

Technical Data Sheet



TX3 is a rapid set, high strength low viscosity concrete repair material designed to repair spalled concrete, cracked concrete, and for filling pin holes and small surface defect treatment on concrete floors before polishing. This two part, 1:1 system is 100% solids can also be used for rebuilding and repairing broken control joints, voids under concrete or tile, as well as injection into cracks for structural repair.

Applications

TX3 has an extended pot life for larger repairs requiring more working time.

- Fill pin holes and small surface defects before polishing
- · Rebuilding control joints
- · Shallow spalls on bridge decks
- Traffic area spalls & crack repairs
- · Structural Crack Injection
- · Floor repair
- Stops additional damage
- Fill & repair spall before coating
- · Used to "knit" cracked slabs
- · Fill voids under concrete or tile

Limitations

- Do not thin, solvents will prevent proper cure.
- · Avoid exposure to moisture prior to curing
- Material is a vapor barrier after cure
- Concrete should be at least 28 days old prior to application

Advantages

- 100% Solids
- Meets USDA and FDA Requirements
- Meets the USGBC's LEED® requirement of IEQ Credit 4.1
- Cures From -20°F to 130°F
- · Drive-Over in 45 minutes
- Produces High Strength Quickly
- Optimal shore D hardness range for strength, wear and tear
- · Self-leveling
- · Self Priming
- Can be mixed with dry aggregate

Physical Properties

Viscosity (mixed)	180 cps
Shore "D" Hardness (ASTM D-2240)	67 to 72D
Tensil Strength, PSI (ASTM D412)	5800
Pot Life 100 grams at 74°F	5 Min
Elongation % (ASTM D-412)	4%
Compressive Strength (ASTM D-695)	

Material Neat 6240 psi Material with Sand 5940 psi

Available in

22 oz. Cartridges

1 Gallon Kits

2 Gallon Kits

10 Gallon Kits

Shelf Life

1 year in original unopened container.

Storage Conditions

Recommended storage temperature is between 75°F to 95°F. Do not store below 45°F.

Consistency

Low Viscosity

Pot Life

Approx. 5 minutes (100 gram mass)

Appearance

Off White, Custom Color Matching Available





TX3

RAPID SET CONCRETE REPAIR

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Coverage Information

To calculate the amount of material required to make a repair, calculate cubic inches by multiplying the approximate length x width x height. Always remember to convert feet to inches. For example a 3" x 3" x 1/2" spall would be 4.5 cubic inches and there are 231 cubic inches per gallon. Add 10-15% to account for waste and overfill.

Trowelable Application Coverage

Significant Surface Damage - 200-400 sf per Gallon Moderate Surface Damage - 500-700 sf per Gallon Minimal Surface Damage - 800-1000 sf per Gallon

Approximate Coverage Rates

1/8" x 1" Crack - 154 If per gal 1/4" x 1" Crack - 77 If per gal

1/2" x 1" Crack - 39 If per gal

Divide If/gal by 5.8 to calculate coverage rate per cartridge

Chemical Resistance

Test Procedure; ASTM D-1308 @72°F

R=Recommend

RC=Recommend Conditional =some swelling or discoloration

N=Not Recommend

1=Some discoloration only

Chemical	Result
Acetic Acid 10 %	R
Acetone	RC
Battery Acid (Sulfuric Acid)	RC
Brake fluid	R
Chlorine (2,000 ppm in water)	R
Citric Acid	R
Gasoline	R
Hydraulic Oil	R-1
Methanol (5%) Gasoline	RC
Motor Oil	R-1
Toluene	RC
Vinegar	R
Water	R
Xylene	R

Application Recommendations

Spalls/Cracks: Clean the area of debris and contaminants that would act to de-bond the TX3; oils, loose materials, dirt, rubber etc. Expose clean rough concrete for best results. If using a saw to cut concrete and clean the crack, remove all the dust from the cut-out area. Cut a vertical edge on large spalls, minimum 1/4" deep around perimeter of spall. Make sure the area is dry. Vacuum or blow off cement dust. Where the crack is deep, apply product to the bottom of the crack and work up in layers. First apply product then sand into the product, then more product & sand. Repeat the steps in layers until reaching the finished grade.

Filler: Sand filler should have minimal moisture content. Any grit size, including pea gravel, most common sizes - 12 to 60. TX3 can be used to bond damaged slabs together. Not intended for use where substrate movement is required. TX3 is slightly moisture sensitive.

Grinding to finish grade: Allow the TX3 to set about 45 minutes or until hard. For best results use a flexible grinding wheel. Grind smooth with a 7-inch wheel. Repair is now ready for traffic.

Structural crack injection: Prepare cracks the same as for epoxy, sealing open cracks and setting ports then inject TX3 for structural repairs.

Safety and Handling

SDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand product Safety Data Sheets provided. Long sleeved overall or disposable overalls, rubber gloves, splash shields, rubber or leather boots should be worn. Do not use near high heat or open flame. Do not take internally. Keep out of the reach of children.

Warranty

HI-Tech warrants its products to be free of manufacturing defects will meet HI-Tech's current published physical properties when applied in accordance with HI-Tech's directions and tested in accordance with ASTM and HI-Tech's standards. There are no other warranties by HI-Tech of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Hi-Tech Corporation 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, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever.



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