

**Part 1 General****1.1 RELATED REQUIREMENTS**

- .1 Division 1 – General Requirements

**1.2 REFERENCES**

- .1 Canadian Construction Documents Committee
  - .1 CCDC 2-94, Stipulated Price Contract.
- .2 Canadian General Standards Board (CGSB)
  - .1 CAN/CGSB-19.13M-M87, Sealing Compound, One Component, Elastomeric Chemical Curing.
  - .2 CAN/CGSB-19.24M-M90, Multi-Component, Chemical Curing Sealing Compound.
  - .3 CGSB 19-GP-14M-84, Sealing Compound, One Component, Butyl-Polyisobutylene Polymer Base, Solvent Curing.
- .3 Sealant and Waterproofer's Institute - Sealant and Caulking Guide Specification.

**1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Division 1.
- .2 Product Data:
  - .1 Submit manufacturer's printed product literature, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.
  - .2 Submit WHMIS MSDS - Material Safety Data Sheets in accordance with Division 1.
- .3 Submit drawings stamped and signed by professional engineer registered or licensed in the Province of Ontario, Canada.
  - .1 Provide drawings of special joint conditions.
- .4 Quality Assurance Submittals: submit following in accordance with Division 1.
  - .1 Existing Substrate Condition: report deviations, as described in PART 3 - EXAMINATION in writing to Departmental Representative.
  - .2 Certificates: submit certificates signed by manufacturer certifying that materials comply with specified performance characteristics, physical properties and is compatible with the new and existing substrate.
  - .3 Manufacturer's Instructions: submit manufacturer's installation instructions and special handling criteria, installation sequence, cleaning procedures and compatibility information.
  - .4 Manufacturer's Field Reports: submit manufacturer's written reports within 3 days of review, verifying compliance of Work, as described in PART 3 - FIELD QUALITY CONTROL.

**1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Division 1.
- .2 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .3 Avoid spillage: immediately notify Departmental Representative if spillage occurs and start clean up procedures.
- .4 Clean spills and leave area as it was prior to spill.

**1.5 WASTE MANAGEMENT AND DISPOSAL**

- .1 Place materials defined as hazardous or toxic waste in designated containers.
- .2 Ensure emptied containers are sealed and stored safely for disposal away from children.

**1.6 AMBIENT CONDITIONS**

- .1 Install solvent curing sealants and vapour release adhesive materials in open spaces with ventilation.
- .2 Maintain temperature and humidity recommended by materials manufactures before, during and after installation.

**1.7 SEQUENCING**

- .1 Sequence work to permit installation of materials in conjunction with related materials and seals.

**1.8 WARRANTY**

- .1 Provide warranty under provisions of Division 1.
- .2 Warranty: include coverage of installed sealant and sheet materials which:
  - .1 Fail to achieve air tight and watertight seal.
  - .2 Exhibit loss of adhesion or cohesion.
  - .3 Do not cure.

**Part 2 Products****2.1 SHEET MATERIALS**

- .1 Type 1: Sheet Seal with self-adhesive bitumen laminated to high-density polyethylene film, nominal total thickness of 1 mm.
- .2 Type 2: Compatible transition membrane by same manufacturer and compatible with roof membrane and other surfaces.

**2.2 SEALANTS**

- .1 Sealants in accordance with Section 07 92 00 - Joint Sealants.
- .2 Primer: recommended by sealant or sheet material air barrier manufacturer appropriate to application.
- .3 Substrate Cleaner: non-corrosive type recommended by sealant or sheet material air barrier manufacturer compatible with adjacent materials.

**2.3 ADHESIVES**

- .1 Mastic Adhesive: compatible with sheet seal and substrate, thick mastic of uniform consistency.

**Part 3 Execution****3.1 MANUFACTURER'S INSTRUCTIONS**

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

**3.2 GENERAL**

- .1 Perform Work in accordance with requirements for materials installation.
- .2 Perform Work in accordance with National Air Barrier Association - Professional Contractor Quality Assurance Program and requirements for materials installation.

**3.3 EXAMINATION**

- .1 Verify that surfaces and conditions are ready to accept work of this section.
- .2 Ensure surfaces are clean, dry, sound, smooth, continuous and comply with air barrier manufacturer's requirements.
- .3 Report unsatisfactory conditions to Departmental Representative in writing.
- .4 Do not start work until deficiencies have been corrected.
  - .1 Beginning of Work implies acceptance of conditions.

**3.4 PREPARATION**

- .1 Remove loose or foreign matter, which might impair adhesion of materials.
- .2 Ensure substrates are clean of oil or excess dust; masonry joints struck flush, and open joints filled; and concrete surfaces free of large voids, spalled areas or sharp protrusions.
- .3 Ensure substrates are free of surface moisture prior to application of self-adhesive membrane and primer.
- .4 Ensure metal closures are free of sharp edges and burrs.
- .5 Prime substrate surfaces to receive sealants in accordance with manufacturer's instructions.

**3.5 INSTALLATION**

- .1 Install materials in accordance with manufacturer's instructions.
- .2 Secure sheet seal backing to masonry materials with self-adhesive backing.
  - .1 Position lap seal over firm bearing.
- .3 Lap sheet seal onto roof vapour retarder and seal with sealant as directed by manufacturer.
  - .1 Caulk to ensure complete air seal.
  - .2 Position lap seal over firm bearing.

- .4 Apply sealant within recommended application temperature ranges.
  - .1 Consult manufacturer when sealant cannot be applied within these temperature ranges.

### **3.6 FIELD QUALITY CONTROL**

- .1 Manufacturer's Field Services:
  - .1 Obtain written report from manufacturer verifying compliance of Work, in handling, installing, applying, protecting and cleaning of product and submit Manufacturer's Field Reports as described in PART 1 - SUBMITTALS.
  - .2 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 Schedule site visits, to review Work, as directed in PART 1 - QUALITY ASSURANCE.

### **3.7 CLEANING**

- .1 Proceed in accordance with Division 1.
- .2 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

### **3.8 PROTECTION OF WORK**

- .1 Protect finished work in accordance with Division 1.
- .2 Do not permit adjacent work to damage work of this section.
- .3 Ensure finished work is protected from climatic conditions.

### **3.9 SCHEDULES**

- .1 Wall Air/Vapour Barrier Over Exterior Surface of Gypsum Sheathing:
  - .1 Place sheet seal over sheathing surfaces.
- .2 Wall and Roof Junction:
  - .1 Lap sheet seal from wall seal material with 150 mm of contact over firm bearing to roof air seal membrane with 100 mm of full contact.
- .3 Roof System Air/Vapour Barrier Over Steel Deck:
  - .1 Gypsum sheathing, taped joints, apply membrane air seal over sheathing surfaces with Adhesive
  - .2 Edge seal membrane with sealant.

**END OF SECTION**