

PRODUCT DATA SHEET

Parex Highway Framefix Mortar

Highway Framefix Mortar is a polyester based, rapid setting bedding mortar

DESCRIPTION

Parex Highway Framefix Mortar is polyester resin based material used for the bedding and leveling of all types of frames in vehicular road surfaces, capable of withstanding the most demanding situations. The Product is supplied as a two pack system ready for onsite mixing consisting of two tins of base resin and two bags of catalysed filler. The mixed mortar will harden to give rapid strength gain reaching ~50 N/mm² in 1 hour, allowing road opening to vehicular traffic within 45 minutes to 1 hour. The placed frames will resist compressive and high impact loads. The chemical mechanism will continue at temperatures down to 0°C (Winter version), with only a small increase in hardening time. The hardened mortar is resistant to chemical attack from petroleum products and road salt. Two grades, Summer and Winter, are available.

USES

Parex Highway Framefix Mortar may only be used by experienced professionals.

- Re-bedding of raised manhole frames.
- Bedding of frames in new roads.
- Installing frames quickly when a rapid return to service is needed.
- Resolving problematic (e.g. repeatedly failing) installations.
- Support of road furniture.
- Securing barriers.

FEATURES

- Easy to use.
- No additional materials (e.g. water) needed - all components supplied.
- Application range: 5 to 50 mm per pass.
- Consistency: Stiff workable mortar.
- Very rapid setting.
- Rapid strength gain.
- Allows a fast return to service.
- Compressive strength ~50 N/mm² after only 1 hour.
- Winter Grade to be used in temperatures 0°C to +20°C.
- Summer Grade suitable for temperatures +10°C to +35°C.

CERTIFICATES AND TEST REPORTS

Parex Highway Framefix Mortar complies with Highways Agency Design Manual for Roads and Bridges HA 104/09 – Chamber Tops and Gully Tops for Road Drainage and Services: Installation and Maintenance, Chapter 6. Bedding Materials. This document has been superseded by National Highways Design Manual for Roads and Bridges Volume 4 Section 2 CD 534 Drainage Design. Chamber Tops and Gully Tops for Road Drainage and Services, the requirements of which Parex Highway Framefix Mortar also fully satisfies.

PRODUCT INFORMATION

Packaging	Parex Highway Framefix Mortar is supplied in 25 kg kits.
Shelf life	18 months
Storage conditions	Keep in unopened containers and in dry conditions, at a temperature of 5°C to 25°C. Storage at higher temperatures and high humidity may reduce shelf life.
Density	~2050 to ~2100 kg/m ³

TECHNICAL INFORMATION

Compressive strength	Age	1 Hour	2 Hours	1 Day
	Compressive Strength	~50 N/mm ²	~60 N/mm ²	~70 N/mm ²
Note: Mechanical strength profile at +20°C and 90% relative humidity.				
Modulus of elasticity in compression	~15 GPa at 7 days			
Flexural toughness	Age	1 Hour	2 Hours	1 Day
	Flexural Strength	15 N/mm ²	17 N/mm ²	20 N/mm ²
Tensile strength	7.5 N/mm ² at 2 hours			

APPLICATION INFORMATION

Yield	The volume yield of each 25kg pack is approximately 12.75 litres.
Layer thickness	Minimum 5mm Maximum 50mm
Pot Life	10 to 20 minutes at 20°C

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

- Application temperature range 0°C to 35°C - the appropriate version should be selected for the conditions.
- The substrate must be clean and surface dry (no standing water).
- Not suitable as a running course.
- Clean all mixing equipment and tools with solvent (e.g. Sika® Thinner C) before setting commences.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Laitance and all loose material including dust, oil and grease should be removed in order to produce a sound substrate. Any loose brickwork should be re-bedded using a slightly resin rich Parex Highway Framefix Mortar.

MIXING

Mixing must be carried out in the plastic package pail, or a similar suitable mixing vessel. Suitable mixers include a slow speed, high torque drill and mortar stirrer.

For full pack mixing of Parex Highway Framefix Mortar, pour all of the resin contained in the two tins within the pack into the mixing pail.

Slowly add the catalysed filler while continually mixing.

Continue mixing after all the filler has been added until the mix is powder free and uniform. The correct mixed consistency is the same as damp sand. The chemical reaction of setting is rapid.

Note: The mixed mortar should be placed immediately after mixing. The working time may be extended in cold ambient conditions and may be shortened in hot

ambient conditions.

APPLICATION

Mix half or full packs only. Variations in mix ratio may alter mortar consistency and compressive strengths achieved.

Set suitable levelling shims onto the working surface ready to receive the frame or unit.

Place the mixed mortar onto the prepared surface and lower the frame or unit onto the mortar and knock down onto the pre-set shims to line and level.

The bed thickness applied in a single application should be between 5mm and 50mm.

Thicker support beds can be achieved by applying further material as soon as the lower bed has hardened sufficiently not to distort under the additional work.

The placed mortar will have hardened sufficiently to carry out further work, such as haunching, within some 20 to 30 minutes, depending on the surrounding ambient conditions.

CURING TREATMENT

No special curing is required at temperatures between 5°C and 35°C.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika® Thinner C Cleaner immediately after use. Hardened / cured material can only be removed mechanically.

LOCAL RESTRICTIONS

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

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 warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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August 2023, Version 01.01

020202010020000015

ParexHighwayFramefixMortar-en-GBPAREX-(08-2023)-1-1.pdf