

Estorex EPS-FS

Fast Setting, High Early Strength, Epoxy Resin Grout

Description

Estorex EPS-FS is a solvent free fast setting epoxy resin grout designed for grouting of base plates and crane/rail tracks where high early strength is required. It is supplied as a three component system consisting of base, hardener and specially graded aggregate. The components are supplied in the correct mix proportions designed for whole pack mixing on site.

Uses

Estorex EPS-FS is a free flowing fast setting epoxy grout, for use where high early strength of hardened grout is of utmost importance. It is suitable for a wide range of heavy duty applications including:

- Under plate grouting to substantial structural elements.
- Heavy industrial applications in steelworks, refineries chemical plants and electroplating works.
- Base plate grouting in dynamic load situations such as turbines and other reciprocating machinery.
- Structural infill where very high strength is required.
- Heavy cranes, or on transporter rails, or rail track support.
- Sleeper-less, direct rail fixing in crane tracks, light rail and permanent way in tunnels and over bridges

Advantages

- Solvent free system
- Excellent durability - high compressive, flexural and tensile strengths ensure a long working life.
- Cost effective - high early strength gain promotes minimum downtime and early commissioning of working areas.
- User friendly - simple, full pack mixing to ensure that the performance characteristics are achieved.
- Versatile - suitable for a wide range of loading situations including repetitive dynamic loads.
- Excellent bonding.

Physical Properties

Pot Life @ 25 °C	20-30 minutes
Density, kg/m ³	2000 - 2200
Bond Strength, N/mm ²	> 2
Flexural Strength, MPa	> 35
Compressive Strength, N/mm ² at 30°C (ASTM C579)	
2 hrs	> 30
3 hrs	> 40
1 Day	> 80
7 Days	> 85
Coefficient of thermal Expansion (ASTM C531)	28.1 × 10 ⁻⁶

Application Instructions

Preparation

Under plate grouting

Formwork on the flank sides should be kept tight to the plate edge. Air pressure relief holes should be provided to allow venting of any isolated high spots.

Formwork

The formwork should be constructed to be leak proof as **Estorex EPS-FS** is a free flow grout. This can be achieved by using foam rubber strip or mastic sealant beneath the constructed formwork and between joints. For free flow grout conditions, it is essential to provide a hydrostatic head of grout. To achieve this feeding hopper should be used - please consult your local Estop office for more details.

Foundation surface

This must be free from oil, grease, or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris.

Base plate

If delay is likely before placing steel base plates, it is recommended that the underside and edge are coated with **Estop Primer E11** to ensure bonding with the **Estorex EPS-FS** grout. All metal surfaces should be cleaned in accordance with Standard SA 2½ or equal. **Estop Primer E11** can be applied directly onto newly cleaned steel surfaces even if they are damp.

Mixing

The entire contents of the hardener should be poured into the base container and mixed until homogeneous. Place the mixed base and hardener into a suitable forced action mixer making sure that the entire volume is poured in. Add the aggregate and mix for 2 minutes or until uniform colour is achieved. Once mixed, the material must be used within the specified pot life. After this time, unused material will have stiffened and should be discarded.

Placing

Ensure that the grout can be placed within its pot life* and the substrate is dry. Continuous grout flow is essential. Sufficient grout must be available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next one. Pouring should be from one side of the void to eliminate air entrapment. The hydrostatic head must be maintained at all times so that a continuous grout front is achieved.

**Note : In order to obtain the maximum pot life time, the ambient temperature during mixing shall be between 25-30 °C. Should the ambient temperature rises above 30 °C, the User shall need to conduct a mixing trial on site to determine the maximum pot life time.*

Base Plate thickness

As a guide, the recommended thickness shall be one as below :

	<u>Temp (°C)</u>	<u>Thickness (mm)</u>
1)	25-30	500
2)	30-33	400
3)	33 & above	Add chipping

Packing & Size

Estorex EPS-FS	10L / pack
Estop Primer E11	200 mL pack

Coverage

Estorex EPS-FS	1 m ² / 8-9 mm thick / 10 litre pack
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Technical Support

Estop offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

Storage

When stored in warehouse conditions below 35°C, **Estorex EPS-FS** will have a shelf life of 12 months.

Precaution

Health and safety

The use of goggles and gloves are recommended.

Should accidental eye contamination occur, wash thoroughly with plenty of clean water and seek medical treatment immediately.

Estop Primer E11 is flammable.

Additional Information

Estop manufactures and offers a wide range of complementary products, which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.

Important Note

Estop products are guaranteed against defective materials and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which may be obtained on request. Whilst Estop endeavors to ensure that any advice, recommendation, specification or information in may give is accurate and correct, it shall not, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.