CI/SfB | | Yr4 |
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construction solutions

A complete kit for on-site resin injection of cracked concrete, masonry and brickwork

weber.tec EP IK

epoxy plus injection kit (EPIK) T

Uses

- Concrete walls and slabs
- Brickwork
- Cavity wall construction
- Bridge repairs
- Pavement repairs

About this product

weber.tec EP IK contains all materials, application gun, and ancillary items that will normally be required to carry out an efficient on-site repair of cracked concrete at widths down to approximately 0·5 mm.

The **weber.tec EP injection resin** is in thixotropic form – this allows application where it is not possible to completely seal the cracks, for example: cavity walls and chimneys.

Features and benefits

- Easy to use
- All materials required, together with mixing bucket and application gun, packed in a single carton
- Comprehensive easy-to-follow instructions with each kit
- Significant cost reduction compared to other techniques

Technical data

weber.tec EP injection resin has the following typical properties:

Usable life at	10°C	1½ – 2 hours
In cartridge	20°C	45 mins – 1 hour
	30°C	30 – 45 mins

All tests carried out at 20°C.

Compressive strength	24 hours	45 N/mm²
	7 days	80 N/mm²
Modulus of elasticity in compression		2·75 kN/mm²
Tensile strength		20 N/mm²
Flexural strength		55 N/mm²
Slant shear bond strength, concrete/concrete		60 N/mm²

FM 1209

weber.tec EP IK

Preparation

Resin injection is particularly useful as a method of carrying out structural repairs of concrete and masonry. It forms a bond between the broken sections stronger than the material itself and seals the crack against ingress of water and aggressive agents, which may have a deleterious effect on reinforcement.

It is generally accepted that cracks in reinforced concrete narrower than 0·2mm need not be injected and some form of surface sealing is normally sufficient. Before deciding to inject cracks it is most important to establish the cause of cracking. Ensure that they are not still moving by using suitable tell-tale devices. If movement is occurring the crack should be treated as a normal movement joint.

Application

The crack and surrounding surface must be thoroughly clean, dry and all loose debris removed. **weber.tec filler** is then used to seal the surface and fix the injection nipples. Once the **weber.tec filler** has hardened, which normally takes about an hour, the injection resin is mixed* and placed in the assembly cartridge. It is then simply a matter of pushing the plastic tube over the nipple, clipping firmly in place with jubilee clip provided, opening the restrictor clamp and gently pumping in the resin using the hand operated skeleton gun. Starting at the bottom so that air is displaced upwards, each nipple is sealed as it becomes filled.

The following day the nipples may be broken off and depressions filled with further **weber.tec filler**. For a smooth matching finish, the crack surface should be ground off using a mechanical grinder or similar tool.

***NB** Stir the resin thoroughly before adding the hardener.

Most of the components are disposable so cleaning is minimised but any spillages and mixing tools should be cleaned with **weber.tec solvent 3** before the resin sets.

Packaging and yield

The resin compounds in the kit are packed in separate containers and clearly labelled. Each 1 litre kit is complete in itself.

For larger jobs it is more economic to purchase resin and accessories separately. Injection resin and hardener are only available in 5 litre packs. Empty cartridges, plungers and nozzles are in packs of 20. Tubes, clips and clamps are provided in sets. Spare nipples are available in packs of 40. **weber.tec filler** is supplied in 4·3 litre packs.

Special **Weber** injection resin systems for use with special two component metering mixing and pumping equipment are available in bulk packs. Details are available from **Weber's** Technical Services Department on request.

Contents

0·6 litre **weber.tec filler**
4 x 0·25 litre **weber.tec injection resin**
10 Injection nipples
4 x 320 cc plastic cartridges, plungers and nozzles
1 tube clamp
Applicator gun
300 mm x 6·5 mm dia. plastic tube
Disposable plastic gloves
Small jubilee clip to hold tubing on nipples
Detailed instruction sheet

The following additional items will be required on site:
Pliers
Steel filler knife
Wire brush
Sharp knife
Abrasives
Barrier Cream
Cleaning Solvent e.g. **weber.tec solvent 3**

Packaging

See above for details.

Yield

Yield of **weber.tec EP IK** is 1 litre.

Health and safety

Contains epoxy constituents. Refer to information supplied by manufacturer (see Material Safety Data Sheet).

All skin contact with epoxy resin products should be avoided. Barrier creams should be used and operatives should wear protective clothing including gloves. Working areas should be well ventilated.

The hardener content is alkaline and labelled as corrosive. The resin content is labelled as an irritant. The flash point of all components is in excess of 100°C. In the event of fire use foam, dry chemical, carbon dioxide (CO_2) or water fog extinguishers.

For further information, please request the Material Safety Data Sheet for this product.

Technical services

Weber's Customer Services Department has a team of experienced advisors available to provide on-site advice both at the specification stage and during application. Detailed specifications can be provided for specific projects or more general works. Site visits and on-site demonstrations can be arranged on request.

Technical helpline
Tel: (01525) 722110
Fax: (01525) 718988

Sales enquiries

Weber products are distributed throughout the UK through selected stockists and distributors. For UK sales enquiries and overseas projects, contact **Weber's** Sales office.

Sales office
Tel: (01525) 722100
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