



TERRA-SHIELD® WC-100

A Single Component, High Solids, Water Catalyzed, Liquid Applied Membrane for Vertical and Horizontal Surfaces Applied at any Field Thickness from 30 to 2500 mils

1.01 DESCRIPTION

Terra-Shield® WC-100 is a seamless, joint-free and crack-free system created from a single-component, high-solids, water-curable, liquid-applied, bitumen-modified, coal-tar free, urethane polyurea waterproofing membrane for vertical and horizontal surfaces. The system is fully adhered and reinforced and may be applied at any field thickness from 30 to 2500 mils or more in one application while supplying simultaneous curing throughout the coating. Be sure to use the right product grade that complies with VOC regulations as per federal, state, statutory bodies, county and city regulations/codes at the place of installation of product.

1.02 FEATURES

- Economical
- Resistant to Bacterial Growth
- Low Odor
- Non Gassing
- Fast Curing
- Applied at Any Required Thickness
- Meets the Criteria of ASTM C-836 & E-96
- Change of Slope of Deck from Negative to Positive
- Fill Ponds & Low Areas in One Application
- Highly Flexible Over Extreme Temperatures
- User Friendly
- Labor Saving
- User Friendly
- Fast Recoat Times
- No Heating or Kettles

1.03 TYPICAL USES

- Tunnels
- Planters
- Between Slabs
- Roofing
- Showers, Laundry, Kitchen Floors
- Green Roof Waterproofing
- Plywood Waterproofing
- Balcony & Breezeway Waterproofing
- Under Malls, Plazas & Promenade Decks
- Simultaneous Continuous Curing Throughout the Coating in Any Thickness
- Basements
- Foundation Walls

Terra-Shield® WC-100 is made to be able to supply slope to drain and fill ponds on plywood, concrete, metal, urethane foam and other roofing systems.

1.04 COLOR

Black

1.05 PACKAGING

- 5 gallon (18.9 liters) pail
- 55 gallon drum – net fill 50 gallons (189 liters)

TECHNICAL DATA

(Based on draw down film).

Hardness, ASTM D-2240	25 ± 5 D
Tear Resistance Die C, ASTM D-624	50 ± 5 pli (8.76 ± 0.8 kMn)
Tensile Strength, ASTM D-412	300 ± 50 psi (2.07 ± 0.34 MPa)
Ultimate Elongation, ATSM D-412	650% ± 50%
Specific Gravity	1.12 ± 0.1
Total Solids by Weight, ASTM D-2369	95% ± 2%
Total Solids by Volume, ASTM D-2697	94% ± 2%
Volatile Organic Compounds, ASTM D-2369-81	<0.5lbs/gal <60 gm/liter

1.06 MIXING

Add one quart (0.95 liters) of water to 5 gallons (18.9 liters) of Terra-Shield® WC-100 and mixed thoroughly using a mechanical mixer at slow speed to ensure a homogeneous material. Take care not to allow entrapment of air into the material.

1.07 JOINTS, CRACKS, AND FLASHING

Apply Terra-Shield® WC-100 overall primed joints and cracks. Bridge the joints and cracks with 3 inch (7.6 cm) Polyester Tape, pushing it into the sealant with a trowel. Over reinforcement tape, apply a thin coat of Terra-Shield® WC-100 and smooth onto adjacent surface. Optionally, Super Seal Tape may be used over all plywood seams and concrete joints and cracks (see the Super Seal Tape Product Data Sheet). The use of Flexi-Flashing may often replace corrosive metal flashings.

APPLICATION

2.01 APPLICATION BASICS

Terra-Shield® WC-100 may be applied directly with a brush, squeegee, or trowel. An airless sprayer or phenolic-core roller may be used but extra care should be taken not cause air bubbles. Apply Terra-Shield® WC-100 evenly over the primed surface. At 75°F (24°C) and 50% relative humidity, allow coating to cure a minimum of 2-4 hours before proceeding to subsequent coats. Cure time will vary depending on temperature and humidity.

A 30 mils (762 microns) construction coat may be applied for temporary waterproofing in horizontal surfaces until the finish system is applied. However, due to the probability of damage, more coating may be needed to create a smooth finish. Attention to proper slope to drain is essential for proper waterproofing.

Primer is optional on plywood and CMU.

2.02 COVERAGE

Recommended coverage rates are a minimum dry film thickness of 90 mils (2286 microns) on plywood, 60 mils (1524 microns) on concrete. Extended warranties require 120-160 mils (3048-4064 microns) fully reinforced (See Terra-Shield® WC-100R System Specifications). Coverage rates and cure times will vary depending on temperature, relative humidity, surface roughness and porosity, aggregate selection and embedment, and application technique. Coverage rates provided are optimal and are not guaranteed. Extended Warranties require a minimum of 120 mils (0.31 cm) or more.

2.03 CURING

For multiple coat applications, allow coating to cure for a minimum of 2 and a maximum of 48 hours (curing is a function of ambient temperature and humidity) before proceeding to subsequent coats. If more than 48 hours pass between coats the surface must be reprimed. Curing time will vary depending on temperature and humidity.

2.04 EQUIPMENT CLEANUP

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

2.04 STORAGE

Terra-Shield® BG-100 has a shelf life of one (1) year from date of manufacture when stored indoors at a temperature between 60°F to 95°F (15°C to 35°C) in the original factory-sealed containers.

2.06 LIMITATIONS

- Surfaces must be dry, clean and free of foreign matter.
- Not UV stable.
- Cannot withstand direct wear or abrasion.
- Containers that have been opened must be used as soon as possible.
- Do not dilute under any circumstance.
- The following conditions must not be coated with PSI deck coating systems: On grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pans, suspended pool decks, swimming pools, magnesite, light weight concrete, asphalt, surfaces and asphalt overlays.

WARNING: This product contains isocyanates.

Please read all information in the General & Safety Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. PSI Products are for "Professional Use Only" and preferably applied by professionals who have prior experience with the PSI Products or have undergone training in application of PSI Products. Published technical data and instructions are subject to change without notice. Contact your local PSI representative or visit our website for current technical data, instructions, and project specific recommendations.

LIMITED WARRANTY

PSI warrants its products to be free of manufacturing defects and that they will meet PSI current published physical properties. PSI warrants that its products, when properly installed by a state licensed waterproofing contractor according to PSI guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of 12 months. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by PSI of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. PSI shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. PSI shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. PSI reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

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