(First Issue 06/15/04)

ARCHITECTURAL SPECIFICATIONS

RUB-R-WALL® PLUS AQUA WATERPROOFING MEMBRANES

PART 1. FLUID APPLIED, 100% RUBBER POLYMER WATERPROOFING

1.01 SCOPE

A. The scope of work includes, but is not limited to the following:

1. Fluid-applied, 100% rubber polymer membrane as sub-grade foundation waterproofing.

2. Foam boards, sheetings and geotextiles as protective coverings.

1.02 REFERENCES

A. ASTM D-412	Rubber Properties: in Tension
B. ASTM D2240	Rubber Properties: Durometer Hardness
C. ASTM C836	Crack Bridging & Low Temperature Flexibility
D. ASTM D95	Liquid Water Absorption
E. ASTM E96-72	Water Vapor Permeance
F. ASTM D2020	Resistance to Fungus
G. ASTM GT29-75	Resistance to Algae
H. ASTM D4299-83	Resistance to Bacteria
I. ASTM E154	Resistance to Degradation in Soil
J. ASTM D466	Resistance to Re-emulsification
K. ASTM D2939	Adhesion Loss
L. NRCA	Waterproofing Manual
M ASTM D2938, Sec 15	Resistance to Water, Blistering And/Or Re-emulsification
N TT-C-555B	Ability to Resist Hydrostatic Pressure Over Non-Structural Cracks
O CGSB37-GP-52M Section 7.2.10	Resistance to Dynamic Impact

1.03 MANUFACTURER

A. All waterproofing membrane products as referred to in this specification are as manufactured by RPC, Inc. (Rubber Polymer Corporation), Akron, Ohio, herein referred to as RPC.

1.04 QUALIFICATIONS

A. Rub-R-Wall Plus Aqua Waterproofing membranes are to be applied only by applicators certified by RPC. The use of RPC products must be done so in strict accordance with RPC and standard waterproofing practices in order to maintain applicable warranties.

B. All associated products used in conjunction with Rub-R-Wall Plus Aqua Waterproofing membranes and forming an integral part of the waterproofing system must meet the approval of RPC in order to maintain applicable warranties.

1.05 MATERIALS

A. All membrane materials referred to in this section are 100% rubber polymer products that yield an asphalt-free, highly elastic, seamless waterproofing membrane.

B. All membrane materials shall be certified by the manufacturer that they meet or exceed the manufacturer's specifications.

C. Waterproofing products as manufactured by RPC are intended for use according to the following schedule:

1. Rub-R-Wall Plus Aqua Waterproofing

a. All sub-grade foundation applications on new construction substrates such as concrete, masonry and ICF forms. Rub-R-Wall Plus Aqua may be applied to other substrates provided approval is obtained from the manufacturer.

b. Aqua is <u>not</u> to be used as an underlayment for decks, slabs, etc.

D. All membrane materials are to be delivered to the job site in either 55 gallon drums or in self-contained tanks which are an integral part of the spray unit. Mastics are supplied in 1-quart caulking tubes, 1 gallon units or 5 gallon units and are sprayed by tank sprayer, brush or troweling knife, Primers are supplied in 5 gallon units or in 55 gallon drums.

E. The use of a protection course is not generally required for Rub-R-Wall Plus Aqua. However, if specified, all protective, insulation or drainage media that become an integral part of the membrane system must meet the approval and acceptance of RPC. Alternative products must be submitted according to Section 1.06. Protection fabrics, sheetings and boards may be one of, or a combination of several products such as the following:

1. Standard closed-cell extruded polystyrene foam boards such as manufactured by Amoco, Dow, Owens Corning or other RPC approved equal. These boards may not be used if the thickness is 1/4" or less and are perforated. Manufacturer recommends the use of a board 1/2" or greater in areas where heavy clay or shale is present or the use of products such as listed in no. 2 which follows:

2. Cross-laminated high density poly-ethylene sheeting such as Rufco 300 as manufactured by Raven Industries or other RPC approved equal.

3. Slit-film, non-woven geotextiles such as Amoco "Amowrap", Webtec "Terra Tex" or other RPC approved equal.

4. Sheet drain and protection board as manufactured by America Wick Drain or other RPC approved equal.

5. Rigid foam extruded polystyrene foam insulation and drainage boards such as Perimate by Dow Chemical or other RPC approved equal.

1.06 SUBMITTALS

A. An "Approved Course List" issued by RPC is available.

B. All submittals for alternative products or products not listed herein which are to be used as an integral part of the membrane system and requiring RPC approval as provided for this specification shall be done so through the project engineer requesting approval by submitting such for approval prior to installation to the following:

Rubber Polymer Corporation
Attn: Mike Roberts, Sr., President
1135 West Portage Trail Extension
Akron, Ohio 44313 USA

PART 2. EXECUTION

2.01 APPLICATION OF RUB-R-WALL PLUS AQUA MEMBRANES

A. Sub-Grade Foundations

1. Preparation

a. Footers must be clean and free of dirt, sand, soil or any other deleterious materials that would prevent full adhesion of the rubber membrane. Footers must be dry and free of any visible water. Any water present must be removed and the substrate dried.

b. Concrete walls must be free of voids and honeycomb. Any such areas, if present, must be repaired by standard methods using a cementitious grout. Form ties must be removed inside and outside below the concrete surface such that the membrane will not possibly be punctured. Minor surface defects such as entrapped air holes and tie holes may be repaired by using Rub-R-Wall Mastic.

c. Concrete walls may be sprayed 24-48 hours after the form stripping process is complete, provided any excess water or moisture due to subsequent rains, etc., is not present.

d. Concrete walls must be smooth and free of projections and other foreign material such as organic matter, asphalt or other frozen material.

e. Medium or high density concrete masonry must be parged. Repair to voids must be done at least 24 hours prior to membrane application. If the masonry cores are to be filled, this must also be done prior to the application. The fresh core fill must be cured before the Rub-R-Wall Plus Aqua application.

f. Brick ledges and buttress walls constructed from masonry must be capped prior to application of the membrane.

g. Check all wall penetrations to insure that they are secure and in the correct and final position.

2. Application

a. The RPC product must be heated to the proper temperature (Refer to specific product specifications). This is generally about 140-160° F depending on the particular product used.

b. Aqua products should not be sprayed when the ambient temperature is below 45° F.

c. Properly ground the spray vehicle, spray equipment, product drums and product tank.

d. Spray equipment must meet the minimum standards as set forth by RPC.

e. Wear only approved safety equipment as specified by all of the applicable safety regulations. All standard safety procedures are to be followed.

f. Proceed to apply the waterproofing membrane in accordance with RPC standards. Application should be made in multiple, uniform passes such that a wet membrane thickness of 60-80 mils is obtained as determined by a standard mil gauge. A cured thickness of 30-40 mils will result. Where additional membrane thickness is required allow a minimum cure time between applications of 2 hours before proceeding with additional application to the specified mil thickness. Typically, the coverage rate should be 20-25 SF/gal on masonry walls and poured walls. Backfill no later than 4 weeks after application.

g. Spray the top of the footer 3" away from the wall. It is not desirable to spray the entire top surface of the footer. Continue the membrane up the wall to a minimum height of 6" above the final grade line or a previously determined elevation.

h. After completion of various sections of the wall, check for thin spots and voids. Re-Spray any such areas as necessary to obtain proper mil thickness.

i. If a protection, insulation or drainage course is specified, allow a cure time of approximately 24 hours (depending on ambient temperature and humidity) before application by mechanically fastening or the use of Rub-R-Wall Mastic. Do not overlap protection boards. Geotextiles should overlap 3 ".

j. Footer drains must be installed in accordance with standards. Downspouts must be tiled separately from the footer drains.

-END TEXT-