

## **PART 1 - GENERAL**

### **1.1 SECTION INCLUDES**

- .1 Materials, removal and installation of asphalt shingles and roll roofing.

### **1.2 RELATED SECTIONS**

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 01 35 43 - Environmental Procedures.
- .3 Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .4 Section 01 45 00 – Testing and Quality Control.
- .5 Section 01 61 00 - Common Product Requirements.
- .6 Section 01 78 00 - Closeout Submittals.

### **1.3 REFERENCES**

- .1 Canadian Roofing Contractors' Association (CRCA).
  - .1 CRCA Roofing Specification Manual - 1997.
- .2 Canadian Standards Association (CSA International).
  - .1 CAN/CSA-A123.1/A123.5-(R2010), Asphalt Shingles Made From Organic Felt and Surfaced With Mineral Granules/Asphalt Shingles Made From Glass Felt and Surfaced With Mineral Granules.
  - .2 CAN/CSA-A123.3-05(R2010), Asphalt Saturated Organic Roofing Felt.
  - .3 CAN3-A123.51-M85 (R2011), Asphalt Shingle Application on Roof Slopes 1:3 and Steeper.
  - .4 CSA B111-1974 (R12003), Wire Nails, Spikes and Staples.
- .3 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
  - .1 Material Safety Data Sheets (MSDS).

### **1.4 SUBMITTALS**

- .1 Manufacturer's Instructions: Provide to indicate special handling criteria, installation sequence, and cleaning procedures.
  - .2 Submit product data in accordance with Section 01 33 00 - Submittal Procedures.
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- .3 Submit WHMIS MSDS - Material Safety Data Sheets. WHMIS acceptable to Health Canada for asphalt shingles.
- .4 Submit product data sheets for asphalt shingles. Include:
  - .1 Product characteristics.
  - .2 Performance criteria.
  - .3 Installation instructions.
  - .4 Limitations.
  - .5 Colour and finish.

### **1.5 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, handle, store and protect materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Provide and maintain dry, off-ground weatherproof storage.
- .3 Remove only in quantities required for same day use.

### **1.6 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
  - .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 in accordance with Waste Management Plan.
  - .4 Place materials defined as hazardous or toxic in designated containers.
  - .5 Divert unused asphalt shingle materials from landfill to asphalt recycling facility approved by Departmental Representative.
  - .6 Dispose of unused asphaltic cement type materials at official hazardous material collections site approved by Departmental Representative.
  - .7 Fold up metal banding, flatten and place in designated area for recycling.
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## **1.7 EXTRA MATERIALS**

- .1 Provide maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.
- .2 All unused shingles remain property of Owner.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- .1 Fibreglass asphalt shingles: to CSA A123.1, A123.5.
  - .1 Type: three tab, strip self-seal, standard pattern.
  - .2 Colours: to be selected by Departmental Representative.
  - .3 Texture: to be selected by Departmental Representative.
  - .4 Warranty: limited, 30 years.
- .2 Roofing underlayment: self adhesive rubberized asphalt adhesive backed by a layer of high density cross laminated polyethylene membrane, 1.02 mm thick.
- .4 PVC drip edge: extruded profile of unplasticized polyvinyl chloride of minimum thickness of 0.8 mm.
- .5 Nails: to CSA B111, of galvanized steel aluminum, sufficient length to penetrate 19 mm into deck.
- .6 Cement: Plastic cement to CAN/CGSB-37.5.

## **PART 3 - EXECUTION**

### **3.1 APPLICATION**

- .1 Do asphalt shingle work in accordance with CAN3-A123.51 CAN3-A123.52 CRCA Specification except where specified otherwise.
- .2 Install drip edge along eaves, overhanging 12 mm, with minimum 50 mm flange extending onto roof decking. Nail to deck at 400 mm on centre.
- .3 Install roofing underlayment over roof area.
- .4 Install bottom step flashing (soaker base flashing) interleaved between shingles at vertical junctions.
- .5 Install asphalt shingles on roof slopes 1:3 and steeper in accordance with CAN3-A123.51.