

PRODUCT DATA SHEET

Parex Super FG

LOW TEMPERATURE REPAIR AND IRONWORK BEDDING MORTAR

DESCRIPTION

Parex Super FG is a one component, Magnesium phosphate cement, rapid hardening and high early strength concrete repair and ironwork bedding mortar for use in temperatures as low as 0°C. The resulting mix produces a mortar which gives rapid setting and high early strength properties suitable for works carried out in raising or lowering carriageway frames and covers. Addition of further water will produce a grout. With the high early strength gain it is ideal for bedding of ironwork, bonding streetscape, flags, blocks and kerbs.

USES

- Re-bedding of raised manhole frames.
- Bedding of frames in new roads.
- Support of road furniture.
- Rapid repairs to concrete surfaces.
- Repairs to cold room areas.

CHARACTERISTICS / ADVANTAGES

- Easy to use just add water
- Rapid setting
- Trafficable within 45 minutes
- Can be placed at low temperatures
- Excellent un-primed adhesion
- High early age and ultimate strengths
- Shrinkage compensated mortar
- Increased resistance to de-icing salts
- Non corrosive to steel
- Durable freeze thaw resistance
- Varying consistency

PRODUCT INFORMATION

Composition	Magnesium Phosphate cement system
Packaging	25kg bag
Appearance / Colour	Grey powder
Shelf life	6 Months from the date of manufacture
Storage conditions	Store in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +25°C.
Density	~2200Kg/m ³

TECHNICAL INFORMATION

Compressive strength	Mortar		
	45 mins	~15N/mm ²	(EN12190)
	2 Hours	~25N/mm ²	
	7 Days	~48N/mm ²	
	28 Days	~55N/mm ²	
	Grout		
	45 mins	~14N/mm ²	(EN12190)
	2 Hours	~24N/mm ²	
	7 Days	~33N/mm ²	
	28 Days	~27N/mm ²	
Shrinkage	Volume Stable		

APPLICATION INFORMATION

Mixing ratio	Consistency	Water requirement (litres)
	Mortar	1.5 - 1.75
	Grout	2.0 - 2.25
Yield	Approx. 11.5 litres of mixed material per 25kg bag	
Layer thickness	8 - 50mm	
Ambient air temperature	+0°C min. / +35°C max.	
Substrate temperature	+0°C min. / +35°C max.	
Pot Life	~10 mins	

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- Do not add water in excess of the recommended dosage.
- For cold weather working below +5°C preheat mixing equipment and gauging water to a temperature of +25°C to +30°C.
- Apply only to prepared sound surfaces.
- Allow mortar to take initial set between applications.
- For hot weather working above +30°C keep mixing equipment cool by working in the shade and chill gauging water to +5°C.
- Do not attempt to rework material which has started to harden.
- Protect freshly applied material from freezing.
- Do not use limestone aggregate as a filler.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete Substrate Preparation: Breakout and remove all concrete designated as being defective, loose and unsound, using suitable mechanical equipment. Ensure sufficient concrete is removed from around reinforcement to allow priming of the steelwork and compaction

of the repair material. At the repair locations, feather edging should be avoided. The edges should be square cut to at least the recommended minimum application thickness of the repair material.

Reinforcement And Ironwork Preparation: All exposed reinforcement should be thoroughly prepared to clean, bright metal, using abrasive blast cleaning or other approved methods.

Steel Reinforcement Priming: Where required, prior to applying Parex Super FG into the repair area, apply two coats of SikaTop® Armatec 110 EpoCem onto the reinforcement in accordance with the product technical data sheet.

MIXING

Excess mixing water should not be used. When mechanical mixing is used wet down the mixing vessel then drain all free water. Add the measured quantity of mixing water. Add the full bag of Parex Super FG. Mix

for at least one minute. Suitable mixers include a slow speed high torque drill and Mortar Stirrer. For mixing at temperatures below +5°C, pre-warm the mixing vessel with warm water and use warm mixing water. Suitable water temperatures are approximately +25 to +30°C.

APPLICATION

Place the mixed mortar as soon as mixing is complete. The chemical setting of Parex Super FG is rapid and all mixed material should be placed within 10 minutes of adding the mixing water. Set frames by “the drop bed method” or by shimming with hard ceramic tiles to line and level followed by “mortar packing”. The mortar should be fully compacted to obtain maximum strength. In both methods the mortar may be face finished using normal steel trowelling. Once the frame has been set, the outer area can be filled to the required thickness using Parex Super FG as either a grout or concrete mix.

CURING TREATMENT

Finished areas will not normally require curing owing to the rapid setting nature of Parex Super FG. However, where rain, or excessively hot, dry or windy conditions prevail, cover after application using hessian or polythene sheeting taped down at the edges or other approved method. For cold weather working also use insulation to maintain temperatures. Never wet cure Parex Super FG

CLEANING OF EQUIPMENT

Remove Parex Super FG from tools and equipment with water. Hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no war-

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