

# RonaScreed Self Smoothing Levelling 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
- Suitable for wet areas
- Up to 1500m<sup>2</sup> 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 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 24 hours.

## Performance Data

<b>Use</b>	underlay screed
<b>Water addition per 25kg</b>	3.50—3.70 litres
<b>Initial flow properties @ 20°C</b> (using 65mm diameter x 40mm flow ring)	190mm ±15mm
<b>Workability @ 20°C</b>	up to 30 minutes
<b>Drying time @ 40mm thickness</b> (time to achieve 75% RH at surface of screed)	10 days @ 20°C
<b>Foot traffic @ 20°C</b>	24 hours
<b>Application thickness (min / max)</b>	5mm / 60mm
<b>Shrinkage @ 28 days</b>	≤ 0.02% linear
<b>Compressive strength @ 14 days</b>	20N/mm <sup>2</sup>
<b>Compressive strength @ 28 days</b>	30N/mm <sup>2</sup>
<b>Flexural strength @ 28 days</b>	9N/mm <sup>2</sup>
<b>Tensile strength</b>	4N/mm <sup>2</sup>

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 <sup>2</sup>
10mm screed	17.0kg/m <sup>2</sup>
15mm screed	25.5kg/m <sup>2</sup>
20mm screed	34.0kg/m <sup>2</sup>

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### Estimating Guide (continued)

#### Priming with RonaFloor Epoxy DPM

RonaFloor Epoxy DPM @ 3.3m<sup>2</sup>/kg  
0.8-1.4mm kiln-dried sharp sand @ 2.5kg / m<sup>2</sup>

**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. 1000m<sup>2</sup> 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 Base is suitable for application to concrete floors from a minimum 5mm thickness to a maximum 60mm. RonaScreed Self Smoothing Levelling Base is suitable for application in 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.

### 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 3.3m<sup>2</sup>/kg and kiln dried sand (grade 8/16 approximately 0.8-1.4mm applied at the rate of 2.5kg/m<sup>2</sup>) should be scattered into the wet resin. Loose aggregate must be removed by vacuum cleaning before application of RonaScreed Self Smoothing Levelling Base. 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

##### Substrate Sealing

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/m<sup>2</sup>. 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.

##### Substrate Priming

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/m<sup>2</sup>. Brush this well into the surface. Apply RonaScreed Self Smoothing Levelling Base whilst primer is

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### Instructions for Use (continued)

tacky; typically between 2-4 hours after application based on material, ambient and substrate condition of 20°C @ 65%RH.

#### Note

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

#### Mixing/Laying

RonaScreed Self Smoothing Levelling Base 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 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.

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.

### 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.

### Packaging

RonaScreed Self Smoothing Levelling 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 6 months. High temperature and high humidity will lead to a reduced shelf life.

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## 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 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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<p><b>BS EN 13813</b></p> <p><b>Floor Screed</b></p>
<p><b>Product: RonaScreed Self Smoothing Levelling Base</b>  <b>Reaction to Fire: A2-s1,d0</b>  <b>Release of Corrosive Substances: None</b>  <b>Capillary Water Absorption: &lt; 0.40kg / m<sup>2</sup> . min0.5</b>  <b>Compressive Strength: ≥ C20</b>  <b>Flexural Strength: ≥ F4</b>  <b>Release of Dangerous Substances: Refer to Safety Data Sheet</b></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.