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# RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed

Pre-packed fast drying screed

## FEATURES

- Will accept foot traffic after 24 hours
- Fast drying—can receive floor coverings such as vinyl, tiles and carpet after 8 days @ 50mm thick and 15 days at 75mm
- Rapid early strength development
- Pre-packed for ease of use
- Pre-packed formulation offers assurance of consistent high performance
- Apply as a bonded screed from 35mm thickness, unbonded from 50mm and floating from 65mm
- A compressive strength in excess of 40N/mm<sup>2</sup> can be achieved after 28 days
- Suitable for screed pumps

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## RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed

### Pre-packed fast drying screed

### FEATURES

- Pre-packed quick drying screed
   allows early covering with vinyl and carpet
- $\sqrt{}$  allows early covering with vinyl and carpet
- ✓ quickly attains RH < 75% at the surface</p>
  ✓ rapid strength gain allows early access by f
- $\checkmark$  rapid strength gain allows early access by following trades

## SPECIFICATION CLAUSES FOR RONASCREED 8 DAY OVERLAY, 75% RH AT 50MM THICK AFTER 8 DAYS @ $20^{\circ}\text{C}$

### 1. Quick drying screed, 35mm minimum thickness, bonded

The rapid drying screed shall be RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed by Ronacrete Ltd, telephone +44 (0) 1279 638700. The bonding primer shall be Ronacrete Standard Primer. The screed shall be laid at a minimum thickness of 35mm, 40mm overall. All materials to be applied in accordance with manufacturers instructions.

### 2. Quick drying screed, 50mm minimum thickness, bonded

The rapid drying screed shall be RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed by Ronacrete Ltd, telephone +44 (0) 1279 638700. The bonding primer shall be 2:1 cement : water. The screed shall be laid at a minimum thickness of 50mm. All materials to be applied in accordance with manufacturers instructions.

### 3. Quick drying screed, 50mm minimum thickness, unbonded

The rapid drying screed shall be RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed by Ronacrete Ltd, telephone +44 (0) 1279 638700. The screed shall be laid at a minimum thickness of 50mm. All materials to be applied in accordance with manufacturers instructions.

### 4. Quick drying screed, 65mm minimum thickness, floating

The rapid drying screed shall be RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed by Ronacrete Ltd, telephone +44 (0) 1279 638700. The screed shall be laid at a minimum thickness of 65mm. All materials to be applied in accordance with manufacturers instructions.

### SUMMARY APPLICATION PROCEDURE

- 1. prepare surfaces
- 2. prime substrate as necessary
- mix and apply screed
   cure and protect
- cure and protect
   optionally measure RH
- optionally measure RH at the surface
   lay covering
- 0. tay cover in

### Description

RonaScreed 8 Day Overlay Pre-packed is a pre-packed screeding mortar used to quickly reduce the level of retained moisture within the screed allowing floor coverings to be laid over the screed much sooner than with conventional screeds. It also promotes high early strength in compression, permitting early access by following trades.

RonaScreed 8 Day Overlay Pre-packed is supplied in pre-packed form and promotes rapid drying and early laying of floor coverings such as sheet vinyl, tiles, carpet etc.

RonaScreed 8 Day Overlay Pre-packed is typically incorporated within 35mm to 75mm thick floor screeds and applied by competent screeding and floor laying contractors. RonaScreed 8 Day Overlay Pre-packed 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; also refer to BS8204 Part 1.

### Drying

When applied at 50mm a RonaScreed 8 Day Overlay Pre-packed screed will achieve 80% RH at the surface of the screed after 4 days and 75% RH after 8 days based on application and curing at 20°C and good drying conditions.

When applied at 75mm a RonaScreed 8 Day Overlay Pre-packed screed will achieve 80% RH at the surface of the screed after 8 days and 75% RH after 15 days based on application and curing at  $20\degree$ C and good drying conditions.

Poor drying conditions such as; low temperature, high humidity and insufficient air movement 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, see BS 8203.

Drying concrete must be separated from the screed by polythene or RonaScreed DPM surface damp proof membrane. Screeds thicker than 50mm will take longer to dry. Screeds which become wet during their application or curing, or are used for material storage will take longer to dry.

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

### Advantages

- promotes rapid drying of floor screeds
- reduces waiting time before laying floor coverings
- allows early foot trafficking
- can be purchased and applied by competent flooring contractors
- minimises site delays and access
- pre-packed for ease of use
- can be pumped to raised levels

BS8204 Part 1 defines methods of testing the performance of bonded screeds. RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed meets the requirements of categories A, B and C of 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

### Category C - Light Traffic

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

### Drying and Hardening

RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed dries out more quickly than unmodified screeds and will generally accept foot traffic after 24 hours only. Vinyl floor coverings and tiles can be laid over a RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed surface as soon as 8 days after laying (for a 50mm screed).

### Bonded, Unbonded and Floating Screeds

RonaScreed 8 Day Overlay Pre-packed screeds can be laid either bonded, unbonded or floating, determined by the substrate type. 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.

### 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 RonaScreed DPM in accordance with the data sheet or install a sheet or similar membrane if an unbonded screed is appropriate. 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 8 Day Overlay Prepacked Fast drying Screed at a minimum thickness of 35mm, bonded to the RonaScreed DPM with Ronacrete Standard Primer(see Table 1).

### Applications

RonaScreed 8 Day Overlay Pre-packed Fast 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 precast concrete, slabs/planks (unbonded only)

#### Hardening, Drying and Curing Times

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Hardening and drying times are dependent on screed thickness, liquid content, cement grading, ambient conditions, mixing, air circulation, substrate conditions and other variables.

### GENERAL SPECIFICATION

#### Surface Preparation

The surface on to which a RonaScreed 8 Day Overlay Pre-packed Fast 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 blasting. The prepared surface must be cleaned (ideally by vacuum), damped with clean water and excess water removed.

### Mixing

RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed must be mixed using a forced action mixer to provide maximum workability and compaction with the minimum amount of liquid. Mix the bag of powder and then add the RonaScreed 8 Day Overlay Pre-packed Fast drying Screed liquid 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

Where thickness dictates the use of a bonding coat, the prepared surface must be well 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 brush Ronacrete Standard Primer in to the surface or, depending on thickness, a 2:1 cement/water slurry. Before this dries the screed must be laid. If the bonding coat dries it must be thoroughly abraded and another coat applied.

### 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 8 Day Overlay Pre-packed Fast Drying Screed the conduit or pipe should be a minimum of 35mm beneath the top surface. It is advisable to incorporate reinforcing mesh, ideally in the middle third of the screed over the conduit or pipe, extending for not less than <u>150</u>mm each side to minimise the risk of cracking.

#### Joints

A RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed should be laid as recommended in BS 882, 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 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.

### Pumping RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed

RonaScreed 8 Day Overlay Pre-packed Fast 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.

### Testing

The strength of the screed can be measured using a BRE Screedtester.

#### Contractors

Unlike other screeds of a similar nature RonaScreed 8 Day Overlay Prepacked Fast Drying Screed can be purchased and applied by competent screeding contractors throughout the country.

Ronacrete Ltd maintains a list of national and local contractors who are familiar with this type of flooring system and their application procedure.

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.

### Health and Safety

RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed is nonflammable and harmful by ingestion. Prolonged contact with skin should be avoided. Any splashes should be washed well with water. If contact with eyes occurs wash thoroughly with water and seek medical advice.

### 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

TYPE	THICKNESS	SUBSTRATE	PRIMER
Bonded	35mm minimum, 40mm overall	suitable concrete or screed, mechanically prepared (and optionally covered with RonaScreed DPM)	Ronacrete Standard Primer
Bonded	50mm minimum	Suitable concrete or screed, mechanically prepared	cement: water (2:1)
Unbonded	50mm minimum	Polythene membrane or building paper on suitable solid substrate	none
Floating	65mm minimum (light use)	Insulation board	none
Floating	75mm minimum (heavy use)	Insulation board	none

Table 2 - Drying Time			Table 3 - Technical Data		
Drying time for a 50mm and 75mm screed			Compressive strength after 1 day	23N/mm <sup>2</sup>	
(* tests conducted by Vinci)		Compressive strength after 28 days	44N/mm <sup>2</sup>		
	50mm	75mm	Pack size	25kg	
Time to reach 80% RH	4 days*	8 days	Yield per pack	10 litres	
Time to reach 75% RH	8 days*	15 days	Packs required per m <sup>3</sup>	100	
The accepted figure for the laying of vinyl floor coverings, tiles etc is 75%. Also refer to "Drying".			The above are typical laboratory results @ 2	The above are typical laboratory results @ 20°C. Site strengths will be lower.	

Table 4 - Primers							
screed type	thickness	substrate	primer required	coverage			
bonded	35mm minimum, 40mm overall	mechanically prepared; structurally sound; may be treated with RonaScreed DPM before priming	Ronacrete Standard Primer	3-4m² per 2kg pack 15-20m² per 10kg packs			
bonded	50mm thickness	mechanically prepared; structurally sound; may be treated with RonaScreed DPM before priming	2:1 cement:water	3-4m <sup>2</sup> per kg of cement			

### Estimating guide for usage of RonaScreed 8 Day Overlay Pre-packed Fast Drying Screed

per m <sup>2</sup> at 50mm	per m² at 75mm	per m³
5 packs	7.5 packs	100 packs

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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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