

Tstrata 330

Low Viscosity, High Strength Epoxy

Physical Properties:

Tensile Strength (ASTM D638):	7,200 psi (49.6 MPa)	Bond Strength (ASTM C882):	Hardened to Hardened
Tensile Modulus (ASTM D638):	280,000 psi (1,930 MPa)	2 days dry	2,150 psi
Elongation at Break (ASTM D638):	2.2%	14 days moist	2,550 psi
Compressive Strength (ASTM D695)	11,100 psi (76.5 MPa)	14 days dry	2,825 psi
Compressive Modulus (ASTM D695)	265,000 psi (1,827 MPa)	Viscosity (ASTM D2196)	300 – 450 cps
Density Mixed Product:	9.06 lbs/gal (1.08 kg/L)	Percent Solids (ASTM D1259):	100%
Pot Life:	25 minutes	VOC Content (ASTM D2369)	0% VOC

DESCRIPTION:

Tstrata 330 is a two-part, low viscosity 100% solids, high strength epoxy for crack repair. Tstrata 330 is moisture insensitive and has a convenient 2A to 1B mix ratio. Tstrata 330 is an environmentally friendly product with high modulus. It is the perfect solution for general bonding applications and for injecting cracks in concrete and a variety of other substrates

PRODUCT USES:

Tstrata 330 is a multi-use epoxy for: injection of cracks in concrete, gravity feed of horizontal cracks, vertical anchor bolt grouting, and as a binder for sand filled horizontal repairs.

Meets ASTM C881- Type I and IV, Grade 1, Class B and C

ADVANTAGES:

- Deep Penetration
- High strength bond to concrete
- Moisture insensitive
- Virtually no odor

APPROXIMATE POT LIFE:

25 minutes @ 72°F (22°C)

APPLICATION INFORMATION

SURFACE PREPARATION:

The surface must be structurally sound, dry, clean and free of grease, oil, curing compounds, soil, dust and other contaminants. Substrates should be dry and exhibit an open pore structure. Surface laitance must be removed. Concrete surfaces must be roughened and made absorptive, preferably by mechanical means, and then thoroughly cleaned of all dust and debris. Route cracks and blow dust/debris from them with oil-free compressed air. Following surface preparation, the strength of the surface can be tested if quantitative results are required by project specifications.

APPLICATION:

Tstrata 330 can be applied to Concrete, Composites, Wood or Metal. It can bond anchors, dowels and pins.

BASIC APPLICATION EQUIPMENT:

Processes for application of Tstrata 330 will require mixing drill and mixing paddle or pressure injection equipment capable of precisely metered resin delivery.

MIXING:

Pre-mix Part A and Part B separately for approximately 1 minute each. Blend Part A and Part B with a mechanical mixer for 3 minutes until uniformly blended using a low-speed drill and a Jiffy mixing paddle. Combine Part A and Part B in a 2 to 1 ratio by volume.

To make Tstrata 330 mortar, gradually add clean, dry, 20/40 mesh silica sand to previously mixed epoxy and mix thoroughly for an additional 3 minutes. The mix ratio of aggregate to mixed epoxy is approximately 3 to 1 by volume but can be modified depending on the desired consistency of the mortar. The sides and bottom of the container should be scraped at least once during mixing. Avoid entrapping air during mixing. Follow ICRI Guidelines for mortar mixing.

PRESSURE INJECTING OF CRACKS:

Vertical cracks: Attach injection ports and seal the face of the crack with V-Wrap PF or Tstrata GEL. Allow the sealing gel to sufficiently harden before injecting, to prevent blowouts. Pump Tstrata 330 into the crack via the injection ports, using two-component pressure injection equipment. Start at the bottom of the crack and work upwards from port to port. Cap off ports as you proceed up the crack to ensure that the epoxy is kept contained within the crack. **DO NOT INJECT IF WATER IS LEAKING FROM THE CRACK.**

Horizontal cracks: Open cracks by mechanical means and ensure that the prepared crack is free of all debris and standing water. If pressure injecting, instructions are the

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same as for vertical cracks. If gravity feeding, pump Tstrata 330 until cracks are completely filled. If working on an elevated slab, ensure the bottom of the slab is sealed prior to injecting or gravity feeding the crack, to ensure epoxy does not leak through.

ANCHORING BOLTS, DOWELS, & PINS:

Tstrata 330 can be used neat or as a mortar to grout vertically-aligned anchors (into a horizontal substrate). The anchor hole should be free of all debris before grouting. The hole sides should be scored to facilitate bond. The optimum hole size is 1/16" (1.6 mm) annular space (1/8" (3.2 mm) larger diameter than anchor diameter). Depth of embedment is typically 10 to 15 times anchor diameter.

PATCHING AND REPAIRS:

Apply Tstrata 330 neat as a primer coat to the prepared concrete surface. Mix the Tstrata 330 into an epoxy mortar and apply to the area by trowel or spatula in lifts of 1" to 1-1/2" (25 to 38 mm) before the neat primer coat becomes tack free. Allow each lift to reach initial set before applying subsequent lifts.

COVERAGE:

One-gallon Tstrata 300 is 231 cubic inches. Pressure injection coverage will vary with concrete conditions.

CLEAN UP:

Use methyl ethyl ketone or acetone for clean-up. Clean tools and application equipment immediately. Observe fire and health precautions when using solvents. Dispose of in accordance with local regulations. Clean spills or drips with the same solvents while still wet.

OBSERVE WORKING TIME LIMITATIONS:

Mix no more material than can be applied within the working time. Ambient temperatures should be between 50°F and 90°F (10°C and 32°C). Material temperatures should be at least 50°F (10°C) and rising. Working time and cure time will decrease as the temperature increases and will increase as the temperature decreases.

PACKAGING:

	Volume	Weight	Package
Part A	2.0 gal	19 lbs	1 gal can
Part B	1.0 gal	8.5 lbs	1 gal can

SHELF LIFE:

Stored at 70°F (21°C): 24 months (Parts A and B)

STORAGE:

Store in a cool, dry area (40°F and 90°F [4°C to 32°C]) away from direct sunlight, flame or other hazards.

HANDLING:

Approved personal protection equipment should be worn at all times. Particles mask is recommended when handling airborne particles. Wear chemical resistant clothing /gloves/goggles. Ventilate area. In absence of adequate ventilation, use properly fitted NIOSH respirator. Product Safety Data Sheets (SDS) are available and should be consulted and on hand whenever handling these products.

These products are for professional and industrial use only and are to be installed by trained and qualified applicators. Trained applicators must follow installation instructions.

SAFETY:

WARNING: Vapor may be harmful. Contains epoxy adhesive and curing agent. May cause skin sensitivity, burns or other allergic responses. Keep away from heat, sparks or open flame. In enclosed areas or where ventilation is poor use an approved air mask and utilize adequate safety precautions to prevent fire or explosion. In case of skin contact, wash with soap and water. For eyes, flush immediately (seconds count) with water for 15 minutes and CALL A PHYSICIAN. If swallowed, CALL A PHYSICIAN IMMEDIATELY.

LIMITATIONS:

Do not thin Tstrata 330. Tstrata 330 will discolor upon prolonged exposure to ultraviolet light and high-intensity artificial lighting. Tstrata 330 is not to be used as a finished/aesthetic coating. Do not use Tstrata 330 for horizontally-aligned anchors (into a vertical substrate). Do not use Tstrata 330 for overhead anchoring

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