Flo-Grout EBG

High strength pourable epoxy foundation resin grout



Description

Flo-Grout EBG is a high strength, non-shrink, pourable epoxy resin grout suitable for grouting gaps with thicknesses between 3 mm - 50 mm.

Flo-Grout EBG is a two component system suitable for heavy dynamic and cyclic loads.

Applications

Flo-Grout EBG is ideally designed for use in the following applications:

- ▲ Machine base plates.
- ▲ Heavy crane rails.
- Pile top waterproofing.
- ▲ Bearing plinths.
- ▲ High speed turbines.
- ▲ Grouting areas where occasional chemical spillage may occur.

Advantages

- ▲ Resistant to dynamic loading.
- ▲ Non-shrink and low creep characteristics under continuous loading.
- ▲ Exceptionally high compressive, flexural and tensile strengths.
- ▲ Extremely dense with crack resistance.
- ▲ Exceptional bond to concrete and steel surfaces.
- Good chemical resistance.
- ▲ High early strength development allowing for rapid installation.

Method of Use

Substrate Preparation

The Substrate should be sound, clean and free from contamination. Surface laitance should be removed by scabbling or grit blasting.

Steel surfaces should be grit blasted to remove all rust and scale.

Concrete surfaces should be dry.

Holes drilled for anchor bolts should be thoroughly cleaned from dust and lose debris using suitable brush or compressed air.

Technical Properties @ 25°C:

Colour: Grey

Mixed density: $1.80 \pm 0.05 \text{ g/cm}^3$

Compressive strength: BS 6319, Part 2

≥ 45 MPa @ 1 day ≥ 65 MPa @ 3 days ≥ 90 MPa @ 7 days

Flexural strength:

BS 6319, Part 3

≥ 25 MPa @ 7 days

Tensile strength:

≥ 25 MPa @ 7 days BS 6319, Part 7

Shrinkage:

ASTM C531

≤ 350 microstrain

Co-efficient of thermal

expansion: ASTM C531-81 25 x 10⁻⁶/°C

Water absorption:

ASTM C413

 $\leq 0.1\%$

Crack formation:

@ 50 mm thickness

No cracks or bleeding

& 40°C

60 - 80 min @ 25°C Working life:

40 - 60 min @ 35°C

Mixing ratio:

(B:H)

3:1 by weight

Peak exothermic

temperature @25°C:

50°C

ASTM D2471

Flow using flow cone

with 200 ml volume:

19 - 23 cm

BS 890

VOC: ≤ 10 g/ltr

ASTM D2369 (complies with LEED)

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. The entire content of the Hardener pack should be added to the Base pack. Care should be taken to ensure that the bottom and the product sides are thoroughly scraped and used. Mix at slow speed the two components for 3 minutes or until a uniform consistency obtained.



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Placing and Finishing

Under Base plate:

Enough materials should be available to achieve continuous fill and to complete the work. Pouring of the mixed grout should be started from one side only to avoid air entrapment.

To obtain maximum flow distance, a side shutter feed 100 mm height should be erected and used to build the required head.

Formwork:

As the mixed grout possesses fluid characteristics, all formwork and shutters should be water tight. This can be achieved by sealing underneath the formwork and at the joints by using an appropriate mastic.

Notes:

- ▲ If application is done under high temperatures, care should be done because the working time will be reduced significantly.
- ▲ To reduce the effect of this problem, try to store the unmixed materials in a cool environment, avoiding the direct sunlight. Also, try not to make the application in the middle of the day or direct sunlight.

Cleaning

All tools should be cleaned immediately after finishing using a suitable epoxy thinner. Hardened materials should be cleaned mechanically

Packaging

Flo-Grout EBG is with 5.4 kg (3 litre).

Thicknesses and Size Limitations

Flo-Grout EBG can be applied in a single layer at thicknesses between 3 - 50 mm. For thicknesses greater than 300 mm:

Multiple layers can be applied after initial curing of the previous layer.

Yield

Approximately 3 litre for the full unit.

Storage

Flo-Grout EBG has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

Cautions

Health and Safety

Flo-Grout EBG is irritant to the eyes, skin and respiratory system. Wear suitable gloves and eye protection.

For further information refer to the Material Safety Data Sheet.

Fire

Flo-Grout EBG is nonflammable.

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- Building products.
- ▲ Structural strengthening.



Note:

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