

MARIUS AURENTI



morpheo

3-component kit for floors, walls, bathrooms, and furniture:

- Morpheo M700 Classic Millimetric Mortar
- Morpheo LPA Water-Based Polymer Binder
- Morpheo BLUSH Mineral Color

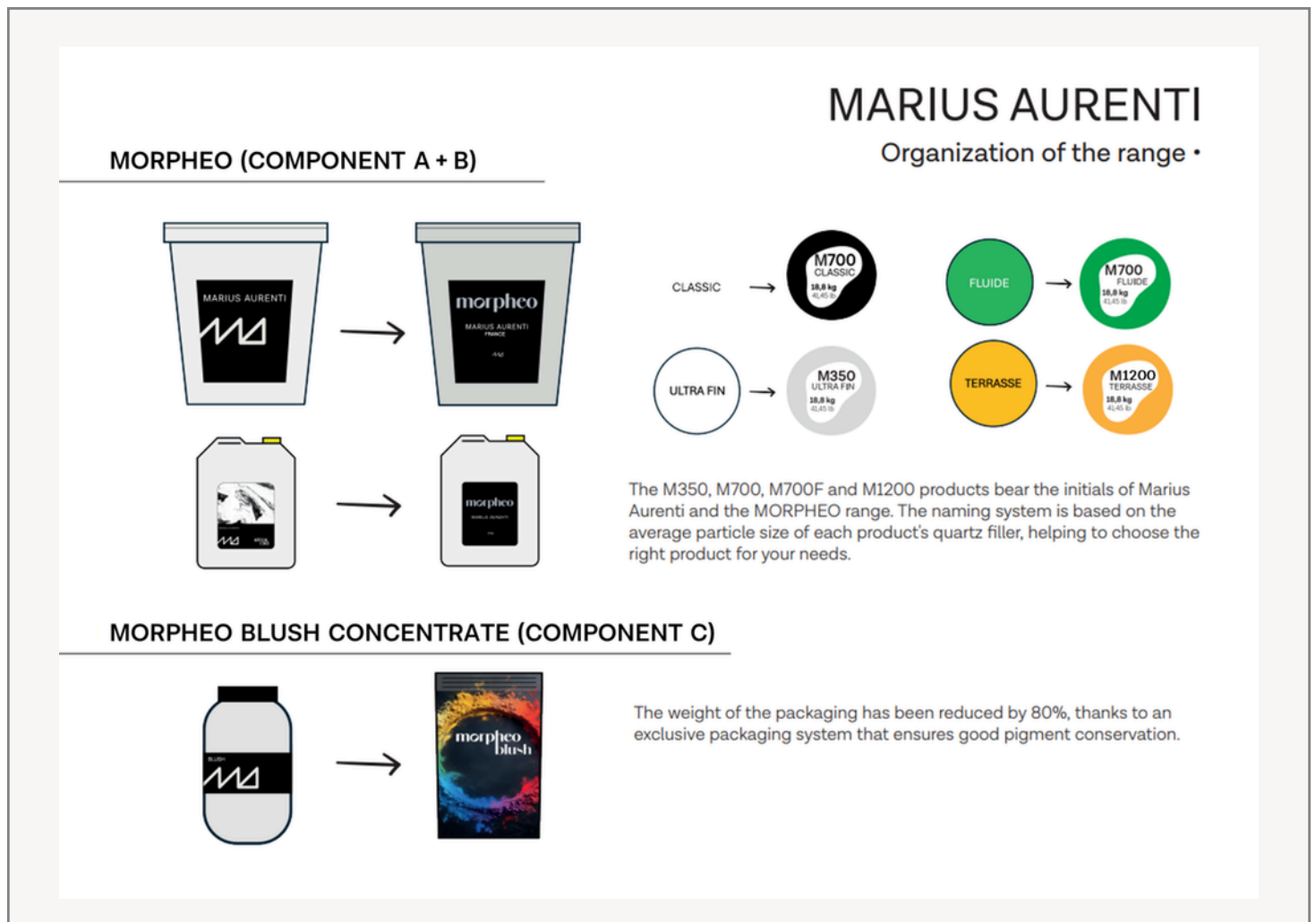
MORPHEO represents the entire range of Marius Aurenti decorative mortars.

This timeless, almost ancient sound carries within it the notion of metamorphosis. Etymologically, "morphé" means "the form", Morphéo is "he who gives birth to form".

MORPHEO thus represents the ability to transform spaces, to metamorphose a place by giving form to matter, and to innovate in architecture.

Particularly committed to environmental preservation, Marius Aurenti pays special attention to the materials used for its packaging and the shipping of its products.

Thus, the MORPHEO range has opted for containers made from between 50 and 80% recycled plastic.



High-performance, millimeter-thick hydraulic mortar designed to create a Microcement finish for interior and exterior decoration (floors, walls, bathrooms, countertops, objects, etc.).

Created nearly 30 years ago, this product was the world's first millimeter-thick microcement—a French innovation already used to create and renovate hundreds of thousands of square meters.

It offers excellent chemical and mechanical resistance, adhesion, and waterproofing performance.

It is available in 87 colors from the IRIS 234 color chart (MORPHEO BLUSH Mineral Color).

This product forms the base coat of the Morpheo M700 Classic system (see the System Data Sheet on the following page). Select the appropriate substrate preparation coat (primer) and finish coat (varnish, impregnation, or wax) for the intended use and location.

A maintenance guide provides recommendations according to the finish and use.

Packaging

3-component kit

Morpheo M700 Classic white base, component A / 18.8 kg

Morpheo LPA binder, component B / 5.32 kg

MORPHEO BLUSH Mineral Color / 1.2 kg

The 7 key advantages of Marius Aurenti Microcement:

No specific joints required

15-year non-cracking warranty

A range of high-resistance varnishes, from matte to gloss

Smooth to non-slip textures

87 mineral colors

2 mm thick

44.1 MPa



Features

The Marius Aurenti M3D System includes:

- a layer of substrate preparation
- a mass layer
- a finishing coat

Refer to each of their respective Technical Data Sheet and Safety Data Sheet.

	SUBSTRATE	TRADE NAME	NUMBER OF LAYERS	TOTAL CONSUMPTION
SUBSTRATE PREPARATION LAYER	New and old hydraulic supports	Porous Floors Primer	1 to 2 coats depending on the porosity of the surface	100 to 200g/m ² depending on the porosity of the substrate
	Tiles	EPX2 Superior Primer + SQ10 or EPX Vapor Barrier Primer	1 to 2 coats depending on the surface	1 to 1.5 kg/m ² or EPX2 Superior primer or EPX Vapor Barrier 1 to 1.5 kg/m ² of sand
	Wood derivative (particleboard, MDF, plywood, etc.)	Truly Universal Primer	1 layer	100 to 120 ml/m ²
MASS LAYER	New and old hydraulic supports. Tiles. Wood derivatives (chipboard, MDF, plywood, etc.)	Morpheo M700 Classic Decorative Microcement	2 to 3 layers	from 2 kg/m ² to 4 kg/m ² (see consumption table P10)
PROTECTIVE LAYER	/	Hydrolak HL8 Varnish or IF3 Fixative or ITP Terrace & Pool Impregnation (exterior)	3 coats (HL8) or ≥ 3 coats (IF3) or 2 coats (ITP)	250 to 300 g/m ² or 300 to 430 g/m ² or 200 to 300 g/m ²

The Morpheo M700 Classic system is available in 87 colors from the IRIS234 Marius Aurenti color chart.

The diversity of substrates and their condition necessitates specific preparation and the use of primers. Consult our Technical Data Sheets. Substrates must be sound, flat, dry, rigid, cohesive, stable, and clean (in particular, free of grease, oil, or laitance). They must be prepared in accordance with current DTU standards. It is important that the substrate exhibits good cohesion and no cracks. Active cracks and expansion joints will be left open and not covered. They will be treated with Marius Aurenti MS Polymer Color grout after the Morpheo M700 Classic Microcement application. Concrete and screed substrates must be at least 28 days old. They must be flat, cohesive, clean, and have a moisture content of less than 4%, or 0.5% for liquid screeds based on calcium sulfate.

A) NEW SUBSTRATES BASED ON HYDRAULIC BINDERS

- Concrete slabs or bonded screeds, meeting the specifications of standard NF DTU 26.2.
- Debonded or floating cement mortar slabs and screeds executed in accordance with the specifications of standard NF DTU 26.2.
- Cement-based fluid screeds that are the subject of a favorable Technical Approval/DTA in force for the intended field of use.
- Slab floors conforming to the requirements of DTU 21 (standard P18-201) with continuity on support.
 - Solid reinforced concrete slabs cast in situ
 - Solid slabs poured onto precast reinforced concrete slabs
 - Solid slabs cast on prestressed concrete slabs

- Ribbed floors with prestressed concrete (BP) or reinforced concrete (BA) beams and infill blocks with a complete distribution slab cast in place with continuity on support.
- Floors made up of hollow-core slabs in BP or BA with composite slabs added in reinforced concrete with continuity on support and with control of cracking in accordance with standard NF DTU 23.2.

Installations on fiber-reinforced or non-fiber-reinforced hydraulic leveling compounds are excluded.

The support must be isolated from the embankments and from capillary rise from below as well as from the edges.

B) CONCRETE SLABS, CONCRETE FLOORS OVER CRAWL SPACES AND NEW CONCRETE FLOORS POURED ON STEEL DECKING

- Concrete slabs and concrete floors over crawl spaces must be executed in accordance with standard NF P 11-213 (DTU 13.3); they must be reinforced in accordance with the same DTU.
- Concrete floors poured on steel decks with continuous collaboration must be executed in accordance with standard NF P 18-201 (DTU 21).

In the case of application on a support (concrete slab) smoothed by helicopter, it is imperative to first carry out a mechanical surfacing of the surface, to ensure optimal adhesion of the primer and then of the Marius Aurenti Microcement.

C) LIQUID SCREEDS BASED ON CALCIUM SULFATE

- Liquid screeds based on calcium sulfate must be executed and accepted in accordance with the valid Technical Opinion and the "Technical Specifications for the execution of liquid screeds based on calcium sulfate" (CSTB e-notebook 3578_V2).

D) EXISTING POURED FLOOR COVERINGS MADE FROM SYNTHETIC RESIN

- Existing poured floor coverings based on synthetic resin complying with the requirements of CPT 3716 – “Execution of poured floor coverings based on synthetic resin – renovation”.

E) OLD TILES, MARBLES

- Existing tiles, in good condition, with good adhesion to the substrate (glued tiles). Applications on outdoor tiles and paving are excluded.

In the case of tiled or marble substrates, after prior surface preparation with a diamond sander, the EPX2 Superior Primer or the Marius Aurenti EPX Vapor Barrier Primer must be used, applied as mortar and then sanded to refusal (it is imperative to consult the Technical Data Sheet).

F) SUBSTRATES IN DAMP ROOMS

For applications in damp areas (e.g., bathrooms), liquid waterproofing systems (LWS) must be installed before the system is implemented. Any junction between different materials must be sealed beforehand with flexible, watertight gaskets.

For any shower-type application, the support must have a slope > 2%.

When installing on a WEDI shower tray, which has been previously sealed with the WEDI waterproofing system, a primer must be used:

- The EPX2 Superior Primer can be applied as a mortar and then sanded to refusal. A gelling agent for EPX2 Superior Primer can be used if necessary. (Consult the technical data sheets carefully).
- The TOP WEDI system is available (please consult the technical data sheet). Preparation of the TOP WEDI system before applying Marius Aurenti Microcement is necessary to ensure proper adhesion of the microcement. Consult our team for further information.

G) SUBSTRATES IN SWIMMING POOLS AND BASINS

In swimming pools and basins, substrate preparation and application methods are specific; refer to the Marius Aurenti Swimming Pool Guide.

H) OTHER SUBSTRATES

- Cellular concrete
- Plasterboard walls (excluding floors)
- Cement slabs
- Bricks
- Concrete blocks
- Wood derivative (particleboard, MDF, plywood, etc.)

COLORS AND MIXTURES

To ensure color consistency, for the same project, use the same batch number of component A and the same batch number of MORPHEO BLUSH Mineral Color.

MORPHEO BLUSH Mineral Colors contain pigments, fillers, and additives in varying proportions to achieve a consistent rheology (fluidity and consistency) in the final product. Mixing the concentrates together is strictly prohibited.

Morpheo M700 Classic bases are semi-finished materials. It is essential to add Morpheo BLUSH Mineral Color to ensure the full properties of Morpheo M700 Classic and the stability of the formula. Even in white, the addition of white Morpheo BLUSH Mineral Color is mandatory. Using the base alone without the concentrate alters the nature of the product and reduces the chemical and mechanical performance of the system.

The product must be used by strictly mixing the 3 components.

Never add water.

USES

Use in saunas and steam rooms is excluded.

Do not apply to solid wood, soft wood floors, plastics and textiles, unglazed terracotta, tomettes and gypsum fiber panels of the Fermacel type.

STORAGE AND SAFETY

Shelf life: 1 year in its original unopened packaging, protected from sunlight and frost, at a temperature between +5°C and 25°C, ideally between 15°C and 20°C. Check the "best before" date on the packaging before use. Once opened, the product must be used within 7 days.

Use the appropriate personal protective equipment described in the Safety Data Sheets.

For more information regarding safety, please refer to the Safety Data Sheet.



The preparation is carried out using a dry mix (allows the kit to be used in several stages) or a wet mix (complete use of the kit).

DRY MIX

In the case of a dry mix, always mix the base and concentrate thoroughly before proceeding with any possible division.

- Roll the base bucket to aerate and soften the material
- Open the base bucket and make a slight indentation in the center of the base
- Shake the jar of concentrate and open it
- Pour the concentrate into the center of the base bucket
- Secure the bucket with your feet and mix the base and concentrate (ideally with a mixer for pasty products, contact us for prices)
- Immerse the blender and gradually increase the speed

Continue mixing using straight and angled vertical and lateral movements to thoroughly blend the contents. Pay particular attention to the edges at the bottom of the container to ensure these hard-to-reach corners are not missed. For your first few mixes, we recommend pouring the blended contents into a bucket of the same size to visually check the quality of the mixture and repeat it if necessary. The mixing time should be at least 1 minute.

- Add component B (liquid) to the prepared quantity of powder: base (component A) + MORPHEO BLUSH Mineral Color, perfectly mixed according to the instructions in the table below:

MORPHEO LPA BINDER COMPONENT B (LIQUID) IN KG	MORPHEO M700 CLASSIC + MORPHEO BLUSH MINERAL COLOR (COLORED POWDER) IN KG	READY-TO-APPLY PRODUCT IN KG
0,21	0,79	1,00
0,42	1,58	2,00
0,63	2,37	3,00
1,26	4,74	6,00
2,66	10,00	12,66
5,32	20,00	25,32

Note: the preservation of the materials once mixed dry is not altered by mixing if the buckets (base + concentrate) are closed and stored under the normal recommended conditions.

WET MIXTURE

- Pour the liquid portion (component B, 5.32 kg) into a clean, empty bucket
- Shake the jar of Morpheo BLUSH Mineral Color and open it
- Pour the Morphéo BLUSH Mineral Color into the liquid
- Secure the bucket and mix at a gradually increasing speed until the liquid and concentrate are homogeneous
- Add the powder (Component A) into the liquid.
- Mix mechanically for 2 to 3 minutes until a homogeneous mixture is obtained.

Never add water.



HUMIDITY

The application of the Morpheo M700 Classic System must be carried out in an ambient relative humidity range of between 30% and 80% except for varnishes which require a humidity range above 40% and below 80% ideally between 50% and 65%.

Humidity conditions must be maintained for at least 48 hours after application of the last coat.

Protect from wind, direct sunlight, rain, frost, and the surrounding flora and fauna during application and absorption of the components.

Before any application, check the moisture content of the substrate (maximum 4% moisture and $\leq 0.5\%$ for liquid screeds based on calcium sulfate).

TEMPERATURE

Before beginning any application, it is essential to check the substrate temperature and the ambient temperature. The substrate temperature must be between $+5^{\circ}\text{C}$ and $+25^{\circ}\text{C}$ (ideal temperature: $>15^{\circ}\text{C}$ and 20°C). It must be at least 3°C above the dew point.

The Marius Aurenti Microcement System can be applied at ambient temperatures between 5°C and 25°C for Microcement and between 15°C and 25°C for varnishes, at least 24 hours before the first application and at least 24 hours after application of the last coat.

Low and high temperatures will respectively slow down and accelerate the setting process. Application should not be carried out in freezing or extremely hot weather. Provide heating or cooling systems if required on the worksite.

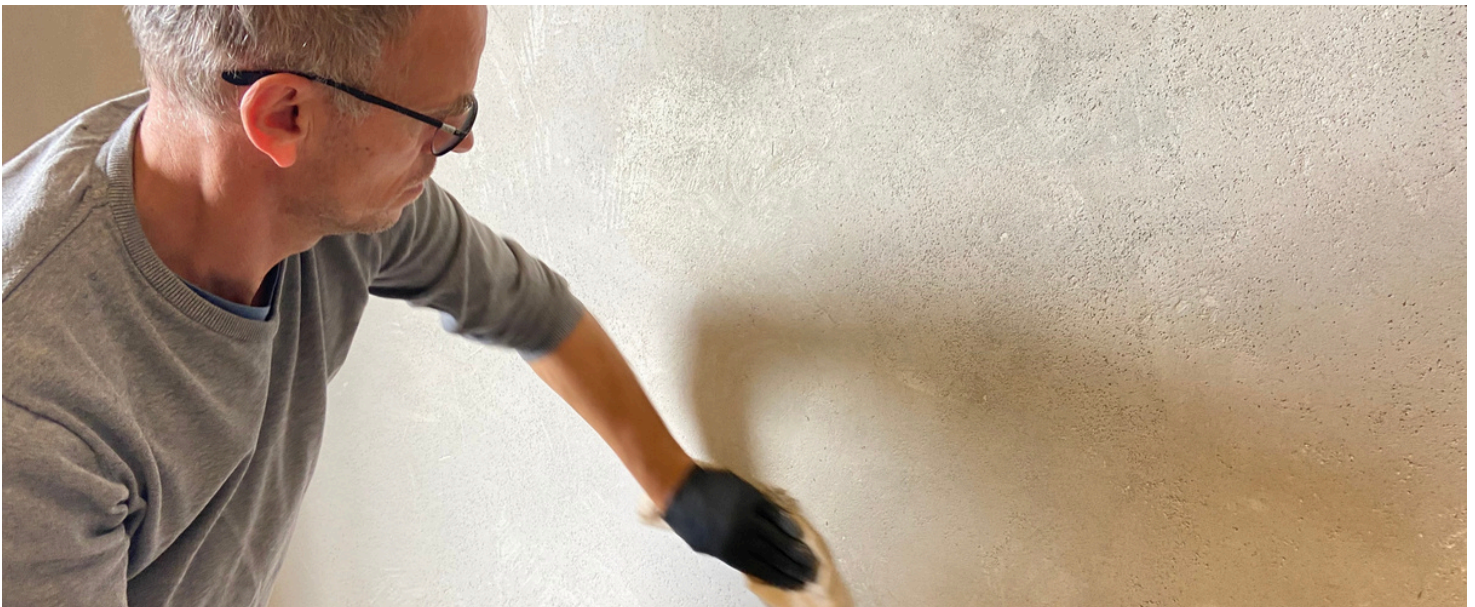
APPLICATION EQUIPMENT

Trowel, notched comb 6 mm triangular teeth, (first coat only).

Perfect'Liss 35cm smoother or stainless steel or plastic 200mm smoother.

Sponge trowel or mason's sponge (dry) for a non-slip finish.

Clean the tools with water.



The Morpheo M700 Classic consists of a two-component mortar applied in a 2 mm thickness.

Apply a first coat of Morpheo M700 Classic with a consumption of approximately 3 kg/m² (approximately 1.5 mm thick) using a trowel or smoother.

To regulate the thickness, it is possible to apply the first layer using a 6 mm notched comb and then immediately smooth it with a trowel until the notched comb's grooves disappear completely.

In this case, the smoothing must be done immediately, while the microcement is still fresh. This first layer determines the final thickness and aesthetic effects.

Before applying the second coat and 24 hours after applying the first coat (at 20°C, 60% relative humidity), it is possible to sand the surface to eliminate decorative effects or excessive irregularities (40 grit) using a single-disc machine (or an orbital sander), then thoroughly dust mechanically.

Apply the second coat at a rate of approximately 1 kg/m², using a stainless steel trowel or smoothing tool. This second coat determines the final texture of the coating and its aesthetic appearance.

It is important to note that a stainless steel application tool can leave dark marks (especially on light colors). A plastic tool may be preferable.

After 24 hours of drying (at 20°C and 60% relative humidity), sand the surface (60 grit, then 80 grit) using a single-disc machine or orbital sander, then thoroughly remove all dust mechanically.

The sanding intensity will determine the final surface appearance (textured or smooth) and reveal the material effects.

If the surface is satisfactory, apply the finishes.

Four finishes are available (refer to each product's Technical Data Sheet):

Interior finishes:

- IF3 Fixative, Matte or Silky Matte
- Hydrolak HL8 Varnish, Velvet Matte

Exterior finish:

- ITP Terrace & Pool Impregnation

CONSUMPTION

DESTINATION	DETAILED DESCRIPTION	MICROCEMENT COVERAGE / M ²	THICKNESS	SURFACE MADE FOR 1 KIT + BLUSH
Dry decorative wall	Interior wall on a smooth surface	2 kg/m ² for 2 coats	approx. 1 mm	approx. 11 m ²
Residential flooring	Screed with or without heating in residential premises	3 kg/m ² for 2 coats	approx. 1.5 mm	approx. 8.5 m ²
intensive floor and wall	Interior or exterior paving; Flooring on screed in public access buildings; Existing tiles on epoxy; Floors and walls exposed to water; Exterior walls on poured concrete (excluding seafront areas); Furniture	4 kg/m ² for 2 coats	approx. 2 mm	approx. 6.5 m ²
Swimming pools and basins	Poured concrete only	8 kg/m ² for 3 coats	approx. 4 mm	approx. 3.3 m ²

DRYING TIME AT 20°C AND 60% RELATIVE HUMIDITY

OPEN TIME	25 to 30 minutes
DRY TO THE TOUCH	4 hours
BETWEEN THE LAYERS	minimum 24 hours
COMPLETE DRYING	2 days but mechanical resistance reached after 28 days

The surface must not be exposed to all stresses before the treatment system has completely dried, i.e. 7 days at 20°C and 60% relative humidity.

Between 2 and 7 days, light traffic is permitted with the following precautions: use of breathable micro-protective tarpaulins such as Landolt Floorliner Vapor, and wear of socks or overshoes. No exposure to water or chemicals is allowed, and avoid rubbing or scratching furniture. Applying adhesives to the floor coverings is prohibited.

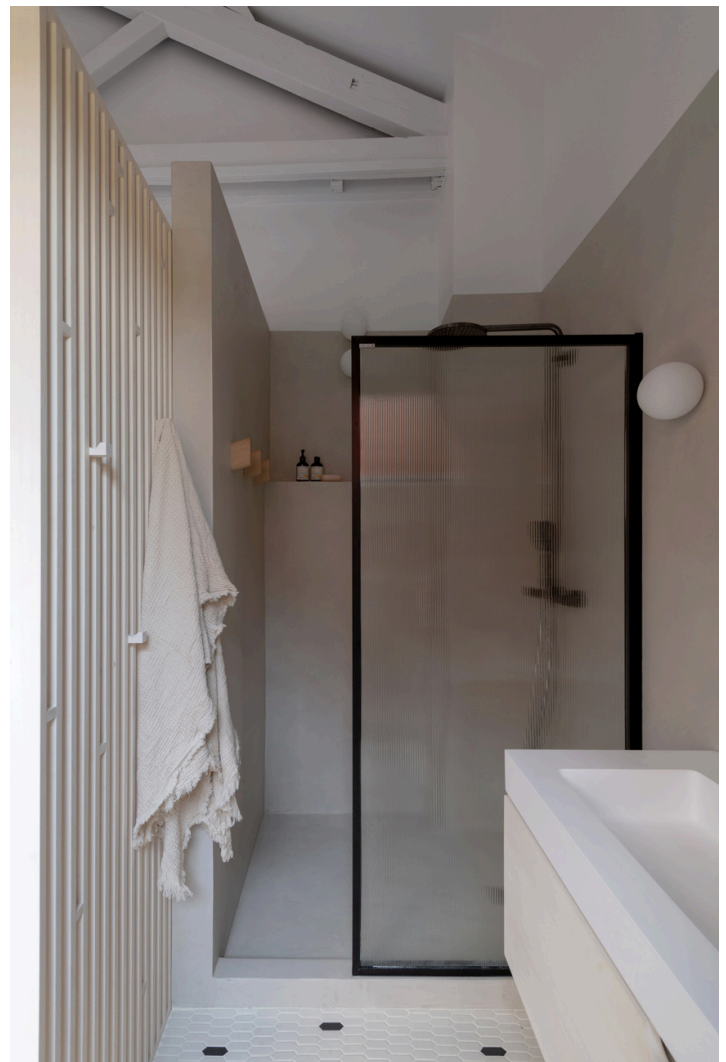
Do not lay down carpet for 7 days.

IMPORTANT NOTE:

The maximum hardness of the Morpheo M700 Classic System is achieved after 28 days of drying.

The floor must be handed over immediately after the completion of the work. The newly installed Morpheo M700 Classic system will be protected from work by other trades using protective materials that allow ventilation (see Technical Data Sheet for Hydrolak HL8 Varnish and IF3 Fixative).

Time before the first wet maintenance: minimum 3 days after applying Hydrolak HL8 Varnish or IF3 Fixative. Follow the instructions in the Marius Aurenti maintenance booklet



Based on Test Reports from CSTB (Scientific and Technical Centre for Building), Test Reports from LNE (National Laboratory for Metrology and Testing) and Test Reports from the Marius Aurenti Laboratory.

CSTB No. RA12-0208

CSTB No. RA20-0353

CSTB No. R2EM-11-26022578

CSTB No. R2EM-SIST-14-26047471

CSTB No. ES541200113

CSTB No. DSR-SIST-22-26085256

LNE No. CX 1600936

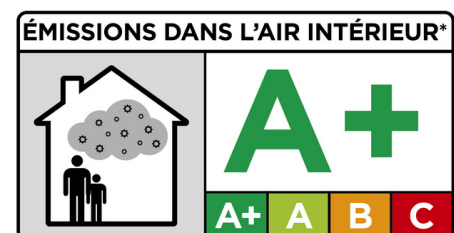
The company Matières Marius Aurenti declares that the Marius Aurenti Systems: Morpheo M700 Classic and Morpheo M700F Fluide with Marius Aurenti varnish finishes meet the following performance (pages 13-14-15), according to the implementation recommendations.



Flexural strength (NF EN 13892-2)	16,8 N/mm ²
Compressive strength (NF EN 13892-2)	44,1 N/mm ²
Puncture resistance (NF EN 13892-6)	293,5 N/mm ²
Surface hardness (NF EN 13892-6:2003)	119,1 N/mm ²
BCA wear resistance (NF 13892-8:2003)	0,08 mm
Impact resistance 1kg-200 cm (NF EN ISO 6272)	No cracks
Adhesion strength (NF EN 13892-8:2003)	2.5 N/mm ² Cohesive rupture
Fire resistance (NF EN ISO 9239-1, NF EN ISO 13501-1 and NF EN ISO 11925-2)	Bf1-S1 (IF3, HL8)
Slip resistance (Maximum values achieved related to application methods) (XP P05-010 and XP P05-011) (NFP 05-011 and DIN EN 16165 EN 16165:2021 Annex C)	PN 24 / PC20 (IF3) PC10 - R10 / PN 18 - B (HL8) VEP 55 dry: 84 VEP 55 wet: 44
Water permeability (NF EN 1062-3:2003)	0.08 kg/m ² .h0.5
Determination of the rolling resistance of a wheeled chair (NF EN 425: 2012) 25 000 cycles, 21°C, 55% HR,	Residual traces in the wheel passage area (IF3) No trace (HL8)

STAIN RESISTANCE (NF EN 423:2002)

Index according to NF EN 423	Test result after cleaning
0	Insensible
1	Not very sensitive
2	Sensible
3	Very sensitive



MICROCEMENT + IF3 FIXATIVE

	Exposure time to reagents			
Reagents	5 minutes	2 hours	6 hours	24 hours
Café	0	0	0	0
Tea	0	0	0	0
Peanut oil	0	0	0	0
Vinegar	0	0	0	0
Lemon juice	0	0	0	0
Red wine	0	0	0	0
Demineralized water	0	0	0	0
Sparkling water	0	0	0	0
Shoe polish (black) *	0	0	1 (darkens pores)	1 (darkens pores)
Crushing a cigarette*	1 (yellow stain)	1 (yellow stain)	1 (yellow stain)	1 (yellow stain)
Ammonia 15%	0	0	0	0
Acetone*	3 (white spot)	3 (white spot)	3 (white spot)	3 (white spot)
Bleach - Sodium hypochlorite (12% solution)	0	0	0	0
Hand sanitizer gel (70% ethyl alcohol)	1	2	3 (white spot)	3 (white spot)
Hydrochloric acid (20% solution)	0	0	0	0
Potassium hydroxide (30g/L solution)	0	0	0	0
Ammonium chloride (100g/L solution)	0	0	0	0
Sodium hydroxide (10% solution)	0	0	0	0
Acetic acid (5% solution)	0	0	0	0
Acetic acid (10% solution)	0	0	0	0
Ballpoint pen ink *	3	3	3	3

MICROCEMENT + HL8 VARNISH

	Exposure time to reagents			
Reagents	5 minutes	2 hours	6 hours	24 hours
Café	0	0	0	0
Tea	0	0	0	0
Peanut oil	0	0	0	0
Vinegar	0	0	0	2
Lemon juice	0	0	0	0
Red wine	0	0	0	1
Demineralized water	0	0	0	0
Sparkling water	0	0	0	0
Shoe polish (black) *	0	0	0	0
Crushing a cigarette*	1 (yellow stain)	1 (yellow stain)	1 (yellow stain)	1 (yellow stain)
Ammonia 15%	0	0	0	0
Acetone*	0	0	0	0
Bleach - Sodium hypochlorite (12% solution)	0	0	0	0
Hand sanitizer gel (70% ethyl alcohol)	0	0	1	2
Hydrochloric acid (20% solution)	0	0	0	1
Potassium hydroxide (30g/L solution)	0	0	0	0
Ammonium chloride (100g/L solution)	0	0	0	0
Sodium hydroxide (10% solution)	0	0	0	0
Acetic acid (5% solution)	0	0	0	0
Acetic acid (10% solution)	0	0	0	2
Ballpoint pen ink *	3	3	3	3

(*) Study conducted on a panel of 12 recognized varnishes from the microcement market.

After 2 hours of exposure:

Between 85% and 95% of varnishes on the market show stains when exposed to vinegar or acetic acid (10% solution).

After only 5 minutes of exposure:

More than 65% of varnishes on the market show acetone stains. More than 75% show cigarette-burn stains. 100% of the varnishes tested are sensitive to ballpoint pen ink.

CE conformity marking, as defined by Directive 93/68/EEC:


OCEAN Marius Aurenti 3 rue Brillat Savarin Rovaltain TGV Nord BP 21034 26958 Valence cedex 9 FRANCE 17 IN 13813
Marius Aurenti Microcement Reaction to fire: Bf1S1 Compressive strength: C40 Flexural strength: F15 Abrasion resistance: AR1 Bond strength: B2.0

MARIUS AURENTI

For over 40 years, Marius Aurenti has been innovating to improve the performance of decorative materials and the sensations they provide.

A mineral and plant aesthetic, close to Nature, to which our works pay homage and for which our environmental commitment is total.

Mariisu Aurenti is also present, through its training and support, alongside quality French craftsmanship which, every day in our workshops as well as in the field, strives to make each place unique, beautiful and timeless.



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