



# Xtreme 4050 Specifications Sheet

ALSO KNOWN AS HI-MOD FIBER MATRIX #4550 LPL  
**MOISTURE INSENSITIVE HIGH MODULUS,  
 HIGH STRENGTH, STRUCTURAL EPOXY**  
 FOR INDUSTRIAL & HOME REPAIR USE

<b>MIXING RATION</b>	2A to 1B	By Volume
<b>COMPRESSIVE YIELD STRENGTH</b>	ASTM-D-695	
	****40°F(4°C)	****75°F(24°C)      ****90°F(32°C)
24 Hours PSI (Mpa)		3200 (22 Mpa)      3600 (25 Mpa)
3 Days PSI (Mpa)	4000 (28 Mpa)	9100 (63 Mpa)      9600 (66 Mpa)
7 Days PSI (Mpa)	7200 (50 Mpa)	10500 (72 Mpa)      9600 (66 Mpa)

<b>TENSILE PROPERTIES</b>	ASTM-D-638	
14 Days Tensile Strength PSI		6000 (41 Mpa)
Elongation at Break		2 - 4 %

<b>FLEXURAL PROPERTIES</b>	14 DAYS	ASTM-D-790
Flexural Strength PSI		7600 (52 Mpa)

<b>GLASS TRANSITION TEMPERATURE</b>	ASTM-E-1356	
2nd Run		
1st Run		>135°F (57°C)

<b>SHORE D HARDNESS</b>	ASTM-D-2240	84
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<b>POTABLE WATER</b>	ANSI/NSF 61-1992	Y/N
****INDICATES TEMPERATURE FOR CURING & TESTING		

**COLOR** Part A Resin: Straw / Part B Hardener: Amber / Ad-Mix: Amber

**PACKAGING** Available in 3 Gallon Units. Available in larger units on request.

- CAUTIONS**
- Minimum surface application temperature is 40°F (4°C)
  - Do not seal slabs on grade
  - Material is a vapor barrier after cure
  - Not for sealing cracks under hydrostatic pressure
  - Minimum age of concrete must be 21 - 28 days
  - Test for surface vapor transmission. Moisture passing through the substrate by pressure during the application and curing will cause bond failures.
  - Due to many variables in bonding on damp or underwater surfaces, be certain to test application under the same conditions as full-scale work.

**TEMPERATURES**  
 Will cure at temperatures as low as 40°F (4°C), providing the temperature will be 40°F and rising during the next 72 hours. Epoxy materials should be stored at least 24 hours prior to use at 80°F (26°C), or higher. Epoxies stored below 60°F(15°C), will cause the epoxy to thicken substantially, making it difficult to properly blend the two materials and obtain a proper mating of resin and hardener. Protect from inclement weather and freezing. If product temperature falls below 50°F(10°C), it is recommended that a product temperature of 80°F (26°C) be obtained prior to using. **Store dry at 40°F(4°C) - 100°F(38°C). Condition to 70°F(26°C) - 85°F(29°C) before using.**

<b>VISCOSITY:</b>	Ad-Mix	ASTM-D-2393	700-900 cps
<b>GEL TIME:</b>	73°F (23°C)		approx. 100 minutes
<b>TACK FREE TIME:</b>		***75°F (24°C)	***90°F (32°C)
		5 hours	4 1/2 hours
***AMBIENT TEMPERATURE			

**NEAT BINDER**  
 Bond Strength, PSI,                      ASTM-C-882  
 2 Days (moist cure):  
 Hardened concrete to hardened concrete or steel-1200 min. (8.2 Mpa)  
 Water Absorption 24 Hrs %              ASTM-D-570              .08 % maximum

**DESCRIPTION**  
 Xtreme 4050 by Fortress is a 100% solids, solvent-free, two-component MOISTURE INSENSITIVE EPOXY.  
 Xtreme 4050 by Fortress is a low viscosity epoxy for wetting and use with carbon fiber for structural repairs.

- ADVANTAGES**
- Easy mix ratio: 2 Parts A to 1 Part B by Volume
  - Long Pot Life with rapid strength development
  - Provides high early strength and excellent adhesion to most structural materials
  - Insensitive to moisture before, during and after cure
  - Low temperature cures - As low as 40°F (4°C)

- PHYSICAL PROPERTIES**
- Moisture Insensitive & low temperature cure
  - #4550 LPL Fiber Matrix Structural Epoxy

**CAUTION:** Fortress Xtreme epoxies contain alkaline amines. Strong sensitizer MAY CAUSE SKIN SENSITIZATION or allergic response ranging from a mild wheezing to a severe asthmatic type attack. Avoid contact with skin or eyes. IN CASE OF CONTACT immediately wash skin with soap and water. Flush eyes with water and obtain medical attention. Wear protective clothing, goggles and barrier cream on all exposed skin. Provide adequate ventilation.

For more information visit our site:  
[www.FortressStabilization.com](http://www.FortressStabilization.com)  
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