



Kimicover 701P

ST4-1221

Single component water-based polyurethane liquid membrane for the waterproofing of balconies, terraces and roofs and for the anti-carbonation protection of reinforced concrete structures



DESCRIPTION

Kimicover 701P is a polyurethane, single component, pure water-based waterproofing product completely free of acrylic polymers, solvent-free (no VOC) and completely odorless.

The product is easy to apply and allows for continuous, elastic and long lasting waterproofing.

It is CE marked as a type C protective coating according to EN 1504-2, PI, MC and IR intervention principles and complies with the requirements of ETAG 005-8.

ADVANTAGES

- Fast application: reduced working times compared to other waterproofing cycles;
- Versatile application: one-component and ready to use, it can be easily applied with a roller, brush or spray with an airless pump;
- No need for reinforcement mesh;
- Suitable for applications on bituminous membranes, on concrete substrates or on already tiled substrates;
- Odorless and solvent-free;
- Performing: once applied, it creates an elastic, continuous membrane, resistant to temperature changes, UV rays and acid rain.

USES

Kimicover 701P is used to waterproof balconies, terraces and walkable roofs to be left exposed (both new and restored), tileable, gutter channels, fiber cement roofs, facades exposed to heavy rain, under-tile waterproofing.

The product is suitable for waterproofing in poorly ventilated areas and particularly suitable for schools, offices and food industries.





Kimicover 701P can be applied on concrete substrates, on already tiled substrates or in case of existing bituminous membranes.

Kimicover 701P can also be used for the anti-carbonation painting of reinforced concrete structures, such as bridges, viaducts and reinforced concrete walls.

WORKS

- Exposed walkable waterproofing with water-based elastic polyurethane systems ([SA138](#))

APPLICATION

	Roll or brush application		Walkable after: 7 hours; Overpainting time: 12 hours; Complete hardening time: 7 days
	Mechanical device application		
	Thickness per coat: 1-2 mm for horizontal application 1-2 mm for vertical application		

In case of bituminous membrane, it will be necessary to evaluate from time to time whether to proceed with the removal of the membrane (convenient operation in the event that most of the existing membrane has deteriorated) or with local restoration.

In the first case, once the membrane has been removed, carefully clean the substrate to eliminate dust, grease, inconsistent parts, which are detached and do not have sufficient mechanical characteristics and any other material that could affect the good anchoring. Repair any deep and extensive irregularities (gravel nests, overhangs between casting leaks etc) with suitable mortar, after priming.

If you decide to leave the membrane: check the correct adhesion of the membrane; fixing to the substrate by heat treatment of the parts that are not degraded in detachment; remove any excessively deteriorated portions and place a new membrane to mend the missing/removed parts; any protective paints, if they are acrylic-based, well adhered and not chalking, may not be removed, in all other cases (reflective and/or deteriorated paints) they will be removed with appropriate techniques (mechanical/chemical or thermal treatments: consult the technical data sheets of the materials used); perform acid washing of the entire surface

with **Soluzione P.**

Kimicover 701P is a ready-to-use one-component product already colored and can be applied with a brush, roller or airless pump in at least two crossed coats at a distance of 12 hours from each other.

In case of regular and perfectly flat substrates, **Kimicover 701P** can be applied without reinforcing mesh, otherwise where the product could be applied in non-uniform thicknesses, use the **Kimitech TNT** mesh impregnated in the first layer of product until fresh.

For local reinforcements at areas subject to high movements, at joints, fittings, and cracks, use the **Kimitech TNT** mesh impregnated in the first layer of product until fresh.

The system, thus configured, is able to guarantee walkability without additional protective finishes.

If you intend to create a tiled surface at the top, provide a suitable layer of adhesive bridge and alkali barrier, by sprinkling with dry quartz sand, **Kimifill MP**, on a special additional layer of fresh product (respecting a consumption of 300 g/sqm).

CONSUMPTION

1,5-3 Kg/m²

PACKAGING

Com Kg 7

Com Kg 25

STORAGE

Store in a dry place at a temperature between 0° and 25°.

In these conditions and in airtight containers, the product maintains its stability for 12 months.

Characteristics	Typical value
Min application temperature	+ 5 °C
Dry touch at 25°C	4 hours
Apparent dry bulk EN ISO 2811 -1	1,34 ± 0,05 g/cm ³
Hardening at 25°C	7 hours
Solid content UNI 8309	61,4 ± 1 %
Flash point	49° C
Available colors	Bianco Rosso terracotta (approximately RAL 3012) Grigio (approximately RAL 7004)
Service temperature	-20° C / +80° C
PVC content	32,65 %
VOC ISO 11890-1 (method 2)	1,40
Adhesion to dry concrete	1,5 MPa

Characteristics	Limits EN 1504-2	Typical value
Concrete adhesion EN 1542	Flexible systems without trafficking >0,8 Mpa; with trafficking >1,5 Mpa. Rigid systems without trafficking >1 Mpa; with trafficking >2 MPa.	> 0,8 N/mm ²

Characteristics	Limits EN 1504-2	Typical value
Permeability EN ISO 7783-2	Class I (permeable to vapour) Sd < 5 m	Class I
	Class II 5 m ≤ Sd ≤ 50 m	
	Class III (not permeable to vapour) Sd > 50 m	
Permeability to carbon dioxide UNI EN 1062-6	Sd > 50 m	62 m
Capillar absorption and water permeability EN 1062-3	< 0,1 Kg/m ² ·h ^{0,5}	< 0,1 Kg/m ² ·h ^{0,5}
Reaction class to fire	Declared value	F

Characteristics	Test according ETAG 005-8	Typical value
Permeability EN ISO 7783-2	Class I -Sd < 5 m (permeable to vapour)	Class I Sd = 0,43 m
	Class II 5 m ≤ Sd ≤ 50 m	
	Class III - Sd > 50 m (not permeable to vapour)	
Concrete adhesion	(4.2.3) TR-004	2,91 kPa
Ceramic adhesion	(4.2.3) TR-004	2 kPa
Rigidity (reinforced waterproofing with TNT)	Static indentation at 23° TR-007 (4.2.5)	I2
	Static indentation at 80° TR-007 (4.2.8)	L1
Heat resistance (80°C for 100 days) ISO 527-3	(4.2.9) TR-011 Tension	0,70 MPa
	(4.2.9) TR-011 Elongation	247 %
Heat resistance after ageing (80°C for 100 days) ISO 527-3	(4.2.9) TR-011 Tension	0,78 MPa
	(4.2.9) TR-011 Elongation	149 %
UV resistance (1000 hours) ISO 527-3	(4.2.10) TR-010 Tension	1,78 MPa
	(4.2,10) TR-010 Elongation	324 %
UV resistance after ageing (1000 hours) ISO 527-3	(4.2.10) TR-010 Tension	2,37 MPa
	(4.2,10) TR-010 Elongation	222 %
Hot water resistance (30 days at 60°C) (reinforced waterproofing with TNT)	Hardening test at 60°C (4.2.11) TR-007	L2
	Hardening test at 90°C (4.2.11) TR-007	L2
Resistance T=23°C (21 days) ISO 527-3	(4.4,1) Tension	1,67 MPa
	(4.4,1) Elongation	261%
Resistance T=5°C (21 days) ISO 527-3	(4.4,1) Tension	137 MPa
	(4.4,1) Elongation	344%

Characteristics	Test according ETAG 005-8	Typical value
Resistance T=40°C (21 days) ISO 527-3	(4.4,1) Tension	1,82 MPa
	(4.4,1) Elongation	303%
Water absorption	(2 cycles – 28 days)	7,57
Damp concrete compatibility	Adhesion on dry concrete	2,91 kPa
	Adhesion on damp concrete	2,15 kPa

WARNING

Product intended for professional use.

Always check the integrity of the packaging before use and do not use the product if there are lumps.

Use all the material once the packages are opened.

The equipment used for the application of the product can be cleaned with Solvente EPOX before hardening.

Avoid application at temperatures below + 5°C.

The humidity of the substrate must be less than 4%. no rising damp is allowed according to ASTM (test "polyethylene sheet"), nor condensation/water on the substrate.

The surface temperature during application must be at least + 3 ° C higher than the "dew point".

Mixing is not necessary. In any case, if the product has sedimentation or appears separated on the surface, provide for an accurate but gentle mixing (avoiding incorporating air), until a uniform color is obtained.

Take all necessary precautions for a good seasoning of the product.

If the application is carried out in conditions of low relative humidity, windiness and sunshine, it is advisable to protect the treated surfaces with protective sheets.

The treated surfaces must be protected from rain, fog or contact with water for at least the first 24 hours after laying. Bituminous materials rich in volatile substances can stain and soften the coating.

Do not apply cementitious adhesives directly on the product. Always provide a suitable layer of adhesive bridge and alkali barrier, by dusting with dry quartz sand on a special further layer of fresh product.

In case of greater resistance to chemical aggressions, in the presence of more aggressive environments (industrial areas) and with high foot traffic or frequent use, alternatively it will be possible to use the single-component polyurethane resin solvent **Kimicover 601P**.

For further information and advice on safe handling, storage and disposal of chemical products, the user must refer to the most recent Safety Data Sheet, containing physical, ecological, toxicological and other data related to safety. All technical data shown in this Technical Data Sheet are based on laboratory tests. Actual measurement data may vary due to circumstances beyond our control. The information and requirements indicated in this Technical Data Sheet are based on our current knowledge and experience and are to be considered, in any case, purely indicative. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive practical applications; therefore the user must test the suitability of the product for the intended application and its purpose. Users must always refer to the

latest version of the local technical data sheet related to the product

TECHNICAL SPECIFICATIONS

SK138 - Exposed walkable waterproofing with water-based elastic polyurethane systems

Carry out the standard checks that are necessary for waterproofing operations, clean the supports properly and possibly prime them (in the case of newly constructed screeds and / or screeds laid on old sheaths, pass a coat of 0.2-0.4 kg/m² of Kimicover FIX MV of Kimia SpA or similar products to be applied between 8 and 24 hours before laying the polyurethane resin).

Check, restore, seal and waterproof the joints by applying Kimicover JOINT elastic self-adhesive strip by Kimia S.p.A. or similar products and spreading the super elastic single-component polyurethane resin Kimicover 701P applied by brush, roller or spray on Kimitech 120 by Kimia S.p.A. or similar products.

The overall monolithic waterproofing of the surface will be carried out by waterproofing with Kimicover 701P monocomponent polyurethane resin by Kimia S.p.A. or similar products applied with a brush, roller or spray in a double coat.

The overall consumption of mortar will not be less than 1.5 kg/sqm. The single component water-based polyurethane waterproofing, solvent-free (no VOC) and completely odorless, used for waterproofing of roofs, terraces, balconies, walkable, applicable on bituminous membranes, hygro-hardening and with high reflectance will be prepared and applied following scrupulously the indications on the technical sheets provided by the Manufacturer and must have the following characteristics:

- Dry touch at 25°C: 4 hours;
- Hardening at 25°C: 7 hours;
- Apparent dry bulk EN ISO 2811 -1: 1,34 ± 0,05 g/cm³;
- Solids content UNI 8309: 61,4 ± 1 %;
- Flash point: 49°;
- VOC ISO 11890-1 (method 2): 1,40;
- Adhesion to dry concrete: 1,5 MPa;
- Permeability to carbon dioxide UNI EN 1062-6: 62m;
- Permeability EN ISO 7783-2: Class I;
- Capillar absorption and water permeability EN 1062-3: < 0,1 Kg/m²·h^{0.5}.

The product will be CE marked as a type C protective coating according to EN 1504-2, PI, MC and IR intervention principles.