RonaScreed 1 Day Overlay Rapid Drying Screed

Cement replacement system for rapid drying screeds

Description

RonaScreed 1 Day Overlay Rapid Dry Screed is a cement replacement for rapid drying screeds used when laying bonded, unbonded or floating screeds prior to covering with vinyl sheet or other coverings. The fast drying properties allow screeds to be covered with moisture sensitive finishes as early as one day after application.

Drying times are determined by many factors including humidity, temperature and mixing. An effective damp proof membrane must be in place.

FEATURES

- rapid hardening—light foot traffic in 6 hours
- rapid drying—can receive floor coverings such as tiles, vinyl, carpet, and epoxy resin after 1 day @ 75mm thick
- apply as bonded, unbonded or floating screed
- can be applied as thin as 25mm
- rapid strength development
- compressive strength >40N/mm² after 28 days
- compatible with underfloor heating systems

Drying Times—50mm screed (Relative Humidity at the surface)

<table>
<thead>
<tr>
<th></th>
<th>24 hours</th>
<th>36 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Humidity at the surface</td>
<td>77%</td>
<td>75%</td>
</tr>
</tbody>
</table>

Drying Times—75mm screed (Relative Humidity at the surface)

<table>
<thead>
<tr>
<th></th>
<th>24 hours</th>
<th>36 hours</th>
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<tbody>
<tr>
<td>Relative Humidity at the surface</td>
<td>75%</td>
<td>&lt; 75%</td>
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</tbody>
</table>

Physical Properties

<table>
<thead>
<tr>
<th></th>
<th>Compressive Strength</th>
<th>Flexural Strength</th>
<th>Tensile Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 day</td>
<td>7 days</td>
<td>1 day</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>25N/mm²</td>
<td>9.0N/mm²</td>
<td>1.4N/mm²</td>
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<tr>
<td>7 days</td>
<td>39N/mm²</td>
<td></td>
<td>3.4N/mm²</td>
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<tr>
<td>28 days</td>
<td>44N/mm²</td>
<td></td>
<td>3.6N/mm²</td>
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<tr>
<td>Flexural Strength</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7 days</td>
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<td>28 days</td>
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<tr>
<td>Tensile Strength</td>
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<td>1 day</td>
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<tr>
<td>7 days</td>
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<td></td>
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<tr>
<td>28 days</td>
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</tr>
</tbody>
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Other Ranges—Resin Bound and Bonded Surfacing, Concrete Repair and Coatings, Flooring and Bedding, and Waterproofing and Tanking
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Yield and Coverage

| Packs required per m³ (approx) | 20.25 packs |
| Packs required per m² @ 50mm  | 1.01 packs  |
| Packs required per m² @ 75mm  | 1.52 packs  |
| Approximate yield per mix     | 0.048m³     |

Mix Design 1—Screed
by weight (by volume)

- RonaScreed 1 Day Overlay Rapid Dry Screed 20kg (1)
- Medium grade sharp sand 80kg (3)
- Water add to achieve workability
- Minimum thickness 25mm

Mix Design 2—Fine Concrete
by weight (by volume)

- RonaScreed 1 Day Overlay Rapid Dry Screed 20kg (1)
- Medium grade sharp sand 40kg (1.5)
- 10-5mm aggregate 40kg (1.5)
- Water add to achieve workability
- Minimum / maximum thickness 40mm / 100mm

Measuring Surface Dryness

Laboratory tests for residual moisture indicate that RonaScreed 1 Day Overlay Rapid Dry Screed screeds will be dry enough to accept suitable vinyl and other coverings 24 hours after application. Good air movement is required to ensure low air humidity.

Instructions for Use

It is essential that where no effective damp proof membrane exists RonaScreed DPM is first applied. Refer to RonaScreed DPM data sheet.

Priming

When laying a bonded screed (see Table 4) the surface must be mechanically prepared and tested to ensure it is suitable to restrain a bonded screed. Clean the substrate to remove dust and debris, damp with clean water and allow the water to soak in. Remove excess water and apply a bond coat of Ronacrete Rapid Primer well brushed into the damp surface. The screed must be laid on wet or tacky primer, dry primer must be vigorously scratched and reapplied.

Mixing

RonaScreed 1 Day Overlay Rapid Dry Screed must be machine mixed in a forced action mixer (e.g. CreteAngle pan mixer). Do not use a free fall mixer. Mix the dry components and when evenly dispersed add sufficient clean water for adequate compaction and surface finish and to ensure full hydration of the cement. Compaction of dry mixes will be poor and strength will be low.

Placing

RonaScreed 1 Day Overlay Rapid Dry Screed must be placed immediately after mixing. The screed must be compacted and closed with a float or trowel. Avoid overworking the surface.

Thicknesses above 50mm may be placed monolithically (wet on wet) in more than one layer to ensure full compaction. Each layer should be of approximately equal thickness. To ensure satisfactory adhesion the lower layer must be raked to...
### Instructions for Use (continued)

Provide a key for the next layer. If the workability of a layer is lost it must be mechanically if it has not been raked, before applying the next layer. Then apply a bond coat of Ronacrete Rapid Primer well brushed onto the surface and apply the next layer onto the wet/tacky primer.

**Curing**

Exposure of RonaScreed 1 Day Overlay Rapid Dry Screed to drying winds and direct sunlight should be avoided.

### Packaging

RonaScreed 1 Day Overlay Rapid Dry Screed is supplied in 20kg sacks.

### Shelf Life / Storage

RonaScreed 1 Day Overlay Rapid Dry Screed should be stored unopened between 5°C and 25°C in dry warehouse conditions and out of direct sunlight. In these conditions shelf life is approximately 9 months.

### Health and Safety

Refer to Safety Data Sheet.

### Site Attendance

When on site Ronacrete representatives are able, if asked, to give a general indication of the correct method of installing a Ronacrete product. It is important to bear in mind that Ronacrete Ltd is a manufacturer and not an application contractor and it is therefore the responsibility of the contractor and his employer to ensure he is aware of and implements the correct practices and procedures to ensure the correct installation of the product and that liability for its correct installation lies with the contractor and not with Ronacrete Ltd.
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Essex, CM19 5TD, UK

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BS EN 13813

Floor Screed

Product: RonaScreed 1 Day Overlay Rapid Drying Screed
Reaction to Fire: A2-s1,d0
Release of Corrosive Substances: None
Capillary Water Absorption: < 0.40kg / m2 . min0.5
Compressive Strength: > 40
Flexural Strength: > F4
Wear Resistance BCA method: AR1
Dampness Test (headspace): 75% RH at 20C at 1 day
Release of Dangerous Substances: Refer to Safety Data Sheet

The information detailed in this leaflet is liable to modification from time to time in the light of experience and of normal product application, and before using, customers are advised to check with Ronacrete Ltd, quoting the reference number, that they possess the latest issue. Any person or company using the product without first making further enquiries as to the suitability of the product for the intended use does so at his own risk, and Ronacrete Ltd can accept no responsibility for the performance of the product, or for any loss or damage arising out of such use.