

# CONCRETE LOOK SELF-LEVELING FLOOR

## INDUX-RBX<sup>®</sup>

### PRODUCT DESCRIPTION

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- The INDUX-RBX<sup>®</sup> is a self-leveling mortar, fusion of cement and mineral particles, enriched with redispersable resins and special admixtures.
- Technology used in its fabrication is a result of profound research carried out to create an exclusive formula. It was tested by CSTB (Scientific and Technical Centre for Construction) that confirmed its exceptional qualities. It has obtained the highest performance level achievable according to the French and European standard NF EN 13813:2002 "Screed material and floor Screeds", namely:
  - Wear resistance BCA: maximum ranking AR0.5 achieved \*
  - Firmness/resistance Shore: ranking SH 200 achieved \*\*
- Ideal for vast areas, it offers you a possibility of fast rendering on indoor floors.
- It will appear as a smooth screed of an industrial character, coloured in its mass, revealing more or less nuances and "material" depending on colours and application conditions (its fine grains slightly appear while sanding).
- It's enriched formula ensures high resistance to wear.
- Applied with a thickness of 4 to 15 mm, it allows working on usual concrete surfaces and tiled floors (7 to 9 mm depending on the size of the seams).

### APPLICATION AREAS/SURFACES

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- Indoors
- Cement screeds / Concrete slabs / Fibered screed
- Tiles
- Suitable for calcium sulfate screeds (anhydrite screeds) with a special preparation treatment, such as textured epoxy primer laid by a professional.

### NECESSARY TOOLS

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- Measuring glass, 3 buckets of an appropriate size (about 30 litres) or dustbins, finishing trowel, stirrer (mounted on a drill), sieve (8 mm), sanding material (single-disc polisher 120, then green or black PAD discs).
- Gloves: it is recommended to put on gloves since the mixture can cause skin damage (see safety/precautions below) like other masonry/decorative products.
- Tools must be cleaned with water immediately after use.
- Ideal application team: 3 people (two of them prepare the mix while the 3rd pours it). This combination allows to work rapidly and to link the batches together to ensure the uniformity of application.

## PREPARATION DU SUPPORT & PRIMAIRE

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- The surface has to be resistant, non-friable, stable, dry and cohesive (1 MPa cohesion is necessary).
- The surface must be free of dust, clean, sound and free of loose parts. It is essential to clean the surface from any traces of oil, grease, laitance etc.
- Scrape off paint, plaster, concrete laitance and glue traces.
- Fill the holes and cracks with a suitable product or our Layered Decorative Concrete.
- If your surface is cracked or uneven, we recommend you to lay

A fiber patching screed (P4S, please, contact us) to level the surface. This will facilitate implementation and contribute to a more aesthetic render. In any case all the cracks must be fixed before application of seamless floor product (INDUX-RBX) ®.

Or a Sanded Epoxy Primer, screened in case of cracks (see Primers technical specifications)

- Keep to expansion and contraction joints and existing peripheral joints of screeds and slabs. It is especially important on under floor heating.
- It is strongly advised to put foam strips to create peripheral expansion joints, especially on external angles and columns that protrude. It will ensure regular expansion of concrete and help avoid cracking. It is obligatory to put these strips if you apply INDUX-RBX® on floors with under floor heating.
- If your area contains wainscot paneling, protect the wood with a plastic masking tape to avoid its swelling during application (take off the tape after drying).

- Apply an adapted primer on all the surfaces (time before covering, refer to technical specifications).

- Specifics depending on surface:

a) Tiles: probe tiles' cohesion, remove loosen tiles and fill in their spaces. Clean your tiles with professional washing powder in order to remove fat remains and ensure best possible adhesion. Then rinse and leave to dry.

b) Hydraulic screed (cement...): wait for at least 28 days (according to D.T.U. – the French Building Code regulations) before covering and measure residual moisture – it must be inferior to 4.5%.

c) Adjuvant hydraulic screed (cement...): generally allows a faster coating, but refer to technical specification of a manufacturer before coating.

d) New floor heating system: carry out a preliminary heating (refer to technical specification of a manufacturer).

e) Floor heating system (new or old): heating must be turned off 48 hours before product application.

f) Room heating: turn off one day before product application.

g) Anhydrite screed (plaster-based): wait at least for 8 weeks (according to D.T.U. – the French Building Code regulations) before covering over and measure residual moisture – it must be inferior to 0.5% according to technical specifications of screed manufacturers (use calcium carbide test).

- In case the product is applied on surface with underfoot heating and/or with thickness superior to 6mm, create peripheral joints with a special tape for peripheral joints.

i) Roughening : use a fiber reinforcement P4S and then wait at least 7 days of drying/hardening ; before recovery, probing residual moisture: less than 4.5%

j) Sanded Epoxy Primer: apply the SOLIX-SC+ in 5/6mm of thickness.

### Primers Overview

Patching compounds, concrete slabs, cement or other porous surfaces or in some other cases: old terracotta (after grease removal)	<ul style="list-style-type: none"> <li>• Textured All-surface Primer keeping to indicated consumption of the INDUX-RBX® (300 g per m<sup>2</sup>)</li> <li>• Two-component primer Epoxy + Sand</li> </ul>
Tiles and interior cement tiles, some old non-porous screeds	<ul style="list-style-type: none"> <li>• Textured All-surface Primer (30 min to 1 hours of drying)</li> <li>• Two-component primer Epoxy + Sand</li> </ul>
Anhydrite screeds	<ul style="list-style-type: none"> <li>• Two-component primer Epoxy + Sand</li> </ul>

Sanded Epoxy Primer could be, in certain cases, completed by weft of fiberglass so as to consolidate the surface if necessary.

### MIX PREPARATION

- Identify the right base to use (white or grey).
- Vigorously shake the bottle with the colouring concentrate to obtain a homogenous colour (it is normal to have little differences between the levels of colouring doses in jerricans – most important is to keep the constant pigment quantity)
- Decant the liquid into a bucket and complete with water to obtain the mix of:
  - Either total liquid (water + colouring concentrate) of 5.8 litres for the full kit of 25 kg.
  - Caution: foam appearing while stirring the colouring concentrate in water can give a misleading impression that the level of the liquid is good. Check the real level having moved the foam aside.
  - Or total liquide (water + colouring concentrate) according to the weights indicated in the table in the appendix to this Technical Specification (depending on your colours).

#### ! CAUTION:

- Excessive amount of water added to the mix might lead to serious differences between the batches (i.e. colour differences etc.) as well as to cracking and other mechanical problems;
- Lack of water in the mix will make it less smooth and will not let the product spread properly.

- Make sure that you have used all the pigment by rinsing several times the bottle of the colouring concentrate and pouring this liquid into the bucket with pigment.
- Stir again to obtain homogeneously coloured liquid.
- Gradually add powder to the homogeneously coloured liquid constantly stirring it with the help of a stirrer (at about 500 turns/min). The mix must be fluid and homogenous (without lumps). This operation must not last for more than 3 minutes.
- Leave the mix for 2 minutes to let the bubbles disappear.
- This process must be repeated for every batch. In their turn, batches must be poured continuously until you accomplish your building process.

## APPLICATION

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- Application temperature: 10 to 25°C.
- Open time: 15 minutes once the mix is made.
- Define the desired thickness and the surface to cover by a batch (refer to the table in the appendix).
- Carefully pour the mix onto the surface.
- Using a finishing trowel, help the product get into the right places (i.e. angles) and adjust the thickness according to the following table:
- The product can be used with a thickness starting from 4 mm on "smooth and uniform surface". However, it will hold better if applied with 5 to 6 mm of thickness.
- Pay particular attention to junctions with walls.
- In order to receive a homogenous result, the batches of the mix must be poured quickly and continuously. If buckets with ready batches were left aside for some time, you should slightly stir the mix for 15 seconds right before application (can be done manually) in order to re-homogenize the coloured water and the sand.
- A fresher batch (with more fluid consistency) must slightly come over the previous one in order to level out the surface.
- Crush or remove the lumps with the edge of a finishing trowel.
- If the colour of the product is not homogenous while it is applied, use a finishing trowel to homogenize it before it sets.
- For a more uniform rendering in terms of colours and nuances it is possible to use a spiked roller adapted to the thickness of your coating. In this case:
  - 1) It is recommended to work in a group of 4: two persons prepare mixes, one person works a finishing trowel and the last one works a spiked roller. Two people pouring and leveling the batches must wear spiked shoes.
  - 2) Apply the coating as indicated above and gradually pass the spiked roller on a product yet fresh and liquid (otherwise the roller might leave traces).
  - 3) A pass of a finishing trowel is necessary (simply skimming the surface) to eliminate all the spike traces of the roller.
- Avoid exposure to wind and sun at the moment of application and during the drying period. If indoors, close the shutters and fasten the windowpanes, avoid air currents.
- Avoid draughts under the doors: place some tissue to avoid multiple cracking at this area.
- Important: the final render is more or less nuanced depending on the colour and application conditions. A polish with a grid (100 to 180 type Scotch-Mesh<sup>TM</sup>) carried out minimum 3 days later at 20°C, followed by a proper polish with a single-disc polisher (black to red PAD according to desired nuances) may diminish the nuances. Always check the final aspect of the coating when it is dried and polished before applying the protections.
- If the appearance of the first layer is not satisfactory, it is possible to place the second one (15 mm maximum for the total thickness of two layers). In this case, leave it to dry for 3 days previously applying a primer for porous surfaces conforming to the right technical specification.

## FINAL DRYING/SANDING

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- Time frames are indicated for the room temperature at 20°C, thus they may vary depending on it.
- Waiting time before it is allowed to step on the surface (preferably in socks): 5 hours after application (may vary depending on the temperature and moisture).
- 48 hours after application (at 20°C), polish the coating with a single-disk polisher (ideally with a black to red PAD depending upon the desired aspect) to obtain even smoother and more "closed" surface. The grain of the product will reappear at this stage.
- The final render will be more or less nuanced depending on the colour and application conditions. A good polish may drastically diminish the nuances. Always check the final aspect of the coating when it is dried and polished before applying the protections.
- The product must be protected from the frost, wind and sun during its setting and hardening. Do not use any plastic film or plastic overwrap since it will not let the product dry in normal conditions.
- Gradually restart the heating (floor or room heating) the earliest 48 hours after application since temperature difference between the air and the surface might lead to cracking (of thickness inferior to that of a hair). It must be done before the use of sealers.
- The coating will reach its highest resistant capacity after 28 days.

## FINITION / PROTECTION ET TRAITEMENT

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- It is obligatory to treat the surface with one of our finishing products.
- The treatment is chosen according to the use of the place (refer to sealers overview, contact us) and contributes to the lifespan of the product.
- Wait for at least 5 days after application and after having checked the moisture and temperature of the coating, protect the INDUX-RBX<sup>®</sup> with a system adapted to your project:
  - Impregnator + Mono Aqua Varnish: Room floors
  - Impregnator + Bi Aqua Varnish for Floors: Floors with high traffic.
  - Impregnator + Solvent-based Protection : bathrooms (floor only)
  - Impregnator + Bicomponent Solvent-based Varnish: Countertops
- The maximum hardness of a concrete look seamless floor is reached 28 days after the sealer sets.
- Covered surface will be operational 1 week after drying of protection systems. Take certain precautions during the first 10 days: do not cover, do not put any carpets, do not move/place heavy furniture, carry out only dry cleaning (hovering or sweeping).
- Regular maintenance is necessary. Its frequency is varied depending on how the area is used and also on a selected sealer. To preserve the product and its sealer, it is recommended:
  - To place the felt pads under the legs of the furniture, chairs etc.
  - Not to leave any coloured water spots or grease stains (wipe them out as soon as possible).
  - Clean the surface with MERCADIER shampoo.

## COVERAGE & PACKAGING & STORAGE

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- Coverage: 2 kg / m<sup>2</sup> / mm
- Format: a kit includes:
  - A bucket of powder;
  - A jerrican of colouring concentrate.
- The full kit consists of 25 kg of powder and a dose of colouring concentrate.
- On tiles, especially if the seams are well marked, the product must be poured with a thickness of at least 7 to 9 mm (depending on the thickness and depth of the seams) to prevent their reappearance at drying.
- The product can be kept for 6 months in its original unopened packaging in a place protected from moisture.

Surface to cover with one kit (25 kg of powder + 5.8 l of liquid) depending on thickness:

Thickness (mm)	4	5	6	7	10	12	15
Surface to cover (m <sup>2</sup> )	3,1	2,5	2,1	1,8	1,3	1,0	0,8

## MECHANICAL PROPERTIES

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The coating will reach its maximum resistance capacity after 28 days.

- Adhesion test consists in verifying the tear strength of the product relative to its support. Traction is performed 35 days after application of the product.
- Flexion resistance test/compression determines the weight limit before fracture of the material in flexion and in crushing.

### Examples of mechanical resistance of the INDUX-RBX®

TEST	RESISTANCE in MPa
Compression	35 MPa
Traction/Flexion	10 MPa

These values are orders of magnitude during laboratory tests. They can vary considerably depending on application conditions.

## TIPS

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- In order to facilitate application you can prepare all the water mixes (colouring concentrate + water) before the beginning of your building process and pouring of the first batch.
- To evaluate the desired thickness, think backwards. It is difficult to estimate the thickness of the product already poured, but it is easy to outlier the surface to be covered with one batch (refer to the table in the appendix). In such a way you make sure to pour the product of a necessary thickness.
- Use a drill to stir (with a stirrer): reverse speed is generally lower, that is more adapted, since it reduces air flux and bubbling.

## PRODUITS ASSOCIÉS

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- Textured All-surface Primer
- Sanded Epoxy Primer
- Sealers:
  - Impregnator + Mono Aqua Varnish: Room floors
  - Impregnator + Bi Aqua Varnish for Floors: Floors with high traffic.
  - Impregnator + Solvent-based Protection : bathrooms (floor only)
  - Impregnator + Bicomponent Solvent-based Varnish: Countertops

## RECOMMENDATION AND WARNING

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- See the most recent version of this technical specification (see website). Our distributors and our technical support are at your disposal for any clarification.
- Decorative coating such as layered polished concrete is the material with a 'continuous aspect', seamless and almost without fractionation. Having certain flexibility, it accepts a slight surface deformation, but up to a certain extent. Thus, this decorative material is sensitive for surface movements (similarly to paint or any other decorative coating). If the surface suffers from substantial differential movements, decorative coating might become cracked despite any precaution measures taken while laying the product.
- Performance and durability guarantees for the decorative coating may be given only in case a complete system of MERCADIER products is used (primer, product itself, sealer) and strictly according to instructions for application and maintenance of the system. Thus, the manufacturer will not be liable for poor product's performance if an application did not conform to our instructions and if the integral system was not used.
- All the information, tips and advice relative to final illustration of MERCADIER products are given in good faith. They are based on knowledge and experience that MERCADIER has acquired so far regarding its products that were appropriately stored and handled, and applied in normal conditions. In practice, the differences between materials, surfaces and specific application conditions are such that provided information, written recommendations or given advice do not imply any warranty of merchantability other than the legal warranty against hidden defects.
- Colours and aspects in our color charts are indicative, and cannot be considered as contractual. The same is applied for boards and panels displayed at retail outlets. It is preferable to use identical samples as much as possible. These products lead to results with subtle differences that can also arise depending on application conditions (applicator's gestures, temperature etc).

## SAFETY / PRECAUTIONS

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Refer to product Safety Data Sheet



In accordance with the new French regulations that establish limit value for the VOC (Volatile Organic Compound) present in constructions materials, this product MERCADIER respects the environment. This regulation states that construction and decoration products must be provided with a label indicating the level of volatile organic compound emission in a simple and readable way. We have the pleasure to confirm that this product is A+ (the lowest possible VOC emission value).

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.

General grid of available colors and precise weighing to prepare the mixing water: water + coloring dose (kg of tinted liquid for a 25kg bucket of powder) and in the case of the pump application system

NB : for a test dose of 2.5kg of RBX powder, the quantity of tinted liquid below (water + colorant dose) is to be divided by 10.

	Water + Dose of colorant (in kg of tinted liquid for a 25kg bucket of powder)	Pump system case Water + Dose of colorant (in kg of tinted liquid for a 25kg bucket of powder)
AKA	5,94	5,00
AMARETTI	5,84	5,30
AMIATA	6,29	4,80
ARACENA	5,81	5,40
BOUZY	5,91	5,20
CAFE-CALVA	5,83	5,30
CLOUD	5,87	5,20
DARDAR	5,86	5,30
ETRETAT	5,90	5,30
FIFTEEN	5,91	5,20
JUAN	5,81	5,40
LE MASQUE	5,82	5,30
MACCHIATO	6,02	5,10
MASSA	5,80	5,40
MAX	5,85	5,30
MILOS	5,81	5,40
NICEFOR	5,91	5,30
OURSIN	5,96	5,20
PIRATES	5,84	5,20
POOLISH	5,82	5,40
RAMIE	6,01	5,10
ST LOUIS	5,97	5,20
TI CAFFRE	5,92	5,20
TRINIDAD	5,98	5,20
ZEBU	5,82	5,40