

REPIFIX REPAIR WRM 519

**FIBRE-REINFORCED REPAIR MORTAR
PROTECTION AGAINST CORROSION**

PROTECTION AGAINST CHLORIDE ATTACK AND WATER

RESISTANCE TO CARBONATION

SHRINKAGE-COMPENSATION / STRONG ADHESION

RESISTANCE TO EXTREME TEMPERATURE CHANGES



PACKAGING

5kg (plastic bag) and 25kg (paper bag)



CONSUMPTION

17 - 18 kg/m²/cm application thickness

APPLICATION TEMPERATURE

Between 5 and 35°C.

SUBSTRATES

New and existing surfaces of concrete and cementitious mortar.

SUITABILITY

Interior and exterior surfaces.



HUE

Grey



STORAGE

At sealed package for up to 12 months from the date of production, in areas protected from moisture, frost and sunlight.



DESCRIPTION

REPIFIX REPAIR WRM 519 is a fiber-reinforced, thixotropic, cement-based, one component repairing mortar of high strength. It consists of cement, quartz sand, resins and special improving admixtures. Its special composition protects the reinforcement from corrosion and restores the passivity of concrete. It is non-shrinking and has excellent compatibility with old concrete, while it provides resistance to frost and moisture. After mixing with water, a homogeneous cementitious slurry of high workability is obtained, which can be applied with a trowel or steel spatula, even in greater thicknesses, directly on the surface to be repaired (internal/external). It is classified as a repairing mortar for concrete PCC R3, according to the standard EN 1504-3.

ADVANTAGES / CHARACTERISTICS

- Resistance to carbonation.
- Protection against chloride attack.
- Protection against water penetration.
- Shrinkage-compensation.
- Resistance to weathering – thermal cycles freeze-thaw
- Strong adhesion to the substrate.
- Greater thickness application.
- High mechanical strength.
- Excellent workability.
- Produced with quartz sand.

- Resistance to moisture
- Resistance to abrasion.

APPLICATION FIELD

REPIFIX REPAIR WRM 519 is suitable for:

- Structural repairs and reinforcements.
- Restoration work on buildings and civil engineering projects.
- Protection of reinforcement against oxidation and corrosion in defected or deteriorated concrete.
- Repair of floors subjected to high loads (industrial floors, shopping centers etc.)
- Filling of cavities, in the edges of columns and beams, filling of cracks, groove formation, as well as creation or repair/filling of existing joints.
- Repair of stairways, parapets, prefabricated and other concrete elements.
- Repair of defects prior to the application of waterproofing.

SUBSTRATE PREPARATION

Firstly, make sure that the application surface is stable, clean from loose particles and corroded or carbonated parts of concrete. Use a hammer, chisel or a sand blaster to remove these particles until a completely smooth surface is visible. In case of existing reinforcement, this needs to be exposed peripherally in order for the material to penetrate. Prior to the application roughen the concrete

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surfaces that will come in contact with the product. Remove all residues with water under pressure and remove any excess water. It is recommended to pre-coat the substrate and the metallic reinforcement with the primer WRM 510 before the application of the product. The substrate must be wetted to saturation.

APPLICATION TOOL - TOOL CLEANING

The application of **REPIFiX REPAIR WRM 519** is done by trowel or steel spatula.

Immediately after use, the tools are cleaned with plenty of water. Do not dispose of washing waste water into the groundwater.

APPLICATION

- 1 In a clean container add 4,6-4,75 liters of clean water and gradually empty the content of the bag of **REPIFiX REPAIR WRM 519** (25 kg) while mixing continuously, in order to produce a homogenous mass of mortar.
- 2 Leave the mixture to cure for 5 min and mix again briefly. It is also recommended to periodically mix the mixture for as long as the repair last. The workable time of the product is 60 minutes. After the preparation of the mixture, the additional addition of water to correct the workability of the mortar is prohibited. This shall lead to a decrease of resistances and to the increase of its shrinkage. The thickness of the mortar can reach 0,5 – 4 cm per application layer.
- 3 To obtain uniform strengths and to avoid cracks the final surface must be retained wet for the first 2 days following the application and rapid drying must be prevented by way of a suitable wet cover. Special care must be taken during the summer months, and for surfaces exposed to strong sun.
- 4 The product must be applied when the ambient temperature is between 5°C and 35°C and not under rain. When the temperature is high, the strength develops faster, while the workability of the material decreases. At low temperatures, the strength development is delayed. The wooden casts must be well saturated but without forming water pools.

NOT RECOMMENDED

The application of **REPIFiX REPAIR WRM 519** is not allowed:

- When there is a frost forecast for the 24 hours following the application of the product.
- Under wet conditions (e.g., rain).
- On substrates directly exposed to intense solar radiation or on warm substrates

PRECAUTIONS

For information on the safe use, storage and disposal of the product, read the information on the label and the most recent Material Safety Data Sheet (MSDS) of the product. The product's Material Safety Data Sheet (MSDS) is available to professionals upon request.

REPIFiX REPAIR WRM 519 contains cement and reacts with water to produce an alkaline solution. For this reason, protect your eyes and skin. In case of contact rinse with plenty of water. In case of contact with eyes seek medical advice immediately. Read the information on the label and in the product's Technical Brochure before use. Wear appropriate protective clothing and gloves. The product's Safety Sheet is available to professionals upon request. The product must be stored away from children.

Excess waste should not be disposed of with the household waste. Advice should be sought from local authorities on the disposal and collection of waste.

[Poisons Information Call Center 210 77.93.777](tel:2107793777)

The technical information and instructions contained in the present brochure and referring to the application and end use of Thrakon products are based on the up to now know-how and experience of the Company with regards to the products and are provided in good faith as long as such products are stored, used and applied as per Thrakon recommendations. Due to the inability, on our part, to directly inspect the conditions prevailing at the worksite as well as the application procedures of the product, the Company does not provide any guarantee with regards to the adequacy of its products for specific purpose while the Company shall not bear any legal responsibility based on the information stated in the present brochure or any other written, oral, or otherwise provided recommendations and instructions. The users of the products are advised to perform a limited surface testing of the products adequacy for the eventual application and use intentions. Thrakon reserves the right to modify the features of its products without prior notification. All orders shall be approved only following acceptance of the above and under the eventual Commercial Policy terms of the Company. The issuance of the present brochure voids any prior version..

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TECHNICAL CHARACTERISTICS	UNITS	STANDARD	VALUES / CHARACTERISTICS
Appearance			Dry powder with fibers
Color			Grey
Reaction to fire	EUROCLASS	EN 13501-1	Class A1
Maximum application thickness (for localized repairs in one layer)	(cm)		0,5 - 4
Temperature resistance	(°C)		-30 to 90
Maximum grain size	(mm)		2.5
Workable time	(min)	EN 1015-9	60
Dry bulk density	(kg/L)	EN 1097-3	1.70 ± 0.10
Compressive strength (28 days)	(N/mm ²)	EN 12190	≥ 25
Flexural strength (28 days)	(N/mm ²)	EN 12190	≥ 6
Modulus of elasticity	(GPa)	EN 13412	≥ 15
Resistance to carbonation	(Pass / Fails)	EN 13295	Pass
Content in chlorides	(%)	EN 1015-17	≤ 0,05
Thermal compatibility – part 1, freeze-thaw	(MPa)	EN 13687-1	≥ 1.5
Adhesion to substrate	(MPa)	EN 1542	≥ 1.5
Capillary water absorption	(kg·m ⁻² ·h ^{-0.5})	EN 13057	≤ 0.5

Note: The measurements were taken in laboratory environment under a temperature of +23°C, Relative humidity 50 % and without ventilation. It is possible for them to vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation, absorbability of the substrate.

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