

TD.475 – TECHNICAL DATA: MERCAP-445™ Crack Repair & Injection Epoxy

Revised: 12/27/19

Product Name: MERCAP-445™ Crack Repair & Injection Epoxy

Product Class: A two-component epoxy crack fill and anchor bolt adhesive.

Description:

MERCAP-445™ is 100% solids, low viscosity, structural epoxy adhesive designed for repairing cracks in concrete and as an anchor bolt adhesive for above grade and below grade applications including damp concrete and attain high strengths in as little 8 hours. MERCAP-445™ is an all-weather anchor adhesive for the harshest environments. Available in 900 ml dual cartridges with static mixer or as a 1.5-gallon bulk kit.

Uses:

Gravity filling horizontal cracks in dry or damp concrete
 Structural anchor bolt adhesive for horizontal applications
 Chip proof sealant for prison safety measures
 General purpose adhesive for bonding dissimilar materials

Features:

Adhesive for many types of substrates
 Bonds to dry or damp concrete
 High strength gain
 Low Viscosity
 2 to 1 ratio by volume

Physical Properties:

<u>Property</u>	<u>Test Standard</u>	<u>Result</u>
Mix Ratio:		2 to 1 by volume
Pot Life:	ASTM C-881	14 minutes
Colors (mixed)		Clear Amber
Consistency		Flowable
Compressive Strength	ASTM D-695	13,500 psi
Compressive Modulus	ASTM D-695	>410,000,000 psi
Bond Strength	ASTM C-882	325 psi 5 hours 550 psi 7 hours 2,100 psi 7 days
Absorption	ASTM D-570	0.04%
Heat Deflection Temperature	ASTM D-638	121 F
Elongation @ break	ASTM D-638	3.75%
Viscosity		
Part A Resin		600 cps
Part B Hardener		250 cps
Mixed		375 cps

Coverages:

CRACK WIDTH X DEPTH (INCHES)	LINEAL FEET PER GALLON
1/8" X 1"	154 LF
1/4" X 1"	77 LF
1/2" X 1"	38.5 LF
3/4" X 1"	25.7 LF
1" X 1"	19.3 LF

Application:

- “V” out crack with joint preparation blade or flat chisel to create reservoir to control the epoxy.
- Pour mixed epoxy in the reservoir and refill as needed until no more is accepted into crack.
- When crack is filled, pour silica sand into reservoir.
- Allow to cure before grinding smooth and/or placing subsequent top coats or overlays.

NOTE: if epoxy adhesive is running thru bottom of crack, add epoxy thickener to mix and tuck point into crack and allow to cure.