



Commercial Coatings

1. Product Name

POLY WALL PRO 3100/3101

2. Manufacturer

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

3. Product Description

BASIC USE

POLY WALL PRO 3100/3101 coatings are designed for use on concrete and concrete masonry surfaces to prevent the penetration of water as well as protect the surface from other chemical intrusion. Typical application includes car wash enclosures, swimming pool enclosures, and concrete tanks for the storage and/or treatment of wastewater. POLY WALL PRO 3100/3101 has demonstrated resistance to pH from 1.5 to 14.0. The durability as well as water and chemical resistance of POLY WALL PRO 3100/3101 suggests other uses. POLY WALL PRO 3100/3101 is differentiated by color:

PRO 3100 is gray

PRO 3101 is white

COMPOSITION & MATERIALS

POLY WALL PRO 3100/3101 is a patented, cold-applied, thermoplastic membrane designed to waterproof and protect concrete and concrete masonry surfaces. It is a single component, non-elastomeric, non-breathable, solvent-based liquid material with a VOC content of <600g/l.

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 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 175 PSI pull-off strength when cured and a minimum profile height of 3-to-5%. Prior to the application, 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 walls to be constructed without integral moisture repellant. After removing forms and bleed water is absent, allow for typical cure time of from 72 hours (longer cure time with lower ambient temperatures) before coating. Ties, inside and out, must be knocked off and filled flush with non-shrinking Portland cement grout. Honeycombs must be filled with non-shrinking Portland cement grout and allowed to thoroughly dry.

Concrete Masonry Walls (CMU): Are to be unparged. CMU to be constructed without integral moisture repellant and shall be constructed with type-M or type-S mortar in accordance with ASTM C270. Joints are to be tooled and brushed to create a surface profile. Any voids in the mortar are to be grouted/filled with non-shrinking Portland cement grout. Minor holes and voids can be filled with POLY WALL Hole Filler or POLY WALL Fiber Flash. Allow assembly to cure for a minimum 72 hours before applying POLY WALL product. Allow longer cure time for low ambient temperatures and the presence of moisture from core fills, bond beams, and rain.

Where control joints are employed, they must be filled and prepared 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, POLY WALL PRO 3100/3101 should be applied directly to sound concrete surfaces.

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 175 PSI pull-off strength when cured and a minimum profile height 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 water.

MEMBRANE APPLICATION

POLY WALL PRO 3100/3101 should be applied in three coats. Allow 8-24 hours drying time between coats. Ambient temperature, humidity, and wind or air movement conditions dictate exact time. Each coat should be applied at a rate of 65 square feet per gallon (25 wet mils). Due to substrate porosity resulting in a profile of peaks and valleys, tests show the coverage of the total dry mil thickness of three coats should average 27 mils. Coating should be sprayed and back-rolled to achieve maximum consistency of coverage and adhesion. An airless sprayer having a 4000 PSI stall pressure and a 0.036-inch to 0.039-inch reversible tip is recommended. Rolling should be accomplished with a new 0.5-inch to 0.625-inch nap roller.

For best results and to minimize pin holing or blistering on outdoor applications, apply during times of cool and descending temperatures. Inspect



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

PROTECTION

POLY WALL PRO 3100/3101 will be adversely affected by prolonged or constant ultraviolet radiation (UV) exposure. Re-coating may be necessary for UV exposed surfaces every 3-5 years.

SAFETY

POLY WALL PRO 3100/3101 liquid and vapors are flammable. When applying POLY WALL PRO 3100/3101, the work areas shall be well ventilated and restricted to only applicators. The following safety precautions must be observed:

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

MEMBRANE REPAIR

Repair of POLY WALL PRO 3100/3101 coating is simply a matter

of thoroughly cleaning and drying the damaged area and re-coating. POLY WALL PRO 3100/3101 will bond to itself without any elaborate surface preparation.

BACKFILL

POLY WALL PRO 3100 should be allowed to dry 24-48 hours after the final coat before putting the structure into service. Ambient temperature, humidity and wind or air movement conditions will dictate exact time.

STORAGE

POLY WALL PRO 3100/3101 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 3100/3101 should be stored out of direct sunlight and in temperatures between -20°F and 110°F. For best results, PRO 3100/3101 should be stored in temperatures above 50°F immediately prior to application to reduce the material viscosity to a level that will allow the material to be sprayed more easily.

6. Availability & Cost

AVAILABILITY

POLY WALL PRO 3100/3101 Coatings are 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 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 3100/3101		
PROPERTY	TEST PROCEDURE	TYPICAL VALUE
ADHESION	ASTM C 836-89a	Exceeds
PERMEANCE	ASTM E 96, Method B	0.010 perm*inch dry mils
PERMEABILITY	ASTM E 96, Method B	0.000 grains/sq.ft./hr./in. Hg. at 80 deg F.
RESISTANCE TO HYDROSTATIC HEAD		231 ft. of water
WATER ABSORPTION	ASTM D 95	Less than 1% weight
METABOLITES	GSA-PBS 07115	Unaffected
RESISTANCE TO DEGRADATION	ASTM E 154	Excellent
CATEGORY 1 40 C.F.R. §59.401 "WATERPROOFING SEALERS AND TREATMENTS"		<600G/L VOC

