.

- .6 Prepare and touch up scratches on prepainted material with air drying formulation of the coil coating paint. Replace material at no cost to Owner, if touching up is unacceptable to the Consultant.

3.2 **SEALANT**

- .1 Apply sealant where required to form weathertight seal between flashing and adjoining surface and between flashing and other Work of this section. Sealant Work consists of bedding between members where possible and with neatly formed sealant bead where exposed.

End of Section