CERMIREP RAPID R3

LIGHT GREY, FAST-SETTING, FIBRE-REINFORCED REPAIR MORTAR



















DESCRIPTION

Light grey, fibre-reinforced, single-component mortar containing selected speciality cements and admixed resins.

ADVANTAGES

- Excellent thixotropy
- Chloride-free, non-corrosive
- Does not affect reinforcements
- Shrinkage-compensating
- Easy to apply with a trowel
- Perfectly compatible with concrete and masonry

WHERE TO USE

For structural repairs and joining concrete elements.

- Repair of spalling
- Quick attachment of guardrail, stairs, etc.
- Rapid repair of concrete pipes, beam angles and pillars, prefabricated components
- Rapid repair of balcony cornices and parapets damaged by oxidation and steel rebars
- Filling of pre-wall and pre-slab joints.
- Facing damaged concrete with exposed and corroded rebars

HOW TO USE

Note: The following is a typical description of the application. If your site has other parameters, contact our Technical Department.











4.25 L for 25 kg

400-600 rpm.

SUITABLE SUBSTRATES

Concrete Masonry (Through stone, blocks) Cement renders

SURFACE PREPARATION

The substrate must be clean, free of grease and have any loose material removed.

Methods that achieve this may be finishing with a bush hammer, milling, hammering or any other method that is sufficiently efficient to produce a cohesive value greater than 1.5 MPa.

After preparation, moisten the substrate to its core without making it leach (mat damp).

Clear away residual water.

PREPARING THE MIXTURE

Mix 25 kg of CERMIREP RAPID R3 with a maximum of 4-4.25 L of water.

Pour 90% (3.8 L) of the water into a mixing bucket. Gradually add the powder while mixing with a mixer (400 to 600 rpm) for 3 minutes until a homogeneous consistency is achieved.

Stir again by slowly adding the remaining water until the desired consistency is achieved (never exceed the prescribed amount). For small quantities, the product can also be mixed manually with a trowel.

HOW TO APPLY THE SYSTEM

For optimal adhesion, apply a slurry using a brush. Make it up on the basis of the mortar mixed, adding water until it has the consistency of "pancake batter".

Apply the mortar using a trowel on the fresh slurry. Then add extra thickness portionwise.

In case of rework, the previous layer (fresh mortar) must be scratched.

APPLICATION CONDITIONS

Application temperature: +5°C to +30°C

Pot life: 20 minutes at 20°C Start of set: 28-35 minutes at 20°C End of set: 35-50 minutes at 20°C

COMMENTS

In hot weather or high winds, as soon as the visible surface of the mortar becomes mat, perform an effective cure by spraying clean water, covering with a damp cloth or applying a curing product. In cold weather, cover with insulation cloth made of polystyrene or another insulating material.

Protect the repair area from rain until the product is fully hardened.

CLEANING AND MAINTENANCE

The equipment must be cleaned immediately with clean water. Once cured, the product has to be removed mechanically.

COVERINGS

The cured product may remain bare or be covered:

- by ceramic coverings/natural stone: 12/24 hr drying at 20°C
- by painting: 2 to 3 days of drying depending on outdoor conditions.

TECHNICAL CHARACTERISTICS

CONSOMMATION

2 kg de poudre/m²/mm d'épaisseur.

TECHNICAL CHARACTERISTICS

Technical Characteristics		Value
Maximum particle size		0 – 0,8 mm
Powder density		1,14
Paste density		2,11
Exposure classes (EN 206-1)		X0, XC1, XC2, XC3, XC4, XF1, XF3, XD1, XD2
Compressive strength	At 2 hr	15 MPa
	at 28 days	45 MPa
Flexural strength	At 2 hr	3 MPa
	at 28 days	9 MPa
Adhesion after freeze/thaw cycles		1,5 MPa

<u>C</u> E		
CERMIREP RAPID R3 CERMIX- Rue de la Belle Croix - 62 240 DESVRES		
13 0333 - CPR - 030016		
EN 1504-3 Concrete repair product for structural repair CC mortar		
Compression strength	Class R3 (≥ 25 MPa)	
Chloride ion content	≤ 0,05 %	
Adhesion	≥ 1,5 MPa	
Shrinkage/expansion prevented	1,9 / 1,8 MPa (≥ 1,5 MPa)	
Carbonation strength	Satisfactory	
Modulus of elasticity	23,2 GPa	
Thermal compatibility Part 1, freeze-thaw	≥ 1,5 MPa	
Slip and slip resistance	NPD	
Coefficient of thermal expansion	NPD	
Capillary absorption	≤ 0,5 mm kg.m-² .h-0.5	
Reaction to fire	Class F	
Hazardous substances	See safety data sheet	

PACKAGING

25 kg bag – 48 bags per pallet 5 kg bag – 120 bags per pallet

STORAGE & SHELF LIFE

Can be stored for 12 months from the manufacturing date in the original, unopened packaging.

Store in a dry place at temperatures between +5°C and +35°C.

SAFETY INSTRUCTIONS

- EMISSIONS IN INDOOR AIR (1): Information on the level of volatile substances emitted in air indoors, presenting a toxicity risk by inhalation, on a classification scale ranging from A+ (very low emissions) to C (high emissions).
- Consult the safety data sheet at www.quickfds.fr or ask CERMIX France for it.
- Always wear personal protective equipment that meets current guidelines and regulations.
- Dispose of the contents and container in accordance with local/regional/national/international regulations.

We reserve the right to update this technical document. It is the user's responsibility to always check whether there is a more recent version available at our website, www.cermix.com. It is the responsibility of the person using the products to ensure that the products are compatible and suitable for the planned use. Prior tests may be carried out to confirm that products behave as expected.

