

HI-TECH Systems

HT SPALL-TX3 Rapid Cure Spall & Crack Repair

Product Description:

HT Spall-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.

HT Spall-TX3 has an extended pot life for larger repairs requiring more working time,

Applications:

- ✓ 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

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
- ✓ Self-leveling
- ✓ Self Priming
- ✓ Fast initial set; rapid gain to ultimate strengths.
- ✓ Color matching to almost any color
- ✓ Separate color tint picks for inventory control
- ✓ Optimal shore D hardness range for strength, wear and tear
- ✓ Can be mixed with dry aggregate
- ✓ Tried and true over many years of applications

Physical Properties:

Viscosity (Mixed)	250 cps
Hardness, durometer (ASTM D2240)	67 to 72D
Tensile Strength, PSI (ASTM D412)	5800
Elongation % (ASTM D412-15a)	4%
Compressive Strength (neat)	6240 psi
(ASTM D695-15) (with sand)	5940 psi
Adhesion (ASTM D7234-12)	Concrete Failure

Concrete Application Recommendations:

Spalls/Cracks: Clean the area of debris and contaminants that would act to de-bond the *HT Spall-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. *HT Spall-TX3* can be used to bond damaged slabs together. Not intended for use where substrate movement is required. ***HT Spall-TX3 is slightly moisture sensitive.***

Grinding to finish grade: Allow the *HT Spall-TX3* to set about 45 minutes or until hard. For best results use a flexible grinding wheel. Grind smooth with a 7-inch wheel. Scraping or cutting may also be done with a sharp razor blade cutter as soon as product is set yet not completely hard. Repair is now ready for traffic.

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

Storage/Shelf Life: Recommended storage temperature is between 75°F to 95°F. Do not store below 45°F. Shelf Life is one year in original unopened containers.

Pot Life: 74°F - 100 Grams
Approx. 5 minutes average

Available In:
22 oz. Cartridges
1, 2, 7 & 10 Gallon Kits

Coverage Information – 22 oz. Cartridge:

Must consider waste. For random cracks, guesstimate the average size. Crack depth is unknown causing more or less use of the product. For bulk repairs, calculate the cubic inches required. 1 gallon = 231 cubic inches. 1 part sand to 1 part product typically doubles the amount.

22 oz. Cartridge Coverage Rate:

Width	¼"	½"	¾"	1"	1-1/4"	1-1/2"
¼"	52.9					
½"	26.5	13.2				
¾"	17.6	8.8	5.9			
1"	13.2	6.6	4.4	3.3		
1 ¼"	10.6	5.3	3.5	2.6	2.1	
1 ½"	8.8	4.4	2.9	2.2	1.8	1.5
1 ¾"	7.6	3.8	2.5	1.9	1.5	1.2
2"	6.6	3.3	2.2	1.6	1.3	1.1
2 ½"	5.3	2.6	1.8	1.3	1.1	.87
3"	4.4	2.2	1.5	1.1	.87	.73

Safety:

SDS are included with shipments and are available on the company website. Product labels include all safety warnings. All personnel should read and understand the Safety Data Sheets.

Disposal & Clean Up:

Empty containers must be drip free. Cured product may be disposed of without restrictions. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Cured materials may be stripped or peeled from plastic tools and containers. It is recommended that metal tools be cleaned within one hour of use by cutting or peeling cured material form tool.

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

<u>Chemical</u>	<u>Result</u>
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

Warranty:

HI-TECH warrants its products to be free of manufacturing defects and that they 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.