

Adheseal

# Concrete Repair & Treatment

*flex*KRETE

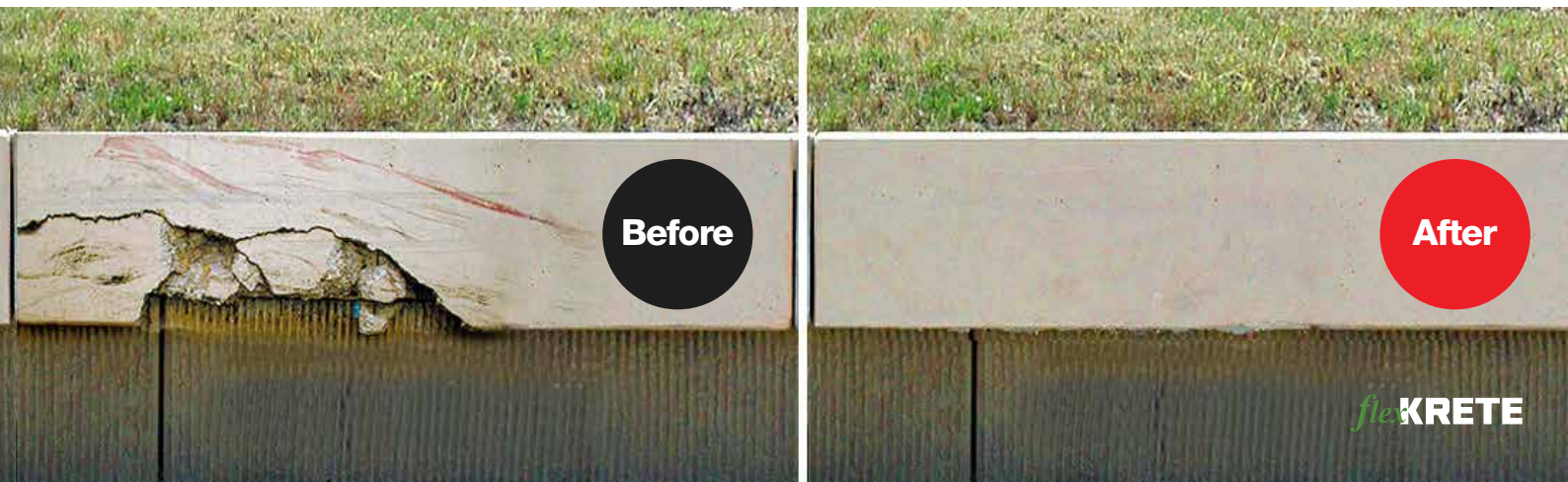
# Permanent Concrete Repair Solution

Revolutionary fast-set concrete repair material with superior adhesion and flexibility.

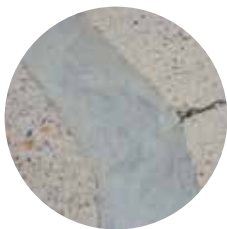


Trafficable in 60 minutes

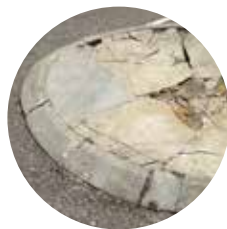
A high performance, rapid setting, permanent concrete repair system based on vinyl polymer resin. This system is capable of being trafficable in 60 minutes and curing time can be accelerated to as little as 30 minutes if desired. FlexKrete cures 3-times harder than concrete with outstanding adhesion properties and is a long-term solution for deep holes, feather-edged or overlay repairs. It has exceptional durability and tolerates extreme abuse without breaking apart or popping out.



## Applications



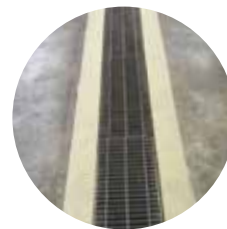
Crack Repairs



Patching



Vertical & Overhead



Nosing



Broadcast



Trafficable in 60 minutes  
(Can be accelerated to 30 minutes)



Extremely Durable



Easy to Use



UV Resistant



Suitable for applications below freezing



Chemical Resistant



Structural Strength



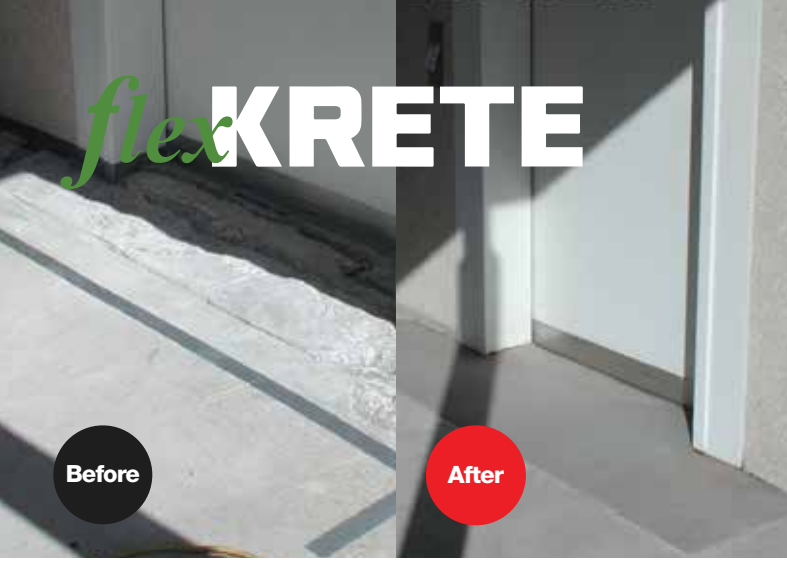
Feather edge without breakage



Cured strength 80mpa

See more before/after images at [www.adheseal.com.au](http://www.adheseal.com.au)

# *flex* KRETE





## Flexkrete Trade Kit - Adheseal



A versatile concrete repair kit that is a permanent solution for many remedial applications. It will yield approximately 13 litres of mixed product for a horizontal application. This kit includes: Flexprime 500ml, Flexkrete 102 kit (4kg), measuring containers, mixing bucket and kiln dried sand.

Size	Code
Trade Kit	FKTK



## FlexPrime - Adheseal



A two-part, modified polymer used as a bonding agent and vapour barrier for concrete and steel before the application of Flexkrete 102. This primer promotes adhesion to damp concrete and helps eliminate pinholes caused by outgassing. FlexPrime can be applied by brush, roller or spray. Coverage - approximately 8m<sup>2</sup> per litre.

Size	Code
500ml	FKP/500
2L	FKP/2
10L	FKP/10



## Flexkrete 102 - Adheseal



A two-part vinyl polymer resin for concrete repairs suitable for most remedial applications. FlexKrete can achieve 60 minute cure time and cures 3 times harder than concrete. It is essential to use this product in conjunction with FlexPrime primer.

Size	Code
4kg	FK102/4
20kg	FK102/20



## FlexTemp - Adheseal



An optional additive used to rapidly accelerate the cure speed of FlexKrete 102 resin in applications that require an extremely fast return to service and is also recommended for applications in cooler environments. Using FlexTemp as an accelerant, can achieve full cure in as little as 15 minutes. Adding FlexTemp will allow FlexKrete 102 to be applied in temperatures as low as -18°C.

Size	Code
150ml	FKT/150



## FlexKrete Fumed Silica - Adheseal



A fine synthetic powder used as a thickening agent for Flexkrete 102 resin to make it suitable for vertical and overhead Flexkrete applications.

### Overhead Applications

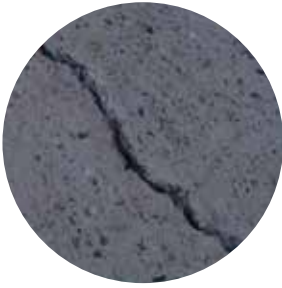
- FlexKrete 102 Resin x 1 part
- Fumed Silica x 2 parts
- Fine Kiln Dried Sand x 1.5 parts

### Vertical Applications

- FlexKrete 102 Resin x 1 part
- Fumed Silica x 1 part
- Fine Kiln Dried Sand x 2 parts

Size	Code
250g	FKFUMED/250
1kg	FKFUMED/1
10kg	FKFUMED/10

1



**STEP 1**  
**Prepare**

V out the crack to a minimum 10mm wide with a V-segment crack chasing wheel.

2



**STEP 2**  
**Clean surface**

Remove dirt, debris, paint and contaminants to produce a clean, dry solid base. Mechanically clean area as needed. If required, mechanically key the application area. Vacuum or blow clean to remove excess dust.

**!** Applying gaffer tape to borders of application area will ensure straight edges and a neat finish.

3



**STEP 3**  
**Prime**

Mix FlexPRIME parts A & B in equal amounts. Apply a very thin coat to prepped area using a brush, roller or sprayer (avoid puddles/ridges). Optional - Thin with up to 10% acetone for easy application and penetration. Allow FlexPRIME to become very tacky before applying FlexKRETE.

4



**STEP 4**  
**Mix FlexKRETE 102 Resin (Part A)**

Open pail and power-mix for 60 seconds with power drill to disperse material (before pouring required quantity).

5



**STEP 5**  
**Measure FlexKRETE 102 Resin (Part B)**

Measure and pour required quantity into clean mixing pail.

6



**STEP 6**  
**Catalyse**

Add FlexKRETE 102 CATALYST (Part B) to FlexKrete Resin (Part A) and power-mix (at low speed - 300rpm) for 30 seconds.

7



**STEP 7**  
**Apply Catalysed FlexKRETE**

Apply catalysed Flexkrete 102 (in liquid form) into the application area to half fill the crack.

8



**STEP 8**  
**Apply sand**

Apply (dry) fine kiln dried sand into the application area to over fill the void (add sand to refusal).

9



**STEP 9**  
**Grind**

Once cured, grind the excess cured product to a smooth finish to complete application.

**!** Optional - Apply a FlexKrete broadcast application over treated area.



**STEP 1**  
**Clean surface**

Remove dirt, debris, paint and contaminants to produce a clean, dry solid base. Mechanically clean area as needed. If required, mechanically key the application area. Vacuum or blow clean to remove excess dust.

**!** Applying gaffer tape to boarders of application area will ensure straight edges and a neat finish.



**STEP 2**  
**Prime**

Mix FlexPRIME parts A & B in equal amounts. Apply a very thin coat to prepped area using a brush, roller or sprayer (avoid puddles/ridges). Optional - Thin with up to 10% acetone for easy application and penetration. Allow FlexPrime to become very tacky before applying FlexKRETE.



**STEP 3**  
**Mix FlexKRETE 102 Resin (Part A)**

Open pail and power-mix for 60 seconds with power drill to disperse material (before pouring required quantity).



**STEP 4**  
**Measure FlexKRETE 102 Resin (Part A)**

Measure and pour required quantity into clean mixing pail.

**!** 1 litre of FlexKRETE resin will yield approximately 3 to 3.5 litres of mixed product.



**STEP 5**  
**Catalyse**

Add FlexKRETE 102 CATALYST (Part B) to FlexKrete Resin (Part A) and power-mix (at low speed - 300rpm) for 30 seconds.



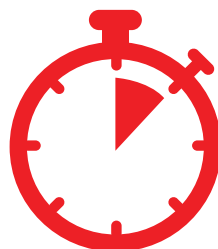
**STEP 6**  
**Measure and add aggregate**

Add 3 to 4 parts kiln dried sand into a mixing pail containing catalyzed FlexKRETE, then power-mix (at low speed) until well blended.



**STEP 7**  
**Apply material**

Pour into void, and then fill flush, pushing firmly into voids. Trowel smooth using long, smooth strokes. Remove gaffer tape (before FlexKrete is cured). Sprinkle sand onto uncured FlexKRETE to reduce tack.



**Trafficable in  
60 minutes**



**Cured strength  
80mpa**

1



**STEP 1**  
**Clean surface**

Remove dirt, debris, paint and contaminants to produce a clean, dry solid base. Mechanically clean area as needed. If required, mechanically key the application area. Vacuum or blow clean to remove excess dust.

**!** Applying gaffer tape to borders of application area will ensure straight edges and a neat finish.

2



**STEP 2**  
**Prime**

Mix FlexPRIME parts A & B in equal amounts. Apply a very thin coat to prepped area using a brush, roller or sprayer (avoid puddles/ridges). Optional - Thin with up to 10% acetone for easy application and penetration. Allow FlexPrime to become very tacky before applying FlexKRETE.

3



**STEP 3**  
**Mix FlexKRETE 102 Resin (Part A)**

Open pail and power-mix for 60 seconds with power drill to disperse material (before pouring required quantity).

4



**STEP 4**  
**Measure FlexKRETE 102 Resin (Part A)**

Measure and pour required quantity into clean mixing pail.

**!** 1 litre of FlexKRETE resin will yield approximately 2 litres of mixed product.

5



**STEP 5**  
**Catalyse**

Add FlexKRETE 102 CATALYST (Part B) to FlexKrete Resin (Part A) and power-mix (at low speed - 300rpm) for 30 seconds.

6A



**STEP 6A - VERTICAL APPLICATIONS**  
**Measure & add aggregate and fumed silica**

Mix 2 parts kiln dried sand and 2-3 parts FlexKrete fumed silica. 3 parts FlexKrete Fumed Silica produces a stiff, dough-like material that can be hand-placed and trowelled smooth. 2 parts fumed silica and 2 parts sand produces a less-stiff material and is recommended as a good starting point to evaluate ratios required.

6B



**STEP 6B - OVERHEAD APPLICATIONS**  
**Measure & add aggregate and fumed silica**

Mix 1.5 parts kiln dried sand and 2 to 3 parts fumed silica. If material is too heavy, decrease the amount of sand (to a minimum of 1 part).

7



**STEP 7**  
**Apply material**

Trowel into void, and then fill flush, pushing firmly into voids. Trowel smooth using long, smooth strokes. Remove gaffer tape.

**!** Remove gaffer tape from borders (if applied) before product has cured.



**Trafficable in  
60 minutes**

1



**STEP 1**  
**Clean surface**

Remove dirt, debris, paint and contaminants to produce a clean, dry solid base. Mechanically clean area as needed. If required, mechanically key the application area. Vacuum or blow clean to remove excess dust.

**!** Applying gaffer tape to boarders of application area will ensure straight edges and a neat finish.

2



**STEP 2**  
**Prime**

Mix FlexPRIME parts A & B in equal amounts. Apply a very thin coat to prepped area using a brush, roller or sprayer (avoid puddles/ridges). Optional - Thin with up to 10% acetone for easy application and penetration. Allow FlexPrime to become very tacky before applying FlexKRETE.

3



**STEP 3**  
**Mix FlexKRETE 102 Resin (Part A)**

Open pail and power-mix for 60 seconds with power drill to disperse material (before pouring required quantity).

4



**STEP 4**  
**Measure FlexKRETE 102 Resin (Part A)**

Measure and pour required quantity into clean mixing pail.

**!** 1 litre of FlexKRETE resin will yield approximately 1.5 - 2 litres of mixed product.

5



**STEP 5**  
**Catalyse**

Add FlexKRETE 102 CATALYST (Part B) to FlexKrete Resin (Part A) and power-mix (at low speed - 300rpm) for 30 seconds.

6



**STEP 6**  
**Measure and add aggregate**

Add 1.5 - 2 parts kiln dried sand into mixing pail containing catalysed FlexKRETE, then power-mix until well blended.

7



**STEP 7**  
**Apply material**

Pour a ribbon of slurry-mix onto repair area using a notched squeegee or gauge rake. Apply material to desired depth. Immediately broadcast with aggregate and allow to cure.

**!** For self-levelling: Leave alone, or for a fine slurry-broadcast repair, immediately broadcast with aggregate.



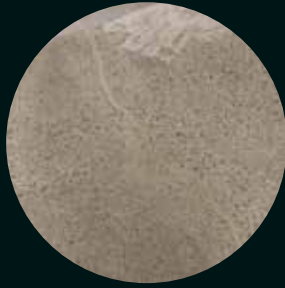
**Trafficable in 60 minutes**



**Cured strength 80mpa**



1



**STEP 1**  
**Clean surface**

Remove dirt, debris, paint and contaminants to produce a clean, dry solid base. Mechanically clean area as needed. If required, mechanically key the application area. Vacuum or blow clean to remove excess dust.

**!** Applying gaffer tape to borders of application area will ensure straight edges and a neat finish.

2



**STEP 2**  
**Prime**

Mix FlexPRIME parts A & B in equal amounts. Apply a very thin coat to prepped area using a brush, roller or sprayer (avoid puddles/ridges). Optional - Thin with up to 10% acetone for easy application and penetration. Allow FlexPrime to become very tacky before applying FlexKRETE.

3



**STEP 3**  
**Mix FlexKRETE 102 Resin (Part A)**

Open pail and power-mix for 60 seconds with power drill to disperse material (before pouring required quantity).

4



**STEP 4**  
**Measure FlexKRETE 102 Resin (Part A)**

Measure and pour required quantity into clean mixing pail.

**!** 1 litre of FlexKRETE resin will yield approximately 2 - 4m<sup>2</sup> of mixed product.

5



**STEP 5**  
**Catalyse**

Add FlexKRETE 102 CATALYST (Part B) to FlexKrete Resin (Part A) and power-mix (at low speed - 300rpm) for 30 seconds.

6



**STEP 6**  
**Apply Catalysed FlexKRETE**

Pour FlexKrete material onto repair area. Using a roller or squeegee, apply the material at 2 - 4m<sup>2</sup> per litre depending on substrate condition and the size of the aggregate being used.

7



**STEP 7**  
**Apply broadcast**

Immediately broadcast to refusal with aggregate then allow to cure. Sweep excess aggregate from surface & open to traffic.

**!** A final topcoat may be applied, such as a good quality Polyurethane or Polyaspartic Sealer. FlexKote 1PU-C or FlexKote 2AS-C Sealers are recommended.



**Trafficable in  
60 minutes**



**Cured strength  
80mpa**



### Everbond Acrylic Bonding Agent - Adheseal

Acrylic Bonding Agent is used as a bonding agent for mortar, renderings and floor screeds producing waterproof and damp-proof screeds, renders and slurries. It also can be used to create a highly wear resistant topping on stair treads, drains, sewage treatment plants and more.

Size	Code
5L	ACRYBOND/5
20L	ACRYBOND/20



### Everbond Plastabond - Adheseal

Plastabond is a bonding agent/additive for:

- Mortar, renderings and floor screeds
- Improving the properties of screeds, renders and slurries
- Patching and repair mortar
- Improving adhesion of renderings to insulation boards and materials
- Producing mortars resistant to chemical attack

Size	Code
5L	PLASTAB/5
20L	PLASTAB/20

## Efflorescence Remover



### EP Efflorescence Remover - Enviropacific

A liquid applied treatment that removes efflorescence from bricks, blocks and all masonry materials. It is non-toxic and biodegradable and is suitable for commercial and residential applications.

Size	Code
5L	EPEFFLOR/5
20L	EPEFFLOR/20

## Plugging



### Lamposilex Waterstop - Mapei

An ultra-fast setting hydraulic binder to instantly stop water leaks.

- Uses**
- Plugging water under pressure, in basements, tunnels and subways
  - For sealing watertight rigid joints in hydraulic concrete structures, sewers, tanks and canals

Size	Code
5kg Drum	LAMPOSIL/5





## Aquastop Waterstop - Pasco

A flexible hydrophilic polymer rubber used to stop water infiltration through vertical and horizontal non-moving construction joints, irregular surfaces and around penetrations through concrete. When in contact with water, Aquastop swells to form an impermeable barrier to prevent water migration. It is suitable for applications such as underground structures, tunnels, box culverts, pits, retaining walls, manholes, basements and precast panels.

Size	Type	Code
19mm x 25mm x 5mt	Roll	AQUASTOP19X25/5



## Idrostop - Mapei

A hydrophilic expandable rubber section for creating watertight construction joints in civil, industrial and hydraulic construction applications.

Product	Size	Code
Idrostop 10	20mm x 10mm x 10mt	IDROSTOP/10
Idrostop 15	20mm x 15mm x 7mt	IDROSTOP/15
Idrostop 25	20mm x 25mm x 5mt	IDROSTOP/25



## Idrostop Mastic - Mapei

Single-component adhesive for the installation of Idrostop. Idrostop Mastic is a ready to use solvent-free single-component adhesive with a base of MS polymers. On extrusion, it is a thixotropic paste suitable for horizontal and vertical applications.

Product	Size	Code
Idrostop Mastic	300ml Cartridge	IDROSTOP/MAS

## Epoxy Grouts & Repair & Injection Products



## Megapoxy P1

Gap Filling / Structural Epoxy Paste Adhesive (2 component).

### Features

- Ideal for concrete structural bonding, filling and repair applications
- Commonly used in pipeline & civil construction
- Suitable for potable water applications
- 60 minute work time / 24 hour cure time

Colour	Size	Code
Grey	1L Kit	MPP1/1
Grey	4L Kit	MPP1/4
Grey	20L Kit	MPP1/20



## Megapoxy PM (Paste medium work time)

Gap Filling / Structural Epoxy Paste Adhesive (2 component).

**Features**

- Commonly used for structural bonding, gap filling and repairs on concrete, marble & granite and other construction materials
- Tensile and compressive strength superior to concrete
- Very good chemical resistance
- 45 minute work time / 24 hour cure time

Colour	Size	Code
Natural (white)	1L Kit	MPPMWH/1
Grey	4L Kit	MPPMGR/4
Natural (white)	4L Kit	MPPMWH/4
Grey	20L Kit	MPPMGR/20
Natural (white)	20L Kit	MPPMWH/20



## Megapoxy PF (Paste fast work time)

Rapid Set Gap Filling / Structural Epoxy Adhesive (2 component).

**Features**

- Commonly used for structural bonding, gap filling and repairs on concrete, marble & granite fixing and other construction materials
- Suitable for immediate on the spot emergency repairs to tanks, pipes, machinery & concrete structures
- Tensile and compressive strength superior to concrete
- Very good chemical resistance
- 5 minute work time / 60 minute cure time

Colour	Size	Code
Natural (white)	1L Kit	MPPFWH/1
Grey	4L Kit	MPPFGR/4
Natural (white)	4L Kit	MPPFWH/4
Grey	20L Kit	MPPFGR/20
Natural (white)	20L Kit	MPPFWH/20



## Megapoxy H

Low Viscosity Hydrophilic Epoxy Resin Liquid (2 component).

**Features**

- Suitable for repair of cracked concrete by low pressure injection impregnation of porous substrates such as masonry and timber
- Vapour Barrier
- Wet to dry binding agent to eliminate cold joints
- Suitable for use in damp conditions

Colour	Size	Code
Natural (Clear)	4L Kit	MPH/4
Grey - N35	4L Kit	MPHGR/4
Natural (Clear)	20L Kit	MPH/20
Grey - N35	20L Kit	MPHGR/20



## Megapoxy HX

Extra Low Viscosity Hydrophilic Epoxy Resin Liquid (2 component).

**Features**

- Suitable for repair of cracked concrete by gravity penetration or low pressure injection impregnation of porous substrates such as masonry and timber
- Suitable for use in damp conditions

Colour	Size	Code
Natural (Extra Clear)	4L Kit	MPHX/4
Natural (Extra Clear)	20L Kit	MPHX/20



## Megapoxy 57

Heavy Duty Epoxy Grout - with extended work time (2 component).

### Features

- Epoxy grout suitable for grouting machinery, locking bearings, setting anchor bolts, chocking of machinery, rail track grouting and bridge bearing pads

Colour	Size	Code
Green	9.4kg Kit	MP57/9



## Megapoxy HICB

High Impact Crusher Backing (for fast return to service).

### Features

- Epoxy grout for backing crusher parts, grouting machinery, locking bearings, setting anchor bolts and chocking of machinery
- Outstanding compressive strength properties with very low shrinkage

Colour	Size	Code
Blue	10kg Kit	MPHICB/10

## Cementitious Grouts & Repair Products



## Mapegrout T40 - Mapei

A medium strength fibre-reinforced, thixotropic mortar for repairing concrete. Suitable for horizontal and vertical applications.

Size	Code
25kg	MAPEGROUTT40



## Mapegrout T60 - Mapei

A sulphate-resistant fibre-reinforced, thixotropic mortar for the repair of degraded concrete structures subject to sulphate attack.

Size	Code
25kg	MAPEGROUTT60



### Mountain Grout Gel Foam - Green Mountain International

A single component, low viscosity hydrophilic polyurethane formulation with high elongation properties for sealing leaking cracks or joints in concrete structures with continuous moisture exposure. Expands up to 25 times initial volume.

**Typical Applications**

- Water related facilities
- Waste treatment plants
- Storm water systems
- Underground vaults
- Concrete dams
- Tunnels
- Elevator Pits

Size	Code
4L	INJGELERA/4



### Mountain Grout Flexible - Green Mountain International

A single component, low viscosity hydrophobic polyurethane formulation. It is typically used to repair cracks or failed joints in concrete structures. For some applications, it is recommended to use Mountain Grout Accelerator in conjunction with Mountain Grout Flexible. This will speed the curing process. Refer to TDS for detailed information.

**Typical Applications**

- Water related facilities
- Concrete dams
- Waste treatment plants
- Tunnels
- Storm water systems
- Earthen dams
- Underground vaults
- Elevator pits
- Parking garages

Product	Size	Code
Mountain Grout Flexible	4L	INJFLEXERA/4

# Adheseal

# Hybrid MS Polymer Range

Automotive / Construction / Industrial / Marine



Low VOC



Solvent Free



Isocyanate Free

**Hi Flex Construction**  
Joint Sealant



**Hi Flex 60LS**  
Structural Adhesive / Sealant



**Hi Power**  
Extreme Structural Adhesive





## Crack Injection Balloon - Resimax

Resimax crack injection balloons are designed to be used with Megapoxy H and HX epoxy resins and some polyurethane injectable products for permanent structural repair of cracks in concrete structures.

**Balloon Concept**

- Provides a visual aid to the process of filling the crack. It stays inflated when the crack is full.

**Clear Base**

- Allows accurate placement of the balloon. Allows you to see the crack and also lets you see the resin when it rises to the balloon. The base is designed to prevent adhesive blocking the aperture during placement.

**Latex Hose**

- Balloons out to 20mm (to keep the injection system pressurised).

**Tap connection**

- Ensures secure closure of the balloon after inflation and allows leakage free connection to a injection gun. Also allows taps further along the crack to be left open if desired.

Product	Code
Crack Injection Balloon	INJBALLOON



## Injection Packer Brass

Brass injection packer with grease nipple for application and a non-return valve. When the resin has set, the top of the packer unscrews. This enables the base to be left in place leaving a small recess which can easily be filled with epoxy or PU injection foam.

Size	Code
6mm x 46mm	INJPACKT/6
8mm x 50mm	INJPACKT/8



## Injection Packer Hammer In

Hammer in packer designed for wider cracks.

Size	Code
-	INJPACKHAMT



## Injection Guns - Resimax

Injection gun compatible for crack injection applications.

Size	Code
-	INJGUN/RES

1

**STEP 1**

## Preparation

The application surface to be treated should be cleared of all debris and attachments to allow free and clear access to the work, and also open access for monitoring of grout travel.

2

**STEP 2**

## Drill Holes

Holes should be drilled at an approximate 45 degree angle, offset to intersect the joint/crack at the approximate mid-depth or to a maximum of 450mm. In thin concrete sections holes may be drilled directly into the joint/crack.

3

**STEP 3**

## Space Holes

Holes shall be placed at appropriate intervals typically 300mm apart to ensure full infiltration of the joint/crack with the product. In narrow (hairline) or highly erratic cracks, holes will be closer together. In wide cracks they may be farther apart. Visually monitor grout flow from outside of crack.

4

**STEP 4**

## Pack

Insert chosen packer devices.

5

**STEP 5**

## Pump

Connect application pump and pump product from packer to packer, with multiple passes on each hole until either stall pressure is achieved or raw grout flow is observed from the crack/joint. Start at lowest point and work upwards

6

**STEP 6**

## Clean

Clean excess product from the application area.



Use as a general guide only. Refer to TDS for specific requirements.



1



### STEP 1

## Preparation

The surfaces of floors / walls are to be treated and should be clean and clear of all debris.

2



### STEP 2

## Adhere injection balloons

Use Megapoxy PM or PF to adhere the injection balloons in place and seal surface of cracks over the cracks ready for injection.

Megapoxy PM - Epoxy Paste - 45 minute work time / 24 hour cure time

Megapoxy PF - Epoxy Paste - 5 minute work time / 1 hour cure time

3



### STEP 3

## Inject Megapoxy H or HX

Use injection gun to inject Megapoxy H or HX through the injection balloons into cracks. The balloon will remain inflated when the cracks and voids are full.

Megapoxy H - Low viscosity hydrophilic epoxy resin used for permanent structural crack repairs.

Megapoxy HX - Very low viscosity hydrophilic epoxy resin used for permanent structural crack repairs.

4



### STEP 4

## Remove

Once the epoxy is cured, mechanically remove the Megapoxy PM or PF and Injection Balloons.



Use as a general guide only. Refer to TDS for specific requirements.