



E-TUFF® JOINT FILL

100 % Solids, Semi Rigid Epoxy Joint Filler V.O.C. Compliant

1.01 DESCRIPTION

E-Tuff® Joint Fill is a Load Bearing Joint Filler Designed to Protect Concrete Commercial and Industrial Floors Subjected to Hard Wheeled Traffic.

1.02 USES

- Repair Spalled & Damaged Joints
- Distribution Facilities
- Manufacturing Plants
- Distribution Facilities
- Crack Repair

1.03 FEATURES

- Allows Moderate Joint Movement
- Cost Effective Joint Sealing System
- Cures Down to 40°F (4°C)
- Does Not Embrittle with Age
- Easy to Place and Shave
- Excellent Impact Resistant
- Excellent Strength Properties
- Excellent Working Time
- Fast Cure Rate
- High Load Bearing Strength
- Moisture-Insensitive Formula
- Nearly No Odor
- No VOC's - 100% Solids
- Non-Shrinking
- Pourable Consistency

1.04 WHERE TO USE

On Dry or Damp Concrete Saw Cut or Control Joints for Foot, Vehicular Pneumatic Tire and Hard Plastic Wheel Traffic.

1.05 PACKAGING

22 oz (600 ml) Cartridges
2 gallon (7.56 liters) unit
10 gallon (37.9 liters) unit

1.06 COLOR

Mixed (Light Grey)
Other colors available upon request.

1.07 COVERAGE

Product coverage is depended upon the width, depth and length of the joint to be filled. Refer to Estimating Guide Chart for approximate coverages.

1.08 JOINT PREPARATION

All inner joint surfaces must be free of dust, coatings, grease, sealants, waxes and all other contaminants and have all deteriorated concrete removed to a sound and clean surface. Typical removal methods include dust-free abrasive blasting or enlarging joint width by saw cutting. Protect joints from contamination after cleaning and prior to product placement. Joint Width inches (mm) Joint Depth inches (mm)

1.09 JOINT DESIGN

Follow ACI's Standard Joint Specification for sizing and filling the joint depth to 25% of the concrete thickness. If the crack at the bottom of the joint is open, materials such as backer rod may be used to prevent epoxy from seeping out of joint void to be filled.

In accordance with ACI 302, semi-rigid epoxy fillers should be installed full depth in saw cut joints and at least 1 in. (2.5 cm) deep in formed joints. **E-Tuff® Joint Fill** can be installed with a caulking gun or poured into the joint from a suitable container. Two passes may be required, as pourable leveling materials will settle in the joint. The second pass must be made within 12 hours at 75°F (24°C). Ultimately, the filled joint should be flush with the floor surface. Another installation technique is to overfill the joint, then once tack free, cut flush with a razor knife. A heat gun can facilitate cutting, if it has hardened. Avoid overheating the cured **E-Tuff® Joint Fill**. Per ACI 302, It is advisable to defer joint filling and sealing as long as possible to minimize the effects of shrinkage-related joint opening on the filler or sealant. If concrete shrinkage-related openings do occur, **E-Tuff® Joint Fill** can be reapplied.

1.10 PRECONDITIONING POLYMER

When temperatures drop polymers typically thicken and becomes harder to place product. When the temperatures are warmer, product typically become thinner. To improve the flowability before mixing product precondition product temperature at 20°C (73°F) or higher. When the substrate temperatures are 15°C (60°F) or lower preheat each epoxy component to 90°F before mixing. Caution - when preheating epoxy to be applied by pouring method the pot life will be reduced by about 50%. When packaged in cartridges the epoxy is mixed through a static mixing tube and there is no pot life issue to be concerned about.

1.11 MIXING FOR POURING METHOD

Pre-mix Side "A", (when pigmented) then pour Side "B" into "A" and mix for 60 seconds (until one even colors develops) with a low speed paddle attached to a drill (400-600 rpm). The mixed product is ready for immediate placement.

2.01 APPLICATION

The product has a convenience mix ratio of 1 to 1 by volume and may be troweled or pumped into the joint void. For additional equipment information, contact PolyTuff Systems International.

2.02 SHELF LIFE

1.5 years in original unopened containers

2.03 LIMITATIONS

- Substrate Temperature Must be 4°C (40°F) or above.
- Minimum Application Temperature is 4°C (40°F).
- DO NOT APPLY on WET Substrate.
- DO NOT THIN – Solvents will prevent proper cure.
- Do Not Add Aggregate to Product or Place Aggregate in Joint Before Filling Joint.
- Pre-condition Polymer as Needed.

2.04 CAUTION

Side "A" - Irritant

Contains epoxy resins. Prolonged contact with skin may cause irritation. Avoid contact with eyes.

Side "B" - Corrosive

Contains amines. Contact with skin may cause severe burns. Avoid eye contact. Product is a strong sensitizer.

2.05 IMPORTANT INFORMATION

Use of safety goggles, chemical-resistant gloves, adequate ventilation and NIOSH/OSHA approved respirator is recommended.

2.06 CLEAN UP

In case of spills wear suitable protective equipment, contain spill, and collect with absorbent material, place in suitable container. Ventilate area. Avoid contact. Dispose according to applicable local, state, and federal regulations.

2.07 FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. For respiratory problems, remove person to fresh air. Contact Physician Immediately. Wash clothing before re-use.

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

PHYSICALS (Material and Curing Conditions at 73°F unless noted, 50% R.H.)			
Viscosity	900 - 1,000 cps		
Pot life	10-14 minutes		
Consistency	Flowable		
Hardness, ASTM D-2240 Shore D 7 Days	35 - 45		
Tack-free Time, ASTM C-679	40-50 minutes		
Tack-Free Time Substrate Temperature	40°F *	73°F	90°F
	8 - 10 hrs	16 - 8 hrs	4 - 6 hrs
Tensile Properties, ASTM D638, 7 Days			
Tensile Strength	1,000 psi		
Elongation Break	80 - 100 %		
Compressive Strength, ASTM D695	40°F	73°F	90°F
1 Day	1,100 psi	1,200 psi	1,400 psi
7 Days	2,100 psi	2,200 psi	2,200 psi
Pull Off Strength - Adhesion to Concrete ASTM D4541, 7 Days	40°F	73°F	90°F
	245 psi	280 psi	290 psi
Water Absorption, ASTM D570 7 Days	0.60%		

*Pre-conditioned epoxy to 90°F before mixing.



ESTIMATING GUIDE							
Lineal Feet / Gallon of Mixed E-TUFF® Joint Fill							
Width Inches (cm)	1/8 (.3 cm)	1/4 (.6 cm)	3/8 (1 cm)	1/2 (1.3 cm)	5/8 (1.6 cm)	3/4 (1.9 cm)	1 (2.5 cm)
1/2 (1.3 cm)	308.0	154.0	102.7	77.0	61.6	51.3	38.5
3/4 (1.9 cm)	205.3	102.7	68.4	51.3	41.1	34.2	25.7
1 (2.5 cm)	154.0	77.0	51.3	38.5	30.8	25.7	19.3
1-1/4 (3.2 cm)	123.2	61.6	41.1	30.8	24.6	20.5	15.4
1-1/2 (3.8 cm)	102.7	51.3	34.2	25.7	20.5	17.1	12.8
1-3/4 (4.4 cm)	88.0	44.0	29.3	22.0	17.6	14.7	11.0
2 (5.1 cm)	77.0	38.5	25.7	19.3	15.4	12.8	9.6
2-1/2 (6.3 cm)	61.6	30.8	20.5	14.7	12.3	10.3	7.7
3 (7.6 cm)	51.3	25.7	17.6	12.8	10.3	8.6	6.4

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 project specific recommendations.

LIMITED WARRANTY

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