

# REPI FIX

## REPIFIX PROTECT WRM 510

Anticorrosive primer for reinforcement elements  
and bonding agent.

REPIFIX PROTECT WRM 510 is a material suitable for the application as a corrosion protection coating on iron reinforcement and the priming of concrete before the application of the repairing materials. REPIFIX PROTECT WRM 510 is a one-component product and requires only water for its preparation. After mixing with water, a liquid paste, is produced, which is easy to apply using a brush both on metallic surfaces and on concrete surfaces. It is a non-shrinkable material with optimum cohesion with the steel reinforcement and the concrete. It consists of special specification cement, quartz aggregates with high silicone dioxide content and of chosen granulometry, resins and special admixtures.

### Advantages:

- Excellent anti-corrosion protection of steel reinforcement
- Strong adhesion to the substrate
- Optimum protection against water penetration
- Optimum protection against chlorides
- Zero shrinkage
- Excellent strengths
- Optimum workability
- It is produced with quartz sand
- Resistance to ageing
- Resistance to oils and solvents



## TECHNICAL CHARACTERISTICS



### Packaging:

- Steel container 1kg
- Plastic bag 5kg



### Application:

Suitable for the anti-corrosion protection of steel reinforcement and priming of concrete, iron and other structural elements prior to the application of repairing materials.



### Color:

Blue.



### Storage:

Stored in a dry environment at temperatures above 0° C for 12 months from the production date.



### Consumption:

- For application on reinforcement elements – 0.06-0.12 kg/linear meter.
- As a bonding layer – 2.0 kg/m<sup>2</sup> for two layers

## FIELDS OF APPLICATION

REPIFIX PROTECT WRM 510 is suitable for:

- The anti-corrosion protection of steel reinforcement.
- As a bonding layer between old and new concrete or mortar.

## SUBSTRATE PREPARATION

Remove the worn parts of the concrete until you reach a healthy substrate. Reveal the metallic reinforcement completely at the places to be repaired, in order to enable its coating with the REPIFIX PROTECT WRM 510 primer. Then clean the reinforcement from rust using a shipping hammer, brush, sand blast or pneumatic pointed chisel tool depending on the size and extent of the corrosion. If there are even concrete surfaces and repairing materials are going to be applied, you must make them rough enough with a chisel. Finally wash and clean the surfaces (reinforcement and concrete) with water under pressure. The concrete surfaces on which the REPIFIX PROTECT WRM 510 product shall be applied must be saturated and the surplus water must be removed.

## APPLICATION

In a clean container, mix 100 parts by weight of dry mortar with 24–25 parts by weight of clean water, stirring continuously until a homogeneous mortar mass is obtained. Leave the mixture to mature for 3 min and mix again briefly. During the application you must also mix gradually. After the preparation of the mixture do not add additional water to correct the workability of the mortar. This shall lead to a decrease of resistances and to the increase of its shrinkage. Make sure to produce as much mixture as you can use, depending on your time, whereas any surplus set mixture must be thrown away and new mixture must be prepared. The application of the prime coating material is performed using a hard brush aiming at the complete coating of the iron reinforcement and the concrete surfaces that will come in contact with the repairing materials, with a 1-2 mm thickness.

During application, you must make sure to remove the air pockets and not to hold any air bubbles on the concrete and the reinforcement surfaces. The prime coated surfaces must be protected from rapid evaporation and particularly during the summer months, avoid cracking, by slight wetting or by covering with a wet cloth. 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. In low temperatures, the strength development is delayed.

## CLEANING OF TOOLS AND MACHINES

Tools should be cleaned immediately after application with plenty of water .

## NOT RECOMMENDED

The application of the product is not allowed:

- When there is a frost forecast for the next 24 hours after the application of the product.
- Under wet conditions.
- On substrates directly exposed to intense solar radiation or on warm substrates.

## PRECAUTIONS

REPIFIX PROTECT WRM 510 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.

Technical characteristics	Units	Standard	Value
Appearance			Dry powder
Color			Blue
Temperature resistance	°C		-30 to 90
Maximum grain size	mm		0.5
Workable time	min	EN 1015-9	30
Maturing time	min		3
Setting time	min	En 196-3	5 – 7
Compressive strength	MPa	EN 1015-11	26 – 28
Flexural strength	MPa	EN 1015-11	7 – 9
Dry bulk density	kg/l	EN1097-3	1.30 – 1.40
Bulk density of fresh mortar	kg/l	EN1015-6	1.65 – 1.75
Shear adhesion	(pass/fail)	EN 15184	pass
Corrosion protection	(pass/fail)	EN 15184	pass
Adhesion to substrate			Excellent
Resistance to humidity and vapors			Excellent
Resistance to aging			Excellent
Resistance to oils and solvents			Excellent
Shrinkage			No

\*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.

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.

Version D: 17/07/2024