

Ronaset Mortar

Rapid strength gain mortar for floor screeds and as a bedding mortar

FEATURES

- ✓ high early strength mortar
- ✓ will take heavy traffic at 24 hours
- ✓ for floor screeds, floor repairs
- ✓ bedding mortar for bricks, blocks, pavements
- ✓ waterproof

SPECIFICATION CLAUSES

1. Floor Screed / Floor Repair—6mm-50mm thick

The levelling screed / screed repair shall be Ronaset Mortar by Ronacrete Ltd, telephone +44 (0) 1279 638700. The screed shall be laid at 6mm–50mm thick (or state thickness - note min. is 6mm). The primer is to be Ronaset Primer. All materials to be applied in accordance with manufacturers instructions.

2. Bedding Mortar

The bedding mortar shall be Ronaset Mortar by Ronacrete Ltd, telephone +44 (0) 1279 638700. The mortar shall be laid at a minimum depth of 6mm (or state thickness - note min. is 6mm). The primer is to be Ronaset Primer. All materials to be applied in accordance with manufacturers instructions.

SUMMARY APPLICATION PROCEDURE

Ronaset Mortar as screed/repair 6mm-50mm thick

1. prepare surface
2. mix and apply Ronaset Primer
3. mix and apply Ronaset Mortar
4. cure and protect
5. optionally apply epoxy floor coating (refer to Ronadeck HB, EWB)
6. traffic

Ronaset Mortar as a bedding mortar

1. prepare surface
2. mix and apply Ronaset Primer to substrate and back of component
3. mix and apply Ronaset Mortar
4. bed component in wet mortar
5. protect
6. traffic

Description

Ronaset Mortar's rapid strength gain is used for laying new and repairing existing floors and bedding building components.

Ronaset Mortar is used where speed of strength gain is of importance. Surfaces formed using Ronaset Mortar can be trafficked as early as 24 hours after mixing. The speed of Ronaset Mortar makes it ideal for application in areas where surfaces must be formed or reinstated or components bedded and opened to traffic with minimum disruption and delay.

As well as offering rapid strength gain Ronaset Mortar is strong and durable and capable of achieving 28 day strengths within hours. Its formulation also allows it to be applied at minimum temperatures of 0°C facilitating external work during cold weather and in freezer rooms and cold stores. For sub-zero works use Monoset.

Applications for Ronaset Mortar include:

- thin section floor screeds and high strength industrial toppings
- high abrasion resistant floors
- floor repairs
- thin section bedding mortar for blocks, kerbs, pavers
- bedding mortar for preformed expansion joints
- forming bridge bearing pads
- crane rail bedding
- replacement overlays for worn and eroded surfaces
- same day or next day treatments
- patch repairs in high demand/constant access areas
- waterproof and frost resistant

Working Time and Mixing

Ronaset Mortar is rapid hardening yet can be machine mixed for large volume applications. The working time is approximately 30-40 minutes depending on temperature; after this time the material will lose workability and begin to firm up. Special grades of Ronaset are available to order with specific batches formulated to meet particular working time and strength gain requirements. Consult the Ronacrete Technical Department for information on standard and specific formulations.

Working Temperatures

Ronaset Mortar can be used in most weather conditions and in a wide temperature range, from 0°C to 30°C. At high ambient temperature the working time of the mix will be reduced; it will be increased at lower temperatures.

Care must be taken when using Ronaset Mortar at low temperatures to ensure that the water used for damping (and the primer) does not freeze on contact with the substrate. In very low temperatures for additional speed warmed gauging liquid may be used for mixing. Similarly exercise care at high temperatures to maintain damp working surfaces and avoid flash setting.

WORKING INSTRUCTIONS

Preparation

The substrate on which Ronaset Mortar is being placed must be structurally sound and stable and suitable to receive a high strength topping. Surfaces should ideally be scabbled or mechanically abraded to expose the aggregate and provide a mechanical key. Remove traces of oil, grease and any other chemical contamination which may impair adhesion. Vacuum clean surfaces to remove debris and deleterious material.

The substrate must be sufficiently strong and sound to receive a high strength topping. Any defect or weakness in this substrate may result in failure of the topping placed in contact with it. The recommendations given in BS8204 Part 3 should be followed to assess the suitability of the substrate and maximise the performance of the topping.

The minimum thickness at which Ronaset Mortar can be placed is 6mm. Above 50mm it may be necessary to place the material in more than one layer, wet on wet to ensure satisfactory compaction or use a different grade (see Table 1, Min/Max Application depth per layer).

Damping

The prepared surface must be thoroughly damped with clean water. Very porous surfaces may require soaking for up to 24 hours. All surplus and standing water must be removed before the primer is applied.

Priming

Ronaset Primer must be applied to the damp surface immediately before applying the Ronaset Mortar. Mix the primer thoroughly and apply evenly over the surface ensuring total and uniform coverage taking care to avoid ponding. Only prime an area of floor which can be covered by the topping within the working time of the primer

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

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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Mixing

Ronaset Mortar is best machine mixed in a forced action mixer (e.g. Creteangle pan mixer). Do not use a free fall mixer. Mix the dry components and when evenly dispersed add the minimum amount of the supplied liquid necessary to provide sufficient workability for compaction and surface finish.

Placing as a screed

As soon as the material is mixed place it onto the wet/tacky primer, compact, rule and close with a float or trowel. Avoid overworking the surface.

Thicknesses above the Maximum Application depth per layer (see Table 1) must be placed monolithically (wet on wet) in more than one layer to ensure full compaction. Each layer should be of approximately equal thickness.

To ensure satisfactory adhesion between wet-on-wet layers the lower layer(s) must be lightly combed, raked or roughened to provide a key for the next layer.

If the previous layer has firmed up and lost workability it must be mechanically abraded before applying the next layer. Allow it to harden sufficiently (typically 4-6 hours at 20°C) then scabble, grit blast, needle gun or similarly mechanically abrade the surface to remove the top few mm of laitence and friable material. Then coat the prepared surface with Ronaset Primer and apply the next layer on to the wet / tacky primer.

Finish the final surface with a float or trowel as required.

Placing as a bedding mortar (e.g. for kerbs, blocks, pavers)

Proceed as described above (**Placing as a screed**). Before placing the component into the wet bedding mortar of Ronaset Mortar first clean the underside of the component and damp with clean water, remove excess and prime with a single coat of Ronaset Primer. Whilst the primer is wet or tacky bed the block into the mortar ensuring adequate compaction and uniform contact with the mortar. Point with Ronaset Mortar or other mortar as required. Take care to avoid staining the face of the component with the mortar.

Curing

To minimise the risk of shrinkage cracking and crazing cure the surface with Monocure 90 spray applied curing membrane as soon as possible after final trowelling.

If applying an epoxy floor coating such as Ronadeck EWB or HB or other coating it is essential to remove the Monocure 90 from the surface (after not less than 24 hours curing) by light mechanical abrasion (eg. mechanical wire brushing, grit blasting) before applying the protective or decorative coating.

Failure to remove the Monocure may result in debond of the coating. Refer to Monocure data sheet.

Using the surface

Ronaset Mortar can be trafficked within 18-24 hours typically at 20°C. This time will vary according to temperature, amount of liquid added during mixing, air circulation and general conditions.

Chemical Resistance

For details on chemical resistance properties please refer to the Ronacrete Technical Department.

Shelf Life

Ronaset Mortar should be stored unopened at temperatures between 5°C and 25°C in dry warehouse conditions and out of direct sunlight. In these conditions shelf life is approximately 9 months.

Health & Safety

Ronaset Mortar is non hazardous although protective clothing such as goggles, 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.

Table 1 Properties

| All strengths are from laboratory cubes tested at 20°C in ideal conditions. Site strengths will be lower. | Min/Max Application depth per layer | Time to foot traffic/heavy traffic at 20°C | Priming System | Time to RH <75% per 50mm thickness | Waterproof/ Frostproof | Compressive Strength @ 24 hours | Compressive Strength @ 28 days |
|---|-------------------------------------|--|----------------|------------------------------------|------------------------|---------------------------------|--------------------------------|
| Ronaset Mortar | 6/50mm | 18/24 hours | Ronaset Primer | 2-3 days | yes | 40N/mm ² | 50N/mm ² |

Table 2—Packaging & Coverage

| | Pack Size | Packs per m ³ | Yield per pack |
|----------------|-----------|--------------------------|---|
| Ronaset Mortar | 28 | 90 | 0.011 |
| Ronaset Primer | 2kg, 10kg | n/a | 3-4m ² , 15-20m ² |

Ronaset

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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.



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