

PRODUCT DATA SHEET

Parex Highway Framefix UF

Highway Framefix UF is a pre-mixed, cementitious, non-shrink, rapid setting, high performance bedding mortar

DESCRIPTION

Parex Highway Framefix UF is a pre-mixed Portland cement based, non-shrink, rapid setting, high performance bedding mortar suitable for the support of road ironwork and highway furniture.

The mixed mortar, when placed, will harden in approximately 15 minutes. The compressive strength gain will reach 20 N/mm² within 1 hour allowing early opening of roads to vehicular traffic. At three hours the compressive strength will exceed 50 N/mm², and the tensile strength will exceed 5 N/mm² conforming with the Highways Agency Design Manual for Roads and Bridges: Chamber Tops and Gully Tops for Road Drainage and Services: Installation and Maintenance, Chapter 6. Bedding Materials (HA 104/09) and its successor 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 self-contained product only needs to be mixed with water on site. The rapid set and hardening properties of the mixed material ensure a prompt return to service. The product is chloride free and can be safely used with cast iron and steel units. The mortar can be placed in sections of 15mm to 75mm in thickness. Greater thicknesses can be achieved by building up in layers.

After placement, no special curing is required in moderate ambient conditions. The material has been specifically designed to replicate the performance of resin based bedding materials whilst eliminating the drawbacks associated with handling and packaging disposal, both to the user and the environment.

USES

- 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 - just add water.
- Application range: 15 to 75 mm per pass.
- Consistency: Stiff workable mortar.
- Very rapid setting.
- Rapid strength gain.
- Allows a fast return to service.
- Compressive strength ~20 N/mm² after only 1 hour.
- Each 25kg bag of Parex Highway Framefix UF will enable a manhole frame 600 x 600mm to be raised approximately 25mm.

CERTIFICATES AND TEST REPORTS

Parex Highway Framefix UF 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 UF also fully satisfies.

PRODUCT INFORMATION

Packaging	25kg bags
Shelf life	6 months
Storage conditions	In unopened containers when kept in dry conditions at a temperature of 5°C to 35°C. Storage at higher temperatures and high humidity may reduce shelf life.
Maximum grain size	Dmax 2.0mm
Density	~2150 to ~2250 kg/m ³

TECHNICAL INFORMATION

Compressive strength	Age	1 Hour	3 Hours	28 Days
	Compressive Strength	~20 N/mm ²	~50 N/mm ²	~70 N/mm ²
Note: Mechanical strength profile at +20°C and 90% Relative Humidity.				
Tensile strength	~5.0 N/mm ² at 3 hours			
Reaction to fire	EuroClass A1			

APPLICATION INFORMATION

Mixing ratio	2.5 - 3.0 litres of water per 25 kg bag
Yield	Each 25kg bag will yield approximately 12 litres.
Layer thickness	Minimum 15mm Maximum 75mm
Consistency	Stiff workable mortar
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 +5 to +35°C.
- The substrate must be clean and surface dry (no standing water).
- Protect freshly laid material from strong direct sunlight, rain, frost or snow.
- Clean all mixing equipment and tools with water 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. The work area should be pre-wetted to saturated surface dry (SSD) condition, taking care to remove any standing water before placing the Parex Highway Framefix UF.

MIXING

To achieve the most consistent mortar mix, mechanical mixing is recommended. Thorough hand mixing is suitable, but care should be taken to ensure that the mix is fully wetted out.

Mechanical mixing may be carried out in a suitable vessel using a slow speed, high torque drill and mortar stirrer. Hand mixing may be carried out using a clean spot board or wheelbarrow.

Each 25 kg bag of Parex Highway Framefix UF requires 2.5 to 3.0 litres of water to give a mortar consistency. Excess water should not be added as this will impact performance.

Once setting of the mortar has commenced, further

mixing should not be used to rework the mix. The mortar should be placed within approximately 15 minutes of mixing. The working time may be extended in cold ambient conditions and may be slightly shortened in hot ambient conditions. For cold weather working, warm mixing water at up to 30°C may be used to reduce the set time.

APPLICATION

Required mixing water is 2.5 to 3.0 litres. Do not add excessive water for mixing. Variations in water content for particular applications may alter mortar consistency and compressive strength 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 15 mm to 75 mm. 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 and +35°C.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be mechanically removed.

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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