



Redirep 25 RSF

Fast setting, shrinkage compensated and fibre reinforced repair mortar



PRODUCT DESCRIPTION

Redirep 25 RSF is a dry mortar for repair of concrete substrates. It has very good bonding properties. The mortar has rapid setting times and low shrinkage.

Redirep 25 RSF consists of special cement and well graded dry sand, together with additives to improve workability and adhesive bonding.

Redirep RSF contains no components, neither in the sand nor cement, which can cause alkali-aggregate reactions.

AREA OF USE

For all types of repair work on concrete substrates. **Redirep 25 RSF** is particularly suitable where there is a need to minimise crack development and/or where surfaces need to be finished quickly.

Redirep 25 RSF has the following characteristics:

- Sets rapidly: Low risk of plastic shrinkage.
- Shrinkage compensated: Low drying shrinkage.
- Hardens rapidly: Makes rapid progress possible.
- Good resistance to marine environment.

Redirep 25 RSF meets the requirements defined by EN 1504-9 (*"Products and systems for protection and repair of concrete structures - Definitions and requirements, quality control and evaluation of conformity. General principles for the use of products and systems"*). And the minimum requirements claimed by 1504-3 (*"Structural and non-structural repair"*) for mortars of class R2.

INSTRUCTIONS FOR USE

Preparation

All dust and loose particles must be removed from surfaces. Absorbent substrates must be pre-wetted. Free water should not be present on the surface when work begins.

Mixing

Pour the amount of water specified into a container, then add **Redirep** mortar and mix mechanically for 2 – 3 minutes. Allow the mixture to rest for 2 minutes before mixing again.

Mix until a homogenous and lump free mixture is obtained.

Remember that too much water will result in a weaker mortar with more shrinkage.

Application

A bonding enhancer (**Redisit** or **Mapepoxy L**) can be applied to the substrate to ensure good adhesive bonding between the substrate and the new mortar. Apply **Redirep 25 RSF** wet on wet with the bonding enhancer.

Apply the mortar using spraying equipment or by hand using suitable mason's tools. Thickness 3-40 mm per layer.

NB!

The mortar has a pot life of approx. 20 minutes at +20°C and approx. 35 minutes at +10°C.

Do not mix more mortar than can be used within these times.

Protect the fresh mortar from quick evaporation which could cause plastic shrinkage cracks.

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION

Strength class according to EN 1504-3	R2
Type:	PCC
Appearance:	powder
Colour:	grey
Maximum aggregate size (mm):	1.0
Dry solid content (%):	100
Chloride ions content - minimum requirements < 0,05 % - according to EN 1015-17 (%):	≤ 0.05
EMICODE:	EC1 Plus - very low emissions

PRODUCT APPLICATION DATA (at + 20 °C -50 % R.F)

Colour of mixture:	grey
Mixing ratio:	100 parts Redirep 25 RSF with 13.2-14.2 parts water (approx. 3.3-3.55 l per. 25 kg sack)
Consistency of mixture:	thixotropic
Density (g/cm ³):	2.05
pH of mixture:	> 12
Application temperature range:	from +5°C til +35°C
Pot life of mixture:	Approx. 20 min

FINAL PERFORMANCE (13,2 % blending water):

Performance characteristics	Test method	Minimum requirements according to EN 1504-3 for R2 class mortar	Product performance
Compressive strength (N/mm ²):	EN 12190	≥ 25 (after 28 days)	> 8 (after 1 day) > 12 (after 7 days) > 25 (after 28 days)
Flexural strength (N/mm ²):	EN 196-1	none	> 3 (after 1 day) > 4 (after 7 days) > 5 (after 28 days)
Modulus of elasticity in compression (GPa):	EN 13412	no requirement	approx. 16 (after 28 days)
Bond strength to concrete (MC 0,40 type substrate w/c ratio= 40 according to EN 1766 (N/mm ²):	EN 1542	≥ 0.8 (after 28 days)	> 0.8 (after 28 days)
Capillary absorption (kg/m ² · h ^{0,5}):	EN 13057	≤ 0.5	< 0.5
Thermal compability fo freeze thaw cycles with deicing salts measured as according to EN 1542 (N/mm ²):	EN 13687-1	≥ 0.8 (after 50 cycles)	> 0.8
Reaction to fire:	Euroclass	Value declared by manufacturer	A1

CLEANING

Fresh mortar can be removed from tools and equipment with water. Hardened mortar can only be removed mechanically.

CONSUMPTION

Approx. 2 kg/m² mm of thickness.

PACKAGING

Redirep 25 RSF is supplied in 25 kg sacks.

STORAGE

Redirep 25 RSF can be stored up to 12 month from production date in unopened, original packaging in dry conditions. Opened bags should be used immediately.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

PRODUCT FOR PROFFESIONAL USE.

NOTE

The technical recommendations and details in this product description represent our current knowledge and experience of the products. All the above information should be treated as a guide and full consideration should be given. The user is responsible for ensuring that the product is suitable for the use intended. The manufacturer cannot be held liable for use of the product for purposes for which it is not recommended or in the event of accidental use.

Please refer to the latest updated version of the technical data sheet on our website, at www.mapei.no

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project- related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.no ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.

All relevant references for the product are available upon request and from www.mapei.no

**Redirep
25 RSF**



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