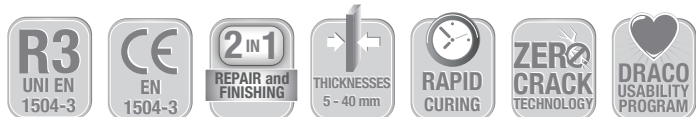


# FLUECO BLITZ

RAPID-SETTING, FIBRE-REINFORCED, THIXOTROPIC,  
FINE FINISH MORTAR FOR CONCRETE REPAIR.

*Ideal for repairs and skimcoats with 5 - 40 mm thickness range.*



**FLUECO BLITZ** is a fast-setting, ready-to-use cement mortar suitable for spot repairs and for finishing damaged concrete and RC and can be used both vertically and horizontally. **FLUECO BLITZ** develops high initial and final mechanical strength; it is waterproof and long-lasting even in aggressive environments and provides strong bonding to steel and concrete. Thanks to its special additives and structural fibres, with **FLUECO BLITZ** it is easy to create layer thickness from 5 mm to 4 cm guaranteeing strong bonding and protection against carbonatation. **FLUECO BLITZ** does not contain any metal parts or chlorides, is resistant to chemical and environmental attacks and is suitable for all the exposure classes defined in UNI 11104.

## BENEFITS

The specific characteristics of the product are:

- ✓ **Rapid repair and finishing in a single product:** with **FLUECO BLITZ** a single product permits you to carry out rapid repairs and create a thin finish coat, simplifying application and significantly reducing laying times.
- ✓ **Resistance to sulphates and chemical and environmental attack:** **FLUECO BLITZ** has high compactness, low capillary porosity and high resistance to aggressive agents present in the environment such as chlorides and sulphates, and it is not subject to carbonatation.
- ✓ **High bonding to substrates and rebars:** **FLUECO BLITZ** has been specifically formulated to increase mortar/support bonding and can be applied to surfaces that have only been sandblasted thus simplifying application.
- ✓ **Absence of crazing and cracks caused by plastic shrinkage:** **FLUECO BLITZ** has no crazing or plastic shrinkage cracks thanks to ZERO CRACK TECHNOLOGY and the use of special synthetic fibres that impede cracking and ensure volume stability.
- ✓ **Waterproofing and resistance even in aggressive environments:** the specific formulation of **FLUECO BLITZ** and the high quality of its components make it completely waterproof and increase resistance to freeze thaw cycles.
- ✓ **Easy to apply:** the special additives contained in **FLUECO BLITZ** make it possible to create thicknesses ranging from 5 mm to 4 cm with a trowel or spatula while ensuring high bonding.



## WHERE TO USE

**FLUECO BLITZ** is particularly suitable for:

- ✓ The repair of chipped edges and the reconstruction of missing sections of elements in concrete and reinforced concrete such as columns, beams, balconies and overhangs;
- ✓ Fast repairs and levelling prior to waterproofing or surfacing cycles.
- ✓ Spot repairs or general restoration and fast repairs of apron linings, balconies and other concrete elements with a fine finish.
- ✓ Suitable for additional applications, such as paints and coatings.

## APPLICATION PROCEDURE

### SUBSTRATE CLEANING

- ▶ **Remove all flaking parts** from the concrete in the area to be repaired, including grout slurry, either by mechanical chipping or pressure washing and taking care not to damage the structures;
- ▶ **Remove spots, efflorescence or soaked-in stains** of grease oils, paints, lime, dust, dirt etc.;
- ▶ **Remove any earlier repairs** if irreparably damaged or deteriorated;

### SUBSTRATE PREPARATION

- ▶ **Roughen the surface** mechanically by bush hammering, chiselling or pressure washing (this last avoids damage to the substrate and is recommended for large areas) to reach the sound, compact concrete and enhance bonding between the mortar and substrate.
- ▶ **Wet the surface with water under pressure to saturation.** This procedure avoids the substrate absorbing water from the mix as this could lead to cracking and reduce the bonding strength of the mortar. This operation also allows the removal of any fragments remaining from the roughening of the concrete substrate. Excess water must be removed with compressed air jets or with sponges.
- ▶ **Infiltration of water on the substrate:** water infiltrations on the substrate may cause leaching of the mortar before it is completely set. Any sources of seepage must therefore be blocked before applying **FLUECO BLITZ** by using the quick-setting mortar **HYDROPLUG**, or where possible by creating specific drain-offs.

### REBAR PROTECTION

- ▶ **Sandblast the rebars** and remove all loose particles such as rust flakes or fragments of material that could lead to corrosion or impair bonding. Milling of the substrate with hydrodemolition also effectively cleans the bars, making sandblasting unnecessary.
- ▶ **Protect the reinforcement bars** by re-alkalising them with the corrosion-inhibiting agent DRACOSTEEL.

## MORTAR PREPARATION

**FLUECO BLITZ** mortar is mixed in a suitable vessel or container using a mechanical agitator at low speed to reduce air entrapment. Add the water in the mix according to the recommended mixing ratio: 5 to 5.5 litres of water for every 25 kg of **FLUECO BLITZ**.

Add slowly, mixing for at least 4 to 5 minutes until the paste is smooth and free of lumps. Make sure that all the product has been properly mixed in and that there are no residues of powder on the sides or bottom of the container. **FLUECO BLITZ** maintains workability for about 20 minutes (20 ° C and 50% RH).

As this is a quick-setting mortar you should prepare small batches of product.



### PRECAUTIONS IN HOT CLIMATES

- ▶ Store **FLUECO BLITZ** away from direct sunlight;
- ▶ Carry out the work in the early hours of the morning, and stop work when the sun is strongest. It is better to resume working in the late afternoon, as long as the structure has been wet continuously for at least 6 hours before work starts;
- ▶ Ensure adequate protection of the area by using covers that are kept continuously wet for the first 48 hours.



### PRECAUTIONS IN COLD CLIMATES

- ▶ Store **FLUECO BLITZ** in a heated environment where possible;
- ▶ Do not use the product at temperatures below 0° C;
- ▶ Start work in the later hours of the morning;
- ▶ Make sure that the substrate is not frozen;
- ▶ Protect the surfaces from frost by covering with waterproof, insulated sheeting.

## APPLICATION

**FLUECO BLITZ** can be laid using either a trowel or spatula in layers between 5 and 40 mm thick. The product must be applied to clean, roughened and water-saturated surfaces as described in the previous paragraph.

To impede micro-cracks caused by plastic shrinkage we recommend smoothing the mortar with a sponge float.

## CURING

**FLUECO BLITZ** is formulated to counter plastic shrinkage cracks resulting from inadequate curing in the first 24-48 hours after laying. To ensure proper wet curing of the product even in dry climates, or where surfaces are exposed to excessively windy or sunny conditions, we recommend the use of nebulised water or the curing membrane PROBETON CURING N.

## PACKAGING AND STORAGE

**FLUECO BLITZ** is packaged in 25 kg bags. If kept in its original packaging and properly stored under cover in a dry place, the product maintains its characteristics for a year.



## PRODUCT CHARACTERISTICS

APPEARANCE	Powder
COLOUR	Grey
MAXIMUM AGGREGATE SIZE	0.5 mm
CHLORIDE CONTENT IN FRESH MORTAR - UNI EN 1015	0.023%
PACKAGING	25 kg bag
SHELF LIFE	12 months

## APPLICATION DATA

MIX COLOR	Grey
MIXING WATER	5 to 5.5 l per 25 kg bag ( 20-22%)
DENSITY OF MIX - UNI EN 12190	2030 kg/m <sup>3</sup>
WORKABILITY - UNI EN 13395	170 mm (Thixotropic)
TEMPERATURE OF USE	+5 ° C to +35 ° C
POT LIFE OF MIX	approx. 20 minutes (20° C 50% RH )
WAITING TIME BEFORE FLOATING	approx. 25 minutes
INITIAL SETTING TIME	approx. 30 minutes
FINAL SETTING TIME	approx. 45 minutes
THICKNESS OF APPLICATION	5-40 mm per coat
CONSUMPTION	18 kg/m <sup>2</sup> approx. per cm of thickness

## NORMATIVE DI RIFERIMENTO

**FLUECO BLITZ** complies with the principles defined in EN 1504-9 "Products and systems for the protection and repair of concrete structures: definitions, requirements, quality control and conformity assessment" general principles for the use of products and systems." **FLUECO BLITZ** complies with the minimum requirements of EN 1504-3 "Structural and non-structural repair" for R3 class structural mortars.

## FINAL PERFORMANCE 21% MIXING WATER

CHARACTERISTICS	TEST METHOD	REQUIREMENTS IN ACCORDANCE WITH EN-1504-3 FOR CLASS R3 MORTARS	PRODUCT PERFORMANCE
COMPRESSIVE STRENGTH	EN 12190	≥ 25 MPa (after 28 days)	8 MPa at 4 hours 16 MPa at 1 day 22 MPa at 7 days 30 MPa at 28 days
FLEXURAL STRENGTH	EN 196/1	None	6.6 MPa at 1day 6.9 MPa at 7 days 7 MPa at 28 days
COMPRESSIVE MODULUS OF ELASTICITY	EN 13412	≥ 15 GPa (after 28 days)	22 GPa
BOND STRENGTH ON CONCRETE (substrate of type MC 0.40 w/c ratio = 0.40) according to EN 1766	EN 1542	≥ 1.5 MPa (after 28 days)	2.3 MPa
RESISTANCE TO ACCELERATED CARBONATATION	EN 13295	Depth of carbonatation ≤ reference concrete (MC 0.45 w / c ratio = 0.45) according to UNI 1766	Requirement satisfied
CAPILLARY ABSORPTION	EN 13057	≤ 0,5 kg/m <sup>2</sup> ·h <sup>-05</sup>	0.24 kg/m <sup>2</sup> · h <sup>-05</sup>
THERMAL COMPATIBILITY measured as bonding according to EN 1542 on concrete MC 0.4 UNI EN 1766 - freeze-thaw cycles with de-icing salts	EN 13687/1	≥1.5 MPa (after 50 cycles)	2.2 MPa 1.9 min.
REACTION TO FIRE	EN 13501-1	Euroclass A1	A1

## TECHNICAL SPECIFICATIONS



**FLUECO BLITZ**, produced by **DRACO Italiana SpA**, is a fast-setting, one-component, fine-grained cementitious mortar that is shrinkage compensated used for the repair and smoothing of concrete surfaces with like. The product provides strong bonding to the substrate, high mechanical strength, resistance to sulphates and to chemical attacks from the environment, and can be applied with a trowel or spatula in layers from 5 to 40 mm thick. All instructions and precautions followed must comply with the recommendations given by the manufacturer: **Draco Italiana SpA**. The product must meet the minimum requirements defined by EN 1504-3 for Class R3 non-structural mortars.

### 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.