

PART 1 - GENERAL

- 1.1 SECTION INCLUDES .1 Materials and installation methods supplementing other air seal materials and assemblies.  
.2 Air seal materials to bridge and seal openings and penetrations of window frames, door frames, and steel framing members.  
.3 Air barrier to be tied into all windows, doors, louvers, roofing, floor slabs, waterproofing transitions.
- 1.2 RELATED SECTIONS .1 General Requirements Division 1  
.2 Thermal & Moisture Protection Division 7  
.3 Board Insulation Section 07 21 13  
.4 Sealants Section 07 92 10
- 1.3 REFERENCES .1 Sealant and Waterproofed Institution Sealant and Caulking Guide Specifications.
- 1.4 SUBMITTALS .1 Provide shop drawings of special joint conditions.  
.2 Provide product data on material characteristics, performance criteria, limitations, and independent air leakage, sustained wind load and gust wind test data.  
.3 Provide manufacturer's installation instructions indicating preparation, installation requirements and techniques, product storage and handling criteria
- 1.5 QUALITY ASSURANCE .1 Perform Work in accordance with Sealant and Waterproofed Institute - Sealant and Caulking Guide Specification requirements for materials and installation.  
.2 Maintain one copy of documents on site.
- 1.6 QUALIFICATIONS .1 Applicator: Company specializing in performing work of this section approved by materials' manufacturers.
- 1.7 ENVIRONMENTAL REQUIREMENTS .1 Do not perform installation during rain or inclement weather and on the area worked upon during the day.  
.2 Do not install solvent curing sealants or vapour release adhesive materials in enclosed spaces without ventilation.

- .3 Maintain temperature and humidity recommended by materials manufactures before, during and after installation.
- .4 Co-ordinate work of this Section with all other applicable sections to ensure continuity of the cut seal.
- 1.8 COORDINATION .1 Coordinate work of this section with all sections referencing this section.
- 1.9 WARRANTY .1 Submit written warranties.
- .2 Contractor hereby warrants the air barrier against failure due to defective materials and due to defective workmanship for three years respectively.
- .3 Include coverage of installed sealant and sheet materials which fail to achieve air tight and watertight seal, exhibit loss of adhesion or cohesion, or do not cure.
- 1.10 DELIVERY, STORAGE AND HANDLING .1 Delivery of Materials:
  - .1 Deliver materials to job site in undamaged and original packaging indicating the name of the manufacturer and product.
- .2 Storage of Materials:
  - .1 Store roll materials on end in original packaging.
  - .2 Store adhesive and primers at temperatures of 5°C and above to facilitate handling. Keep solvent away from open flame or excessive heat.
- .3 Handling of Materials:
  - .1 Protect rolls from direct sunlight until ready for use.
  - .2 Do not use adhesives containing solvent near open flame or spark.
- 1.11 SCHEDULING .1 Schedule work so as to provide an air tight seal at the end of each working day on the area worked upon during the day.
- .2 Co-ordinate work of this Section with all other applicable Sections to ensure continuity of the air seal.
- 1.13 MOCK-UP .1 Construct mock-up in accordance with Section 01340- Shop Drawings, Product Data, Samples and Mock-ups.

- .2 Construct mock-up 10m<sup>2</sup> minimum, of wall showing membrane overlaps, base flashing at building corners and wall openings. Mock-up may be part of finished work and should include window opening.
- .3 Allow 48 hr for inspection of mock-up by Department Representative before proceeding with membrane work.

## PART 2 - PRODUCTS

### 2.1 SHEET MATERIALS

- .1 Self-adhering Sheet Membrane: SBS modified bitumen membrane self-adhering type, complete with cross laminated polyethylene film on outer surface a release film on the inner surface, and having the following physical characteristics:
  - .1 Thickness: 1.0 mm minimum;
  - .2 Air Leakage: <0.01 L/s.m<sup>2</sup> @ 75 Pa to ASTM E283-91;
  - .3 Vapour permeance: 2.8 ng/Pa.m<sup>2</sup>.s to ASTM E96;
  - .4 Low temperature flexibility: Pass @ -30 C to CGSB 37-GP-56M;
  - .5 Elongation: 200% minimum to ASTM D412.
- .2 Sheet Membrane for Flashings and Tie-in Flaps: SBS sheet membrane compatible with all other air / vapour barrier for attachment to substrate by adhesive or mechanical means.
  - .1 Products that meet these specifications include:
    - .1 Blueskin AG as marketed by Monsey Bakor or approved equal.

### 2.3 ACCESSORIES

- .1 Sheet membrane primer, air barrier sealant, substrate cleaner: as per sheet membrane manufacturer's recommendations.
- .2 Adhesive: as recommended by manufacturer of sheet membrane.
- .3 Substrate Filler: as per manufacturer's recommendations.
- .4 Reinforcing tape: fibreglass reinforced, self-adhering drywall tape.

## PART 3 - EXECUTION

### 3.1 SCHEDULE

- .1 Tie-in flaps for door, window and other similar penetrations: sheet membrane flashings and tie-in flaps

- .2 Vertical surfaces that contain projections prior to installation of sheet membrane, including brick ties, etc.
  - .3 Under-side of horizontal surfaces including soffits.
  - .4 Over all other surfaces: self-adhered sheet membrane.
- 3.2 EXAMINATION
- .1 Verify that surfaces and conditions are ready to accept the Work of this section.
- 3.3 PREPARATION
- .1 Inspect all substrates prior to commencement of work of this Section.
  - .2 Clean and prime substrate surfaces to receive primer and membrane in accordance with manufacturer's instructions.
  - .3 Insure substrates are clean of oil or excess dust, and masonry joints are struck flush, and concrete surfaces free of large voids, spalled areas, or sharp protrusions.
  - .4 Insure new concrete has cured 14 days minimum. Insure any curing compounds used are clear resin based without oil, wax or pigments.
  - .5 Insure substrates are free of surface moisture prior to application of primer and membrane.
  - .6 Remove loose or foreign matter which might impair adhesion of materials.
- 3.4 PRIMING
- .1 Prime surfaces to be covered with air/vapour barrier in accordance with manufacturer's instructions.
- 3.5 INSTALLATION  
GENERAL
- .1 Mechanically secure tie-in flaps to those frames that are provided with no flaps. Provide flaps of width sufficient to overlap air/vapour barrier on building envelope.
  - .2 Install materials in accordance with manufacturer's instructions.
  - .3 Insure detail work is carefully carried out to ensure continuous air tightness of the membrane.
  - .4 Overlap air barrier over top of the air barrier tie-in flaps of windows, doors, frames, louvers, and other similar devices by a minimum of 75 mm and fully embedded in adhesive.

3.6 INSTALLATION -  
SHEET MEMBRANE

- .1 Overlap membrane minimum of 50 mm on end and side laps.
- .2 Position membrane for alignment with protective film in place. Roll back, remove protective film, and press firmly in place. When membrane is entirely in place, roll membrane including seams with a counter top roller to ensure full contact.
- .3 Cut membrane neatly around ties to form tight seal. Seal area around ties and any projections with sealant.
- .4 Seal end of membrane where it meets the end of the substrate at the end of the work day with sealant.

3.7 REVIEW BY CONSULTANT

- .1 Give Department Representative 48 hours notice when sections of work are complete so as to allow for review prior to installation of insulation.

3.8 PROTECTION OF  
FINISHED WORK

- .1 Do not permit adjacent work to damage work of this section.

END OF SECTION