

LIXIO®

Cement-based Microterrazzo with marble aggregates.

DESCRIPTION

Lixio® is a low thickness (6mm) microterrazzo suitable for application on both new or existing flatwork. The customer can customise the design by choosing from a selection of colour pigments, marble aggregates and degree of gloss.

FEATURES

The Lixio® system includes EPOXY-COAT as primer, the coloured pigments COLOUR-PACK C, selected marble aggregates (LIXIO-BLEND), LIXIO-FLUID liquid polymer and the cement-based premix LIXIO-POWDER.

After installation and once the surface has set, it is then ground with diamond abrasive discs using the same techniques for natural marble. By combining COLOUR-PACK-C and coloured marble aggregates, the customer can create his desired chromatic effect. By choosing the appropriate level of polishing, he will be able to obtain the most suitable gloss and level of slip-resistance, from bush hammered or brushed finishes suitable for exterior surfaces, up to a mirror-polished surface.

The surface can be protected with IDEALPU WB EASY water-based polyurethane sealer or with PETROTEX-S oil-resistant impregnator. Treatment with IDEAL HARD densifier (or IDEAL HARD PLUS) will also increase the scratch resistance of the surface.

FIELDS OF USE

Lixio®, in its multiple chromatic finishes, is ideal for use in prestigious environments, perfectly harmonising both modern architecture and classic restoration schemes.

It is particularly suitable for:

- Commercial areas
- Housing
- Hotels
- Airports and large public spaces
- Museums and galleries
- Offices

APPLICATION

SURFACE PREPARATION

The substrate may consist of sand/cement or concrete screeds and may also have an existing ceramic or natural stone finish. It must be dry, well levelled, clean and free of oil residues, paints or other polluting substances. Possible cracks or depressions must be previously repaired with anti-shrinkage epoxy mortar such as IDEAL MALTA. The surface must be ground with diamond pads to ensure adhesion. Any existing joints must be mirrored on the surface with suitable profiles.

Thoroughly check the level of the substrate with a straightedge screed. If necessary, grind the higher areas. Based on the type and condition of the substrate (concrete, sand-cement, ceramic, self-

leveling...), this must be prepared by sanding, shot blasting etc. and also be clean, rough, free from contamination, intact and perfectly level.

For floors subject to ordinary pedestrian traffic the substrate must have a compressive strength of at least 25 Mpa and pull off requirements of at least 1.0 Mpa.

The residual moisture content of the substrate must not exceed 4.0 %.

Respect any control joints that may exist on the substrate.

Repair existing cracks. Firmly place the LIXIO-JOINT profiles before application of Epoxy -coat.

Joints existing in the support must be mirrored on the surface. Profiles will also define the pouring areas and will be placed to create geometrical crack control joints.

Apply a very thin layer of Epoxy-Coat mixed with 20% quartz sand 0.1-0.5 mm on the pretreated surface. Broadcast quartz 0,7-1,2 mm (about 2,5 Kg/m²). Limit the work area so that broadcasting can be completed while the resin is still wet.

The entire surface must be completely covered with quartz.

Always wear spiked shoes or cleats to walk on the surface.

Preparation on a ceramic background

1. First, always sand with a diamond disc.
2. Apply an 80-100 g / m² fibreglass mesh fixed with IW-BLOCKER
3. On a base with residual grouts, apply 2 coats of Epoxy-coat with quartz broadcast (see above), on ceramic without or with minimal grouts, just 1 coat is enough.

Preparation on concrete in the absence of rising damp

1. Sand or shotblast
2. Apply a coat of epoxy-coat with quartz broadcast (see above).

Preparation on concrete in the presence of rising damp

1. Sand or shotblast.
2. Apply a coat of BARRIERA CEM as a chemical vapour barrier.
3. Apply a coat of epoxy-coat with quartz broadcast (see above).

Preparation on sand and cement base

1. Sand with paper 24
2. Possible consolidation (if necessary) with IDEAL WATER or alternatively with IW-BLOCKER and fibreglass mesh.
3. Apply a coat of epoxy-coat with quartz (see above).

Preparation on self-levelling

1. Grind
2. Consolidate with IDEAL WATER
3. Apply a coat of epoxy-coat with quartz broadcast (see above).

Other backgrounds

Contact the Ideal Work technical office.

It will be the care and responsibility of the applicator to evaluate the actual conditions of the background and the suitability of the indicated solutions on the particular construction site.

APPLYING THE MATERIAL

The actual application thickness should be made considering that approximately 2mm of the surface will be ground to expose the aggregates in the final sanding process.

Do not apply at temperatures over 30° or lower than 10°.

MIXING AND COLOURING

Keep LIXIO-FLUID and LIXIO-POWDER cool before and during the use.

Mix the components as follows.

Pour 70% of Lixio® in the mixing-machine and slowly add the whole quantity of LIXIO-BLEND, the LIXIO-POWDER and then the remaining polymer.

Mix 2-3 minutes to loosen clumps. The quantity of LIXIO-FLUID can vary by +/- 5%.

COLOURPACK -C (see datasheet) is the specific pigment for Lixio®. Mix 28 g /l with the polymer for a full tone, in a lesser ratio for a lighter shade. It is available in 27 colours.

After 8-12 hours (at 20°, 50% RH) and after having sanded and vacuumed the surface, the Lixio® mixture should be poured and levelled with a screed and trowel before rolling the surface with "Stencil-Roller" to create the perfectly level. Then spray LIXIO-FLUID evenly on the surface as anti-evaporating product.(about 0,1 Kg/m²).Note, very high temperatures and humidity can delay the hardening of the primer Lixio® can be walked on from 24 hours after installation.

The previously placed profiles along with suitable steel rods will help to keep the levels (steel rods to be removed immediately after pouring). Wear spiked shoes or cleats.

GRINDING-POLISHING

Wet (recommended) or dry grinding can begin once the surface has completely set. Whichever is chosen, this should not be before 3-5 days from the application.

Use stone-polishing machines. The type of discs, number of revolutions and number of passes must be determined according to the machine used (please contact the manufacturer).

After the first two or three grinding steps, the surface will be filled with a grout composed of 1 part of LIXIO-FLUID (pigmented) and 2 parts of cement .

After setting of grouting (1-2 days) ,subsequent steps will bring Lixio® to the desired degree of gloss.

For example, polishing process 400: G2, G120, G200, G400 (honed)

To mirror polish, additional pass with G800, polishing with salts).

Lixio® can be mirror-polished and treated with PETROTEX-S impregnating water-oil repellent, or polished with to G 400 grit diamond pad and sealed with the water-based polyurethane sealer IDEAL PU-WB EASY SL (see the relative technical datasheets). The preventive treatment with IDEAL HARD or IDEAL HARD PLUS increases the surface resistance to abrasion and scratching.

BACKGROUND PROTECTION

For the protection of the surface, the following products are recommended, please refer to the relevant technical data sheets and to the Ideal Work technical office for further information.

The previous treatment with IDEAL HARD or IDEAL HARD PLUS densifier increases the scratch resistance and is recommended for heavy trafficked areas.

Polyurethane water-based resin

The resin can change the hue of the surface, in some cases significantly.

- IDEALPU WB EASY matt
- IDEALPU WB EASY SL water-based satin (recommended)
- WB-BOOSTER added to the second coat of resins increases the scratch resistance of the protective film

Protective impregnation

- PETROTEX-S impregnation against oil and water

MAINTENANCE

Use neutral detergents, preferably Ideal Work Perfect. The use of Ideal Care liquid wax combined with washing water helps maintain the colour over time. See the Ideal Work maintenance manual https://www.idealwork.it/wp-content/uploads/2019/02/Cat_manutenzione_doppie-1.pdf

TECHNICAL DATA

Technical Data

See data sheet and CE DOP on

<https://www.idealwork.it/download/documentazione-tecnica>

CONSUMPTION AND MIXING RATIOS

The following composition by weight guarantees the achievement of the physical-mechanical characteristics indicated in the products technical data sheet.

Deviations from the indicated proportions or incorrect mixing can affect the performance of the product.

	CONSUMPTION PER m ² FOR 10 MM THICKNESS *		
	FOR THE MIXTURE	FOR GROUTING	AS AN ANTI-EVAPORANT
LIXIO® POWDER	8,40 Kg	--	--
LIXIO® FLUID	3,0 Kg	0,1 Kg	0,1 Kg
LIXIO® MARBLE BLEND	11,6 Kg	--	--
COLOUR PACK C	0,08 Kg	0,006 Kg	--
WHITE CEMENT		0,2 Kg	--

*Please consider initial surface level should be 2 mm more than the final polished thickness

PACKAGING/STORAGE/DISPOSAL

The system components are packed in the following units:

LIXIO® POWDER	18,75 Kg
LIXIO® FLUID	10,00 Kg
LIXIO® MARBLE BLEND	25,00 Kg
COLOUR PACK C	0,50 Kg in 30 ml minipack.

The products can be stored for 12 months from the date of packaging in a cool and dry place.

CAUTION

Avoid conditions that may encourage different setting times between areas, such as air currents and solar radiation. In the presence of underfloor heating, complete the ignition cycle beforehand and do not exceed 12°.

Any shrinkage cracks that formed in the substrate inevitably tend to be transmitted to the Lixio® finishing layer. If the substrate is characterised by a 28 days shrinkage of more than 300µm / m (UNI 11307 for concrete and UNI 6687 for sand and cement or mortar substrates) it is advisable to wait for its complete curing and drying and seal any cracks with Epoxy-coat before application.



* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

IMPORTANT:

The manufacturer disclaims any responsibility for the achievement of the services declared for the system and for the success of the work if it is not used in accord with its instructions. The manufacturer disclaims any responsibility for the achievement of the services declared for the system and for the success of the work if it is performed even partially in contrast with these guidelines or with products not covered by them.

The manufacturer also declines any responsibility for the aesthetic aspect of the flooring which depends on the installation methods, working times and climatic conditions of the site. The applicator must take these into account when scheduling and applying the materials supplied by the manufacturer.

The applicator notes that Ideal Work is in no way responsible for the suitability of the solution chosen in relation to:

A) Substrate suitability, climatic conditions or any other external parameter which may affect the performance of the Ideal Work products being used.

B) The stresses to which Ideal Work products may be put under operation.

It also notes that the indications provided by Ideal Work in its technical documentation are to be considered a necessary condition but do not in any way relieve the contractor of the responsibilities and technical evaluations of the applicator. The data can be changed at any time. Also note that the products are intended for professional use only.