

RonaScreed Self Smoothing Exterior Screed

Fast setting, water tolerant, self smoothing, resurfacing & levelling screed



FEATURES

- self smoothing, does not require trowelling.
- can be pumped or poured.
- very fast application reduces disruption and down time.
- economical—lower cost than resin based systems.
- suitable for exterior use.
- manufactured under a Quality Assurance Scheme to BSEN ISO 9001

Description

RonaScreed Self Smoothing Exterior Screed is a flow applied industrial flooring system. It provides a hard, durable floor surface for new floors or for renovating existing surfaces. The material gains strength quickly and can be accessed by foot traffic in 4—5 hours and by light to medium traffic after 24 hours @ 20°C.

When applied correctly, RonaScreed Self Smoothing Exterior Screed produces a smooth, durable wearing surface. The application thickness can vary, ranging from 2mm to 40mm. For optimum performance and appearance RonaScreed Self Smoothing Exterior Screed should be applied by specialist industrial floor layers with expert knowledge of preparation, mixing and application.

Performance Data

Water addition per 25kg	3.2—3.5 litres
Initial flow properties @ 20 °C (using 65mm diameter x 40mm flow right)	225mm
Workability	up to 30 minutes
Foot traffic @ 20 °C	4—5 hours
Light traffic @20 °C	24 hours
Application thickness (min / max)	2mm / 40mm
Bond strength	>1.3N/mm ²
Shrinkage @ 28 days	>0.1%
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. Site results will be lower. Drying times may be longer.

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Composition

RonaScreed Self Smoothing Exterior Screed is supplied as a cement based dry powder which requires a specified quantity of clean water to produce a free flowing self-smoothing mix ready to pump or pour onto prepared, sealed and primed surfaces. It is manufactured by blending special cements, selected fillers, polymers and plasticisers. It is free from casien, other proteins and ammonia and is consequently suitable for use in hospitals and food processing areas. It has been carefully formulated to provide high performance and ease of application.

Uses

RonaScreed Self Smoothing Exterior Screed provides a tough durable floor which is used in thin section. Its exceptional self smoothing properties allows the topping to be laid quickly to the most demanding tolerances.

It can be used in food processing plants, factories, warehouses and other locations where a high degree of wear resistance is required. RonaScreed Self Smoothing Exterior Screed is suitable for levelling concrete to meet the exacting requirements of high bay racking systems.

Achievable Surface Finish

RonaScreed Self Smoothing Exterior Screed is designed to provide a rapid strength gain, hard wearing screed or a surface suitable to receive a further layer such as vinyl or coating. Due to the nature of the product the risk of entrapped air, pinholes and surface undulations cannot be eliminated. However efficient substrate preparation, sealing and priming, combined with correct mixing and application will provide optimum results. It is recommended that a specialist applicator is employed. The presence of surface imperfections will not impair the performance of the product.

Instructions for Use

Preparation

The condition of the surface to be treated is of great importance. The substrate must be mechanically prepared e.g. scabbled, milled or shot blasted. All laitance and contamination must be removed to leave a clean aggregate exposed finish. Testing and assessment to BS8204 Part 3 should be conducted before proceeding with vacuum cleaning, sealing and priming.

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/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.

Substrate Priming

Prime the sealed surface by applying one coat of RonaScreed Self Smooth

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Instructions for Use (continued)

Primer diluted with 3 parts water at the rate of 0.71 litres/m². Brush this well into the surface. Apply RonaScreed Self Smoothing Exterior Screed 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 Exterior Screed.
- Allow the sealer to dry
- Always prime surface within 36 hours of sealing operation.
- Remove ponded primer.
- Always apply RonaScreed Self Smoothing Exterior Screed on to wet or tacky primer.
- RonaScreed Self Smoothing Exterior Screed is self smoothing but not self levelling. It must be levelled with a pin rake before spike rolling.
- RonaScreed Self Smoothing Exterior Screed 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 Exterior Screed may be applied either by pouring or using a specialist mixer/pump. 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.

For poured application place the specified quantity of clean water into a mixing vessel. Gradually add the RonaScreed Self Smoothing Exterior Screed whilst continuously mixing with a slow speed drill and helical paddle until fully blended. A forced action mixer such as Baron or CreteAngle may also be used.

The mixed material is poured or pumped onto the prepared and sealed/primed surface and levelled with a pin rake. Spike rolling is necessary to release entrapped air. Pins may be placed in the floor to set out the required levels. Pumped screeds should be filtered by a fine mesh attachment at the end of the hose.

Estimating Guide

5mm screed	8.5kg/m ²
10mm screed	17kg/m ²
15mm screed	25.5kg/m ²
20mm screed	34kg/m ²
25mm screed	42.5kg/m ²

Sealer and 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)

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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 and Bay Width

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.

Water and Chemical Resistance

RonaScreed Self Smoothing Exterior Screed has good resistance to exposure to water. If attack from solvents or acids is likely, the surface must be protected by a suitable resin based coating e.g RonaFloor HB100/200 or PU Coating. RonaFloor HB coatings may also be used to provide decoration and colour demarcation.

When applying a coating, lightly abrade the surface in order to remove any surface film that may be present.

Where RonaScreed Self Smoothing Exterior Screed has not been over-coated it may be occasionally cleaned with a rotary scrubbing machine. It should be cleaned with a pH neutral cleaning material. The uncoated screed will mark and become dirty more quickly than one protected with a coating.

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 Exterior Screed is supplied in 25kg high density polythene lined 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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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.


Ronacrete Ltd, Flex Meadow, Harlow Essex, CM19 5TD, UK
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BS EN 13813 Floor Screed
Product: RonaScreed Self Smoothing Exterior Screed 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

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.