StoLevell Uni

Mineral adhesive and reinforcing mortar in acc. with EN 998-1

Rev. INT.EN/061/02.2009

Characteristics

Function
- High adhesive power; very good starting adhesive power
- Very good adhesion

Optics
- Colour of set material: Natural white

Application
- Optimal application characteristics
- For both manual and machine application

Areas of use
- For interior and exterior use
- As adhesive and reinforcing material for External Wall Insulation Systems StoTherm Vario, StoTherm Mineral and StoTherm Wood.
- As adhesive material for StoTherm Classic etc.
- For all mineral and almost all organic substrates

Technical data

Product group
01 008 011 Facade bonding/reinforcing: Mineral mortar

Composition
Calcium silicate, calcium hydroxide, polymer powder, silicon dioxide, calcium carbonate, additives

<table>
<thead>
<tr>
<th>Data</th>
<th>Criterion</th>
<th>Norm / Test prescript</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density of solid mortar</td>
<td>DIN 18 555</td>
<td></td>
<td>1,6</td>
<td>g/cm³</td>
</tr>
<tr>
<td>Flexional strength</td>
<td>EN 196-1</td>
<td></td>
<td>3</td>
<td>N/mm²</td>
</tr>
<tr>
<td>(after 28 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compressional strength</td>
<td>EN 196-1</td>
<td></td>
<td>7</td>
<td>N/mm²</td>
</tr>
<tr>
<td>(after 28 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic E-modulus</td>
<td>TP BE-PCC</td>
<td></td>
<td>5000 - 6000</td>
<td>N/mm²</td>
</tr>
<tr>
<td>(after 28 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermal conductivity λ</td>
<td>DIN 4108</td>
<td></td>
<td>0,87</td>
<td>W/(m·K)</td>
</tr>
<tr>
<td>μ value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water absorption</td>
<td>ETAG 004, § 5.1.3.1</td>
<td></td>
<td>0,14</td>
<td>kg/m²</td>
</tr>
</tbody>
</table>

*1 g/cm³ = kg/dm³ = kg/l
*2 N/mm² = MPa

The values stated are average values. Due to the use of natural raw materials in our products, the actual value determined on an individual delivery may deviate slightly, without compromising product suitability.

Certificates / Norms / Approvals

<p>| Certificates / Norms / Approvals | ETA-05/0130                              | StoTherm Vario 1       |
|                                  | ETA-06/0127                              | StoTherm Mineral 2     |
|                                  |                                          | Adhesive and reinforcement with StoLevell Uni. |
|                                  |                                          | European Technical Approval, |
|                                  |                                          | EOTA Bruxelles / DIBt Berlin |
| ETA-03/0027                      |                                          | StoTherm Classic 1     |
| ETA-05/0098                      |                                          | StoTherm Classic 2     |
| ETA-06/0003                      |                                          | StoTherm Classic QS1   |
| ETA-06/0148                      |                                          | StoTherm Classic QS2   |
|                                  |                                          | Adhesive fixed with StoLevell Uni. |
|                                  |                                          | European Technical Approval, |
|                                  |                                          | EOTA Bruxelles          |</p>
<table>
<thead>
<tr>
<th>Certificate/Approval</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-33.41-116</td>
<td>StoTherm Classic / Vario (adhesive fixed) with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.43-61</td>
<td>StoTherm Classic / Vario (adhesive and dowel fixed) with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.42-129</td>
<td>StoTherm Classic / Vario (track fixing) with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.44-134</td>
<td>StoTherm Mineral L / StoTherm Classic L with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.47-811</td>
<td>StoTherm Classic / Vario / Classic L for timberframe construction, with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.46-422</td>
<td>StoTherm Systems with ceramic and natural stone cladding (adhesive and dowel fixed) with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.47-659</td>
<td>StoTherm Wood for timberframe construction, reinforcement with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.43-925</td>
<td>StoTherm Wood for solid wall construction, reinforcement with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.2-394</td>
<td>StoVentec Facade, reinforcement with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.2-601</td>
<td>StoVerotec Facade for timberframe construction, reinforcement with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.2-124</td>
<td>StoReno Facade with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
<tr>
<td>Z-33.49-742</td>
<td>Doubling up of EWIS (EWIS renovation) with StoLevell Uni. General approval for use as a construction material in Germany, DIBt - Berlin</td>
</tr>
</tbody>
</table>

**Application**

**Substrate**

The substrate must be firm, dry, clean and load bearing, frost-free as well as free of sinter layers, efflorescences and separating agents. Critical substrates must be tested for suitability (create test surface).
**StoLevell Uni**

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<table>
<thead>
<tr>
<th>Substrate preparation</th>
<th>If necessary, cleaning and/or priming of the substrate should be carried out.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application temperature</td>
<td>Air and substrate temperature should not be less than + 5 °C, not more than + 30 °C (until the material has completely set).</td>
</tr>
</tbody>
</table>
| Mixing ratios | StoLevell Uni powder : water = 4 : 1 parts by weight  
-> 25 kg powder : approx. 6.3 l water |
| Mixing procedure | Measure out water and add factory dry mortar. Mix for approx. 2 minutes, then allow to mature for approx. 3 minutes and mix again for a further half minute with manual application. |
| Application time | At 20 °C approx. 60 minutes. |
| Consumption | Article | Type of application | Consumption approx. |
| 00815 StoLevell Uni | As adhesive for EPS Boards | 4,5 - 6,0 kg/m² |
| | As adhesive for Sto Mineral Fibre Boards, Sto Mineral Lamellas, Sto Soft Wood Fibre Boards | 6,0 - 7,0 kg/m² |
| | As adhesive - application on the wall - for Sto EPS Boards, Sto Speed Lamellas | 6,5 – 8,0 kg/m² |
| | As additional adhesive for Sto EPS Boards, Sto Mineral Fibre Boards (track fixing system) | 2,0 - 2,5 kg/m² |
| | As adhesive for StoReno Plan | 4,5 kg/m² |
| | As equalisation material for dowel heads and countersinks, and when used as fine leveller | 1,0 kg/m² |
| | As reinforcing material on Sto EPS Boards, Sto Mineral Fibre Boards, Sto Mineral Lamellas, Sto Speed Lamellas | 4,0 - 7,0 kg/m² |
| | As reinforcing material on Sto Soft Wood Fibre Boards | 6,0 - 8,0 kg/m² |

The consumption is dependent on the substrate and application method. Precise consumption figures should be determined on the object.

**Application**

**Adhesive:**  
Apply adhesive manually or by machine to the insulation board or to the wall. Can be applied with rust-free trowel or toothed trowel and all current plastering machines.  
(see overview “Silo and Machine Technology”).

Adhesion share with adhesive application on the wall:  
- With Sto EPS Boards min. 60 % of the board in adhered condition  
- With Sto Speed Lamellas minimum 50 % of the board in adhered condition
Application (cont.)
The insulation boards must immediately be pressed into the fresh adhesive mortar bed, then floated in and pressed on.

The adhesion share with adhesive application onto the board: minimum 40 % of the board in adhered condition.

With EWIS systems with ceramic cladding, an adhesive surface share of 60 % of the board must find itself in adhered condition.

Reinforcement:
Over the whole surface with StoLevell Uni and Sto Glass Fibre Mesh. The mesh must be overlapped approx. 10 cm in the joint area. At building openings (window, door reveals etc.), diagonal reinforcement must be carried out.

Recommended average reinforcement layer thickness 3 - 5 mm, except for StoTherm Wood. For StoTherm Wood, the average reinforcement layer thickness is approx. 5 mm. The stated value is a guideline value. Depending on application case (corners, reveals etc.), the coating thickness may vary significantly.

The application may be carried out manually or by machine. Special suitability however for machine application (mixing and/or pumping).

A quick drying at high temperatures has to be avoid (sprinkle with water).

Overcoatable after 24 - 48 hours (at + 15 °C and max. 70 % air humidity).

For further application notes, see the system-specific application guidelines.

Cleaning of tools
Clean with water immediately after use; bound material can only be mechanically removed.

Supply
Product code and name 00815  StoLevell Uni
Packaging 00815-001  StoLevell Uni, paper sack 25 kg
StoSilo large containers (not available in all countries)

Colour
Set material: Natural white.
Not for tinting.

Storage
Storage conditions Store in dry conditions.

Storage life
In unopened original sacks, product can be stored for 9 months; in StoSilo large containers also for 9 months. (Relevant data: refer to packaging).

This product is low in chromates according to TRGS 613. We guarantee these characteristics until expiry of the max. storage life.

Please note the statement of guaranteed storage life on the printed batch number on the pail.

Explanation of batch no.: e.g. 9450013223
In the example, a storage life to end of calendar week 45 in 2009 is guaranteed (digit 1 = final digit of the year, digits 2+3 = calendar week). For further explanations, see the Sto Price List.
Environment

Disposal
Waste has to disposed considering the local, official regulations.
Waste key in accordance with the European Waste Catalogue: 17 09 03.

Special notes

Marking
Xi - irritant

Safety
This product requires marking according to the current EU guidelines. For further information on handling, storage and disposal of the product, refer to the EU Material Safety Data Sheet, available for the professional user. You will receive an EU Material Safety Data Sheet with your first order. Please observe the information on handling, storage and disposal of the product.

GISBAU-code
ZP01

Revision No.
INT.EN/061

Validity
05.02.2009

Uses not clearly described in this Technical Data Sheet should only take place after consultation with Sto AG.
The information and data serve to ensure the normal application purpose and normal application suitability.

This Technical Data Sheet is valid outside Germany, in all countries without Sto subsidiary.

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