SPECIFICATION – CODE GREEN AIR/VAPOUR BARRIER

SPEC NOTE: *This guide specification is basic and must be adapted to suit the requirements of individual projects. It is written in accordance with the Three-Part Section Format but may be rearranged to suit any format required. Square brackets [ ] indicate choice, alternatives, data required for the specifier to make a decision.*

1 General

1.1 SECTION INCLUDES

.1 Materials and installation methods for a spray applied air/vapour barrier located in the non-accessible part of the wall.

.2 Materials and installation to bridge and seal openings and penetrations of window frames, door frames, masonry ties and similar leakage paths in the wall.

1.2 RELATED SECTIONS

SPEC NOTE: *Re 1.2 Limit the following listings only to sections that have a DIRECT affect on this section.*

.1 Section [_____]: Below grade [waterproofing] [damproofing] membrane.

SPEC NOTE: *Re 1.2.2. Specify concrete surfaces to be smooth and without large voids, spalled areas or sharp protrusions.*

.2 Section [_____]: Concrete wall construction.

SPEC NOTE: *Re 1.2.3. Specify masonry joints to be flush and completely filled with mortar, with all excess mortar sitting on brick ties to be removed.*

.3 Section [_____]: Masonry wall construction.

.4 Section [_____]: Steel stud wall construction.

.5 Section [_____]: Insulation.

.6 Section [_____]: Fire stopping materials.

.7 Section [_____]: Roofing membrane [and vapour retarder].

.8 Section 07900 - Joint Sealers: Sealant materials and installation techniques.

SPEC NOTE: *Re 1.2.9 and 1.2.10. Reference all wall appurtenances that penetrate air seal materials or assemblies;as follows.*

.9 Section [_____]: Door frames.

.10 Section [_____]: Window frames.

1.3 SUBMITTALS

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

1.4 QUALIFICATIONS

.1 Applicator: Company specializing in performing work of this section approved by air/vapour membrane material manufacturer.

1.5 MOCK-UP

SPEC NOTE: *Use 1.5 when specifying full sized erected assemblies required for review of construction, coordination of work of several sections, site testing, education of specific trades involved, or observation of installation.*

.1 Provide mock-up of air/vapour barrier materials under provisions of Section [01340].

.2 Construct typical exterior wall sample panel, [_____] m long by [_____] m wide, incorporating window and door frame and sill, insulation, and junction with roof membrane, illustrating materials interface and seals.

.3 Locate [where directed].

.4 Mock-up may [not] remain as part of the work.

.5 Allow [24] h for inspection of mock-up by [Consultant] before proceeding with air/vapour barrier work.

1.6 PRE-INSTALLATION CONFERENCE

.1 Convene [one week] prior to commencing work of this section, under provisions of Section [01040].

1.7 ENVIRONMENTAL REQUIREMENTS

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

1.8 SEQUENCING

.1 Sequence work under the provisions of Section [_____].

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

1.9 CO-ORDINATION

.1 Co-ordinate work of this section with all sections referencing this section.

2 Products

2.1 Air/Vapour Barrier Membrane: Code Green Air/Vapour Barrier, liquid applied 100% rubber copolymer membrane having an air leakage rate of 0.00220 L/s.m2 when tested to ASTM E283, nominal total thickness of 1 mm (40 mils) manufactured by Advanced Coatings Inc. in accordance with physical properties as stated in manufacturer's literature.

2.2 Transition Strip: Rub-R-Wall SA, composite sheet composed of rubberized asphalt integrally bonded to a high density cross laminated polyethylene, nominal 1.0 mm (40 mils) thickness, width as required, manufactured by Advanced Coatings Inc.

2.3 Transition Strip Primer: Rub-R-Wall SA primer manufactured by Advanced Coatings Inc.

2.4 Substrate Filler: Code Green mastic manufactured by Advanced Coatings Inc.

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 dry, smooth without large voids, spalled 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 APPLICATION

.1 Install materials in accordance with manufacturer's instructions.

SPEC NOTE: *Modify the following paragraphs as appropriate to drawing details. Ensure drawings utilize same terminology used in this section. Alternatively, schedule specific applications at end of this section. Liquid air/vapour materials should be placed over firm backup to achieve structural support in order to accomplish an effective and permanent air/vapour seal.*

.2 Transition joints: Seal with transition strip at beams, columns, changes in substrate material, and similar joints or connections to provide continuity of air/vapour barrier assembly. Generally, apply transition strip so that a minimum of 75 mm (3") coverage is achieved over both substrates. Position strip over firm bearing.

.3 Window frame perimeter, and door frames: Lap transition strip from wall substrate with 75 mm (3") of full contact over firm bearing to window or door frame with 25 mm (1") of full contact.

.4 Apply air/vapour barrier membrane within recommended application temperature ranges. Consult manufacturer when membrane cannot be applied within these temperature ranges.

.5 Using airless spray equipment having a minimum pressure of 20 684 kPa (3000 psi), apply first coat of air/vapour barrier membrane over [outer surface of inner wythe masonry] [over outer surface of inner metal stud wall assembly].

.6 Use alternating horizontal and vertical passes to ensure complete coverage of substrate and transition strips. Seal masonry anchors or other penetrations air tight.

.7 Check surfaces again and if necessary, fill any remaining gaps with mastic substrate filler prior to covering with membrane.

.8 Complete application of membrane at coverage rate of 2.6 to 3 m2/4.5 L (28 to 32 sq. ft/gal.) to provide seamless, monolitic surface to a thickness of 1 mm (40 mils).

SPEC NOTE: *Re 3.3.9. Specify installation of board or spray insulation in insulation section of specification or specify here as desired.*

.9 Adhere insulation to air/vapour barrier membrane after initial set time of approximately 1 to 2 hours, and while membrane is still tacky, to prevent convection currents occuring behind the insulation.

3.4 PROTECTION OF FINISHED WORK

.1 Protect finished work under provisions of Section [_____] - [_____].

.2 Do not permit adjacent work to damage work of this section.