



B-TUFF® 302 / 302SC

A Single Component, Aromatic Base Membrane for Concrete, Plywood and Metal

1.01 DESCRIPTION

B-Tuff® 302/302 SC is a single component, liquid applied, moisture cured, flexible, aromatic-urethane basecoat that can be applied to suitably prepared concrete, plywood and metal surfaces. B-TUFF® 302 is 250 VOC and B-TUFF® 302SC is 100 VOC. 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

- Economical
- Moisture cured
- Proven Protection
- Seamless

1.03 TYPICAL USES

- Concrete
- Masonry Surfaces
- Metal
- Plywood
- Wood

1.04 COLOR

Grey or Tan

1.05 PACKAGING

5 gallon (18.9 liters) 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) mockup of the system to be installed and approve for aesthetics, color, slip resistance, actual coverage rate and functionality before proceeding.

1.07 MIXING

Before application, premix B-Tuff® 302/302SC using a mechanical mixer (Jiffy Mixer) at slow speeds or mix for at least 5 minutes, if mixed by hand. Mix B-Tuff® 302/302SC throughly until a homogeneous mixture and color is obtained. Use care not to allow the entrapment of air into mixture.

1.08 JOINTS, CRACKS, AND FLASHING

Apply a single or two component non-gassing polyurethane sealant over all joints, cracks and flashing.

Bridge the joints and cracks and flashing with 2-75-4" (7-10.14 cm) polyester or polyurethane foam tape pushing the tape into the 20 mil

TECHNICAL DATA (Based on draw down films) B-TUFF® 302	
Specific Gravity	1.26 ± 0.1
Hardness ASTM D-2240 Shore A	55 ± 5
Tensile Strength, ASTM D-412	800 ± 100 psi (5.52 ± 0.7 MPa)
Elongation, ASTM D-412	500 ± 50%
Tear Resistance, Die C, ASTM D-624	170 ± 25 pli (28.8 ± 4.4 kN/m)
Split Tear, ASTM D-470	60 ± 5 pli (10.5 ± 0.9 kNm)
Viscosity, at 75°F (24°C)	6500 + 3000 cps
Total Solids by Weight, ASTM D-2369	81 ± 2%
Total Solids by Volume, ASTM D-2697	71 ± 2%
Volatile Organic Compounds ASTM D-2369-81	2.01 lbs/gal (240 gm/liter)

TECHNICAL DATA (Based on draw down films) B-TUFF® 302SC	
Specific Gravity	1.30 ± 0.1
Hardness ASTM D-2240 Shore A	55 ± 5
Tensile Strength, ASTM D-412	500 ± 100 psi (3.44 ± 0.7 MPa)
Elongation, ASTM D-412	500 ± 50%
Tear Resistance, Die C, ASTM D-624	180 ± 25 pli (31.5 ± 4.4 kN/m)
Viscosity, at 75°F (24°C)	6500 + 3000 cps
Total Solids by Weight, ASTM D-2369	92.7 ± 2%
Total Solids by Volume, ASTM D-2697	87.7 ± 2%
Volatile Organic Compounds ASTM D-2369-81	0.78 lbs/gal (94 gm/liter)

(508 microns) prestripe of the basecoat. Alternatively, joints and cracks 1/16" or larger may be sealed flush with PTS E-101 concealed with 4" (10 cm) Super Seal Tape. NOTE: Concrete must be primed first and allow to dry.

Over reinforcement tape, apply a prestripe coat of B-Tuff® 302/302 SC material and taper it onto the adjacent surface. Alternatively, no crack chasing or prestripe is necessary with the use of Super Seal Tape over a primed surface (see our Super Seal Tape Technical Data Sheet). Allow the surface to cure for 1 to 2 hours.

APPLICATION

2.01 APPLICATION BASICS

For best results use a squeegee or notched trowel to spread B-Tuff® 302/302SC evenly over the entire deck. Make sure the dew point is 5°F (3°C) above the surface temperature. Curing time will depend on temperature. Apply B-Tuff® 302/302SC evenly over the entire deck. Application should be continuous to ensure a smooth and level coat with no lines or streaks to disfigure the deck.

If accelerated curing time is required, add one quart (0.95 liters) of B-Tuff® 302 Accelerator to 5 gallons (3.78 liters) of B-Tuff® 302 /302SC and mix thoroughly. This accelerated B-Tuff® 302/302SC will cure in 8 hours at 75°F (24°C) and 50% RH.

B-Tuff® 302 may be applied at 50-60 sqft/gallon (1 2/3-2 gallons/100 sqft [0.68-0.82 liters/sqm]).

Refer to individual Systems Description under System Specifications Section of the PSI catalog or website for specific coverage rates.

2.02 COVERAGE RATES

Coverage rates and cure times will vary depending on temperature, relative humidity, surface roughness, porosity, aggregate selection, embedment, and application technique. Coverage rates provided are optimal and are not guaranteed.

2.03 CURING

Allow each coat to cure (depending on environmental conditions, humidity and temperature) a minimum of 6-8 hours with accelerator and 12-16 hours without accelerator. If more than 24 hours passes between coats, reprime the surfaces with Enviro-Grip™ EP#1, EP#2, or PUR#555.

B-Tuff® 302/302SC is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extend the cure time.

2.04 EQUIPMENT CLEANUP

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

2.04 SHELF LIFE AND STORAGE

B-Tuff® 302/302SC has a shelf life of six (6) months from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

2.05 LIMITATIONS

- Do not open until ready to use. Any off ratio mixing of the product will affect the properties and the product may not cure.
- B-Tuff® 302/302SC should be used as a base membrane only. Topcoat must be applied.
- B-Tuff® 302/302SC cannot withstand direct wear and abrasion.
- 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™ 404FC 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 power-washed 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 and solvents.



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 and chemical properties. 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 user's 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.

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