AXXX POURED FLOOR

PRODUCT DESCRIPTION

self-levelling , self-smoothing , calcium sulphate (anhydrite) based product that is extremely smooth and quick-setting. High-performance fluidising technology ensures excellent smoothing.
- This homogeneous finish with a very smooth and soft surface offers the user a decorative floor of great hardness and aesthetics.
- Its formula with innovative raw materials gives it both decorative properties through the fineness of its grain, as well as high mechanical resistance (suitable for heavy traffic/public places). With its excellent very smooth finish and its formulation, it represents a new generation of 'cast floors with very low tension (little shrinkage).
- With its fluid consistency, it can be easily implemented and allows the rapid creation of interior floors.
- Anhydrite-based 'poured floors' are a quick and ideal solution for creating surfaces whether for renovation or new construction.
- Applied to a thickness of 3 to 10mm, it allows you to work on most supports and existing tiles.

AREAS OF APPLICATION

- Interior (except damp rooms or floors with rising damp/humidity)
- Hydraulic screeds (cement, excluding lightweight screeds)
- Tiling (contact us for suitable preparations and primers)
- Fiber-reinforced screed
- Suitable for hot water underfloor heating and low temperature electric underfloor heating.
- Not suitable for humid rooms (bathrooms, etc.) or any use with a risk of humidity.
- Not suitable for cellars or crawl spaces where there is a risk of rising damp.
- Not suitable for radiant floors and cooling floors (risk of condensation, dew point).
- Other media: contact us

NB: As with our other castings, in the case of new underfloor heating, the first heating and testing must be carried out before the 'floor casting'. In all cases, the underfloor heating must be completely switched off at least 48 hours before and can only be switched on again at least 48 hours after casting.
The AXXX 'cast floor' must not come into contact with insulation and heating pipes due to the risk of corrosion. This is particularly true for galvanized steel heating pipes.

NECESSARY TOOLS

- Measuring cup, 3 mixing buckets of suitable size (approximately 30 litres) or 50/100l bins (with flat bottom and sides), Flemish smoother, mixing whisk (mounted on a variable speed drill), "No. 12" mason's sieve, sanding equipment (single-brush machine and white PAD discs).
- The tools are cleaned with water immediately after use.
- Ideal application team: 3/4 people (to be increased depending on the surface area of the site): 2 prepare the mixtures while one person carries the "mixtures" / pours them gradually onto the ground and the last person applies in the Flemish style. This allows you to work quickly and to chain the pours while limiting the rework of materials.
- Can be applied (ideally in 5mm) to the pump and the mechanical mixer – For this, please contact us.

SUPPORT PREPARATION & PRIMARY

- The support must be strong, non-friable, stable, dry and cohesive: the support must have an internal cohesion of at least 1 MPa.
- The surface must be dust-free, clean, sound and free of non-adherent parts and free of any product likely to impair adhesion: oil, grease, paint, plaster, concrete laitance and traces of glue. Remove them by cleaning and/or shot blasting and/or sanding.
- Fill the holes with a suitable product.
- Repair localized cracks in the support using a suitable product in accordance with current technical specifications.
- If your support is cracked over a large area, or uneven, we advise you to use either:

A P4S fiber-reinforced leveling compound must be applied beforehand to level the surface. This will facilitate application and contribute to a more aesthetically pleasing finish. Cracks must always be repaired beforehand.

- It is essential to install peripheral joint strips around the perimeter of the rooms, at the external corners and around the posts, in order to allow the concrete to expand correctly and limit the risk of micro-cracks appearing. **The thickness of the peripheral joint strips must be proportional to the thickness of the casting in mm** (e.g.: 5 mm cast floor = 5 mm thick peripheral joint strips).
- Respect existing expansion or splitting joints in screeds or slabs by installing profiles and pouring on either side of them.
- For woodwork, protect the wood with plastic masking tape to prevent it from swelling during application (level off the tape after drying).
- On all surfaces, apply the appropriate primer (covering time, see Technical Data Sheet for the primer)
- Specificities by support:

Tiling : Check the cohesion of the tiles, remove any loose tiles and refill their locations. Clean your tiled floor with 'St Marc' detergent to remove any remaining grease and ensure better adhesion. Rinse thoroughly and allow to dry. Resurfacing (sanding) the tiles is strongly recommended to ensure better adhesion of the system.

Hydraulic screed (cement, excluding lightweight screeds, etc.) : wait at least 28 days, in accordance with the DTU, before covering and test the residual humidity of the substrate (a humidity level below 4.5% is necessary).

Admixed screed : generally allows for faster covering, refer to the Technical Advice of the screed Manufacturer.

New underfloor heating : the first heating and testing must be carried out before the 'floor is poured'. The underfloor heating must be completely switched off at least 48 hours beforehand and cannot be switched back on until at least 48 hours after it has been poured.

Hot water underfloor heating : prior heating is essential (refer to the Manufacturer's Technical Advice).

Low temperature electric underfloor heating : it must be switched off 48 hours before laying the 'poured floor'.

Ambient heating : stop the day before application.

Anhydrite screed (Calcium Sulfate, etc.) : wait at least 8 weeks, in accordance with the DTU, before covering and test for residual moisture, which must be less than 0.5% in accordance with the screed manufacturer's Technical Data Sheets (carbide bomb test or measurement using a moisture meter). The screed must be sanded and then vacuumed.

Leveling : use a P4S-classified fiber leveling compound, and wait at least 7 days for drying/hardening before covering, test the residual humidity of the substrate (a humidity level below 4.5% is necessary).

Summary of the Primaries

Leveling compounds, hydraulic screeds or other porous supports or in certain cases "damaged" supports	• Porous Fund Fixer (for very porous supports) • Multi-Support Sanded Primer respecting the consumption indicated for a poured floor or • MERCADIER fiber-reinforced leveling compound + Multi-Support Sanded Primer
Interior tiles & cement tiles or in some cases old non-porous screeds, old terracotta (after degreasing.	• Multi-Support Sandblasted Primer
Anhydrite screeds (the screed must be received and finished by the screeder beforehand: pay particular attention to the flouring)	• Multi-Support Sanded Primer: The substrate must be free of laitance and dust-free. The humidity level of the screed must be less than 0.5% (carbide spray test or measurement using a moisture meter). Apply a first coat diluted to 20% and then apply a second undiluted coat (respect the recommended coverage)

PREPARATION OF THE MIXTURE

- Shake the coloring dose (concentrate) vigorously to obtain a uniform color.
- Then transfer into the mixing bucket and top up with water at room temperature to obtain a total liquid mixture (water + coloring dose) equal to the weight indicated in the table at the end of the technical data sheet.

ATTENTION :

Adding more water in the proportions indicated above could result in larger batch connections (color differences) as well as the appearance of cracks and other technical problems.

A lack of water could result in a less creamy mixture and therefore a product that does not stretch properly.

- Make sure you have collected all the pigment by rinsing your coloring dose bottle several times in the mixing water.
- Mix everything again to obtain a homogeneous liquid (coloring dose + mixing water).
- Gradually pour the powder into the colored homogeneous liquid while mixing with the whisk (at about 300-500 rpm). Do not hesitate to scrape the sides and bottom of the bucket (using a Maryse spatula) in which the mixture is made in order to obtain a smooth and homogeneous mixture (without lumps). This operation should not last more than 3 minutes.
- The product thus mixed must be passed through a mason's sieve "No. 12" in order to eliminate any residual lumps.
- Let the mixture stand for 3-5 minutes to allow the bubbles to disappear (the bubbles are created by the mechanical action during mixing).
- This process must be repeated for each kit ("mixture"), from this point onwards it will be necessary to pour the product in a loop until the end of the project.

IMPLEMENTATION

- Ideal temperature for use: +15 to +25°C (do not exceed these temperatures as this may cause the product to stretch poorly)
- Minimum soil temperature for implementation: +10°C
- Practical duration of use: 15 to 20 minutes once mixed (for a temperature of +20°C, an ambient humidity level of 65% and a layer thickness of 5mm)
- Relative humidity of ambient air: less than 65%
- Define the desired application thickness and therefore the surface to be covered per 'mixture' (see table # Yield)
- In order to obtain the most homogeneous result possible and avoid connections between batches, the pours must follow one another quickly. Also, once the product has been mixed and rested, stir the mixture for 15 seconds just before application (this must be done manually using a large stainless steel spatula for example) in order to re-homogenize the mixture.
- Gently pour the mixture onto the ground.

- The freshest batch (more fluid consistency) will slightly overflow onto the previous batch in order to even out the surface.
- Using the Flemish trowel, help the product to settle into place and allow it to get into the corners...
- Pay particular attention to the connection with the bottom of the walls.
- If the color of the product does not appear uniform during application, use the Flemish to homogenize it before the product sets.

- Avoid exposure to wind and sun during application and while drying. Close shutters or cover windows and avoid drafts. Block drafts under doors to avoid the risk of crazing in these areas.

FINAL DRYING / SANDING

The product must be protected from frost, wind and sun while it sets and hardens. Do not use tarpaulins, cardboard boxes or carpets, which would prevent the product from drying properly.
- The times are indicated for an ambient temperature of 20°C and may vary depending on the implementation conditions.
- Waiting time before pedestrian traffic (preferably in socks): the next day
- As soon as the surface of the coating has sufficiently hardened (check the residual moisture content using a moisture meter), and at least 48 hours after pouring (depending on the humidity and temperature conditions and the thickness applied), " pad " the coating using a single-brush machine (only with a white PAD) in order to obtain an even softer and more closed surface. A very fine micro-dust develops, this must absolutely be vacuumed up using a vacuum cleaner.
- Reheat (underfloor or ambient heating) at the earliest 48 hours after application and gradually, because a temperature difference between the surface and the ambient air can create slight micro-cracks (less than the thickness of a hair). This must be done before applying the protections.
- The 'cast floor' AXXX will reach its maximum mechanical resistance capacity after 28 days.

FINISHING / PROTECTION AND TREATMENT

- Surface treatment with one of our finishing products must be carried out.
- The treatment chosen varies depending on the use made of the premises (see summary of finishes, consult us) and contributes to the longevity of the project.
- The finishing treatment must be carried out no sooner than 3 days after pouring and after checking the residual moisture content in the poured floor. It is essential to first check the residual moisture content (less than 1%) using a moisture meter, the floor temperature and the ambient temperature (see Technical Data Sheet for protections):

- Protect the 'cast floor' AXXX with a system adapted to your project:
    Mono-Aqua Impregnator and Varnish for living rooms
    Bi-Aqua Impregnator and Varnish for high traffic areas.

Regarding the application of the impregnator, the application technique is different from other 'poured floors'. Refer to the Technical Data Sheets for the impregnator + varnish system

- Commissioning: wait at least 1 week for normal traffic after the protection system has dried. During the first 10 days, take a few precautions:

Do not cover, do not place rugs, do not move heavy furniture, dry clean (vacuum cleaner or broom).

- Regular maintenance is required. The frequency will vary depending on the use of the area and the finish selected. To preserve the product and its finish, it is recommended to:

Attach felt pads under the legs of furniture, chairs, etc.

Do not let stains of colored water, grease, etc. remain, wipe them off as quickly as possible

Clean the surfaces with the Mercadier range of Cleaning Shampoo (regular floor maintenance) and see the Technical Data Sheet for protective varnishes for all information concerning the maintenance of your floor.

YIELD & PACKAGING & STORAGE

- Yield: 1.7kg / m^2 / mm
- On smooth 3mm support / On 5 to 7mm tiles depending on the depth and width of the joints.
- Formats: the kit includes:

A bucket of 25kg powder

A coloring dose

- The products can be stored for 6 months in their original, unopened packaging, away from humidity and heat.

Surface that can be covered with a kit depending on the thickness :

Thickness (mm)	3	4	5	6	7	8	9	10
Covered area (m^2)	4.9	3.7	2.9	2.5	2.1	1.8	1.6	1.5

MECHANICAL PROPERTIES

The AXXX 'cast floor' will reach its maximum mechanical strength capacity after 28 days.

- Flexural/compressive strength test: determines the limit weight before breaking of the material in bending and crushing.

Mechanical resistance of the 'cast floor' AXXX :

TESTS	RESISTANCE in MPa
Compression	C40
Flexion	F10

These values are orders of magnitude for laboratory tests. They can be significantly modified by the implementation conditions.
For example, the compressive strengths of our 'poured floors' can be classified according to an index which represents a performance index (compressive strength):

- SC+ = index 100
- RBX = index 102
- AXXX = index 159

The measurements were carried out on real construction sites. These tests are therefore not standardized and cannot under any circumstances serve as a guarantee.

TIPS

- To facilitate the progress of the worksite, remember to prepare all the mixing buckets (coloring dose + water) of each kit before the start of the worksite and the first pour. Follow our charts at the end of the document.
- To assess the thickness of the product applied, think "backwards": it is difficult to judge the thickness of the product applied. However, it is easier to determine the surface area to be covered with the amount of a bucket to ensure that the correct thickness of product is applied.
- Use a drill to mix or a mixer with a whisk (contact us if necessary or see our website). Avoid the turbine which can bring in air and promote bubbling.

RELATED PRODUCTS

- Porous Fund Fixer (FFP)
- Multi-Support Sandblasted Primer (PRMU)
- Mercadier Fiber Leveling Compound
- Protection systems (impregnator and varnish)

RECOMMENDATIONS AND WARNINGS

- Consult the most recent version of this Technical Data Sheet (see website). Our Distance Selling service and our resellers are at your disposal for any additional information.
- Decorative coatings such as 'polished concrete' are materials with a continuous appearance, with very few joints and splits. Despite a certain flexibility, they can accept certain deformations of the support, but to a certain extent. The decorative material is therefore (like paints and other decorative coatings) sensitive to movements of the support. In the event of significant differential movement of the latter, cracks may appear, despite all the care taken during application.

- The guarantees of good performance and longevity can only be acquired in the event of use of the complete system of the Mercadier range (primer, product and finish) and strict compliance with the instructions for use of this system as well as the maintenance recommendations. We cannot therefore be held liable in any way in the event of an application not in accordance with our information and not using our entire system.
- Information, tips and advice relating to the end use of MERCADIER products are provided in good faith. They are based on the knowledge and experience that MERCADIER has acquired to date with its products when they have been properly stored, handled and applied under normal conditions. In practice, differences between materials, substrates and specific conditions on site are such that this information or any written recommendation or advice given does not imply any guarantee of merchantability other than the legal guarantee against hidden defects. The colors & appearances shown on our color charts are indicative and cannot be considered contractual. The same applies to the panels presented in store. Where possible, it is preferable to use identical batches. These products have a nuanced final appearance which can also vary depending on the application conditions (applicator's gesture, temperature, etc.).

HEALTH AND SAFETY

Classification according to Regulation (EC) No. 1272/2008: The product is not classified according to the CLP Regulation.

In accordance with the new French regulations that impose limit values for the VOC (Volatile Organic Compound) content of construction products, this Mercadier product is environmentally friendly. This regulation requires construction and decoration products to have a label indicating their volatile pollutant (VOC) emission level in a simple and legible manner.
*Information on the level of emission of volatile substances in indoor air, presenting a risk of toxicity by inhalation, on a class scale ranging from A+ (very low emissions) to C (high emissions).

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

General grid of available colors and precise weights for preparing the mixing water:

Water + Coloring dose

(kg of tinted liquid for a 25kg bucket of powder)

NB: For a more fluid product and better tension / opening time, flexibility to add 200g (0.200 kg) of water is possible by heating between 21 and 25°C.
NB: for a test dose of 2.5 kg of AXXX powder, the quantity of tinted liquid in the table above (water + coloring dose) is to be divided by 10.

	Water + Coloring dose (in kg of tinted liquid for a 25kg bucket of powder)
ASWAN	5.30
COFETE	5.21
CORDILLERA	4.99
CRASPEDIA	4.89
DONKEY	5.04
FROCK	4.88
GAZOU	4.95
FROSTED	5.27
GRIBI	4.84
WINTER	4.89
MARL	5.50
MILNA	5.43
MOON	5.19
NONZA	4.98
OPERA	4.90
QAMSAR	5.64
SABOR	5.46
SO BRITISH	5.09
TAHINI	5.11
ZEROUZI	5.11

Caution: Excess water can cause bubbling, chalking, and non-conforming colors, as well as impair the product's mechanical properties. Please observe the mixing water quantities precisely.

General grid of available colors and precise weights for preparing the mixing water:

Pump system with/or electronic water doser

(kg of tinted liquid for a 25kg bucket of powder)

	Pump system case (for a 25kg bucket of powder)	
	Water (Liters or kg)	Coloring dose (kg)
ASWAN	4.48	0.82
COFETE	4.40	0.81
CORDILLERA	4.40	0.59
CRASPEDIA	4.41	0.47
DONKEY	4.43	0.61
FROCK	4.39	0.49
GAZOU	4.38	0.57
FROSTED	4.48	0.79
GRIBI	4.40	0.44
HIVER	4.39	0.50
MARNE	4.54	0.97
MILNA	4.53	0.90
MOON	4.44	0.75
NONZA	4.35	0.63
OPERA	4.39	0.51
QAMSAR	4.57	1.07
SABOR	4.53	0.92
SO BRITISH	4.38	0.71
TAHINI	4.45	0.66
ZEROUZI	4.46	0.65

Caution: Excess water can cause bubbling, chalking, and non-conforming colors, as well as impair the product's mechanical properties. Please observe the mixing water quantities precisely.