Megapoxy®

The Complete Guide to Concrete Floor Repairs & Coating

The Megapoxy Difference

Megapoxy is proud to support the performance, safety and longevity of structures, products and equipment across the globe. We are high-strength epoxy adhesive specialists, crafting solutions to solve real industry challenges. We work with clients to achieve the perfect result, smoothly and efficiently.

We develop, produce and manufacture advanced formulas to bond, strengthen, repair, preserve and protect. Backed by the highest quality standards and certifications, our clients enjoy reliable supply, fast turnaround, expert advice and support worldwide. Trusted for 50 years, we constantly innovate for today and tomorrow.

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Megapoxy®

Powerful Protection and Repair for Concrete Floors

Epoxy adhesive solutions are the smart flooring choice for commercial, industrial and healthcare settings. With constant foot traffic, heavy equipment and exposure to spills, selecting the right coatings and repair methods is essential for durability, safety, style and low maintenance.

This guide covers everything from assessing cracks and surface damage to choosing the best repair and coating solutions. For expert advice, visit **megapoxy.com** to explore our solution selector and find your nearest distributor. Need help? Contact us anytime for advice (see back page).

Floor Crack Repair: Identifying the Issue

Some floor cracks are more dangerous than others, but all can lead to serious damage if not repaired.

Here is an overview of the most common types of cracks, how to identify them, and recommended solutions.

Hairline

Minor surface-level cracks from a variety of causes, including impact shock and thermal attrition in curing.

Recommended:

Megapoxy HX

Shrinkage

Minor surface-level cracks caused by shrinking concrete.

Recommended:

Megapoxy H

Megapoxy HX

Settlement

Medium cracks caused when the ground below settles.

Recommended:

Megapoxy H

Megapoxy HX

Megapoxy HT

Structural

Large, more serious concrete cracks that appear to be wider with easily visible depth.

Recommended:

Megapoxy H

Megapoxy HX

Megapoxy HT

Note

All concrete floor cracks should be repaired, regardless of size or cause.
Left untreated, they can spread and cause more severe damage.

Surface Profiles & Preparation

For overlays and concrete restoration

Proper preparation of existing concrete surfaces is essential to achieve strong adhesion of resurfacers, overlays, sealers, coatings and stains.

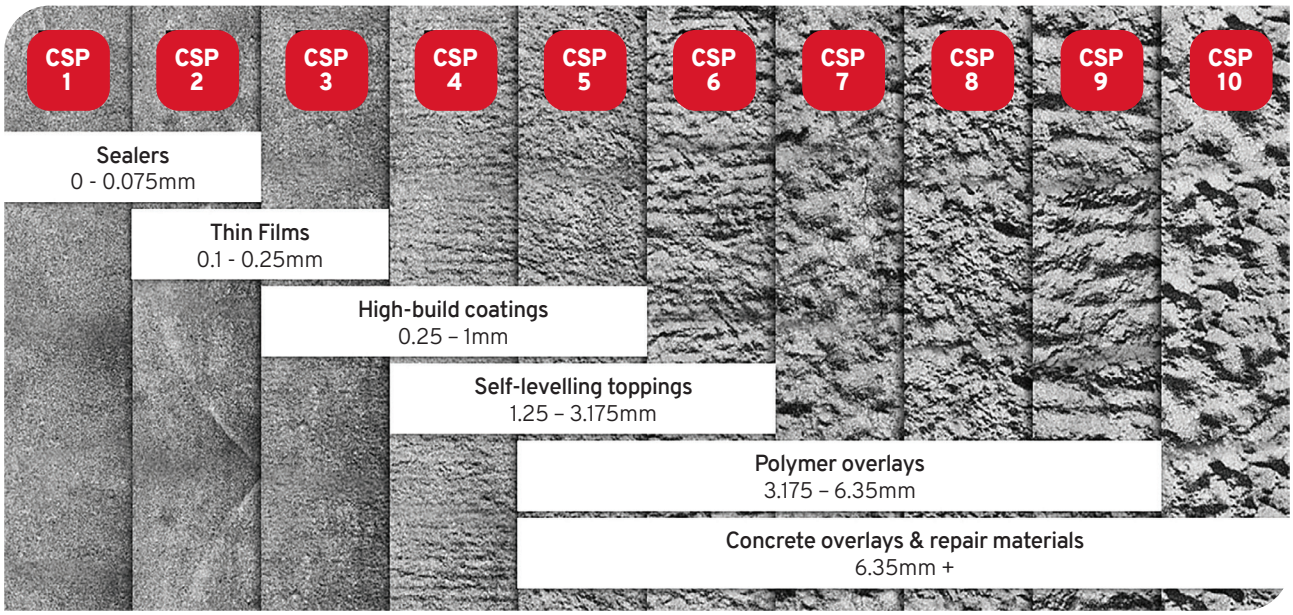
With many different products available, it is important to understand the required surface condition for the product you plan to use.

Taking steps to prepare the surface correctly saves time and money while preventing coating failure.

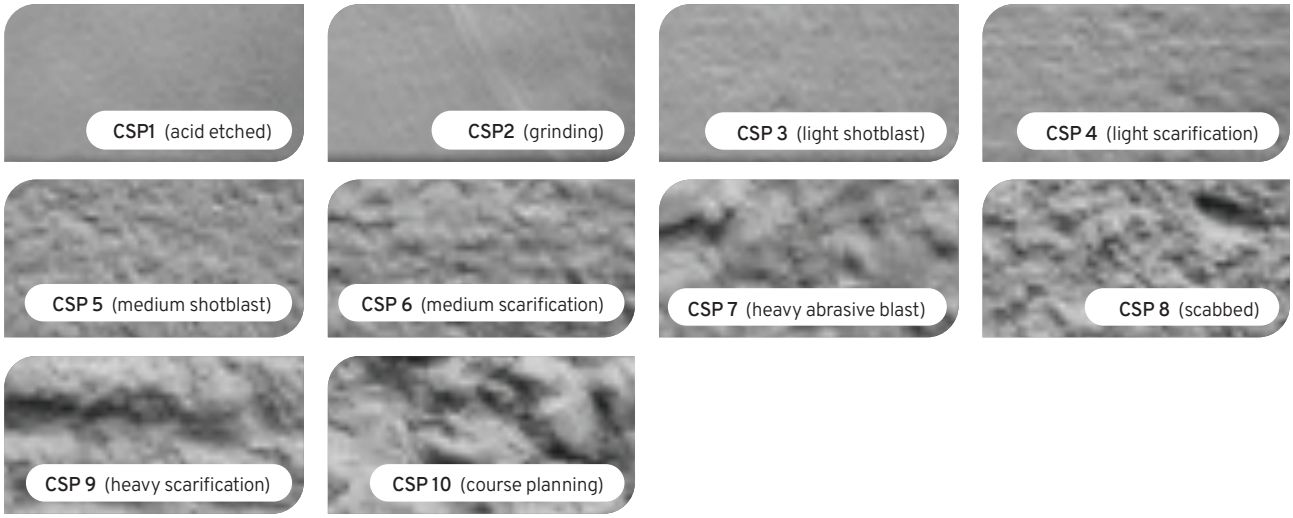
Concrete Surface Profiles (CSPs) were developed by the International Concrete Repair Institute (ICRI). They cover 10 classifications, from CSP1 (smoothest) to CSP10 (roughest) – as shown in the images below.

These industry standards guide installers to achieve the right texture for successful bonding of an overlay or coating.

STEP 1: Find the right CSP
Match the required surface texture to your coating.



STEP 2: Select the best preparation method
Use the right technique to achieve the required CSP.



Important for Surface Preparation

- The surface must be clean – without chemicals, oil, grease, curing contaminants and other compounds.
- The existing concrete must have the right surface profile for the selected overlay. Always check the manufacturer's recommendations.
- Mechanical profiling and acid etching are techniques for preparing floors for overlays and restorations. Mechanical profiling is the preferred and safest option for roughening concrete. Acid etching can work for some coatings, sealers and toppings – but can be difficult to completely rinse and neutralise, requires a well-ventilated area, and will not remove petroleum-based products or animal/vegetable oils from existing concrete.
- More aggressive surface preparation methods – like flame blasting, scarifying, scabbling and milling/ rotomilling – can cause micro-cracking. If this occurs, additional surface preparation is necessary.
- Repair cracking or spalling during surface preparation, before applying the final overlay.
- Maintain existing control, construction and expansion joints.
- Test by applying the coating to a mock-up or test area under actual ambient temperature and surface moisture conditions to ensure proper surface preparation.

Industry standards

Reference the following industry standards for preparation of concrete from the ASTM International (formerly known as American Society for Testing and Materials-ASTM), NACE International (formerly National Association of Corrosion Engineers), Society for Protective Coatings (SSPC), and the International Concrete Repair Institute (ICRI).

ASTM D4258, Standard Practice for Surface Cleaning Concrete for Coating.

ASTM D4259, Standard Practice for Abrading Concrete.

ASTM D4260, Standard Practice for Liquid and Gelled Acid Etching of Concrete.

ASTM D4261, Standard Practice for Surface Cleaning Concrete Unit Masonry for Coating.

ASTM D7682, Standard Test Method for Replication and Measurement of Concrete Surface Profiles Using Replica Putty.

SSPC-SP13/NACE 6, Surface Preparation of Concrete.

ICRI Standard 310.2 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair with CSP Chips.

Scrub washing concrete

The Right Products for the Job

This guide provides a summary of our proven solutions for concrete floor repairs and coatings.

For more specific product advice tailored to your project, contact our team today (see back page).

Megapoxy H

Low Viscosity Hydrophilic Epoxy Resin

Used extensively to repair concrete and as a wet-to-dry concrete adhesive.

Repair crack widths:

- 0.5mm to 2mm – Injection, capillary action.
- 2mm to 10mm (Horizontal surface) – Pouring, trowelling.
- 10mm to 100mm (Horizontal surface) – Use with clean kiln-dried sand (30/60 or 16/30 grit size); Mixing ratio: 1-part mixed Megapoxy H to 3-parts sand.

Megapoxy HX

Extra Low Viscosity Epoxy Resin

Spreads easily – with excellent penetration, sealing and adhesive properties.

- Repair crack widths: 0.1 to 1mm.
- Application: High or low-pressure injection.
- Capillary action.

Megapoxy HT

Hydrophilic Epoxy Gel Adhesive

Incredibly strong and versatile: can be used vertically, overhead or underwater.

- Repair crack widths: 1mm to 20mm.
- Greater than 20mm – Mix with kiln-dried sand (30/60 grit); Mixing ratio: 1-part mixed Megapoxy HT to 1-part sand.
- Application: Trowel, knife or pump.

Megapoxy MC2

Heavy Duty Maintenance Coating

- VOC-free.
- AS/NZ 4020:2108 Potable Water Approved.
- Excellent chemical resistance.
- High-wear resistant coating.
- Suitable for food service applications.
- 100% solids and ultra-high build.

Megapoxy 132

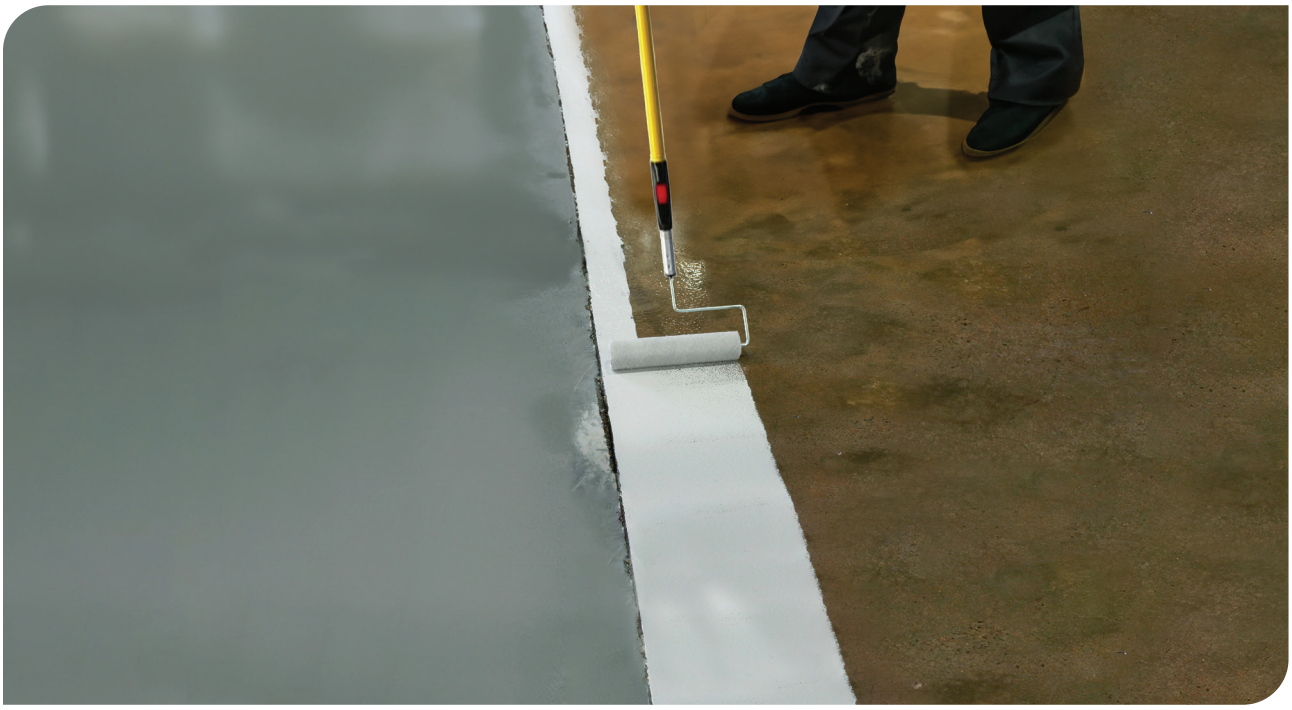
High Strength Epoxy Coating

- VOC-free.
- Safe for food and potable water applications.
- Excellent abrasion resistance.
- Easy maintenance and cleaning.
- Can add coloured pigments for a stylish finish.

Megapoxy P1

Epoxy Paste Adhesive

- VOC-free.
- AS/NZ 4020:2108 Potable Water Approved.
- Excellent chemical resistance.
- Simple 1:1 mix ratio and asy-blend texture.
- Steel protection in low cover concrete applications.
- High strength permanent bonds.
- Two-part solution.



The Right Products for the Job

Megapoxy H315

Low Viscosity Rapid Set Epoxy Resin

- Rapid setting.
- Solvent-free liquid resin.
- Ideal for coating or casting.
- Can be used with fine aggregates to make fast-setting high-strength epoxy mortars.

Megapoxy LVS

Low Viscosity Sealer

- Seals concrete floors against oils, fats, dilute acids and other corrosive materials.
- Protects walls and floors against damp.
- Protects structural concrete from salt air and moisture.
- Seals concrete tanks to prevent leaks.
- Recommended for use with Megapoxy MC as a primer.

Megapoxy MC

Heavy Duty Maintenance Coating

- Hygienic and dust free.
- Safe for food applications.
- Excellent chemical resistance.
- Apply by airless spray equipment, roller or brush.
- 100% solids and high build.
- VOC-free.
- Available in: Black, Blue, Carribean Blue, Charcoal, Dark Grey, Grey, Mid Grey, Pacific Blue, Safety Yellow.

Megapoxy PM

Epoxy Paste Adhesive

- Suits vertical, inclined or overhead work.
- High chemical resistance.
- Cures in adverse conditions.
- General purpose and bonds with most construction materials.
- Elasticity for temperature variations and seismic movement.
- Available as twin self-mixing cartridges.

Megapoxy PF

Rapid Set Epoxy Adhesive

- Fast cure: Sets in 3–5 minutes.
- Ideal for on-the-spot critical repairs and fixings.
- Non-sag for vertical, inclined or overhead work.
- Smooth, workable, easy 1:1 mix ratio.
- High-strength bonds and chemical resistance.
- Two-part solution.

Megapoxy 260

Flexible Epoxy Resin

- Designed for control and construction joints.
- Crack repairs.
- High impact resistance.
- Pre-metered.
- Movement tolerance ± 8-10%.
- Can be coloured with Megapoxy pigments.

Concrete Flooring
How to Repair Non-Structural Cracks

There are two main methods for repairing non-structural cracks in concrete flooring.

- **Patching & Surface Repair (Megapoxy P1 & HT):** Ideal for shallow, wide cracks, where the goal is to restore the surface level, such as in floor and wall repairs.
- **Crack Filling & Capillary Action (Megapoxy H & HX):** Used when the epoxy needs to flow into the gap, either by pouring to fill deeper cracks or using the capillary action system for finer cracks.

1. Patching & Surface Repair Using Megapoxy P1 and HT

Non-structural cracks that require patching with Megapoxy P1 and HT are wider surface cracks that do not compromise structural integrity but need to be physically opened (V-groove cut) and filled with epoxy to ensure a durable, sealed repair.

Patching crack repairs are surface-only repairs – and not classed as structural repairs.

Surface Preparation

- All surfaces must be structurally sound.
- Remove previous coatings, adhesives, efflorescence or laitance by chipping, abrasive blast cleaning, high pressure water washing, mechanical scrubbing or similar.
- All surfaces must be cleaned free from dirt, grease, oil or other surface contaminants.
- Ensure the surface is dry before application begins.

Mechanical abrasion of concrete surface.

Note

To work Megapoxy P1 deeper into the crack repair, you can run a diamond cutting blade along the crack or V cut. Please contact us if you have any questions about this, or any, repair method. We are here to help: see back page for support near you.

Process

1. Make sure area around the crack to be repaired is clean and free of loose or damaged concrete.
2. Chip, grind or cut out a V along the length of the crack: approximately 10mm deep each side and 10mm across.
3. Run a concrete cutting blade along the length of the crack to open it up slightly. This should give a clean, fresh concrete surface to bond to once cured.
4. Make sure the prepared V cut is clean and free of dust and any loose or damaged concrete.
5. Using a flat board, mix Megapoxy P1 Part A and Part B in the correct 1:1 ratio by volume. When mixed thoroughly, it should be streak free and dark grey in colour.
6. Using a trowel, small tool or gloved hand, apply mixed Megapoxy P1 along the prepared crack.
7. Work it into the crack. A small amount of moisture on your tools or gloves can prevent Megapoxy P1 from sticking.
8. Once in place, run a lightly moistened trowel across the surface to smooth the surface. Re-wet tool frequently to prevent dragging.
9. Once the Megapoxy P1 has cured, if the repair is higher than the concrete surface, it can be sanded using a #40 grit flap disc.

Work the Megapoxy P1 into the crack.

A small amount of moisture on a trowel will allow the surface to be finished smoothly. Re-wet tool frequently to prevent dragging.

2. Crack Filling & Capillary Action Repair with Megapoxy H & HX

Capillary action crack repairs using Megapoxy H or HX are surface repairs only – and not classed as structural repairs.

Surface Preparation

All surfaces must be structurally sound.

- Remove all previous coatings, adhesives, efflorescence or laitance by chipping, abrasive blast cleaning, high pressure water washing, mechanical scrubbing or similar.
- All surfaces must be cleaned free from dirt, grease, oil or other surface contaminants. Ensure the surface is dry before application begins.

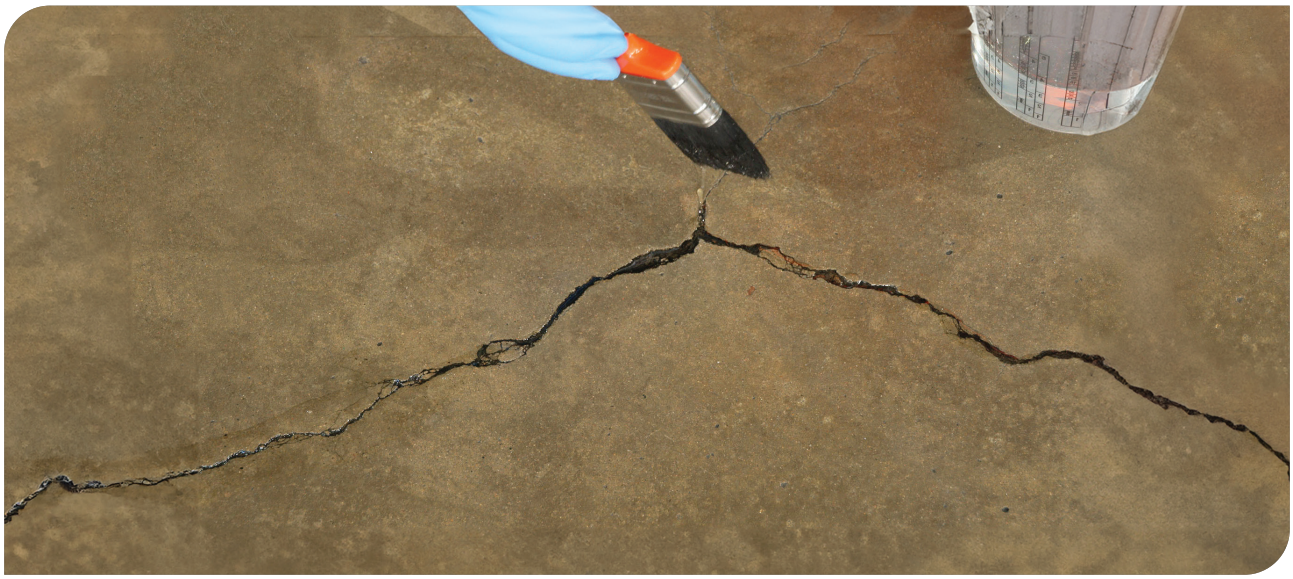
See pages 13–14 for more detailed preparation instructions.

See the Video

For further Megapoxy H instructions and a demonstration scan the QR code:

Process

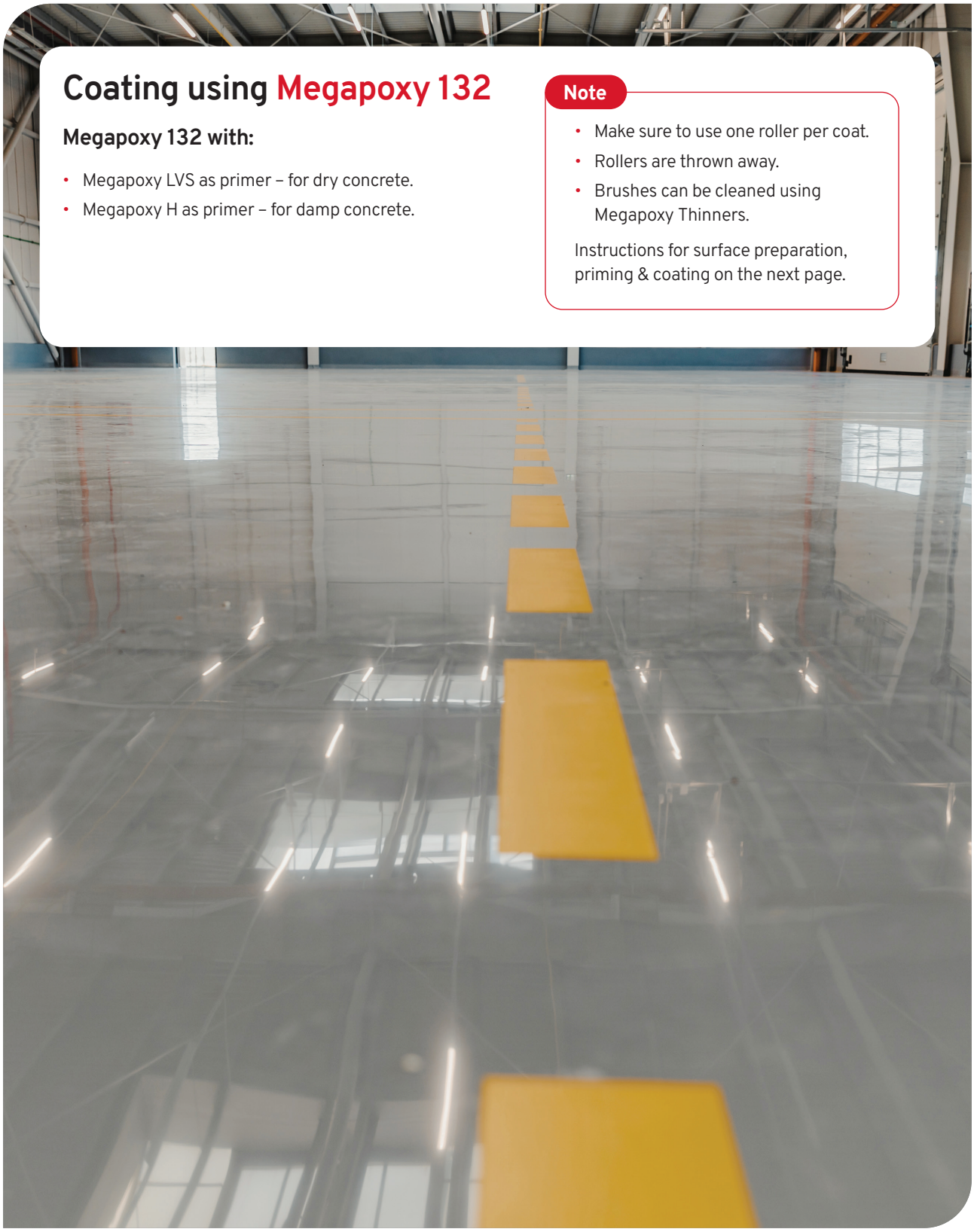
1. Prepare the area surrounding the crack as above.
2. Mix Megapoxy H or HX using the instructions on page **XX** or use the QR code below to link to our video. Only mix what can be used within the work time of Megapoxy H or Megapoxy HX.
3. Using methylated spirits, acetone or similar, paint the solvent onto the crack, ensuring it penetrates.
4. Before the solvent dries out, brush a generous amount of correctly mixed Megapoxy H/HX over the crack.
5. Repeat the process on each crack until they are all coated in a visible film of Megapoxy H/HX. The treated area surrounding the crack should be visibly darker and wet compared to the unpainted areas.
6. Once the Megapoxy H/HX has cured, there should visible Megapoxy H/HX on the treated surface around the crack – appearing shiny and darker than untreated areas. This confirms penetration of Megapoxy H/HX into the surface crack repair.
7. Repeat the process of applying the Megapoxy H/HX onto the crack – but without using solvent – so there is **no visible ridge line** along the crack edges. This confirms that Megapoxy H/HX has penetrated below the surface to bridge, fill and seal the crack.



Concrete Flooring Coating Process

Achieving a durable and long-lasting concrete coating starts with proper surface preparation and careful application of high-performance epoxy adhesive solutions.

At Megapoxy, we make it easy to get back to business.



Coating using Megapoxy 132

Megapoxy 132 with:

- Megapoxy LVS as primer – for dry concrete.
- Megapoxy H as primer – for damp concrete.

Note

- Make sure to use one roller per coat.
- Rollers are thrown away.
- Brushes can be cleaned using Megapoxy Thinners.

Instructions for surface preparation, priming & coating on the next page.

STEP	DRY CONCRETE	DAMP CONCRETE
1: SURFACE PREPARATION	1. Degrease floor. 2. Remove any existing coating mechanically. 3. Recommend grinding concrete surface to a fresh rough finish (usually to a minimum of CSP 2 – see page 5). 4. Vacuum all dust from floor. 5. See pages 13–14 for more detailed instructions.	1. Degrease floor. 2. Remove any existing coating mechanically. 3. Recommend grinding concrete surface to a fresh rough finish (usually to a minimum of CSP 2 – see page 5). 4. Vacuum all dust from floor. 5. See pages 13–14 for more detailed instructions.
2: PRIMING	**Megapoxy LVS** 1. Mix at 2 Parts A to 1 Part B. Mix 3–6 litres max. 2. Mix for 2 minutes, scraping base of mixing container. Do not whip epoxy. 3. Scrape container sides and then mix for 1 more minute. Resin should be clear. 4. Set timer for 15 minutes, then start rolling floor. 5. When timer goes off, stop rolling and mix the next 3–6 litres and pour into trays. 6. Set timer again for 15 minutes and repeat process until floor is completed.	**Megapoxy H** 1. Mix at 3 Parts A to 1 Part B. Mix 4–6 litres max. 2. Mix for 2 minutes, scraping base of mixing container. Do not whip epoxy. 3. Scrape container sides and then mix for 1 more minute. Resin should be clear. 4. Set timer for 15 minutes, then start rolling floor. 5. When timer goes off, stop rolling and mix the next 4–6 litres and pour into trays. 6. Set timer again for 15 minutes and repeat process until floor is completed. ****Do not add any thinners into the Megapoxy H when using as a damp concrete surface primer.****

FOR ANTI-SLIP FLOOR: MEGAPOXY 132 Same process – dry and damp

3: COATING FOR ANTI-SLIP FLOOR

Initial mix:
- Mix Megapoxy 132 using a ratio of 2 parts A to 1 part B by volume. Mix 3–6 litres.
- Mix for 2 minutes, scraping the base of the container. (Do not whip the epoxy).

Add thinners and mix:
- Scrape the sides of the mixing container.
- Add 10% Megapoxy Thinners.
- Mix for 1 more minute: the resin should be clear.

Application:
- Set a timer for 15 minutes and start rolling the floor.
- When the timer goes off, stop rolling.
- Mix the next 3–6 litres and pour it into trays.
- Reset the timer for another 15 minutes and repeat the process until the floor is completed.

Broadcast sand:
- Broadcast sand across the wet epoxy surface at the required coverage and grit.
- The following day, before applying the second coat, vacuum or sweep up any excess sand.

Second coat:
- For the second coat, mix and apply the Megapoxy 132 as first coat: but do not add thinners.

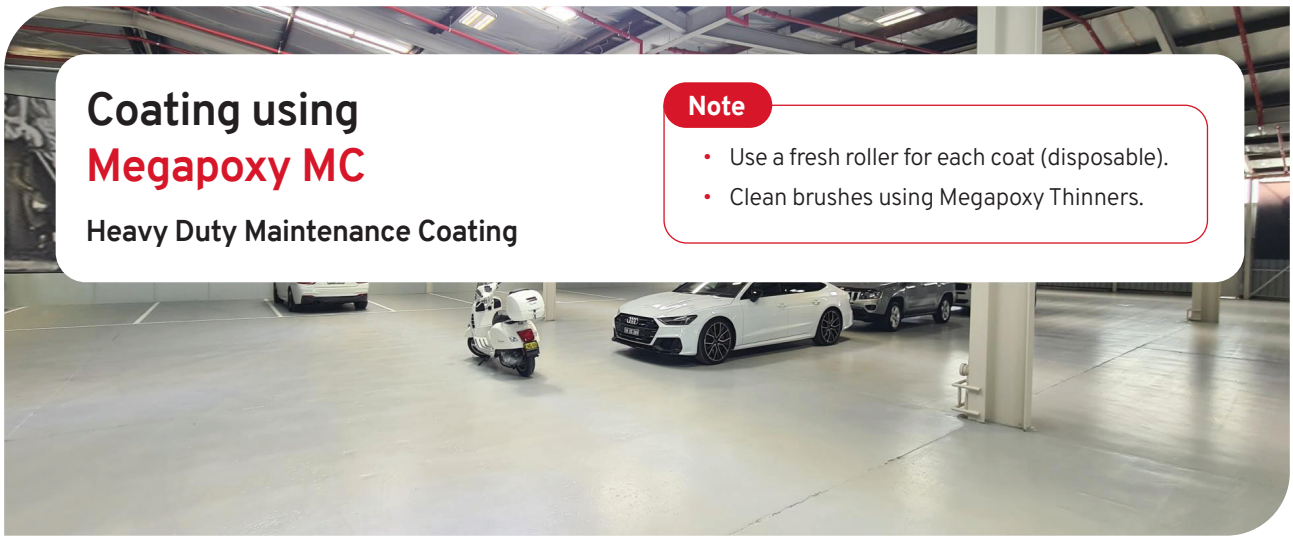
FOR STANDARD EPOXY FLOOR (NO ANTI-SLIP) Same process – dry and damp

4: COATING FOR STANDARD FLOOR

Initial mix:
- Mix Megapoxy 132 using a ratio of 2 parts A to 1 part B by volume. Mix 3–6 litres.
- Mix for 2 minutes, scraping the base of the container. (Do not whip the epoxy.)
- Scrape the sides of the mixing container.
- Mix for 1 more minute: the resin should be clear.

Application:
- Set a timer for 15 minutes and start rolling the floor.
- When the timer goes off, stop rolling.
- Mix the next 3–6 litres batch and pour into trays.
- Reset the timer for another 15 minutes and repeat the process until the floor is completed.

Second coat:
- For the second coat, mix and apply Megapoxy 132 as per the initial mix (no thinners for standard floor).



Coating using Megapoxy MC

Heavy Duty Maintenance Coating

Note

- Use a fresh roller for each coat (disposable).
- Clean brushes using Megapoxy Thinners.

STEP	DRY CONCRETE	DAMP CONCRETE
1: SURFACE PREPARATION	1. Degrease floor. 2. Mechanically remove any existing coating. 3. Grind back to fresh concrete (recommended). 4. Vacuum all dust thoroughly.	1. Degrease floor. 2. Mechanically remove any existing coating. 3. Grind back to fresh concrete (recommended). 4. Vacuum all dust thoroughly.
2: PRIMING	**Megapoxy LVS** 1. Mix at 2 Parts A to 1 Part B. 2. Mix 3–6 litres maximum. 3. Mix for 2 minutes, scraping the base of the container. Do not whip. 4. Scrape the sides, then mix for 1 more minute (resin should be clear). 5. Set a timer for 15 minutes, then start rolling. 6. When the timer goes off, stop rolling, mix the next batch and pour into trays. 7. Repeat the process until the floor is completed.	**Megapoxy H** 1. Mix at 3 Parts A to 1 Part B. 2. Mix 4–6 litres maximum. 3. Mix for 2 minutes, scraping the base of the container. Do not whip. 4. Scrape the sides, then mix for 1 more minute (resin should be clear). 5. Set a timer for 15 minutes, then start rolling. 6. When the timer goes off, stop rolling, mix the next batch and pour into trays. 7. Repeat the process until the floor is completed. **** Do not add thinners to Megapoxy H when priming damp surfaces ****

FOR ANTI-SLIP FLOOR: Same process – dry and damp

3: COATING FOR ANTI-SLIP FLOOR

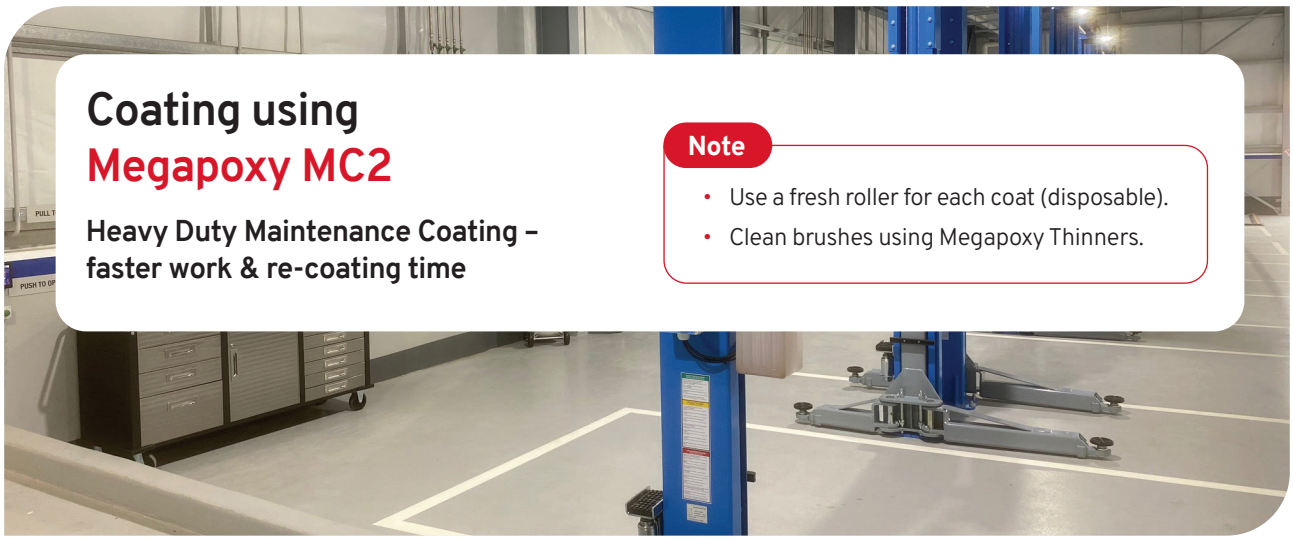
1. Add 1L of Part B to the Part A pail. Mix for 3 minutes, scraping the base of the pail as you go.
2. After 3 minutes, scrape sides and add 250g of sand. Mix for 2 more minutes.
3. Add up to 10% Megapoxy Thinners (max 400ml). Mix for 1 more minute or until fully blended.
4. Pour into a tray, cut in the edges, roll onto concrete.
5. Next day, assess non-slip surface:
   - Too rough: apply the second coat without sand.
   - Not enough grip: use coarser sand.
6. For the second coat:
   - If surface is ideal, mix and apply the same way.

**** Do not add thinners to second coat, whatever method used. ****

FOR STANDARD EPOXY FLOOR (NO ANTI-SLIP) Same process – dry and damp

4: COATING FOR STANDARD FLOOR

1. Add 1L Part B to Part A pail. Mix for 3 minutes, scraping the base of the pail as you go.
2. After 3 minutes, scrape the sides and add up to 10% Megapoxy Thinners (max 400ml). Mix for 2 more minutes or until fully blended.
3. Pour into tray, cut in edges, roll onto concrete.
4. Allow to cure.
5. Second coat: mix and apply the same way, **without thinners**.



Coating using Megapoxy MC2

Heavy Duty Maintenance Coating – faster work & re-coating time

Note

- Use a fresh roller for each coat (disposable).
- Clean brushes using Megapoxy Thinners.

STEP	DRY CONCRETE	DAMP CONCRETE
1: SURFACE PREPARATION	1. Degrease floor. 2. Mechanically remove any existing coating. 3. Grind back to fresh concrete (recommended). 4. Vacuum all dust thoroughly.	1. Degrease floor. 2. Mechanically remove any existing coating. 3. Grind back to fresh concrete (recommended). 4. Vacuum all dust thoroughly.
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FOR ANTI-SLIP FLOOR: Same process – dry and damp

3: COATING FOR ANTI-SLIP FLOOR

1. Add 1L of Part B to the Part A pail. Mix for 2 minutes, scraping the base of the pail as you go.
2. After 2 minutes, scrape sides and add 250g of sand. Mix for 1 more minute.
3. Add up to 10% Megapoxy Thinners (max 400ml). Mix for 1 more minute or until fully blended.
4. Pour into a tray, cut in the edges, roll onto concrete.
5. Next day, assess non-slip surface:
   - Too rough: apply the second coat without sand.
   - Not enough grip: use coarser sand.
6. For the second coat:
   - If surface is ideal, mix and apply the same way.

**** Do not add thinners to second coat, whatever method used. ****

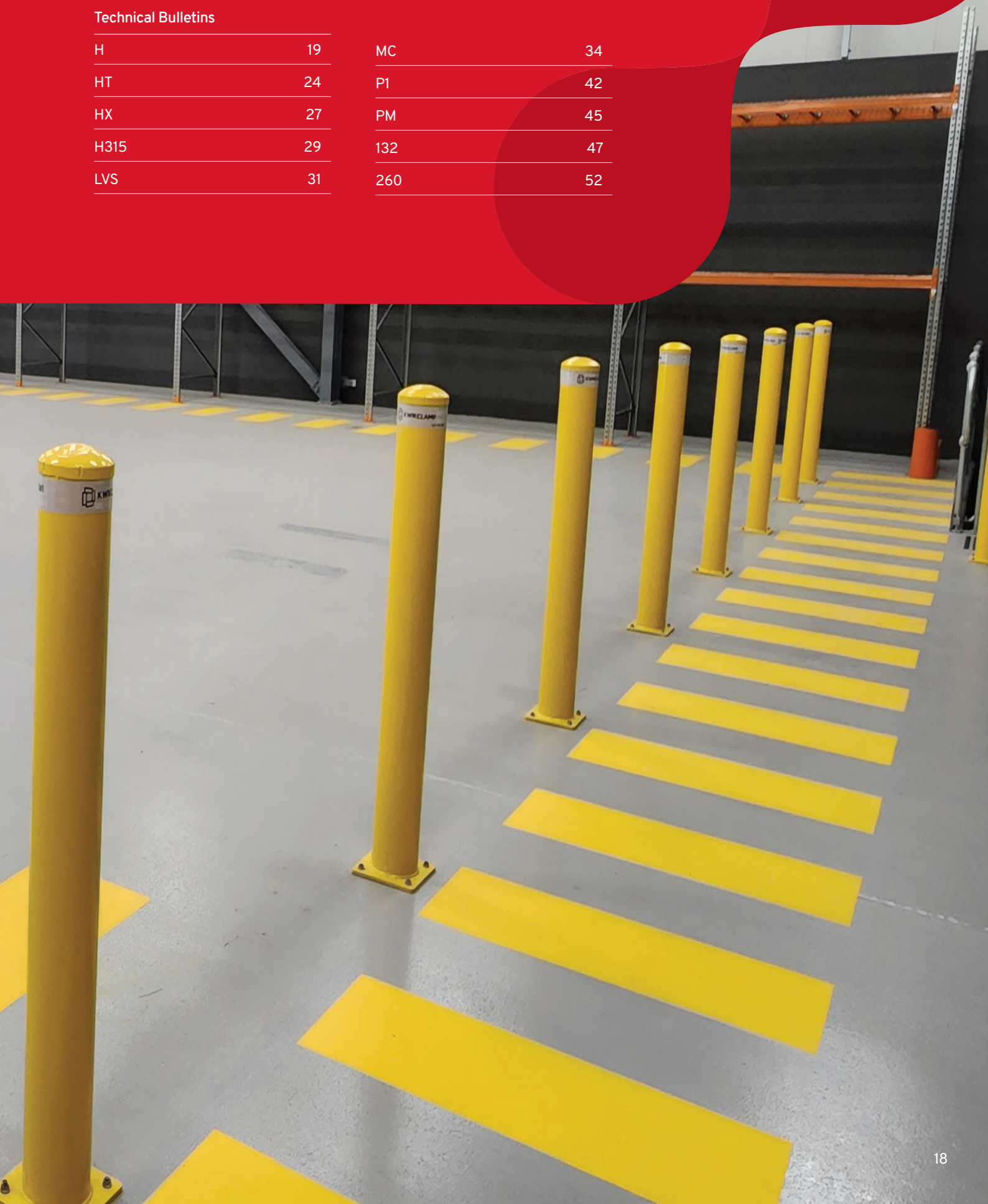
FOR STANDARD EPOXY FLOOR (NO ANTI-SLIP) Same process – dry and damp

4: COATING FOR STANDARD FLOOR

1. Add 1L Part B to Part A pail. Mix for 2 minutes, scraping the base of the pail as you go.
2. After 2 minutes, scrape the sides and add up to 10% Megapoxy Thinners (max 400ml). Mix for 1 more minute or until fully blended.
3. Pour into tray, cut in edges, roll onto concrete.
4. Allow to cure.
5. Second coat: mix and apply the same way, **without thinners**.

Appendix

Technical Bulletins



Megapoxy®

H

Low Viscosity Hydrophilic Epoxy Resin

Technical Data Sheet

DESCRIPTION

Megapoxy H is a low viscosity, 100% solids, resin based, solvent-free, hydrophilic liquid resin.

It is suitable for use in repairs of structures that are in contact with potable water.

Megapoxy H complies with AS/NZS 4020:2018 “Testing of Products For Use In Contact with Drinking Water”. Megapoxy H is resistant to hydrogen sulphide that may be present in pipes and plants used for treatment of sewage. Megapoxy H has excellent static and dynamic mechanical properties, and can be used with the fine aggregates to make high strength epoxy mortar.

It can be used for wet to dry concrete adhesive. Repairs of cracked concrete, underwater and splashzone repairs.

Megapoxy H is volatile organic compounds free (Nil V.O.C.)

RECOMMENDED APPLICATIONS

- New to Old Concrete Bonding
- Concrete Crack Repair
- Concrete Repairs
- Steel Anchoring
- Coating
- Floor Repairs
- Low Pressure Injection
- Epoxy Mortars

PROPERTIES

Mixing Ratio by Volume	3 Part A to 1 Part B
Work Time at 25°C:	30 minutes
Minimum Cure Time at 15°C	48 hours
Minimum Cure Time at 25°C	24 hours
Minimum Cure Time at 35°	12 hours
Thin Film Cure at 25°C	5-6 hours
Minimum Application Temperature	10°C
Viscosity Part A at 25°C	1300 - 1900cps
Viscosity Part B at 25°C	75 - 90cps
Mixed Viscosity at 25°C	800cps
S.G. Part A at 25°C	1.12 - 1.14
S.G. Part B at 25°C	0.97 – 0.99
Mixed S.G. at 25°C	1.09
Colour Part A	Clear or N35 Grey
Colour Part B	Clear

H

Megapoxy

Technical Data Sheet

CURED PROPERTIES	Compressive Strength - ASTM D695	100Mpa
	Bond Strength Concrete - ASTM D4541	>3Mpa
	Tensile Bond Strength Steel - ASTM D897	20Mpa
	Modulus of Elasticity - ASTM D695	11Gpa
	Flexural Strength - ASTM D790	40Mpa
	Tensile Strength - ASTM D638	40Mpa
	Tensile Shear Strength - ASTM D1002	13Mpa
	New to Old Concrete Bonding: Slant Shear Test:	36MPa
	Hardness - Shore D - ASTM D2240-00	75 minimum

CHARACTERISTICS

- VOC Free
- Hydrophilic
- Thin Liquid
- Mixes easily by hand
- Very high strength permanent bonds
- Excellent tensile and compressive strengths, superior to concrete
- Excellent chemical resistance

SURFACE PREPARATION

Concrete

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. 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.

Metal Surfaces

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.

Coated Surfaces

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.

Concrete:

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.

Metals:

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.

STEEL ANCHORING

For anchoring steel into concrete, drill a hole approximately 1.5 diameters of the steel to be grouted. Any dust or foreign matter must be blown out with oil-free, dry compressed air. Set the steel into the hole and pour the mixed Megapoxy H from one side to allow air to escape.

Allow to cure for 24 hours. For grouting of steel horizontally use Megapoxy HT

instead of Megapoxy H. The steel should be grit blasted and degreased to achieve good bond.

Technical Data Sheet

TYPICAL PULL OUT STRENGTH - 40 Mpa CONCRETE	14 mm deformed bar inserted to depth 10 x diameter of bar : > 50 kN 25 mm deformed bar inserted to depth 8 x diameter of bar : > 150 kN 14 mm deformed bar inserted to depth 8 x diameter of bar : > 50 kN 25 mm deformed bar inserted to depth 10 x diameter of bar : > 150 kN
BASIC FORMULATION FOR CRACK SEALING AND ANCHORING STEEL INTO CONCRETE	Mixing Ratio by volume: 3 Parts A to 1 Part B Mix thoroughly and dispense by pouring or pressure injection.
CRACK REPAIR - TREATMENT OF CRACKS	The treatment of cracks in concrete not expected to undergo further movement can be carried out by one of the following methods: **Heat Treatment** The temperature of concrete surrounding the crack is slowly raised to 80°C and the mixed Megapoxy H is applied over the crack as a paint. On cooling the resin will be drawn into the crack where it will cure and provide a water tight seal. **Capillary Action** Methylated Spirits or Acetone is applied to the crack followed by brush coating of mixed Megapoxy H. As the solvent dries out, the resin is drawn into the crack. **Low Pressure Injection** Prepare concrete around the crack by lightly grinding the surface. Bond crack injection balloons over the crack at a distance of 300mm apart, depending on the crack width, using Megapoxy PM. Seal over the balloon bases and crack to a minimum width of 50mm either side of the crack, using Megapoxy PM. Once the Megapoxy PM has cured, mix the Megapoxy H and pour into the back of the crack injection gun. Open all the crack injection balloon taps, attach the crack injection gun to the crack injection balloon and pump the Megapoxy H into the balloon until it comes out of the next balloon or the balloon inflates to approx. 20mm. Turn tap off and repeat the process until all the balloons are inflated and remain inflated. Once every thing has cured, knock balloons of with a chisel below the steel clip, then using a 40grit flap disc, grind the surface back smooth. **Pressure Injection** Seal outside of crack with Megapoxy PM non-sag paste system. Some “V-ing” may be necessary to obtain better bonding. When applying the Megapoxy PM, bond over the crack nuts into which ball-less grease nipples can be screwed prior to injection the next day. Nuts should be placed 200 to 400 mm apart, depending on the depth of the crack. The deeper the crack, the closer the nut. Megapoxy H can be injected by grease gun or pressure pot. A nipple is screwed into the bottom-most nut and Megapoxy H injected until it exudes from the adjacent nut. Remove the nipple and plug with fitting bolt. The nipple is then screwed into the next nut and the procedure repeated until the crack is full. In some cases it may be necessary to seal concrete on the opposite side with Megapoxy PM. The following day the nuts can be removed with a chisel leaving a minimum of grinding to achieve a clean appearance.

Technical Data Sheet

IMPORTANT INFORMATION	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.

EPOXY MORTARS AND EPOXY CONCRETE

POURABLE EPOXY MORTARS

POURABLE EPOXY MORTAR (GROUT)	Mixing Ratio by volume	3 Parts A to 1 Part B 12 Parts Silica 50N by volume
	The proportion of silica 50N (epoxy quality fine sand) can be varied to provide suitable pourability in cold and warm weather conditions.	
LARGE POUR POURABLE EPOXY MORTAR (GROUT)	Mixing Ratio by volume	3 Parts A to 1 Part B 12 Parts Silica 16/30 by volume
	This mix of Megapoxy H and silica 16/30 (epoxy quality sand) can be used for larger and deeper sized pour while still maintaining strength. It can be varied slightly to provide different pourability. Suitable for large truncation pocket grouting. Compressive Strength : 85Mpa	

TROWELLABLE EPOXY MORTARS

EASY TO WORK MORTAR	Mixing Ratio by volume	3 Parts A to 1 Part B 12 Parts Silica 50N by volume
	Prior to placement of this mortar, prime the prepared concrete surface with a brush applied coat of pre-mixed Megapoxy H. Finish the placed mortar using a steel trowel. To avoid sticking and dragging of the trowel, broadcast a thin layer of Silica 50N on the mortar surface and work with trowel until desired surface finish is achieved. Allow to cure for 24 hours. Compressive Strength : 90Mpa	
HIGH STRENGTH CORRECTIVE RESURFACING MORTAR.	Mixing Ratio by volume	3 Parts A to 1 Part B 12 Parts Silica 50N by volume 12 Parts Silica 30/60 by volume
	Prior to placement of this mortar, prime the prepared concrete surface with a brush applied coat of pre-mixed Megapoxy H. Finish the placed mortar using a steel trowel. To avoid sticking and dragging of the trowel, broadcast a thin layer of Silica 50N on the mortar surface and work with trowel until desired surface finish is achieved. Allow to cure for 24 hours. This provides a moisture tolerant epoxy modified leveling screed upto 50mm in thickness. Compressive Strength : 70Mpa	

Megapoxy®

Technical Data Sheet

EPOXY CONCRETE	
HIGH STRENGTH MEGAPOXY H BASED CONCRETE	Mixing Ratio by volume 3 Parts A to 1 Part B 10 Parts Silica 50N by volume 10 Parts Blue Metal 10 - 20 mm by volume Prior to placement of this mortar, prime the prepared concrete surface with a brush applied coat of pre-mixed Megapoxy H. Finish the placed mortar using a steel trowel. To avoid sticking and dragging of the trowel, broadcast a thin layer of Silica 50N on the mortar surface and work with trowel until desired surface finish is achieved. Allow to cure for 24 hours. This provides a moisture tolerant epoxy modified leveling screed up to a 100mm in thickness. Compressive Strength : 70Mpa
NEW TO OLD CONCRETE ADHESIVE	Mixing Ratio by volume 3 Parts A to 1 Part B Mix Megapoxy H as detailed above and apply by brush, roller or airless spray to prepared old concrete at the rate of 1 to 1.5 litres per square metre. Place new concrete within 15 minutes of applying Megapoxy H to ensure good bonding. For vertical and overhead rendering use Megapoxy HT in place of Megapoxy H.

CLEANING	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 Megapoxy H Safety Data Sheets.
PACKAGING	Megapoxy H is available in 4lt & 20lt kits. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.

Megapoxy

HT

Hydrophilic Epoxy Gel Adhesive

Technical Data Sheet

DESCRIPTION

Megapoxy HT is a 100% solids, resin based, solvent-free, hydrophilic epoxy gel adhesive. Megapoxy HT is resistant to hydrogen sulphide that may be present in pipes and plants used for treatment of sewage. Megapoxy HT has excellent static and dynamic mechanical properties, and can be used with the fine aggregates to make high strength epoxy mortar.

It can be used for wet to dry concrete adhesive. Repairs of cracked concrete, underwater and splashzone repairs. Megapoxy HT is volatile organic compounds free (Nil V.O.C.)

RECOMMENDED APPLICATIONS

- New to Old Concrete Bonding
- Concrete Crack Repair
- Concrete Repairs
- Steel Anchoring
- Coating
- Floor Repairs
- Epoxy Mortars
- Underwater Repairs

PROPERTIES

Mixing Ratio by Volume	3 Part A to 1 Part B
Work Time at 25°C:	30 minutes at 25°C
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
S.G. Part A at 25°C	1.00 - 1.10
S.G. Part B at 25°C	0.97 – 0.99
Mixed S.G. at 25°C	1.03
Colour Part A	N35 Grey
Colour Part B	Clear
Appearance Mixed	N35 Grey

CURED PROPERTIES

Compressive Strength - ASTM D695	100Mpa
Bond Strength Concrete - ASTM D4541	>3Mpa
Tensile Bond Strength Steel - ASTM D897	20Mpa
Modulus of Elasticity - ASTM D695	11Gpa
Flexural Strength - ASTM D790	40Mpa
Tensile Strength - ASTM D638	40Mpa
Tensile Shear Strength - ASTM D1002	13Mpa
New to Old Concrete Bonding: Slant Shear Test:	36MPa
Hardness - Shore D - ASTM D2240-00	70 minimum

Technical Data Sheet

CHARACTERISTICS CONTINUED	• VOC Free • Hydrophilic • Thin Liquid • Mixes easily by hand • Very high strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance
SURFACE PREPARATION	**Concrete** 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. 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. **Metal Surfaces** 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. **Coated Surfaces** 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. Concrete: 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. Metals: 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.
STEEL ANCHORING	For anchoring steel into concrete, drill a hole approximately 1.5 diameters of the steel to be grouted. Any dust or foreign matter must be blown out with oil-free, dry compressed air. Set the steel into the hole and pour the mixed Megapoxy H from one side to allow air to escape. Allow to cure for 24 hours. For grouting of steel horizontally use Megapoxy HT, grouting steel vertically, Megapoxy H can be used. The steel should be grit blasted and degreased to achieve good bond.
IMPORTANT INFORMATION	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.

HT

Megapoxy

Technical Data Sheet

EPOXY MORTARS AND EPOXY CONCRETE

EPOXY CONCRETE

NEW TO OLD CONCRETE ADHESIVE	Mixing Ratio by volume: 3 Parts A to 1 Part B Mix Megapoxy HT as detailed above and apply by brush, roller or airless spray to prepared old concrete at the rate of 1 to 1.5 litres per square metre. Place new concrete within 15 minutes of applying Megapoxy HT to ensure good bonding. For vertical and overhead rendering use Megapoxy HT in place of Megapoxy H.
CLEANING	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 Megapoxy HT Safety Data Sheets.
PACKAGING	Megapoxy HT is available in 1lt, 4lt and 20lt kits. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.

Megapoxy

HX

Extra Low Viscosity Epoxy Resin

Technical Data Sheet

DESCRIPTION

Megapoxy HX is a specially formulated extra low viscosity, 100% solids, resin based, solvent-free, hydrophilic liquid resin. Megapoxy HX is used regularly for the repair of cracked concrete by gravity penetration or low pressure injection. Megapoxy HX is also suitable for impregnation of porous substrates such as masonry and timber. Megapoxy HX has also been used successfully as a low viscosity laminating resin for fibreglass work.

RECOMMENDED APPLICATIONS

- Casting
- Concrete Crack Repair
- Low Pressure Injection
- Surface Hardening
- Floor Repairs
- Laminating
- Masonry Sealing
- Capillary Action
- Vacuum Bagging

PROPERTIES

Mixing Ratio by Volume	3 Part A to 1 Part B
Work Time at 25°C:	60 minutes
Minimum Cure Time at 15°C	48 hours
Minimum Cure Time at 25°C	24 hours
Minimum Cure Time at 35°	12 hours
Thin Film Cure at 25°C	4 - 6 hours
Minimum Application Temperature	10°C
Viscosity Part A at 25°C	400 - 600cps
Viscosity Part B at 25°C	15 - 20cps
Mixed Viscosity at 25°C	200cps
S.G. Part A at 25°C	1.10 - 1.12
S.G. Part B at 25°C	0.95 - 0.97
Mixed S.G. at 25°C	1.07
Colour Part A	Clear
Colour Part B	Clear

CURED PROPERTIES

Compressive Strength - ASTM D695	95Mpa
Bond Strength Concrete - ASTM D4541	>3Mpa
Tensile Bond Strength Steel - ASTM D897	20Mpa
Modulus of Elasticity - ASTM D695	11Gpa
Flexural Strength - ASTM D790	35Mpa
Tensile Strength - ASTM 638	35Mpa
Tensile Shear Strength - ASTM D1002	10Mpa
Hardness - Shore D - ASTM D2240	>75

HX

Megapoxy

Technical Data Sheet

CHARACTERISTICS	• VOC Free • Hydrophilic • Thin Liquid • Mixes easily by hand • Very high strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance
SURFACE PREPARATION	**Concrete** 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. 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. **Metal Surfaces** 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. **Coated Surfaces** 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. Concrete: 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. Metals: 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.
IMPORTANT INFORMATION	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.
CLEANING	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 Megapoxy PF Safety Data Sheet.
PACKAGING	Megapoxy HX is available in 4lt & 20lt kits. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.

Megapoxy

315

Low Viscosity Rapid Set Epoxy Resin

Technical Data Sheet

DESCRIPTION

Megapoxy H315 is a rapid set low viscosity, 100% solids, resin based, solvent-free, liquid resin, that can be utilized as a coating or a casting, when fast return to service applications are needed. Megapoxy H315 has excellent static and dynamic mechanical properties, and can be used with the fine aggregates to make a fast set, high strength epoxy mortar.
Megapoxy H315 is volatile organic compounds free (Nil V.O.C.)

RECOMMENDED APPLICATIONS

- Concrete Crack Repair
- Concrete Repairs
- Epoxy Mortars
- Coating
- Floor Repairs
- Low Pressure Injection

PROPERTIES

Mixing Ratio by Volume	3 Part A to 1 Part B
Work Time at 25°C:	10 minutes
Minimum Cure Time at 15°C	8 hours
Minimum Cure Time at 25°C	4 hour
Minimum Cure Time at 35°C	2 minutes
Thin Film Cure at 25°C	90 minutes
Minimum Application Temperature	10°C
Viscosity Part A at 25°C	1300 - 1900cps
Viscosity Part B at 25°C	25 - 30cpss
Mixed Viscosity at 25°C	405cps
S.G. Part A at 25°C	1.30 -1.40
S.G. Part B at 25°C	1.30 - 1.40
Mixed S.G. at 25°C	1.09
Colour Part A	Clear or N35 Grey
Colour Part B	Clear

CURED PROPERTIES

Compressive Strength - ASTM D695	80Mpa
Bond Strength Concrete - ASTM D4541	>3Mpa
Tensile Bond Strength Steel - ASTM D897	20Mpa
Modulus of Elasticity - ASTM D695	7.5Mpa
Tensile Bond Strength Steel - ASTM D897	3.09Gpa
Flexural Strength - ASTM D790	40Mpa
Tensile Strength - ASTM D638	24Mpa
Tensile Shear Strength - ASTM D1002	13Mpa
Hardness - Shore D - ASTM D2240-00	75 minimum

H315

Megapoxy

Technical Data Sheet

CHARACTERISTICS	• VOC Free • Rapid Setting • Thin Liquid • Mixes easily by hand • Very high strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance
SURFACE PREPARATION	Concrete 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. 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. Metal Surfaces 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. Coated Surfaces 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. Concrete: 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. Metals: 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.
IMPORTANT INFORMATION	It is essential that the correct mixing ratio be used and that the Part A and Part B are thoroughly mixed together before use. When using the self mixing nozzle, the Megapoxy 36 should be one colour when being applied. 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.
CLEANING	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 Megapoxy 36 Safety Data Sheets.
PACKAGING	Megapoxy 36 is available in 600ml Twin Pack Cartridge, supplied with 1 static mixing nozzle. Extra Static Mixing Nozzles are also available to purchase separately. Product should be stored in cool dry place
TECHNICAL SERVICE	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.

Megapoxy®

LVS

Low Viscosity Sealer

Technical Data Sheet

DESCRIPTION	Megapoxy Low Viscosity Sealer is a two component, resin based, low viscosity, liquid resin, that has been developed as penetrating sealer and primer. It can be used to seal, harden and waterproof many types of porous substrates, including; concrete, timber, bricks, mortar and natural stone. Primer for Megapoxy Floor Coating products. It must be applied to thoroughly dry substrates.
RECOMMENDED APPLICATIONS	• Internal sealing of concrete tanks • Waterproofing walls and floors • Internal sealing of bricks and mortar • Sealing/Priming of concrete floors • Protection of structural concrete • Toughening Timber Surfaces

PROPERTIES	
Mixing Ratio by Volume	2 Part A to 1 Part B
Work Time at 25°C:	30 minutes
Minimum Cure Time at 15°C	48 hours
Minimum Cure Time at 25°C	24 hours
Minimum Cure Time at 35°	12 hours
Thin Film Cure at 25°C	4 hours
Minimum Application Temperature	10°C
Viscosity Part A at 25°C	100 - 140cps
Viscosity Part B at 25°C	10 - 20cps
Mixed Viscosity at 25°C	90cps
S.G. Part A at 25°C	1.00 – 1.10
S.G. Part B at 25°C	0.91 – 0.94
Mixed S.G. at 25°C	1.01
Colour Part A	Clear
Colour Part B	Clear

CURED PROPERTIES	
Compressive Strength - ASTM D695	80Mpa
Bond Strength Concrete - ASTM D4541	>3Mpa
Tensile Bond Strength Steel - ASTM D897	20Mpa
Modulus of Elasticity - ASTM D695	11Gpa
Flexural Strength - ASTM D790	40Mpa
Tensile Strength - ASTM D638	40Mpa
Tensile Shear Strength - ASTM D1002	13Mpa

CHARACTERISTICS	• Thin Liquid • Mixes easily by hand • Very high strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance • Penetrative into porous substrates

LVS

Megapoxy

Technical Data Sheet

SURFACE PREPARATION	**Concrete** 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. 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 dry. **Metal Surfaces** 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. **Timber** Remove any damaged, loose or rotted timber, back to a clean, dust free surface. **Coated Surfaces** 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. Concrete: 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. Metals: 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.
APPLICATION	Mix Parts A and B thoroughly at the ratio; 2 Parts A to 1 Part B by volume. Apply by brush or roller to prepared substrate. **Priming** Minimum of 1 coat is required prior to overcoating with Megapoxy floor coating products. **Coating, Sealing or Hardening** Minimum of 2 coats is required. Megapoxy LVS should be applied as thinly as possible and not allowed to pool. If any pooling occurs, wipe up excess to leave a thin film of on the surface being coated. Allow to cure for 18 to 24 hours before opening to traffic.

LVS

Megapoxy

Technical Data Sheet

COVERAGE	Concrete: Wood Float Finish: 75m² per 15 litre kit. Steel Float Finish: 150m² per 15 litre kit. Bricks: 75m² per 15 litre kit. Timber: 75m² per 15lt kit.
IMPORTANT INFORMATION	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.
CLEANING	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 Megapoxy LVS Safety Data Sheet.
PACKAGING	Megapoxy LVS is available in 6lt & 15lt kits. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.

Megapoxy

MC

Heavy Duty Maintenance Coating

Technical Data Sheet

DESCRIPTION

Megapoxy MC is a two component heavy duty, 100% solids, high build, highly chemical resistant and heavy duty maintenance coating suitable for a variety of commercial and industrial floor, wall and steel protection applications. Megapoxy MC provides a decorative, hygienic, dust free coating with heavy abrasion resistance. Megapoxy MC is resistant to hydrogen sulphide that may be present in pipes and plants for the treatment of sewage.

It is recommended that Megapoxy MC is applied in a three coat application when used in particularly aggressive and harsh environments. This three coat application will give a total cured maintenance coating thickness of 0.4 - 0.5 mm. Megapoxy MC is volatile organic compounds free (Nil V.O.C.) is suitable for coating and protecting structures that are in contact with foodstuffs.

RECOMMENDED APPLICATIONS

- Food, Beverage Facilities including Abattoirs
- Chemical Storage Tanks and Bunds
- Protective Coatings for Concrete and Steel
- Car Parks and Ramps including Forklift Areas
- Factory and Warehouse Floors
- Mechanical Workshops
- Sewage Treatment Plants and Pipes
- Plant Rooms and Machine Rooms

PROPERTIES

Megapoxy MC is available in either a Standard Cure version or in a Rapid Setting version called Megapoxy MC2.

	Megapoxy MC (std)	Megapoxy MC2 (Rapid)
Mixing Ratio by Volume	3 Parts A to 1 Part B	3 Parts A to 1 Part B
Mixing Ratio by Weight	4 Parts A to 1 Part B	4 Parts A to 1 Part B
Work Time at 25°C:	2 hours	30 minutes
Tack Free Time at 25°C	4 hours	2 hours
Re-Coat Time 25°C	8 hours	4 hours
Minimum Cure Time at 25°C	24 hours	24 hours
Minimum Application Temperature	10°C	10°C
Coverage - 5kg Kit	20 - 25m^2	20 - 25m^2
Coverage - 20kg Kit	80 - 100m^2	80 - 100m^2
Maximum Operating Temperature	100°C	100°C
Colour Part A	Various - See Colour Chart	Various - See Colour Chart
Colour Part B	Amber	Clear

MC

Megapoxy

Technical Data Sheet

CURED PROPERTIES	Compressive Strength - ASTM D695	70Mpa (MC2 only)
	Bond Strength Concrete - ASTM D4541	>3Mpa
	Tensile Bond Strength Steel - ASTM D897	13Mpa
	Modulus of Elasticity - ASTM D695	2.4Gpa
	Tensile Strength - ASTM D638	30Mpa
	Hardness - Shore D - ASTM D2240	80
	Dielectric Strength 50Hz @25°C(Kv/mm)	17

CHARACTERISTICS

- VOC Free
- Pre-metered easy to use kit
- Easily mixed by hand or mechanically
- Great Coverage
- Can be applied by brush, roller, squeegee (MC2 only) or airless spray
- Accepts fine aggregates broadcast between coats for non-slip
- Excellent tensile and compressive strengths, superior to concrete
- Excellent chemical resistance
- Gloss finish

SURFACE PREPARATION

Concrete

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. 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.

Metal Surfaces

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.

Coated Surfaces

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.

Concrete:

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.

Metals:

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.

Megapoxy

Technical Data Sheet

MIXING PROCEDURE	Add the entire contents of Part B into the Part A tin, there is enough space to combine both parts in the Part A container. **Megapoxy MC 5kg kits & 20kg kits** Mix the two parts together thoroughly for a minimum of 3 minutes, by hand or using a mechanical stirrer on a low speed of 200rpm or lower, making sure to scrape the base and corners of the drum, after 3 minutes, scrape the side of the drum and mix for a further 2 minutes. Set a timer do not guess the time. **Megapoxy MC2 5kg kits** Mix the two parts together thoroughly for a minimum of 2 minutes, by hand or using a mechanical stirrer on a low speed of 200rpm or lower, making sure to scrape the base and corners of the drum, after 2 minutes, scrape the side of the drum and mix for a further 1 minute. Set a timer do not guess the time. 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.
APPLICATION	It is recommended that Megapoxy LVS - Low Viscosity Sealer is used as a primer on particularly porous surfaces before the application of Megapoxy MC. Megapoxy LVS can be applied either by roller, brush or spray equipment at a rate of 8-10m^2 per litre. Single coat application of Megapoxy LVS is generally all that is required and thinning is not recommended. Recoat or overcoat approximately between 8 – 24 hours after application of Megapoxy LVS. Megapoxy MC can be thinned up to 10% with Megapoxy Thinners to promote easy working. Add a maximum of 10% Megapoxy Thinners on the first coat, 5% on the second coat and so on. However, care must be taken to ensure that all thinners have evaporated before applying subsequent coats. If more than 24 hours elapses between coats, it is necessary to thoroughly abrade the coated surface to a uniform dull finish using 60 grit abrasive paper.
NON-SLIP SURFACES	If you wish to have a non slip surface, broadcast epoxy quality sand, glass beads, carborundum or silicone oxide over the first freshly applied coat. This can either be left as is for an aggressive non slip surface, Then re-coat with Megapoxy MC to lock the aggregate in-between coats. A fine aggregate can also be mixed through the Megapoxy MC. Once the Megapoxy MC has been thoroughly mixed, the addition of approximately 250gms of required aggregate size per 5kgs of Megapoxy MC, should give a fairly even coat of non-slip when using a roller on the surface to be coated. Depending on the grip level required, this can be done in all coats or just the first one.
CLEANING	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 Megapoxy MC Safety Data Sheet.

MC

Megapoxy

Technical Data Sheet

PACKAGING	Megapoxy MC & MC2 are available in 5kg kits and 20kg kits. 5kg kits: Caribbean Blue, Blue, Pacific Blue, Charcoal, Dark Grey, Mid Grey, Grey, Koala Grey, Safety Yellow, White, Black. 20kg kits: Charcoal, Dark Grey, Mid Grey, Grey Product should be stored in cool dry store.
TECHNICAL SERVICE	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.
STANDARD COLOURS FOR MEGAPOXY MC	Caribbean Blue Pacific Blue Charcoal Dark Grey Mid Grey Grey Koala Grey Safety Yellow White Black Please Note; These colours are a digital/print representation of our standard Megapoxy MC colours. The finished product may be different to these colours. For accurate colour samples please contact our Technical Department or sample Megapoxy MC colour chips.

Megapoxy®

Technical Information

Megapoxy MC Flooring Procedure: Dry Concrete

Preparation:

1. Degrease floor.
2. Remove any existing coating mechanically, recommend grinding back to fresh concrete surface.
3. Vacuum all dust from floor: dust will inhibit the bond if there is a lot on the floor.

Priming: Megapoxy LVS

1. Mix Megapoxy LVS at 2 Parts A to 1 Part B by volume, mix: 3 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 3-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.

If wanting Anti-Slip Floor

1. Add the 1lt Part B bottle to the Part A Pail and stir for 3 minutes making sure to scrape the base of the pail while mixing.
2. After 3 minutes, scrape the sides of the pail and add the 250gms of sand and mix for a further 1 minutes.
3. Add Megapoxy Thinners, 10% maximum (400ml), stir for a further 1 minute or until the thinners has been mixed in.
4. Pour the Mixed Megapoxy MC into the roller tray, cut in the edges and roll onto the concrete.
5. Next day, check the non-slip of the Megapoxy MC, if too rough, do the next coat without sand added, if the non-slip is ok, do the same as previous, if not enough non-slip, the sand size can be increased.
6. Second coat, Mix and apply the Megapoxy MC the same way as previous, No Thinners in the Second coat

If wanting Standard Epoxy Floor: (no anti-slip)

1. Add the 1lt Part B bottle to the Part A Pail and stir for 3 minutes making sure to scrape the base of the pail while mixing.
2. After 3 minutes, scrape the sides of the pail and add Megapoxy Thinners, 10% maximum (400ml), stir for a further 2 minutes or until the thinners has been mixed in thoroughly.
3. Pour the Mixed Megapoxy MC into the roller tray, cut in the edges and roll onto the concrete.
4. Second coat, Mix and apply the Megapoxy MC the same way as previous, No Thinners in the Second coat

Make sure to use 1 roller per coat, rollers are throw away, brushes can be cleaned in the Megapoxy Thinners.

Megapoxy

Technical Information

Megapoxy MC Flooring Procedure: Damp Concrete

Preparation:

1. Degrease floor.
2. Remove any existing coating mechanically, recommend grinding back to fresh concrete surface.
3. Vacuum all dust from floor: dust will inhibit the bond if there is a lot on the floor.

Priming: Megapoxy H

1. Mix Megapoxy H at 3 Parts A to 1 Part B, mix: 4 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 4-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.

****Do not add any any thinners into the Megapoxy H when using as a damp concrete surface primer.****

If wanting Anti-Slip Floor

1. Add the 1lt Part B bottle to the Part A Pail and stir for 3 minutes making sure to scrape the base of the pail while mixing.
2. After 3 minutes, scrape the sides of the pail and add the 250gms of sand and mix for a further 1 minute.
3. Add Megapoxy Thinners, 10% maximum (400ml), stir for a further 1 minute or until the thinners has been mixed in.
4. Pour the Mixed Megapoxy MC into the roller tray, cut in the edges and roll onto the concrete.
5. Next day, check the non-slip of the Megapoxy MC, if too rough, do the next coat without sand added, if the non-slip is ok, do the same as previous, if not enough non-slip, the sand size can be increased.
6. Second coat, Mix the Megapoxy the same way as previous, No Thinners in the Second coat.

If wanting Standard Epoxy Floor: (no anti-slip)

1. Add the 1lt Part B bottle to the Part A Pail and stir for 3 minutes making sure to scrape the base of the pail while mixing.
2. After 3 minutes, scrape the sides of the pail and add Megapoxy Thinners, 10% maximum (400ml), stir for a further 2 minutes or until the thinners has been mixed in thoroughly.
3. Pour the Mixed Megapoxy MC into the roller tray, cut in the edges and roll onto the concrete.
4. Second coat, Mix the Megapoxy the same way as previous, No Thinners in the Second coat.

Make sure to use 1 roller per coat, rollers are throw away, brushes can be cleaned in the Megapoxy Thinners.

Megapoxy

Technical Information

Megapoxy MC2 Flooring Procedure: Dry Concrete

Preparation:

1. Degrease floor.
2. Remove any existing coating mechanically, recommend grinding back to fresh concrete surface.
3. Vacuum all dust from floor: dust will inhibit the bond if there is a lot on the floor.

Priming: Megapoxy LVS

1. Mix Megapoxy LVS at 2 Parts A to 1 Part B by volume, mix: 3 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 3-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.

If wanting Anti-Slip Floor

1. Add the 1lt Part B bottle to the Part A Pail and stir for 2 minutes making sure to scrape the base of the pail while mixing.
2. After 2 minutes, scrape the sides of the pail and add the 250gms of sand and mix for a further 1 minute.
3. Add Megapoxy Thinners, 10% maximum (400ml), stir for a further 1 minute or until the thinners has been mixed in.
4. Pour the Mixed Megapoxy MC2 into the roller tray, cut in the edges and roll onto the concrete.
5. Next day, check the non-slip of the Megapoxy MC2, if too rough, do the next coat without sand added, if the non-slip is ok, do the same as previous, if not enough non-slip, the sand size can be increased.
6. Second coat, Mix and apply the Megapoxy MC2 the same way as previous, No Thinners in the Second coat.

If wanting Standard Epoxy Floor: (no anti-slip)

1. Add the 1lt Part B bottle to the Part A Pail and stir for 2 minutes making sure to scrape the base of the pail while mixing.
2. After 2 minutes, scrape the sides of the pail and add Megapoxy Thinners, 10% maximum (400ml), stir for a further 1 minutes or until the thinners has been mixed in thoroughly.
3. Pour the Mixed Megapoxy MC2 into the roller tray, cut in the edges and roll onto the concrete.
4. Second coat, Mix and apply the Megapoxy MC2 the same way as previous, No Thinners in the Second coat.

Make sure to use 1 roller per coat, rollers are throw away, brushes can be cleaned in the Megapoxy Thinners.

Megapoxy

Technical Information

Megapoxy MC2 Flooring Procedure: Damp Concrete

Preparation:

1. Degrease floor.
2. Remove any existing coating mechanically, recommend grinding back to fresh concrete surface.
3. Vacuum all dust from floor: dust will inhibit the bond if there is a lot on the floor.

Priming: Megapoxy H

1. Mix Megapoxy H at 3 Parts A to 1 Part B by volume, mix: 4 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 4-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.

****Do not add any any thinners into the Megapoxy H when using as a damp concrete surface primer.****

If wanting Anti-Slip Floor

1. Add the 1lt Part B bottle to the Part A Pail and stir for 2 minutes making sure to scrape the base of the pail while mixing.
2. After 2 minutes, scrape the sides of the pail and add the 250gms of sand and mix for a further 1 minute.
3. Add Megapoxy Thinners, 10% maximum (400ml), stir for a further 1 minute or until the thinners has been mixed in.
4. Pour the Mixed Megapoxy MC2 into the roller tray, cut in the edges and roll onto the concrete.
5. Next day, check the non-slip of the Megapoxy MC2, if too rough, do the next coat without sand added, if the non-slip is ok, do the same as previous, if not enough non-slip, the sand size can be increased.
6. Second coat, Mix and apply the Megapoxy MC2 the same way as previous, No Thinners in the Second coat

If wanting Standard Epoxy Floor: (no anti-slip)

1. Add the 1lt Part B bottle to the Part A Pail and stir for 2 minutes making sure to scrape the base of the pail while mixing.
2. After 2 minutes, scrape the sides of the pail and add Megapoxy Thinners, 10% maximum (400ml), stir for a further 1 minutes or until the thinners has been mixed in thoroughly.
3. Pour the Mixed Megapoxy MC2 into the roller tray, cut in the edges and roll onto the concrete.
4. Second coat, Mix and apply the Megapoxy MC2 the same way as previous, No Thinners in the Second coat

Make sure to use 1 roller per coat, rollers are throw away, brushes can be cleaned in the Megapoxy Thinners.

Megapoxy®

P1

Epoxy Paste Adhesive

Technical Data Sheet

DESCRIPTION

Megapoxy P1 is a two component gap filling adhesive based on DGEBA epoxy resin and carbonate free filler. Easy to use, this product sets after mixing with excellent properties for a wide range of applications.

Megapoxy P1 is volatile organic compounds free (Nil VOC) and is suitable for use in repairs of structures that are in contact with potable water. Megapoxy P1 complies with AS/NZS 4020:2018 "Testing of Products For Use In Contact with Drinking Water".

Megapoxy P1 is resistant to hydrogen sulphide that may be present in pipes and plants used for treatment of sewage.

RECOMMENDED APPLICATIONS

Bonding

- Precast concrete articles
- Metal to metal or concrete
- Grouting bolts
- Natural stones
- Bricks and ceramics
- Bonding compressed cement sheet

Filling and Repair

- Concrete pipes and tanks Fibreglass articles
- Fibreglass articles
- Concrete floors and stairs
- Concrete column
- Insitu formed concrete
- Flush-filling countersunk screws in fibre cement sheet

PROPERTIES

Mixing Ratio by Volume	1 Part A to 1 Part B
Work Time at 25°C:	60 minutes
Minimum Cure Time at 15°C	48 hours
Minimum Cure Time at 25°C	24 hours
Minimum Cure Time at 35°	12 hours
Full Cure Time at 25°C	4 Days
Minimum Application Temperature	10°C
Maximum Operating Temperature	80°C
Colour Part A	White
Colour Part B	Black
Appearance Mixed	Dark Grey

P1

Megapoxy

Technical Data Sheet

SURFACE PREPARATION	**Concrete** 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. 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. **Metal Surfaces** 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. **Coated Surfaces** 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. Concrete: 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. Metals: 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.
IMPORTANT INFORMATION	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.
CLEANING	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 Megapoxy P1 Safety Data Sheet.
PACKAGING	Megapoxy P1 is available in 4lt and 20lt kits.
TECHNICAL SERVICE	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.

P1

Megapoxy

Technical Data Sheet

CURED PROPERTIES	Compressive Strength - ASTM D695	80Mpa
	Bond Strength Concrete - ASTM D4541	>3Mpa
	Tensile Bond Strength Steel - ASTM D897	19Mpa
	Modulus of Elasticity - ASTM D695	2Gpa
	Flexural Strength - ASTM D790	33Mpa
	Tensile Strength - ASTM 638	45Mpa
	Tensile Shear Strength - ASTM D1002	11Mpa
	Hardness - Shore D - ASTM D2240	75
	Dielectric Strength 50Hz @25°C(Kv/cm)	190
	Coefficient of Linear Thermal Expansion	59.0 x 10-6 mm/mm/°C

CHARACTERISTICS

- VOC Free
- Simple 1:1 mix ratio
- Creamy Texture, blend easily
- No – Sag on vertical & overhead surfaces
- Adheres and cures under adverse conditions (cold & damp)
- Good strength retention after prolonged immersion in water
- High strength permanent bonds
- Excellent tensile and compressive strengths, superior to concrete
- Excellent chemical resistance
- Flash Point above 200°C

CONCRETE & STEEL PROTECTION

Megapoxy P1 is suitable for protection of reinforcing steel where concrete cover is insufficiently thick, and to prevent corrosion Megapoxy P1 can be applied directly to steel, grit blasted to a bright metal finish.

Properly mixed and applied Megapoxy P1 is a stone like solid that will retain strength permanently.

Applications to concrete necessitates surface preparation to ensure that Megapoxy P1 is bonded to a sound substrate.

Experience show that a minimum of a 3mm layer of Megapoxy P1 provides protection to reinforcing steel equivalent to approximately 50mm of concrete cover.

Megapoxy®

PM

Epoxy Paste Adhesive

Technical Data Sheet

DESCRIPTION

Megapoxy PM is a specially formulated non-sag epoxy filling and adhesive paste. This easy to use two-part epoxy product sets after mixing with excellent properties ideally suited for a wide range of applications.

Megapoxy PM is volatile organic compounds free (Nil VOC).

Properly mixed Megapoxy PM will not stain or discolour white or light coloured marble and ceramics.

RECOMMENDED APPLICATIONS

Bonding

- Precast concrete articles
- Metal to metal or concrete
- Grouting bolts
- Natural stones
- Bricks and ceramics
- Bonding compressed cement sheet

Filling and Repair

- Concrete pipes and tanks Fibreglass articles
- Fibreglass articles
- Concrete floors and stairs
- Concrete column
- Insitu formed concrete
- Flush-filling countersunk screws in fibre cement sheet

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	70°C
Colour Part A	White
Colour Part B	White or Dark Grey
Appearance Mixed	White or Grey

CURED PROPERTIES

Compressive Strength - ASTM D695-23	80Mpa
Bond Strength Concrete - ASTM 4541	>3Mpa
Tensile Bond Strength Steel - ASTM D897-08	20Mpa
Modulus of Elasticity - ASTM D695	2Gpa
Flexural Strength - ASTM D790-17	38Mpa
Tensile Strength - ASTM D638-22	22Mpa
Tensile Shear Strength - ASTM D1002-10	13Mpa
Hardness - Shore D - ASTM D2240-00	70
Coefficient of Linear Thermal Expansion. Mean	70.4 x 10-6 (mm/mm/°C)
Dielectric Strength 50Hz @25°C(Kv/cm)	190

PM

Megapoxy

Technical Data Sheet

CHARACTERISTICS	• VOC Free • Simple 1:1 mix ratio • Creamy Texture, blend easily • Non sag on vertical & overhead surfaces • Adheres and cures under adverse conditions (cold & damp) • Good strength retention after prolonged immersion in water • High strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance • Flash Point above 200°C
SURFACE PREPARATION	**Concrete** 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. 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. **Metal Surfaces** 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. **Coated Surfaces** 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. Concrete: 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. Metals: 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.
IMPORTANT INFORMATION	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.
CLEANING	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 Megapoxy PM Safety Data Sheet.
PACKAGING	Megapoxy PM is available in 4lt & 20 litre kits and in Grey or White. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.

Megapoxy®

132

High Strength Epoxy Coating

Technical Data Sheet

DESCRIPTION	Megapoxy 132 is a two component, solvent free, low viscosity protective floor coating suitable for a variety of commercial and industrial applications. With the inclusion of Coloured Pigment Megapoxy 132 floor coating provides a decorative surface finish with aesthetically pleasing appearance, high strength, abrasion resistance and serviceability to allow regular cleaning. AS 4020:2018 Potable Water Approved Megapoxy 132 is free from any suspected or potential carcinogens or mutagens and will not taint foodstuffs. Megapoxy 132 conforms to the requirements of the Department of Primary Industries for coatings and floorings used in food processing establishments such as abattoirs for export purpose. Megapoxy 132 is volatile organic compounds free (Nil V.O.C.) and is suitable for coating and protecting structures that are in contact with foodstuffs and potable water.
RECOMMENDED APPLICATIONS	• Food and Beverage Production Facilities • Pharmaceutical Industries • Hospital and Catering Kitchens • Factory and Warehouse Floors • Bakeries • Forklift Ramps and Driveways

PROPERTIES

Mixing Ratio by Volume	2 Parts A to 1 Part B
Work Time at 25°C:	30 minutes
Minimum Cure Time at 15°C	48 hours
Minimum Cure Time at 25°C	24 hours
Minimum Cure Time at 35°	12 hours
Thin Film Cure at 25°C	4-6 hours at 25°C
Minimum Application Temperature	10°C
Viscosity Part A at 25°C	1300 – 1900cps
Viscosity Part B at 25°C	130 – 160cps
Mixed Viscosity at 25°C	620cps
S.G. Part A at 25°C	1.12 – 1.14
S.G. Part B at 25°C	0.97 – 0.99
Mixed S.G. at 25°C	1.08
Colour Part A	Clear or N35 Grey
Colour Part B	Clear

132

Megapoxy

Technical Data Sheet

CURED PROPERTIES

Compressive Strength - ASTM D695	70Mpa
Bond Strength Concrete - ASTM D4541	>3Mpa
Tensile Bond Strength Steel - ASTM D897	20Mpa
Modulus of Elasticity - ASTM D695	2.4Gpa
Flexural Strength - ASTM D790	40Mpa
Tensile Strength - ASTM D638	30Mpa
Tensile Shear Strength - ASTM D1002	13Mpa
Hardness - Shore D - ASTM D2240-00	75 minimum
Dielectric Strength 50Hz @25°C(Kv/mm)	17

CHARACTERISTICS

- VOC Free
- Simple 2:1 mix ratio
- Easily mixed by hand or mechanically
- Can be applied by brush, roller, squeegee or airless spray
- Can be used with fine aggregates to make screed floors
- Accepts fine aggregates broadcast between coats for non-slip
- Excellent tensile and compressive strengths, superior to concrete
- Excellent chemical resistance
- High gloss finish

SURFACE PREPARATION

Concrete

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. 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.

Metal Surfaces

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.

Coated Surfaces

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.

Concrete:

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.

Metals:

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.

IMPORTANT INFORMATION

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.

Megapoxy®

Technical Data Sheet

CLEANING	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 Megapoxy 132 Safety Data Sheet.
PACKAGING	Megapoxy 132 is available in 4.5lt, 15lt & 20lt kits in clear, it is also available in N35 Grey in 30lt kits. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.

Megapoxy

Technical Information

Megapoxy 132 Flooring Procedure: Dry Concrete

Preparation:

1. Degrease floor.
2. Remove any existing coating mechanically, recommend grinding back to fresh concrete surface.
3. Vacuum all dust from floor: dust will inhibit the bond if there is a lot on the floor.

Priming: Megapoxy LVS

1. Mix Megapoxy LVS at 2 Parts A to 1 Part B, mix: 3 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 3-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.

If wanting Anti-Slip Floor

1. Mix Megapoxy 132 at 2 Parts A to 1 Part B by volume, mix: 3 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container add 10% Megapoxy Thinners, and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 3-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.
8. Broardcast sand across the wet epoxy surface at the required coverage and grit .
9. The next day, prior to the second coat, vacuum or sweep up excess sand.
10. Second coat, Mix appy the Megapoxy the same way as previous, No Thinners in the Second coat.

If wanting Standard Epoxy Floor: (no anti-slip)

1. Mix Megapoxy 132 at 2 Parts A to 1 Part B by volume, mix: 3 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 3-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.
10. Second coat, Mix appy the Megapoxy the same way as previous, No Thinners in the Second coat.

Make sure to use 1 roller per coat, rollers are throw away, brushes can be cleaned in the Megapoxy Thinners.

Megapoxy

Technical Information

Megapoxy 132 Flooring Procedure: Damp Concrete

Preparation:

1. Degrease floor.
2. Remove any existing coating mechanically, recommend grinding back to fresh concrete surface.
3. Vacuum all dust from floor: dust will inhibit the bond if there is a lot on the floor.

Priming: Megapoxy H

1. Mix Megapoxy H at 3 Parts A to 1 Part B, mix: 4 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 4-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.

****Do not add any any thinners into the Megapoxy H when using as a damp concrete surface primer.****

If wanting Anti-Slip Floor

1. Mix Megapoxy 132 at 2 Parts A to 1 Part B by volume, mix: 3 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container add 10% Megapoxy Thinners, and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 3-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.
8. Broardcast sand across the wet epoxy surface at the required coverage and grit .
9. The next day, prior to the second coat, vacuum or sweep up excess sand.
10. Second coat, Mix appy the Megapoxy the same way as previous, No Thinners in the Second coat.

If wanting Standard Epoxy Floor: (no anti-slip)

1. Mix Megapoxy 132 at 2 Parts A to 1 Part B by volume, mix: 3 – 6lts max.
2. Mix for 2 minutes scraping the base of the mixing container. Do not whip epoxy.
3. Scrape sides of mixing container and then mix for 1 more minute (resin should be clear)
4. Set timer for 15 minutes.
5. Start rolling floor.
6. When timer goes off, stop rolling and mix the next 3-6lts and pour into trays.
7. Set timer again for 15minutes and repeat process until floor is completed.
10. Second coat, Mix appy the Megapoxy the same way as previous, No Thinners in the Second coat.

Make sure to use 1 roller per coat, rollers are throw away, brushes can be cleaned in the Megapoxy Thinners.

Megapoxy

260

Flexible Epoxy Resin

Technical Data Sheet

DESCRIPTION	Megapoxy 260 is a two component, 100% solids, resin based, solvent-free, flexible epoxy resin. Designed for control and construction joints, where wider joints widths and toughness is required for a variety of jointing applications. Can be coloured with Megapoxy epoxy pigments.	
RECOMMENDED APPLICATIONS	• Construction Joints • Parking Structures • Factory Floors • Joints in Decks	• Control Joints • Warehouse Floors • Ramps and Driveways • Concrete Stairs
PROPERTIES	Mixing Ratio by Weight	100 Part A to 28.5 Part B
	Work Time at 25°C:	35 minutes
	Minimum Cure Time at 15°C	48 hours
	Minimum Cure Time at 25°C	24 hours
	Minimum Cure Time at 35°	12 minutes
	Minimum Application Temperature	10°C
	Maximum Operating Temperature	80°C
	Viscosity Part A at 25°C	30000 – 40000cps
	Viscosity Part B at 25°C	130 – 160cps
	Mixed Viscosity at 25°C	31550cps
	S.G. Part A at 25°C	1.05 – 1.10
	S.G. Part B at 25°C	0.97 – 0.99
	Mixed S.G. at 25°C	1.02
	Colour Part A	Clear - May be coloured
	Colour Part B	Clear
	Appearance Mixed	Clear - May be coloured
CURED PROPERTIES	Movement Tolerance	8 - 10%
	Compressive Strength - ASTM D695	15Mpa
	Bond Strength Concrete - ASTM D4541	>3Mpa
	Tensile Bond Strength Steel - ASTM D897	>3Mpa
	Modulus of Elasticity - ASTM D695	12Mpa
	Tensile Strength - ASTM D638	4Mpa
	Hardness - Shore D	30 minimum

260

Megapoxy

Technical Data Sheet

CHARACTERISTICS	• VOC Free • Pre-metered • Mixes easily by hand or mechanically • Trafficable • Good flexibility • Very high strength • Can be coloured
SURFACE PREPARATION	**Concrete** 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. 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. If the surface is damp, use Megapoxy H as a primer. **Metal Surfaces** 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. **Coated Surfaces** 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. **Concrete:** 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. **Metals:** 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.
IMPORTANT INFORMATION	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.
CLEANING	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 Megapoxy 260 Safety Data Sheet.
PACKAGING	Megapoxy 260 is available in 2.57kg kits. Product should be stored in cool dry store.
TECHNICAL SERVICE	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.

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