

PRODUCT DATA SHEET

POWER GROUT-214



CEMENTITIOUS, NON SHRINKAGE COMPENSATED, GENERAL PURPOSE GROUT

DESCRIPTION

Power Grout-214 is a cementitious, free flowing, general purpose, non-shrink precision grout with high ultimate strength. Suitable for use in hot and tropical climatic conditions.

USES

Power Grout-214 is used for grouting in the following:

- Machine foundations
- Columns in pre-cast construction
- Concrete anchors, cavities, gaps and recesses
- Base plates
- General concrete repairs
- Bridge bearings pads

CHARACTERISTICS / ADVANTAGES

Power Grout-214 is an economical and easy to use grout requiring only the addition of water. It offers the following beneficial properties:

- Easy to mix
- Good flow characteristics
- Dual expansion system
- Adjustable consistency
- High final strengths
- Non-corrosive and iron-free

APPROVALS / CERTIFICATES

Power Grout-214 follows the main requirements of ASTM C1107

PRODUCT INFORMATION

Composition	Portland cement, selected fillers and aggregates, special additives
Packaging	20 kg bag
Shelf life	12 months minimum from date of production.
Storage conditions	Store in a dry area in original sealed packaging at temperatures between +5°C and +35 °C. Protect from direct sunlight, heat and moisture.
Maximum Grain Size	~4 mm

TECHNICAL INFORMATION

Compressive Strength		1 Day	3 Day	28 Days	(ASTM C109)
	W/P ratio = 0.15 (3.25 L water / 20 kg)	~30 N/mm ²	~45 N/mm ²	~65 N/mm ²	
Tensile Adhesion Strength	≥ 1.5 N/mm ² (or concrete failure)				(EN 1881)



APPLICATION INFORMATION

Mixing Ratio	Consistency	Water per 20 kg bag	Water / Powder ratio
	Flowable (max. strength)	3.25 - 3.75 L	0.15 - 0.16
	Highly flowable (max. flow)	4.00 - 4.25 L	0.16 - 0.17
Fresh Mortar Density	~2.20 kg/l (+25 °C)		
Yield	~13.2 L / 20 kg bag, depending on water addition		
Layer Thickness	Min. 10 mm per pour Max. 75 mm per pour		
Ambient Air Temperature	+5 °C min. / +35 °C max.		
Substrate Temperature	+5 °C min. / +35 °C max.		
Pot Life	~2 h (25 °C)		

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:

The concrete shall be thoroughly clean, rough, free from dust, oil, greas, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. De-laminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means. Absorbent surfaces should be saturated thoroughly with clean water.

Steel Reinforcement:

Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed. Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting to SA 2 (ISO 8501-1) Embedded steel reinforcing should be treated with a suitable anticorrosion coating.

MIXING

Add water according to the desired consistency into a clean mixing vessel before slowly adding the a forced action mixer, for 2 to 3 minutes or until the mix is free of lumps, not longer than 5 minutes. Slow speed drill (maximum 500 rpm) can be also used for mixing. Normal tumble type concrete mixers are not suitable. Do not add extra water or other ingredients. Mix only full bags for best results.

APPLICATION

Before pouring let the mixed grout stand for approximately 5 minutes after mixing to allow entrapped air to escape. Pour into the prepared area such that the grout has the shortest distance to travel. Ensure that air displaced by the grout is allowed to escape. When carrying out base plate grouting, ensure a sufficient head of pressure is maintained to keep the mortar flowing. All exposed areas of the mortar surface should be kept as small as possible.

CURING TREATMENT

Treat exposed surfaces with Antisol®-WB curing compounds or use other approved curing methods such as polyethylene sheeting or wet hessian. Do not commence fogging until final set has been reached.

CLEANING OF EQUIPMENT

Clean equipment and mixer immediately after application with water. Hardened material can only be removed mechanically.

FURTHER INFORMATION

Method Statement

IMPORTANT CONSIDERATIONS

- Ensure formwork is secure and watertight to prevent movement and leaking during placing and curing.
- At high temperatures, use chilled water for mixing to keep grout mix temperature below 30 °C.
- In hot weather, base plates and foundations must be shaded from direct sunlight. Condition bags of grout < 30 °C prior to use.
- Depending on requirements and site condition, the addition of single size, clean coarse aggregates is possible up to 100 % by weight of the dry grout powder. Trials are recommended to confirm suitability of aggregates to be employed.