

Dossier

PROJECTED CORK



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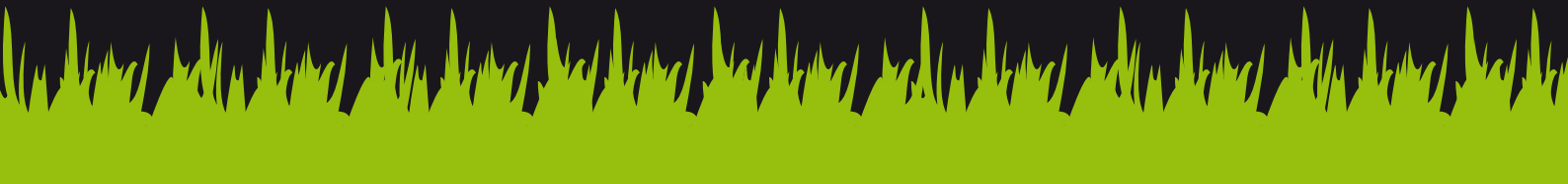
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Industrias Kolmer S.A.



At Industrias Kolmer, S.A. we have spent over 75 years creating color, working and growing within the painting industry. From our origins (in a small factory located in the center of Granada) until today, the company has experienced rapid development in every way: manufacturing processes, investment in new technologies, R & D, new ranges of products, human resources, social responsibility, etc..



To achieve all of our goals, we have an excellent laboratory equipped with the best human and technical resources, and we are equipped with the most modern tools of measuring and testing in the country.

As a result of all this, our company has achieved certification according to the UNE EN ISO 9001 in Quality and UNE EN ISO 14001 in Environmental management.



What is Suber by Kolmer?



We all know that cork is one of the best insulators that there is.

Well, Industrias Kolmer has created a product with unique features, retaining all the natural insulating properties of cork, that we can use in our homes, leisure centers, offices, etc ...

SUBER by Kolmer is an ecological product made by mixing powdered cork of various particle sizes, acrylic resin, vegetable fats and water. These materials, becoming steadier in time, are subjected to a bonding process that does not alter their characteristics and even strengthening some of the, so that the final product is very stable.

Some of its most common uses are:

- Waterproofing for roofs and facades
- Thermal-Acoustic Insulation.
- Sealant and Adhesive.
- Antihumidity.
- Efflorescence proof.
- Encapsulation of asbestos.

SUBER by Kolmer can comfortably replace many materials, offering additions such as: elasticity, flexibility and mechanical strength, thermal insulation, waterproof abd anti-fungal properties, a total absence of toxicity, and much more, supplemented by significant savings in labor and materials when compared to traditional products, and full compliance with the new European building regulations.



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Where I can use Suber by Kolmer?

It can be applied on almost any surface, walls, ceilings, and floors of all types. It is also environmentally friendly and biodegradable, and it is considered to be non-toxic or harmless according to EC regulations. This means it can be used safely in environments where there are small children, such as bedrooms, bathrooms, preschool classrooms, etc..



Specifications



SUBER by Kolmer is a water-proof aqueous coating for facades and roofs; it provides thermal and acoustic insulation, it is a sealant and adhesive, it is anti-humidity and efflorescence proof. It has a base of natural cork and acrylic copolymer dispersions, free of asphalt products. It is suitable for insulation and waterproofing of facades, terraces and other indoor and outdoor foundations.



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How do we apply the product and what color do we use?



First of all, we must make sure to clean and prepare the area that is to be treated. The surface that is to be protected should be dry. Stir the product at a moderate speed for 2-3 minutes before use and if necessary, add water (100 to 125 ml. for a 12 kg. pack) to get the desired fluidity.

Apply SUBER by Kolmer by projection, creating a layer 3mm. thick (for roofs, you are advised to apply a double layer)

To achieve the desired thickness, repeat the operation after the first coat has dried.

At Industrias Kolmer, we have a range of application guns that are ideal for applying the product, with all the guarantees necessary to achieve the best result, and although teams are better able to cover large areas, these smaller machines are ideal for checks and small jobs.

SUBER by Kolmer has a wide range of colors, which you can find in a convenient color chart.

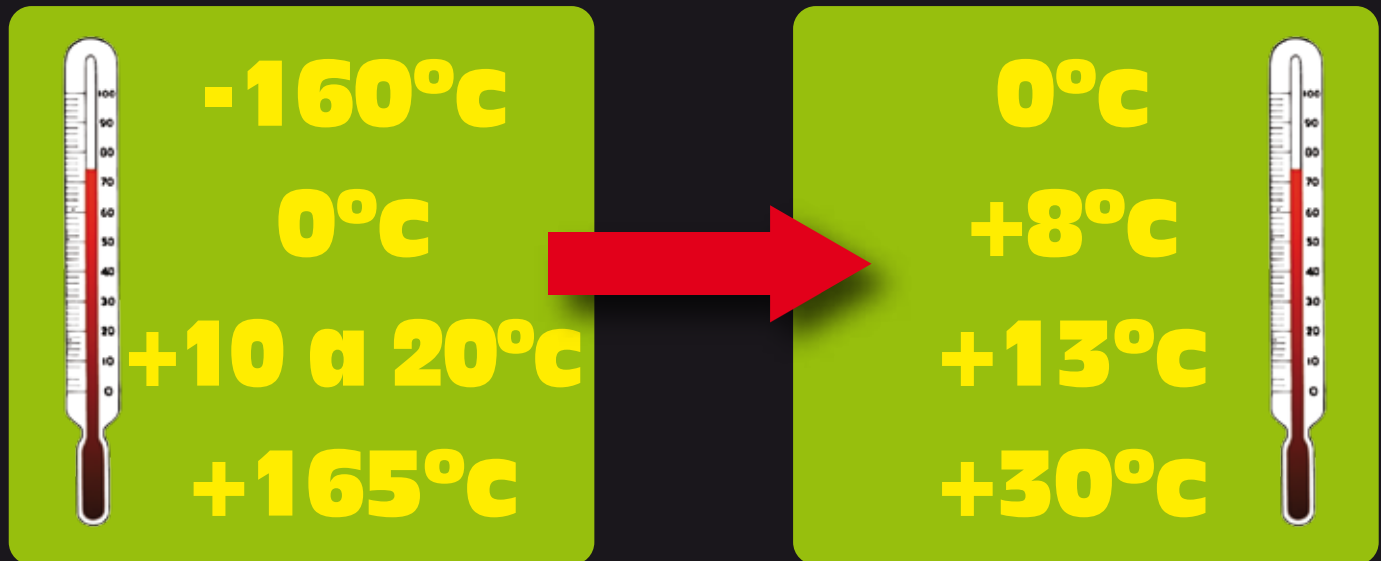
Don't worry, you have a huge amount of colors at your disposal so you can find the one that most suits your tastes and needs.



The secret of cork

EXTERNAL TEMPERATURE

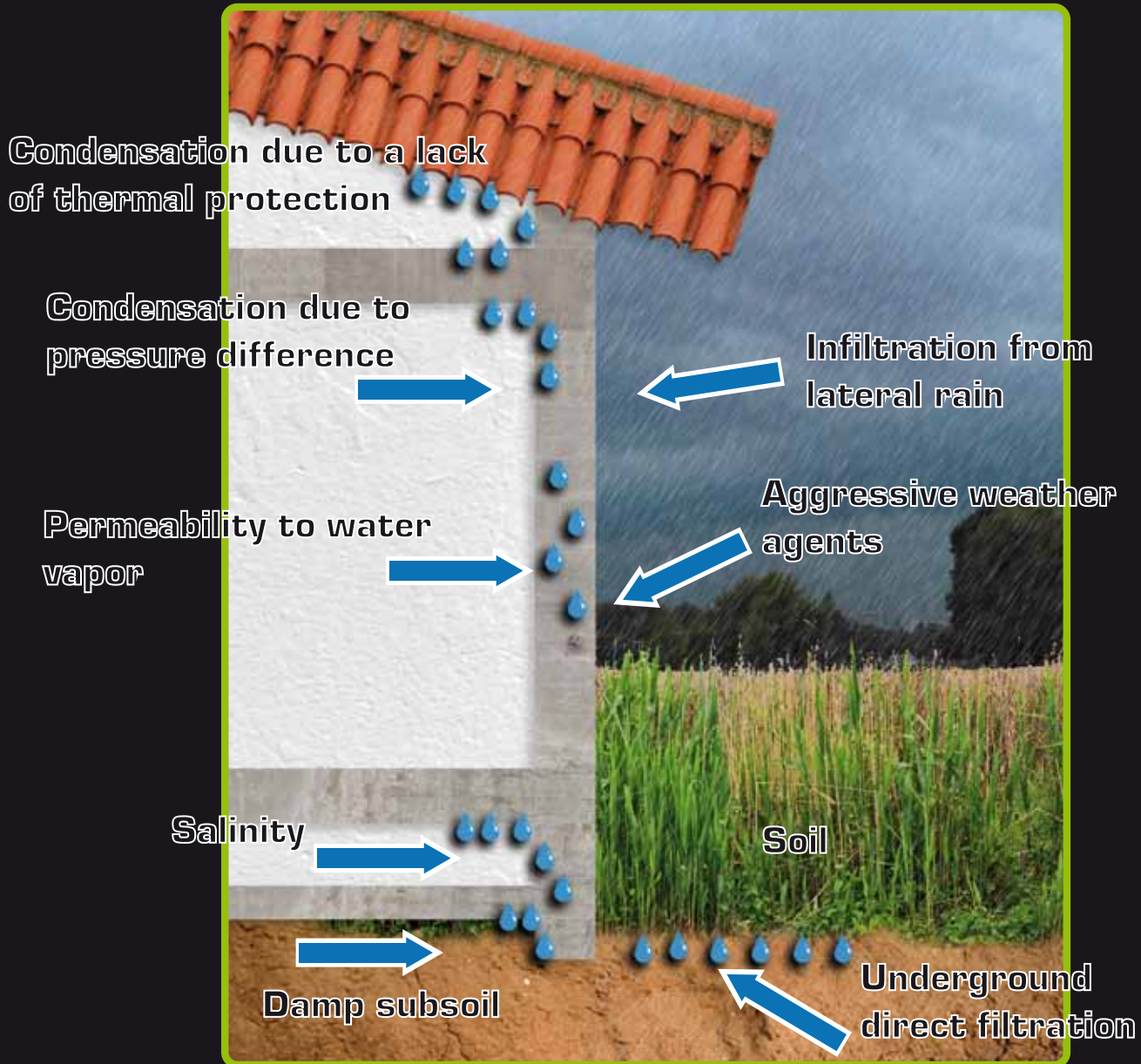
TEMPERATURE OF CORK



These results demonstrate the excellent performance of SUBER by Kolmar when exposed to external temperature, cushioning it and keeping it warm, allowing the transpiration of moisture.

SUBER by Kolmer can moderate extreme temperature variations with exceptional insulating qualities.

Causes of moisture in construction





Laboratory testing techniques

TYPE OF TEST	METHOD - STANDARD	RESULT
Permeability	Prof. Edward B. Grunau	Waterproof No capillary activity
Specific weight	UNE 83.814/92	0.414g/cm ³
Traction and elongation	UNE 53.112/98	Tensile strength: 20N/5cm Elongation: 11 to 33%
Resistance to seawater and sea fog	Immersion in seawater and sea fog for 7 dayss	Remains stable and unaltered, with both immersion and sea fog
Mass per unit area	UNE 104.281	2.56 Kg/m²
Flexibility at different temperatures	UNE 104.242-2/95	No breaks or cracks
Loss due to warming	Not subject to standard	The product does not blister, sag or drip.
Traction, adhesion and pull-out resistance	UNE 83.822/92 Electronic measuring meter: NEURTEK	Resistance in Kg/cm² Glass 10.60 Ceramic brick 10.10 Glazed tile 11.10 Steel plate 9.70 Unglazed tile 10.80 Fibrocement 8.10 Ceramic brick rendering 12.80 Plaster or stucco 2.30 Concrete 11.50 Chipboard 2.20
Stability in hot-cold weather	Freeze (-5°C) Heat (+80°C) 6 hour cycles	No loss of surface, blisters, swelling or cracking
Volume and density	UNE 53.215	Volume: 2 dm³ Bulk density 0.262 Kg/dm³
Resistance to impact and shock	1kg steel ball.	No break
Moisture content	UNE 56.917	0.50%
Breathability	Not subject to standard	Breathable to 79%
Accelerated aging	UNE 104.242 1/95	Certified 5 years

Laboratory testing techniques



TYPE OF TEST	METHOD - STANDARD	RESULT
Acoustic isolation by transmission	UNE 140 - 4UNE 717 1	30 db 4mm layer over 10mm chipboard
Acoustic insulation by resonance	UNE 140 - 4UNE 717 1	Excellent certified results
Sound insulation by impact	UNE 140 - 4UNE 717 2	Excellent certified results
Thermal conductivity λ	UNI 7745	$\lambda=0.038$ Kcal/h °Cm
Decreased λ	Not subject to standard	Aprox. 28%
Encapsulation of asbesto cement	UNI 10686 - 10	Suitable
Thermal resistance R	UNI EN 12667	R=0.16
Slip $\mu=2$	UNI 8272 PARTE 11ª	4: Very resistant to slippage



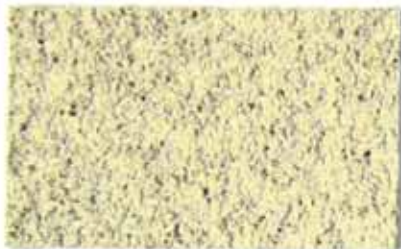
Colors chart



01- Blanco KP



02- Transparente KTR



03-KP



04-KP



05-KTR



06-KTR



07-KP



08-KP



09-KTR



10-KTR



Colors chart



11-KP



13-KTR



15-KP



18-KTR



* Corps architecturaux sans revêtement, béton exposé, isolation extérieure, isolation intérieure



12-KP



14-KTR



16-KP



17-KTR



19-KP

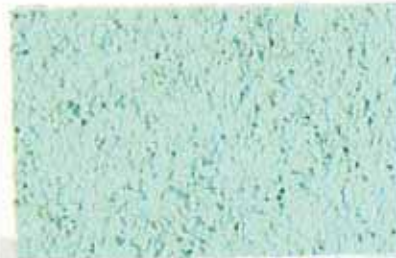


20-KP

Colors chart



21-KTR



23-KP



25-KTR



28-KP



* Colors are not exact, they are approximate, colors may vary slightly.



22-KTR



24-KP



26-KTR



27-KP



29-KTR



30-KTR

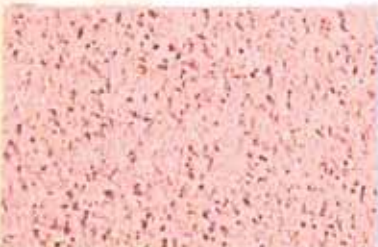
Colors chart



31-KP



33-KTR



35-KP



38-KTR



*Colors presented here illustrate color selection; actual results may vary.



32-KP



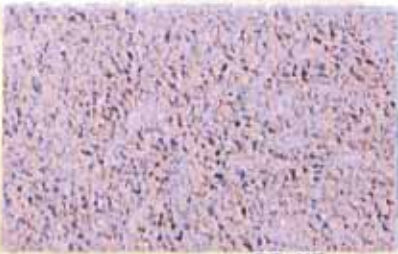
34-KTR



36-KP



37-KTR



39-KP



40-KP



41-KTR



43-KP



45-KTR



48-KP



42-KTR



44-KP



47-KP



50-KTR



46-KTR



49-KTR



Industrias Kolmer S.A.

**POLÍGONO INDUSTRIAL JUNCARIL C/ LOJA - PARC. 111A - 112
18220 - ALBOLOTE (GRANADA) ESPAÑA
Tlf.: +34 958 46 56 86 FAX +34 958 46 74 02
KOLMER@KOLMERSA.COM WWW.KOLMERSA.COM**