

PART 1 - GENERAL

1.1 RELATED SECTIONS

- .1 Section 01 35 29.06 - Health and Safety Requirements
- .2 Section 06 10 00 - Rough Carpentry
- .3 Section 07 52 00 - Modified Bitumen Membrane Roofing

1.2 SAMPLES

- .1 Submit 300mm x 300mm samples for approval of sheet metal flashing specified before proceeding with the work, showing proposed method of shaping, forming, jointing and fastening.
- .2 Submit samples if approval of substitutions is requested.

1.3 WORKMANSHIP

- .1 Sheet metal flashing work shall be carried out in accordance with the industry standard best practices; with joints locked, cleated, caulked as required and exposed edges hemmed. Ample allowance shall be made in all work for expansion and contraction.
- .2 Mitred corners shall be straight and true to profiles shown on drawings, with flat surfaces free of distortion and free of face nailing.

1.4 REFERENCES

- .1 Latest edition of all listed references to apply:
 - .1 ASTM A606 – Specification for Steel, Sheet and Strip, High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, with Improved Atmospheric Corrosion Resistance.
 - .2 ASTM A653/A653M – Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by Hot-Dip Process
 - .3 ASTM A792/A792M – Specification for Steel Sheet, 55% Aluminum-Zinc Alloy- Coated by Hot-Dip Process.
 - .4 CSA B111 – Wire Nails, Spikes and Staples
 - .5 CAN/CGSB 51.32M – Sheathing, Membrane, Breather Type.
 - .6 CAN/CGSB 93.1M – Sheet, Aluminum Alloy, Prefinished, Residential
 - .7 SMACNA – Sheet Metal and Air Conditioning Contractors National Association – “Architectural Sheet Metal Manual”
 - .8 Canadian Roofing Contractors Association (CRCA) – Roofing Specifications Manual.

1.5 EXTENDED WARRANTY

- .1 For Work of this Section 07 62 00 – Sheet Metal Flashings, 12 months warranty period is extended to 60 months.

PART 2 - PRODUCTS

2.1 PRE-FINISHED METAL FLASHING

- .1 Compatibility between materials is essential. Use only materials that are known to be compatible when incorporated in a completed assembly.
- .2 Prefinished Metal Flashing:
 - .1 24 gauge (0.66mm) steel with G90 (Z275) zinc coating conforming to ASTM A653A/A653M. Colour selected by Departmental Representative from Manufacturer's standard colour range.
- .3 Cleats and Starter Strips (Not Otherwise Specified):
 - .1 Two gauges heavier of material matching that of flashing being employed; minimum 22 gauge (0.82mm).
- .4 Fastening Bars:
 - .1 Fastening bars to be 18 gauge metal and pre-drilled at 400mm o/c.

2.2 PRE-FINISHED METAL SIDING

- .1 Shall be 26 gauge (0.55mm) commercial galvanized steel with G90 (Z275) zinc coating conforming to ASTM A653A/A653M.
 - .1 Colour: selected by Departmental Representative from Manufacturer's standard colour range.
 - .2 Profile: 16mm rib at 152mm o.c.

2.3 CAULKING

- .1 Sealing compound: one component polyurethane base caulking compound to CGSB 19.13-M. Sealing compound to be installed in accordance with manufacture's recommendations.

2.4 ACCESSORIES

- .1 Isolation coating: alkali resistant bituminous paint.
- .2 Touch-up paint: as recommended by pre-finished material manufacturer.

PART 3 - EXECUTION

3.1 GENERAL

- .1 Metal flashing shall be as detailed, supplemented by recommendations of The S.M.A.C.N.A. Architectural Manual.
- .2 All free edges of metal flashing shall be strengthened by a fold at least 13mm wide, set out slightly and presenting a straight line and neat finish. Form flashings in 2.4m lengths, making allowance for expansion. When flashings exceed 600mm in height form flashing in 1.2m lengths.
- .3 Metal shall be formed on a bending brake, shaping trimmed and hard seaming shall be done on bench, as far as practicable, with proper sheet metal working tools. Angles of bends and folds for interlocking metal shall be made with full regard to expansion and contraction to avoid buckling or fullness in service and to avoid damaging surfaces of metal.
- .4 Dry joints are to be tight but not dented so as to permit slight adjustments of sheets and yet remain watertight.

- .5 Linear mating of sections of cap flashings and parapet flashings to be with an "S" lock joint.
- .6 Lock seams at all corners.
- .7 Corner mating to be completed with a standing seam.
- .8 Do not install fasteners through cant strips.
- .9 Apply isolation coating to entire area metal surfaces to be embedded in concrete or mortar, and between dissimilar metals, to suitable thickness (as approved by Departmental Representative).

3.2 ANCHORS AND FASTENERS

- .1 Space exposed fasteners evenly and in an organized pattern, keep number to a minimum. Where exposed to view, use metal fasteners of same material, colour, texture and finish as the metal on which they occur. Obtain approval before installing any exposed fasteners.

3.3 CAP FLASHING

- .1 Supply and install a continuous metal starter strip. Place fasteners a maximum of 38mm above drip edge with suitable fastener of sufficient length to penetrate a minimum of 25mm into substrate. Secure at 600mm O.C. maximum.
- .2 Supply and install metal cleats at specified spacing. Use fastener of sufficient length to penetrate a minimum of 25mm into substrate.
- .3 Use concealed fastenings except where approved by Departmental Representative.
- .4 Secure sections of metal in S-lock joints on all faces and allow for sufficient expansion and contraction between each piece. Ensure drip edges are inserted into the drip of the adjacent section.
- .5 Form cap flashings to profiles as shown on the detail drawings. Ensure positive drainage to the interior (roof surface) areas.
- .6 Where height of metal fascia exceeds 150mm, provide stiffening breaks every 150mm maximum. Breaks to be located at equal distance from the top and bottom of the fascia, and from each other.

3.4 METAL SIDING

- .1 Install metal siding plumb and overlapped as per manufacturer's requirements. Secure siding to sub-girts using self-drilling fasteners spaced at 300mm o.c.
- .2 Install metal flashings and trims required to complete installation and as indicated on the drawings.
- .3 At each corner, install proper required metal trim piece.

3.5 FASTENING BARS

- .1 Install metal fastening bars where detailed, secured at 400mm o/c with self-tapping flat head screws. Fastener length to be minimum 25mm. Fasteners to be approved by Departmental Representative.

3.6 REGLETS

- .1 Reglets that are not of sufficient height are not to be reused. New reglets are to be cut a minimum of 400mm above finished roof surface and are to be a minimum of 19mm wide and

25mm deep. Reglets to be cut prior to the application of the membrane flashings. Provide details of proposed cuts/locations for Departmental Representative approval prior to proceeding.

- .2 For existing reglets greater than 400mm above finished membrane, clean out and secure new metal flashing and caulk. (Minimum height shall be 450mm or as detailed).
- .3 Prime reglet prior to the application of the membrane flashings.
- .4 Turn top edge of metal flashing into walls, secure with lead wedge or friction fit pins into reglet and caulk joint at wall.
- .5 Secure sections of metal in S-lock joints on all faces and allow for sufficient expansion and contraction between each piece. Ensure drip edges are inserted into the drip of the adjacent section.

3.7 CAULKING

- .1 Install caulking in accordance with manufacturer's latest recommendations and guidelines.
- .2 Provide foam backer rod for joints greater than 19mm wide and/or 25mm deep, prior to installing caulking compound.
- .3 Tool finish smooth and true, to satisfaction of Departmental Representative.

3.8 CLEAN-UP

- .1 Daily as work proceeds and on completion, remove all surplus materials and debris resulting from foregoing work.
- .2 Drag a magnetic bar across work area and grounds to ensure removal of all discarded fasteners and sharp metal debris.
- .3 Remove all stains, caulking or other adhesive from all affected surfaces.