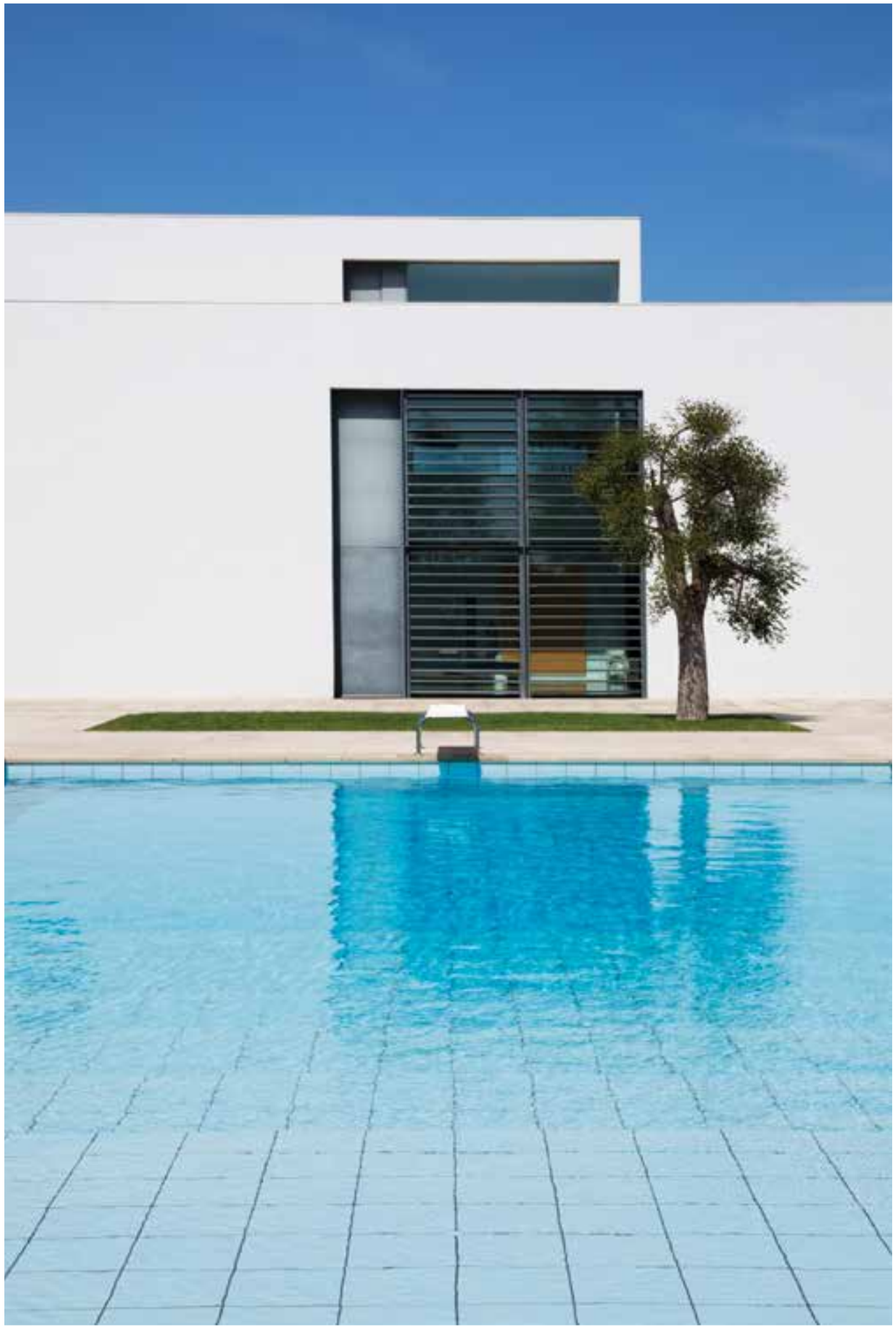
AQUAMAT
PRODUCT RANGE

WATERPROOFING CEMENT-BASED SLURRIES

isomat
building quality

for a sustainable future

#buildingquality



INTRODUCTION

Waterproofing is essential to preserving a structure's integrity, ensuring its longevity and minimizing maintenance and repair costs throughout its service life. When it comes to choosing the right waterproofing products, one should opt for easy application, advanced properties and definitive solutions through integrated product systems, some of the key criteria that also contribute significantly to a sustainable built environment.

Counting over 40 years of experience and deep expertise in waterproofing materials, **ISOMAT** has developed innovative, reliable and long-lasting waterproofing solutions for every project. For an easy and cost-effective approach to safeguard any structure against potential water damage, cement-based waterproofing slurries are the go-to waterproofing option. They serve as an ideal choice for both positive- and negative-side waterproofing, offering a comprehensive solution that effectively manages hydrostatic pressure while allowing for water vapor permeability to prevent possible damage. Thanks to their special composition, they are environment- and user-friendly and a great number of ISOMAT products have received certificates recognized by green building certification systems, such as LEED, BREEAM, etc. Plus, they can be enhanced with special resins to obtain a greater level of flexibility, accommodate expansion/contraction and vibration and provide crack-bridging properties. It should also be noted that cement-based slurries are the only surface-applied materials to which special active chemicals can be added, acting as crystalline waterproofing products, such as AQUAMAT-PENETRATE. This means that they can seal concrete pores and capillaries, remaining permanently active and significantly extending the service life of the structure, further reducing its environmental footprint.

The AQUAMAT product family is suitable for various areas of use, including waterproofing of basements, foundations, manholes, flat roofs, balconies, wet areas, potable water tanks, sewage tanks, swimming pools, biological treatment tanks, etc. Specially formulated to support under-tile waterproofing and surface waterproofing prior to installation of decorative cementitious flooring (e.g. microcement, terrazzo, etc.), allowing for direct application of the floor covering to follow. They constitute the optimal techno-economic solution for a variety of projects and are selected for waterproofing and protection of small- and large-scale structures in Greece and abroad.

AQUAMAT-ACTIVE

**Ultra-flexible, fast-setting, bitumen-free,
2-component waterproofing cement-based slurry**

Description

AQUAMAT-ACTIVE is a two-component, ultra-flexible, fast-setting, waterproofing cement-based slurry. It consists of a cementitious powder modified with recycled aggregates and additives (component A) and a polymer emulsion (component B). After hardening, it forms a seamless and jointless membrane offering the following advantages:

- Fast setting – the treated surface becomes rainproof after just 4 hours.
- Exceptional flexibility and crack-bridging ability.
- Ideal for application with a trowel – applicable also with a brush or spray.
- Applicable at a thickness of up to 4 mm in one layer without cracking.
- Total waterproofing against positive hydrostatic pressure up to 5 atm according to EN 12390-8.
- Environment-friendly – contains recycled raw materials.
- High water vapor permeability.
- Works as a radon barrier.
- Suitable as a bonding bridge/contact layer and for repairing old bituminous waterproofing layers in basements.
- Suitable for bonding XPS/EPS perimeter insulation boards to the exterior of basement walls.
- Resistance to frost and UV radiation.
- Primerless adhesion to slightly wet surfaces.
- No corrosive effect on the reinforcing steel in concrete.

Fields of application

AQUAMAT-ACTIVE is used for waterproofing surfaces made of concrete, cement block, brick, solid brick, etc. Ideal for waterproofing below-ground structures, such as basement walls, foundations, manholes, etc., in cases ranging from simple moisture to water under pressure, and waterproofing water tanks. Suitable also for waterproofing surfaces under cement screeds and masonry to stop rising damp. Well-suited for areas of application where fast return-to-service, exceptional flexibility, crack-bridging ability and strong adhesion are critical considerations. Serves also as a bonding bridge/contact layer and for repairing old bituminous waterproofing layers. Suitable for bonding XPS/EPS perimeter insulation boards to the exterior of basement walls.

Directions for use – Consumption

Component A (3 plastic bags of 4.8 kg each) is added to component B (10.6 kg) under continuous stirring, until a homogeneous, lump-free paste is obtained. For brush or spray application, component B (resin) is thinned by 5-10% by weight with clean water, depending on the desired workability. The cementitious substrate must be pre-wetted to a saturated surface dry condition before application. Depending on the water load, the material is applied in two or more layers.
Consumption: 2.0 - 4.0 kg/m^2,
depending on the application field.

Packaging - Color

25 kg (14.4 kg comp. A + 10.6 kg comp.B) – dark grey.

AQUAMAT

Waterproofing cement-based slurry for basements and tanks

Description

AQUAMAT is a one-component, cement-based, brush-on waterproofing slurry. After hardening, it forms a seamless and jointless membrane offering the following advantages:

- Total waterproofing against positive hydrostatic pressure up to 5 atm, according to EN 12390-8. It can also withstand negative pressure.
- Perfect adhesion to substrates like concrete, masonry, render, etc.
- Suitable for potable water tanks and food contact surfaces.
- Protection of concrete from carbonation.
- No corrosive effect on the reinforcing steel in concrete.
- Simple and low-cost application.

CE EN 1504-2 C

Suitable For Food Industry

Fields of application

Waterproofing of concrete elements, masonry or render surfaces, in cases ranging from simple moisture to water under pressure. Suitable for waterproofing of basements, water tanks, swimming pools, sewage tanks, etc. Enables internal waterproofing of underground structures, since it can withstand negative pressure (water from the substrate side), thanks to its excellent adhesion to the substrate. In case the surface to be waterproofed shows or is expected to show hairline cracks, such as flat roofs, balconies, etc., the use of the two-component brush-on waterproofing slurries AQUAMAT-FLEX, AQUAMAT-ELASTIC or AQUAMAT-SUPERELASTIC or the one-component slurry AQUAMAT-MONOELASTIC is recommended instead.

Directions for use - Consumption

AQUAMAT is gradually added to water under continuous stirring, until a uniform, viscous mixture is formed, suitable for brush application. The substrate must be pre-wetted to a saturated surface dry condition before application. The material is applied in two or more layers, depending on the water load.

Consumption: 2.0 - 4.0 kg/m^2,
depending on the application field.

Packaging - Color

5 kg, 25 kg - grey, white.

AQUAMAT-PENETRATE

Crystalline waterproofing cement-based slurry

Description

AQUAMAT-PENETRATE is a one-component, cement-based, brush-on waterproofing slurry with special active chemicals, which react with water and calcium hydroxide present in the concrete forming insoluble compounds (crystals). These crystals block capillary pores and seal shrinkage cracks in concrete, preventing any further water ingress. Offers the following advantages:

- Remains permanently active, protecting the structure from water throughout its entire life.
- Total waterproofing against positive hydrostatic pressure up to 5 atm, according to EN 12390-8. It can also withstand negative pressure.
- Excellent adhesion to concrete.
- Sealing of cracks up to 0.4 mm wide, even if they appear afterwards.
- Suitable for potable water tanks and food contact surfaces.
- In case of damage to the waterproofing layer, the watertightness of the construction is not affected.
- Protection of concrete from carbonation.
- No corrosive effect on the reinforcing steel in concrete.
- Does not compromise the breathability of the concrete surface.
- Simple and low-cost application.

CE EN 1504-2 C

Suitable For Food Industry

Fields of application

Waterproofing of concrete elements in cases ranging from simple moisture to water under pressure. Suitable for waterproofing of basements, foundations, manholes, water tanks and sewage tanks.

Directions for use - Consumption

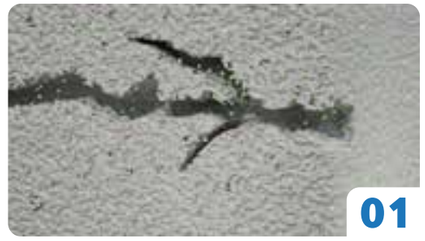
AQUAMAT-PENETRATE is added to water under continuous stirring, until a uniform, viscous mixture is formed, suitable for brush or spray application. The substrate must be pre-wetted to a saturated surface dry condition before application. The product is applied in two layers.

Consumption: Approx. 1.5 kg/m^2,
depending on the application field.

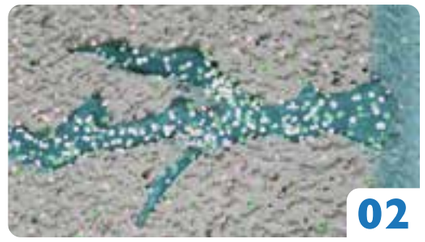
Packaging - Color

4 kg, 20 kg - grey.

How AQUAMAT-PENETRATE works:



Typical leaking crack in concrete.



AQUAMAT-PENETRATE is applied to concrete and instantly reacts with moisture, forming insoluble bonds (crystals).

Crystals seal and block capillary pores, preventing any further water ingress.

AQUAMAT-FLEX

Flexible, 2-component, polymer-modified, waterproofing cement-based slurry

S-P-06177 EPD®
environdec.com

GEV-EMICODE EC 1 PLUS very low emission

Suitable For Food Industry

CE EN 1504-2 C

Description

AQUAMAT-FLEX is a two-component, flexible, brush-on waterproofing slurry. It consists of a cementitious powder (component A) and a resin emulsion (component B). After hardening, it forms a seamless and jointless membrane offering the following advantages:

- Crack-bridging ability.
- Total waterproofing against positive hydrostatic pressure up to 5 atm, according to EN 12390-8. It can also withstand negative pressure.
- Suitable for potable water tanks and food contact surfaces.
- Vapor permeability.
- Adhesion to wet surfaces without priming.
- Protection of concrete from carbonation.
- No corrosive effect on the reinforcing steel in concrete.
- Simple and low-cost application.

Fields of application

It is used for waterproofing surfaces made of concrete, plaster, brick, cement block, terrazzo, etc., that show or are expected to show hairline cracks. Ideal for application on flat roofs, terraces, balconies and wet areas to be covered with tiles (bathrooms, kitchens, etc.). In this case, tiles should be fixed on the hardened AQUAMAT-FLEX surface with a high-performance, polymer-modified tile adhesive, like ISOMAT AK-22, ISOMAT AK-24 CRYSTAL GEL, or ISOMAT AK-25. Suitable also for inverted roofs, underground reservoirs, planter boxes, etc. Also used for internal and external basement waterproofing against moisture or water under pressure. In case where extremely high flexibility is required, the use of AQUAMAT-MONOELASTIC, AQUAMAT-ELASTIC or AQUAMAT-SUPERELASTIC is recommended.

Directions for use - Consumption

Component A (25 kg) is added to component B (8 kg) under continuous stirring, until a uniform, viscous mixture is formed, suitable for brush application. The substrate must be pre-wetted to a saturated surface dry condition before application. Depending on the water load, the material is applied in two or more layers.

Consumption: 2.0 - 4.0 kg/m^2,
depending on the application field.

Packaging - Color

- 18 kg (13.6 kg comp. A + 4.4 kg comp. B) - grey.
- 33 kg (25 kg comp. A + 8 kg comp. B) - grey.

AQUAMAT-ELASTIC

Highly flexible, 2-component, polymer-modified, waterproofing cement-based slurry

S-P-06177 EPD®
environdec.com

GEV-EMICODE EC 1 PLUS very low emission

ISOMAT P-SAC 02/5.1/19-008 P-SAC 02/5.1/16-129 MFPA

Root Resistant

Suitable For Food Industry

CE EN 1504-2 C EN 14891 CM 02P

Description

AQUAMAT-ELASTIC is a two-component, highly flexible, brush-on waterproofing slurry. It consists of a cementitious powder (component A) and a resin emulsion (component B). After hardening, it forms a seamless and jointless membrane offering the following advantages:

- Crack-bridging ability, even at low temperatures.
- Total waterproofing against positive hydrostatic pressure up to 5 atm according to EN 12390-8. It can also withstand negative pressure.
- Vapor permeability.
- Suitable for potable water tanks and food contact surfaces.
- Resistance to UV radiation and aging.
- Resistance to sewage, making it suitable for use in waste water treatment plants, sewers, etc.
- Adhesion to slightly wet surfaces without priming.
- Protection of concrete from carbonation.
- No corrosive effect on the reinforcing steel in concrete.
- Simple and low-cost application.

Fields of application

It is used for waterproofing surfaces made of concrete, plaster, brick, cement block, terrazzo, gypsum board, wood, etc. Ideal in cases where high flexibility and strong adhesion are required. Suitable for waterproofing of substrates subject to movement caused by expansion-contraction or vibration and show or are expected to show hairline cracks, such as flat roofs, terraces, balconies, above ground water tanks, swimming pools, inverted roofs, green roofs, etc. It can also be used for internal and external basement waterproofing against moisture or water under pressure. Well-suited for under-tile waterproofing applications in various spaces, including bathrooms, kitchens, swimming pools, swimming pool surrounds, etc. In this case, tiles should be fixed on the hardened AQUAMAT-ELASTIC surface with a high-performance, polymer-modified tile adhesive, like ISOMAT AK-22, ISOMAT AK-24 CRYSTAL GEL, ISOMAT AK-25, or ISOMAT AK-ELASTIC.

Directions for use - Consumption

Component A (25 kg) is added to component B (10 kg) under continuous stirring, until a uniform, viscous mixture is formed, suitable for brush application. The substrate must be pre-wetted to a saturated surface dry condition before application. Depending on the water load, the material is applied in two or more layers.

Consumption: 2.0 - 4.0 kg/m^2, depending on the application field.

Packaging - Color

- 7 kg (5 kg comp. A + 2 kg comp. B) - white.
- 18 kg (12.9 kg comp. A + 5.1 kg comp. B) - white.
- 35 kg (25 kg comp. A + 10 kg comp. B) - grey, white.

AQUAMAT-MONOELASTIC

Highly flexible, one-component, fiber-reinforced, polymer-modified, waterproofing cement-based slurry

NEW FORMULA

S-P-06177 EPD®
environdec.com

CE
EN 1504-2
C
EN 14891
CM P

Root Resistant

Description

AQUAMAT-MONOELASTIC is a one-component, highly flexible waterproofing slurry. It consists of a cementitious powder enhanced with resins. After hardening, it forms a seamless and jointless membrane offering the following advantages:

- Crack-bridging ability.
- Total waterproofing against positive hydrostatic pressure up to 5 atm according to EN 12390-8. It can also withstand negative pressure.
- Vapor permeability.
- Suitable for potable water tanks.
- Resistance to aging.
- Adhesion to slightly wet surfaces without priming.
- No corrosive effect on the reinforcing steel in concrete.
- Protection of concrete from carbonation.
- Simple and low-cost application.
- Suitable for brush and trowel application.

Fields of application

It is used for waterproofing surfaces made of concrete, plaster, brick, cement block, terrazzo, gypsum board, wood, etc. Ideal in cases where high flexibility and strong adhesion are required. Suitable for waterproofing of substrates subject to movement caused by expansion-contraction or vibration and show or are expected to show hairline cracks, such as flat roofs, terraces, balconies, above ground water tanks, swimming pools, inverted roofs, etc. Ideal for application on flat roofs, green roofs, balconies and wet areas to be covered with tiles (bathrooms, kitchens, etc.). In this case, tiles should be fixed on the hardened AQUAMAT-MONOELASTIC surface with a high-performance, polymer-modified tile adhesive, like ISOMAT AK-22, ISOMAT AK-24 CRYSTAL GEL, ISOMAT AK-25, or ISOMAT AK-ELASTIC. It can also be used for internal and external basement waterproofing against moisture or water under pressure.

Directions for use - Consumption

The 18 kg bag is added to 5.0-5.4 l of water for brush application or 3.6-4.3 l of water for trowel application under continuous stirring, until a uniform, viscous mixture is formed. The substrate must be pre-wetted to a saturated surface dry condition before application. Depending on the water load, the material is applied in two or more layers.

Consumption: 2.5 - 3.5 kg/m^2,
depending on the application field.

Packaging - Color

18 kg - grey.

AQUAMAT-SUPERELASTIC

Ultra-flexible, 2-component, polymer-modified, waterproofing cement-based slurry

GEV-EMICODE EC 1 PLUS very low emission

Root Resistant

ISOMAT
P-1201/107/17
MPA-BS

CE
EN 1504-2
C
EN 14891
CM 02P

Description

AQUAMAT-SUPERELASTIC is a two-component, ultra-flexible waterproofing slurry. It consists of a cementitious powder (component A) and a resin emulsion (component B). After hardening, it forms a seamless and jointless membrane offering the following advantages:

- Easy application by brush, roller or airless spray in one layer up to 2 mm thick.
- Exceptional crack-bridging ability, even at low temperatures.
- Total waterproofing against positive hydrostatic pressure up to 5 atm according to EN 12390-8. It can also withstand negative pressure.
- Resistance to UV radiation.
- Suitable for potable water tanks.
- High vapor permeability and resistance to frost.
- Resistance to aging caused due to temperature fluctuations.
- Resistance to chemicals, such as de-icing salts, sulfates, chlorides, etc.
- Protection of concrete from carbonation.
- No corrosive effect on the reinforcing steel in concrete.

Fields of application

It is used for waterproofing surfaces made of concrete, plaster, brick, cement block, terrazzo, gypsum board, wood, etc. Ideal in cases where exceptional flexibility and excellent adhesion are required. Suitable for waterproofing substrates subject to movement due to expansion-contraction or vibration and show or are expected to show hairline cracks, such as flat roofs, green roofs, balconies, above ground water tanks, swimming pools, inverted roofs, etc. It can also be used for internal and external basement waterproofing against moisture or water under pressure. It is used for waterproofing elements subject to salt water or de-icing salts. Suitable also for under-tile waterproofing applications in various spaces, including bathrooms, kitchens, swimming pools, swimming pool surrounds, etc. In this case, tiles should be fixed on the hardened AQUAMAT-SUPERELASTIC surface with a high-performance, polymer-modified tile adhesive, like ISOMAT AK-22, ISOMAT AK-24 CRYSTAL GEL, ISOMAT AK-25, or ISOMAT AK-ELASTIC.

Directions for use - Consumption

Component A (20 kg) is added to component B (10 kg) under continuous stirring, until a uniform, viscous mixture is formed, suitable for brush application. The substrate must be pre-wetted to a saturated surface dry condition before application. The material is applied in two or more layers, depending on the water load.

Consumption: 2.0 - 4.0 kg/m^2, depending on the application field.

Packaging - Color

30 kg (20 kg comp. A + 10 kg comp. B) - white.

Reference Projects

Miraggio Thermal Spa Resort, Chalkidiki, Greece

Sama Beirut Tower, Sodeco Achrafieh, Lebanon

Four Seasons Astir Palace Hotel, Athens, Greece

Sani Resort, Chalkidiki, Greece

King David Residences, Tbilisi, Georgia

Pedestrian Bridge, Jeddah, Saudi Arabia

Domodedovo International Airport, Moscow, Russia

Aqua Magic Mamaia Water Park, Constanța, Romania

Metropol Palace Hotel, Belgrade, Serbia

Thessaloniki Metro, Thessaloniki, Greece

Reference Projects

Belgrade Waterfront Complex, Belgrade, Serbia

Coco-Mat Athens BC Hotel, Athens, Greece

IKEA, Sofia, Bulgaria

Napred Administrative Building, Belgrade, Serbia

Euphoria Retreat, Mystras, Greece

Ambassadori Hotel, Tbilisi, Georgia

Residential Multi-Storey Building, Batumi, Georgia

Repeat Fitness & Wellness Club, Tirana, Albania

ISOMAT S.A.
BUILDING CHEMICALS, MORTARS & PAINTS
export@isomat.eu
www.isomat.eu

HEADQUARTERS, THESSALONIKI, GREECE
17th km Thessaloniki - Ag. Athanasios Road
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece
T: +30 2310 576 000

0325

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