Dampproofing

Division 07 - Thermal and Moisture Protection
Section 07110 Dampproofing

1. Product Name

POLY WALL PRO 1000

2. Manufacturer

Polyguard Products, Inc.
Ennis, TX 75119
(800) 846-3020
www.poly-wall.com

3. Product Description

BASIC USE
POLY WALL PRO 1000 is designed for precast concrete, poured concrete, and concrete masonry surfaces to prevent the penetration of water as well as protect the surface from other chemical intrusion. Typical application includes coating exterior foundation walls. For superior moisture control, coating of the interior and exterior foundation walls is recommended. The durability as well as water and chemical resistance of POLY WALL PRO 1000 suggests other uses.

POLY WALL PRO 1000 is available in an attractive gray or beige color with glossy finish and can be used on both unexposed and exposed portions of foundations. Coating foundation walls all of the way to the top provides a unique protection against moisture from rain water and melting snow as well as typical below-grade moisture.

COMPOSITION & MATERIALS
POLY WALL PRO 1000 is a patented, single-component, cold-applied, non-elastomeric, non-breathable, thermoplastic membrane designed to protect concrete and concrete masonry surfaces. POLY WALL PRO 1000 is solvent based with a VOC content of <600g/l.

4. Technical Data

See Table

5. Installation

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

SURFACE PREPARATION

General: All rough concrete, surface defects, voids, and surface protrusions must be made smooth and filled flush. All surfaces to be coated must have a minimum pull-off strength of 175 PSI when cured and a minimum profile of 3- to-5%. Footings shall be scraped and brushed clean of all dirt and debris. Prior to coating, surfaces must be clean and dry; free of mortar smears and form release; and free of frost, ice or excess moisture.

Poured Concrete Walls: Concrete is to be constructed without integral moisture repellant that would interfere with adhesion. Once forms are removed and bleed water is absent, allow for typical cure time of 3 days (longer cure time with lower ambient temperatures) before the application. Ties, inside and out, must be knocked off and filled flush with POLY WALL Hole Filler, POLY WALL Fiber Fill or non-shrinking Portland cement grout. Honeycombs must be filled with non-shrinking Portland cement grout and allowed to thoroughly dry.

Concrete Masonry Walls: Are to be unparged. Concrete and concrete masonry units (CMU) to be constructed without integral moisture repellant, and CMU shall be constructed with type-M or type-S mortar in accordance with ASTM C270. Joints are to be tooled and brushed to create surface profile. Allow assembly to cure for 3 days (longer cure time with lower ambient temperatures) before the application. Core fills, bond beams and rain add significant moisture to the assembly requiring longer lengths of time for drying. Any voids in the mortar are to be grouted/ filled with POLY WALL Hole Filler, POLY WALL Fiber Flash or non-shrinking Portland cement grout and allowed to dry prior to application.

Where control joints are employed, they must be treated according to POLY WALL's requirements. Submit control joint detail design for approval prior to commencing work.

PRIMING
No primer is recommended. For best results PRO 1000 should be applied directly to sound concrete surfaces.

MEMBRANE APPLICATION
POLY WALL PRO 1000 should be applied in one coat at a rate of 40 square feet per gallon (40 wet mils). When properly applied, POLY WALL PRO 1000 will form a continuous dry membrane averaging 14 mils. Surface texture and porosity will control the coverage rate. The application rate is inversely related to the porosity of the wall service. Use of an airless sprayer with a 4000 PSI stall pressure and a 0.036-inch to 0.039-inch reversible tip is recommended.

Inspect all surfaces for complete, continuous and consistent coverage. Re-apply material until complete coverage is accomplished.

Option: The coating can be sprayed and back-rolled to achieve a continuous coating at the desired mil thickness. When back-rolling use a new 0.5-inch to 0.75-inch nap roller.

PROTECTION
When employed as a Foundation dampproofing to a foundation 9-foot deep and more, or backfill contains sharp materials; protection board is required. For foundations less than 9 feet deep, no protection board is necessary when using clean fill and allowing adequate film drying time.

POLY WALL PRO 1000 will be adversely affected by prolonged or constant ultraviolet radiation (UV) exposure. Exposed surfaces may require re-application every 5-to-7 years. Paint applied to a dry POLY WALL PRO 1000 treated surface for addition of color and provide extra UV protection shall contain a bonding additive (such as Imperial Wil-Bond Liquid Surface Preparation) to obtain successful adhesion.

SAFETY
POLY WALL PRO 1000 liquid and vapors are flammable. When applying POLY WALL PRO 1000, the work areas shall be well ventilated and restricted to only applicators. The following safety precautions must be observed:

1. Smoking and introduction of flames, sparks, electric arcs, etc. shall not be allowed.
2. Applicators shall wear a NIOSH approved disposable organic vapor respirator and protection clothing.
3. A working fire extinguisher, type ABC, shall be available in all vehicles near truck doors and in the work area.
4. All trucks, barrels and spray equipment shall be grounded.

MEMBRANE REPAIR
Repair of POLY WALL PRO 1000 is simply a matter of thoroughly cleaning, drying the damaged area, and re-applying product. POLY WALL PRO 1000 will bond to itself without any elaborate surface preparation.

BACKFILL
POLY WALL PRO 1000 should be allowed to dry 12-24 hours after the final coat before backfilling or putting the structure into service. Ambient temperature, film thickness, humidity, and wind (air movement) conditions will dictate exact time.

STORAGE
POLY WALL PRO 1000 is to be carefully stored according to the requirements of local authorities. Protect containers of product from water, sparks, flames, excessive heat and poor ventilation.

Containers of POLY WALL PRO 1000 should be stored out of direct sunlight and in temperatures between –20°F and 110°F. For best results and good spray pattern, POLY WALL PRO 1000 should be at a temperature above 40°F at time of application. This will help to reduce the material viscosity to a level that will allow the material to be sprayed more consistently.

6. Availability & Cost

AVAILABILITY
POLY WALL PRO 1000 is available through a network of Manufacturer's Representatives, Distributors, and Qualified Installers. View the POLY WALL website or contact Polyguard Products, Inc. for information on the nearest manufacturer's representative or nearest distributor to your area.

COST
Contact Contact Polyguard Products, Inc. or your nearest Representative or Distributor for pricing information.

7. Warranty

All POLY WALL products are warranted to be free of manufacturer's defects for a period of five (5) years. Contact Polyguard Products, Inc. for further information.

8. Technical Services

Technical information and advice are available from Polyguard Products, Inc. as well as through your nearest manufacturer's Representative or Distributor.

POLY WALL PRO 1000 Reference: ICC –ES Legacy Report 96-42 Thermal and Moisture Protection Section 07110 Dampproofing		
PROPERTY	TEST PROCEDURE	TYPICAL VALUE
ADHESION	ASTM C 836-89a	Exceeds
PERMEANCE	ASTM E 96 method B	0.45 Perms
RESISTANCE TO HYDROSTATIC HEAD		100ft. of water
WATER ABSORPTION	ASTM D 95	Less than 1% weight
METABOLITES	GSA-PBS 07115	Unaffected
WATER PENETRATION and LEAKAGE THROUGH MASONRY	ASTM E 154	No Penetration or Leakage
CATEGORY 1 40 C.F.R.§59401 "WATERPROOFING SEALERS AND TREATMENTS"		<600G/L VOC