



TechnoFix® Epomast 400 ETS

High Build, Solvent free, Flexible Resinous Mortar for Transition Strips & Bridge deck expansion joint nosing.

Description:

TechnoFix®Epomast 400 ETS is a three component epoxy-urethane resin system that hardens at ambient temperature whose basic binding agent is epoxy with special compatible liquid tar and elastomer additives combines with optimum mechanical properties, resistance to chemical aggression, dielectric properties and outstanding elasticity.

TechnoFix®Epomast 400 ETS consists a unique blend of specially selected fillers and high purity resins, specially developed to provide an extended maintenance free life nosing which combines rapid curing properties with exceptional flexibility and resilience, capable of absorbing continual traffic impact, to meet the requirements for nosing transition strips in tropical climates.

Application Includes:

TechnoFix®Epomast 400 ETS is specially formulated for:

- As ancillary filling material for the installation of highway expansion joints in bridges and overpasses, the filling of concrete slab ends were strong and elastic connection require.
- As ancillary filling material for large voids and gaps with a material capable of reversible deformation and whose properties are suitable to resist continued mechanical stress.
- As ancillary product for construction of nosings for expansion joints in bridge decks.
- As ancillary product for construction of transition strips between bridge deck asphalt wearing surfaces and high movement surface bridge expansion joint system

Features:

- Excellent adhesion to prepared surfaces
- Absorbs impact loads
- Recommended for use in conjunction with TechnoFlex® Compression Seal & TechnoFlex® CombiSeal Expansion Joint Systems.
- 100% Solids.
- High mechanical properties.
- High elasticity.
- Excellent adhesion to metal, asphalt, and concrete.
- High chemical resistance

Packaging

TechnoFix®Epomast 400 ETS is supplied in 20 kg composite packs. Packaging size may vary subject to local regulations and requirements.

Shelf Life & Storage

24 months from date of production if kept in undamaged and unopened original sealed containers and store at protected area from direct sunshine in dry and cool condition at temperatures between 10°C-30°C.

Directions for use

Substrate preparation

Proper surface preparation is the key to any successful repair application using TechnoFix®Epomast 400 ETS. It is essential that all surfaces to which this materials is to be applied are dry, structurally sound, clean and free from dust and all loose material. Concrete surfaces must be prepared by scrubbing, wire brushing and compressed air. Wet joints must be dried out by means of a gas blow torch if necessary. Persistent of water must be eliminated by stopping its penetration into the joint before proceeding. Failure will occur if this procedure is not rigidly adhered to.

Steel surfaces should be grit blasted to remove all rust and scale. Cement laitance should be removed by wire brushing or grit sand blasting before priming with TechnoSeal® PrimePlus.

Placing of formwork

If interlocking steel formwork or other formwork is being used, it must be set up to the correct joint width and secured in position over the line of the joint.

Substrate Priming

Thoroughly mix base and hardener components of the primer for 3 to 4 minutes and apply evenly to the substrate using a stiff brush. The contents of the container must be used within 45 minutes of mixing at 25°C. Priming should be carried out in advance of application of the mortar. It is essential to apply the mortar on top of the primer whilst the latter is still tacky. If the first priming coat should gel, apply a second priming coat before applying the mortar.

Mixing

Care should be taken to ensure that TechnoFix®Epomast 400 ETS is thoroughly mixed to produce a fully homogeneous, trowellable mortar. TechnoFix®Epomast 400 ETS must be mixed mechanically. The 'hardener' and 'base' components should be stirred thoroughly in order to disperse any settlement before mixing them together.

The entire contents of the 'hardener' container should then be emptied into the 'base' container and manually mixed for 3 minutes, then emptied into a forced action mixer of adequate capacity. Add the filler component slowly with the mixer running and continue for 2 to 3 minutes until all the components are thoroughly blended. Under no circumstances should part packs be used.

Typical Properties at 20°C

Form	three - part mortar
Mixed Appearance	Thick Black paste
Tensile strength @30°C	>25 N/mm2 @ 7 days
Flexural strength @30°C	>25 N/mm2 @ 7 days
Flash point	Over 65°C
Mixed density	1.7 ± 0.1 g/cm3 (fully compacted)
Initial curing Time	>24 hrs
Full cure	14 days at 20°C depending on curing condition and temperature

Placement

Apply the mixed mortar immediately after mixing on the tacky primed surface firmly with a steel trowel or spatula. Correct alignment with the level of the asphalt is essential to minimise shock loadings during the passage of traffic.

Finishing

TechnoFix®Epomast 400 ETS is finished by the use of a wood float and closed with a steel trowel. The completed surface should not be overworked.

Note: The application life of TechnoFix®Epomast 400 ETS is 30 to 45 minutes. Once mixed, it must be used within this time range

Curing

TechnoFix®Epomast 400 ETS should be allowed to cure for 24 hours at 20°C before being subjected to foot traffic. At the same temperature, full mechanical and chemical properties are achieved after 14 days (please consult our Technical Department for details of curing times at other temperatures).

Cleaning

Tools and equipments should be cleaned within the pot life of the grout with TechnoFix® Eco Cleaner. Cured material can only be removed mechanically.

Coverage

Approx. weight of unit of A, B and C is 20kg. Coverage is dependent upon various factors, including the method of working, site conditions and substrate condition. When the three parts are mixed it will have Yield 10 litre/20 kg pack. For example if Size of Nosing is 50mm x 180mm one pack of 20 kg (10 Litre)TechnoFix®Epomast 400 ETS is sufficient for 1.10 metre run of nosing.

Health and Safety instructions

Some people are sensitive to resins so gloves and a barrier cream should be used when handling TechnoFix®Epomast 400 ETS. If contact with the resin occurs, it must be removed, before it hardens, with a resin removing cream. Follow by washing with soap and water. Do not use solvent. The use of goggles is recommended but should accidental eye contamination occur, wash thoroughly with plenty of water and seek medical treatment immediately.

Ensure adequate ventilation in volume and pattern in working area and do not smoke during use. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals. Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment.

Product only for professional use.

Compressive Strengths (ASTM C 579)	> 68 N/mm ² @ 14days
Pot Life	45 mins
Chemical resistance	Excellent
Shrinkage on curing	Negligible

*All technical data stated herein is based on tests carried out under laboratory conditions. Full cure normally in 14 days depending on temperature of curing condition.

Limitations

- TechnoFix®Epomast 400 ETS should not be used when the temperature is below 5°C and falling.
- Do not mix part packs under any circumstances.
- TechnoFix®Epomast 400 ETS should not be exposed to moving water during application. Exposure to heavy rainfall prior to the final set may result in surface scour. If any doubts arise concerning temperature or substrate conditions, consult our Technical representative.
- The material should not be applied at less than 5 mm thickness.

Additional information

Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products.

DISCLAIMER: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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