T-SHIELD® WC-100 (FORMERLY 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
T-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 (762-63,500 microns) or more in one application while supplying simultaneous curing throughout the coating. Please use the correct product grade that complies with VOC regulations as per federal, state, county and city regulations/codes at the place of installation of product.

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

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

1.04 COLOR
Black

1.05 PACKAGING
T-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.

1.06 SURFACE PREPARATION
Refer to General and Safety Guidelines for complete information. Concrete surfaces require a medium sandpaper finish equal to or greater than an ICRI CSP #3. Surface preparation may be completed by shotblasting or the use of Poly-Tuff Profile and Etch cleaner. Peel and adhesion tests are recommended. Install a 100-200 sqft (9.30-18.58 sqm) mockup of the system to be installed and approve for actual coverage rates and functionality before proceeding.

1.07 PRIMING
Prime surface as required with Enviro-Grip™ EP#2(SC), #1 (mixture of Side-A & Side-B) or Enviro-Grip™ PUR#555 at a rate of 1 gallon per 300 sqft (0.14 liters/sqm) or 300 sqft/gallon. Apply using a brush or phenolic core roller. This will result in 3 dry mils (76 microns) of coating. Existing urethane-coated surfaces should be primed with Enviro-Grip™ PUR#555. Rough and pin-holed concrete surfaces may require more primer. Discovery of these issues is generally revealed in the mockup. See the Tech-Note Section of the PSI website. Do not allow primer to puddle; dry roll excess primer in puddles and overlaps.

1.08 MIXING
Add one quart (0.95 liters) of water to 5 gallons (18.9 liters) of T-Shield® WC-100 and mix thoroughly using a mechanical mixer at slow speed to ensure a homogeneous material. Take care not to allow entrapment of air into the material.
1.09 JOINTS, CRACKS, AND FLASHING
Apply T-Shield® WC-100 over all primed joints and cracks. Bridge the joints and cracks with 3 inch (7.6 cm) Polyester Tape or polyurethane foam, pushing it into the sealant with a trowel. Over reinforcement tape apply a thin coat of T-Shield® WC-100 and smooth onto adjacent surface. Optionally, in lieu of 3 coursing laps and joints, Super-Seal™ Tape may be applied over all primed concrete at laps, joints and cracks.

APPLICATION
2.01 APPLICATION BASICS
T-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 to cause air bubbles. Apply T-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 mil (762 micron) 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 clean concrete.

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 T-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 immediately after use with an environmentally-safe solvent, as permitted under local regulations.

2.05 SHELF LIFE AND STORAGE
T-Shield® WC-100 has a shelf life of 12 months from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

2.06 LIMITATIONS
- Surfaces must be dry, clean and free of foreign matter.
- Not UV stable.
- Can not 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 or products:
1) On grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool, swimming pool decks, or areas where hydrostatic pressure is or may be present, without the use of Enviro-Grip™ 404 FC primer. PSI Deck Coating is not recommended over magnesite, gypsum lightweight and where chained or studded tires may be used.
2) Concrete must exhibit 3000 psi minimum strength. An ICRI CSP 2-3 surface or greater is required for concrete surfaces to be coated.
3) New concrete must be cured for 28 days unless otherwise approved by PSI in writing. New surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function. Light broom finished concrete should be powdered before coating application.
4) Concrete cleaning (see General and Safety Guidelines). Surface preparation may be completed by shotblasting or the use of Poly-Tuff Profile and Etch (PE) cleaner. Peel and adhesion tests are recommended.

WARNING: This product contains isocyanates.