

## RonaFloor Repair 1 Hour

### Ultra-rapid floor repair and bedding mortars



#### FEATURES

- ultra-rapid strength gain
- will accept heavy traffic after only 1 hour @ 20°C
- low temperature application—down to -10°C
- pre-packed for ease of use and site control
- thin section applications down to 2mm depending on grade
- can be used for repairs up to 150mm in a single application
- compressive strengths in excess of 50N/mm<sup>2</sup> can be achieved
- selected grades are waterproof

#### Description

RonaFloor Repair 1 Hour is a range of mortars and fine concretes designed for rapid strength gain and low temperature use. Within one hour of mixing (depending on temperature) the material will have gained sufficient strength to take foot and vehicle traffic including cars, lorries, fork trucks and other machinery.

The speed of RonaFloor Repair 1 Hour makes it ideal for use on roads, motorways, slipways and ramps, tidal areas, airports and stations, in factories, warehouses and goods depots and in all other areas where speed and rapid strength gain is of paramount importance. After just one hour of mixing a surface repaired with RonaFloor Repair 1 Hour or a component bedded on RonaFloor Repair 1 Hour can be opened to foot and vehicle traffic.

As well as achieving rapid strength RonaFloor Repair 1 Hour also works at low temperatures when conventional mortars cannot be used.

#### Uses

##### RonaFloor Repair 1 Hour 2-6mm

- Repairs to floors
- Hard standings
- 2mm to 6mm

##### RonaFloor Repair 1 Hour 6-50mm

- Repairs to floors
- Hard standings
- Fill potholes
- 6mm to 50mm

# RonaFloor Repair 1 Hour

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## Uses (continued)

### RonaFloor Repair 1 Hour 25mm

- Repairs to floors
- Hard standings
- Fill potholes
- 25mm to 150mm

## Physical Properties

### RonaFloor Repair 1 Hour 2-6mm

### Compressive Strength

1 hour	8N/mm <sup>2</sup>
2 hours	16N/mm <sup>2</sup>
24 hours	26N/mm <sup>2</sup>
7 days	38N/mm <sup>2</sup>
28 days	51N/mm <sup>2</sup>

Waterproof	Yes
Frostproof	Yes

## Physical Properties

### RonaFloor Repair 1 Hour 6-50mm

### Compressive Strength

1 hour	12N/mm <sup>2</sup>
2 hours	15N/mm <sup>2</sup>
24 hours	28N/mm <sup>2</sup>
7 days	40N/mm <sup>2</sup>
28 days	53N/mm <sup>2</sup>

Waterproof	Yes
Frostproof	Yes

## Physical Properties

### RonaFloor Repair 1 Hour 25mm

### Compressive Strength

1 hour	17N/mm <sup>2</sup>
2 hours	21N/mm <sup>2</sup>
24 hours	29N/mm <sup>2</sup>
7 days	42N/mm <sup>2</sup>
28 days	54N/mm <sup>2</sup>

Waterproof	Yes
Frostproof	Yes

## Yield and Coverage

### RonaFloor Repair 1 Hour 2-6mm

Yield	13.9 litres
Packs required per m <sup>3</sup>	72 packs
Coverage per pack	6.95m <sup>2</sup> @ 2mm

### RonaFloor Repair 1 Hour 6-50mm

Yield	11 litres
Packs required per m <sup>3</sup>	91 packs
Coverage per pack	1.1m <sup>2</sup> @ 10mm

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### Yield and Coverage (continued)

#### RonaFloor Repair 1 Hour 25mm

Yield	10 litres
Packs required per m <sup>3</sup>	100 packs
Coverage per pack	0.4m <sup>2</sup> @ 25mm

### Working Time and Mixing

RonaFloor Repair 1 Hour is a rapid set mortar system, designed for hand mixing in small volume. The working time is approximately 10-15 minutes, dependent on material and ambient temperature. It must therefore be mixed close to the area of application so that it can be placed and finished before initial set.

For larger volume work where hand mixing is not possible but rapid strength gain is required, please contact the Ronacrete Technical Department.

### Instructions for Use

#### Floor Repair

1. prepare repair area by mechanical abrasion to remove loose, unsound and friable material; provide a vertical saw cut around the periphery of the area. Remove oil and grease and other contamination which may impair adhesion. Vacuum clean to remove dust and debris.
2. the substrate can be tested to ensure it is strong enough to restrain the repair; refer to BS8204 Part 3:1993
3. damp the surface with clean water; soak very porous surfaces for 24 hours; remove all standing and surplus water leaving the surface damp
4. mix and apply Ronacrete Rapid Primer ensuring total uniform coverage. Only prime an area which can be covered by the mortar within the working time of the primer (typically 15-60 minutes depending on temperature, air movement and surface porosity).
5. hand mix the appropriate grade of RonaFloor Repair 1 Hour, close to the area of application by dry mixing the powders and sands (and aggregates) and adding sufficient of the supplied gauging liquid to provide the required consistency
6. apply the mixed RonaFloor Repair 1 Hour on to the wet or tacky primer, compact and close the surface with a float or trowel. If the primer dries, scarify by close cross hatch scratching and reapply
7. where the total repair thickness exceeds the Maximum Depth per Layer quoted in "Materials Selection Guide", lay in more than one layer, ensuring each is not less than the Minimum Depth Per Layer. If the previous layer begins to firm up before the next is placed, scratch the surface and apply Ronacrete Rapid Primer between layers
8. protect the surface until hard enough to traffic (typically 1 hour at 20°C)

#### Bedding Kerbs, Paviours, Copings

1. mechanically abrade substrate; remove all contamination, grease, oil and loose material to provide a sound substrate strong enough to receive the high strength bedding mortar
2. damp substrate and underside of component with clean water; remove excess
3. apply Ronacrete Rapid Primer to both surfaces whilst damp; do not allow to dry. If surface dries scarify and remove dried primer and reapply.

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### Instructions for Use (continued)

4. working close to the area of application hand mix RonaFloor Repair 1 Hour 6-50mm by dry mixing the powder and sand and adding sufficient gauging liquid to provide the desired consistency mortar
5. apply the mixed RonaFloor Repair 1 Hour 6-50mm to the wet/tacky primer and place component in to wet mortar. Compact ensuring contact. Remove excess mortar. Avoid staining face of component. Bed depth is typically 10mm but may be between 6mm and 50mm.
6. protect the surface until hard (typically 1 hour at 20°C)
7. if required rake out joints and repoint

### Working Temperatures

RonaFloor Repair 1 Hour can be used in most weather conditions and in a wide temperature range, from -10°C to 25°C and above. At high ambient temperature the working time of the mix will be considerably reduced; it will be increased at lower temperatures. Care must be taken when using RonaFloor Repair 1 Hour in extreme temperatures to ensure that the water used for dampening, and the primer, does not freeze or dry/evaporate on contact with the substrate. In very low temperatures for additional speed warm water or warmed gauging liquid may be used for mixing. Machine mixing may also be possible; consult Ronacrete Technical Department.

### Technology

It is important to note that RonaFloor Repair 1 Hour is designed for small volume application where rapid strength gain is of prime importance. The hydration of RonaFloor Repair 1 Hour creates an exotherm; this allows the material to be used at low temperatures. This reaction is controlled in small volume mixes although heat and shrinkage cracking can occur when using larger volumes. For bonded applications such as minor cracking is not detrimental to the performance of the material.

### Substrate Testing

It is important when carrying out floor repairs with RonaFloor Repair 1 Hour that the substrate is suitably prepared with aggregate exposed and that the substrate is sufficiently strong to receive a high strength repair. The recommendations given in BS8204 Part 3 1993 refer to the testing of substrates before applying mortars and fine concretes and these recommendations can be followed for repairs in strategic locations.

### Packaging

RonaFloor Repair 1 Hour is supplied in 24kg packs. RonaFloor Repair 1 Hour 6-50mm and RonaFloor Repair 1 Hour 25mm are supplied 25kg packs.

### Shelf Life and Storage

RonaFloor Repair 1 Hour should be stored unopened between 5°C and 25°C in dry warehouse conditions and out of direct sunlight. In these conditions shelf life is approximately 9 months.

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### Health and Safety

RonaFloor Repair 1 Hour 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.

### 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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Ronacrete Ltd, Flex Meadow, Harlow Essex, CM19 5TD, UK	
13 0836-CPR-13/F046	
BS EN 1504-3 Concrete Repair	
<b>Product:</b>	<b>RonaFloor Repair 1 Hour 2-6mm RonaFloor Repair 1 Hour 6-50mm RonaFloor Repair 1 Hour 25mm</b>
	<b>Compressive Strength: <math>\geq 25</math> MPa Chloride ion Content: <math>\leq 0.05\%</math> Bond Strength Test: <math>\geq 1.5</math> MPa Rest. Shrinkage/Expansion: <math>\geq 1.5</math> MPa Carbonation Resistance: <math>dk \leq</math> control concrete (MC 0.45) Reaction to Fire: A2-s1,d0 Dangerous Substances: Refer to Safety Data Sheet</b>

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.