

Structural Epoxy Adhesive

Technical Data Sheet

DESCRIPTION	<p>Megabond is a high strength two component 100% solids epoxy adhesive.</p> <p>It is creamy white in colour, easy to mix and spreads easily with a notched trowel. Megabond is suitable for bonding stone and tile to all masonry surfaces including cement sheet, cement render, plasterboard and timber, it is suitable for both interior and exterior applications.</p> <p>Megabond will not stain light coloured marbles and bonds water sensitive and composite stone. Megabond can be coloured to suit using Megapoxy coloured pigment pastes.</p> <p>High shock and chemical resistance.</p>	
RECOMMENDED APPLICATIONS	Bonding <ul style="list-style-type: none">• Precast concrete articles• Metal to metal or concrete• Miter Joints• Natural stones• Bricks and ceramics• Bonding compressed cement sheet	Filling and Repair <ul style="list-style-type: none">• Stone holes and voids• Chipped or damaged stone edges• Concrete floors and stairs• Concrete column• Insitu formed concrete• Fibreglass articles
PROPERTIES	Mixing Ratio by Volume	1 Part A to 1 Part B
	Work Time at 25°C:	45 minutes
	Minimum Cure Time at 15°C	48 hours
	Minimum Cure Time at 25°C	24 hours
	Minimum Cure Time at 35°	12 hours
	Minimum Application Temperature	10°C
	Maximum Operating Temperature	80°C
	Colour Part A	White
	Colour Part B	Natural
	Appearance Mixed	Off White
CURED PROPERTIES	Compressive Strength - ASTM D695-23	60Mpa
	Bond Strength Concrete - ASTM D4541	>3Mpa
	Tensile Bond Strength Steel - ASTM D897-08	10Mpa
	Modulus of Elasticity - ASTM D695	2Gpa
	Flexural Strength ASTM D790-17	50Mpa
	Tensile Strength - ASTM D638-22	18Mpa
	Tensile Shear Strength - ASTM D1002-10	6Mpa
	Hardness - Shore D - ASTM D2240-00	70
	Coefficient of Linear Thermal Expansion, Mean	60 x 10 ⁻⁶ (mm/mm/°C)

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CHARACTERISTICS	<ul style="list-style-type: none"> • VOC Free • Smooth and easily workable • Simple 1:1 mix ratio • Creamy texture, blends easily • Spreads easily with notched trowel • Rapid setting • Very high strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance
SURFACE PREPARATION	<p>Concrete</p> <p>Concrete should be free from grease and oil. If necessary, clean with industrial heavy duty degreaser. When clean, remove surface laitance. This is best done by mechanical abrasion such as scabbling, grit blasting or grinding. If this is not possible acid etching must be carried out.</p> <p>Mix concentrated hydrochloric acid with equal volume of water and spread at the rate of 0.5 litre per square meter of concrete surface. Allow to react for about 10 minutes and wash the area thoroughly and scrub with a stiff bristled broom to remove loose sand. Allow to dry for 24 hours. For maximum adhesion the concrete should be surface dry.</p> <p>Metal Surfaces</p> <p>Metals should be grit blasted to AS CK 9.4 - 1964 Class 3 finish. If this is not possible, mechanically abrade the surface to a clean, bright metal surface. Once this abrasion is complete, degrease the surface by flooding with an industrial grade degreaser. Wire brushing is not entirely satisfactory and gives minimal adhesion only.</p> <p>Coated Surfaces</p> <p>It is recommend to remove all coatings prior to bonding, bonding to coated surfaces will give inferior bond strengths compared to bonding directly to a prepared substrate.</p> <p>Concrete:</p> <p>The surface may be either flame-cleaned, or mechanically treated with a scutching tool, to remove all traces of paint. Complete the preparation by diamond grinding or scabbling.</p> <p>Metals:</p> <p>Steps should be taken to remove all paint and/or galvanizing. Good quality paint stripper should be used, followed by grit blasting or grinding to a bright metal finish.</p>
IMPORTANT INFORMATION	<p>It is essential that the correct mixing ratio be used and that the Part A and Part B are thoroughly mixed together before use. Inaccuracies and poor mixing will result in lower physical properties of the cured system and, if the error is sufficiently large, the system may not cure satisfactorily and discolour on ageing.</p>
CLEANING	<p>To keep mixing implements and working tools clean, use Megapoxy Thinners. Use disposable rubber gloves to protect hands and maintain proper industrial hygiene. For further details refer to the Megabond Safety Data Sheet.</p>
PACKAGING	<p>Megabond 20 litre kits White. Product should be stored in cool dry store.</p>
TECHNICAL SERVICE	<p>All purchasers of Megapoxy Products, are encouraged to avail themselves of our Technical Service for our Megapoxy Products. The information in this Bulletin is correct at time of publication, however continual research and development is being carried out and specs may change without notice.</p>