B-TUFF® SHIELD 40
40% Solids VOC Compliant Penetrating Silane

1.01 DESCRIPTION
B-Tuff® Shield 40 is a 40% solids, solvent based, silane sealer. This clear, penetrating, breathable, water repellent is designed for use on interior and exterior above-grade concrete or masonry surfaces. B-Tuff® Shield 40 penetrates the surface and bonds directly with the substrate, which results in a surface that is highly resistant to both moisture and salt. B-Tuff® Shield 40 helps protect against the corrosive effects of de-icing salts, moisture, and weathering to prevent spalling and deterioration of concrete structures. 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
• Colorless and Non-Yellowing
• Dries Tack-Free and Skid Resistant
• Excellent Water Repellency
• Fast Drying in Cooler Temperature
• New As Well As Old Concrete Surfaces
• Provides Excellent Chloride Screen
• Reduces the Effects of Freeze-Thaw Cycling

1.03 USES
• Bridges and Ramps
• Concrete and Masonry Surfaces
• Parking Structures
• Pavements and Marine Platforms
• Seals and Protect Woods Finishes

1.04 TECHNICAL DATA
Meets and surpasses Fed. Spec SS-W-110 b(GSA-FSS) Performance

1.05 PACKAGING
5 gallon (19 liters) pail
55 gallon (208 liters) drum
275 gallon (1041 liters) tote

1.06 COLOR
Clear with fugitive dye

1.07 COVERAGE
The average rate is determined by surface porosity:
Porous surfaces: 125-175 sqft gal (3.07-4.30 sqm/liter)
Broom finish: 200-300 sqft/gal (4.91-7.36 sqm/liter)

1.08 PREPARATION
Old Concrete and Masonry: Remove any previously applied sealers, dust, dirt, tar, oil, etc. with pressure wash and PSI’s EnviroClean™ Citrus Cleaner or use other appropriate measures to properly prepare the substrate. Membranes of any kind must be removed. Substrates must be absorptive to allow penetration of the B-Tuff® Shield 40.
New Concrete: Surface should be well cured (28-day minimum) using water, wet burlap, polyethylene curing paper, or dissipating resin-based curing compound. Surface must be free of all curing residue, dust, debris, oil and other contaminants. Substrates must be absorptive to allow penetration of the B-Tuff® Shield 40. All joint sealant, caulks and patching should be in place before applying.

1.09 APPLICATION
Horizontal Surfaces: Flood surfaces with B-Tuff® Shield 40 using a low-pressure sprayer (airless sprayer 10 to 20 psi), roller, brush or boom. Broom or squeegee around for even distribution. Let the surface absorb the B-Tuff® Shield 40. An extremely porous surface may require two coats if applied on a “wet on wet” procedure. Distribute any puddles or free-standing material.
Vertical Surfaces: Apply with spray or roller at the rates indicated in the coverage guide.

1.10 CURING/DYING TIME
The cure time is 2-4 hours at 70°F (21°C) and 50% relative humidity. Cooler temperatures or higher relative humidity can extend the drying time.

1.11 CLEAN UP
Tools and Equipment: Flush and clean with water immediately after use. Use PSI’s Solvent 100 or other cleaning solvents for sprayers to remove cured or residual material.

1.12 STORAGE AND SHELF LIFE
The material should be stored between 40-95°F (4-35°C) in a cool, dry area away from direct sunlight. The shelf life of properly stored, unopened containers is 24 months from the date of manufacture. An excessive temperature differential and/or high humidity can shorten the shelf life expectancy.

1.13 LIMITATIONS
• Avoid prolonged skin contact.
• B-Tuff® Shield 40 is not formulated for below grade waterproofing.
• Combustible liquid.
• Dispose of waste material in accordance with federal, state and
local requirements.

- Do not apply if precipitation is expected within four hours, or if rain has preceded the application in the past 24 hours.
- Do not apply in high winds.
- Do not dilute.
- DO NOT EXPOSE TO OR APPLY NEAR FIRE OR FLAMES. FOR WELL VENTILATED OR EXTERIOR USE ONLY!
- Do not over apply. Substrates should be saturated with the material, but puddling should be avoided.
- Do not use over a curing membrane. Initial reaction will be in 16 to 24 hours.
- Keep Away from Open Flame.
- No contact with foodstuffs.
- Not effective for some stone surfaces.
- Not suitable for asphaltic surfaces.
- Over application may cause a slight darkening of the surface.
- Protect glass, metal and other non-masonry surfaces from over spray. Do not use if air, product or surface temperatures are below 20°F (-6.7°C) or above 90°F (32°C).
- Treated areas may be returned to service once the product has penetrated and the surface is dry.
- Wear protective gloves and goggles.
- READ SDS PRIOR TO USING PRODUCT. FOR PROFESSIONAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. MADE IN THE USA.

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<tr>
<th>PHYSICALS</th>
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<tbody>
<tr>
<td>Composition</td>
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<tr>
<td>Active Silane Content</td>
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<tr>
<td>Chloride Screened</td>
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<tr>
<td>VOC</td>
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<tr>
<td>Content (EPA Method 24)</td>
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<tr>
<td>Fugitive Dye for visual inspection</td>
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<tr>
<td>Weight / Gal</td>
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<tr>
<td>Repellency Factor</td>
</tr>
<tr>
<td>ASTM C642, Water Absorption</td>
</tr>
<tr>
<td>ASTM C672, Scaling Resistance</td>
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<td>Flash Point (ASTM D3278-82)</td>
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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 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 product 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 tests, 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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