

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed

Pre-packed Quick Drying Screed



FEATURES

- rapid hardening—light foot traffic in 24 hours
- rapid drying—can receive floor coverings such as vinyl, tiles and carpet after 4 days @ 50mm thickness and 3 days @ 75-100mm thickness
- rapid early strength development
- pre-packed formulation offers assurance of consistent high performance
- apply as a bonded screed from 35mm
- apply as an unbonded from 50mm
- apply as a floating from 65mm minimum thickness
- compressive strength >40N/mm² after 28 days
- suitable for screed pumps—consult technical department
- compatible with underfloor heating systems

Description

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed is used to allow floor coverings to be laid over the screed much sooner than with conventional screeds. Rapid strength gain permits early access by following trades.

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed is supplied pre-packed in 25kg bags. It allows early laying of floor coverings such as sheet vinyl, tiles and other materials including the range of RonaFloor Epoxy and Polyurethane coatings (refer to Ronacrete Technical Department).

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed is typically incorporated within 35mm to 75mm thick floor screeds and should be laid by competent screeding and floor laying contractors. RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed can be purchased and laid by non-licensed screeding contractors.

Ronacrete provides full on site support and guidance together with a design and advisory service. For further information contact Ronacrete.

Drying Time of 50mm screed tested @ 20°C & 65% RH

1 day	84%
2 days	80%
3 days	76%
4 days	74%

Drying Time of 75-100mm screed tested @ 20°C & 65% RH

2 days	<80%
3 days	<75%

The accepted figure for the laying of vinyl floor coverings, tiles etc is 75% relative humidity at the screed surface. Also refer to “Drying”

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Physical Properties

Compressive Strength

1 day	30N/mm ²
28 days	68N/mm ²

The above are typical laboratory results @ 20°C. Site strengths will be lower.

Yield and Coverage

Packs required per m ² @ 50mm	4.55 packs approximately
Packs required per m ² @ 75mm	6.82 packs approximately
Packs required per m ³	91 packs approximately

Measuring Surface Dryness

The data is based on drying @ 20°C and 65% relative humidity. Low temperature, high humidity, slow air movement and other poor drying conditions will delay drying. If the screed is covered with a curing membrane such as polythene, then the drying time starts when the membrane is removed. The relative humidity (RH) at the surface of the screed should be measured with a hygrometer before proceeding to lay floor coverings. Standard practices should be followed.

Damp Proof Membrane

Drying concrete must be separated from the screed by polythene or RonaScreed DPM surface damp proof membrane. Screeds thicker than those referred to will take longer to dry. Screeds which are wetted during their application or curing will take longer to dry.

Note that RonaScreed screeds are designed to be covered with carpet, vinyl, tiles or other coverings and are not designed as wearing screeds or toppings. For wearing screeds Ronafix or RonaScreed Self Smooth Topping should be used.

Areas of Use

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed can be laid in the following situations:

- over concrete slabs
- over existing screeds
- on to damp proof membranes (minimum thickness 35mm on to RonaScreed DPM)
- on to insulating board (minimum thickness 65mm)
- unbonded on precast concrete, slabs/planks
- unbonded on lightweight screeds

All RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed mix designs meet the requirements of Category A, BS8204 Part 1 and are therefore suitable for use in the following areas:

Category A - Very Heavy Traffic

e.g. hospital corridors, operating theatres, x-ray rooms, laboratories

Category B - Heavy Traffic

e.g. canteens, restaurants, hospital wards, main corridors

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Areas of Use (continued)

Category C - Light Traffic

e.g. foot traffic, light trolleys, offices, domestic housing

Drying and Hardening

Drying of RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed is much faster than drying of traditional screeds and faster strength gain will generally allow foot traffic after 24 hours only. Vinyl floor coverings and tiles can be laid over a RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed surface as soon as 3-4 days after laying, see drying times.

The durability and hardness of a RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed floor is superior to standard floor screeds.

Bonded, Unbonded and Floating Screeds

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed screeds can be laid either bonded, unbonded or floating. Bonded screeds must be laid on to a suitably prepared substrate (see Surface Preparation). Unbonded screeds are those laid on a separating layer or preformed damp proof membrane. Floating screeds are those laid on to an insulation board or resilient layer.

Bonded Screed (from 35mm)

- suitable substrate, mechanically prepared (and optionally covered with RonaScreed DPM)
- prime with Ronafix : cement (1:1)

Bonded Screed (from 50mm)

- suitable substrate, mechanically prepared
- primer with cement : water (2:1)

Unbonded Screed (from 50mm)

- solid substrate with polythene or other suitable membrane

Floating Screed (65mm)

- light use
- insulation board

Floating Screed (75mm)

- heavy use
- insulation board

Damp Proof Membranes

A damp proof membrane should be present under the concrete slab to prevent moisture penetration from below. If no membrane is present or if the concrete is drying, apply two coats of RonaScreed DPM or install a sheet or similar membrane. If RonaScreed DPM is laid on to a clean, sound substrate as specified in the RonaScreed DPM data sheet it is possible to lay RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed at a minimum thickness of 35mm, bonded to the RonaScreed DPM with a primer of Ronafix and cement.

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Instructions for Use

Surface Preparation for bonded screeds

The surface on to which a RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed is to be bonded must be clean, structurally sound and stable. All grease, oil, laitance and loose material must be removed. The surface must be keyed to expose the aggregate and to provide good adhesion. This is best achieved by scabbling, planing or shot blasting. The prepared surface must be cleaned (ideally by vacuum), damped with clean water and excess water removed.

Mixing

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed must be mixed using a forced action mixer to provide maximum workability and compaction with sufficient gauging liquid to fully hydrate the cement. Dry mix RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed followed by sufficient clean water (approximately 2—2.2 litres) to provide the desired level of workability. The screeder should be able to make a ball of the mixed mortar and pull it apart without crumbling of the mortar.

Priming

The prepared surface must be thoroughly damped with clean water and the water allowed to soak in. Excess water must be removed and the appropriate bond coat applied. For bonded screeds this is a mix of 1:1 Ronafix:cement brushed in to the surface or for screeds thicker than 50mm a 2:1 cement/water slurry. Before this dries the screed must be laid. If the bonding coat dries it must be vigorously scratched and reapplied.

Laying

Standard screeding practices should be followed. The mortar must be placed as soon as possible after mixing and well consolidated. Conventional tools such as float and trowel are used to obtain the desired surface finish.

Embedded Conduits and Pipes

When laying conduits or pipes within RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed the conduit or pipe should be a minimum of 25mm beneath the top surface. It is advisable to incorporate reinforcing mesh centrally within the depth of the screed over the conduit or pipe, extending for not less than 150mm each side to minimise the risk of cracking.

Bay Sizes

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed should be laid as one continuous area, taking care to observe the following:

- construction joints in the substrate must be expressed through into the screed
- expansion joints in the substrate must be expressed through into the screed
- when laying on suspended floors movement joints should be installed in the screed over support positions to accommodate movement
- isolation joints should be installed around the perimeter of the floor and around columns, manholes and fixed spaces to accommodate movement

Curing

Curing must commence as soon as possible after finishing the screed. Cure the

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Instructions for Use (continued)

screed with tight fitting polythene, placed on to the screed as early as possible without damaging the surface. Cover for 24 hours then remove and air cure.

Laying on to Precast Planks

When laying RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed on to precast planks the screed should be laid unbonded with a separating membrane. When reinforcing the screed with a suitable mesh (e.g. D49 mesh) the mesh should be placed in the middle third of the screed.

Pumping RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed can be pumped to the point of laying. Tests have been conducted using Putzmeister equipment and specific guidance should be sought from Ronacrete Ltd.

Contractors

Ronacrete Ltd maintains a list of national and local contractors who are familiar with this type of flooring system and their application procedure but unlike other screeds of a similar nature RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed can be purchased and applied by competent screeding contractors throughout the country.

There are obvious advantages in selecting a contractor who has previous experience of the material but if requested the Ronacrete Technical Department will provide guidance and assistance to other contractors.

Other Flooring Materials

Depending on the specific requirements of the floor system being laid Ronacrete may recommend an alternative product and specification which may be more suited to the application.

To discuss the use of Ronacrete materials for any application please contact the Ronacrete Technical Department for full technical and practical guidance at design and specification stage together with site assistance and practical backup.

Advice can also be given to those contractors and specifiers not familiar with Ronacrete products and techniques.

Packaging

RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed is supplied in 25kg sacks.

Shelf Life and Storage

RonaScreed 4 Day Overlay Pre-packed Quick Drying 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 6 months.

Health and Safety


Refer to safety data sheet.

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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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BS EN 13813 Floor Screed
Product: RonaScreed 4 Day Overlay Pre-packed Quick Drying Screed Reaction to Fire: A2-s1,d0 Release of Corrosive Substances: None Capillary Water Absorption: < 0.40kg / m² . min0.5 Compressive Strength: > C40 Flexural Strength: > F4 Wear Resistance BCA Method: AR3 Dampness Test (headspace):75% RH at 20C at 4 days 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.



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