

## PRODUCT DATA SHEET

# Parex High Build Protective Coating

2-component, solvent-free, epoxy resin high build protective coating

### PRODUCT DESCRIPTION

Parex High Build Protective Coating is a two-part, solvent-free epoxy resin product consisting of a pigmented base resin component plus a pale yellow hardener component.

The colour coding enables homogeneous mixing to be easily achieved.

The product is applied as a high build protective coating to steel, iron, aluminium, concrete, masonry, hard natural stone and other construction materials.

Applied coating is resistant to mechanical damage, abrasion and will give protection against weathering, chemical attack and corrosion.

The product gives a high build coating in a single application which cures to hard semi-gloss finish within 24 hours.

### USES

Parex High Build Protective Coating offers protection in a variety of applications, including:

- Steel fabrications and reinforcements.
- Floors, walls and soffits.
- Marine and sewage works.
- Warehouse storage areas plus industrial factory areas.
- Exposed reinforcing strand ends.
- Exposed reinforcing steel ends.
- Precast concrete elements.
- Concrete found to have 'low cover' to the reinforcement.

### CHARACTERISTICS / ADVANTAGES

- Easy to mix and apply.
- Different coloured components for mixing control.
- Excellent adhesion to most construction materials.
- No primer required.
- Impermeable to most liquids and water vapour.
- Good adhesion to dry and matt damp concrete.
- Hardens without shrinkage.
- Outstanding abrasion and mechanical damage resistance.
- Offers excellent protection against weathering and chemical attack.
- Protects against corrosion of reinforcement.
- Extremely high carbon dioxide permeability.
- Very effective as equivalent concrete cover (173µm dry film thickness will provide the same protection as ~600mm of 'good quality' concrete).
- Temperature application range +10 °C to +35 °C.

### APPROVALS / STANDARDS

Carbon Dioxide Permeability in accordance with EN 1062-6: Paints and varnishes - Coating materials and coating systems for exterior masonry and concrete - Determination of carbon dioxide permeability - Classification C<sub>1</sub>.

## PRODUCT INFORMATION

<b>Packaging</b>	1.655 kg Combined Units	
<b>Colour</b>	Resin Component	Dark Grey
	Hardener Component	Pale Yellow
	Mixed Product	Concrete Grey
<b>Shelf Life</b>	12 months from the date of manufacture	
<b>Storage Conditions</b>	The Product should be kept in dry conditions at a temperature of +5 °C to +35 °C. Storage at higher temperatures and high humidity may reduce the shelf life.	
<b>Density</b>	Mixed product: ~1.65 kg/l	
<b>Solid content by volume</b>	~100 %	
<b>Dry film thickness</b>	Up to 300µm in one coat (minimum thickness shall be 173µm)	
<b>Reaction to Fire</b>	When mixed, Parex High Build Protective Coating is classified as non-flammable.	
<b>Permeability to CO2</b>	302m	Classification C <sub>1</sub> EN 1062-6
<b>Consumption</b>	Coverage is approximately 3m <sup>2</sup> per litre / each 1.655 kg unit.	
<b>Yield</b>	Each 1.655 kg unit will yield approximately 1 litre of mixed material.	
<b>Product Temperature</b>	Maximum	+35 °C
	Minimum	+10 °C
<b>Ambient Air Temperature</b>	Maximum	+35 °C
	Minimum	+10 °C
<b>Dew Point</b>	Beware of condensation. Steel substrate temperature during application must be at least +3 °C above dew point.	
<b>Substrate Temperature</b>	Maximum	+35 °C
	Minimum	+10 °C
<b>Pot Life</b>	~45 Minutes	
<b>Curing Time</b>	Initial usage: ~24 Hours (at +20 °C)	
	Full cure: ~7 Days (at +20 °C)	
<b>Tack Free Time</b>	~6 Hours	

## VALUE BASE

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.

## 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

#### CONCRETE / MASONRY / MORTAR / STONE

Concrete and mortar must be at least 3 to 6 weeks old. Substrate surfaces must be sound, clean, dry or matt damp. The surfaces shall be free from standing water, ice, dirt, oil, grease, coatings, laitance, efflorescence, old surface treatments, all loose particles and any other surface contaminants that could affect adhesion of the Product.

#### STEEL

Surfaces must be clean, dry, free from oil, grease,

coatings, rust, scale, all loose particles and any other surface contaminants that could affect adhesion of the bonding agent.

#### WOOD

Substrate surfaces must be sound, clean, dry and free from dirt, oil, grease, coatings, all loose particles and any other surface contaminants that could affect adhesion of the Product.

#### POLYESTER / EPOXY / CERAMICS / GLASS

Surfaces must be clean, dry, free from oil, grease and any other surface contaminants that could affect adhesion of the Coating.

#### SUBSTRATE PREPARATION

##### CONCRETE / MASONRY / MORTAR / STONE

Substrates must be prepared mechanically using suitable abrasive blast cleaning, needle gunning, light scabbling, bush hammering, grinding or other suitable equipment to achieve an open-textured, gripping surface profile.

##### STEEL

Surfaces must be prepared mechanically using suitable abrasive blast cleaning, grinding, rotating wire brush or other suitable equipment to achieve a bright metal finish with a surface profile to satisfy the necessary tensile adhesion strength requirement. Avoid dew point conditions before and during application.

##### WOOD

Surfaces must be prepared by planing, sanding or other suitable equipment.

##### POLYESTER / EPOXY

Surfaces must be prepared by abrading using suitable equipment.

##### CERAMICS / GLASS

Surfaces must be prepared by abrading using suitable equipment. Do not apply to siliconised substrates.

##### ALL SUBSTRATES

All dust and loose material must be completely removed from all substrate surfaces before application of the product by vacuum / dust removal equipment.

#### MIXING

Parex High Build Protective Coating base resin component is supplied in a container which is large enough to receive the hardener component and act as the mixing vessel.

Pour the entire hardener component into the base container and mix using a slow speed high torque drill with a Mortar Stirrer.

Mixing should be continued for two minutes to achieve a uniform consistency and colour.

#### APPLICATION

Apply the Parex High Build Protective Coating as a single thick coat using a stiff bristle brush.

Do not attempt to brush out the applied material.

The applied thickness of 300 microns may be monitored using a simple thickness gauge to check the application during the work.

#### CLEANING OF TOOLS

All tools and equipment should be cleaned with Sika® Thinner C.

Hardened Parex High Build Protective Coating may 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 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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