WRM 530 GROUT

CEMENTITIOUS GROUTING MATERIAL FOR ANCHORING AND REPAIRING

ACCORDING TO EN 1504-6

DESCRIPTION

WRM 530 GROUT is a cementitious, shrinkage compensated grouting material with specially graded quartz aggregates.

AREAS OF APPLICATION

WRM 530 GROUT is used in civil and structural engineering for bedding and grouting construction elements.

- grouting of steel structures (screws and connecting pins).
- concrete repair.
- beams, columns, wall panels, exterior walls and generally structural elements
- anchor grouting for machines and threaded rods
- grouting of rails and slabs (crane rail)

PROPERTIES

WRM 530 GROUT is shrinkage compensated and exhibits a controlled increase in volume. It is waterproof, free of chlorides and high-alumina cement as well as resistant to frost and de-icing salts.

SURFACE PREPARATION

The mineral substrate to be treated must be free of dirt, grease and other adhesion reducing substances. The prepared surface must be sufficiently roughened and open textured. Moisten the concrete surface to saturation. At the time of application, the substrate must be damp, but any surface water must be removed.

MIXING

Pour 4.0–5.25 l of tap water into a clean container and add – while mixing – 25 kg of **WRM 530 GROUT**. Mix with a mechanical mixer to a lump-free, homogeneous consistency. Mixing time is approx. 5 minutes. Do not add more water before 3 minutes of initial mixing. Do not exceed max. water quantity.

APPLICATION

The grouting material is then poured into the void. Grouting beneath steel or machines is usually done into previously constructed formwork which has to be sealed and must not be absorbent. If the particular void cavity is not equal sided, the **WRM 530 GROUT** has to be placed in one continuous pour through the longer side. Due to its good flowability, it is not necessary to vibrate the material. In case of extensive works, **WRM 530 GROUT** alternatively can be placed mechanically using common wet mortar pumps. A high density grout without air entrapment is achieved by including a sufficient number of ventilation holes or slots. After application, clean tools thoroughly with water. – Do not apply at temperatures below +5 °C or to a frozen substrate. Grouting thickness can be increased by adding coarse sand (4–8 mm, round, washed); quantity: up to 10 kg sand per 25 kg of **WRM 530 GROUT**. To achieve specific flow characteristics, the quantity of water to be added may vary. Please contact our technical department for further information.

CONSUMPTION

Calculated quantity (dry mortar) per m³ of **WRM 530 GROUT**: approx. 1760 kg

CURING

Curing of the exposed grout edges can be undertaken, as well as all hydraulically setting cement mortars, by laying moist hessian over it, followed by polythene sheeting. Curing time is at least 5 days. Alternatively, application of curing products is possible.

STORAGE - PACKAGING

When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months. 25 kg PE-lined paper bag.

PRECAUTIONS

WRM 530 GROUT contains cement. Irritating to respiratory system and skin. Risk of serious damage to eyes. – Keep out of the reach of children. Do not breathe dust. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label. – For further information please refer to Safety Data Sheet.

TYPE ACCORDING TO THE EUROPEAN STANDARD EN 1504 -6

TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUE
Appearance			Powder
Color			Grey
Density of wet mortar	(g/ml)		Approx. 2.1
Aggregate size d_{max}	(mm)		2
Grouting thickness	(mm)		10-60
Application time	(min)	Στους 20°C	Approx. 30
Hardened grout:			
Compressive strength	(MPa)	3 days	Approx. 40
Compressive strength	(MPa)	7 days	Approx. 50
Compressive strength	(MPa)	28 days	Approx. 65
Dynamic modulus of elasticity	(GPa)	28 days	Approx. 33
Expansion	(%)	28 days	+0.05

(*)All data are averages of several tests under laboratory conditions. In practice, climatic variations such as temperature, humidity, and porosity of substrate may affect these values.

Note: *The measurements were taken in laboratory environment under a temperature of +23°C, Relative Humidity 50 % and without ventilation. They may vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation and absorbability of the substrate.*