









Cement replacement system for rapid drying screeds



### **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/mm<sup>2</sup> after 28 days
- compatible with underfloor heating systems

### **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.

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

77% 24 hours 75% 36 hours

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

24 hours 75% 36 hours < 75%

**Physical Properties** 

**Compressive Strength** 

1 day 25N/mm<sup>2</sup> 39N/mm<sup>2</sup> 7 days 28 days 44N/mm<sup>2</sup>

**Tensile Strength** 

1 day 1.4N/mm<sup>2</sup> 3.4N/mm<sup>2</sup> 7 days 3.6N/mm<sup>2</sup> 28 days



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Yield and Coverage Packs required per m³ (approx) 16.2 packs Packs required per m² @ 50mm 0.81 packs

Packs required per m<sup>2</sup> @ 75mm 1.22 packs Approximate yield per mix 0.06m<sup>3</sup>

Mix Design 1—Screed RonaScreed 1 Day Overlay Rapid Dry Screed 25kg (1) by weight (by volume) Medium grade sharp sand 25kg (3)

Water add to achieve workability

Minimum / maximum thickness 25mm / 50mm

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

RonaScreed 1 Day Overlay Rapid Dry Screed 25kg (1)
Medium grade sharp sand 50kg (1.5)
10-5mm aggregate 50kg (1.5)

Water add to achieve workability

Minimum / maximum thickness 40mm / 100mm

### **Measuring Surface Dryness**

Laboratory tests for RH and 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. The screed should be laid and cured at 20oC and 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 abraded 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.



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# Instructions for Use (continued)

Thicknesses above 50mm must 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 lightly combed, raked or roughened to provide a key for the next layer. If the workability of a layer is lost it must be mechanically abraded before applying the next layer. Allow it to harden sufficiently then scabble, grit blast, needle gun or similarly mechanically abrade to remove laitence and friable material. Then apply a bond coat of Ronacrete Rapid Primer well brushed onto the surface and apply the next layer on to 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 25kg 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**

The use of protective clothing such as goggles, overalls and gloves is recommended to prevent any effect from prolonged skin contact, inhalation or ingestion.

In the event of skin contact, wash with soap and water. Seek medical advice if irritation or pain occurs. In the event of eye contact irrigate with plenty of clean water and seek immediate medical advice. In the event of ingestion do not induce vomiting. Seek immediate medical advice.

Note—RonaScreed 1 Day Overlay Rapid Dry Screed is not recommended for use as a wearing surface or for external use. If a wearing screed or waterproof / frostproof screed is needed select other screeding products from the Ronacrete range such as Ronafix or RonaScreed Mortar/Concrete please consult the Ronacrete Technical Department.

### **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.



### Pre-packed Rapid Drying Screed



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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

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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.

