

ARMOFIX I[®]

Epoxy-system for injection into cracks for concrete, masonry

DESCRIPTION

Two-component, epoxide compound, without solvent, specifically used for reinforcement injections and impermeabilization in concrete, masonry, stone, tufaceous structures etc.

USES

Structural reinforcement of damaged elements in concrete, cementitious mixes, brickwork, stone with lime, tufa etc. The strengthening occurs by means of structural anchoring of the damaged parts both by in-block diffusion with impermeabilization and by point-sealing of fractures.

Use of ARMOFIX I is particularly recommended for fissures and cracks with gaps smaller than 3 mm. Suitable for floor joists, bridge beams, columns, beams and pillars, masonry in historical buildings and in industrial and civil engineering works. The system ensures a degree of penetration superior to that of other systems with resin, cement or lime bases.

ADVANTAGES

High-level injection capacity.

Very high capacity of penetration.

Non-shrink.

High degree of mechanical resistance (tensile, cutting, compressive and chemical).

TECHNICAL DATA

Sp. Gr.:	1.05 g/cm ³
Resistance to flexural stress:	95 MPa
Resistance to tensile stress:	61 MPa
Resistance to compressive stress:	120 MPa
HDT:	>= 60°C
Viscosity at 25° C:	1-2 poise
Pot life for 100g at 20°C:	90 min
Temp. for use:	>= 10°C
Resistance to solutions w/	10% HCl, 50% H ₂ SO ₄ , 50% NaOH, 30% NaCl, Benzol, Petroleum (gasoline), Mineral oils etc.

INSTRUCTIONS FOR USE

Depending on the type of structure to be reinforced, intervention has to be planned with definition of the following parameters:

degree of structural weakening or damage

number and types of damaged sections

geometric distribution of holes to be made and their depth or positioning of nozzles

injection method (batch/continuous)

type of checks required.

Two types of injection method are possible:

With injectors positioned at the holes and connected directly to the injection pump.

After injection the holes are sealed with ARMOFIX T.

With previous attachment (fastening by means of ARMOFIX T) of special nozzles or plastic/steel spouts in or along the damaged sections. The fissures and gaps are then sealed with ARMOFIX T. The center-distance of the nozzles must be about 30-40 cm.

Work from the bottom upwards, injecting the resin with a batch pump and moving from one nozzle to the next after insertion. At the end of the operation the spouts are cut off.

To clean the injection equipment and pump use PAVISOL E diluent.

YIELD

Requirements will be determined by the nature and condition of the structures to be reinforced. Requirements are normally calculated according to the work to be carried out with tests conducted at the site.

COLOUR

Transparent, straw colour.

PACKING

Tins.

CAUTION

The in-block reaction times may vary considerably according to quantities and external temperature. It is therefore important to carry out preliminary on-site tests, especially when the batch system is used.

Protect hands with gloves. Use glasses to protect the eyes from accidental contact or spraying, which may cause irritation.

STORAGE

Shelf-life of 12 months when stored in the original sealed packaging in a dry environment. Protect from frost and low temperatures.