

Polymer admixture for bedding mortars



FEATURES

- High solids content SBR admixture for multiple applications. Refer to separate data sheets for:
 - Ronafix (Renders)
 - Ronafix (Screeds)
 - Ronafix (Concrete Repair)
 - thin section application
- provides a strong and durable bond to the prepared concrete
- waterproof
- frostproof
- increased physical properties
- excellent adhesion

Description

Ronafix SBR is a single part modified styrene butadiene liquid additive for cement mortars—used to bond copings, paviours, linear drainage channels, brick slips, and other components to concrete surfaces. The cured mortar has high physical strength, is waterproof and frost proof.

Mortars containing Ronafix SBR are used for a wide range of applications where thin high strength high performance mortars are required. Typical minimum application depth is 10mm.

Performance Properties

Freeze / thaw cycle tests

Temperature Range -18°C/+20°C Flexural Strength Initial 11.6N/mm² Flexural Strength After 120 Cycles 11.0N/mm²

Pull off tests—Calcium Silicate Brick

 $\begin{array}{lll} \mbox{Normal Cure} & 1.05\mbox{N/mm}^2 \\ \mbox{Immersed in CaCO}_3 & 0.50\mbox{N/mm}^2 \\ \mbox{Freeze / Thaw (50 cycles)} & 0.71\mbox{N/mm}^2 \\ \mbox{Thermal Cycling} & 0.81\mbox{N/mm}^2 \\ \end{array}$

Pull off tests—Clay Bricks

 $\begin{array}{lll} \mbox{Normal Cure} & 1.55\mbox{N/mm}^2 \\ \mbox{Immersed in CaCO}_3 & 1.07\mbox{/mm}^2 \\ \mbox{Freeze / Thaw (50 cycles)} & 1.03\mbox{N/mm}^2 \\ \mbox{Thermal Cycling} & 1.28\mbox{N/mm}^2 \end{array}$

In no case did the brick / mortar or concrete / mortar bond fail.

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Performance Properties (continued)

Compressive Strength		
1 day	22N/mm ²	
7 days	42N/mm ²	
28 days	53N/mm ²	

Tensile Strength		
7 days	5.7N/mm ²	
28 days	8.4N/mm ²	

Flexural Strength	
7 days	15.8N/mm ²
28 days	19.1N/mm ²

Note that all quoted data is based on laboratory tests conducted at 20°C. Results shown are MAXIMUM laboratory strengths achieved by casting and curing cubes in ideal working conditions; site strengths will be lower.

Test Authority: British Precast Concrete Federation

CMC Laboratories W & C French Ltd Ronacrete Laboratories

Mix Design

Mix Design	Mix C
Cement (CEM II 42.5)	50kg
Medium sharp sand	125kg
Ronafix SBR	14 litres
Water addition	See note below
Yield	0.1m ³

Note: Water addition

Water addition will depend on the sand water content. To test for correct consistency a ball should be made of the mortar, squeezing of the ball should not produce free liquid. When the ball is pulled apart it should separate in two pieces without crumbling.

Instructions for Use

Preparation

The substrate on which the Ronafix SBR mortar is being placed must be structurally sound and stable and strong enough to support the weight of the mortar and the component being bedded. Surfaces should ideally be prepared by mechanical abrasion, e.g. scabbling, water/grit blasting or similar means to expose the aggregate and provide a mechanical key. All coatings, grease, oil, dirt and deleterious material must be removed. Similarly clean the back of the component.

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Instructions for Use (continued)

Damping

The prepared surfaces must be thoroughly dampened with clean water. All surplus water must be removed before the primer is applied.

Priming

Brush apply a primer of 1:1 Ronafix SBR: cement to both surfaces, substrate and component, immediately before applying the Ronafix SBR modified mortar. Mix the primer thoroughly and apply evenly over the surface ensuring total and uniform coverage. Only prime an area which can be covered by the mortar within the working time of the primer.

Note that the primer must not be allowed to dry. If it dries it must be thoroughly cross hatch scratched and reapplied.

Mixing

Ronafix SBR modified mortars can be mixed by hand or machine. Machine mixing will more easily provide a mortar with even dispersion of mix components and a lower water/cement ratio. The use of a forced action mixer (eg. Creteangle or Screedmaster) will provide optimum performance; free fall mixers cause the mortar to ball up with a resultant reduction in performance and must not be used.

Depending on the quality of mixer used and the moisture content of sands and aggregates it may not be necessary to add the full amount of water specified in the mix design. When using an efficient mixer, a mixing time of 2-3 minutes is normally sufficient. Do not overwork the mix as this will entrain air and may affect performance. Once mixed the mortar should be used as quickly as possible.

Placing

As soon as the material is mixed render it onto the wet/tacky primer or trowel on to the back of the component being bedded and place the component in position ensuring compaction. Remove excess mortar, taking care not to stain the surface.

Support if necessary until the mortar has hardened sufficiently to support the component. If required the joints can be raked out, taking care not to disturb the bond, and repointed with a coloured mortar.

Working Temperatures

Ronafix SBR bedding mortar can be used in most weather conditions and in a wide temperature range, typically from +5°C to 25°C and above. Note that at high ambient temperatures the working time of the mix will be reduced; it will be increased at lower temperatures. In cold weather the surface temperature of the laid render (not the air temperature) should be maintained at above 5°C during construction and for four to five days after laying. In this way the mortar will normally achieve sufficient strength to resist damage by freezing.

Packaging

Ronafix SBR is supplied in 5 litre, 25 litre, 210 litre and 1000 litre containers.

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Shelf Life and Storage Ronafix SBR should be stored unopened between 5°C and 25°C in dry

warehouse conditions away from direct heat and sunlight. Shelf life is

approximately 9 months in unopened containers.

Health and Safety Refer to Safety Data Sheet

Site AttendanceWhen 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

