

# Technical Data Sheet

## StoCrete PU HD

Heavy duty, slip resistant polyurethane screed  
(6 – 12 mm)



### Characteristics

- Area of application**
- Hygienic floor for kitchen, wet food & beverage processing and packaging plants
  - Chemical resistant floor for chemical process, containment area and wash down rooms
  - Thermal shock resistance floor for freezers, refrigerators and oven installed areas
  - Mechanically durable floor for loading docks and warehouses
  - Anti-skid safe floor for oily / slippery service conditions

### Properties

- Excellent bonding to mineral substrates
- Anti-skid finished
- Excellent resistant to wide range of chemicals
- Microbiologically inert, seamless and easily cleaned and maintained
- High temperature resistant up to 150°C (occasional spillage)
- No solvent odour during application
- High wear, abrasion and impact resistance
- Speedy installation allowing rapid access
- Seamless without joints for optimum sanitation and hygienic finish

### Technical Data

Criteria	Standard / test specification	Value / Unit	Notes
Density		2.1 g/cm <sup>3</sup>	
Compressive strength	EN 13892-2	> 49 N/mm <sup>2</sup>	
Tensile strength	ASTM C307	7 N/mm <sup>2</sup>	
Flexural strength	EN 13892-2	> 13 N/mm <sup>2</sup>	
Adhesion strength	EN 13892-8	> 1.5 N/mm <sup>2</sup>	
Abrasion resistance	EN 13892-4	< 0.05 mm	

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

### Substrate

#### Requirements

The substrate must be sound, dry, load bearing and free from native and foreign substances that have a separating effect. Remove less strong layers and laitance.

The maximum moisture content of the substrate should not exceed 4% by weight measured with the CM device.

Substrate temperature greater than +10°C and 3 K above dew point.

Average adhesion strength >1.5 N/mm<sup>2</sup>. Adhesion strength of the single smallest value 1.0 N/mm<sup>2</sup>

#### Preparations

Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting, or abrasive blasting.

Prepare grooves in 8 mm (width) x 8 mm (depth), at all edges, bay joints columns, doorways and drains, for anchoring purpose.

For floor requiring repair in excess of 10 mm, use StoPox EPS GP.

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### For old floor

Thoroughly inspect the old floor for its integrity to ensure an ideal substrate for optimum adhesion. Substrate must be free from all contaminants.

Grooves 8 mm (width) x 8 mm (depth) have to be created diagonally for every 1 m<sup>2</sup> of the floor to facilitate mechanical bonding.

### Application

#### Application temperature

Lowest application temperature: +10°C  
Highest application temperature: +30°C

#### Service temperature

At 6 mm : approx. - 25°C to 100°C  
At 9 mm : approx. - 40°C to 120°C  
At 12 mm : approx. - 40°C to 130°C (150°C occasional spillage)

#### Time for application

At +10°C : approx. 35 minutes  
At +15°C : approx. 30 minutes  
At +30°C : approx. 20 minutes

#### Mixing ratio

Part 1 to Part 5 = 3 : 3 : 13.5 : 0.5 : 12 parts by weight (Powder colour filler)  
Part 1 to Part 5 = 3 : 3 : 13.8 : 0.2 : 12 parts by weight (Liquid colour paste)

### Material preparation

#### Powder colour filler

Shake Part 1 and Part 2 thoroughly before pouring both into a clean mixing pail. Mix for 10 seconds with a suitable electrical mixer (750 rpm).

With the mixer still running, add Part 4 (powder colour filler) and mix for 10 seconds. Gradually add Part 3 followed by part 5 into the pail and continue to mix for at least 2 minute until a fully homogenous mixture is obtained.

It is also vital to stir thoroughly at the sides and bottom in order to evenly distribute the mixture.

Before mixing a new pack, scrape out and discard all previously leftover mix from the sides of the drum.

#### Liquid colour paste

Shake Part 1 and pour into a clean mixing pail. Add Part 4 (liquid colour paste) and mix thoroughly with a suitable electrical mixer (750 rpm) ensuring a homogenous mixture is obtained.

Shake Part 2 and pour into the pail and carry on mixing for 10 seconds.

With the mixer still running, add Part 3 followed by part 5 into the pail and continue to mix for at least 2 minute until a fully homogenous mixture is obtained.

It is also vital to stir thoroughly at the sides and bottom in order to evenly distribute the mixture.

Before mixing a new pack, scrape out and discard all previously leftover mix from the sides of the drum.

### Consumption

#### Type of application

#### Approx. coverage

The coverage rate @ 6 mm thick per 32 kg set

2.5 m<sup>2</sup>

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project.

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## StoCrete PU HD

<b>Coating build-up</b>	<ol style="list-style-type: none"> <li>1) Substrate preparation</li> <li>2) Prime coating (optional)</li> <li>3) Scratch coat of StoCrete PU SM</li> <li>4) Placing of StoCrete PU HD</li> </ol>
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<b>Application</b>	<ol style="list-style-type: none"> <li>1) Substrate preparation</li> <li>2) Prime coating (optional) Prime the prepared surface evenly with a primer from the Sto range of primers using a medium pile roller or squeegee for sealing well the substrate porosity.</li> <li>3) Scratch coat After 14 hours of primer cured, apply StoCrete PU SM as scratch coat of 1 mm thickness.</li> <li>4) Placing of StoCrete PU HD After 14 hours of cured StoCrete PU SM scratch coat, spread the StoCrete PU HD to the desired thickness (6 - 12mm) using a pin rake (Sto-Pin Leveller) and trowel smooth within the stated working life. Immediately after laying the material, finished off with a loop roller (Sto-loop Pile Roller) to achieve an even surface.</li> </ol>
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**Note :**

1. StoCrete PU HD should not be applied on material or floor temperatures below 10°C.
2. Temperature should not fall below 5°C in the first 24 hours after application.
3. All movement joints must be carried through StoCrete PU HD and properly sealed.
4. Construction joints and cracks may be covered, however if substrate movement occurs, StoCrete PU HD will reflect the crack.
5. Yellowing that appears under UV light does not affect the technical characteristics of the product.
6. All StoCrete PU HD components must be used immediately. No partial usage is allowed.

<b>Drying, curing, ready for next coat</b>	<p>Curing time:</p> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>25°C</u></th> <th style="text-align: center;"><u>35°C</u></th> </tr> </thead> <tbody> <tr> <td>Foot traffic</td> <td style="text-align: center;">30 hours</td> <td style="text-align: center;">24 hours</td> </tr> <tr> <td>Light traffic</td> <td style="text-align: center;">36 hours</td> <td style="text-align: center;">30 hours</td> </tr> <tr> <td>Full traffic</td> <td style="text-align: center;">48 hours</td> <td style="text-align: center;">36 hours</td> </tr> <tr> <td>Full cure</td> <td style="text-align: center;">6 days</td> <td style="text-align: center;">5 days</td> </tr> </tbody> </table>		<u>25°C</u>	<u>35°C</u>	Foot traffic	30 hours	24 hours	Light traffic	36 hours	30 hours	Full traffic	48 hours	36 hours	Full cure	6 days	5 days
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<b>Cleaning the tools</b>	<p>Tools must be cleaned immediately after use with cleaning solvent.</p> <p>Small unreacted Part B in container to be decontaminated with 5% solution of washing soda (sodium carbonate) prior to disposal. Hardened material is virtually impossible to remove</p>
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<b>Notes, recommendations, special information, miscellaneous</b>	<p>Please consult the local sales office for further information and any site assistance required.</p>
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# Technical Data Sheet

## StoCrete PU HD

### Delivery

**Colour** Selected standard colour range, matt finish  
Green, Red, Cream, Buff, Yellow, Light Grey, Dark Grey, Grey, Blue, Brown

### Packaging

Name	Packing
StoCrete PU HD	32 kg set

### Storage

**Storage conditions** Store in cool dry conditions; avoid direct sunlight.

**Storage life** This product has a shelf life of 9 months from the manufacturing date.

### Identification

**Product group** Mortar

**Safety** Please refer to Safety Data Sheet.

### Special Notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.

Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on [www.sto-sea.com](http://www.sto-sea.com).

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\*Product images may differ from the actual product.