



TECHNICAL DATA SHEET

1.6 MAINTENANCE AND REPAIR



► Rhona M-322

R4 Structural repair mortar
2134 / Version 5 / 26-11-2025



DESCRIPTION

RHONA M-322 is a structural repair mortar based on Portland cement, selected aggregates, special fillers, chemical additives, fibres and polymers, which provides high compatibility with the concrete to correctly repair it. Respond all the requirements established in the "GREEN BUILDING", offering the highest possible score for BREEAM and / or LEED certifications.

PROPERTIES

- It may be projected by a wet process in order to achieve a faster completion of the work.
- Resistant to abrasion
- Compensated retraction. Large surfaces can be repaired without retraction.
- Can be applied without formwork on vertical surfaces and ceilings.
- Excellent adhesion to cement and concrete.
- Low permeability. Producing excellent protection against carbon dioxide and chloride ions.
- Good protection for the metal structure of the formwork due to its alkaline nature.
- CLASSIFICATION: R4
- Suitable for repairing floors.

USES

RHONA M-322 is indicated for making permanent repairs to any type of concrete or masonry. Ideal for repair in areas where excellent thermal compatibility with the concrete is required, and to apply in areas where high resistance to chlorides and carbon dioxide is required.

TECHNICAL DATA

Appearance	Powder grey
Finish	Textured
Mixed mortar density (Kg/L)	1.9
% Mixing water	15 - 20
pH	12.5 - 13.5
Shore Hardness	87
Useful life of mixture	10 min
Setting time (20 °C)	15 min
Drying time (2 mm thickness and 20°C)	Concrete: 7 - 8 h Paint: 7 - 8 h
Resistance to compression (UNE -EN 13892-2:2003) N/mm2	Class R4
Determination of chloride content (UNE-EN -1015) %	0.05
Determination of shrinkage and expansion (UNE-EN 12617-4:2002) Mpa.	2.0
Determination of resistance to carbonation (UNE-EN 13295-2005)	Pass
Adhesion by direct traction (UNE-EN 1542) (MPa)	2.0
Maximum thickness per layer	3 - 50 mm
Usage	As plastering: 1.5 – 1.9 Kg/m2/mm thick Coverage of a 12 mm thick bar: 200 g/m linear
Ice-thaw cycles with immersion in thawing salts (EN13687-1)(MPa)	2.0
Cleaning of utensils and stains	With water before drying. If the product hardens, it can only be removed mechanically.

HOW TO APPLY

- The surface must be intact, clean, consistent and free from dust, grease, oil, micro-organisms and any other material that could affect the products correct adhesion to the surface.



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SURFACE AND AMBIENT CONDITIONS

AMBIENT TEMPERATURE:

Never apply below 5°C or above 37°C.

AMBIENT CONDITIONS:

The paint should not be applied under conditions of excessive sunlight, strong winds, or if rain is forecast.

SURFACE PREPARATION

UNPAINTED SURFACES:

Concrete:

- The perimeter of the area to be repaired must be delimited, using a disc, to a minimum depth of 10 mm. Rusted reinforcements must be completely uncovered, removing loose scale and rust deposits. For the correct cleaning of the product the use of a sand jet is recommended. If corrosion is due to the presence of chlorides, the reinforcements should be treated with pressure water jets and immediately after they should be sprayed with sand.

POSSIBLE APPLICATION SYSTEMS

FILLING AND REPAIR: The exposed reinforcements must be held firmly in order to prevent them from moving again when applying the mortar, given that this could affect the correct screeding. It must be applied manually on the prepared surface. Compact the product over the primed substrate with RHONA A-200 and around the reinforcement. It can be applied both with or without formwork. In applications on horizontal supports, maximum thicknesses of 15 mm should be applied, if greater thicknesses are desired, the use of successive layers is recommended. The material must not be used for thicknesses of less than 3mm. In the case of flaking due to excess material, the material should be completely removed and a thinner layer should be applied on the primed surface again. **FINISHES:** The finish is achieved by rendering the surface and subsequently using a metal trowel to close the pores. Other, softer trowels can be used (wood, plastic, etc.) as well as a damp sponge to achieve the desired texture.

PRIMERS:

- Rhona A-200: adhesive bond for new mortar on old. Yield: 0.1 - 0.2 kg/m². Coats: 1

FINISH RHONA M-322:

- Yield: 1.5-1.9 kg/m²/mm
- Coats:

SAFETY

Consult the current safety data sheet for safe handling (Section 8.2). Unsuitable for children. Keep out of the reach of children. Do not place painted surfaces into the mouth.

REMOVAL

Take the necessary measures to ensure waste is kept to an absolute minimum. Analyse all possible methods for reuse or recycling, in line with the local and national legislation in force. Take the necessary measures to ensure waste is kept to an absolute minimum. Analyse all possible methods for reuse or recycling. Do not pour down drains or into the environment. Dispose of the product at an authorised waste disposal site or through an authorised waste management company. Waste must be handled, stored and disposed of pursuant to current local- national legislation.

STORAGE

See storage conditions indicated in section 7.2 of the current safety data sheet. Store the containers away from high temperatures, direct exposure to the sun and frost. Maximum recommended storage time: 12 months from manufacture in fully sealed original container, indoors and at temperatures between 5° and 35° C.

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LEGAL TEXT NOTE

This information, particularly the recommendations regarding the application and end use of the product, is given in good faith, based on Pinturas Isaval's current knowledge and experience with the products when correctly stored, handled, and applied under normal conditions within their shelf life and in accordance with Pinturas Isaval's recommendations. In practice, the potential differences in materials, substrates, and actual conditions at the application site are such that no warranty of merchantability or fitness for a particular purpose, nor any obligation, may be inferred from the information in this document or from any other written recommendation or advice given. The user must conduct their own tests to verify the product's suitability for the intended use. Pinturas Isaval reserves the right to modify the properties of its products. Third-party property rights must be respected. All orders are accepted under the terms of our current General Conditions of Sale and Supply. Users must consult and use the most recent and updated version of the local Product Data Sheets, which can be sent upon request or found on the website www.isaval.es. The data provided are indicative and not legally binding, based on laboratory tests performed at 20°C and 1 atm pressure. On-site measurements may vary due to circumstances beyond our control, such as changes in environmental pressure and temperature. The reported ranges are based on historical measurements. The product must not be used for purposes other than those specified. If further clarification on product characteristics or usage is needed, users should contact PINTURAS ISAVAL S.L. staff.