



POLY-TUFF SYSTEMS  
INTERNATIONAL  
HIGHWAY DIVISION

# B-TUFF® MMA HS

## Flexibilized, Methacrylate Crack Healer Sealer

### 1.01 DESCRIPTION

**B-Tuff® MMA HS** is a specially formulated, flexibilized, Methacrylate sealer composition that has been developed for sealing of related cracking in Portland cement concrete, latex modified and/or silica fume (micro silica) concrete.

### 1.02 USES

- Bridges
- Parking Garages
- Piers
- Slabs, any horizontal concrete surface
- Wharfs

### 1.03 FEATURES

- Compatible with other PSI MMA systems
- Excellent bond – high strength and durability
- Freeze thaw resistant
- Highly elastic
- Protects against water and salt ion intrusion
- Rapid curing (1 hour)
- Resistant to weathering, aging and UV exposure
- Steel & Concrete compatible
- Waterproof
- Wide application temperature range: 14°F to 90°F (-10°C to 40°C)

### 1.04 TECHNICAL DATA

Conforms to published most DOT specifications.

### 1.05 COLOR

Bluish to clear

### 1.06 PACKAGING

**B-Tuff® MMA HS** is packaged in 47.5 gallon (180 kgs) drums. The powder activator is provided in separate labeled containers or in premeasured quantities.

### 1.07 COVERAGE

Application rate is 100 sqft/gallon (2.5 sqm/liters)

### 1.08 PREPARATION

Surface must be dry for 24 hours and just prior to application cracks should be cleaned with dry high pressure compressed air. or damp, but free of standing water and frost. Surface should be sound with no loose materials. Remove dust, laitance, grease, curing compounds, impregnations, waxes, foreign particles, disintegrated materials and other bond inhibiting materials from the surface. Prepare surfaces per ICRI Guideline NO. 310.1R. Shot blast, blast clean, or use other

approved mechanical means to provide an open roughened texture. In some cases, at the engineer's discretion, a thorough cleaning of the substrate using low pressure sand or water blasting is sufficient.

### 1.09 MIXING

**B-Tuff® MMA HS** must be mixed for 1-2 minutes with the appropriate amount of PSI's activator just prior to application. Air/substrate temperature determines the amount as follows:

Air/substrate temperature determines the amount per gallon as follows:

TEMPERATURE	VOLUME (OUNCES)	WEIGHT %
41°F (5°C)	5	6
50° (10°C)	10	5
59° (15°C)	15	4
68°F (20°C)	20	3
68°F (30°C)	30	2

\* Please consult PSI Technical Services for applications outside this temperature range.

## APPLICATION

### 2.01 APPLICATION

**B-Tuff® MMA HS** is applied as a flood coat in a gravity-fed process by squeegee or roller. The contents of the mixed batch should be immediately poured onto the substrate and worked into cracks by distributing with 1/2" to 3/4" (13-20 mm) nap solvent grade rollers or broom. Do not allow material to pond. Application rate is 100 sqft/gal (2.5 sqm/liter). Do not allow the mixed batch to remain in the mixing vessel. It is advisable to randomly broadcast a 30 mesh (600 µm), dry aggregate into the wet, uncured resin at the rate of approximately 4 lb/100 sqft (200 g/sqm). Working time for **B-Tuff® MMA HS** is between 10 and 15 minutes once the hardener has been added and should be immediately applied to the substrate. Full cure to specification will be between 45 minutes and 1 hour.

Pre-treat wide cracks: Cracks over 1/8" (3 mm) should be treated individually prior to deck application. Full depth cracks may require alternative treatment to prevent runoff of resin. Fill wider cracks with dry 30 mesh silica sand. Mix a small amount of B-Tuff® MMA HS, pour into cracks and distribute with a paint brush. Squeeze bottles can also be used.



#### For Best Performance:

- Application temperature range of substrate is between 40 and 104° F (5 and 40° C).
- DO NOT use for vertical surface treatments.
- B-Tuff® MMA HS Flex is a sacrificial film that will wear out over time. However, the cracks will continue to be protected.

#### **2.02 CURING**

**B-Tuff® MMA HS** has a curing time of 45 minutes at 41°F (5°C) - 104°F (40°C).

#### **2.03 CLEAN UP**

Tools and Equipment: Clean with water or PSI's **Solvent 100™**, acetone, ethyl acetate or similar solvents.

#### **2.04 STORAGE AND SHELF LIFE**

The material should be stored optimally at 77°F (25°C) in a cool, dry area away from direct sunlight. At temperatures below 59°F (15°C), the paraffin dissolved in the binder may precipitate. The material must be thoroughly be stirred before use. The shelf life of properly stored, unopened containers is 12 months. Excessive temperature differential and/ or high humidity can shorten the shelf life expectancy.

#### **2.05 LIMITATIONS**

- Avoid prolonged skin contact.
- Do not dilute.
- Wear protective gloves and goggles.

#### **2.06 CAUTION**

Keep container tightly closed. Not for internal consumption. For industrial use only. Flammable.

**READ SDS PRIOR TO USING PRODUCT. FOR PROFESSIONAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. MADE IN THE USA.**

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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