

TERRACES' HYBRID INSULATION SYSTEM



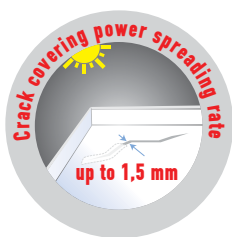
Safe function duration up to **10** years



Acrylic and Polyurethane based Elastomeric Insulation paint



Water based primer for all surfaces



General characteristics - Properties - Advantages



Water based high solids' hybrid elastomeric insulation paint based on acrylic and polyurethane resins (HSH PUACR technology).

Quick drying. It creates a water and vapor proof film, against humidity and stagnated waters. The film maintains its elasticity from -20°C up to + 80°C.

It fully covers micro cracks and cracks up to 1,5 mm. Great contraction-distention absorption capacity.

Due to the product's innovative composition:

- 👍 There is high resistance to dirt and pure whiteness (cleaned with water), as well as strong thermo-reflective properties in a long period of time,
- 👍 An elastomeric film is created, walk-able and with no stickiness.
- 👍 It can be applied in one layer, reducing the paint-worker' cost (e.1,5kg m² per one layer).
- 👍 It is certified as cold-reflective paint (KAPE, DEMOCRITOS) and it has excellent thermo-reflectivity (reduction of cold rate during summer months).
- 👍 It is an excellent solution for premium insulation repairs with or without the use of glass-plat tape or polyster armament.
- 👍 Easy application and repair (by expert or non expert personnel), friendly to the user and the environment.

USE

Suitable for the insulation of terraces, roofs, balconies, flower beds, flowerpots, parapets, water tanks, plasters, irrigation channels, garages, stadiums, bridges, tunnels etc.

Excellent adhesion and running through surfaces of cement, plaster, concrete, ellenit, wood, metal.

It can be applied with the appropriate primer Isolor Hybrid Primer on surfaces of asphalt bituminous materials, mosaic, polyurethane paints, aluminum e.c.

Technical characteristics

Appearance:	Semi-liquid water based of high solids, low odor.
Color Shades:	White and Tile-colored.
Specific weight:	1,50-1,54 kg/lt
Dilution:	If needed, up to 5% with water. The first layer is up to 10% above asphalt bituminous surfaces.
Spreading rate:	Using roller for one coat depending on the surface's roughness: 1,25-2m ² consumption of 500-800gr/m ² . By using a brush with soft hair, as well as by using airless gun, we can succeed a thicker film, for example consumption 1-1,5kg/m ² on one coat.
Drying - Recoating:	It dries in 1-3 hours depending on the environment conditions and the film's thickness. It is re-coated after 6-12 hours, depending on the weather conditions and film's thickness. The next layer should be applied crossed-type. There is no limitation for the maximum layer's film (it can reach even 750µm of dry film in a layer). Big cracks (>1,5mm) can be covered by using Smaltofill Elastic Putty before applying the product or enduring reinforced armament in the product or/with the use of polyurethane sealants. The surface is walk-able 3-4 hours after the product's application and depending on the weather conditions.
Armament Use:	The use of reinforced armament demands the product's application in at least 3 coats. The armament for example of 1m width is put and applied on the first fresh layer. The armament's reinforced first layer is covered with two more coats of ISOLOR HYBRID Aqua Plus.

Re-reflectivity in the visible spectrum (400-750 nm, ASTM E903-96) = 89,5%

Re-reflectivity in the intra-red spectrum (780-2500 nm, ASTM E903-96) = 89,5%

Elaboration Factor (ϵ , ASTM E408-71) = 0,88

On testing films 1 mm thick, the following have been measured:

Adhesion on concrete surface (EN 24624)>4MPa






Adhesion on primed concrete surface, by Isolor Hybrid Primer (EN 24624)>6MPa

Elongation duration cracking= 350% στους 23°C και 100% στους -10 °C

Resistance to pulling (23 °C /-20 °C) N/mm² = 1.4 / 7.5

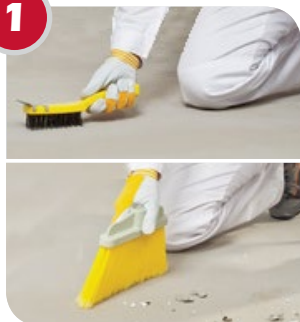
Water Vapor Permeability >14gr/m²d

Application instructions

-  New concrete should be "matured" for 4 weeks before primed by Isolor Hybrid Primer and insulated by Isolor Hybrid Aqua Plus.
-  Humidity of the insulated surface should be less than 15%.
-  Old insulated surfaces, dirt, algae organisms should be well cleaned with rubbing tools.
-  On terraces with air-condition devices, it is better to apply ISOLOR Hybrid Aqua Plus with the reinforce of glass-plat tape or polyester armament.
-  When apply the product in a layer of 1-1,5kg/m², the temperature should be lower than 30°C and there should be no wind, because the film would not be uniformly dried. Environment temperatures over 35°C make the product's application difficult since they could lead to quick drying.

INSULATION STEP BY STEP

1



New surface

Thorough cleaning of dirt e.c.

Old surface with insulation film

The surface to be painted has to be cleaned cropped paints, rust and dampness. All kind of cracks and surface's defects should be covered by Smaltofill Elastic Putty or enduring reinforced armament in **ISOLOR Hybrid Aqua Plus** or/and usinf polyurethane sealants. Thorough cleaning of dusts e.c.

Old asphalt bituminous surfaces

The surface to be painted has to be cleaned cropped paints, rust and dampness. All kinds of cracks and surface's defects should be covered by Smaltofill Elastic Putty or enduring reinforced armament in **ISOLOR Hybrid Aqua Plus** or/and usinf polyurethane sealants. Thorough cleaning of dusts e.c.

2



Priming by **Isolor Hybrid Primer**.

Priming by **Isolor Hybrid Primer**.

Priming by **Isolor Hybrid Primer**.

3



Detailed insulation (e. pipes' drillings, air-condition channels) and parapets, by using the appropriate armament.

Detailed insulation (e. pipes' drillings, air-condition channels) and parapets, by using the appropriate armament.

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4



Apply **ISOLOR Hybrid Aqua Plus** in one or more layers, depending on the insulation duration. Follow the product's application instructions.

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Apply **ISOLOR Hybrid Aqua Plus** in one first layer with up to 10 % water. Then apply more layers depending on the insulation duration. Reinforced armament should be used on very old bituminous surfaces. Follow the product's application instructions.

Acrylic and Polyurethane based Elastomeric Insulation paint.



Waterbased for all surfaces.

THE WINNING SYSTEM!

Isolor HYBRID

Aqua Plus+

It excels compared to the conventional water based elastomeric acrylic paints:

- Higher resistance and better insulation, up to 10 years.
- Excellent quality-price rate.
- Higher resistance to stagnated waters.
- No stickiness, resistance to dirt and easy to clean with water.
- Surface to walk on it.
- It preserves its whiteness and thermo-reflectivity for a longer period of time.
- Its specific weight is 1-1,5kg per m² even in one coat due to its high solids and special composition.
- No limitations on the application film.
- It maintains its elasticity from -20°C up to + 80°C.
- It can be applied on surfaces of asphalt bituminous materials and polyurethane paints.
- Suitable for Photo-voltaic solar installations.








It excels compared to the solvent polyurethane elastomeric acrylic paints :

- Better insulation with the least material and paint-workers cost.
- Premium quality-price rate
- It preserves its whiteness and No yellowing for a long period of time.
- No chalking.
- It can be applied on terraces with stagnated waters.
- Better thermo-reflectivity.
- Easy to apply without odors and solvent use.
- Very easy insulation repair.
- No limitation on the thickness of the application film or/and on weather conditions (e. humidity) or on the time between successive layers.
- Excellent drying and insulation power.
- Better resistance to sudden rain.
- Its specific weight is 1-1,5kg per m² even in one coat due to its high solids and special synthesis.
- Suitable composition for insulation of terraces with Photo-voltaic solar installations.
- No expiry date on the can.

Estimated terraces' insulation and protection time duration with ISOLOR Hybrid Aqua Plus

TOTAL CONSUMPTION	ESTIMATED MINIMUM INSULATION FUNCTION TIME DURATION	USE OF REINFORCED POLYESTER ARMAMENT	REMARKS
1,0 kg/m ²	4-5 years	-	One coat application possibility
1,5 kg/m ²	5-7 years	-	One coat application possibility
2,0 kg/m ²	7-9 years	-	
2,0 kg/m ²	9-10 years	50 gr/m ²	The use of reinforced armament demands at least three coats' material application. The armament is applied after the first coat, while this is fresh.
4,0 kg/m ²	10-14* years	100 gr/m ²	

* Depending on the armament type

 SPREADING RATE 1-2m²/Lt	 DILUTION 5%	 DRYING 1-3 h	 COATING 2
AVAILABLE AT			
750ml (1,19kg) 3lt (4,5kg) 10lt (15,2kg)			
  			



Safe function duration up to **10 years**



ISOLOR HYBRID PRIMER

- ✓ Water based hybrid primer, ideal before applying ISOLOR Hybrid Aqua Plus.
- ✓ Low odor and VOC.
- ✓ Ready for use.
- ✓ Suitable for the priming of new cement substrates as well as of existing waterproofing coatings. It can be applied above bituminous materials and old polyurethane insulation.
- ✓ Excellent adhesion and penetration. Quick drying.

 SPREADING RATE 4-8m²/Lt	 DILUTION 0%	 DRYING 1/2-1 h	 COATING 1-2
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 AVAILABLE AT 1Lt, 5Lt			
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THE WINNING SYSTEM!



Hybrid water based primer for insulation



Hybrid insulation elastomeric high solids' paint

since 1948



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