Kimicover 601P

Single-component polyurethane waterproofing resin for balcony, tarraces and covering structures

Scheda Tecnica rev.01_05/2025

DESCRIPTION

Kimicover 601P is a hygrosetting polyurethane waterproofing product (Water Bonding technology). It is a single component which can be applied cold. Once hardened, it develops a continuous, waterproof and long lasting system for roofing without further finishing. Suitable for any type of new and existing coverings.
The product makes an elastic, continuous, coloured membrane with excellent solar reflection rates ("cool roofs" solar Skin technology), high resistance to temperature leap. Resistant to ultraviolet rays and acid rain. It adheres to existing bituminous membranes.

ADVANTAGES

- Absorbs normal thermal expansion movements; maintains high flexibility even at low temperatures; hygrosetting: rain resistant already immediately after application (water bonding); vapor permeable: allows the breathability of the substrate.
- great adhesion: it can be used on any substrate (even on existing bituminous membranes) also without reinforcement.
- extreme versatility of use; suitable for "cool roofs" (solar skin).
- it can be applied by roller, brush or airless pump spray; easy to cover (no removal needed).
- fast curing: walkability after 7 hours.

USES

Kimicover 601P is used to waterproof pedestrian roof (both new or existing), to waterproof under-roof tiles, gutters, fibre cement roofs and walls exposed to beating rain. It can be applied on concrete substrates, tiled substrates or on existing bituminous membranes.

WORKS

Exposed walkable waterproofing with elastic polyurethane systems (SA101)

CERTIFICATIONS

CE marked product as a protective coating type C in compliance with EN 1504-2, intervention principles MC and IR. CE marked according to ETAG 005-6.

ETAG 005-6 EN 1504-2 CE

APPLICATION

	Roll or brush application		Curing time: 7 hours; Overpainting time: 12 hours;
	Mechanical device application		
	Thickness per coat: 1-2 mm for horizontal application 1-2 mm for vertical application		

As for existing bituminous membrane, it will be necessary to evaluate from time to time whether to proceed with the removal of the membrane (especially if the membrane is deteriorated) or with localised restoration.
In the first case, once the membrane has been removed, clean the substrate to remove dust, grease, inconsistent parts, detachment and poor mechanical characteristics and any other material that could compromise the good anchoring. Repair any deep and extensive irregularities (gravel nests, casting leaks etc) with suitable mortar, after priming.
If you decide to leave the membrane: check the correct adhesion of the membrane; reinforce through heat treatment the non-degraded detached parts; remove any deteriorated parts and place a new membrane to seal the missing/removed parts; any protective varnishes, if of an acrylic nature, well adhered and not chalking, may not be removed, in all other cases (reflective and/or deteriorated paints) will be removed with appropriate techniques (mechanical/chemical or thermal treatments: contact the technical data sheets of the materials used); acid wash of the surface with Soluzione P.

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Kimicover 601P is a ready-to-use one-component product and can be applied with a brush, roller or airless pump in at least two coats, 12 hours apart.
For the colored versions, the mixing of the powder oxides must take place gradually adding the pigment and mixing with a whisk mixer at low speed for about 3-5 minutes up to the complete homogenization of the color.
In case of regular and perfectly flat substrates, Kimicover 601P can be applied without reinforcement mesh, otherwise where the product could be applied in uneven thicknesses, use Kimitech 120 mesh impregnated in the first layer of product still fresh.
Use Kimitech 120 mesh impregnated in the first layer of product as long as it is fresh for local reinforcements in areas subject to high movements, in correspondence with joints and cracks.
The system is able to guarantee walkability without additional protective finishings.
If you wish to perform an upper tiled surface, provide a suitable layer of adhesive bridge and alkali barrier, by dusting quartz dry 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 7,1
Com Kg 21,3

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 9 months.

CHARACTERISTICS	VALUE
Minimum temperature of application	+ 5 °c
Dry touch at 25°c	4 hours
Apparent dry bulk EN ISO 2811 -1	1,42 ± 0,05 g/cm³
Complete curing at 25°c	7 hours
Solid content uni 8309	68 ± 1 %
Flash point	49° c
Colour	White, Terracotta red (approximately RAL 3012) and grey (approximately RAL 7004)
Service temperature	-20° c / +80° c
Tensile strength without reinforcement (EN ISO 527-3)	4,5 mpa
Failure elongation without reinforcement (EN ISO 527-3)	180 %
Hemispherical reflectance (ASTM E903-12)	0.79
Thermal emissivity (ASTM E 1933-14)	0.89
SRI (Solar reflectivity index) (ASTM E1980-11)	98

FEATURES	LIMITS EN 1504-2 C COATING, MC AND IR PRINCIPLES	VALUE
Adhesion to concrete EN 1542	Flexible systems without trafficking>0,8 Mpa; trafficking >1,5 Mpa. Rigid systems Without trafficking >1 Mpa; trafficking >2 MPa.	> 0,8 N/mm²
Permeability EN ISO 7783-2	Class I (permeable to vapour) Sd < 5 m Class II 5 m ≤ Sd ≤ 50 m Class III (not permeable to vapour) Sd > 50 m	Class I
Capillary absorption and permeability to water EN 1062-3	< 0,1 Kg/m²·h^{0,5}	< 0,1 Kg/m²·h^{0,5}
Reaction to fire class	Value declared	F

PERFORMANCE CHARACTERISTICS ACCORDING TO ETAG 005-6	PERFORMANCE	TYPE OF TEST
Reaction to fire from outside	Broof(t1) (1)	ENV 1187 EN 13501-5
Reaction to fire	Euroclass e	EN 13501-1
Lifetime expectancy classification	W2	In compliance with ETAG 005-6:2000, 4.3.3
Climate zone classification	M e s	In compliance with ETAG 005-6:2000, 4.3.3
Strength to loads classification	P4 (on rigid substrate only)	In compliance with ETAG 005-6:2000, 4.3.3
Slope based classification	From S1 to S4	In compliance with ETAG 005-6:2000, 4.3.3
Surface temperatures classification	Min: TL3 Max: TH3	In compliance with ETAG 005-6:2000, 4.3.3
Lubricity	NPD	En 13893
Reaction to fire	Euroclass E	En 13501-1

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SUSTAINABILITY, HEALTH AND SAFETY

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.
As of 24 august 2023, a proper training is required prior to industrial or professional use of this product, according to regulation (ec) no. 1907/2006 (reach) - mandatory training. The trade associations of disocyanate producers isopa and alipa, together with the association of the european adhesive and sealant industry feica, have launched an e-learning course platform, available in all the eu languages. Click the link below to learn more: https://www.feica.eu/puinfo

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.
The product reacts to contact with air. The lid of the packages once opened does not guarantee a hermetic seal. Preferably program the complete use of each package for each application.
The product is designed to have a fast curing time. A high temperature combined with high air humidity accelerates the hardening process. Once the tin is open, the material begins to harden. Do not try to reuse an advanced can. When exposed to air the product will form a surface skin in approx. 1 hour (+ 20 ° C / 50% u.r.).
It is not possible to re-pack the packages for subsequent uses. The product in previously opened packages can become excessively dense.
Bituminous materials rich in volatile substances can stain and soften the coating.
Bituminous materials with a low melting point may require a coat of Kimicover FIX MV primer. Be careful when applying at higher temperatures as this may cause spotting due to the release of air.
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.
Do not use indoor. Do not dilute the product. Not suitable for permanent contact with water. Areas subject to large movements, irregular substrates or flexible roofing require the use of Kimitech TNT reinforcement fabric. The product may show slight surface chalking. Do not use wastewater for human consumption, fish farming or irrigation use.
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

SK101 - Exposed walkable waterproofing with elastic polyurethane systems

Carry out the standard checks that are necessary for waterproofing operations, clean the supports proprerly and possibly prime them (In case of application on screeds, glazed tiles or bituminous membranes, apply Kimicover FIX MV by brush or roller).
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 601P 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 601P 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.

Once the last coat of Kimicover 601P has been cured, proceed with bonding the covering to be made by using Aderflex KR type powder adhesive for tiles by Kimia S.p.A. or similar products.

If a cool roof finish is required, it is possible to complete the waterproofing with two-component aliphatic resin type Kimicover 301 NF in the high reflectance variant of Kimia S.p.A or similar product.

The single-component polyurethane waterproofing resin for waterproofing roofs, terraces, balconies, walkable, applicable on bituminous, hygro-hardening and high reflectance membranes will be prepared and applied scrupulously following the indications given on the technical data sheets supplied by the manufacturer and must have the following characteristics :

- Dry touch at 25 ° C: 4 hours;
- Curing at 25 ° C: 7 hours;
- Content in UNI 8309 solids: 68 ± 1%;
- Tensile strength without reinforcement (EN ISO 527-3): 4.5 Mpa;
- Elongation at break without reinforcement (EN ISO 527-3): 180%;
- Hemispheric reflectance (ASTM E903-12): 0.79;
- Emission (ASTM E 1933-14): 0.89;
- SRI (Solar reflectivity index) (ASTM E1980-11): 98.

The product will be CE marked as a type C protective coating according to EN 1504-2, MC and IR intervention principles and CE marked according to ETAG 005-6.