

Two-component microcement for continuous, thin-layer coatings on floors and walls for decorative finishes.

Uses

As a continuous covering suitable for floors, walls, stairs, ceilings and even furniture. Its versatility makes it ideal for renovations of private homes and commercial premises and large spaces such as sports centres, industrial buildings, hotels and restaurants.

Description

Betoncire divides its TWO-COMPONENT MICROCEMENT range into four types of microcement, classified according to their function within the system. These are organised into two main groups:

• Primer or preparation layer: BETONBASE, formulated to level the substrate, provide mechanical strength and create a suitable base for the adhesion of subsequent layers.
• Finishing layer: BETONMUR, BETONSOL and BETONEX, designed to provide the final finish in terms of both aesthetics and functionality. The choice between them depends on the intended use of the coating (walls, stairs, floors or exterior surfaces with (terrace) and the requirements regarding texture and durability.

Classification of Betoncire micro-cements by particle size and recommended application

BETON	TYPE	PARTICLE SIZE (mm)	RECOMMENDED USE
BASE	L	0.3	Preparation
	XL	0.4	
	XXL	0.6	
WALL	S	0.125	Interior wall finishes
	M	0.18	
SUN	M	0.18	Interior flooring finishes
	L	0.2	
EX	L	0.2	Exterior
	XL	0.4	

Properties

• Seamless continuous cladding (always ensure expansion joints are provided).
• Suitable for use on almost any type of surface, whether horizontal or vertical: concrete, cement, ceramics, plaster, plasterboard, etc.
• Excellent adhesion to the substrate and high abrasion resistance, particularly with coarse grit sizes
• Thickness between 1 and 3 mm
• Excellent workability.
• A wide range of colours and effects.

TECHNICAL INFORMATION

BETON	TYPE	LIST Component A / Component B	COVERAGE (2 layers) kg/m²	GRIT
BASE	L	10 kg / 2.5–3 litres	2,00	40
	XL	10 kg/3 L	2,80	
	XXL	10 kg / 2.5 L	3,40	
WALL	S	10 kg / 4.5 L	0,50	220
	M	10 kg / 4.3 L	0,50	
SUN	M	10 kg / 3.0–3.5 litres	1,00	80
	L	10 kg / 3.0–3.5 litres	1,00	
EX	L	10 kg / 2.8–3.0 litres	2,00	40
	XL	10 kg / 2.7–3.0 litres	2,00	

PROPERTIES OF COMPONENT A POWDER	SPECIFICATION	UNIT	METHOD
Features	Dust		
Composition	Cement, additives and selected aggregates		
Apparent density of BetonBase powder	1175±50	kg/m³	
Apparent density of BetonMur powder	930±50	kg/m³	
Apparent density of BetonSol powder	1175±50	kg/m³	
Apparent density of BetonEx powder	1175±50	kg/m³	

PROPERTIES OF BETONRESIN COMPONENT B RESIN	SPECIFICATION	UNIT	METHOD
Features	Milky liquid		
Composition	Polyacrylate emulsion		
Density Comp. B	1,03±0.01	g/cm³	UNE-EN ISO 2811-1
Viscosity at 23°C, Comp. B	<100	mPa·s	EN ISO 3219
Non-volatile contents Comp. B	22-23	%	UNE-EN ISO 3251:2020
pH Comp. B	9-10		UNE-EN ISO 19396-1:2020

PROPERTIES OF THE A+B MIXTURE	TYPE			
	BetonBase	BetonMur	BetonSol	BetonEx
Apparent density (wet) kg/m³	1480	1420	1505	1480
Apparent density (hardened) kg/m³	1430	1310	1390	1430
Pot life at 20°C (min)	60	60	60	60
Drying time between layers (h)	3-4			
Maximum thickness for each type (mm)	<1	<1	<1	<1
System thickness (mm)	1-3			

PROPERTIES OF THE A+B MIXTURE	TYPE			
	BetonBase	BetonMur	BetonSol	BetonEx
Type of trowel (material)	Metal	Flexible rubber	Flexible Steel	Steel BiFlex

Certificates: Declared performance; CE marking

EN 13813:2002	BetonBase	BetonMur	BetonSol	BetonEx
Flexural strength at 28 days (EN 13892-2) (MPa)	14,7	14,4	17,9	13,3
Compressive strength at 28 days (EN 13892-2) MPa	59,4	46,4	73,6	48,4
Adhesion resistance (EN 13892-8)	>1,5	>1,2	>1,2	>1,5
Reaction to fire (EN 13501-1)	Bfl-s1	Bfl-s1	Bfl-s1	Bfl-s1

Application

1.1. Preparation of the substrate.

The substrate must be clean and free from grease; the base must be stable and level.

1.2. Priming.

Before applying **BetonBase** microcement, the surface must be prepared in accordance with the conditions of the substrate. Certain applications require specific solutions: flat, flexible fibreglass mesh; **BetonPrim 200** or **BetonPrim 100** adhesion promoters; or **BetonPox Composant** vapour barriers or capillary moisture barriers. In all cases, please follow the recommendations of our technical staff and consult the relevant technical data sheets.
In any case, it is recommended that the microcement be applied whilst the primer is still tacky (sticky to the touch) to ensure optimum adhesion. If the primer cures completely and loses its tack (particularly in the case of epoxy-based primers), adhesion is reduced and flaking may occur. If the primer is already dry, the surface must be sanded before applying the microcement to restore adhesion.
In all cases, you must strictly follow the technical advice provided by our specialists and consult the relevant technical data sheets for each product.

1.3. Kneading.

This system is mixed with BetonResin resin and colourants, depending on the colour chosen. To ensure the coating maintains its intended properties, it is essential to maintain the correct ratio of microcement to resin.
Microcement should be prepared as follows:

1. Pour a small amount of BetonResin into a container, add the full amount of pigment corresponding to the quantity of microcement you are going to use, and mix
2. Gradually add the microcement powder and resin whilst mixing the product with a low-speed mechanical mixer.
3. Mix for at least 4 minutes until the mixture is smooth and free from lumps.

1.4. Application of microcement

a. Preparation layers:
Depending on the type of substrate, apply one or two layers of **BetonBase** XXL, XL or L using a metal trowel. If the substrate is a floor, always apply two layers, having first laid a highly flexible fibre mesh. Allow to dry for 4 hours between layers, then lightly sand using a random-orbit sander and 40-grit sandpaper to remove any imperfections.

b. Finishing layers:
• If you want a rustic finish, you can apply a third layer of **BetonBase** XXL or XL.
• For interior floors, **BetonSol** should be applied in two layers. This gives rooms a very natural and elegant finish.
• **BetonMur** is used exclusively for walls and non-trafficable surfaces
applying two layers as well. It gives a silky finish that is soft to the touch. With the
A distinctive feature of this finish is that it allows us to create watermarks using a flexible rubber trowel, which lend it a high decorative value.
• If you want a more natural stone-like finish with non-slip properties that make it

ideal for outdoor areas such as terraces, porches or even patios; you should use the BetonEx applied in two layers.

The finishing layers can be applied using either the “wet-on-wet” or “wet-on-dry” techniques.

“Wet-on-wet”
This system can be applied using the “wet-on-wet” technique, applying the next layer as soon as the previous one loses its “tack”, i.e. when the freshly applied microcement no longer sticks to your fingers when touched. In this case, the first layer of this system applied using this technique should not be sanded. If any burrs or lumps remain, these should be removed with the trowel, trimming off any material that protrudes. Apply the next layer working over sheets of extruded polystyrene. Once the material is dry, sand lightly using a random orbital sander or sandpaper of the appropriate grit (see table) to remove any imperfections.

“Wet on dry”
Before applying a new layer, allow the previous layer to dry (for around 3 hours) and sand it lightly using a random-orbit sander or sandpaper of the appropriate grit (see table) to remove any imperfections.
Do not apply layers thicker than 1 mm for micro-cements (BetonBase, (BetonMur, BetonSol, BetonEx). A total system thickness of 1 to 3 mm is recommended.

1.5. Sealing.

Betoncire microcement systems must be sealed once the curing process is complete, which occurs between 24 and 48 hours after application. The sealing process must not begin until the coating has a residual moisture content of less than 5%, a figure that must be verified using specific moisture-measuring instruments. For sealing, we recommend applying two layers of our **BetonSeal** primer, followed by two layers of a varnish from the **BetonSeal Finition** range. In particular, we suggest using **BetonSeal Finition Total**, as it is the most advanced and comprehensive product in the range. It is essential to strictly follow the application instructions detailed in the technical data sheets for each product.

1.6. Cleaning the tools.

Tools should be washed with water immediately after use. Once set, the material can only be removed by mechanical means.

Limitations

The better the levelling and preparation of the surface to be coated, the better the performance and lower material costs and application time. It is advisable to choose the the right method for each application.
Low temperatures extend the service life of the [item], whilst high temperatures significantly reduce it.
the product and the drying process.

Special precautions

This product contains cement.
• Avoid contact with the eyes and skin, and do not inhale the dust.
• Wear rubber gloves and safety goggles.
• Do not apply the product at ambient temperatures below 10°C or above 30°C.
It is essential to follow the instructions on the label. For further information, please refer to the product safety data sheet.

Introduction

Available in 15 kg bags: BetonMur M and S
Available in 18 kg bags: BetonSol M and L
Available in 20 kg bags: BetonBase L
Available in 22 kg bags: BetonBase XL
Available in 24 kg bags: BetonBase XXL
Available in 20 kg bags: BetonEx XL and L

Storage conditions

The product must be stored in its original, unopened packaging, protected from the elements, at temperatures between 10°C and 30°C, in a dry, well-ventilated place, away from sources of heat and direct sunlight. When stored correctly, the product has a shelf life of 24 months from the date of manufacture.