
RonaScreed 1 Day Overlay Rapid Dry Screed

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/mm² after 28 days
- Compatible with underfloor heating systems

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FEATURES

- ✓ cement replacement for fast drying screeds
- ✓ allows early overlaying with vinyl, carpet or tiles
- ✓ RH at the surface is <75% after 24 hours
- ✓ early strength gain allows quick access by following trades
- ✓ reduces waiting and drying times
- ✓ accelerates building process

SPECIFICATION CLAUSES

1. Quick drying screed, RH < 75% in 24 hours, 25mm minimum thickness, bonded

The rapid drying screed shall be RonaScreed 1 Day Overlay Rapid Dry Screed mix design 1 or 2 by Ronacrete Ltd, telephone +44 (0) 1279 638700. The bonding primer shall be Ronacrete Rapid Primer. The screed shall be laid at a minimum thickness of 25mm. All materials to be applied in accordance with manufacturers instructions.

SUMMARY APPLICATION PROCEDURE

1. prepare substrate
2. prime substrate
3. mix and apply screed
4. cure and protect
5. optionally measure RH at the surface
6. lay covering

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.

Measuring Surface Dryness

Laboratory tests for RH and residual moisture indicate that RonaScreed 1 Day Overlay Pre-packed 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 20°C and good air movement is required to ensure low air humidity.

Damp Proof Membrane

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.

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 laitance 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 / Storage

RonaScreed 1 Day Overlay Rapid Dry Screed is supplied in 25kg sacks. 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 & 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.

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Table 1: Screed selection guide and mix designs by weight

By weight	Mix 1 Screed	Mix 2 Fine concrete
min/max thickness per layer	25/50mm	40/100mm
RonaScreed 1 Day Overlay Rapid Dry Screed	25kg	25kg
Medium grade sharp sand	100kg	50kg
10-5mm aggregate	-	50kg
Water	7-9 litres*	7-9 litres*
Yield m ³ (approx)	0.06	0.06
* reduce water addition to compensate for water content of sand (and aggregate)		

Table 2: Screed selection guide and mix designs by volume

By volume	Mix 1 Screed	Mix 2 Fine concrete
min/max thickness per layer	25/50mm	40/100mm
RonaScreed 1 Day Overlay Rapid Dry Screed	1 part	1 parts
medium grade sharp sand	3 parts	1½ parts
10-5mm aggregate	-	1½ parts
water	add to achieve workability	add to achieve workability

Table 3: Coverage and Estimating Guide

Packs required per m ³	16.2 packs
Packs required per m ² @ 50mm	0.81 packs
Packs required per m ² @ 75mm	1.22 packs
Approximate Yield per mix (mix 1)	0.06m ³
Approximate Yield per mix (mix 2)	0.06m ³

Table 4: Bonding regime

25-50mm thick	screed must be bonded	Bond with Ronacrete Rapid Primer
> 50mm thick	screed may be laid bonded or unbonded	If bonding, use Ronacrete Rapid Primer

Table 5: Physical data

	Compressive N/mm ²	Tensile N/mm ²
1 day	25	1.4
7 day	39	3.4
28 day	44	3.6

Table 6: Drying Time / Relative Humidity at the surface

BS 8201:1987 App. A	Hygrometer Reading	
Hours after casting	50mm thick	75mm thick
24	77%	75%
36	75%	< 74%

RONL 715 Issue 1 8th March 2012

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.



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