

RonaScreed Self Smoothing Levelling Topping

Self-smoothing cementitious wearing screed



FEATURES

- Self smoothing cementitious floor screed
- Self finished industrial floor topping
- Excellent wear resistance
- Up to 1500m² can be pumped per day depending on thickness
- Ready for foot traffic after 24 hours @ 20°C
- Quality Assured to ISO 9001

Description

RonaScreed Self Smoothing Levelling Topping is a flow applied protein free floor topping for industrial floors. The material gains strength quickly and can be accessed by foot traffic in 24 hours.

Performance Data

Use	wearing screed
Water addition per 25kg	3.50—3.70 litres
Initial flow properties @ 20°C (using 65mm diameter x 40mm flow ring)	190mm ±15mm
Workability	up to 30 minutes
Foot and light vehicle traffic @ 20°C	24 hours
Heavy traffic @ 20°C	7 days
Application thickness (min / max)	5mm / 20mm
Bond strength	>1.3N/mm ²
Shrinkage @ 28 days	≤ 0.02% linear
Pack size	25kg
Compressive strength @ 28 days	30N/mm ²
Flexural strength @ 28 days	9N/mm ²
Tensile strength	4N/mm ²

Results shown are from samples mixed, conditioned and tested in ideal laboratory conditions (20°C, 65% RH). Site results will be lower. Drying times may be longer. When opening to foot traffic do not subject to potential impact damage for 14 days @ 20°C.

Estimating Guide

5mm screed	8.5kg/m ²
10mm screed	17.0kg/m ²
15mm screed	25.5kg/m ²
20mm screed	34.0kg/m ²

Priming with RonaFloor Epoxy DPM

RonaFloor Epoxy DPM @ 3.3m²/kg
0.8-1.4mm kiln-dried sharp sand @ 2.5kg / m²

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Estimating Guide (continued)

Sealing and Priming with RonaScreed Self Smooth Primer

Divide surface area by 3.5 to calculate quantity of litres of RonaScreed Self Smooth Primer needed for sealing and priming e.g. 1000m² divided by 3.5 = 286 litres of Primer needed which is enough for one coat of sealer and one coat of primer)

Uses

RonaScreed Self Smoothing Levelling Topping is suitable for application to concrete floors from a minimum 5mm thickness to a maximum 20mm. Note that when applied thinner than 8mm, substrate imperfections will be evident. For screeds thicker than 20mm, RonaScreed Self Smooth Base may be applied as the initial layer and topped with RonaScreed Self Smoothing Levelling Topping. RonaScreed Self Smoothing Levelling Topping is suitable for wet areas.

Achievable Surface Finish

Due to the nature of the product the risk of air bubbles, pinholes and surface undulations cannot be entirely eliminated. Correct substrate preparation, effective sealing and priming and correct mixing/ application will provide optimum results. It is recommended that a Ronacrete Approved Contractor should be employed. The presence of surface imperfections will not impair the performance of the product. The use of RonaFloor Epoxy DPM to prime the floor is preferred to sealing and priming with RonaScreed Self Smooth Primer; adhesion is improved and the risk of pinholing is considerably reduced.

Instructions for Use

Preparation

The concrete must be mechanically prepared by vacuum shot blasting or scabbling to fully remove laitance and then cleaned to remove contamination, Loose shot and dust should be removed by vacuum cleaning before the process of sealing and priming commences. Pins may be placed in the floor to set out the required levels.

Priming with RonaFloor Epoxy DPM

Priming of the substrate with RonaFloor Epoxy DPM is the preferred priming method. A single coat of RonaFloor Epoxy DPM is usually sufficient to seal the substrate and provide good adhesion. RonaFloor Epoxy DPM should be applied at the rate of 3.3m²/kg and kiln dried sand (grade 8/16 approximately 0.8-1.4mm applied at the rate of 2.5kg/m²) should be scattered into the wet resin. Loose aggregate must be removed by vacuum cleaning before application of RonaScreed Self Smoothing Levelling Topping. RonaFloor Epoxy DPM should be allowed to cure for 18-24 hours @ 20°C before loose aggregate is removed.

Priming and Sealing with RonaScreed Self Smooth Primer

Seal the prepared surface by applying one or more coats of RonaScreed Self Smooth Primer diluted with 5 parts water at the rate of 0.62 litres/m². Allow to dry for not more than 36 hours; protect the surface and keep clean.

Note that inadequate sealing will increase the risk of pinholing. Very porous substrates may require the application of two or more coats of sealer. Whilst it is difficult to determine whether a substrate has been sufficiently sealed, a sheen on the surface of the substrate is an indication of adequate sealing.

Prime the sealed surface by applying one coat of RonaScreed Self Smooth Primer diluted with 3 parts water at the rate of 0.71 litres/m². Brush this well into

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Instructions for Use (continued)

the surface. Apply RonaScreed Self Smoothing Levelling Topping whilst primer is tacky; typically between 2-4 hours after application based on material, ambient and substrate condition of 20°C @ 65%RH.

Note

- Major imperfections or deviations in the substrate may need to be made good before laying RonaScreed Self Smoothing Levelling Topping.
- Allow the sealer to dry.
- Always prime surface within 36 hours of sealing operation.
- Remove ponded primer.
- Always apply RonaScreed Self Smoothing Levelling Topping on to tacky primer.
- RonaScreed Self Smoothing Levelling Topping is self smoothing but not self levelling. It must be levelled with a pin rake before spike rolling.
- RonaScreed Self Smoothing Levelling Topping is a free flowing liquid consistency screed. It is essential that prior to pouring, adequate precautions are taken to ensure that the material is retained.

Mixing/Laying

RonaScreed Self Smoothing Levelling Topping may be applied either by mixer/pump Putzmeister SP 11 THF (or similar, note that continuous feed pumps may not provide adequate dispersal of components) or when mixing smaller quantities, mix with a slow speed drill \leq 450RPM fitted with an MR3 type helical paddle and pour onto the floor. Pump or pour RonaScreed Self Smoothing Levelling Topping onto the prepared and sealed/primed surface and level with a pin rake. Spike rolling is necessary to expel entrapped air and must be completed before the mix begins to gel, to avoid leaving spike marks in the surface.

For pump applications it is recommended that a contractor with the necessary experience to carry out this type of work is employed. For a list of such contractors contact the Ronacrete Technical Department.

It is recommended that when applying RonaFloor HB100 or RonaFloor HB200, a coat of RonaFloor EWB water based epoxy coating should be applied to RonaScreed Self Smoothing Levelling Topping as a penetrative primer.

Application Temperature

The substrate and ambient temperature must not be less than 5°C on a rising thermometer at time of application. Materials should be at a temperature of 15°C—20°C at time of application; lower temperatures will impair flow and surface finish. There should be light ventilation during and after laying. Apply the material within 15 minutes of mixing (at 20°C). **Protect the fresh screed from direct sunlight during the hydration/drying process.** Low temperatures will reduce the flow of the wet screed and increase the risk of surface undulations and imperfections. Take extra care when working at low temperatures.

Joints

It is recommended that isolation joints are positioned in doorways. Large areas should be sub-divided by using temporary dividing strips to limit bay width, ensuring that a wet edge is maintained. Bay joints and movement joints in the substrate must be brought through into the topping.

Cleaning

Tools and equipment should be cleaned with water immediately after use. Cured material can be removed mechanically or by acid etching.

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Packaging

RonaScreed Self Smoothing Levelling Topping is supplied in 25kg bags. Deliveries from the factory are shrink wrapped.

Shelf Life and Storage


Store in a cool dry place. Shelf life in correct storage conditions for sealed bags is 6 months. High temperature and high humidity will lead to a reduced shelf life.

Health and Safety

Refer to Safety Data Sheet.

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 a 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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<p>BS EN 13813</p> <p>Floor Screed</p>
<p>Product: RonaScreed Self Smoothing Levelling Topping Reaction to Fire: A2-s1,d0 Release of Corrosive Substances: None Capillary Water Absorption: < 0.40kg / m² . min0.5 Compressive Strength: ≥ C20 Flexural Strength: ≥ F4 Wear Resistance BCA method: AR1 Release of Dangerous Substances: Refer to Safety Data Sheet</p>

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.