

1 General

1.1 SECTION INCLUDES

- .1 Materials and installation methods providing primary air / weather barrier materials and assemblies including tie ins to vapor barriers and all other terminations.
- .2 Air/weather barrier materials to provide continuous seal between components of building envelope and building penetrations, including all windows and doors.

1.2 RELATED REQUIREMENTS

- .1 Section 06 08 99 - Rough Carpentry for Minor Works
- .2 Section 07 92 00 - Joint Sealants.
- .3 Section 08 50 00 - Windows

1.3 SUBMITTALS

- .1 At least 4 weeks prior to commencing installation of air/weather barrier membrane submit sample of membrane for Departmental Representative's review and approval.

1.4 QUALITY ASSURANCE

- .1 Perform Work in accordance with National Air Barrier Association - Professional Contractor Quality Assurance Program and requirements for materials.
- .2 Manufacturer's Representative to visit the site during the installation of the preparation for and installation of the first two (2) mock-ups. Manufacturer's Representative to review mock-up and provide a written report confirming the installation is in accordance with Manufacturer's requirements.

1.5 QUALITY ASSURANCE MOCK-UP

- .1 Fabricate a mock-up that will demonstrate the various aspects of the air barrier / window connection / cladding (steel, wood) installation and detailing.
- .2 The installation is to reflect the intent to have a full tie in of the air barrier to the entire perimeter of all wall openings, including windows, doors and louvers, providing a tight air and water seal and the relationship of the cladding installation to the openings.
- .3 The mock-up is to be reviewed by the Contractor, Membrane Installer, Window Installer and Departmental Representative prior to the Contractor moving forward with the installation of all other windows.
- .4 Allow 24 hours to convene the review on site.
- .5 Mock-up to be approved prior to fabrication of additional openings.
- .6 Openings installed prior to review and approval will be removed at the Contractors expense and rebuilt.
- .7 The approved mock-up may remain on site as part of the work and it will form the standard of acceptance for the remainder of the work.

1.6 QUALIFICATIONS

- .1 Applicator: Company specializing in performing work of this section with minimum 3 years documented experience with installation of air/weather barrier systems.

1.7 PRE- INSTALLATION MEETINGS

- .1 Attend a pre installation meeting to verify project requirements, manufacturers installation instructions, tie ins & quality expectations.

1.8 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
 - .2 Deliver, store and handle materials in accordance with manufacturer(s) written
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instructions.

1.9 SEQUENCING

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

1.10 GUARANTEES

- .1 The product manufacturer shall issue a written and signed document, issued in the name of the Owner, certifying the product will meet all the physical characteristics published by the manufacturer, for a period of five (5) years, starting from the date of Substantial Completion.

1.11 WASTE MANAGEMENT AND DISPOSAL

- .1 Collect and separate for disposal waste material generated by this Section.
- .2 Place in appropriate on-site bins in accordance with Waste Management Plan.
- .3 A clean worksite is mandatory at all times. Failure to maintain the site in a clean, safe condition shall result in the Departmental Representative initiating a clean-up and related costs being deducted from progress claims.

2 Products

2.1 SHEET MATERIALS

- .1 Through-wall flashing membrane (Self-Adhering): SBS modified bitumen, self-adhering sheet membrane complete with a cross-laminated polyethylene film, fully compatible with air/weather membrane, having the following physical properties:
 - .1 Thickness: 1 mm (40 mils) min.
 - .2 Film Thickness: 0.225mm (9.0 mils)
 - .3 Elongation: 200% to ASTM D412;
 - .4 Tensile Strength (film): 34500 kPa (5000 psi) ASTN D882
 - .5 Vapor permeance: 2.8 ng/Pa.m².s (0.05 perms) to ASTM E96
 - .6 Low temperature flexibility: -30°C to CGSB 37-GP-56M;

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 Departmental Representative 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 in accordance with manufacturer's instructions.
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3.3 INSTALLATION

- .1 Apply primer to all surfaces to receive membrane in a manner and at a rate recommended by manufacturer. Primed surfaces not covered by membrane during the same working day must be re-primed.
- .2 Apply membrane starting at bottom, lapping both ends and sides in accordance with manufacturer's instructions.
- .3 Seal end of membrane to substrate at end of days work and around any projections through membrane using only sealant recommended by membrane manufacturer.
- .4 Carry membrane around into all wall openings and seal at frames or other building components. Reinforce all corners with adhesive applied membrane using heated trowel to ensure joint tightness.
- .5 Where work of other trades is incomplete leave sufficient membrane to complete work of this Section to ensure continuity and integrity of air/weather barrier.
- .6 Repair damage to membrane as necessary.

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
