

A-Tech 1300 SP

Concrete Spall and Crack Repair

Description and Uses

A-Tech 1300 SP is a rapid set, solvent free, low viscosity, high strength, modified polyurethane used to repair spalls and cracks in concrete slabs, floors. A-Tech 1300 SP is a two part 1:1 ratio that is 100% solids after curing. The material is used to restore, rebuild and repair broken joints, control joints, concrete spalls very quickly. Voids in concrete can also be repaired. The extended pot life of A-Tech 1300 SP makes it an ideal material for repairing larger areas in warehouse floors, concrete slabs, exterior or interior areas, basement floors, driveways or sidewalks. Excellent for high traffic areas due to its fast cure time or if overlays are going to be installed the same day. Dry filler sand can be used to add UV protection, increase strength, match existing concrete.

Applications

- Rebuild control joints
- Shallow spalls on bridges
- Traffic areas
- Floor repair
- Fill spalls prior to overlays

Advantages

- 100% solids, no VOCs
- Meets USDA and FDA requirements
- "Drive-over" tie of 45 minutes
- Self leveling and priming
- Fast initial set
- Cures from -20° F – 130° F

Specifications

Property	Test	Result
Viscosity		250 cps
Hardness, durometer	ASTM D-2240	57-62D
Tensile Strength	ASTM D-412	4600 PSI
Tear Strength	ASTM D-624	-lb/mil 489
Elongation	ASTM D-412	6-8%
Compressive Strength, (neat)	ASTM C-109	3900 PSI
(with sand)		4800 PSI
Bond Strength	ASTM 822-99	3450 PSI
Pot Life	ASTM C-881	Approximately 10 minutes

Storage

1 Year in unopened container. Recommended storage between 75° F- 85° F. Do not store below 45° F or above 85° F.

Application Recommendations

Clean the repair area of debris and substances that will inhibit bonding, i.e.; oil, dirt, loose materials, water etc. Expose clean concrete for the best results. If grinding or sawing the repair area, remove dust. Cut out a vertical edge minimum 1/2 " deep around the perimeter of the spall. A-Tech 1300 SP should not be used where substrate movement is required. Do not use in wet areas as this will prevent proper bonding.

Where the Crack is Deep

To reduce the amount of material used, apply the product to the bottom of the crack and work up in layers. First apply the product, then sand, then the product, then sand. Repeat until reaching the final grade.

Filler Sand

Filler sand should be dry silica sand between 12 to 60 grit. Filler sand will reduce discoloration from UV rays. Larger pea gravel can be used for larger repairs.

Grinding to Finish Grade

Allow A-Tech 1300 SP to cure for 45 minutes or until hard. For best results grind smooth with a flexible 7 inch wheel. Scraping or cutting can be done with a sharp razor blade cutter. Cut as soon as the product is set and not completely hard. Once fully cured, the area is ready for traffic.

Available Sizes

22 oz Cartridges

Disposal and Clean Up

Empty containers must be drip free. Mix unused materials to allow to cure. Cured products may be disposed without restrictions. Clean tools within one hour of use by cutting or peeling material off.

Warning

- Use with adequate ventilation
- Keep out of reach of children
- Do not take internally
- In case of ingestion call a physician, do not induce vomiting

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

Coverage Information:

Include waste in your estimate. Estimate the average size of the crack. 1 PART SAND TO 1 PART PRODUCT TYPICALLY DOUBLES THE AMOUNT OF COVERAGE

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

Depth of Crack	Width of Crack					
	1/4"	1/2"	3/4"	1"	1-1/4"	1-1/2"
1/4"	52.9'					
1/2"	26.5'	13.2'				
3/4"	17.6'	8.8'	5.9'			
1"	13.2'	6.6'	4.4'	3.3'		
1-1/4"	10.6'	5.3'	3.5'	2.6'	2.1'	
1-1/2"	8.8'	4.4'	2.9'	2.2'	1.8'	1.5'
1-3/4"	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'
2-1/2"	5.3'	2.6'	1.8'	1.3'	1.1'	.87'
3"	4.4'	2.2'	1.5'	1.1'	.87'	.73'

Warranty

Applied Technologies warrants that, that at the time of shipment, the product is free of manufacturing defects and conforms to published specifications in force on the date of acceptance by "the company" of the order. Applied Technologies shall only be held liable under this warranty if the material has been stored, used and applied in accordance with Applied's instructions in the products technical data sheet.

If Applied Technologies, in its sole discretion determines that the product breached the above warranty it will in its sole discretion replace the non-conforming product, refund the purchase price or issue a credit to the buyer of the product. The dollar value of Applied's liability and the buyer's remedy under this limited warranty shall not exceed the purchase price of the material in question. This is the only warranty extended by Applied. There are no other warranties including implied warranties of merchantability and fitness for a particular use and purpose. Applied specifically disclaims liability for any incidental, consequential or other damages including but not limited to, loss of profits or damages to a structure or its contents.

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