



EpiMax 575

Structural Adhesive System

Description

EpiMax 575 Structural Adhesive System is a specially formulated gap-filling paste adhesive. This easy-to-use, two-part epoxy product hardens after mixing with excellent properties ideally suited for many building and construction site applications. It is a companion product to EpiMax 111 Structural Injection System for effective repair of cracked concrete decking.

Other broad applications include bonding, grouting and general repair of concrete.

Since EpiMax 575 is solventless, it will not shrink or crack under normal dynamic stresses and loads.



Advantages

- Excellent adhesion to most surfaces
- Gap filling qualities
- Simple 1:1 mix ratio - colour coded
- Non sag on vertical surfaces
- Very good chemical resistance
- Creamy texture, blends easily
- Excellent peel strength
- High electrical resistivity
- Tensile and compressive strength superior to concrete
- Excellent adhesion under adverse conditions (cold and damp)
- Good strength retention after prolonged immersion in water
- Contains Kevlar for extra mechanical strength

Typical applications

- Sealing concrete pipes and tanks
- Bonding pre-cast concrete elements
- Bonding natural stone
- Sealing cracks in concrete decks
- Grouting inserts into concrete
- Metal bonding

General properties

- Shelf life: 2 years
- Volume solids: 100%
- Adhesion: > concrete tensile strength
- Achievable vertical lining build 40 mm (as supplied)
- Shrinkage: Nil
- Chemical resistance: Excellent

Standard version properties

- Mix ratio: 1:1 by volume
- Set time: 7 hours at 25° C
- Work time per pack: 2 hours at 25° C
- Cure time: 1 day at 25° C

Express version properties

- Mix ratio: 1:1 by volume
- Set time: 20 minutes at 25° C
- Work time per pack: 10 minutes at 25° C
- Cure time: 45 minutes at 25° C

Typical properties, cured 14 days 20° C (Standard version)

- Code compliance: ASTM C881/C881M
- Compressive strength, 20° C: 95 MPa
- Flexural strength, 20° C: 33 MPa
- Flexural modulus, 20° C: 5640 MPa
- Tensile strength, 20° C: 25 MPa
- Lap shear strength, 20° C: 20 MPa
- Adhesive/bond strength, 20° C: ~ 3.8 MPa, concrete fails
- T-Peel strength, 20° C: 2.7 N/mm

Estimating data

4 ltr EpiMax 575 Structural Adhesive System
= 4 sq m at 1 mm thickness.

Preparation

Concrete should be at least 28 days old and free of additives, curing agents, oils etc. Prepare concrete by acid etching/neutralizing/washing, professional grinding or captive blast cleaning as applicable to expose firmly held aggregate and allow to dry. Surface profile should be CSP 3 minimum, greater if top-coating. Prepare steel surfaces in accordance with AS 1627-2002. Wire brushing is not entirely satisfactory and gives limited preparation only. Always confirm preparation adequacy.

Application

Using a low speed (400 rpm) mechanical mixer combine EpiMax 575 Part A (Compound) and EpiMax 575 Part B (Hardener) in equal volumes. Mix until uniform, taking care not to aerate. Confirm mixing by colour checking to an even, mid grey colour.

For concrete crack sealing applications, prior to structural injection bonding, use a broad spatula to apply the mixed adhesive into the cleaned cracks.

Do not subject to chemical exposure for seven days. For specific projects, EpiMax will prepare detailed specifications to control application.

Packaging

EpiMax 575 is available in 4 litre (includes Part A (Compound), Part B (Hardener)). It is pre-packaged in correct proportions for immediate use.

EpiMax 575 Express is available in 4 litre (includes Part A (Compound), Part B (Hardener)). It is pre-packaged in correct proportions for immediate use.

Safety precautions

Read **Material Safety Data Sheet** before commencing any application. Keep away from children. Avoid contact with skin and avoid breathing vapour. Always provide adequate personal protection (gloves & goggles etc) during use. Always provide adequate ventilation, especially in confined spaces. If poisoning occurs, call Doctor or Poisons Information Centre. Phone 13 11 26. If swallowed, DO NOT induce vomiting. Give plenty of water or milk. If skin contact occurs, quickly remove contaminated clothing and wash affected areas thoroughly with soap and water.

TDG Code, EpiMax 575: Part A (Compound) - Not Classified, Part B (Hardener) - Not Classified.

