

Estogrout Admix

Plasticized Expanding Grout Admixture

Description

Estogrout Admix is an admixture for cementitious grouts where a low water: cement ratio and positive expansion are required.

It is a combination of plasticizing agent and a gas producing expansion medium. Sufficient restrained expansion is developed to ensure a high degree of interfacial contact.

If pre-packed cement-based grout is required instead of an admixture, use Estogrout FP 70, MP 70 or MP 60, which only required additional of water.

Estogrout Admix has been tested by SIRIM BHD in accordance to ASTM C940:1998, on Expansion and Bleeding Test, Potentiometric Method, on Determination of Chloride Content, and complied with the specification in this data sheet.

Uses

Estogrout Admix is suitable for use to grout

- Ground Anchors
- Steel columns
- Bed grouting
- Duct grouting
- Infilling and jointing

Advantages

- Gas producing expansion compensates for drying shrinkage and settlement in cement-based grouts
- Excellent flow and good filling properties
- Good dimensional stability
- No bleeding
- High strength
- Shrinkage compensated
- No metallic iron content to corrode and cause staining or deterioration due to rust expansion in the grout.
- Gives high grout fluidity with low water: cement ratio, for ease of placement or injection.

Standards Compliance

- ASTM C940
- CP110 Part 1:1972, section 6.12

Physical Properties

| Form | Powder |
|--|---|
| Chloride Content BS 5075 | Nil |
| Setting Time | Not affected |
| Time for Expansion | 15mins – 2 hours at 20 °C |
| Expansion Characteristics, % ASTM C940 | 1% – 4% |
| Compressive Strength | Plasticising effect in Estogrout Admix provides a flowable grout at low water cement ratio. It improves the compressive strength of cement-based grouts by 15% approximately when cure under restraint. Water cement ratio should be confirmed by a site trial. |
| Compatibility | Compatible with all type of Ordinary Portland Cement but it is incompatible with High Alumina Cement. |

Application Instructions

Dosage

Typical mixes

| OPC | 5mm | Water | Estogrout | Yield |
|------|------|---------|-----------|---------|
| | Sand | | Admix | |
| (kg) | (kg) | (litre) | (gm) | (litre) |
| 50 | - | 20-22 | 225 | 36 |
| 50 | 50 | 22-24 | 225 | 57 |

Over Dosing

Drastic overdosing of **Estogrout Admix** increases expansion and may cause severe strength lost.

Mixing

For best results a mechanically powered grout mixer must be used. For quantities up to 50kg a slow speed drill fitted with a high shear paddle is suitable. Larger quantities will require a high shear vane mixer. It is essential that machine mixing capacity and labour availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of a holding tank with provision for gentle agitation to maintain fluidity.

The selected water content should be accurately measured into the mixer. Slowly add the cement (and sand if required) and **Estogrout Admix**. Mix continuously for 5 minutes, making sure that a smooth even consistency is obtained.



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Application

After mixing, areas to be grouted should be prepared in the usual way to ensure, clean, sound, pre-wetted substrates. Place the grout within 20 minutes of mixing to gain the full benefit of the expansion process. Adopt usual placing or pumping procedures ensuring a continuous operation.

Curing

On completion of the grouting operation all exposed areas that are not to be cut back should be thoroughly cured. This should be done after the initial hardening of the grout by continuous application of water or by application of suitable curing membrane such as Estocure product range

Packing & Size

| Estogrout Admix | 20 kg bag | |
|-----------------|-----------|--|
| | | |

Technical Support

Denka offers a comprehensive range of high performance, high quality of repair product for both new and existing concrete surfaces. In addition, the company offers a technical support package to specifiers, end-users and contractors, as well as on site technical assistance.

Storage

Extogrout Admix should be stored on pallets in dry conditions. Under these conditions the product will have a shelf life of 12 months.

Precaution

Gloves should be worn when mixing with **Estogrout Admix**. Wet mix shall be wash with clean water when contacted with skin or eyes.

In the event of prolonged irritation, seek medical advice.

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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