

Part 1 General

1.1 SECTION INCLUDES

- .1 Materials and installation methods for membrane air barrier for exterior wall, soffit, and roof construction, using a rubberized asphalt composite sheet membrane.

1.2 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures
- .2 Section 01 74 19 - Construction/Demolition Waste Management And Disposal
- .3 Section 01 61 00 - Common Product Requirements

1.3 REFERENCE

- .1 Health Canada:
 - .1 Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS)

1.4 SUBMITTALS

- .1 Submit in accordance with Section 01 33 00.
- .2 Product Data,
 - .1 Submit manufacturer's data on materials. Include characteristics, performance criteria, and limitations
 - .2 Submit manufacturer's installation instructions, including preparation requirements, product storage and handling criteria.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00.
 - .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
 - .2 Avoid spillage. Immediately notify Departmental Representative if spillage occurs and start clean up procedures.
 - .3 Clean spills and leave area as it was prior to spill.

1.6 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19.
- .2 Place materials defined as hazardous or toxic waste in designated containers.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard, and other packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.

- .4 Ensure emptied containers are sealed and stored safely for disposal.

1.7 PROJECT ENVIRONMENTAL REQUIREMENTS

- .1 Unless otherwise directed by manufacturer, do not install air barrier under the following weather conditions:
 - .1 During inclement weather.
 - .2 When air temperature falls below -5° C, taking into consideration added wind chill factor.
 - .3 When substrate temperature is below -5° C.
- .2 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials, and regarding labelling and provision of Material Safety Data Sheets (MSDS) acceptable to Labour Canada.

1.8 SEQUENCING

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

1.9 WARRANTY

- .1 For air barrier material the 12 months warranty period prescribed in subsection GC 32.1 of General Conditions "C" is extended to 24 months.
- .2 Include coverage of installed air barrier material which fails to achieve air tight and watertight seal.

Part 2 Products

2.1 MATERIALS

- .1 Air Barrier Material: minimum 1.0 mm thick self-adhering composite sheet; comprised of rubberized asphalt integrally bonded to 0.2 mm thick film of polyethylene; incorporating an edge bead of rubberized asphalt or sealant at laps; acceptable products:
 - .1 Sopraseal Stick 1100 manufactured by Soprema Inc.
 - .2 Perm-A-Barrier manufactured by W. R. Grace & Co. of Canada Ltd.
 - .3 Air Shield manufactured by W. R. Meadows.
 - .4 Aquabarrier AVB manufactured by IKO Industries Ltd.
 - .5 Blueskin SA manufactured by Bakor Inc., a Henry Company.
 - .6 CCW-705 manufactured by Carlisle Coating & Waterproofing, Inc.
- .2 Primer, mastic, sealant, liquid membrane: types recommended by membrane manufacturer to suit substrate and weather conditions.

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 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 that 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;
- .3 Ensure substrates are free of surface moisture prior to application of primer.
- .4 Ensure metal closures are free of sharp edges and burrs.

3.3 PRIMING

- .1 Prime substrate surfaces in accordance with manufacturer's instructions. Use primer in all instances, and on all substrates surfaces.
- .2 Unless directed otherwise by manufacturer, re-prime surfaces left exposed overnight or left exposed to minimal moisture.

3.4 INSTALLATION

- .1 Install air barrier in accordance with manufacturer's directions, and generally as follows:
 - .1 Install continuously, in a horizontal coursing, starting at bottom of wall and roof areas, with joints lapped to shed water.
 - .2 Install in continuous strips, in as long lengths as possible to minimize joints.
 - .3 Install with minimum 65 mm side laps and minimum 125 mm end laps.
 - .4 At terminations, apply heavy pressure to barrier to ensure positive adhesion at edges.
 - .5 As each sheet is applied, roll barrier firmly and completely in place.
 - .6 Install barrier smooth and flat in place.
 - .7 Apply a trowel bead of mastic to all terminations at end of each day's work.
 - .8 After installation, check all laps by running a trowel along the seams to verify full adhesion.
- .2 Lap and seal air barrier to adjacent assemblies.

- .1 Seal to exterior windows, mechanical and electrical penetrations, and other adjacent assemblies and components to provide air-tight junctions.
- .2 Seal to steel door frames.
- .3 Seal to dampproofing on concrete foundations.
- .3 Place air barrier strips progressively around openings and penetrations, from sills to jambs to heads, so that barrier weather-laps at corners.
 - .1 Shingle lap around openings and at horizontal seams so that water sheds in same direction as overlap.
 - .2 Seams that overlap against the flow of water are not acceptable.
- .4 Repair defects as work progresses. Repair damage, punctures, fish-mouths, and misaligned or inadequately lapped seams with a patch of air barrier extending minimum 150 mm, in every direction from deficiency. Trowel edges and patches with mastic.
- .5 Do not allow air barrier to be concealed by other building materials or components until Departmental Representative has reviewed its application.

3.5 PROTECTION OF WORK

- .1 Protect finished Work in accordance with Section 01 61 00.
- .2 Do not allow air barrier to be left exposed to weather for a time greater than recommended by manufacturer.
- .3 Use all means necessary to protect installed air barrier from damage caused by work of trades who are installing other building components and materials over and adjacent to air barrier. Should air barrier be damaged prior to installation of overlying building materials or components, make repairs in accordance with air barrier manufacturer's instructions.

END OF SECTION