

Technological, two-component elastic waterproofing system suitable for the containment of water, under positive and negative thrust, in monolithic structures in concrete. Ideal for waterproofing non-absorbent substrates such as old flooring. Certified as suitable for the containment of drinking water.



IDROBUILD®

ELASTIC MINERAL WATERPROOFING PRODUCT – The IDROBUILD® technology ensures impermeability and protection for all hydraulic engineering works designed to resist anaerobic and acid aggression of the terrain, continuous abrasion caused by flowing water, for permanent immersion and the containment of drinking water. The elasticity, the occlusive interstitial crystallisation and the compactness of the micro-components used in IDROBUILD® ensure a superior degree of impermeability to water also in the presence of high, positive-negative pressure.

INNOVATIVE TECHNOLOGY FOR SUBSTRATES – The IDROBUILD® technology ensures impermeability in balconies, terraces, swimming pools and shower cabinets before direct laying of ceramic tiles with SAS (Shock Absorbing System) Technology adhesives. IDROBUILD® ensures rapid, secure waterproofing of old terraces, avoiding any requirement for onerous demolition work.

GUARANTEED LONG LIFE – The durability of the waterproofing process in IDROBUILD® is ensured by the high levels of resistance to ageing and by its inorganic, mineral nature. A mix of silicate microparticles, flexibilizing co-polymers and mineral reactive agents with a low water soluble salt content complete the chemical structure of IDROBUILD®, ensuring effective elasticity and resistance to chemical/environmental aggression of the waterproofing system.

Developed by the Research and Development Division and guaranteed by the Training Center.
Compliant with the CARE Project for the Protection of Health and the Environment:
Building Division (Method M1 – Action FE207).

AREAS OF USE

Waterproofing of:

- balconies, terraces, swimming pools and shower cabinets before the laying of the ceramic covering
- foundations, hoistway pits, basements and exterior foundation walls even with a negative hydrostatic thrust
- tanks for containment of drinking water
- impermeable protection of concrete surfaces

Use

Monolithic screeds; old flooring featuring dimensional stability and anchored to ceramic substrates, marble floor tiles and natural stone; beams and pillars in prefabricated concrete or fresh concrete casting; cement plasters and mortars.

Do not use

On gypsum walls or ready-to-use gypsum-based plaster, on metallic or wooden supports, on bituminous coverings or for waterproofing flat surfaces which are left visible.

PREPARATION OF SUBSTRATES

The substrate must be perfectly aged, free from hygrometric shrinkage, solid (i.e. free from any loose, flaky or easily removable parts) and free from oil, grease and paint.

Check that the concrete contains no traces of parting compound. When working on weakened or missing parts, and also in the case of gravel beds, the substrate has to be restored with appropriate restoration mortars.

On ceramic substrates any materials used to treat the surface such as wax or greasy substances must be completely removed. The most suitable cleaning methods are sanding, shot-blasting or washing with detergents and pressurised water. Before application, the absorbent substrates must be wet well but must not include any stagnant water.

To waterproof monolithic liquid containers and swimming pools, fill the spacer holes with the technological epoxide system KERABUILD® EPOADESIVO, create rigid connection shells in vertical and horizontal corners and any required finishing and levelling coatings with KERABUILD® FINITURA mortar.

On terraces, create dimensionally stable areas of surface smaller than ten square metres by means of mechanical cutting of the flooring and substrate. To produce horizontal joints and peripheral overlapping use the PVC strip IDROBUILD® GIUNTOFLEX 160, applied with KERABUILD® EPOADESIVO.

ABSTRACT

Concrete protection: on constructions that must be protected from weathering and from the action of antifreeze salts, waterproofing must be carried out with a technological, two-component, elastic waterproofing system such as IDROBUILD® manufactured by Kerakoll, applied in two coats for an overall coverage of $\approx 4 \text{ kg/m}^2$.

Swimming Pools - Tanks - Basements: the waterproofing of swimming pools, tanks and basements should be carried out with a technological, two-component, elastic waterproofing system such as IDROBUILD® manufactured by Kerakoll. The horizontal and vertical angles should be linked up with a shell using a structural mortar such as KERABUILD® FINITURA manufactured by Kerakoll. Then the waterproofing product should be applied in two coats with an interposed reinforcing mesh made of anti-alkaline glass fibre for a coverage of $\approx 4.5 \text{ kg/m}^2$.

Terraces: the waterproofing of terraces should be carried out with a technological, two-component, elastic waterproofing system such as IDROBUILD® manufactured by Kerakoll. The expansion joints, fractionizing joints and angular couplings should be waterproofed with a PVC strip such as IDROBUILD® GIUNTOFLEX 160 manufactured by Kerakoll, stuck to the support with an epoxide system such as KERABUILD® EPOADESIVO manufactured by Kerakoll and welded onto the overlaps. Then the waterproofing product should be applied in two coats with an interposed reinforcing mesh made of anti-alkaline glass fibre for a coverage of $\approx 4.5 \text{ kg/m}^2$.

INSTRUCTIONS FOR USE

Preparation

IDROBUILD® is prepared by mixing component A with component B (preset ratio 3 : 1 in the bags). The two components should be mixed with a low-rev, drill-type mixing device for approximately 2 minutes until a mixture with a fluid and homogenous consistency is obtained. Pour the latex into a clean container and gradually add the powder during the mixing operation. Leave the mixture to rest for approximately 2 minutes to allow the co-polymer to become completely dispersed and mix again for approximately 20 seconds before use.

Application

IDROBUILD® is applied with a smooth spreader or hard fibre brush to the surface prepared in advance. When waterproofing, apply a first coating and immediately insert the reinforcement mesh in anti-alkali glass fibre suitable for finishing coatings, with a weight equal to approximately 100 g/m² and mesh pattern size of approximately 4x5 mm. When the product has hardened, and in any case within not more than 24 hours, apply the second coat in a criss-cross direction as compared with the first coat. The different layers of IDROBUILD® must be applied with great care in order to assure the total covering of the substrate and maximum level of adhesion. Installation of a reinforcement mesh is not required when protecting concrete and in waterproofing operations in foundations and basements.

Subsequent laying of ceramic coverings must be performed 24 hours after application of the final coating with SAS (Shock Absorbing System) Technology adhesive of the H40® line.

A rough coating with KERABUILD® BETON mortar, which is required on application of the thermal plaster ISOBUILD®, must be performed after the product has set and in any case within 24 hours following application of the final coating.

Cleaning

Residual traces of IDROBUILD® can be removed from tools with plain water before the product has hardened.

SPECIAL NOTES

Terraces: expansion joints, fractionizing joints and angular couplings. In the realisation of joints and bindings it is necessary to link up the opposite surfaces with the PVC strip IDROBUILD® GIUNTOFLEX 160, stuck to the support with the technological, epoxide system KERABUILD® EPOADESIVO and welded onto the overlays before treating with IDROBUILD®.

Swimming pools, tanks, basements: angular couplings. The linking up of the horizontal and vertical angles should be carried out with a shell of mortar KERABUILD® FINITURA before treating with IDROBUILD®.

Walls waterproofed with IDROBUILD®: application of plaster. In order to favour the adequate bonding of the plaster to the waterproofing layer, carry out a "wide" first coat with technological mortar KERABUILD® BETON.

TECHNICAL CHARACTERISTICS

Appearance	Part A light-coloured clear ready-mixed – Part B white latex	
Apparent volumetric mass	Part A $\approx 1.28 \text{ kg/dm}^3$ – Part B $\approx 1.01 \text{ kg/dm}^3$	UEAtc
Mineralogical nature of inert material	Silicate-crystalline carbonate (part A)	
Chemical nature	Co-polymers in water solution (part B)	
CARE	Method M1 – Action FE207	
Storage	≈ 12 months in original packaging in dry environment	
Warning (part B)	Protect from frost, avoid direct exposure to sunlight and sources of heat	
Packaging	Part A 24 kg bag – Part B 8 kg can	

TECHNICAL DATA compliant with Kerakoll Quality Standard

Mixing ratio	Part A : Part B = 3 : 1	
Mixture spread	$\approx 85\%$	UNI 7044
Viscosity	$\approx 150000 \text{ mPa} \cdot \text{s}$, rotor 96 RPM 5	Brookfield method
Specific weight of the mixture	$\approx 1,65 \text{ kg/dm}^3$	UNI 7121
pH of the mixture	≥ 12	
Pot life	$\geq 1 \text{ h}$	
Temperature range for application	from $+5 \text{ }^\circ\text{C}$ to $+35 \text{ }^\circ\text{C}$	
Min. thickness	$\geq 2 \text{ mm}$	
Max thickness obtainable by coat	$\approx 3 \text{ mm}$	
Max thickness obtainable	$\leq 6 \text{ mm}$	
Waiting time between 1st and 2nd coat	$\leq 24 \text{ h}$	
Waiting time before laying covering	$\approx 24 \text{ h}$	
Coverage	$\approx 1.6 \text{ kg/m}^2$ per mm of thickness	

At $+23 \text{ }^\circ\text{C}$ and 50% R.H. and no ventilation.

FINAL CHARACTERISTICS

Resistance to the positive thrust of water:	$\geq 7 \text{ bar}$ (thickness: 2 – 6 mm)	DIN 1048
Drinking water containing	Suitable	6520/00 ARPA* Cert.
Adhesion to concrete after 28 days	$\geq 1 \text{ MPa}$	UNI-EN 1542
Resistance to abrasion after 28 days	$\leq 2 \text{ g}$, grinding-wheel H-22, weight 500 g, revs 200	ASTM D 4060
Resistance to sulphates (penetration)	0 mm	
Resistance to chloride (penetration)	0 mm	UNI 7928

Values taken at $+23 \text{ }^\circ\text{C}$ and 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

*ARPA = Italian Regional Environment Protection Agency

WARNING

- **Product for professional use**
- use at temperatures between $+5 \text{ }^\circ\text{C}$ and $+35 \text{ }^\circ\text{C}$
- make sure the substrate is not frozen
- protect treated surfaces from direct sunlight and wind
- any condensation on the first coat must be dried before applying the second coat
- the elastic joints must be adequately waterproofed with the PVC strip IDROBUILD® GIUNTOFLEX 160
- do not add any water, binders or additives to the mortar mixture
- do not position on gypsum, metal or wood
- do not apply to dirty, loose or flaky surfaces
- do not apply in thickness exceeding 2 mm per separate coat
- if necessary, ask for the safety data sheet
- for further information please consult the **Kerakoll Worldwide Global Service +39-0536.811.516**

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KERACEM® PRONTO

Superior-technology, professional, ready-for-use and high-resistance screed with normal setting, fast drying and compensated shrinkage

IDROBUILD®

Technological, two-component, elastic waterproofing system for the containment of water, under positive and negative thrust, in concrete structures

H40® MARMOREX

Professional adhesive with SAS Technology, high degree of deformability, extra-rapid hardening and setting for laying marble, granite and large formats

FUGABELLA® 1-4

Superior-technology, professional, single-component smooth-finish grout for high-resistance grouting for natural stone



THE KERAKOLL GLOBAL SERVICE

Wherever you are, and whatever your project needs are, you can always rely on the Kerakoll Service: highly-efficient, global customer support matching the high quality of our products.

Technical Service +39-0536.811.516 - Technical assistance in real time

Training Service - Professional training to support our quality

Guarantee Service - A long-lasting warranty

Kerakoll.com - The channel of choice for your projects



KERAKOLL QUALITY STANDARD

In all units of the Kerakoll Group, before being considered suitable for production, products undergo stringent testing in accordance with the very high requirements set by the Kerakoll Quality Standard: a process supported by the Centre for Applied Technology which assists the work of researchers with its sophisticated resources and laboratories. At the Kerakoll laboratories the various elements of formulations are carefully analysed to identify and eliminate any factors of weakness by means of simulation of real working conditions in building sites. After the testing cycles, the new products are submitted to the extreme fatigue of the Safety-Test process.



SAFETY, HEALTH AND THE ENVIRONMENT

For an industrial system such as Kerakoll it is vitally important to ensure that human health and the environment are protected. The Kerakoll company policy is to ensure that every possible safeguard be taken to make sure that these factors are always considered, and regulations and specific methods have been developed over the years for this purpose at all levels of the organisation. The CARE Project is the result of the Group's concern for human health and the environment, and ensures that the Group's products are perfectly safe for use and that the building materials supplied to builders ensure a very high level of safety before, during and after their use.

The information given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind our Company in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.

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