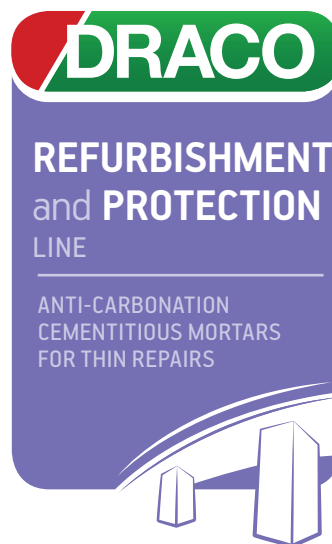
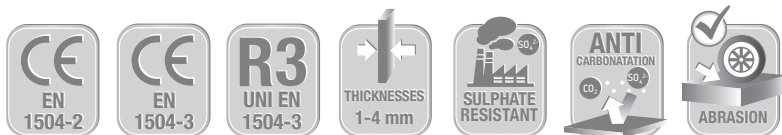


# CONCRETE FINISHER

ONE-COMPONENT POLYMER-MODIFIED CEMENTITIOUS  
SKIM MORTAR FOR SMOOTHING  
AND THIN REPAIRS (1-4 mm)

*High protection against carbonation*



**CONCRETE FINISHER** is a pre-blended carbonation resistant cementitious mortar based on specific fine-grained aggregates, synthetic polymers and special admixtures to be mixed with water. **CONCRETE FINISHER** is formulated for the restoration and the smoothing out of concrete structures in thickness up to 1-4 mm in a single coat. **CONCRETE FINISHER** is easy to use and simply mixed with water forms a soft paste easy to apply even on vertical surfaces that smooth out and protects concrete against carbonation and aggressive environments. It is ideal as a smoothing cementitious top layer for concrete repair system with FLUECO mortars.

## ADVANTAGES

The chemical-physical features and the mechanical strength of **CONCRETE FINISHER** enable to make extremely reliable and durable repair works, by sharply reducing all maintenance costs.

The specific technical characteristics of the product are:

- ✓ **HIGH PROTECTION AGAINST CARBONATION:** smoothing thin layers made with **CONCRETE FINISHER** have a very compact surface with very low permeability to  $\text{CO}_2$  that guarantees a high protection against carbonation.
- ✓ **HIGH ADHESION TO CONCRETE:** **CONCRETE FINISHER** is formulated with special nano-polymers additives that give to the product an excellent bonding to all concrete surfaces.
- ✓ **HIGH FREEZE-THAW CYCLES RESISTANCE:** **CONCRETE FINISHER** withstand also very hard freeze-thaw cycles and different weather conditions.
- ✓ **HIGH CHEMICALLY AGGRESSIVE ENVIRONMENTS RESISTANCE:** **CONCRETE FINISHER** has excellent resistance to all types of climatic conditions, aggression from smog, sulphates, sunlight and forms of hard-wearing.
- ✓ **EASY TO APPLY:** It is very easy and quick to apply by trowel even on damp surfaces.



## AREAS OF APPLICATION

**CONCRETE FINISHER** is formulated to carry out interventions where the regularization of the substrate is required, for maintenance or restoration in industrial and urban areas, where the aggressive agents of the atmosphere cause the deterioration of the concrete and the corrosion of the reinforcing irons.

**CONCRETE FINISHER** is ideal for:

- ✓ Anti-corrosion protection and alkalinity restoration for steel reinforcements bars in concrete structures.
- ✓ Repairs and thin skim coatings on columns, beams/girders, floors, general purpose concrete surfaces and on surfaces with no forklift traffic.
- ✓ Finishing layer for port refurbishment works and structures in contact with seawater.
- ✓ Smoothing surface imperfections in concrete surfaces before painting.



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## APPLICATION INSTRUCTIONS

### CLEANING THE SUBSTRATE

- ▶ **Remove all loose parts from the substrate**, including loose grout, by means of sandblasting or hydro-washing.
- ▶ **Remove stains, efflorescences or impregnation** of grease oil, paints, lime, dust, dirt, etc.
- ▶ **The surface to be treated must be solid and perfectly clean.**
- ▶ **Deteriorated substrates:** if necessary, remove the damaged layer with mechanical means until you reach a layer of healthy and compact concrete, and carry out restoration and volumetric reconstruction with mortars from the FLUECO line after treating the irons with DRACOSTEEL.
- ▶ **Wet the surface with pressurised water until saturated.** Free water on surfaces must be removed with compressed air or rags.

### MIXING INSTRUCTIONS

The **CONCRETE FINISHER** skim coat must be mixed in a concrete mixer. Pour the mixing water into the concrete mixer according to the recommended mixing ratio: 19 - 21 litres of water per 100 kg of product (4.8 ÷ 5.2 l per 25 kg pack).

Pour the product slowly, mixing for at least 4 to 5 minutes until a homogeneous, lump-free mixture is obtained; allow the mixture to rest for about 5 minutes and stir for a further minute before use. Check that all the product has been properly mixed and that there is no powder residue on the walls and bottom of the container. To prepare small quantities of product, use a suitable container or vessel observing the recommended mixing ratio. In this case, the use of a low-speed mechanical stirrer is recommended to reduce air entrainment.



### HOT CLIMATES

- ▶ Store **CONCRETE FINISHER** in a shaded area.
- ▶ Use cold water for the mix.
- ▶ Work early in the morning.
- ▶ Provide adequate protection for the first 14 hours and, if possible, lay sheets over it and keep them constantly wet.
- ▶ Please note that workability at high ambient temperatures tends to diminish, so you will need to work quickly without taking any breaks.



### COLD CLIMATES

- ▶ If possible, keep **CONCRETE FINISHER** in a warm environment.
- ▶ Make sure that the support surface is not frozen.
- ▶ Start work in the late morning.
- ▶ Protect surfaces from frost, covering them with waterproof insulated sheeting.

## APPLICATION

Apply the mortar to the surface with a trowel in a maximum thickness of 1 to 4 mm per coat. Thicker finishes should be applied in several coats. Smoothing **CONCRETE FINISHER** can be done with a flat trowel or wet sponge float ca. 30 minutes after application at +20°C. If the surface tends to dry during smoothing, water can be sprayed on it to make floating easier. In warm, windy, or very sunny weather, water should be sprayed on the surface during the first few hours of hardening to prevent rapid drying which could cause cracking.

## CURING

Under specific conditions (very dry and/or windy climates, direct sun exposure), you should perform a wet cure by placing wet sheets over the surfaces for at least 24-48 hours straight. Applying a curing product such as PROBETON CURING N improves curing by containing mix water evaporation from the mortar. Such an anti-evaporation intervention is also effective after wet curing.

## PACKAGING AND STORAGE

**CONCRETE FINISHER** is available in 25 kg bag.

If the product is stored properly in its original packaging, indoors in a dry location, at a temperature of not less than + 10°C, it maintains its original features for one year.



## PRODUCT FEATURES

APPEARANCE	gray powder
MAXIMUM SIZE AGGREGATE	0.6 mm
CLORIDES CONTENT - EN 1015-17 ( $\leq 0.05\%$ )	$\leq 0.05\%$
PACKAGING	25 kg bag
STORAGE	12 month

## APPLICATION DATA

MIXING WATER	4.8 ÷ 5.2 l per 25 kg bag.
WORKABILITY - UNI EN 13395-1	180 mm (Tixotropic)
BULK DENSITY - UNI EN 1015-6	2000 kg/m <sup>3</sup>
pH	approx. 12.5
APPLICATION TEMPERATURE RANGE	+ 5°C to + 35°C
THICKNESS	1 ÷ 4 mm
POT LIFE OF MIX	60 min
SETTING TIME AT 20° C	Start 6 hours End 7 hours
SURFACE DRYING TIME (20°C - 50 % U.R. - 2 mm of thickness)	30 min.
WAITING TIME BEFORE APPLYING PAINTED COAT (ACRIFLEX o ACRIPRIMER) AT 20°C	1 day on surfaces repaired with mortar from the FLUECO range. 1 day on surfaces smoothed over using ACRIFLEX.
CONSUMPTION	approx. 1.8 kg/m <sup>2</sup> per mm of thickness

## PERFORMANCE CHARACTERISTIC mixing water 18% (+20° C - 50% R.H.) - thickness 2,5 mm

PERFORMANCE CHARACTERISTIC	TEST METHOD	REQUIREMENTS ACCORDING TO EN 1504-2 COATING (C) MC - IR PRINCIPLES	REQUIREMENTS ACCORDING TO EN 1504-3 (R3 CLASS)	PRODUCT PERFORMANCE
<b>BOND TO CONCRETE</b> (MC 0.40 - type concrete rapporto a/c = 0,40) - EN 1766	EN 1542	Rigid system with no traffic: $\geq 1,0$ MPa with traffic: $\geq 2,0$ MPa	$\geq 1,5$ MPa after 28 gg	$> 2$ MPa to 28gg
<b>PERMEABILITY TO WATER VAPOUR</b>	EN ISO 7783-2	class I - $S_d < 5$ m class II - $5 \text{ m} \leq S_d \leq 50 \text{ m}$ class III - $S_d > 50 \text{ m}$	None	class I - $S_d < 5$ m permeable to water vapor
<b>PERMEABILITY TO CO<sub>2</sub></b>	UNI EN 1062-6	$S_d > 50 \text{ m}$	None	$S_d > 50 \text{ m}$
<b>CAPILLARY ABSORPTION AND IMPERMEABILITY TO WATER</b>	UNI EN 1062-3	$W < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$	None	$< 0,1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
<b>IMPERMEABILITY TO WATER</b> - under pressure - capillary absorption	EN 12390-8 EN 13057	None	None $w \leq 0,5 \text{ kg/m}^2 \cdot \text{h}^{0.5}$	$< 15 \text{ mm}$ $< 0,1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
<b>THERMAL COMPATIBILITY</b> according to EN 1542 measured as bond strength to concrete (MC 0.4) UNI EN 1766 - Freeze-thaw cycles with de-icing salts - Storm cycles (thermal shock) - Dry cycles	EN 13687-1 EN 13687-2 EN 13687-4	Rigid system with no traffic: $\geq 1,0$ MPa with traffic: $\geq 2,0$ MPa	$\geq 1,5$ MPa after 50 cicli	Meets specifications
<b>REACTION TO FIRE</b>	EN 13501-1	Euroclass	Euroclass	A1
<b>COMPRESSIVE STRENGTH</b>	EN 12190	None	$\geq 25$ MPa after 28 gg	$> 13$ MPa (after 1 day) $> 29$ MPa (after 7 days) $> 41$ MPa (after 28 days)
<b>MODULUS OF ELASTICITY IN COMPRESSION</b>	EN 13412	None	$\geq 15$ GPa	$16 \text{ GPa} \pm 1$ (after 28 days)
<b>RESISTENCE TO ACCELERATED CARBONATATION</b>	EN 13295	None	Depth of carbonatation $\leq$ than reference concrete (MC 0.45-type, water/ concrete ratio = 0.45) according to UNI 1766 standards	Meets specifications
<b>OTHER FEATURES</b>				
<b>FLEXURAL STRENGTH</b>	EN 196-1	None	None	$> 4$ MPa (after 1 day) $> 7$ MPa (after 7 days) $> 9$ MPa (after 28 days)
<b>BLEEDING</b>	UNI 8998	None	None	absent

### Legal notice - SLCMP version dated 01.03.2017

In the technical specifications herein, Draco Italiana s.p.a. used the indicators therein specified, with the relevant standards.

Please check if this Sheet and the figures therein contained apply to the product batch you are interested in or if they have been overridden by any later release. If in doubt, check whether this Sheet matches the one applicable at the time of finalising the sales agreement, at [www.draco-edilizia.it](http://www.draco-edilizia.it), and/or contact our Engineering Department.

No advice provided by our staff, either verbally or in writing at your request, about the potential applications of the Products shall be binding under the sales agreement or shall be considered an integral part of the agreement. Such advice is based on our experience and on the best available practical and/or scientific knowledge; as such, it shall not be binding or conditional on the buyer or user. Please try our products first to find out whether they are fit for your intended use or application; in any case, you shall be solely responsible for your choice.