Part 1 General

1.1 SECTION INCLUDES

- .1 Materials and installation methods providing airvapour barrier materials and assemblies.
- .2 Air/vapour barrier materials to provide continuous seal between components of building envelope and building penetrations.

1.2 REFERENCES

- .1 Canadian Construction Documents Committee
 - .1 CCDC 2 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-19.18M-[M87], Sealing Compound, One Component, Silicone Base Solvent Curing.
 - .3 CAN/CGSB-19.24M-[M90], Multi-Component, Chemical Curing Sealing Compound.
 - .4 CGSB 19-GP-14M-[76], Sealing Compound, One Component, Butyl-Polyisobutylene Polymer Base, Solvent Curing.
- .3 NBCC 1995; Part 5 Environmental Separation
- .4 Sealant and Waterproofer's Institute Sealant and Caulking Guide Specification.

1.3 SUBMITTALS

- .1 Submit shop drawings in accordance with Section 01330 Submittal Procedures.
- .2 Submit manufacturer's product data sheets in accordance with Section 01330 Submittal Procedures
- .3 Submit manufacturer's installation instructions in accordance with Section 01330 -Submittal Procedures.

1.4 QUALITY ASSURANCE

.1 Perform Work in accordance with Sealant and Waterproofer's Institute - Sealant and Caulking Guide Specification requirements for materials and installation.

1.5 QUALIFICATIONS

.1 Applicator: Company specializing in performing work of this section [with minimum 5 years documented experience with installation of air/vapour barrier systems. Completed installation must be approved by the material manufacturer.

.2 Applicator: Company who is currently licensed by certifying organization must maintain their license throughout the duration of the project.

1.6 MOCK-UP

- .1 Construct typical exterior wall panel 5m long by 0.800 m high.
- .2 Locate where directed.
- .3 Mock-up may remain as part of the Work.
- .4 Allow 24 h for inspection of mock-up by Engineer before proceeding with air/vapour barrier Work.

1.7 PRE- INSTALLATION MEETINGS

.1 Convene prior to commencing Work of this section.

1.8 DELIVERY, STORAGE AND HANDLING

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

1.9 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.

1.10 PROJECT ENVIRONMENTAL REQUIREMENTS

- .1 Do not install solvent curing sealants or vapour release adhesive materials in enclosed spaces without ventilation.
- .2 Ventilate enclosed spaces.
- .3 Maintain temperature and humidity recommended by materials manufactures before, during and after installation.

1.11 WARRANTY

.1 For sealant and sheet materials the 12 months warranty period prescribed in subsection GC 32.1 of General Conditions "C" is extended to 24 months.

Part 2 Products

2.1 SHEET MATERIALS

- .1 Sheet Seal Type 1: Self-Adhesive bitumin laminated to high-density polyethylene film,
 - .1 Acceptable material: Grace 'Perma-Barrier'.
- .2 Sheet Seal Type 2: Thermofusable elastomeric bitumin membrane reinforced with a glass mat.
 - .1 Acceptable material: Soprema 'Sopra-flam'
- .3 Foam Seal [Type [4]]: Spray-applied medium density spray polyurethane foam insulation/air/vapour barrier.

2.2 Moisture Barrier

- .1 Moisture barrier for below-grade application:
 - .1 Acceptable Material: Bithuthene 3000 installed as per manufacturer's instructions.

2.3 SEALANTS

.1 Sealants in accordance with Section 079210 - Joint Sealers.

Part 3 Execution

3.1 EXAMINATION

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

3.2 PREPARATION

- .1 Remove loose or foreign matter which might impair adhesion of materials.
- .2 Ensure all substrates are clean of oil or excess dust; all masonry joints struck flush, and open joints filled; and all concrete surfaces free of large voids, spalled areas or sharp protrusions.
- .3 Ensure all 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 adhesive and sealants in accordance with manufacturer's instructions.

3.3 INSTALLATION

- .1 Install materials in accordance with manufacturer's instructions.
- .2 Install sheet seal between window and door frames and adjacent wall seal materials with sealant and mechanically fastened galvanized metal cleats
- .3 Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

3.4 PROTECTION OF WORK

- .1 Do not permit adjacent work to damage work of this section.
- .2 Ensure finished Work is protected from climatic conditions.

END OF SECTION