

Dr. Fixit Unigrout 505



HIGH STRENGTH, NON-SHRINK, FREEFLOW CEMENT
BASED GROUT FROM 6 - 75 MM

Description

Dr. Fixit Unigrout 505 is a ready to use, non-shrink, free-flowing and high strength cementitious grout meeting the requirements of ASTM C1107, for thickness up to 75 mm. Increased thickness can be accommodated through the addition of 10 mm aggregate.

Typical Application

Machine and equipment foundations.
Bridge bearing pads and structural columns in pre-cast construction.
Connection on precast construction.
Cavities, gaps, tie rod holes, recesses and anchorage.

Features

- Non-shrink with controlled positive expansion, preventing shrinkage cracking and contact area loss.
- Excellent flow characteristic
- No bleeding and segregation.
- Adjustable consistency to suit the requirement.
- High early strength.
- Free of chlorides therefore preventing corrosion of foundation bolts and base plates.
- Self-compactable.
- Chloride free.

Packaging

25 kg bags

Method of Application

1 SURFACE PREPARATION

- Concrete surfaces should be sound, stable, clean and free from laitance, paint, oil, grease or any residual mould release agents and curing compounds.
- An abraded or profiled substrate surface is preferable. Metal surfaces should be free from any rust, scaling or paint and abraded to reveal clean, bright metal finish.
- Seal the formwork joints using a suitable sealant to prevent leakage of Dr. Fixit Unigrout 505 through the joints.
- Surfaces should be thoroughly wetted with water for 3 - 4 hours prior to application of grout.

2 APPLICATION

- Dr. Fixit Unigrout 505 should be mixed in a high shear grout mixer for optimum dispersion and workability.
- Ensure the mixing water is below 25°C using ice if necessary, especially if the ambient temperature is above 40° C. Ideal mixed grout temperature is 25 - 30° C.
- Add approximately 85 % of measured water required for the chosen consistency to the mixer and then slowly add the powder. Mix for 1 - 2 minutes and then add remaining water to the desired final consistency. Do not add more than the maximum recommended water quantity.
- Should the necessity arise, Dr. Fixit Unigrout 505 can be installed beyond 75 mm upto 150 mm thickness by mixing 1:1 or 2:1 by weight of 10 mm clean, graded aggregates to a required consistency. This aggregate should be added at this stage prior to final mixing.
- Mix for an additional 2 - 3 minutes until a smooth, uniform, homogenous mix is achieved.



- Pour the mixed grout via a hopper from one side only to avoid air entrapment. Maintain a head of at least 150-250 mm to ensure pressure to promote the material flow.
- Check for any grout loss through leakages. Stop leakages with Dr Fixit Leak Plug.
- Good curing practice is essential for all exposed surfaces. Immediately after pouring apply two coats of Rokseal CM Curing Membrane. Alternatively cure using water ponding, spray misting or covering with wet sheeting for a minimum of 7 days.

Precautions & Limitations

- Do not add extra water beyond recommended in any circumstances.
- Do not use in unrestrained areas as it may lead to cracks.
- Shoulder width between base plate and form work should be kept as minimum as possible.
- Ensure that the shuttering is suitably robust to withstand the weight of grout.
- Consult our Technical Department for further details

Technical Information (Typical properties @ 25 ± 2 °C & 50%R.H)

PROPERTIES	SPECIFICATION	RESULTS
Wet Density, Kg/m ³	ASTM C185 - 02	2200 +/- 50
Consistency	ASTM C1437	Flowable @0.16 w/p
Expansion (Plastic) (Hardened)	ASTM C827 ASTM C1090	Upto 2.0 % positive expansion 0 - 0.3 %
Compressive Strength, 7 days 28 days	ASTM C109	45 N/mm ² min. 60 N/mm ² min.
Flexural Strength, 28 days	BS 6319-3	8 N/mm ² min.

Setting Time	Initial	ASTM C266	4 - 5 hrs
	Final		7 - 8 hrs

WATER REQUIREMENT FOR MIX CONSISTENCY	LITRES PER UNIT
Flowable	4.0 litres
Plastic	3.0 litres

Theoretical Coverage

25 kg bag yields: 13 litres at flowable consistency
12 litres at plastic consistency

Storage

When stored in dry conditions in original unopened packaging this product has a shelf life of 12 months. Storage above 35°C and high humidity (above 50 %) will reduce shelf life and product performance.

Health and Safety

This products contains cement. And contact with skin may cause irritation. It should not be inhaled, and a properly designed and maintained face mask should be used whilst handling, pouring and mixing the powder. Avoid contact with the product by working carefully, using a barrier cream and wearing protective gloves. If any contact does occur, wash thoroughly with soap and water. Use eye protection. Avoid contact with eyes, if such contact occurs irrigate with water for 20 minutes and seek medical advice. If mistakenly ingested, drink plenty of clean water and seek medical advice. See MSDS for further information

Pidilite MEA Chemicals L.L.C offers a wide range of structural Protection and Waterproofing systems:



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