Construction Grade Adhesive

Description:

EpiMax 575 CG Construction Grade Adhesive is a thixotropic, gap filling adhesive and repair mortar based on a 2-component solvent free epoxy system.

EpiMax 575 CG was originally developed to meet the exacting application and engineering standards for the specialised bonding of post-tensioned precast concrete bridge and viaduct elements. As such, EpiMax 575 CG met the requirements of the Fédération Internationale de la Précontrainte Proposal FIP/9/2 "Tests and verification of epoxy bonding agents for segmental construction".



These applications required a demanding match between convenient application characteristics, providing intimate contact to the bonded surfaces and, then, final cure to a watertight, high strength adhesive or repair mortar with engineering properties greater than the surrounding concrete.

This system has now been released to general construction projects requiring outstanding field performance.

It is available in three grades, EpiMax 575 CG STANDARD, SLOW and FAST to suit site ambient temperature conditions.

Advantages:

- Easy mix ratio
- Excellent surface wetting
- Gap filling qualities
- Non sag holds on vertical surfaces
- Conforms to ASTM C-881, Type VI
- Compressive, shear, tensile bending strength meets FIP/9/2 Standard
- Excellent adhesion under adverse conditions (cold and damp)
- Good strength retention after prolonged immersion in water
- Long-term dimensional stability, non-shrink
- Kevlar reinforced

Project advantages:

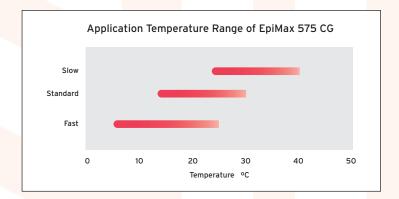
- Moisture tolerant
- Fast application to precast surface
- Easy clean up

Strength development can match assembly schedule

- Limited losses in assembly
- Segments aligned faster due to lubricating effect

General properties:

- Shelf life: 2 years
- Volume solids: 100%
- Flexural strength: 30 MPa
- Work time: 30 minutes at 25° C
- Compressive strength: 60 MPa, 24 hrs; 75 MPa, 7 days
- Shear strength: 15 MPa
- Mix ratio: 2 volumes Part A: 1 volume Part B
- Maximum build: 30mm (without aggregate extension)





Estimating data

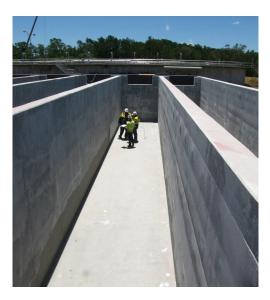
6 Itr EpiMax 575 CG Segmental Construction Adhesive = 3 sq m at 2 mm thickness.

Application

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

Typically, the freshly mixed adhesive is applied by hand, using protective, disposable rubber gloves to the precast face.

Sufficient labour should be available to coat the joint in the time allowed. The adhesive should be applied to the face of the segments at a thickness of 3 mm, if applied to one face, or 1.5 mm if applied to both faces, depending upon project requirements.



Temporary post-tensioning will squeeze the adhesive. Bars may be anchored at temporary blocks (blisters) on the interior of the section or at diaphragms and deviators, passing through them in ducts. Segments must be post-tensioned within the open time of the adhesive.

Once the segments have been joined and stressed, excess adhesive should be cleaned off. Swab the ducts before curing so that any adhesive squeezed into them does not create an obstruction or high spot for the tendons.

Packaging

EpiMax 575 CG is available in 6 litre packs (includes Hardener, Compound) to order. It is pre-packaged in correct proportions for immediate use.

Safety precautions

Read **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 and 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 CG: Hardener - UN 2735 Compound - Not Classified.

This Technical Data Sheet is provided for general information and instruction only. The properties and characteristics set out herein represent typical testing results using industry test methods under laboratory conditions. Results of actual product characteristics may vary slightly. Site-specific and project-specific conditions may affect product performance, including without limitation: surfaces, environmental conditions, contact conditions, storage conditions, storage timeframes, weather, and climatic or seasonal conditions. Not all product parameters are batch tested as part of the manufacturing quality control process, and performance may vary between batches.

If EpiMax gives any express written product warranty in relation to the product, that warranty is subject to the foregoing qualifications, despite anything to the contrary in any other document. All other representations, advice, suggestions or promises regarding the product's performance or its implementation, whether verbal or in writing, and whenever given, including in the course of any field services, are expressly disclaimed. Without limiting the foregoing, EpiMax will have no liability for loss or damage of any kind if any application specifications are not followed.

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