

RonaScreed Self Smooth Base

Self-smoothing cementitious underlayment screed



FEATURES

- Self smoothing cementitious floor screed
- Base layer for RonaScreed Self Smooth Topping or floorings such as vinyl or tiles
- 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 Base is a flow applied underlay screed for commercial and industrial floors. It provides a hard, durable base for RonaScreed Self Smooth Topping or floor finishes such as sheet vinyl, carpet or tiles. The material gains strength quickly and can be accessed by foot traffic in 4 hours.

Performance Data

Use	underlay screed
Water addition on site per 25kg	5.75 litres
Compressive Strength	30N/mm ²
Flexural Strength	8.5N/mm ²
Initial Flow properties @ 20°C	
65mm diameter 40mm high flow ring	235mm - 255mm
Workability @ 20°C	30—35 minutes
Foot traffic @ 20°C	4 hours
Application Thickness (min/max)	5mm/60mm
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
25mm	40.5kg / 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 @ $3.3\text{m}^2/\text{kg}$
0.8-1.4mm kiln-dried sharp sand @ $2.5\text{kg} / \text{m}^2$

Sealing and Priming with RonaScreed Self Smooth Primer

Typical usage of RonaScreed Self Smooth Primer is $0.3\text{ litres} / \text{m}^2$. 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. 1000m^2 divided by 3.33 = 300 litres of primer).

Uses

RonaScreed Self Smooth Base is suitable for application to concrete floors from a minimum 5mm thickness to a maximum 60mm. Note that when applied thinner than 8mm, substrate imperfections will be evident. RonaScreed Self Smooth Base is not suitable for wet areas such as commercial kitchens, swimming pool surrounds etc.

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.

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 Base. RonaFloor Epoxy DPM with a kiln-dried sand blinding (grade 8/16 approximately 0.8-1.4mm applied at the rate of $2.5\text{kg}/\text{m}^2$) is suitable for direct application of RonaScreed Self Smooth Base.

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 $3.3\text{m}^2/\text{kg}$ and kiln dried sand (grade 8/16 approximately 0.8-1.4mm applied at the rate of $2.5\text{kg}/\text{m}^2$) should be scattered into the wet resin. Loose aggregate must be removed by vacuum cleaning before application of RonaScreed Self Smooth Base. RonaFloor Epoxy DPM should be allowed to cure for 18-24 hours before loose aggregate is removed.

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Instructions for Use (continued)

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 Base when the primer has become tacky; typically after 2-4 hours @ 20°C @ 65%RH. Typical RonaScreed Self Smooth Primer usage is 0.3 litres/m² for 1 seal coat and 1 primer coat.

Note

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

Mixing/Laying

RonaScreed Self Smooth Base 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 5.75 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 Base 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 Base 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.

Application Temperature

The temperature must be $\geq 6^{\circ}\text{C}$ on a rising thermometer and no greater than 30°C at time of application. Preferred application conditions are $15\text{--}20^{\circ}\text{C}$ and $< 75\%$ relative air humidity. Materials should stored be at a temperature of $15^{\circ}\text{C} - 20^{\circ}\text{C}$; 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 sunlight and drying winds during the curing process and ensure that air and floor temperatures are $> 6^{\circ}\text{C}$ 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

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Joints (continued)

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 Base 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.