

# PURE MINERAL BETON<sup>®</sup>

## PRODUCT DESCRIPTION

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- The PURE MINERAL BETON<sup>®</sup> (PMB) is a decorative finishing mortar, tinted in the mass, with very fine grain composed of cement, lime and mineral fillers and a tinted binder.
- Its waterproof properties make it an ideal material for the construction of walls, work tops and washbasins, showers.
- It can be applied in living rooms under certain conditions. Avoid rooms subject to heavy pedestrian traffic (contact us).
- Because of its composition (lime / cement), PURE MINERAL BETON allows easy application and extended application time.
- It is applicable, in thin thickness, (from 1 mm to 2mm) in several layers with the trowel.
- Like all 'polished concrete', it will present more or less shades according to the color and the conditions of application.

## FEATURES

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- Interior
- Decorative walls
- Showers
- Worktops, washbasin drawers
- PURE MINERAL BETON, due to its composition (lime / cement) has a longer drying / curing time than our other coatings, RBX, SC + and EBC, which make it More fragile by scratching or punching. These are recommended for larger traffics.

## APPLICATION SURFACES

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- Cement
- Cellular concrete blocks
- Gypsum board (BA 13), water-repellent or not
- Plaster and plaster tiles
- Tiles and cement tiles (after specific preparation)
- Hydraulic screeds and anhydrite screeds
- Medium, water-repellent agglomerate (CTBX), marine plywood, laminate. NB: These supports require special attention to the design and their preparation (contact us).
- NB: this product is not a sealant according to the D.T.U. When used in a shower, according to the D.T.U., the waterproofing must have been carried out beforehand thanks to an effective sealing system (Liquid Sealing System for example)
- Other media: contact us

## NECESSARY TOOLS

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- Scale, trapezoidal stainless steel trowel, painter's knife, turbine (mounted on a variator drill), rubbing or normal sponge and, if necessary, sanding material (very fine grain sandpaper)
- Gloves: it is recommended to put on gloves because, like many products of masonry / decoration, the mixture can cause skin damage (see security notice below).
- Tools are cleaned with water immediately after use.

## SURFACE PREPARATION AND PRIMER

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- The surface must be resistant, non-friable, dry and cohesive: the surface must have an internal cohesion of at least greater than 1.5 MPa.
- The surface must be dust-free, clean, sound and free from any non-adhering parts, and free from any product liable to impair adhesion: oil, grease, laitance, paint, plaster, laitance of concrete and traces of glue. Remove them by cleaning and / or shot blasting and / or sanding.
- Pure Mineral Beton® is a thin coating, from 1mm to 2mm depending on the destination, which needs to be applied to a perfectly flat surface. Specific preparations are necessary:

Irregular or cracked ground surfaces (slab, screed, etc...) and tiled floor.	P4S Fiber Coating (wait one week of drying /hardening before applying the system) Then « Sanded Primer Multi Surface »
Regular and cohesive surfaces: mortar, cement, P4S filler, gypsum plasterboard etc ..	« Sanded Primer Multi Surface »
Irregular wall surfaces (Concrete cell, "Fermacell", plaster tiles ...	"Multi support sanded Primer" + rubbed Multitop (drying 24h / mm) Then moisten slightly before the application of "Pure Mineral Concrete"
Wall tiles, Wood (MDF, marine plywood, etc.)	"Sanded Primer Multi Support" + Multitop rubbed (drying 24h per mm) adjuvanted with binder. Then moisten slightly before application of "Pure Mineral Concrete"
Non-leaky support showers (Gypsum plasterboards ...)	"Liquid waterproofing Primer"

Refer to the technical data sheets for the following products: "Multitop" ("Les Trois Matons" range), "Multi Support sanded Primer", "Liquid Waterproofing Primer" ("Mercadier" range)

- Some surfaces require special attention:
  - Tile: probe the cohesion of the tiles, remove the unsealed tiles and refill their pitches. After cleaning, apply a sodium hydroxide solution to remove any remaining grease and ensure better adhesion. Rinse thoroughly and let dry the surface. Then carry out the preparation mentioned above.
  - Anhydrite slab (Calcium Sulfate ...): wait at least 8 weeks, according to D.T.U. Before covering and probing residual moisture. It must be less than 0.5% of humidity according to the manufacturer's technical data sheets (carbide bomb test). The screed must be sanded and vacuumed.
  - Hydraulic screed (cement ...): wait at least 28 days, according to D.T.U. before overlap and probe the residual moisture which must be under 4.5%.
  - Adjustable Hydraulic Screed: generally allows a faster recovery, but refer to Technical Advice of the Manufacturer before overlap.
  - New underfloor heating: preliminary heating required (refer to the Technical Advice of the Manufacturer).
  - Floor heating (new or old) must be stopped 48 hours beforehand.
  - Ambient heating: stop the day before application.
  - 'Ready to tile': These types of surface can have certain disadvantages and include:
    - a certain flexibility of the surface can persist despite the application of "Pure Mineral Concrete" in 2mm: it will be necessary to make an additional preparation to the application of "Pure Mineral Concrete" in order to get the basic hardness of the floor. (Otherwise risk of cracks, detachment and punching). Beware, however, of falling objects that can cause significant punching.
    - on certain receivers of this type, the heights of the bungs, which were originally made for the application of tiles, are too large for the application of "Pure Mineral Concrete" in 2 mm. In order to overcome these drawbacks, there are two possibilities:
      - \* Either a "Primer bi-component Epoxy" + sand,
      - \* Or realize a low-end tiling application.

## APPLICATION

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- Application Temperature: +5 to +25°C.
- Avoid wind and sunlight exposure during application and during drying. Indoors, close the shutters or hide the windows and avoid drafts.
- Attention, a high humidity level can cause problem of efflorescence (lighter aureoles). In case of too cold temperature (- 10 ° C) and / or too high humidity, it is advisable to leave a heater in the working area in order to avoid this problem.
- Observe the existing expansion joints of screeds or slabs.

## MIXTURE PREPARATION

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The "Pure Mineral Concrete" is a mortar made of a bag of powder and a tinted binder.

The binder of "Pure Mineral Concrete" needs to be diluted with water:

Powder	Binder	Water
Bag of 20 kg	4kg	2.8L
Bag of 12 kg	2.4kg	1.7L
Test dose 1.25	250g	175ml

For a bag of 20kg powder of "Pure Mineral Concrete" add 4kg of binder "Pure Mineral Concrete" and complete with 2.8L of water.

For a bag of 12kg powder of "Pure Mineral Concrete" add 2.4kg of binder "Pure Mineral Concrete" and complete with 1.7L of water.

For a bag of 1.25kg powder of "Pure Mineral Concrete" add 250g of binder "Pure Mineral Concrete" and complete with 175mL of water.

- Preparation of the colored liquid:

Shake the binder can tightly and transfer it to another container (at least 10 l in the case of a 5L binder can).

Dilute the binder with water according to the proportions above and mix well.

Use this water addition to clean the tinted binder can until it is clean.

This liquid prepared in one go will be used for all your mixtures with the powder.

- Preparation of the powder :

Due to a large quantity of lime and mineral fillers, agglomerates may form. To avoid lumps and flares, we advise you to screen the powder before preparing your mixtures.

- Preparation of the mixture:

Advise: prepare the necessary quantity for the whole application to have a soft mixture all along the application.

Use the tables below in m<sup>2</sup>.

Multiply the quantities by the area to be covered.

**Application sur 1 mm en 2 couches** : murs décoratifs, crédences.

LAyers	Product Quantity to mix by m <sup>2</sup>	Mixture by m <sup>2</sup>
1st Layer	0.6 kg of powder + 0.2L of liquid*	0.8kg
2 <sup>nd</sup> Layer	0.45kg of powder +0.15L of liquid*	0.6kg

\* Warning: the liquid correspond to the mix of: tinted binder + water

- **First and second layer:**

- Moisten the substrate in the case of a porous surface (application on "Multitop" for example) avoiding dripping.
- Apply a first coat with a trowel of about 0.6 mm homogenously:  
+ / - 0.8kg of mixed product by m<sup>2</sup>.
- Check carefully if the product is well hooked to the surface. Scrub this first coat as soon as the mortar begins to "pull" (starts to dry).
- As soon as the imprint of a finger leaves no mark, apply the second coat with a trowel of about 0.5mm homogenously without living oversizes:  
+ / - 0.6kg of mixed product by m<sup>2</sup>.
- Close the grain with a plastic horn or a soft trowel (the plastic horn avoids the blackening of the surface) all over the surface. This step is essential in the case of a shower and worktop application. It also avoids sanding too much.

Important: If this last coat is not closed and smooth enough, you can lightly rub with a sponge slightly moistened and well wiped in order to smooth the surface

Application in 2mm thick in 3 layers: shower walls, countertops, and floors with light traffic (bathroom for example)

(Note: a 2mm application allows a better hardness and a 3 layers application will also allow a finish more "closed", to get an easier maintenance).

**Mixture Quantity for a m<sup>2</sup> by 1mm thick:**

Layers	Product Quantity to mix by m <sup>2</sup>	Mixture by m <sup>2</sup>
1 <sup>st</sup> Layer	0.9 kg of powder + 0.3L of liquid*	1.2kg
2 <sup>nd</sup> Layer	0.67kg of powder + 0.23L of liquid*	0.9kg
3 <sup>rd</sup> Layer	0.45kg of powder + 0.15L of liquid*	0.6kg

\* Warning: the liquid correspond to the mix of: tinted binder + water

- **First layer :**

- Moisten the surface in case of a porous surface (application on "Multitop" for example) avoiding dripping.
- Apply the first layer with a stainless trowel to about: 1 mm thick  
+ / - 1.2kg of mixed product by m<sup>2</sup>.
- As soon as the imprint of a finger leaves no mark, but is still fresh enough to be smoothed, lightly rub the first coat with a sponge slightly moistened and well wiped in order to smooth the surface. Attention: this is not to wet the support, but only to smooth and flatten without tightening the grain.
- Wait until the first coat has completely dried before carrying out the following steps (between 5h and 24h depending on the surface and the application conditions).

- **Second coat and third coat :**

Moisten again the first coat before the application of the second coat, avoiding dripping.

- Apply a second coat with a stainless trowel of about 0.7mm thick homogeneously:  
+ / - 0.9kg of mixed product by m<sup>2</sup>.

- Check carefully if the product is well hooked to the surface. Scrub this second coat as soon as the mortar begins to "pull" (starts to dry).
- As soon as the imprint of a finger leaves no mark, apply the third coat smoothly and homogeneously to about 0.5mm:
  - + / - 0.6kg of mixed product by m<sup>2</sup>.
- Close the grain with a plastic horn or a soft trowel all over the surface (the plastic horn avoids the blackening of the surface). This step is essential in the case of a shower and worktop application. It also avoids sanding too much.

Important: If this last coat is not closed and smooth enough, you can lightly rub with a sponge slightly moistened and well wiped in order to smooth the surface. The really closed surface application, following a "fresh in fresh" application, is essential for a good performance of the system of protection against marks.

Usually, the total thickness of the 3 layers should be 2 mm.

## **FINAL DRYING / SANDING**

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- Attention, due to its lime composition, the "Pure Mineral Concrete" remains more or less soft for a few weeks (be careful to pay attention to the outgoing angles and the pedestrian traffic).
- Wait a few days before hand sanding. The "Pure Mineral Concrete" must be hard enough before being sanded. Use fine sandpaper (grain 150/180) to not scratch the surface.
- Sanding provides a softer, smoother finish. It also intensifies the effects of materials. Take this into consideration if a finish more homogeneous is desired.
- Wear socks to walk in case of a floor realization
- Restart heating (floor heating or ambient) at least 48 hours after application and gradually. This must be done before applying the protections.
- The coating will reach its maximal resistance capacity after 28 days.

## FINISH / PROTECTION

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- Surface treatment with one of our finishing product must be carried out.
- The chosen finishing product varies according to the use made of the surface (see synthesis of the finishes, contact us) and contributes to the longevity of the realization.
- The finishing treatment must be carried out at least 5 days later. It is imperative to check the residual moisture content (less than 1%), the soil temperature and the ambient temperature (see data sheet of protections).
  
- Protect the "Pure Mineral Concrete" with a system adapted to your realization:
  - Impregnator Sealer + Solvent-based Protector for bathrooms.
  - Impregnator Sealer + Bi-Component Solvent-based Varnish for areas subjected to heavy tasks (worktop in particular).
  - Impregnator Sealer + Mono-Aqua varnish for living rooms.
  
- First use: wait 1 week minimum for normal traffic after drying of the protection system. During the first 10 days take some precautions: do not cover, do not cover, do not use carpet, and do not move heavy furniture, dry clean (vacuum cleaner or broom, no liquid).
- Regular maintenance is required. Maintenance frequency will vary depending on the use of the surface and the selected finish. In order to preserve the product and its finish it is advisable to:
  - Attach pads under the feet of furniture, chairs, etc ...
  - Do not let colored stains, grease marks, etc... On the surface. Wipe them as soon as possible.
  - Clean the surfaces with Mercadier Shampoo.

## COVERAGE / STORAGE

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- The kit includes: a powder bucket & a can of liquid
- Coverage:
  - + Or - 0.9 kg of powder / m<sup>2</sup> / mm
  - + Or - 1.2kg of mixed product / m<sup>2</sup> /mm
  
- For a Kit of 24kg (20kg of powder + 4kg tinted binder):
  - Coverage: In 1mm: about 19.2m<sup>2</sup>
  - In 2mm: about 9.6m<sup>2</sup>
- For a Kit of 14.4kg (12kg of powder + 2.4kg tinted binder):
  - Coverage: In 1mm: about 11.5m<sup>2</sup>
  - In 2mm: about 5.7m<sup>2</sup>
- The products can be stored for 1 year in their original packaging, unopened, protected from moisture.

## TIPS

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- In hot weather store the night before work, the liquid in the fridge to slightly lengthen the application time and store the powder in a cool/cold room.
- If it is a wall or a vertical surface, proceed from bottom to top by crossing your movement for the first layer and from top to bottom for the 2nd layer.
- Use paint tape in order to delimit the area to be coated clearly. Be careful to remove the tape before drying the plaster completely. Repeat the operation for each layer.

## ASSOCIATE PRODUCTS

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### RANGE 'MERCADIER'

- Primer: Waterproofing primer, Sanded Multi-Support Primer, Sanded Epoxy Primer
- Finishing products:
  - Impregnator Sealer + Mono Aqua Varnish : Floors
  - Impregnator Sealer + Solvent-Based Protector : Bathrooms
  - Impregnator Sealer + Bi-Component Solvent-Based Varnish: Worktops, Countertops, and wash-basins

### RANGE 'LES TROIS MATONS'

- Multitop
- Tramex

## ADVICES AND WARNINGS

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- - Read the latest version of this data sheet (see website). Our Sales Department Service and our resellers are at your disposal for any additional information.
- The decorative coatings such as 'Polished concrete' are materials with a continuous appearance, with very few seams & splits. Despite some flexibility, they may accept certain deformations of the surface, but to some extent. The decorative material is therefore (as paints and other decorative coatings) sensitive to the movements of the support. In the event of a significant differential movement of the latter, cracks may appear, despite all the care taken in your work during the application.
- The guarantees of good performance and longevity can only be acquired if the complete Mercadier system (primer, "concrete" and finishing product) is used and sticks to the datasheet instructions for use of this system and maintenance recommendations. Therefore, our responsibility can not be undertaken in the event of an application that does not stick to our information and does not use our entire system.
- The information, tips and advice regarding the end use of MERCADIER products are provided in good faith. They are based on the knowledge and experience that MERCADIER Company has acquired to date of its products when properly stored, handled and applied under normal conditions. In practice, the differences between materials, substrates and specific conditions on site are such that this information or any written

recommendation or advice given implies no guarantee of merchantability other than the legal warranty against latent defects

-The colors and aspects shown in our color chart are indicative and cannot be considered as contractual. It is the same thing for panels presented in stores. As far as possible, it is advised to use identical batches. These products have indeed a final finish nuanced which can also vary according to the conditions of application (Applicator motions, temperature, etc.).



In accordance with the new French regulation which imposes limit values of the rate of VOC (Volatile Organic Compound), present in the products of the construction this product respects the environment.

This regulation imposes that most of the decoration products be provided with a label which indicates in a simple and readable way, their level of emission in volatile pollutants (VOC).

This is indicated by a class ranging from A+ (no or very low emissions) to C (high emissions). As this product has not yet been tested, it is classified C pending the results, but this does not mean that it is "harmful".

The information contained in this sheet is the expression of our knowledge and test results, it can in no way be considered as providing a guarantee, nor as engaging our responsibility in case of defective application.