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

Application methods
- Apply with rake / trowel, finish off with a short nap roller

Technical Data

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard / test specification</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixing ratio</td>
<td></td>
<td>3 : 3 : 0.5 : 13.5 : 11 pbw</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>DIN 53217</td>
<td>2.2 g/cm³</td>
<td></td>
</tr>
<tr>
<td>Compressive strength (after 28 days)</td>
<td>EN 13892-2</td>
<td>&gt; 50 N/mm²</td>
<td></td>
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<tr>
<td>Tensile strength (after 28 days)</td>
<td>BS 6319 Pt 7</td>
<td>7 N/mm²</td>
<td></td>
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<tr>
<td>Flexural strength (after 28 days)</td>
<td>EN 13892-2</td>
<td>&gt; 13 N/mm²</td>
<td></td>
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<tr>
<td>Adhesive strength (after 28 days)</td>
<td>EN 13892-8</td>
<td>&gt; 1.5 N/mm²</td>
<td></td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>EN 13892-4</td>
<td>&lt; 0.05 mm</td>
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</table>

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 Requirement

The substrate must be sound, dry, load bearing and free of foreign substances with separating effect.

If necessary, the substrate should be prepared mechanically by ball blasting, milling, diamond grinding or other mechanical means until a satisfactory profile is evident.

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The maximum moisture content of the substrate should not exceed 4% by weight measured with the CM device. The pull of strength of the substrate should be greater than 1.5 N/mm².

Substrate temperature must be > 10°C and 3 K above dew point.

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.

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 m² of the floor facilitate mechanical bonding.

<table>
<thead>
<tr>
<th>Application</th>
<th>Application temperature</th>
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<tbody>
<tr>
<td></td>
<td>Minimum application temperature +10°C</td>
</tr>
<tr>
<td></td>
<td>Maximum application temperature +30°C</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Service temperature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6 mm</td>
<td>-25°C to 100°C</td>
</tr>
<tr>
<td>9 mm</td>
<td>-40°C to 120°C</td>
</tr>
<tr>
<td>12 mm</td>
<td>-40°C to 130°C  (150°C occasional spillage)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Working life</th>
<th></th>
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<tbody>
<tr>
<td>10°C</td>
<td>approx. 35 minutes</td>
</tr>
<tr>
<td>15°C</td>
<td>approx. 30 minutes</td>
</tr>
<tr>
<td>30°C</td>
<td>approx. 20 minutes</td>
</tr>
</tbody>
</table>

Material preparation
Shake Comp. A and Comp. B thoroughly before pouring both into a clean mixing pail. Mix for 10 seconds with a suitable electrical mixer (750 rpm).

Add Comp. C and Comp. D into the pail and mix for 20 seconds. Finally add in Comp. D and continue to mix for 1 minute until a fully homogenous mixture is obtained.

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

Coating procedure
Priming (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.

Scratch Leveller
After 14 hours of primer cured, apply StoCrete PU SM as scratch coat of 1 mm thickness.

Placing
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, Art No 17402-001) and trowel smooth within the stated working life.

Immediately after laying the material, finished off with a loop roller (Sto-loop Pile Roller, Art No 17406-007) to achieve an even surface.
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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. Constructions joints and cracks may be covered, however if substrate movement occurs, StoCrete PU HD will reflect the crack.
4. Yellowing that appears under UV light does not affect the technical characteristics of the product.
5. All StoCrete PU HD components must be used immediately. No partial usage is allowed.

Consumption
The coverage rate is approximately 2.4 m² @ 6 mm thick per 31 kg set

Curing time
<table>
<thead>
<tr>
<th></th>
<th>25°C</th>
<th>35°C</th>
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</thead>
<tbody>
<tr>
<td>Foot traffic</td>
<td>30 hrs</td>
<td>24 hrs</td>
</tr>
<tr>
<td>Light traffic</td>
<td>36 hrs</td>
<td>30 hrs</td>
</tr>
<tr>
<td>Full traffic</td>
<td>48 hrs</td>
<td>24 hrs</td>
</tr>
<tr>
<td>Full cure</td>
<td>6 days</td>
<td>5 days</td>
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</table>

Cleaning of tools
Tools must be cleaned immediately after use with thinner. Small unreached 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.

Delivery
Colour
Selected standard colour range, matt finish
MF Green, MF Cream, MF Buff, MF Red, MF Light Grey, MF Grey

Packing
StoCrete PU HD is available in 31 kg set.

Storage
Storage life & condition
This product has a shelf life of 9 months from the manufacturing date.
Product should always be stored in an unopened bag, dry place, protected from rain, direct sunlight and raised off the floor.

Special Notes
Health & Safety
Please refer to Safety Data Sheet

Technical Support
Please consult the local sales office for further information and any site assistance required.
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.