

Estorex EPS 75

High Strength, Epoxy Resin Grout

Description

Estorex EPS 75 is a solvent free epoxy resin grout designed for grouting of gap widths of 10 to 100 mm. 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 75 is a free-flowing epoxy grout, for use where physical properties and chemical resistance of the hardened grout are 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.

Advantages

- 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 plant.
- 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 in-service performance - non-shrink capability ensures full surface to surface contact.

Standard Compliance

- **ASTM C307 - 18**
- **ASTM C348 - 18**
- **ASTM C531**
- **BS 6319: Part 2:1983**

Physical Properties

Pot Life, mins 23°C	2 hours
Tensile Strength, N/mm ² 7 Days	> 14
Flexural Strength, N/mm ² 7 Days	> 26
Compressive Strength, N/mm ² 1 Day 3 Days 7 Days	> 90 > 95 > 100
Maximum flow distance (mm) for a head of 100 mm at 20°C 35 mm gap 70 mm gap	2000 3500
Coefficient of thermal Expansion (ASTM C531)	28.1 × 10 ⁻⁶

Application Instructions

Preparation

Under plate grouting

The unrestrained surface area of the grout must be kept to a minimum. Generally, the gap between the perimeter formwork and the plate edge should not exceed 75 mm on the pouring side and 25 mm on the opposite side.

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 75** 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 prevent rust formation and ensure bonding with the **Estorex EPS 75** grout. All metal surfaces should be cleaned to a bright finish in accordance with Swedish 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 2-3 minutes or until uniform color 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.

Note: Immediately prior to placement, all surfaces must be dry.

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.

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Hot Weather Working

Whilst the performance of **Estorex EPS 75** at elevated temperatures is assured application under such conditions can sometimes be difficult. It is therefore suggested that, for temperatures above 35°C, the following guidelines are used:

- I. Keep mixing and placing equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come into direct contact with the material itself.
- II. Try to eliminate application in the middle of the day, and certainly avoid application in direct sunlight.
- III. Ensure that there are sufficient operatives available to complete application within the material's pot life.

Limitation:

Grouts should not be placed in any unrestrained situation, i.e. base plate plinths, etc. Failure to comply may lead to crack development in the grout.

Packing & Size

Estorex EPS 75	14 litre pack
Estop Primer E11	200 mL pack

Technical Support

Denka 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 75** will have a shelf life of 12 months.

Precaution

Health and safety

The use of goggles is recommended but should accidental eye contamination occur, wash thoroughly with plenty of clean water and seek medical treatment immediately.

Estop Primer E11 is flammable.

Additional Information

Denka Construction Solutions Malaysia Sdn Bhd 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.



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