



VHDRS®
 Very
 High
 Durability
 Repair & Prevention
 Systems



Certified Quality System since **FEBRUARY 1993**

From Project to Jobsite

MICROCEM 315

MONO-COMPONENT CEMENTITIOUS FAIRING COAT

CE approved – Certificate n. 1305 - CPD - 0808

EN 1504-3 Class R2



Description Mono-component cement based pre-mix with maximum aggregate size of 0,3 mm, for the fairing of concrete surfaces.

- Advantages and characteristics**
- Adheres perfectly to the concrete, and to some resin based coatings, providing they are sufficiently roughened and opened.
 - Can be finished by floating by smooth trowel or brush, thanks to the specific particle size distribution (max 0,3 mm) and the particular plasticity.
 - The high thixotropy allowing easy application on horizontal and vertical substrates.
 - Volumetric stability after application.
 - Does not require post-curing.
 - Sprayable with conventional spray equipment

- Fields of use**
- Uniform fairing coat of concrete and resin based coatings.
 - Correction of small surface imperfections on concrete like air-bubbles, small cracks, pores,...
 - For the resurfacing of degraded elements.

Method of use Preparation of the substrate :

- Substrates must be clean and sound. Remove all the incoherent parts by hand or mechanically, and clean by means of sandblasting or water/sandblasting in order to remove all traces of oil, grease, demoulding oil residues,...etc.
- The exposed reinforcement shall be cleaned by sandblasting and protected with anti-corrosion slurry MuCis® PROTEZIONE FERRO.
- Resin based coatings, and substrates in general, shall be roughened prior to the application of MICROCEM 315. If a repair is required at higher thickness, use, before MICROCEM 315, BS 38 MuCis® bicomponent.

Application:

- Mix the content of a bag of 25 kg with kg 5,25 (21%) clean water, till a lumpfree and easy to apply mortar is obtained. The liquid demand can vary with the climatic conditions and type of application. The product can be mixed by hand or by horizontal axes mixer equipment till complete homogenisation.

- Remark**
- Do not apply when temperature is below + 5°C.
 - Do not apply more than 4 mm thick layer for each layer.
 - Information according to 2003/53/CE

Storage: Storing possible during 12 months in original, unopened packaging, kept dry and protected, at temperatures between +5°C and +35°C
 Do not use the contents of already opened bags if they seem to have turned lumpy.

Packaging 25 Kg bag.



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Technical Data (typical values)

• Initial setting time:	around 1 hour at 20°C.	
• Compressive strength	N/mm ²	30 (28 d.)
• Flexural strength	N/mm ²	9 (28 d.)
• Elasticity modulus	N/mm ²	15.000 (28 d.)
• Adhesion to concrete support	N/mm ²	2,5 (28 d.)
• Pull-out	N/mm ²	> 10 (28 d.)
• Carbonation vs. years	8 years mm	1
	18 years mm	4
	25 years mm	8,2
• Resistance to CO ₂ penetration	μ	1.900
• Resistance to water vapour diffusion	μ	82
• ① Freeze and thaw resistance	gr/m ²	530
• ② Chlorides permeability	Coulomb	640
• Type of conglomerate	Fairing coat	
• Number of components	mono	
• Thickness suggested	mm	1÷3
• Application	By hand	
• Wet/damp curing	SE	
• Sheltered curing	SE	
• Typical application	Smoothing concrete	
• Setting time	Normal	
• Hardening	normal	
• Shrinkage compensation	YES	
Dosage / yield	Kg/m ² /mm	1,85

* some products can also be produced with addition of corrosion inhibitor MuCis®

1) resistance against frost/thaw in presence of salts according to SIA 162/1/91 g/m² (<600 g/m² = high resistance = required for motorway boarders)

2) chloride permeability –Coulomb – FHWA/RD/81) (100-1000 Coulomb = very low)

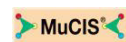
SE in function of the conditions during application (rain, sun, temperature, humidity, etc)



Very High Durability Repair and Prevention Systems. Very durable repair and protection Systems



Very High Durability Reinforced Concretes Very durable and anti-corrosion reinforced concretes



Multiple Corrosion

Inhibiting Synergies for the inhibition of the steel corrosion in reinforced concrete

AED High Deformation Energy

1N/mm² = 1MPa = 10,19 Kg/cm²

Safety indications

Read carefully the safety indications on the packaging, or consult the relevant Material Safety Datasheet of this product.

The above data are based on our actual and most experienced practical and laboratory knowledge and the results are collected from application of the product in different situations. Tecnochem Italiana does not assume any responsibility regarding inadequate or negative performance as a result of improper use of the product or for defects deriving from factors or elements other than the quality of the product including improper storage. The technical characteristics and performance mentioned in this datasheet are updated periodically. The revision dates and number of revision of the datasheets are listed in the table below. Eventual variations are traceable on our website www.tecnochem.it where the most updated datasheets can be retrieved.

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