Part 1 GENERAL

1.1 GENERAL REQUIREMENTS

1. Division One, General Requirements, is a part of this Section and shall apply as if repeated here.

1.2 WORK INCLUDED

1. Materials and installation methods for air/vapour barrier located at the top of the fire hose tower.

1.3 RELATED WORK SPECIFIED ELSEWHERE

1. Rough Carpentry - Section 06 10 00
2. Insulation - Section 07 21 13 13, 07 21 16, 07 21 29
3. Sealants - Section 07 90 00

1.4 QUALITY ASSURANCE

1. All Air/Vapour Barrier products shall be applied by a contractor currently approved by Air/Vapour Barrier manufacturer and with mechanics with a minimum 5 years experience with the installation of this specified system. Provide written evidence of approval.

1.5 SUBMITTALS

1. Product Data: Provide data on material characteristics, performance characteristics, limitations and independent air leakage, sustained wind load and gust wind test data.

2. Submit shop drawings indicating all details of connections to roof hatches and masonry walls.

3. Submit samples of air/vapour barrier membrane which has the factory applied identification of the manufacturer clearly marked on it.

1.6 DELIVERY AND STORAGE

1. Deliver materials in original unopened packaging with all labels intact.

2. When stored at the job site, materials shall be protected from the weather by the proper use of raised platforms and waterproof coverings. Pallets of membrane shall not be double-stacked on the job site. Materials should not be stored at continuous temperatures above 38 deg. C. (100 deg. F.). Consult precaution statements on product label before use.

1.9 ENVIRONMENTAL REQUIREMENTS

1. Ensure application temperature and humidity recommended by material manufacturer is maintained before, during and after installation.

1.10 SEQUENCING

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

1.11 COORDINATION

1. Coordinate work of this section with all sections referencing this section.

1.12 WARRANTY

1. The product manufacturer shall provide a certificate certifying the performance of products for a period of 5 years from date of acceptance.

2. The installation contractor shall provide a certificate certifying all work shall remain in place as installed free from any membrane defect for a period of 5 years from acceptance.

Part 2 PRODUCTS

2.1 MATERIALS

1. Air/Vapour Barrier: (self-adhesive) Henry/Bakor "Blueskin SA" in rolls form, with an average thickness of 60 mils. Membrane is comprised a modified bitumen self adhesive membrane reinforced with non-woven polyester mat.

2. Primer for "Blueskin SA": Henry/Bakor "Blueskin primer".

3. Air barrier sealant: Henry/Bakor Polybitume.

4. Substrate Cleaner: Mineral spirits or xylol.

5. Liquid Sealant (Around Pipe Penetrations Prior to Membrane Installation): “Air Bloc 21" by Henry/Bakor.

6. End of Membrane Sealant: “Air Bloc 06" by Henry/Bakor.

Part 3 EXECUTION

3.1 EXAMINATION

1. Verify that surfaces and conditions are suitable prior to commencing work of this section.

2. Ensure that:

    1. surfaces are sound, dry, even, and free of oil, grease, dirt, excess mortar or other contaminants.

    2. concrete surfaces are cured and fry, smooth without large voids, spoiled areas or sharp protrusions.

    3. masonry joints are flush and completely filled with mortar, and all excess mortar sitting on masonry ties has been removed.

3.2 PREPARATION

1. Remove loose or foreign matter which might impair adhesion of materials.

2. Fill any voids with mastic substrate filler.

3. Clean and prime substrate joint/connection surfaces to receive transition strip in accordance with manufacturer's instructions.

3.3 INSTALLATION OF PRIMER

1. All surfaces required by manufacturer to receive air/vapour barrier must be completely primed by lambs wool roller, brush or spray equipment.

2. Apply at a rate of 4m5/L (200ft5/gal) depending on porosity and texture of surface or as directed by manufacturer.

3. Primed surfaces not covered during the same working day must be reprimed.

3.4 INSTALLATION

1. Install membrane horizontally with the sheet starting at the bottom and work progressing up the wall.

2. Position membrane for alignment with protective film in place. Roll back, remove protective film and press firmly in place. When membrane is in place, cut for ties or projections. When membrane is in place, roll membrane including seams with a counter top roller to ensure full contact.

3. Overlap all joints in membrane a min. 2" (51 mm).

4. All inside corners shall be double covered with initial strap of 12" (300 mm) width centred.

5. Construction and control joints, double ply covered with initial strip of 6" (150 mm) width and second strip of 18" (460 mm) width.

6. Areas around drains, piping, vents, etc. shall be liberally coated with Air Bloc 21 for radius of 6" (150 mm) around drain hub piping vents, etc. before and after application of membrane.

7. Seal around any openings with Air-Bloc 21 with a minimum 2 1/2" (64mm) overlap.

8. Seal end of membrane where is meets the substrate at the end of the days' work with Air-Bloc 06.

9. At all detail areas ensure continuity of air/vapour barrier to ensure continuous air tightness, especially at all corners, junctions, window and door locations. In corners and difficult areas, use "Vedatex Adhesive" to allow for sealing and application of reinforcing pieces of membrane.

10. Install membrane down over metal through wall flashings (by Section 04 04 25) with a min. 2" (50 mm) overlap at end joints.

3.5 PRECAUTIONS

1. Do not leave membrane exposed for more than 6 weeks. Install insulation as soon as possible to protect the membrane from damage by other trades.

2. Provide support for air/vapour barrier system on back and/or bottom side where it crossed over gaps such as masonry wall cavities, etc. Use copper flashing to support air/vapour barrier at gaps.

3.6 JOB COMPLETION

1. The contractor shall inspect the completed membrane and correct all defects to meet the specification.

2. Clean up all debris, excess materials and equipment and remove from site.

3. Any drippage or spills of coating sealant, mastic or primers shall be cleaned.

4. The General Contractor shall restrict construction traffic and equipment movement near the completed air barrier to only essential related trades. For trades continuing to work near the completed air barrier, appropriate protection shall be provided.

End of Section 07 27 13