Rub-R-Wall Commercial Grade
WATERPROOFING SYSTEM

Specification

SPEC NOTE: *This waterproofing 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 Substrate preparation.
- .2 Waterproofing membrane.
- .3 [Protective covering].
- .4 [Filter fabric].
- .5 [Insulation].
- .6 [Overburden].
- .7 [Precast pavers].
- .8 [Metal sleeve flashing].

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 [_____]: Asphalt Concrete Paving: Traffic bearing surface course.
- . 2 Section [_____]: Cast–In-Place Concrete: Concrete substrate [concrete traffic toping] [slope to drain].
- .3 Section [_____]: Concrete Finishing.
- .4 Section [_____]: Structural Precast Concrete.
- .5 Section [_____]: Unit Masonry.
- .6 Section [_____]: Rough Carpentry: Wood nailers, curbs, cants.
- .7 Section [_____]: Air Barriers
- .8 Section [_____]: Insulation: Rigid insulation cover.
- .9 Section [_____]: Sheet Metal Flashing and Trim: Counter Flashing.
- .10 Section [_____]: Joint Sealants: Sealants and application for waterproofing.
- .11 Section [_____]: Plumbing Specialties: Deck / Area drains

1.3 SUBMITTALS
- .1 Product Data: Provide data on material characteristics, performance characteristics, limitations and independent water vapor transmission test data

1.4 QUALIFICATIONS
- .1 Applicator: Company specializing in performing work of this section approved by 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 in several sections, site testing, education of specific trades involved, or observation of installation.*
- .1 Provide mock-up of materials under provisions of Section [01340].
- .2 Construct typical exterior wall sample panel, [____] feet long by [_____] feet wide, incorporating penetration seals [and junction with air barrier], illustrating materials interface and seals.
- .3 Locate [where directed].
- .4 Mock-up may [not] remain as part of the work.
- .5 Allow [24] hr inspection of mock-up by [Consultant] before proceeding with [waterproofing] work.

1.6 PRE-INSTALLATION CONFERENCE
- .1 Convene [one week] prior to commencing work of this section, under provisions of Section [01040].
- .2 Ensure attendance of representatives from inspection company, manufacturer and applicator, and parties directly affecting the work of this section.
- .3 Review conditions of installation, installation procedures, and coordination with related work. Establish manufacturer's requirements for approval of substrate.

1.7 ENVIRONMENTAL REQUIREMENTS
- .1 Ensure application temperature and humidity recommended by material manufacturer is maintained before, during and after installation.
- .2 Provide forced air circulation or adequate natural ventilation during installation and curing periods for enclosed application.
- .3 Do not expose materials vulnerable to water or sun damage in quantities greater than can be installed the same day.
- .4 Install [waterproofing] on dry surfaces, free of snow, and ice and during weather that will not introduce moisture into waterproofing system.

1.8 SEQUENCING
- .1 Sequence work under the provision 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 MATERIAL

.1 Waterproofing Membrane: Rub-R-Wall CG, liquid applied 100% rubber copolymer membrane having a water vapor permeance of 0.21 perms when tested to ASTM E96, nominal total thickness of [40 mils] [as indicated on the drawings], manufactured by Rubber Polymer Corporation in accordance with physical properties as stated in manufacturer's literature.

.2 Primer: Wet-Prime cold-sprayed, low viscosity primer as manufactured by Rubber Polymer Corporation.

.3 Substrate Filler: Rub-R-Wall CG Mastic, towel grade heavy-bodied rubber mastic as manufactured by Rubber Polymer Corporation.

.4 Joint and Crack Reinforcement Strip: Rub-R-Wall SA self-adhering SBS modified bitumen membrane.

.5 Fabric Reinforcement Sheet: Polyester mesh fabric recommended by membrane manufacturer.

.6 Protection Board: Dow ¼" fanfold Protection Board, non-perforated.

.7 Protection Board/Drainage Layer: Wrap-N-Drain, Dimpled, High Density Polyethylene (HDPE) sheet barrier providing a continuous air gap of approximately 3/8" between foundation walls and backfill.

.8 Protection Board/Drainage Layer: Geo-Wrap, a three dimensional polymeric core drain board with a non-woven geotextile fabric fully bonded to the top of the dimples of the core, compression strength 250 kN/m.

.9 Protection Board/Drainage Layer: Dow Styrofoam Perimate, 53mm (2.1") (R-10) or 62.5 mm (2.5") (R-12) extruded polystyrene foam insulation, Class A, Type 2 Drainage Product, CAN/ULC. S701-97 Type 4.

.10 Insulation: CAN/CGSB-51.20 Type IV, Type III, extruded, expanded, foamed poly, rigid board, [square] [shiplapped] edges or approved equal.

.11 Gravel for [Drainage Layer] [Setting Bed]: [Stone 19-32 mm (3/4" to 1-1.4")] size, well graded crushed stone, opaque, non-porous, washed, free from fines, long splinters, moisture, ice and snow.

SPEC NOTE: Prefabtricated Drainage System can be used in vertical and horizontal applications as a substitute for drainage layers or for drainage backfill against foundation walls. Revise specification when used in vehicular traffic bearing decks.

.12 Ballast: Washed, clean, crushed or round stones nominal size from ¾" to 1-1/4", uniformly graded.

2.2 ACCESSORIES:

.1 Backer Rod: Extruded, round, closed cell, heat resistant foam rod, 50% wide than joint, and as recommended by membrane manufacturer

.2 Fixing Bars: 1/8" x 1" metal bars, pre-drilled for fasteners at 9" oc.

.3 Fasteners: Non-corrosive self-tapping screws.

.4 Paver Pedestals: Elevated [neoprene] [high density polyethylene] pedestals with leveling plates and integral spacer ribs on upper surface, [_____] model manufactured by [_____].

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.
4. Verify that all penetrations, sleeves, etc. are properly placed and secure.

3.2 PROTECTION

.1 Protect adjacent work of other sections from splash, spray or spillage.

.2 Ensure drains, sleeves, vents, pipes and other items passing through substrates to be waterproofed are properly and rigidly installed.

.3 Commencement of installation implies acceptance of [site conditions], [surfaces], [substrate].

3.3 PREPARATION - GENERAL

.1 Remove loose or foreign material such as grease, frost, paint, form oil or other materials which might impair adhesion of materials.

.2 Fill any voids with mastic substrate filler.

SPEC NOTE: Check if project requires treatment of cracks, surface defects, and joints. Coordinate articles 3.3, 3.4 and 3.5 accordingly. For cracks and joints more than 1/8" in width, specify standard reinforcing sheets in lieu of fabric reinforcement.

.3 Repair defects which will impair adhesion and performance of [waterproofing].

.4 Reinforce cracks larger than 1/16" wide with layer of 9" wide Rub-R-Wall SA self adhered modified bitumen membrane centered over crack.

3.4 PREPARATION – CONCRETE DECK

.1 Fill cracks, rivulets, holes and depressions larger than 1/8" with substrate filler, in accordance with manufacturer's instructions.

.2 Grind smooth fish tails, sharp projections and spills from other pours.

.3 Light sandblast or blastrack finish concrete surfaces to remove laitance, curing compounds and sealers.

.4 If necessary apply primer to damp substrates at a rate as recommended by membrane manufacturer. Allow primer to dry.

3.5 MEMBRANE APPLICATION

.1 Apply membrane and reinforcing in accordance with manufacturer's instructions. Ensure full bond of membrane to substrate.

.2 Apply membrane within recommended application temperature ranges. Consult manufacturer when membrane cannot be applied within these temperature ranges.

.3 Using airless spray equipment having a minimum pressure of 3000 psi, apply waterproofing membrane in multiple, uniform passes to provide seamless, monolithic cured membrane thickness of 40 mils as determined by standard gauge.

.4 Complete application of membrane over vertical and horizontal surfaces, including previously reinforced areas, at a rate of 23 to 27 sq. ft./gal for poured concrete substrates. Continue membrane up vertical surfaces 6" where detailed.

.5 For foundation walls commence application at the top of footings, keeping the spray orifice 12-16" away from the wall. Carry the membrane up the wall to previously determined height.

.6 Ensure water tight seal at items penetrating membrane.

.7 Ensure continuity of building envelope air barrier.
.8 Upon completion of application, after allowing a cure time of approximately30 minutes, depending on temperature and humidity, and while membrane is still tacky, adhere protection board [and/or insulation]. Take care to ensure proper initial placement. Do not overlap protection board.
.9 Do not commence backfill earlier than 24 hours after membrane application. Ensure that backfill material is free of debris, organic material, boulders, rocks, concrete block debris or any other deleterious material considered unsuitable fill.
SPEC NOTE: Add, as necessary, clauses pertaining to installation of insulation and filter fabric, metal flashing, or other items as determined by job conditions.

3.6 FIELD QUALITY CONTROL
.1 An independent inspection and testing company appointed [and paid for by the owner] [under Cash Allowance specified in Section 01020] [will carry out inspection and testing in accordance with the General Conditions] [and Section _____]

3.7 CLEANING
.1 Clean work in accordance with Section [_____].
.2 Clean to the Consultant's approval, soiled surfaces, spatters, and damage caused by work of this Section.
.3 Check drains to ensure cleanliness and proper function, and remove debris, equipment and excess material from the site.

3.8 PROTECTION OF FINISHED WORK
.1 Protect finished work under provisions of Section [_____[- [_____].
.2 Do not permit adjacent work to damage work of this section.

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