**CONCRETE REPAIR** 



# **E.MIX PE Non Shrink Grout**

Grade 40 non-shrink grout for plastic and flowable consistency

**E.MIX PE Non Shrink** is a non-metallic, non-shrink grout formulated for plastic and flowable consistencies which is pumpable. E.MIX PE Non Shrink is a green-labelled product endorsed by the Singapore Green Building Council. E.MIX PE Non Shrink Grout is Grade 40.



## USES

E.MIX PE Non Shrink Grout is designed for grouting under columns, base plates and sole plates. It is applicable for grouting of prestressed or post-tensioned tendons, anchor bolts, or cables or grouting of post-tensioned structural sections. It is also suitable for grout jacking, pile grouting, and repairing concrete structures. Other various uses like void backfilling in tunnel work, underpinning of buildings and permanently anchoring posts, signs, parking meters, railings and columns, and other fixtures in concrete, rock or masonry are also applicable.

## **TECHNICAL DATA & PHYSICAL PROPERTIES**

Colour Components

Water Demand (Plastic) Water Demand (Flowable) Wet Density (Plastic) Wet Density (Flowable) Pot Life Compressive Strength @ 28 days (ASTM C349: 2018) Flexural Strength @ 28 days (ASTM C348: 2021) Expansion (ASTM C940: 2016) Shrinkage @ 28 days (ASTM C940: 2016) Slant Shear Bond Strength (BS EN 12615: 1999) Grey

Ordinary Portland Cement, slag, non-metallic aggregates, expanding agents, additives Approx. 14 - 14.5 % or 3.5 - 3.6 litres/25 kg bag Approx. 14.5 - 16.5 % or 3.6 - 4.1 litres/25 kg bag Approx. 2.26 - 2.30 g/cc Approx. 2.21 - 2.26 g/cc Approx. 30 minutes  $\geq 40 \text{ N/mm}^2 \text{ *}$  $10.1 \text{ N/mm}^2 \text{ *}$ 0 % (3 days); 0% (28 days) \*0 % \* $7.5 \text{ N/mm}^2 \text{ *}$ 

\* Tested @ 15% water demand

Specifications are subject to change without notification. Results shown are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance will depend on installation methods and site conditions.

### CONSUMPTION

Approx 0.0124 - 0.0127 m<sup>3</sup> per 25 kg bag for plastic consistency. Approx 0.0127 - 0.0132 m<sup>3</sup> per 25 kg bag for flowable consistency.





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#### **PROCEDURE & APPLICATION**



## **Substrate Preparation**

Base plates or machinery should be firmly bolted down to vertically confine the grout during placement and usage. The grout is for void filling where adequate surface restraint can be provided. It is not for use as a patching material where there is no adequate restraint. Proper formwork should be constructed if containment of the repair grout is needed. Reduce water dosage accordingly if bleeding and segregation do occur at high water dosage. All surfaces must be clean, sound, and free from any laitance, oil, grease, and any contaminants.



#### Mixing

Add E.MIX PG Non Shrink Grout with the required amount of clean water and mix continuously using a mechanical high-speed drill mixer. Mix continuously for 3-7 minutes until the mixture is homogeneous. The use of rotating drum mixers is not recommended. If necessary, reduce or add more water to adjust the mix to the desired consistency. Placing should be completed within 30 minutes after the start of mixing.



#### Curing

Exposed grout surfaces should be kept moist for at least 72 hours after grouting. Alternatively, the use of curing compounds meeting the requirements of ASTM C309 is permitted after 24 hours of moist curing.

#### STORAGE & PACKING

E.MIX PE Non Shrink Grout is available in 25 kg bags. Shelf life of 12 months if unopened and kept in sheltered and dry conditions.

## HEALTH & SAFETY

E.MIX PE Non Shrink Grout contains cement, which may produce an allergic effect. Material may irritate eyes and skin. In case of contact with eyes, rinse immediately with plenty of water, and seek medical assistance. After contact with skin, wash immediately with plenty of soap and water. Please keep out of reach of children.



\*Note: Because it is not possible to give specific instructions for the various site conditions or to control the applications, the information on this Technical Data Sheet is for general guidance only. Saint-Gobain (Singapore) Pte Ltd reserves the rights to amend the contents of the data sheet at its sole discretion. (*Nov '22*)

