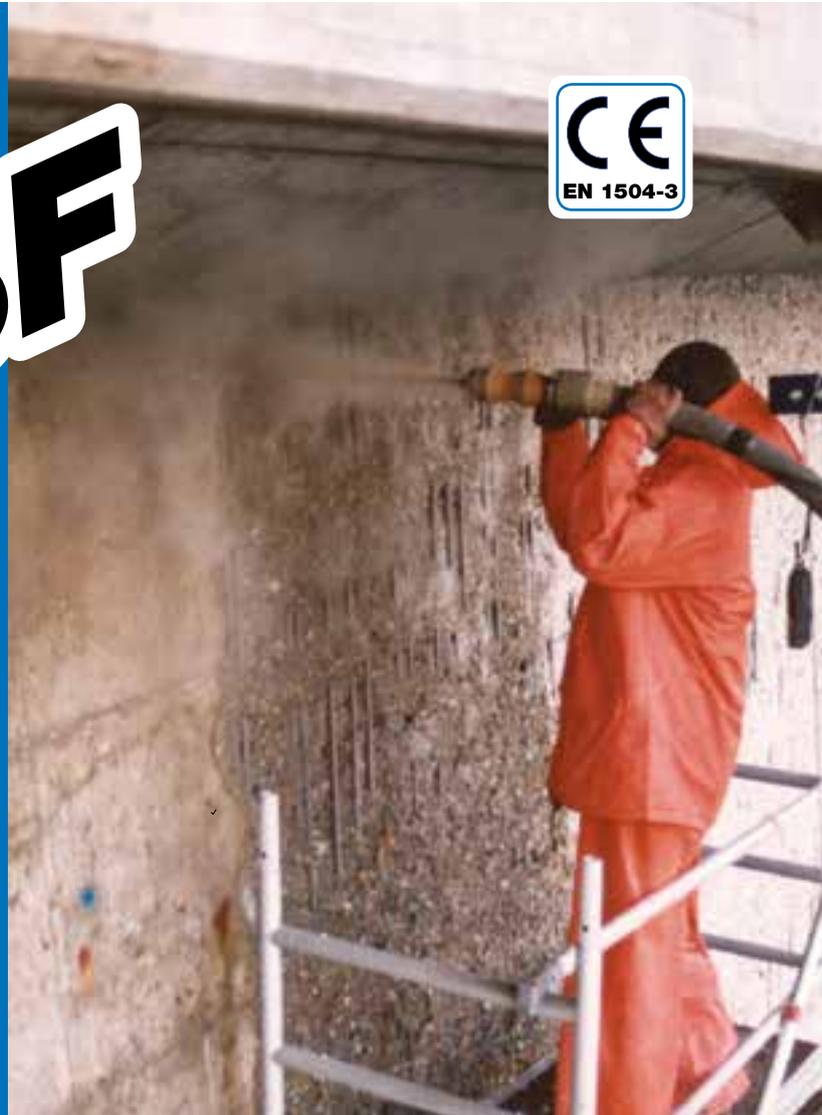




DS-RSF

Shrinkage compensated repair mortar for dry shot application



AREA OF USE

DS-RSF is specially designed for repair of all types of concrete structures: docks, bridges, dams etc. Also suitable for rock reinforcement and renovation for balconies, for example.

Examples of use:

- Repair of power plant, dams, canals, tunnels etc.
- Repair and reinforcement of structural building sections
- Repair of damaged concrete on bridges
- Renovation of balconies and façades.

TECHNICAL DATA

DS-RSF is a ready-mixed special mortar designed for dry shot application. **DS RSF** is shrinkage compensated and contains cement, silica, additives and well-graded sand up to 4 mm. The mortar's composition means there is little rebound and low formation of dust.

DS-RSF is in accordance with the principles described in EN 1504-9 «*Products and systems for the protection and repair of concrete structures: Definitions, requirements, quality control and evaluation of conformity. General principles for the use*», and the requirements described in EN 1504-3 «*Repair mortar for structural and non-structural repair, Class R4*».

RECOMMENDATIONS

Do not apply **DS-RSF** to smooth surfaces; scrub and clean the surface first.

Do not add extra cement or additives to **DS-RSF**.

GUIDELINES FOR USE

Pretreatment

Clean the surface thoroughly; all loose and poor concrete must be removed. The surface must be free of dust, oil, grease and other impurities. Wet the surface with plain water so that it is only slightly porous. The temperature of the surface must be $> +5^{\circ}\text{C}$. If there are any water leaks, these must be sealed before spraying, for example with **Rapp**.

APPLICATION

DS-RSF is applied using suitable dry-spraying equipment. Start by spraying into a container until adjusted to the correct water quantity. Always start spraying from the bottom. The surface can be drawn off, scraped and smoothed if a smoother surface finish is required. If a thickness of $> 50\text{ mm}$ is required, it is recommended that this is done in several layers.

Post-treatment

The freshly-sprayed surface must be immediately protected from drying out, by watering, covering with plastic or by the application of **Mapecure 1** curing membrane.

If the surface is to be painted or have some other form of surface treatment, the choice of curing membrane must be suitable for this.

DS-RSF

CLEANING

Clean tools with water, while the mortar is fresh. Remove hardened material mechanically.

CONSUMPTION

Approx. 20 kg/m² per cm thickness (add approximately 5% for rebound).

PACKAGING

DS-RSF is supplied in 25 kg sacks and 1200 kg big bags.

STORAGE

Stored in a dry place in sealed original packaging, **DS-RSF** can be kept for a minimum of 12 months.

The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

DS-RSF is an irritant and contains cement that when in contact with sweat or other body fluids causes an irritant alkaline reaction or allergic reaction for those predisposed. May cause respiratory irritation, avoid breathing dust. May cause serious eye damage. In case of contact with eyes wash immediately with plenty of water for several minutes and seek medical attention. The use of protective gloves, protective clothing, face protection and safety goggles is recommended and normal precautions for using chemicals should be taken.

For further and complete information about the safe use of our product please refer to the latest version of our material safety data sheet.

PRODUCT FOR PROFESSIONAL USE

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above - information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the technical data sheet, available from our web site www.mapei.no

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

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION

Strength class according to EN 1504-3:	R4
Type:	CC
Consistency:	powder
Colour:	grey
Maximum aggregate size (mm):	4,0
Dry solids content (%):	100
Chloride ions content – minimum requirements ≤ 0.05 % - according to EN 1015-17 (%):	≤ 0,05

PRODUCT APPLICATION DATA (at +20°C-50%RH)

Colour of mixture:	grey
Mixing ratio:	approx. 13% water. Adjusted in nozzle to correct consistency
Consistency of mixture:	cohesive
Density of mixture (kg/m ³):	approx. 2 200
pH of mixture:	> 12
Application temperature range:	from +5°C to +35°C

FINAL PERFORMANCE (13.5 % blending water)

Performance characteristics	Test method	Minimum requirements according to EN 1504-3 for R4 class mortar	Product performance
Compressive strength (MPa):	EN 12190	≥ 45 (after 28 days)	> 45 (after 28 days)
Flexural strength (MPa):	EN 196/1	no requirement	> 3 (after 1 days) > 5 (after 7 days) > 8 (after 28 days)
Carbonation resistance:	EN 13295	D _v ≤ reference (MC(0,45))	pass
Modulus of elasticity (GPa):	EN 13412	≥ 20	23 (after 28 days)
Bond strength to concrete g (MC 0,40,v/c = 0,40) according to EN 1766 (MPa):	EN 1542	≥ 2,0 (after 28 days)	> 2,0 (after 28 days)
Capillary absorption (kg/m ² ·h ^{0,5}):	EN 13057	≤ 0,5	0,36
Fire resistance:	Euroclass	value declared by manufacturer	A1

DS-RSF



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