PSPC Ontario	SHEET METAL FLASHING AND	Section 07 62 00
Region Project	TRIM	Page 1
Number R.100644.001	Document Set 2	2022-02-04

PART 1 - GENERAL

1.1 REFERENCE STANDARDS

- .1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM A653/A653M-20, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .2 ASTM D523-14, Standard Test Method for Specular Gloss.
 - .3 ASTM D822/D822M-13(R2018), Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings.
- .2 Canadian Roofing Contractors Association (CRCA)
 - .1 Roofing Specifications Manual 2012.
- .3 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 .1 Safety Data Sheets (SDS).

1.2 SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00.
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature for sheet metal flashing systems materials, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit two copies WHMIS SDS Safety Data Sheets.
- .3 Shop Drawings:
 - .1 Shop drawings: submit drawings stamped and signed by professional engineer registered or licensed in Province of Ontario, Canada.
- .4 Samples:
 - .1 Submit duplicate $50 \times 50 \text{ mm}$ samples of each type of sheet metal material, finishes and colours.
- .5 Quality assurance submittals: submit following in accordance with Section 01 45 00.
 - .1 Manufacturer's Instructions: submit manufacturer's installation instructions and special handling criteria, installation sequence, and cleaning procedures.
 - .2 Manufacturer's Field Reports: submit to manufacturer's written reports within 3 days of review, verifying compliance of Work, as described in PART 3, FIELD QUALITY CONTROL.

PSPC Ontario	SHEET METAL FLASHING AND	Section 07 62 00
Region Project	TRIM	Page 2
Number R.100644.001	Document Set 2	2022-02-04

1.3 QUALITY ASSURANCE

- .1 Pre-Installation Meetings: convene pre-installation meeting oneweek prior to beginning on-site installation, with contractor's representative and Departmental Representative in accordance with Section 01 32 16.19 to:
 - .1 Verify project requirements.
 - .2 Review installation and substrate conditions.
 - .3 Co-ordination with other building sub-trades.
 - .4 Review manufacturer's installation instructions and warranty requirements.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00.
- .2 Waste Management and Disposal:
 - .1 Separate waste materials for reuse and recycling in accordance with Section $01\ 74\ 20$.

PART 2 - PRODUCTS

2.1 SHEET METAL MATERIALS

.1 Zinc coated steel sheet: 0.60 0.34 mm thickness, commercial quality to ASTM A653/A653M, with Z275 designation zinc coating.

2.2 PREFINISHED STEEL SHEET

- .1 Prefinished steel with factory applied silicone modified polyester.
 - .1 Isolation coating: alkali resistant bituminous paint.
 - .1 Class F1S.
 - .2 Colour selected by Departmental Representative from manufacturer's standard range.
 - .3 Specular gloss: 30 units +/- 5 in accordance with ASTM D523.
 - .4 Coating thickness: not less than 22 micrometres.
 - .5 Resistance to accelerated weathering for chalk rating of 8, colour fade 5 units or less and erosion rate less than 20% to ASTM D822/D822M as follows:
 - .1 Outdoor exposure period 500 hours.
 - .2 Humidity resistance exposure period 500 hours.

2.3 ACCESSORIES

- .1 Isolation coating: alkali resistant bituminous paint.
- .2 Plastic cement: to CAN/CGSB-37.5.
- .3 Sealants: in accordance with Section 07 92 00.
- .4 Cleats: of same material, and temper as sheet metal, minimum 50 mm wide. Thickness: same as sheet metal being secured.

PSPC Ontario	SHEET METAL FLASHING AND	Section 07 62 00
Region Project	TRIM	Page 3
Number R.100644.001	Document Set 2	2022-02-04

- .5 Fasteners: of same material as sheet metal, to CSA B111, flat head roofing nails of length and thickness suitable for metal flashing application.
- .6 Washers: of same material as sheet metal, 1 mm thick with rubber packings.
- .7 Touch-up paint: as recommended by prefinished material manufacturer.

2.4 FABRICATION

- .1 Fabricate sheet steel flashings and other sheet steel work in accordance with applicable CRCA 'FL' series details as indicated.
- .2 Form pieces in 2400 mm maximum lengths.
 - .1 Make allowance for expansion at joints.
- .3 Hem exposed edges on underside 12 mm.
 - .1 Mitre and seal corners with sealant.
- .4 Form sections square, true and accurate to size, free from distortion and other defects detrimental to appearance or performance.

2.5 METAL FLASHINGS

.1 Form flashings, copings and fascias to profiles indicated of 0.60 0.34 mm thick prefinished steel.

2.6 REGLETS AND CAP FLASHINGS

- .1 Form surface mounted reglets of 0.60 0.34 mm thick sheet metal for base flashings as detailed.
 - .1 Provide slotted fixing holes and steel/plastic washer fasteners.

2.7 EAVES TROUGHS AND DOWNPIPES

- .1 Form eaves troughs and downpipes from $0.60\ 0.34\ \mathrm{mm}$ thick galvanized sheet metal.
- .2 Sizes and profiles as indicated.
- .3 Provide goosenecks, outlets, strainer baskets and necessary fastenings.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

.1 Compliance: comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets.

PSPC Ontario	SHEET METAL FLASHING AND	Section 07 62 00
Region Project	TRIM	Page 4
Number R.100644.001	Document Set 2	2022-02-04

3.2 INSTALLATION

- .1 Install sheet metal work in accordance with CRCA FL series details and as detailed.
- .2 Use concealed fastenings except where approved before installation.
- .3 Counterflash bituminous flashings at intersections of roof with vertical surfaces and curbs.
 - .1 Flash joints using S-lock forming tight fit over hook strips.
- .4 Lock end joints and caulk with sealant.
- .5 Install surface mounted reglets true and level, and caulk top of reglet with sealant.
- .6 Insert metal flashing into reglets to form weather tight junction.
- .7 Caulk flashing at reglet with sealant.
- .8 Where flashing installed with mechanical fasteners, install fasteners in slots or oversize holes to allow expansion and contraction of flashings.

3.3 EAVES TROUGHS AND DOWNPIPES

- .1 Install eaves troughs and secure to building at 750 mm on centre with eaves trough spikes through spacer ferrules.
 - .1 Slope eaves troughs to downpipes as indicated.
 - .2 Seal joints watertight.
- .2 Install downpipes and provide goosenecks back to wall.
 - .1 Secure downpipes to wall with straps at 1800 mm on centre; minimum two straps per downpipe.
 - .2 Connect downpipes to drainage system and seal joint with plastic cement.
- .3 Install splash pans as indicated.

3.4 FIELD QUALITY CONTROL

- .1 Manufacturer's Field Services:
 - .1 Provide manufacturer's field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.

3.5 CLEANING

- .1 Proceed in accordance with Section 01 74 00.
- .2 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.
- .3 Leave work areas clean, free from grease, finger marks and stains.