

## IDEAL KIT

### Two-component epoxy system in cartridges for cracks repair

#### DESCRIPTION

IDEAL KIT is a two-component epoxy resin-based system used to fill cracks and chinks in the fields of building and civil engineering. The resin and hardener are pre-packaged into specially patented two-chamber cartridges. The IDEAL KIT is ready to use and is provided with all the necessary accessories for hand gun or relatively high-pressure compressed air injection.

IDEAL KIT is supplied in 3 different fluidity grades:

IDEAL KIT 10 - very fluid.

IDEAL KIT 12 - semi fluid.

IDEAL KIT 15 - paste.

#### FEATURES

- Ready to use system for worksite applications.
- Resin and hardener are pre-dosed and packaged into closed two-chamber cartridges.
- Very safe and hygienic.
- Easy and safe application by hand gun or compressed air up to 15 atm pressure (217 psi).
- Easy nipple with check valve.
- Semifluid system free from solvents.
- High mechanical properties.
- Excellent adhesion to all kinds of construction materials with dry or wet bottoms.

#### SURFACE PREPARATION

The surface to treat must be dry and clean. Concrete must have cured for at least 28 days.

#### APPLICATION

- To restore cracks, chinks and blind or passing cracks in concrete, brick, stone, freestone walls, wooden beams and other elements.
- Steel-wood, steel-concrete, etc.
- To reinforce stone and brick walls and to fix steel and fibre glass connectors in the seams of structural cracks.
- To fill any spacing into wooden floors to prevent noise and squeaking.
- To glue steel-concrete-wood elements, window sills, steps, detached concrete footings and connectors for concrete slabs connected to wood beams.

## APPLICATION GUIDE

Carefully remove any crumbly portions from cracks or injection points by means of a sanding disk, a brush or a scraper. Clean thoroughly by means of a vacuum cleaner or by compressed air.

Fix the nipples at distances of 20-30cm from one another using epoxy stucco, such as IDEAL KIT, on the back of the nipple then push it slightly against the crack or the injection point.

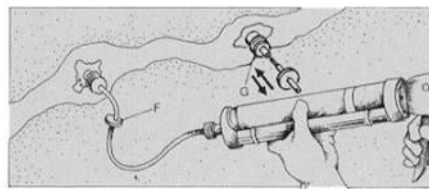
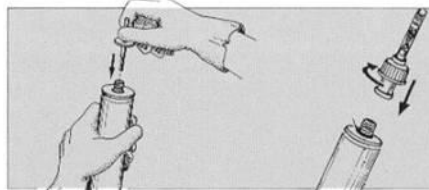
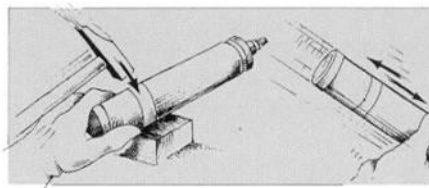
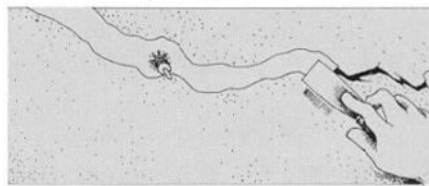
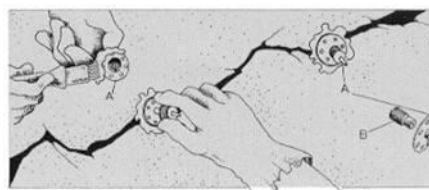
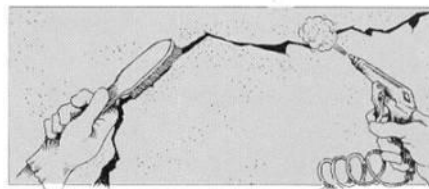
Thoroughly seal the crack with stucco IDEAL KIT using a knife or a brush. Leave to cure for 4-12 hours, depending on the temperature.

To mix the resin and hardener, break the glass bulb by banging slightly on the cartridge wall with a hammer then mix the product, stirring back and forth at least 20 times. Do not shake, otherwise air could enter.

Open the seal with a clove and screw the connection pipe.

Put the cartridge into the gun, connect the small pipe to the nipple on the lowest injection point and fix it properly to the ring. Put a vent pipe into the adjacent nipple and start to pump. When the resin appears in the upper nipple, remove the injection pipe and connect it in the same way to the adjacent nipple. Go on 'til the crack is fully filled.

When curing is complete (after 12-15 hours), remove the nipples and the stucco on the surface by a chisel and smooth by means of a sanding disc.



## TECHNICAL INFORMATION

APPEARANCE		liquid
MIXTURE A VISCOSITY:		
10°C	mPas	400-800
20°C	mPas	250-500
30°C	mPas	100-250
MIXTURE DENSITY AT 25°C	g/cm <sup>3</sup>	approx. 1.0
SHELF LIFE AT 10-30°C		>1 YEAR
WORKING TIME (POT LIFE) AT		
10°C		90 min.
20°C		35 min.
30°C		20 min.
40°C		10 min.
CURING AT		
10°C		12 hours
20°C		7 hours
30°C		5 hours
40°C		3 hours

## MECHANICAL PROPERTIES

After 7 days of curing at 25°C

COMPRESSION STRENGTH (DIN 53454)	N/mm <sup>2</sup> > 70
BENDING STRENGTH (ISO 178)	N/mm <sup>2</sup> > 45
TENSILE STRENGTH (ISO R 5 7)	N/mm <sup>2</sup> > 55
MODULUS OF ELASTICITY ( DIN 604 )	Approx. N/mm <sup>2</sup> 2800
TEARING TEST (ISO 4624)	
On dry concrete	N/mm <sup>2</sup> >4.5
On wet concrete	N/mm <sup>2</sup> >2.5
ELONGATION AT RUPTURE	approx. 2.5%

### Practical tips

Before starting an injection, observe cracks carefully. It is important to know the width, depth and length of the crack to calculate the right amount of product required. It is also expedient to mark the points where injection nipples are to be placed.

## PACKAGING AND STORAGE

A box contains:

- 12 cartridges, with 0.25kg of resin and hardener each.
- Content of a 3.00kg box.
- 30 nipples with check valve.
- 6 connection pipes without check valve.
- 4 vent pipes.

The original containers are to be stored at 10-30°C in a dry place and vertically. Shelf life under these storage conditions is at least 12 months.

For longer storage, check with a practical test.

Idealkit is supplied in 3 different fluidity grades:

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IDEAL KIT 12 - semi fluid. (on request)

IDEAL KIT 15 - paste. (on request)

## **WARNINGS**

During pressure injection, there is always the risk of splashing. Use gloves, closed goggles, a head cover and a working suit. In case of splashes on the skin, wash immediately with water and soap. In case of splashes in the eyes, rise immediately with water for at least 10 minutes and call a physician. Use soap or paste to wash hands. Do not use solvents. It is recommended to protect skin with a cream before and after work.

### **IMPORTANT:**

All the information contained in this sheet is based on the best practical and laboratory applications. It is the customer's responsibility to check the product is suitable for the intended use. The manufacturer declines any responsibility for wrong application. It is recommended to carry out tests on small areas before application. This sheet replaces and cancels any previous one. The data contained can be changed at any time. Ideal Work products are for professional use and the company organises periodical training for its customers on demand. Anyone who uses these products without qualification takes all the associated risks.

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