

# RonaFloor Repair 1 Hour (formerly Monoset RX, RXT and Concrete RX)

## Ultra-rapid floor repair and bedding mortars

### FEATURES

- high early strength mortar and concrete
- will take heavy traffic after 1 hour
- for floor screeds, floor repairs
- bedding mortar for bricks, blocks, paviments
- selected grades are waterproof

### SPECIFICATION CLAUSES

#### 1. Floor repairs 2mm-6mm thick

The floor repair shall be RonaFloor Repair 1 Hour 2-6mm by Ronacrete Ltd, telephone +44 (0) 1279 638700. The primer is to be Ronacrete Rapid Primer. All materials to be applied in accordance with manufacturers instructions.

#### 2. Floor repairs 6mm-50mm thick

The floor repair shall be RonaFloor Repair 1 Hour 6-50mm by Ronacrete Ltd, telephone +44 (0) 1279 638700. The primer is to be Ronacrete Rapid Primer. All materials to be applied in accordance with manufacturers instructions.

#### 3. Floor repairs 26mm-150mm thick

The floor repair shall be RonaFloor Repair 1 Hour 25mm by Ronacrete Ltd, telephone +44 (0) 1279 638700. The primer is to be Ronacrete Rapid Primer. All materials to be applied in accordance with manufacturers instructions.

#### 4. Bedding kerbs and paviments

The bedding mortar shall be RonaFloor Repair 1 Hour 6-50mm by Ronacrete Ltd, telephone +44 (0) 1279 638700. The primer is to be Ronacrete Rapid Primer. All materials to be applied in accordance with manufacturers instructions.

### SUMMARY APPLICATION PROCEDURE

#### Floor repairs (see Specification Clause 1 to 3 above)

1. prepare surface
2. apply Ronacrete Rapid Primer
3. mix and apply the appropriate grade of RonaFloor Repair 1 Hour
4. optionally apply epoxy floor coating (contact Technical Department)
5. traffic

#### Bedding mortar (see Specification Clause 4 above)

1. prepare surface
2. mix and apply Ronacrete Rapid Primer to substrate and back of component
3. mix and apply RonaFloor Repair 1 Hour 6-50mm
4. bed component in wet mortar
5. protect

### 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.

### Applications for RonaFloor Repair 1 Hour

- bedding and securing kerbs
- emergency floor repairs
- concrete carriageway repairs

- securing copings
- filling potholes
- casting rapid set concrete
- airport runway hardstanding repairs

### 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.

### Advantages

- ultra-rapid strength gain
- traffic within 1-2 hours of mixing
- low temperature working down to -10°C
- prepacked for ease of use and site control
- high strengths within hours
- thin section applications down to 2mm depending on grade
- established track record since 1981
- economical and durable

### 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 damping, 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.

### Health & 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.

### A. Working Instructions - 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

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7. primer dries, scarify by close cross hatch scratching and reapply 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)

### **B. Working Instructions - 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.
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

### **RonaFloor Repair 1 Hour 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 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.

### **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.

### **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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APPLICATION	GRADE	MIN/MAX DEPTH PER LAYER	DESCRIPTION/SUPPLY	SEE WORKING INSTRUCTIONS
repairs to floors, hard standings; 2mm to 6mm deep	RonaFloor Repair 1 Hour 2-6mm; bond with Ronacrete Rapid Primer	2mm/6mm	light to medium duty areas; supplied ready to use with gauging liquid	A
repairs to floors, hard standings, fill potholes; 6mm to 50mm deep	RonaFloor Repair 1 Hour 6-50mm; bond with Ronacrete Rapid Primer	6mm/50mm	medium duty areas; supplied ready to use with gauging liquid	A
repairs to floors, hard standings, fill potholes; 26mm to 150mm deep	RonaFloor Repair 1 Hour 25mm; bond with Ronacrete Rapid Primer	25mm/150mm	heavy duty areas; supplied ready to use with gauging liquid	A
bedding mortar for kerbs, bricks and copings, typical bed depth 10mm	RonaFloor Repair 1 Hour 6-50mm; bond with Ronacrete Rapid Primer	6mm/50mm	supplied ready to use with gauging liquid	B

YIELDS			
	Pack Size	Yield (approx)	Coverage (approx)
RonaFloor Repair 1 Hour 25mm	25kg	106 packs per m <sup>3</sup>	0.4m <sup>2</sup> @ 25mm
RonaFloor Repair 1 Hour 6-50mm	25kg	100 packs per m <sup>3</sup>	1m <sup>2</sup> @ 11mm
RonaFloor Repair 1 Hour 2-6mm	24kg	72 packs per m <sup>3</sup>	1.6m <sup>2</sup> @ 5mm
Ronacrete Rapid Primer	2kg, 10kg	3-4m <sup>2</sup> , 15-20m <sup>2</sup>	-

PROPERTIES OF CURED MORTARS									
RESULTS ARE IN N/MM <sup>2</sup> ; 100mm CUBES TESTED AT 20° C. SITE MIXED CUBES WILL PRODUCE LOWER STRENGTHS	DESIGNED FOR WEARING SURFACE	MIN DEPTH PER LAYER	MAX DEPTH PER LAYER	1 HOUR COMPRESSIVE STRENGTH	2 HOUR COMPRESSIVE STRENGTH	24 HOUR COMPRESSIVE STRENGTH	7 DAY COMPRESSIVE STRENGTH	28 DAY COMPRESSIVE STRENGTH	WATERPROOF FROSTPROOF
RonaFloor Repair 1 Hour 25mm	yes	25mm	150mm	17	21	29	42	54	yes
RonaFloor Repair 1 Hour 6-50mm	yes	6mm	50mm	12	15	28	40	53	yes
RonaFloor Repair 1 Hour 2-6mm	yes	2mm	6mm	8	16	26	38	51	yes

FLOOR REPAIR GRADES SELECTION TABLE			
depth	product	min. depth per layer	max. depth per layer
2-6mm	RonaFloor Repair 1 Hour 2-6mm	2mm	6mm
6mm-50mm	RonaFloor Repair 1 Hour 6-50mm	6mm	50mm
25mm-150mm	RonaFloor Repair 1 Hour 25mm	25mm	150mm

RONL 014 Issue 7 23rd May 2011

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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