



TERRA-SHIELD® BG-H/V/GCH/GCV

A Single Component, Liquid Applied, Black Membrane System for Vertical, Horizontal Surfaces and for Green Concrete

1.01 DESCRIPTION

Terra-Shield®BG is a single-component, liquid-applied, bitumen-modified, coal-tar free, urethane Polyurea joint and crack-free waterproofing membrane system for vertical and horizontal surfaces. Terra-Shield® BG-H is designed for horizontal grades. Terra-Shield® BG-V is for vertical grades. Terra-Shield®BG-GCH is for green concrete - horizontal grades. Terra-Shield®BG-GCV is for green concrete - vertical grades. This products meets 100 VOC limit. 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
- User Friendly
- Resistant to Bacterial Growth
- Labor Saving
- Meets the Criteria of ASTM C-836 & E-96
- Green Concrete Grades available for Horizontal & Vertical Apps. (Terra-Shield®BG-GCH & Terra-Shield®BG-GCV)

1.03 TYPICAL USES

- Bridges
- Tunnels
- Planters
- Basements
- Between Slabs
- Shower Pans
- Foundation Walls
- Under Slab Plywood Waterproofing

1.04 COLOR

Black

1.05 PACKAGING

5 gallon (18.9 liter) pail

55-gallon drum, net fill 50 gallons (189 liters)

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) mock up of the system to be installed and approve for actual coverage rates and functionality before proceeding.

1.07 MIXING

Terra-Shield®BG should be thoroughly mixed using a mechanical mixer at slow speed to ensure a homogeneous material. Take care not to allow entrapment of air into the material.

1.08 JOINTS, CRACKS, AND FLASHING

Apply Terra-Shield®BG over all primed joints and cracks. Bridge the joints and cracks with 3" (7.66cm) Polyester Tape. Apply a thin coat of Terra-Shield®BG over the reinforcement tape and smooth onto the adjacent surface. Optionally, in lieu of 3 coursing laps and joints, Super Seal Tape may be used over all cleaned laps, joints and cracks and then coated.

Wall-to-deck perimeter flashings shall be either a minimum of 24 gauge galvanize steel flashing or Flexi-Flashing. Flashing should turn up the wall a minimum of 6" (15.24 cm) and turn out 4" (10.16 cm) onto the deck surface. Metal Flashings require Enviro-Grip™ EP#2. Flexi-Flashing must be primed with Enviro-Grip™ #1, #2, or PUR#5. The use of Flexi-Flashing may often replace corrosive metal flashings.

APPLICATION

2.01 APPLICATION BASICS

Terra-Shield® BG may be applied directly with a brush, squeegee, trowel or phenolic core roller. Apply Terra-Shield® BG evenly over the primed surface. Primer is optional on plywood and CMU.

2.02 CURING

For multiple coat applications, allow coating to cure for a minimum of 16 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.

Terra-Shield®BG is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in thickness of application. Limit single coat thickness to 30-40 wet mils.

2.03 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 has a shelf life of twelve (12) months from date of manufacture when stored indoors at a temperature between 60°F to 95°F (15°C to 35°C) in original factory sealed containers.

2.05 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: 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.
- Green concrete should be cured a minimum of 72 hours before applying green concrete coating Terra-Shield®BG-GCH (Horizontal grade) or Terra-Shield®BG-GCV. (Vertical Grade).

WARNING: This product contains isocyanates and solvents

TECHNICAL DATA (BASED ON DRAW DOWN FILM)

Based on Draw Down Film	Terra-Shield® BGH	Terra-Shield® BGV	Terra-Shield® BG-GCH	Terra-Shield® BG-GCV
Hardness, ASTM D-2240	50 ± 5 Shore A	45 ± 5 Shore A	50 ± 5 Shore A	45 ± 5 Shore A
Tear Resistance, Die C, ASTM D-624	40 ± 20 pli 7.0 ± 3.5 kNm	35 ± 10 pli 6.1 ± 2kNm	40 ± 20 pli 7.0 ± 3.5 kNm	35 ± 10 pli 6.1 ± 2 kNm
Tensile Strength, ASTM D-412	350 ± 50 psi 3.45 ± 0.3 Mpa	350 ± 50 psi 3.45 ± 0.3 Mpa	350 ± 50 psi 3.45 ± 0.3 Mpa	350 ± 50 psi 3.45 ± 0.3 Mpa
Ultimate Elongation, ASTM D-412	300 ± 50%	300 ± 50%	300 ± 50%	300 ± 50%
Specific Gravity	1.32	1.23	1.32	1.23
Total Solids by Weight, ASTM D-236	92 ± 3%	92 ± 3%	92 ± 3%	92 ± 3%
Total Solids by Volume, ASTM-2697	90 ± 3%	90 ± 3%	90 ± 3%	90 ± 3%
Viscosity at 80°F (27°C)	5,000 ± 2000 cps	40,000 ± 20,000 cps	5,000 ± 2000 cps	40,000 ± 20,000 cps
Volatile Organic Compounds, ASTM D-2369-81	0.83 lb/gal 100 gm/liter	0.83 lb/gal 100 gm/liter	0.83 lb/gal 100 gm/liter	0.83 lb/gal 100 gm/liter

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

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and PSI makes no claim that these tests or any other tests, accurately represent all environments.