

Idrosilex 2K



032-157-1977
Environmentally
Preferred Coating

Flexible, cementitious mortar for waterproofing

WHERE TO USE

- Repairing and waterproofing underground masonry subject to water and moisture seepage in situations with a counter-pressure up to 1 atmosphere.
- Waterproofing basins, reservoirs, concrete or masonry tanks.
- As smoothing and waterproofing compound for underground walls before laying bituminous membrane.

Some application examples

Waterproofing:

- interior and exterior cellar walls;
- internal damp areas, examples - kitchens, pantries, drying yards;
- bathrooms, balconies and terraces;
- lift-rooms;
- underground passages;
- foundation walls.

TECHNICAL CHARACTERISTICS

Idrosilex 2K is a two-component mortar, composed of a cement-based compound, selected graded aggregates, special additives and synthetic polymers in water dispersion, blended according to a formula developed in the MAPEI research laboratories. When the two components are mixed together, **Idrosilex 2K** becomes a fluid mortar that can be applied by trowel or hard-bristled brush/broom with excellent adhesion to the substrate for a complete waterproofing, even in the presence of slight counter-pressure.

RECOMMENDATIONS

- Do not use **Idrosilex 2K** for solving internal condensation problems (use dehumidifying renders, improve ventilation to the area or provide adequate insulation).
- Do not use on surfaces of gypsum, plasterboard, painted walls, plywood, chipboard, asbestos cement.
- Do not mix **Idrosilex 2K** with additives, cement or aggregates.
- Do not use on flexible or unstable surfaces.
- In no case should **Idrosilex 2K** be applied to a surface which has standing water.
- Do not dilute **Idrosilex 2K** with more Component B or water than is specified.
- Do not use the product if the packing is damaged.

APPLICATION PROCEDURE

Preparing the substrate

The surface to be waterproofed must be perfectly clean and sound. Remove crumbly or loose parts, dust, cement laitance, form release agents, varnishes and paint by mechanical brushing, sanding or high water pressure.

Renders must be perfectly anchored to the substrate. Seal cracks in the substrate and repair damaged parts with products from the **Mapegrout** range.

All corners must be filled with 25mm angle fillets prepared with a mortar mix of sand, cement and **Planicrete** additive and allowed to cure. Alternatively, corners may be treated with **Mapeband** tape during application of **Idrosilex 2K**.

Idrosilex 2K

Completely prewet the substrate to saturated surface dry condition (no standing water).

Preparing the mortar

Pour Component B (liquid) into a suitable, clean container. Then slowly add Component A (powder) while stirring with a low speed mechanical mixer. Carefully mix **Idrosilex 2K** thoroughly for a few minutes, taking care to blend in all the unmixed powder deposited on the sides and bottom of the bucket, until a perfectly homogeneous mix is obtained (free from lumps). Do not prepare the mix by hand. Leave the mortar to stand for approximately 5 minutes, remix and apply.

Applying the mortar

Apply **Idrosilex 2K** with a trowel or hard-bristled brush/broom.

Always apply a minimum of 2 coats. Make sure the previous coat is sufficiently dry before applying the next, in a direction perpendicular to the first (generally 5-6 hours depending on the temperature and the absorption of the substrate). In order to have good adhesion, it is recommended not to exceed 24 hours between coats. Pay particular care to corners and coves. When application is by trowel, it is recommended to treat the substrate with **Idrosilex 2K** using a brush for the first coat. The properties of the hardened layer of **Idrosilex 2K** are such that it shall not be used where live cracks are anticipated. **Idrosilex 2K** cannot be exposed to any type of traffic and must be protected by a screed.

Precautions to be observed during application

In areas exposed to wind or direct sun, protect from rapid drying by covering with plastic sheets, properly secured.

Cleaning

Idrosilex 2K can be removed from tools with water before it hardens. Once hardened, cleaning becomes difficult and can be carried out only mechanically.

CONSUMPTION

Apply a minimum of 2 coats.

- For wet areas not subject to hydrostatic pressure : 1.0 kg/m² per coat
- For areas subject to max. 1m water-head : 1.5kg/m² per coat

For water-containing structures subject to more than 1.0m water-head, we would recommend the use of **Mapelastic**.

PACKAGING

Units of 25 kg -
Component A: 20 kg bag
Component B: 5 kg drum.

STORAGE

Store the product in its original unopened packaging in a cool dry place.
Component A: 12 months;
Component B: 24 months.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Idrosilex 2K component A contains cement that when in contact with sweat or other body fluids causes irritant alkaline reaction and allergic reactions to those predisposed. It can cause damage to eyes.

In case of contact with eyes or skin wash immediately with plenty of water and seek medical attention.

Idrosilex 2K component B is not considered as dangerous according to the current regulation regarding the classification of mixtures. We recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products.

For further and complete information about the safe use of our product please refer to our latest version of the Material Safety Data sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

All relevant references for the product are available upon request and from www.mapei.com

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	Component A	Component B
Consistency:	powder	liquid
Colour:	grey	white
Specific gravity (kg/m³):	1.3	1.0
Dry solid content (%):	100	25
APPLICATION DATA (at 23°C at 50% R.H.)		
Colour of mix:	grey	
Mixing ratio:	component A : component B = 4 : 1	
Consistency:	fluid	
Density of mix (kg/m³):	1800	
pH of mix:	approx. 12	
Minimum and maximum temperature for application (°C):	from +5 to +35	
Pot life at +20°C (hrs):	2	
Application of following coats at 20°C (hrs):	after 5 but not more than 24	
Ready for use (days):	7	
FINAL PERFORMANCES		
Compressive strength 28 days EN 12190 (MPa):	20	
Flexural strength 28 days EN 196-1 (MPa):	9	
Resistance to water penetration, DIN 1048 Pt 5 : 1991, depth of penetration (mm):	0	

SIRIM TEST RESULTS	
Pull-off strength, ASTM D4541-2002 (N/mm ²):	> 0.6
Initial surface absorption, BS 1881 : Part 208 : 1996 (ml/m ² .s):	Treated with Idrosilex 2K : Nil Untreated control : 0.21
Water vapour transmission, ASTM E96/E96M-05 (Water Method)(g/h.m ²):	10.45
Suitability of non-metallic product for use in contact with water intended for human consumption with regard to their effect on the quality of the water, BS 6920 : Part 1 : 2000 <ul style="list-style-type: none">- Clause 5, colour- Clause 5, turbidity- Clause 6, growth of aquatic micro-organisms- Clause 8, extraction of metals	complies complies complies complies
CERTIFICATION	
SPAN (Suruhanjaya Perkhidmatan Air Negara)	Certificate No. SPAN/KP/A/01043-2012



BUILDING THE FUTURE

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