Flo-Grout EP215T

High strength trowelable epoxy resin grout



Description

Flo-Grout EP215T is a three-component, high strength, trowelable epoxy resin grout specially designed for repairing and filling gaps with thicknesses between 10 - 150 mm at ambient temperatures between 10 - 40°C.

Applications

Flo-Grout EP215T is suitable 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.
- ▲ Exceptional bond to concrete and steel surfaces.
- ▲ Good chemical resistance.
- ▲ High early strength development allowing for rapid installation.

Method of Use

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 a suitable brush or compressed air.

Technical Properties:

Compressive strength: 25°C 35°C

ASTM C579

@ 1 day ≥ 60 MPa ≥ 80 MPa
@ 3 days ≥ 90 MPa ≥ 100 MPa
@ 7 days ≥ 95 MPa ≥ 105 MPa

Flexural strength:

≥ 32 MPa @ 7 days, 25°C

LIN 13032-2

Tensile strength: BS 6319-7 ≥ 16 MPa @ 7 days, 25°C

Mixed density: $2.1 \pm 0.1 \text{ g/cm}^3$

Linear shrinkage:

ASTM C531 ≤ 0.10% @ 7 days

Water absorption:

ASTM D570 ≤ 0.5%

Crack formation @

150 mm thickness, No cracks

40°C:

Working life: $\approx 2 \text{ hr } @ 25^{\circ}\text{C}$ VOC: < 20 g/ltr

ASTM D2369 (complies with LEED)

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with helix type 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 the two components for 2 minutes. The filler should be gradually added while mixing. Mixing should continue for 3 minutes or until a uniform consistency obtained.

Notes:

- ▲ Slow speed mixer (i.e. 300 rpm) should be only used.
- ▲ If drill mixer with helix paddle is used, then the rotation of the paddle should be upward mixing to minimize the entrapment of air (i.e. the rotation of the mixer makes the blades move material from the bottom of the bucket to the top).
- ★ The mixing paddle should always be below the epoxy grout level, and it should not be moved up and down to prevent air-entraining.

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Placing and Finishing

Enough materials should be available to achieve continuous fill and to complete the work. Use a suitable trowel to apply the material to form the needed shape and thickness. The top surface should be levelled to avoid waviness which may generate gaps under the base plates and thus affect the load-bearing capacity of the base plate.

Notes:

- ▲ If the application is done under high temperatures (> 35°C), care should be taken 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

Immediately, and after finishing clean all tools using a suitable epoxy thinner. Clean hardened materials mechanically.

Packaging

Flo-Grout EP215T is available in 42 kg pack.

Thicknesses and Size Limitations

Flo-Grout EP215T applied in a single layer at thicknesses between 10 - 150 mm. For thicknesses greater than 150 mm:

- ▲ Multiple layers can be applied after the initial curing of the previous layer.
- ▲ Flo-Grout EP330 can be used instead.

Yield

Approximately 20 litre per 42 kg pack.

Storage

Flo-Grout EP215T 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 advise.

Cautions

Health and Safety

Flo-Grout EP215T 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 EP215T is nonflammable.

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- ▲ Surface treatments
- Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

