

PART 1 – GENERAL

- 1.1 RELATED SECTIONS .1 Section 01 33 00 - Submittal Procedures.
- 1.2 REFERENCES .1 American Society for Testing and Materials International (ASTM)  
.1 ASTM A 792/A 792M-10, Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.  
.2 ASTM D 523-14, Standard Test Method for Specular Gloss.  
.3 ASTM D 822/D 822M-13, Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings.
- .2 Canadian Roofing Contractors Association (CRCA)  
.1 Roofing Specifications Manual 1997.
- .3 Canadian Standards Association (CSA International)  
.1 CSA A123.3-05 (R2010), Asphalt Saturated Organic Roofing Felt (Reaffirmed 2010).  
.2 CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
- 1.3 SAMPLES .1 Submit duplicate 50 x 50 mm samples of each type of sheet metal material, colour and finish.
- 1.4 WASTE MANAGEMENT AND DISPOSAL .1 Separate and recycle waste materials.
- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on-site bins for recycling.
- .4 Place materials defined as hazardous or toxic in designated containers.
- .5 Ensure emptied containers are sealed and stored safely for disposal away from children.
- .6 Divert unused metal materials from landfill to metal recycling facility as approved by Consultant.
- .7 Unused paint and sealant material must be disposed of at an official hazardous material collections site as approved by Consultant.
- .8 Unused paint and sealant material must not be disposed of into sewer system, into streams, lakes, onto ground or in other location where it will pose health or environmental hazard.
- .9 Fold up metal banding, flatten and place in designated area for recycling.

## PART 2 – PRODUCTS

### 2.1 PREFINISHED STEEL SHEET

- .1 Prefinished steel with factory applied polyvinylidene fluoride.
  - .1 Colour: to match existing.
  - .2 Specular gloss: 30 units +/- in accordance with ASTM D 523.
  - .3 Coating thickness: not less than 22 micrometres.
  - .4 Resistance to accelerated weathering for chalk rating of 8, colour fade 5 units or less and erosion rate less than 20% to ASTM D 822 as follows:
    - .1 Outdoor exposure period 2500 hours.
    - .2 Humidity resistance exposure period 5000 hours.
  - .5 Thickness: 0.511 mm.

### 2.2 ACCESSORIES

- .1 Isolation coating: alkali resistant bituminous paint.
- .2 Plastic cement: to CAN/CGSB-37.5.
- .3 Underlay for metal flashing: asphalt laminated 3.6 to 4.5 kg kraft paper.
- .4 Sealants: Polyisobutylene, non-hardening, non-skinning, non-drying, non-migrating, mygrati sealant (colour to match adjacent).
- .5 Cleats: of same material, and temper as sheet metal, minimum 50 mm wide. Thickness same as sheet metal being secured.
- .6 Fasteners: of same material as sheet metal, to CSA B111, ring thread flat head roofing nails of length and thickness suitable for metal flashing application.
- .7 Washers: of same material as sheet metal, 1 mm thick with rubber packings.
- .8 Solder: to ASTM B 32.
- .9 Flux: rosin, cut hydrochloric acid, or commercial preparation suitable for materials to be soldered.
- .10 Touch-up paint: as recommended by prefinished material manufacturer.

### 2.3 FABRICATION

- .1 Fabricate metal flashings and other sheet metal work in accordance with applicable CRCA 'FL' series details.
- .2 Form pieces in 2400 mm maximum lengths. Make allowance for expansion at joints.

- .3 Hem exposed edges on underside 12 mm. 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.
- .5 Apply isolation coating to metal surfaces to be embedded in concrete or mortar.

#### 2.4 METAL FLASHINGS

- .1 Form flashings, copings and fascias to profiles indicated of 0.511 mm thick prefinished zinc-coated steel.

#### 2.5 PANS

- .1 Form pans to receive roofing plastic from 0.511 mm thick prefinished steel sheet metal with minimum 75 mm upstand above finished roof and 100 mm continuous flanges with no open corners. Solder joints. Make pans minimum 50 mm wider than member passing through roof membrane.

#### 2.6 REGLETS AND CAP FLASHINGS

- .1 Form surface mounted reglets, metal cap flashing of 0.511 mm thick sheet metal to be built-in masonry work for base flashings as detailed. Provide slotted fixing holes and steel/plastic washer fasteners. Cover face and ends with plastic tape.

### PART 3 – EXECUTION

#### 3.1 INSTALLATION

- .1 Install sheet metal work in accordance with CRCA FL series and as detailed.
- .2 Use concealed fastenings except where approved before installation.
- .3 Provide underlay under sheet metal. Secure in place and lap joints 100 mm.
- .4 Counterflash bituminous flashings at intersections of roof with vertical surfaces and curbs. Flash joints using S-lock forming tight fit over hook strips.
- .5 Lock end joints and caulk with sealant.
- .6 Install surface mounted reglets true and level, and caulk top of reglet with sealant.
- .7 Insert metal flashing under cap flashing to form weather tight junction.

- .8 Turn top edge of flashing into recessed reglet or mortar joint minimum of 25 mm. Lead wedge flashing securely into joint.
- .9 Caulk flashing at reglet with sealant.
- .10 Install pans, where shown around items projecting through roof membrane.