

# POLY WALL®

## 1. Product Name<sup>Spec Sheet</sup>

CRACK GUARD Systems

## 2. Manufacturer

Protective Coatings  
Technology, Inc.  
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## 3. Product Description

### BASIC USE

CRACK GUARD waterproofing system (*CRACK GUARD*) is designed for use on concrete and concrete masonry as well as on insulated concrete forms (ICFs). Typical application includes foundation waterproofing, split slab construction such as plaza decks, and tunnels.

### COMPOSITION & MATERIALS

*CRACK GUARD* is a 38.5" wide sheet membrane for waterproofing substrates including concrete, concrete masonry and wood. Available Accessory products include *Poly-Wall PRO 1000*, *Poly-Wall PRO 2000*, and *Poly-Wall Activator*.

*Crack Guard* is to be used when ambient and surface temperatures at the time of application and for a minimum of 36 hours after application is above 45 degrees F. For surface or ambient temperatures below 45 degrees the use of *Poly-Wall Activator* is recommended. *Crack Guard* is recommended for use on extruded (closed cell) ICFs.

*CRACK GUARD* is a cold applied, self adhesive, elastomeric membrane consisting of a layer of polymer-modified asphalt laminated to a layer of high-density polyethylene. *Crack Guard* is designed to provide a barrier to water passage and bridge

small shrinkage cracks up to 1/16". *CRACK GUARD* can be applied to subterranean concrete, concrete block and wood structures to prevent the passage of water. *CRACK GUARD* is designed for positive side hydrostatic pressure and is not recommended for surfaces subject to negative side hydrostatic pressure. For best results a primer coat of *Poly-Wall PRO 1000 Or Poly-Wall PRO 2000* is highly recommended. When used on Insulated Concrete Forms a primer coat is NOT recommended.

*Poly-Wall PRO 1000 and PRO 2000* are liquid applied thermoplastic protective coatings that are compatible with concrete, concrete masonry and wood. These coatings are used as a primer for the *CRACK GUARD* systems. These primer coats are designed not only to improve adhesion but also to reduce the possibility of bladders forming between the substrate and the flexible coating. Use of these coatings as a primer provides double waterproof protection as well as substantially increasing the strength and longevity of the bond with the substrate.

## 4. Technical Data See Table

## 5. Installation

### GENERAL

Read and carefully follow the instructions contained on this spec sheet as well as in the most current Manufacturer's Guide Specifications.

### SURFACE PREPARATION

A clean, dry, smooth surface is required. Although no particular curing time is required prior to applying primer, surface must be free of frost, ice or moveable surface water. Fill all surface defects, voids and exposed aggregate with concrete or a Portland cement grout prior to primer application. All rough concrete, surface defects and surface protrusions must be made smooth and any control joints filled flush.

### PRIMING

Prime surface with *Poly-Wall PRO 1000* at a rate of 60 square feet per gallon to obtain a wet thickness of 26 mils or *Poly-Wall PRO 2000* at a rate of 80 square feet per gallon to obtain a wet thickness of 20 mils. Allow to dry prior to the application of the *CRACK GUARD*. Drying time will vary depending on temperature and air movement conditions. Test for dryness by feeling the coating. If the coating is dry to the touch and does not deform when a hand is wiped across the coating the *Crack Guard* may be installed.

### MEMBRANE APPLICATION

Apply *Crack Guard* 38.5" wide sheets vertically across the wall with shingle-like overlaps. Side laps must lap at least 2.5", ends must lap at least 12". Roll or press all areas firmly to achieve a firm seal. Caulk and seal all surface projection intersections. Inspect for complete coverage.

For best results seal all termination points with a plastic or stainless steel termination bar. All membrane termination points should be at least 3" above the level of any possible standing water. Copper or Stainless steel counter flashing should be used anywhere the membrane would otherwise be exposed to sunlight or other strong UV sources.

### PROTECTION

For best results a protection board is recommended for all horizontal and vertical surfaces. Install protection board after the installation of the *Crack Guard* membrane to protect the membrane from foot or equipment traffic and from other trades as well as to protect from backfill material and direct sunlight exposure. For vertical surfaces a latex construction adhesive may be used to attach the protection board to the *Crack Guard* membrane.

**FLOOD TEST**

On horizontal surfaces a flood test of at least 24 hours in length is recommended. Flood surface with 2" of water. For angled surfaces perform the flood test in sections to avoid excessive depth of water and structure stress. Inspect for leaks and make repairs as necessary.

**MEMBRANE REPAIR**

Inspect membrane thoroughly prior to backfilling or covering. Patch cuts and tears as well as inadequately sealed seams with additional membrane. Slit open all fishmouths. Repair cuts, tears, inadequately sealed seams and opened fishmouths with a patch of membrane extending at least 6" from repair site in all directions. Seal patch edges with mastic.

**BACKFILL:**

No waiting is required when the *CRACK GUARD* system is used. Backfilling shall be completed using clean backfill free of rocks, tree roots and debris. Use sand or clean granular fill 3/4" or less. Do not use sharp stone materials. For best results protection board is recommended to protect the membrane during backfill.

**STORAGE**

CRACK GUARD Should be stored out of direct sunlight an at temperatures between 40 and 80 degrees F.

**6. Availability & Cost**

**AVAILABILITY**

CRACK GUARD System is available through a network of Distributors, Manufacturer's Representatives and Qualified Installers. Contact Protective Coatings Technology, Inc. for information and the nearest representative or distributor.

**COST**

Contact Protective Coatings Technology, Inc. or your nearest Representative or Distributor for pricing information.

**7. Warranty**

All PCT, Inc. products are warranted to be free of manufacturer's defects for a period of Two (2) years. Contact Protective Coatings Technology, Inc. for further information and extended warranties.

**8. Technical Services**

Technical information and advice are available from Protective Coatings Technology, Inc. as well as through your nearest manufacturer's representative or Distributor.

POLY-WALL LIQUID PRO 1000		
PROPERTY	TEST PROCEDURE	TYPICAL VALUE
ADHESION	ASTM C 836-89a	Exceeds
ABRASION RESISTANCE	Tumbler Test <sup>1</sup>	Excellent
PERMEANCE	ASTM E 96, Method B	.2 grains/sq.ft. / hr./in. Hg. at 80 deg F.
RESISTANCE TO HYDROSTATIC HEAD		100 ft. of water
WATER ABSORPTION	ASTM D 95	Less than .1% weight
METABOLITES	GSA-PBS 07115	Unaffected
RESISTANCE TO DEGRADATION	ASTM E 154	Excellent

CRACK GUARD		
PROPERTY	TEST PROCEDURE	TYPICAL VALUE
<b>AIR PERMEANCE</b>	<b>ASTM E 2178-01</b>	<b>.0014 cfm/ft<sup>2</sup></b>
TENSILE STRENGTH (WET)	Membrane: ASTM D412 Film: ASTM D 822	325 PSI 6500 PSI
ELONGATION	ASTM D 412	600%
PERMEANCE	ASTM E 96-B	.05 grains/sq.ft. /hr./in.
PEEL ADHESION	ASTM D 1000	15.0 lbs./in. width
OVERLAP BOND	ASTM D 1000	8.0 lbs./in. width
PLIABILITY	ASTM D 146	no effect @ -15 deg. F
PUNCTURE RESISTANCE	Membrane: ASTM E 154	40 lbs.
METABOLITES	Analysis: Chemical and Visual	excellent resistance
WATER ABSORPTION	ASTM D 570	less than 1% weight
RESISTANCE TO DECAY	Saturated CaCo solution-50 cycles	No weight Loss
HYDROSTATIC PRESSURE RESISTANCE	ASTM D 5385	231 Ft.

<sup>1</sup> Tumbler Test was created because at this time no ASTM test had been created specifically for testing waterproofing ground abrasion action. Summarily, Poly-Wall was applied to a concrete substrate, tumbled in a combination of rock, sand and water for 4 hours, and the results observed by a qualified technician.

