



Rub-R-Wall® Commercial Grade (CG) Waterproofing System Guide Specification

Rub-R-Wall® Commercial Grade (CG) Waterproofing System is designed for commercial, industrial, and institutional waterproofing applications. This 100% rubber all-polymer membrane can be spray applied to both vertical and horizontal substrates including foundation walls, elevator shafts, slabs, planters, etc.

Since 1992, Rubber Polymer Company has delivered the highest quality products for the waterproofing industry. We developed our products to be environmentally friendly by providing asphalt free formulas that are easy to apply, create a membrane protective barrier, and help us all to be environmentally responsible.

Consult Rubber Polymer Company for assistance in editing this section for your project. Visit www.rpcinfo.com to locate a sales manager in your region.

This section is based on the products of Rubber Polymer Company, Cumming, GA: (770) 410-1545; sales@rpcinfo.com.

SECTION 071400 – FLUID-APPLIED WATERPROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

Specifier: Rub-R-Wall® CG Waterproofing may be used either for vertical or horizontal applications. Edit section as required for project application.

1. Fluid-applied, 100 percent rubber-polymer waterproofing membrane for [vertical] [and] [horizontal] surfaces.
2. Accessories.

1.2 REFERENCES

Specifier: If retaining this Article, edit list to correspond to references retained after editing.

A. References, General: Versions of the following standards current as of the date of issue of the project or as required by applicable code apply to the Work of this Section.

B. ASTM International:

1. ASTM C836/C836M - Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course.
2. ASTM C898/898M - Standard Guide for Use of High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with Separate Wearing Course.
3. ASTM C1471/C1471M - Standard Guide for the Use of High Solids Content Cold Liquid-Applied Elastomeric Waterproofing Membrane on Vertical Surfaces.
4. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
5. ASTM D95 - Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation.
6. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension.
7. ASTM D903 - Standard Test Method for Peel or Stripping Strength of Adhesive Bonds.
8. ASTM D2020 - Standard Test Method for Mildew (Fungus) Resistance of Paper and Paperboard.
9. ASTM D4299-83 - Test Method for Effect of Bacterial Contamination on Performance of Adhesive Preparations and Adhesives Films.
10. ASTM D5385/D5385M - Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes.
11. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
12. ASTM E154/E154M - Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.
13. ASTM G29-75 - Standard Practice for Determining Algal Resistance of Plastic Films.

1.3 SUBMITTALS

A. Product Data: Manufacturer's technical literature including standard application details for each product specified.

- B. Manufacturer's Instructions: Include manufacturer's written instructions for substrate preparation.
- C. Shop Drawings: For conditions not addressed by manufacturer's standard details.
 - 1. Show locations and extent of waterproofing, accessory materials, and protection layers.
 - 2. Include details at substrate joints and cracks, penetrations, corners, and terminations.

1.4 QUALITY ASSURANCE

Specifier: Verify availability of approved installers in your area by contacting [Rubber Polymer Company](#), (770) 410-1545.

- A. Installer: Firm with record of successful installations on projects of similar scope and employing workers and supervisors trained and approved by manufacturer.
- B. Mock-Ups: To set quality standards for materials and execution.
 - 1. Install at location acceptable to Architect.
 - 2. Size: [As shown in Drawings] [100 sq. ft. minimum].
- C. Pre-Installation Meeting: Discuss handling and installation techniques, coordination of other work, protection, and scheduling of work to cover membranes.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original unopened packages with manufacturer's labels intact.
- B. Comply with manufacturer's instructions for storage. Protect against damage.
- C. Store materials above 40 deg. F.

1.6 FIELD CONDITIONS

- A. Environmental Limitations: Apply membranes within the range of ambient and substrate temperatures recommended by manufacturer.
- B. Do not apply to a damp or wet substrate or during snow, rain, fog, or mist.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Rubber Polymer Company, <https://www.rpcinfo.com/>, sales@rpcinfo.com, (770) 410-1545.
- B. Substitutions: [None acceptable] [In accordance with Instructions to Bidders and Division 01 General Requirements].
- C. Source Limitations: Obtain membrane materials and accessories from single manufacturer.

2.2 WATERPROOFING MEMBRANE

- A. Waterproofing Membrane: Fluid-applied, seamless, 100-percent rubber copolymer membrane capable of preventing water infiltration exceeding limits indicated. No asphalt content permitted.
1. Product: [Rub-R-Wall® Commercial Grade \(CG\) Waterproofing System](#) by Rubber Polymer Company.
 2. Hydrostatic Pressure Resistance: Greater than 138 ft. of water; ASTM D5385/D5385M.
 3. Elongation: Greater than 1,200 percent; ASTM D412, (die C).
 4. Low-Temp Flexibility: Flexible to -20 deg. F; bend around 0.5 in. mandrel.
 5. Abrasion Resistance: Less than .10 percent membrane loss; 700 psi on 0.06 by 0.06-inch point moving 1 inch per second.
 6. Asphalt Content: 0.0 percent.
 7. Block Peel Adhesion: 8.03 lbs./inch; ASTM D903.
 8. Crack Bridging: Exceeds 10 cycles to 1/8 inch at -15 degrees F; ASTM C836/C836M.
 9. Water Vapor Permeance: Maximum 0.093 perms; ASTM E96/E96M Procedure B, Water Method.
 10. Liquid Water Absorption: Less than 0.5 percent weight; ASTM D95.
 11. Resistance to Bacteria: No attack; ASTM D4299-83 (modified).
 12. Resistance to Degradation in Soil: Excellent, ASTM E154/E154M (soil preparation).
 13. Resistance to Algae: No attack, ASTM G29-75 (modified).
 14. Resistance to Fungus: No attack, ASTM D2020 (modified).
 15. Resistance to Chemical Attack: Unaffected by chemicals in concentrations typically found in soils.
 16. Solvent Resistance: Exceeds performance of modified asphalts.
 17. Life Expectancy: Exceeds 100 years; Arrhenius Projection Theory.

2.3 PROTECTION COURSE

[Specifier: Retain "Fan-Folded Board Insulation," "Molded-Sheet Drain Course," "Insulated Drainage Panels," below or insert other methods of waterproofing protection.](#)

[Specifier: Board insulation below is used to protect vertical waterproofing from backfill operations.](#)

- A. Fan-Folded Board Insulation: Fan folded, with a core of extruded-polystyrene board insulation faced with plastic film, nominal thickness of 1/4 inch.

[Specifier: Panels in paragraph below protect waterproofing while providing a drainage pathway for water. Retain first option for vertical applications; retain second option for horizontal applications. Molded-sheet drainage panels are sometimes installed beneath grooved insulation board for plaza deck applications.](#)

- B. Molded-Sheet Drainage Panel: Three-dimensional composite subsurface drainage panels consisting of a [nonwoven] [woven] geotextile facing laminated to one side of a studded, molded-plastic-sheet drainage core.

[Specifier: Retain first option below for vertical applications; retain second option for horizontal.](#)

- C. Drainage Board Insulation: Extruded-polystyrene board insulation complying with ASTM C578, [shiplap] [square] edged, grooved to facilitate drainage.

2.4 ACCESSORIES

- A. Accessories, General: Provide substrate repair materials, reinforcement strips, and other accessory materials compatible with waterproofing membrane as required to complete the work and as recommended by waterproofing membrane manufacturer.
- B. Primer: Manufacturer's standard liquid-applied factory-formulated primer.
 - 1. Product: Rub-R-Wall® SA Primer by Rubber Polymer Company.
- C. Substrate Repair Materials: Manufacturer's standard heavy-bodied rubber mastic; trowel grade.
 - 1. Product: Rub-R-Wall® Mastic by Rubber Polymer Company.
- D. Reinforcement Strips: Self-adhering SBS-modified-bitumen sheet membrane, 40 mil thickness, for repair and reinforcement of cracks and joints.
 - 1. Product: Rub-R-Wall® SA Sheet Membrane by Rubber Polymer Company.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examination: Verify conditions with installer present to confirm that substrates are sound, free of contaminants and ready for installation of waterproofing.
 - 1. Concrete Substrates: Verify that concrete has cured, and surface is clean and free of oil, form release agent, curing materials and other contaminates.
 - 2. Masonry Substrates: Verify that masonry joints are cut flush and filled with mortar.
- B. Verify that sleeves, vents, and pipes passing through substrate are rigid and secure.
- C. Correct defects before proceeding.

3.2 PREPARATION, GENERAL

- A. Protect and mask adjoining surfaces to prevent overspray and spillage. Close drains and penetrations to prevent migration of waterproofing fluids.
- B. Clean substrates of dirt, sand, soil, or any other materials that would prevent full adhesion of the waterproofing. The substrate must be dry and free of any visible water.

3.3 PREPARATION, CONCRETE SUBSTRATES

- A. Grind smooth fish tails, and sharp projections.

Specifier: Retain first option in paragraph below for vertical surfaces; retain second option for horizontal surfaces.

- B. Joint and Crack Treatment: Prepare, treat, and fill all voids, cracks, honeycombs, pockets, and holes according to manufacturer's instructions and [ASTM C1471/C1471M] [and] [ASTM C898/898M]. Fill holes with mastic. Provide a smooth installation surface.

1. Reinforce cracks larger than 1/16 inch with 9-inch-wide reinforcement strips.
- C. Concrete Decks: Lightly sandblast concrete surfaces to remove laitance, curing compound and sealers.

3.4 WATERPROOFING INSTALLATION

- A. Comply with manufacturer's written installation instructions.
- B. Prime all areas to receive waterproofing with primer/tack coat prior to membrane installation according to manufacturer's instructions. Allow primer to dry.
- C. Vertical Surfaces: Apply waterproofing in accordance with ASTM C1471/C1471M.
- D. Horizontal Surfaces: Apply waterproofing in accordance with ASTM C898/C898M.
- E. Spray apply waterproofing material in multiple uniform passes to achieve 60 to 80 mils wet thickness (30 to 40 mils dry) free of entrapped gases and pinholes. Verify thickness with wet mil gauge.
- F. Install to ensure continuity with building envelope air barrier.
- G. Protection Course: Install according to manufacturer's instructions.
1. Adhered Protection Course: Cure membrane for at least 30 minutes and adhere protection course insulation while membrane is still tacky.
 2. Molded-Sheet Drainage Panels: Place and secure with geotextile facing away from substrate according to manufacturer's written instructions. Do not use mechanical fasteners that penetrate waterproofing. Lap edges and ends of geotextile fabric to maintain continuity.
 3. Drainage Board Insulation: Install over waterproofed surfaces. Cut and fit to within 3/4 inch of projections and penetrations.
 - a. Vertical Surfaces: Set insulation units in adhesive applied according to manufacturer's written instructions.
 - b. Horizontal Surfaces: Loose-lay insulation units unadhered and tightly abutted according to manufacturer's written instructions. Stagger end joints.
- H. Do not begin backfilling operations earlier than 24 hours after membrane installation.

3.5 PROTECTION AND REPAIRS

- A. Allow membrane to fully cure for 24 hours.
- B. Protect installed waterproofing from damage.
- C. Repair all scratches and minor defects to provide a complete waterproofing membrane.

END OF SECTION