



### Fast drying screed additive



#### **FEATURES**

- will accept foot traffic after 24 hours
- rapid drying—can receive floor coverings such as vinyl, tiles and carpet after 11 days @ 50mm thick and 15 days at 75mm
- rapid early strength development
- liquid admixture disperses quickly and fully in the gauging liquid
- apply as a bonded screed from 35mm, unbonded from 50mm and floating from 65mm
- compressive strength in excess of 40N/mm<sup>2</sup> can be achieved after 28 days
- suitable for screed pumps
- concentration of admixture saves packaging waste

Description	RonaScreed 15 Day Overlay screeding additive for used to quickly reduce the level of retained mois allowing floor coverings to be laid over the screed conventional screeds. They also promote high early permitting early access by following trades.	sture within the screed much sooner than with
	RonaScreed 15 Day Overlay is supplied in concentra dilution. It promotes rapid drying and early laying of sheet vinyl, tiles and other materials including the ra and Polyurethane coatings (refer to Ronacrete Techn	floor coverings such as nge of RonaFloor Epoxy
	RonaScreed 15 Day Overlay is typically incorporated within 35mm to 75mm thick floor screeds and applied by competent screeding and floor laying contractors. RonaScreed 15 Day Overlay is simple and straightforward to use and can be purchased and laid by non-licensed screeding contractors.	
Drying Time of 50mm screed	7 days 11 days	80% 75%
Drying Time of 75mm screed	10 days 15 days	80% 75%

The accepted figure for the laying of vinyl floor coverings, tiles etc is 75%. Also refer to "Drying"



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Drying	The data is based on drying @ 20 °C in good drying conditions. Low temperature, high humidity, slow air movement and other poor drying conditions will delay the drying times. 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 measured with a hygrometer before proceeding to lay floor coverings. Standard practices should be followed.	
Physical Properties	<b>Compressive Strength</b> 1 day 28 days The above are typical laboratory results @ 20°C. Site st	20N/mm <sup>2</sup> 40N/mm <sup>2</sup> rengths will be lower.
Yield and Coverage	Required per m <sup>2</sup> @ 50mm Required per m <sup>2</sup> @ 75mm Required per m <sup>3</sup>	0.45 litres 0.68 litres 9 litres
Mix Design	Portland cement Medium grade sharp sand RonaScreed 15 Day Overlay Water Yield per mix	50kg (1) 200kg (3.5) 1 litre 15.7 litres approx 0.11m <sup>3</sup>
Measuring Surface Drying	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 out. Screeds which are wetted during their application or curing will take longer to dry out. 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 Smoothing Topping should be used.	
Areas of Use	<ul> <li>RonaScreed 15 Day Overlay screeds can be laid in the over concrete slabs</li> <li>over existing screeds</li> <li>on to damp proof membranes (minimum RonaScreed DPM)</li> <li>on insulating board (minimum thickness 65mm)</li> <li>unbonded on precast concrete, slabs/planks</li> <li>unbonded on lightweight screeds</li> </ul>	thickness 35mm on to



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Screeds

Areas of Use (continued)	<ul> <li>BS8204 Part 1 defines methods of testing the performance of bonded screeds. All bonded RonaScreed 15 Day Overlay mix designs tested to this standard meet the requirements of categories A, B and C of BS8204 Part 1 and are therefore suitable for use in the following areas:</li> <li>Category A - Very Heavy Traffic <ul> <li>e.g. hospital corridors, operating theatres, x-ray rooms, laboratories</li> <li>Category B - Heavy Traffic</li> <li>e.g. canteens, restaurants, hospital wards, main corridors</li> <li>Category C - Light Traffic</li> <li>e.g. foot traffic, light trolleys, offices, domestic housing</li> </ul> </li> </ul>
Drying and Hardening	Floor screeds incorporating RonaScreed 15 Day Overlay dry 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 15 Day Overlay surface as soon as 11 days after laying (for a 50mm screed) and 15 days (for a 75mm screed).
	The durability and hardness of a RonaScreed 15 Day Overlay floor is superior to standard floor screeds due to its high density, compressive strength and impact resistance.
Bonded, Unbonded and Floating Screeds	RonaScreed 15 Day Overlay screeds can be laid either bonded, unbonded or floating, determined by the substrate type. 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.
	<ul> <li>Bonded Screed (from 35mm)</li> <li>suitable substrate, mechanically prepared (and optionally covered with RonaScreed DPM)</li> <li>prime with Ronacrete Standard Primer</li> </ul>
	<ul> <li>Bonded Screed (from 50mm)</li> <li>suitable substrate, mechanically prepared</li> <li>primer with cement : water (2:1)</li> </ul>
	<ul> <li>Unbonded Screed (from 50mm)</li> <li>solid substrate with polythene or other suitable membrane</li> </ul>
	<ul> <li>Floating Screed (65mm)</li> <li>light use</li> <li>insulation board</li> </ul>
	<ul> <li>Floating Screed (75mm)</li> <li>heavy use</li> <li>insulation board</li> </ul>

Other Ranges-Resin Bound and Bonded Surfacing, Concrete Repair and Coatings, Flooring and Bedding, and Waterproofing and Tanking

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Damp Proof Membrane	A damp proof membrane should be present the 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 15 Day Overlay at a minimum thickness of 35mm, bonded to the RonaScreed DPM with a primer of Ronafix and cement.
Mix Components and Design	The basic components of a RonaScreed 15 Day Overlay screed are cement (BS EN197 CEM II 32.5R), sand from grade C or M of table 5 of BS882, RonaScreed 15 Day Overlay and clean water, the water content shown in mix designs must be adhered to, dry mixes will fail to fully hydrate the cement. Larger sized aggregates are used for concrete or granolithic finishes; see Table 4 of BS882.
	RonaScreed 15 Day Overlay mix 1 gives a water/cement ratio of 0.36 and yields approximately 0.1m <sup>3</sup> . The density of the cured screed is approximately 2300kg/m <sup>3</sup> . This mix design can be leaned out to 1:4 (cement : sand) by weight if preferred, but strength will be reduced.
	Aggregate Water Content If damp sand is used the amount of water should be adjusted accordingly to ensure the correct amount of RonaScreed 15 Day Overlay is added.
Instructions for Use	<b>Surface Preparation</b> The surface on to which a RonaScreed 15 Day Overlay 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.
	<b>Mixing</b> RonaScreed 15 Day Overlay is best mixed using a forced action mixer to provide maximum workability and compaction with the minimum amount of liquid, Mix 1 must always be mixed with a forced action mixer. Dry mix the cement and sand then add the RonaScreed 15 Day Overlay liquid followed by sufficient clean water 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.
	<b>Priming</b> 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 this is a mix of 1:1 Ronafix :cement brushed in to the surface or, depending on thickness, a 2:1 cement/water slurry. Before this dries the

Screeds Other Ranges-Resin Bound and Bonded Surfacing, Concrete Repair and Coatings, Flooring and Bedding, and Waterproofing and Tanking

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# Instructions for Use (continued)

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 15 Day Overlay screeds 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 <u>150mm</u> each side to minimise the risk of cracking.

### **Bay Sizes**

A RonaScreed 15 Day Overlay 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 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 Damp Proof Membrane

When laying a RonaScreed 15 Day Overlay screed on to a dpm we recommend the guidelines shown in BRE paper CP 94/74 'The rippling of thin flooring over discontinuities in screeds' are followed.

### Laying on to Precast Planks

When laying a RonaScreed 15 Day Overlay screed on to precast planks the screed should ideally be laid unbonded with a separating membrane. If the screed can not be laid thick enough to be unbonded, the planks should either be provided with an acceptable rough clean laitance free finish or be lightly shot blasted and vacuum cleaned. The screed should be bonded using a primer of 1:1 Ronafix: cement. Hairline cracks forming in line with the joints between the units will not be detrimental to the screed provided the screed is well bonded.

Reinforcing the screed with a suitable mesh (e.g. D49 mesh placed in the lower third to half depth of the screed) may be appropriate for particular types of suspended floor design. Consult the Ronacrete Technical Department.



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Instructions for Use (continued)	<b>Pumping</b> RonaScreed 15 Day Overlay modified screeds 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 15 Day Overlay 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.
	The use of RonaScreed 15 Day Overlay is simple and straightforward and satisfactory performance will be achieved provided the correct methods are followed.
	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.
Packaging	RonaScreed 15 Day Overlay is supplied in 20 and 210 litre units.
Shelf Life and Storage	Shelf life in unopened containers is 9 months. Store in a cool dry place. Protect from frost.
Health and Safety	RonaScreed 15 Day Overlay is non-flammable 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.

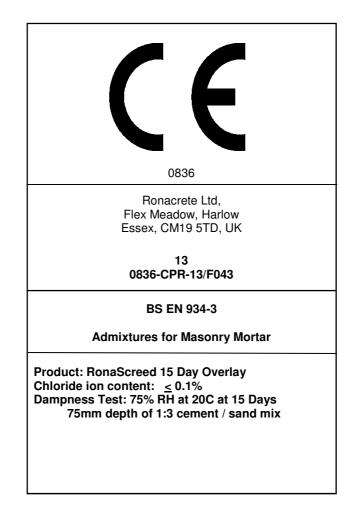


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Site Attendance

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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