

EPICON L.W.

Light Weight Epoxy Mortar

Description

Epicon L.W. is a solvent free lightweight epoxy resin based mortar with specially developed thixotropic properties which enable repairs to be carried out on vertical and inverted surfaces. When used in conjunction with Epicon Primer Tack Coat the bond strength is excellent and the impermeable nature of the repair ensures protection of the reinforcing steel. Pigmented grey to satisfy aesthetic requirements.

Advantages

- High build repairs possible on vertical and inverted surfaces without use of shuttering.
- Resistant to water, sea water and a wide range of chemicals.
- Early strength development with excellent physical properties.
- Can be applied to damp substrates.

Technical Information

Compressive Strength (BS6319:Pt 2):	35 N/mm ²
Tensile Strength (BS6319:Pt 7):	7 N/mm ²
Flexural Strength (BS6319:Pt 3):	13 N/mm ²
Secant Module of Elasticity in Flexure (BS6319:Pt 3):	3.5 GN/m ²
Pot Life @ 15°C:	45 mins
Initial Hardness:	24 hrs
Full Cure:	5-7 days
Yield:	1500 cc/kg
Coverage:	2.5 m ² per 10 kg unit at a thickness of 6 mm.

Epicon Primer Tack Coat 'V'

Pot Life:	20 mins @ 20°C
Coverage:	3-4 m ² /kg

Applications

- Repair of spalled insitu concrete, e.g. columns, beams, walls etc.
- Repairs to effluent tanks, bund walls and catchment pits.
- Repairs to damaged precast concrete units.
- Renovation of weather or fire damaged concrete.

Surface Preparation

All surfaces should be clean, free from oil, grease and chemical contamination. Oil and grease should be removed by using Desolve.

Concrete surfaces should be free from laitance, this should be removed by either scarifying or etching with Chemclean. If etching with Chemclean, once the reaction has ceased the surface should be thoroughly washed with water and allowed to dry. A stronger repair will result if the edges are cut straight with a chisel or a similar tool to avoid feather edging the material.

Exposed reinforcement and steel surfaces should be cleaned preferably by grit blasting.

Priming

Epicon Primer Tack Coat 'V' should be used. Mix Epicon Primer Tack Coat 'V' in the proportions supplied by adding the entire contents of the hardener tin to the contents of the base tin and thoroughly mix. Once mixed this should be brushed well into the prepared concrete surface and onto the primed reinforcement. The primed surface should be covered with Epicon L.W. between 15 minutes and 3 hours after application of the primer tack coat, whilst the primer tack coat is still tacky.

Mixing

The Epicon L.W. base and hardener should be thoroughly mixed in the base container. The mixed material should then be transferred to a suitable mixing vessel and the aggregate component gradually mixed in. It is recommended that a suitable mechanical mixer be used, such as a Daines, Mixal or Hobart. Mixing should continue for 3-4 minutes until all components are thoroughly blended. If a wetter mix is required, this is achieved by leaving part of the aggregate component out, although this will alter application properties.

Application Instructions

The mixed materials should be applied to the primed substrate whilst the primer tack coat is still tacky. It should be applied by either a steel trowel or float. The surface can then be brought to the required finish using a steel float after the mortar has been well compacted. Finishing is simplified by keeping the float face clean by wiping with a cloth dampened with Nuwash. On thicker sections the material should be compacted in layers not exceeding 25mm.

After use all tools and equipment should be cleaned immediately using Nuwash.

Packaging

Epicon L.W. Mortar is available in 1.5 kg units (2.25 litre) and 10 kg units (15.00 litre).

Epicon Primer Tack Coat 'V' is available in 0.25 kg and 1.0 kg units.

Storage

Epicon L.W. Mortar should be stored at normal room temperature. If stored in cold conditions the containers should be thoroughly warmed prior to use as this will greatly aid the mixing procedure. Epicon L.W. Mortar should be stored away from foodstuffs and out of the reach of children.

Health & Safety

Epicon L.W. Mortar, like similar products, is capable of irritating unprotected skin. We therefore recommend the use of a suitable barrier cream and that gloves be worn.

Limitations

Do not apply below 5°C.

In cold conditions and below 5°C curing can be aided by the use of tenting and warm air blowers.

Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors.

Technical representatives are available throughout the UK to provide further information and arrange demonstrations.