HARD System

SmartCOVER μ
GRAPHENE FINISHING

HARD System

Graphene micro-mortar for high pedestrian traffic, ideal for floors, walls and other surfaces in shopping centres, bars, restaurants, party venues, cinemas, etc. Guarantees high resistance to wear, abrasion and stain protection without neglecting design.

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1. HARD SYSTEM APPLICATION

SUBSTRATE PREPARATION AND WATERPROOFING

The substrate must be clean, dry, smooth, firm and pore-free with no cracks or fractures.
If necessary, apply a liberal coat of Waterproofing HARD+.

FIBERGLASS MESH APPLICATION

Set the Fiberglass Mesh and apply Union Bridge.
Allow to dry for 2 hours.
Estimated performance: 100 g/m^2.

APPLY 2 COATS OF SMARTCOVER BASE WITH METAL TROWEL

Mix 1 kg of SmartCOVER Base with graphene with 400-550 cc of Resin Mixture with graphene, depending on the workability may be required.
Estimated performance: 1 kg/m^2 per coat.
Estimated pot life: 1 hour.
Allow to dry for 6-8 hours.
Sand with 80-grit.

APPLY 2 COATS OF SMARTCOVER FINE WITH PLASTIC TROWEL

In order to obtain "burnt effect" apply the product with metal trowel.
Mix 1 kg of SmartCOVER Fine with graphene with 400-550 cc of Resin Mixture with graphene, depending on the workability may be required.
Estimated performance: 350 g/m^2 per coat.
Estimated pot life: 1 hour.
Allow to dry for 3-8 hours.
Sand with 120-grit.

APPLY A BEAD OF ACRILAT SEALER

Estimated performance: 100 g/m^2.
Allow to dry for 2 hours.

APPLY TWO HIGH TRAFFIC TOP COAT LAYERS COMPONENT A + COMPONENT B

Mixture ratio: 2 kg of Resin / 1 kg of Hardener.
Estimated performance per coat: 100 g/m^2.
Pot life: 1 hour.
Allow to dry between coats from 2 to 3 hours for a matte and satin finish, or 8 hours for a glossy finish.

These indications are based on our current state of technical knowledge and our experience. Due to the different conditions of application, it is advisable to conduct proper testing to determine the most adequate consumptions and dosages for each use. Product and information are destined for industrial use, for professionals with the necessary skills and knowledge to carry out an appropriate application.
Other uses beyond those specified in this document are at your own risk.

2.1. WATERPROOFING CLASSIC - Single Component (Optional)

PROPERTIES

The dried product forms a flexible waterproof membrane.

INSTRUCTIONS

Surfaces must be clean, dry and free from dust, grease, rust, dirt and residues from cleaning agents.

PERFORMANCE

The estimated consumption is 100-200 g/m^2.
This consumption is intended as a guide only. Independent tests should be conducted to determine appropriate consumption amounts.

CLEANING

Tools and utilities that have been saturated with Waterproofing CLASSIC+ must be washed with water before the product dries on them.

PRODUCT PRESENTATION

Packed in 10kg, 5kg and 1kg containers.

HANDLING AND TRANSPORT

The usual preventive measures for the handling of chemical substances should be adopted, such as the use of goggles and gloves. Wash hands before breaks and at the end of work. Do not eat, drink or smoke while handling the product.
They are not considered dangerous goods for transport by road.

STORAGE

Store the product in its original container, perfectly closed, in a cool, dry and ventilated place at temperatures no lower than 5 °C. Avoid extreme temperatures. Under these conditions, the product is preserved for 1 year.

DISPOSAL

The disposal of the product and its packaging must be carried out in accordance with the legislation in force and it is the prime responsibility of the product consumer to adhere to disposal regulations.

TECHNICAL DATA

Appearance: White liquid
Density, 20 °C: 1.05 +- 0.2 g/cm^3
pH: 7.5 +- 1
Brookfield viscosity, 20 °C: 500-600 cps

2.2. FIBERGLASS MESH

Fiberglass Mesh is recommended to reinforce the resistance of micromortar walls and floorings as well as to prevent shrinkage and cracks due to the stress on specific points in the building or house.

PROPERTIES

Water resistant.
Flexible.
Does not rust.

SUBSTRATE PREPARATION

Surfaces must be perfectly set and free of dust, paint, oil, etc.
Sand it with 80-grit and remove the sanding dust.

INSTRUCTIONS

Fiberglass Mesh is set with the Union Bridge, followed by the application of a SmartCOVER Base.

RECOMMENDATIONS

Application should not be made in rainy conditions, or at a temperature below 5 °C or above 35 °C.

CLEANING

Wash the tools with water before the product dries on them.

PRODUCT PRESENTATION

In 50 m^2 rolls.

STORAGE

Preserved up to 1 year in original packaging, between 15 °C and 25 °C.

SAFETY AND HYGIENE

For any information on safety, storage and disposal of waste refer to the product *Safety Data Sheet*.

2.3. UNION BRIDGE

It is indicated for facilitating adherence between substrates.

Watery dispersion of esters of the acrylic acid with high concentration in resin.
It facilitates adhesion between micromortar and different substrates such as: cement, concrete, plasterboard, etc.

PROPERTIES

Dry product forms a bending, sticky, alkali-resistant film that facilitates the adhesion.

INSTRUCTIONS

Surfaces must be clean, dry and free of dust, grease, oxide or dirt.
Apply with a brush or roller.
Apply a regular thin coat of the product, avoiding unwanted buildups.
Do not use at temperatures below 5 °C.

PERFORMANCE

Consumption is around 100-200 g/m^2 according to surface porosity.
This consumption is intended as a guide only. Independent tests should be conducted to determine appropriate consumption amounts.

CLEANING

Tools and utilities that have been saturated with Union Bridge must be washed before the product dries on them.

PRODUCT PRESENTATION

Packed in 10kg, 5kg and 1kg containers.

HANDLING AND TRANSPORT

The usual preventive measures for the handling of chemical substances should be adopted, such as the use of goggles and gloves. Wash hands before breaks and at the end of work. Do not eat, drink or smoke while handling the product.
They are not considered dangerous goods for transport by road.

STORAGE

Store the product in its original container, perfectly closed, in a cool, dry and ventilated place at temperatures no less than 5 °C. Avoid extreme temperatures. Under these conditions, the product is preserved for 9 months.

DISPOSAL

The disposal of the product and its packaging must be carried out in accordance with the legislation in force and it is the prime responsibility of the product consumer to adhere to disposal regulations.

TECHNICAL DATA

Appearance:	White liquid
Density, 20 °C:	1.02 +- 0.2 g/cm^3
pH:	8 +- 1
Brookfield viscosity, 20 °C:	50-100 cps

2.4. SMARTCOVER BASE

Cementitious adhesive that regularises and repairs.

APPLICATIONS

Adhesive that regularises and repairs cement, concrete, plaster mortar substrates and pavements used for walls and floors with heavy usage.
Facade cladding.
Application for overlap on old stoneware tiles.

PROPERTIES

Optimal grip with high compressive and shearing strengths.
High thixotropy and great workability.
Non-slip.
Suitable for inmersion in water.

SUBSTRATE PREPARATION

Surfaces must be resistant, be perfectly set and free of dust, paint, oil, etc.
If the surface is exposed to sunlight or is very absorbent, it is recommended that the surface be wet before application.

INSTRUCTIONS

Mix 1 kg of SmartCOVER Base with graphene with 400-550 cc of Resin Mixture with graphene, depending on the workability may be required.
Allow to stand for 5 minutes.
Mix again to obtain a paste ready to use.
Apply with metal trowel and expand on the substrate in order to have a regular surface.

RECOMMENDATIONS

Application should not be made in rainy conditions, or at a temperature below 5 °C or above 35°C.
Wet the substrates in hot weather or strong wind.
In low absorbing substrates, open the pore with hydrochloric acid or etching diluted at 50%.

TECHNICAL DATA

Application temperature:	5 °C to 35 °C
Open time:	30 minutes
Mixture pot life:	1 hour
Adherence:	>=2.0 N/mm^2.

PERFORMANCE

Approximate consumption: 1 kg/m^2 per coat.

CLEANING

Wash the tools with water before the product dries on them.

PRODUCT PRESENTATION

Buckets of 25 kg.
White colour.

STORAGE

Preserved up to 1 year in original packaging, between 15 °C and 25 °C.

SAFETY AND HYGIENE

For any information on safety, storage and disposal of waste refer to the product *Safety Data Sheet*.

2.5. SMARTCOVER FINE

Two component cement-based mortar for walls and floors.

APPLICATIONS

Apply over SmartCOVER Base.
Use a continuous coat on surfaces free of wall and floor joints.

PROPERTIES

Water resistant.
Abrasion resistant.

SUBSTRATE PREPARATION

Surfaces must be resistant, be perfectly set and free of dust, paint, oil, etc.
Sand it with 80-grit and remove the sanding dust.

INSTRUCTIONS

Mix 1 kg of SmartCOVER Fine with graphene with 400-550 cc of Resin Mixture with graphene, depending on the workability may be required.
Allow to stand for 5 minutes.
Mix again to obtain a paste ready to use.
Apply with plastic or metal trowel to get “burnt effect” and expand on the substrate in order to have a regular surface of approximately 1 to 1.5 mm of thickness.

RECOMMENDATIONS

Application should not be made in rainy conditions, or at a temperature below 5 °C or above 35 °C.

TECHNICAL DATA

Application temperature:	5 °C to 35 °C
Mixture pot life:	1 hour

PERFORMANCE

Approximate consumption: 350 g/m^2 per coat.

CLEANING

Wash the tools with water before the product dries on them.

PRODUCT PRESENTATION

Buckets of 20 kg.
White colour.

STORAGE

Preserved up to 1 year in original packaging, between 15 °C and 25 °C.

SAFETY AND HYGIENE

For any information on safety, storage and disposal of waste refer to the product *Safety Data Sheet*.

2.6. RESIN MIXTURE WITH GRAPHENE

Water-based nanodispersion of graphene with acrylic resins, indicated to improve the performance of the micromortar.

Such improvements are reflected in the behavior against scratch resistance, impact resistance, impermeability, workability, cracking resistance, abrasion resistance and flexural strength.

INSTRUCTIONS

Mix 1 kg SmartCOVER Base with 400-550 cc Resin Mixture with graphene.
Mix 1 kg SmartCOVER Fine with 400-550 cc Resin Mixture with graphene.
Allow to stand for 5 minutes.
Mix again to obtain a paste ready to use.
Apply with trowel and expand on the substrate in order to have a regular surface.

CLEANING

Tools and utilities that have been saturated with Resin Mixture with graphene must be washed with water before the product dries on them.

PRODUCT PRESENTATION

Packed in 25 kg and 10 kg containers.

HANDLING AND TRANSPORT

The usual preventive measures for the handling of chemical substances should be adopted, such as the use of goggles and gloves. Wash hands before breaks and at the end of work. Do not eat, drink or smoke while handling the product.
They are not considered dangerous goods for transport by road.

STORAGE

Store the product in its original container, perfectly closed, in a cool, dry and ventilated place at temperatures no less than 5 °C. Avoid extreme temperatures. Under these conditions, the product is preserved for 1 year.

DISPOSAL

The disposal of the product and its packaging must be carried out in accordance with the legislation in force and it is the prime responsibility of the product consumer to adhere to disposal regulations.

TECHNICAL DATA

Appearance:	White liquid
Density, 20 °C:	1.02 +- 0.2 g/cm^3
pH:	7.5
Brookfield viscosity, 20 °C:	50 cps

2.7. ACRILAT SEALER

Fast drying sealer for micromortar. Watery dispersion of acrylic resins which forms a sealing film on cementitious coatings.

PROPERTIES

Dry product forms a hard film in satin matte finish.

INSTRUCTIONS

Surfaces must be clean, dry and free of dust, grease, oxide or dirt.
Apply with a brush or roller.
Apply a consistent thin coat of product to avoid immediate and unwanted buildups.
Do not use at temperatures below 5 °C.

PERFORMANCE

Consumption is around 100-150 g/m^2 according to surface porosity.
This consumption is intended as a guide only. Independent tests should be conducted to determine appropriate consumption amounts.

CLEANING

Tools and utilities that have been saturated with Acrilat Sealer must be washed before the product dries on them.

PRODUCT PRESENTATION

Packed in 10kg, 5kg and 1kg containers.

HANDLING AND TRANSPORT

The usual preventive measures for the handling of chemical substances should be adopted, such as the use of goggles and gloves. Wash hands before breaks and at the end of work. Do not eat, drink or smoke while handling the product.
They are not considered dangerous goods for transport by road.

STORAGE

Store the product in its original container, perfectly closed, in a cool, dry and ventilated place at no less than 5 °C. Avoid extreme temperatures. Under these conditions, the product is preserved for 1 year.

DISPOSAL

The disposal of the product and its packaging must be carried out in accordance with the legislation in force and it is the prime responsibility of the product consumer to adhere to disposal regulations.

TECHNICAL DATA

Appearance:	White liquid
Density, 20 °C:	1.02 +- 0.2 g/cm^3
pH:	8 +- 1
Brookfield viscosity, 20 °C:	100-300 cps
Drying time:	Approximately 20 minutes

2.8. High traffic TOP COAT Parts A + B

Two-component aliphatic polyurethane sealant for high pedestrian traffic. Finishes to be chosen from matt, gloss and satin, as described below. The hardener is common to all three finishes.

2.8.1. HIGH TRAFFIC TOP COAT PART A - MATT

DESCRIPTION

Two-component colourless matte acrylic finish.

PROPERTIES

Does not yellow.
Filling ability.
High hardness.
Good elasticity.
Excellent transparency.
Surface scratch resistant.
Excellent extensibility.
Wear resistant.

USES

Decorative micro-mortar finish.

PROPERTIES AND PHYSICAL STATE

Liquid. Viscous. Colourless.

TECHNICAL DATA

Viscosity (DIN 4) 25°C: 18”-22”
Specific gravity 25°C (kg/l): 0.970-0.990
% hardener: 50
Shine: 60°: 8-12/100 g/m^2
Solids (%): 33.430
VOCs g/l: 651.260
% carbon by weight: 24.303
Proportion: A+B= 2:1

COMMENTS

Suitable for application by hand roller or brush Can also be applied by spray gun.

STORAGE AND SAFETY

In its original, well-sealed container. In a cool place, at a temperature not exceeding 30°C, away from heat sources and direct sunlight. In these storage conditions the product remains stable for 12 months.
Good ventilation, a mask with chemical absorbent, safety goggles and rubber gloves are recommended for its use.

APPLICATION

Machinery	Airbrush gun	Air-Mix gun	Airless gun	Curtain machine
Viscosity DIN 4 at 25°C	18" - 20"	18" - 20"	16" - 18"	16" - 18"
Nozzle size	1,2 - 1,5	0,6 - 0,9	0,9 - 1,1	
Product pressure	1,5 - 2,0	2,0 - 2,5	80 - 100 bar	
Spraying pressure	2,0 - 2,5	0,5 - 1,5		
% hardener	50	50	50	50
% solvent	5% - 10%	5% - 15%	5% - 20%	0% - 10%
Solvent type	Polyurethanes	Polyurethanes	Polyurethanes	Polyurethanes
Thickness applied g/m²	100 - 150	100 - 150	100 - 150	100 - 150

Excellent manual application with both brush and roller. Fine hair roller recommended.

2.8.2. HIGH TRAFFIC TOP COAT PART A - GLOSS

DESCRIPTION

Two-component colourless gloss acrylic finish.

PROPERTIES

Does not yellow.
Filling ability.
High hardness.
Good elasticity.
Excellent transparency.
Surface scratch resistant.
Excellent extensibility.
Wear resistant.

USES

Decorative micro-mortar finish.

PROPERTIES AND PHYSICAL STATE

Liquid. Viscous. Colourless.

TECHNICAL DATA

Viscosity (DIN 4) 25°C: 19"-22"
Specific gravity 25°C (kg/l): 0.960-0.980
% hardener: 50
Shine: 60°: 85-95
Solids (%): 31.670
VOCs g/l: 667.380
% carbon by weight: 22.272
Proportion: A+B= 2:1

COMMENTS

Suitable for application by hand roller or brush Can also be applied by spray gun.

STORAGE AND SAFETY

In its original, well-sealed container. In a cool place, at a temperature not exceeding 30°C, away from heat sources and direct sunlight. In these storage conditions the product remains stable for 12 months.

Good ventilation, a mask with chemical absorbent, safety goggles and rubber gloves are recommended for its use.

APPLICATION

Machinery	Airbrush gun	Air-Mix gun	Airless gun	Curtain machine
Viscosity DIN 4 at 25°C	18" - 20"	18" - 20"	16" - 18"	14" - 16"
Nozzle size	1,2 - 1,5	0,6 - 0,9	0,9 - 1,1	
Product pressure	1,5 - 2,0	2,0 - 2,5	80 - 100 bar	
Spraying pressure	2,0 - 2,5	0,5 - 1,5		
% hardener	50	50	50	50
% solvent	5% - 10%	5% - 15%	5% - 20%	0% - 10%
Solvent type	Polyurethanes	Polyurethanes	Polyurethanes	Polyurethanes
Thickness applied g/m²	100 - 150	100 - 150	100 - 150	100 - 150

Excellent manual application with both brush and roller. Fine hair roller recommended.

2.8.3. HIGH TRAFFIC TOP COAT PART A - SATIN

DESCRIPTION

Two-component colourless satin acrylic finish.

PROPERTIES

Does not yellow.
Filling ability.
High hardness.
Good elasticity.
Excellent transparency.
Surface scratch resistant.
Excellent extensibility.
Wear resistant.

USES

Decorative micro-mortar finish.

PROPERTIES AND PHYSICAL STATE

Liquid. Viscous. Colourless.

TECHNICAL DATA

Viscosity (DIN 4) 25°C: 19”-22”
Specific gravity 25°C (kg/l): 0.960-0.980
% hardener: 50
Shine: 60°: 25-30
Solids (%): 32.900
VOCs g/l: 639.660
% carbon by weight: 25.243
Proportion: A+B= 2:1

COMMENTS

Suitable for application by hand roller or brush Can also be applied by spray gun.

STORAGE AND SAFETY

In its original, well-sealed container. In a cool place, at a temperature not exceeding 30°C, away from heat sources and direct sunlight. In these storage conditions the product remains stable for 12 months.

Good ventilation, a mask with chemical absorbent, safety goggles and rubber gloves are recommended for its use.

APPLICATION

Machinery	Airbrush gun	Air-Mix gun	Airless gun	Curtain machine
Viscosity DIN 4 at 25°C	18” - 20”	18” - 20”	16” - 18”	14” - 16”
Nozzle size	1,2 - 1,5	0,6 - 0,9	0,9 - 1,1	
Product pressure	1,5 - 2,0	2,0 - 2,5	80 - 100 bar	
Spraying pressure	2,0 - 2,5	0,5 - 1,5		
% hardener	50	50	50	50
% solvent	5% - 10%	5% - 15%	5% - 20%	0% - 10%
Solvent type	Polyurethanes	Polyurethanes	Polyurethanes	Polyurethanes
Thickness applied g/m²	100 - 150	100 - 150	100 - 150	100 - 150

Excellent manual application with both brush and roller. Fine hair roller recommended.

2.8.4. HIGH TRAFFIC TOP COAT PART B - HARDENER

DESCRIPTION

Hardener for 2-component polyurethanes and acrylics.

PROPERTIES

Does not yellow.
Aliphatic.

PROPERTIES AND PHYSICAL STATE

Liquid. Colourless fluid.

DATOS TÉCNICOS

Specific gravity 20°C (kg/l): 0.955-0.965
Solids (%): 30.750
VOCs g/l: 664.110
% carbon by weight: 34.138
Proportion: A+B= 2:1

STORAGE AND SAFETY

In its original, well-sealed container. In a cool place, at a temperature not exceeding 30°C, away from heat sources and direct sunlight. In these storage conditions the product remains stable for 12 months.
Good ventilation, a mask with chemical absorbent, safety goggles and rubber gloves are recommended for its use.