



Epikerb



Nufins

Epoxy Bedding Mortar

Description

Epikerb has been formulated to enable the fixing of concrete kerbs directly onto concrete or asphalt allowing savings to be made by eliminating the need of a bedding channel or backing material. Epikerb is a pre-weighed three component system of solvent free epoxy resin and hardener which, when blended with the graded aggregates, forms a high strength mortar with outstanding adhesive properties. The material may also be used as a general bedding mortar for pre-cast units, coping stones, manhole frames, machinery, etc. Epikerb is designed to comply with the requirements of EN1504 Part 3 Class R4.

Advantages

- Economical - no need to excavate a bedding channel.
- Ready for trafficking in a few hours.
- Tolerant to damp surfaces.
- No need for a primer.
- High bond strength saves on maintenance costs.
- No back filling required.
- Pre-weighed ingredients are supplied in sealed containers.
- Durable and long lasting.
- Low Modulus of Elasticity in flexure.
- Can be used as a gap/joint filler.
- Excellent adhesion to concrete, stone, asphalt and metal.
- Tolerant to road salts and freeze-thaw.
- Compliant with EN1504 Part 3 Class R4.

Technical Information

Cure Temp	4Hr	6Hr	18Hr	24Hr	2Day	3Day	7Day
5°C	6	14	50	55	60	70	75
23°C	35	41	80	85	86	87	90

Typical Compressive strengths of 40mm cubes (N/mm²).
Tested in accordance with EN12190.

Full cure	7 Days
Yield, per 20kg pack	9.7 Litres
Minimum cure prior to stress	4 Hours (@ 23°C)

Vehicular Trafficking Time

Summer @ >15°C	12-24 Hours
Winter @ >5°C	1-3 Days
Winter with forced warming	12-24 Hours

Surface preparation

All surfaces should be clean, free from oil, grease and chemical contamination, free standing water, old paint and loose debris. Oil and grease should be removed using Desolve.

New concrete should be fully cured and scabbled or thoroughly wire brushed to remove any laitance or loose material.

Steel should be grit blasted or mechanically abraded to a clean bright finish.

Mixing

The Epikerb base and hardener components should be mechanically mixed in the base container. In cold conditions it will greatly aid mixing if the materials are stored in warm conditions. Once the base and hardener are mixed they should be transferred to a suitable forced action mechanical mixer such as a Creteangle or Danes and the aggregate added slowly. Once all the aggregate is added mix thoroughly for 3-4 minutes, until a homogenous mix is obtained.

Application Instructions

Epikerb mortar should be loosely placed onto the prepared substrate. The Epikerb should be at least 5mm thicker than the finally required bed.

The kerb should then be placed firmly on top of the mortar and worked into place to the required level. Any excess mortar squeezed out should be removed at this stage. It is not recommended to drop below a 5mm bed.

The mixed product may also be used as a heavy duty gap filler. A method statement is available on request.

Technical properties of Epikerb.

Properties	Standard	Performance Requirement	Declared Value
Appearance			Grey Resinous Mortar
Chloride-ion content	EN1015-17	≤0.05%	≤0.05%
Max. aggregate size			2mm
Layer minimum thickness			5mm
Working time (@ 23°C)			45-60 Minutes
Hardening Time (@ 23°C)			60-90 Minutes
Density			2000-2100 kg/m ³
Temperature for application			Between +5°C & +35°C
Compressive Strength @ 23°C	EN 12190	≥ 45 N/mm ²	35 N/mm ² @ 4 Hr 41 N/mm ² @ 6 Hr 80 N/mm ² @ 18 Hr 85 N/mm ² @ 24 Hr 86 N/mm ² @ 2 Days 87 N/mm ² @ 3 Days 90 N/mm ² @ 7 Days
Compressive Strength @ 5°C	EN 12190		6 N/mm ² @ 4 Hr 14 N/mm ² @ 6 Hr 50 N/mm ² @ 18 Hr 55 N/mm ² @ 24 Hr 60 N/mm ² @ 2 Days 70 N/mm ² @ 3 Days 75 N/mm ² @ 7 Days
Tensile Strength	BS6319-7		>13.0 N/mm ²
Flexural Strength	BS6319-3		>27 N/mm ²
Modulus of Elasticity, In Flexure	BS6319-3		>20 kN/mm ²
Modulus of Elasticity, In Compression	EN13412	≥ 20 kN/mm ²	> 20 kN/mm ²
Adhesion - concrete	EN1542	≥ 2.0 N/mm ²	≥ 2.0 N/mm ²
Adhesion after freeze/thaw (50 cycles with salt)	EN13687-1	≥ 2.0 N/mm ²	≥ 2.0 N/mm ²
Adhesion after thunder showers (30 cycles)	EN13687-2	≥ 2.0 N/mm ²	≥ 2.0 N/mm ²
Adhesion after dry cycling (30 cycles)	EN13687-4	≥ 2.0 N/mm ²	≥ 2.0 N/mm ²
Skid Resistance	EN13036-4		Class 1
Carbonation resistance	EN13295	$d_k \leq \text{ref. concrete}$	$d_k < \text{ref. concrete}$
Capillary absorption	EN13057	$\leq 0.5 \text{ kg/m}^2/\text{h}^{-0.5}$	$\leq 0.5 \text{ kg/m}^2/\text{h}^{-0.5}$
Cracking tendency	Coutinho Ring Test		No cracking after 180 days

Technical data shown are statistical results and do not correspond to guaranteed minima. Tolerances are those described in appropriate performance standards.



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Packaging

Epikerb is packed in 20kg units (9.7 litres).

Storage

Epikerb should be stored in cool dry conditions.

If stored at temperatures of 10°C or below the containers should be warmed prior to use as this will greatly aid the mixing procedure. Epikerb should be stored away from foodstuffs and out of the reach of children.

Health & Safety

Epikerb, 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.

Minimum compacted bed thickness is 5mm.

Technical Support

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

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



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