













# Polymer admixture for bedding mortars



#### **FEATURES**

- 'the product has a greater resistance to the passage of moisture than the equivalent unmodified sand cement mortar.' BBA Certificate No. 89/2149
- 'the product will provide a strong and durable bond to the prepared concrete.' BBA Certificate No. 89/2149
- 'the product is not significantly affected by frost action and will be more durable than the equivalent unmodified sand cement mortar' BBA Certificate No. 89/2149
- waterproof
- frostproof
- increased physical properties
- excellent adhesion

#### **Description**

Ronafix is a single part modified styrene butadiene liquid additive for cement mortars which enhances physical and chemical properties, allows mortars to be placed in thin section, provides waterproofing and resistance to frost and promotes adhesion to building surfaces.

Mortars containing Ronafix are used for a wide range of applications where thin high strength high performance mortars are required. Typical minimum application depth is 6mm.

#### **Performance Data**

#### 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

Normal Cure 1.55N/mm<sup>2</sup> Immersed in CaCO<sub>3</sub> 1.07/mm<sup>2</sup> Freeze / Thaw (50 cycles) 1.03N/mm<sup>2</sup> Thermal Cycling 1.28N/mm<sup>2</sup>

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





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Performance Data (continued)

**Compressive Strength** 

 1 day
 22N/mm²

 3 days
 34N/mm²

 7 days
 42N/mm²

 28 days
 53N/mm²

**Tensile Strength** 

7 days 5.7N/mm<sup>2</sup> 28 days 8.4N/mm<sup>2</sup>

Flexural Strength

7 days 15.8N/mm<sup>2</sup> 28 days 19.1N/mm<sup>2</sup>

Compression tests: 100mm cubes

Flexural tests: 100 x 25mm x 25mm prisms

Tensile tests: dumbell specimens

Test Authority: British Precast Concrete Federation

CMC Laboratories
W & C French Ltd
Ronacrete Laboratories

Mix Design

By weight

Cement 50kg
Medium sharp sand 125kg
Ronafix 14 litres

Water 4 litres (approximately)

Instructions for Use

#### **Preparation**

The substrate on which the Ronafix 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.

#### **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: cement to both surfaces, substrate and component, immediately before applying the Ronafix 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.





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Instructions for Use (continued)

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

#### Mixina

Ronafix 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.

**Packaging** 

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

**Shelf Life and Storage** 

Ronafix should be stored unopened between  $5^{\circ}$ C and  $25^{\circ}$ C in dry warehouse conditions away from direct heat and sunlight. Shelf life is approximately 9 months in unopened containers.

**Health and Safety** 

Ronafix is non-hazardous although protective clothing such as goggles, overalls and gloves are 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



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Site Attendance (continued)

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

13 0836-CPR-13/F042 0836-CPR-13/F043

BS EN 934-2 BS EN 934-3 Concrete Admixture Masonry Mortar Admixture

**Product: Ronafix** 

Chloride ion content: ≤ 0.1% Alkali Content: ≤ 0.5% Dangerous Substances: None

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.

