



**BONDIT MORTAR RAPIDO RDH 50**

**Rapid Dry and Hardening Repair Mortar [Polymer Modified]**

# Nexgen Construction Supplements



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# BONDIT MORTAR RAPIDO RDH 50

## Rapid Dry and Hardening Repair Mortar [Polymer Modified]

### PRODUCT DESCRIPTION

Bondit Mortar Rapido RDH is a pre-blended, ready to use non-shrink, non-metallic Portland cement-based thixotropic mortar consisting of high quality & performance synthetic polymers, specialty additives used for the protection against corrosion of reinforcing steel, for concrete superficial protection. It contains no calcium chloride. It requires only the addition of water at the job site.

### FEATURES & BENEFITS

- Wide range of use & application Thickness
- Can be bulked out with Sand or Aggregates to extend the application Thickness
- Ready for overcoating after 90 minutes
- Produces Thixotropic Mortar
- Self-Curing Property eliminates moisture curing
- Easy to Smooth with Float or Sponge
- Non-Metallic, Non-Staining & Chloride Free
- Water vapor permeable
- Exhibits Excellent Mechanical Properties & Bonding Strength
- Meets National & International Standards

### WHERE TO USE

Rapid setting and rapid hardening mortar for reparation of concrete degraded structures for protection against corrosion of reinforcing steel, for concrete superficial protection

- Repairing and finishing the concrete surfaces,
- Repairing and plastering exposed concrete,
- Repairing and plastering ceiling and walls,
- Providing smooth, sound and waterproof layer under paintings, on concrete surfaces under epoxy and PU coatings in industrial plants and under waterproofing systems.

### STANDARD COMPLIANCE

EN 1504-3 CLASS R4, Repair and Structural Recovery of Concrete  
EN 1504-2, Protection of Concrete  
EN 1504-7 Protection against Corrosion of Steel Reinforcement of Concrete.

### YIELD/COVERAGE/WATER

**Water:** 2.5litre – 2.75litre per 11kg Bag  
**Coverage:** 7m<sup>2</sup> at 1mm Thickness per 11kg Bag  
**Yield:** 7litre of Mortar

NOTE: Yield and water are approximate. The yield above does not allow for waste and spillage.

### PACKAGING & COLOUR

11kg & Grey

### SHELF LIFE

Twelve months from the date of manufacture when stored in original, unopened package and under normal warehouse conditions.

### APPLICATION INSTRUCTIONS

#### Surface and Substrate preparation:

Before starting, all substrates must be clean, dry and strong enough to support the weight of the floor composition. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion. Smooth surfaces should be abraded with a wire brush or mechanically in order to remove contamination and improve the key for the mortar. Absorbent surfaces should be dampened with clean water prior to applying the mortar. Direct to earth subfloors must have an effective Damp Proof Membrane.

#### Priming:

Priming is not usually required prior to applying the Mortar Rapido RDH 50. Absorbent surfaces should be dampened with clean water. Very Absorbent & Non-Absorbent surfaces should be primed by using an appropriate primer. Please consult our advisory service.

## Mixing:

### STANDARD MIX (UN-FILLED):

Mix by adding powder to water, approximately 2.5 - 2.75litre of water to 11kg of Mortar Rapido RDH 50, alternatively mix 1-part water to 3 parts powder by volume. Mix ideally with an electric paddle and mix to a smooth, lump free consistency. When mixed with 2.5litre of water, the mortar will have more control making it suitable for vertical applications. When mixed with the higher water content, the mortar becomes wetter and slightly flowable, ideal for certain floor applications.

### FILLED MIX:

**Application Thickness: >5mm to <20mm:** Add 0 - 5mm sharp sand/aggregate of 1/3 volume to the standard powder.

**Application Thickness: >20mm:** Add 10mm single size aggregate of equal volume to the standard powder.

*Please note, the water additions may vary slightly depending on the aggregate used. Mix ideally with an electric paddle. The Filled Mix should be used only when applying to depths as specified and for increased economy.*

### APPLICATION:

The mixed Mortar Rapido RDH 50 should be used immediately. Trowel the mortar onto the prepared surface and spread to the required thickness using a steel trowel. The mortar can be applied slightly proud and any excess can be removed after 15 – 20 minutes. For a smoother finish, the mortar can be improved by wetting and smoothing the surface before the mortar has fully set, typically after 15 - 20 minutes. When applying the Filled Mix and to improve the surface finish, we recommend applying the mortar slightly below the required level and allow to set. Once the initial coat has hardened, another thin coat of unfilled mortar can be applied if necessary, to improve the surface finish. If using Mortar Rapido RDH 50 as a final wearing surface a suitable covering/coating is required.

## TECHNICAL DATA

TYPICAL PROPERTIES	
Appearance	Grey Colour (Grey When Mixed)
Dry Mortar Bulk Density	1350-1400kg/m <sup>3</sup>
Fresh Wet Mortar Bulk Density	1800 – 1850kg/m <sup>3</sup>
Initial Setting Time	15 minutes
Final Setting Time	60 minutes
Pot Life	15-20 minutes @20°C

COMPRESSIVE STRENGTH (EN 12190)	
1 Day	>30 MPa
7 Days	>40 MPa
28 Days	>50 MPa

TENSILE & FLEXURAL STRENGTH (EN 196/1)	
1 Day	>6 MPa
7 Days	>9 MPa
28 Days	>12 MPa

PROPERTY	TEST METHOD	TYPICAL VALUES
Bond Strength	EN 1542	≥2 MPa
Carbonation Resistance	EN 13295	Pass
Modulus of Elasticity	EN 13412	≥20 GPa
Capillary Absorption	EN 13057	< 0,5 kg*m <sup>-2</sup> *h <sup>-0,5</sup>
Abrasion Resistance	EN ISO 5470-1	≤ 3000 mg
Impact Resistance	EN ISO 6272-1	Class III ≥ 20 Nm
Protection Against Corrosion	EN 15183	No Corrosion

*PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.*

## PRECAUTIONS

- Use only when the product, air, and surface temperature are above 5°C for a minimum of 24 hours,
- Do not add accelerators, retarders, plasticizer or other additives,
- Do not mix more Mortar Rapido RDH 50 than can be placed in 15-20 minutes. Lower/High Temperature will extend/reduce the working time,
- Discard any Mortar Rapido RDH 50 that has stiffened or is unworkable.

## CLEAN UP

Wash all tools and equipment with fresh, clean water immediately after use. Any hardened material can only be removed mechanically.

## TECHNICAL SUPPORT

Technical information and guidance regarding BONDIT range of admixtures, repairs and bonding, water proofing systems, epoxy industrial flooring systems etc, will be available from the technical services department, BONDIT CONSTRUCTION CHEMICAL PVT LTD.

## HEALTH AND SAFETY

Avoid contact with skin. Protective gloves and clothing are recommended when mixing or using this product. Please refer to full MSDS (material safety data sheet) for this product, which is available from Bondit upon request.

### **CAUTION!**



### **HAZARD STATEMENTS:**

Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause respiratory irritation.

### **PRECAUTIONARY STATEMENTS:**

Wear protective gloves/protective clothing/eye protection/face protection/respiratory protection. Avoid release to the environment.  
IF SWALLOWED: Rinse mouth with plenty of water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
IF ON SKIN (OR HAIR): Remove all contaminated clothing immediately. Rinse skin with water/ shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a poison centre/doctor if you feel unwell.

**STORAGE:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**DISPOSAL:** Dispose of contents and container in accordance with all local, regional, national and international regulations.

**SDS is available from [www.bondit.in](http://www.bondit.in)**

## IMPORTANT NOTE

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BONDIT products undergo high standard quality checks and every reasonable precaution is taken in the manufacture of all products. BONDIT continuously strive to ensure the products, recommendations, specifications & information given is reliable, correct and accurate. No specific guarantee can be assured as product performance depends not only on quality but also on many other factors which are not under our control. The customer should make his own trials to determine the compatibility of the product for his own purpose. All products are sold subject to our standard terms and conditions of sale.

## BONDIT CONSTRUCTION CHEMICAL PVT LTD.

Office No. 3 & 4, Sai Prithvi Arcade, 1st Floor, Above Bata Showroom  
Main Road, Madhapur, Hyderabad, Telangana



Customer: 07997 109 109



service@bondit.in