

RonaScreed Self Smooth 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 4 hours @ 20°C
- Quality Assured to ISO 9001

Description

RonaScreed Self Smooth 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 4 hours.

Performance Data

Use	wearing screed
Water addition on site per 25kg	6 litres
Compressive Strength	32 N/mm ²
Flexural Strength	9 N/mm ²
Initial Flow properties @ 20°C	
65mm diameter 40mm high flow ring	250mm - 265mm
Workability @ 20°C	25 - 30 minutes
Foot traffic @ 20°C	4 hours
Application Thickness (min/max)	5mm/20mm
Pack size	25kg

Results shown are from samples mixed, conditioned and tested in ideal laboratory conditions. Strengths tested after 28 days @ 20°C, site results may differ.

Estimating Guide

5 mm	8.1kg / m ²
10 mm	16.2kg / m ²
15 mm	24.3kg / m ²
20 mm	32.4kg / m ²

Surface Damp Proof Membrane

2 coats RonaFloor Epoxy DPM @ 3.5 - 4.5m²/kg/coat
0.8-1.4mm kiln-dried sharp sand @ 2.5kg / m²

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Estimating Guide (continued)

Priming with RonaFloor Epoxy DPM

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

Sealing and Priming with RonaScreed Self Smooth Primer

Typical usage of RonaScreed Self Smooth Primer is 0.3 litres/ m². Divide the surface area by 3.33 to calculate the minimum quantity in litres of RonaScreed Self Smooth Primer required for one coat of sealer and one coat of primer (e.g. 1000m² divided by 3.33 = 300 litres of primer).

Uses

RonaScreed Self Smooth 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 Smooth Topping. RonaScreed Self Smooth Topping is not 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.

Damp Proof Membrane

Substrates subject to rising damp must be treated with two coats of RonaFloor Epoxy DPM damp proof membrane, see separate data sheet, before application of RonaScreed Self Smooth Topping. RonaFloor Epoxy DPM with a kiln-dried sand blinding (grade 8/16 approximately 0.8-1.4mm applied at the rate of 2.5kg/ m²) is suitable for direct application of RonaScreed Self Smooth Topping.

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

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Instructions for Use (continued)

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 Smooth 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 1:5 with clean water. 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. Porous concrete may require the application of two or more coats of sealer to prevent moisture loss from the primer and consequent poor adhesion. An even glazed surface across the whole substrate is an indication of adequate sealing.

Prime the sealed surface by applying one coat of RonaScreed Self Smooth Primer diluted 1:2 with clean water. Apply RonaScreed Self Smooth Topping when the primer has become tacky; typically after 2-4 hours @ 20°C @ 65%RH.

Note

- Remove any ponded primer.
- The primer must not be allowed to dry out before applying RonaScreed Self Smooth Topping.
- Always prime the surface within 36 hours of sealing.
- Always apply RonaScreed Self Smooth Topping to tacky primer.
- When RonaScreed Self Smooth Topping is to be applied to RonaScreed Self Smooth Topping, apply RonaScreed Self Smooth Primer only.

Mixing/Laying

RonaScreed Self Smooth Topping may be applied by pouring or pumping. For pump applications it is recommended that a contractor with the necessary experience to carry out this type of work is used.

For poured applications place 6 litres of clean water per bag into a mixing vessel. A slow speed drill and helical paddle must be used for mixing and RonaScreed Self Smooth Topping should be slowly added to obtain a homogenous mix. For pump application a specialist mixer/ pump must be used. Pump or pour RonaScreed Self Smooth 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. Sanding of the screed surface may be required if resin floor coatings are to be applied. 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 Smooth Topping as a penetrative primer.

Application Temperature

The temperature must be ≥ 6°C on a rising thermometer and no greater than 30°C at time of application. Preferred application conditions are 15-20°C and < 75% relative air humidity. Materials should be stored at a temperature of 15°C - 20°C; low temperatures will impair flow and affect the surface finish. There should be light ventilation during and after laying. Protect the fresh screed from direct

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Application Temperature (continued)

sunlight during the drying process and ensure that air and floor temperatures are > 6°C for a period of at least 7 days following application.

Joints

Isolation joints should be positioned at screed perimeters including columns, manholes, doorways etc. using 10mm polyethylene strips. Movement joints and day joints which may be subject to minor movement must not be spanned. Large areas should be sub-divided by using temporary dividing strips. Maintain a maximum bay width of 6-8m to ensure a wet edge can be maintained.

Cleaning

Tools and equipment should be cleaned with clean water immediately after use. Cured material should be removed mechanically.

Packaging

RonaScreed Self Smooth 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 3-6 months depending on storage conditions. High temperature and high humidity will lead to a reduced shelf life.

Health and Safety

Protective clothing, such as goggles, masks, 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.

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.

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.