HOTELS

INTEGRATED SOLUTIONS FOR HOTELS

isomat

building quality

for a sustainable future

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BY ISOMAT

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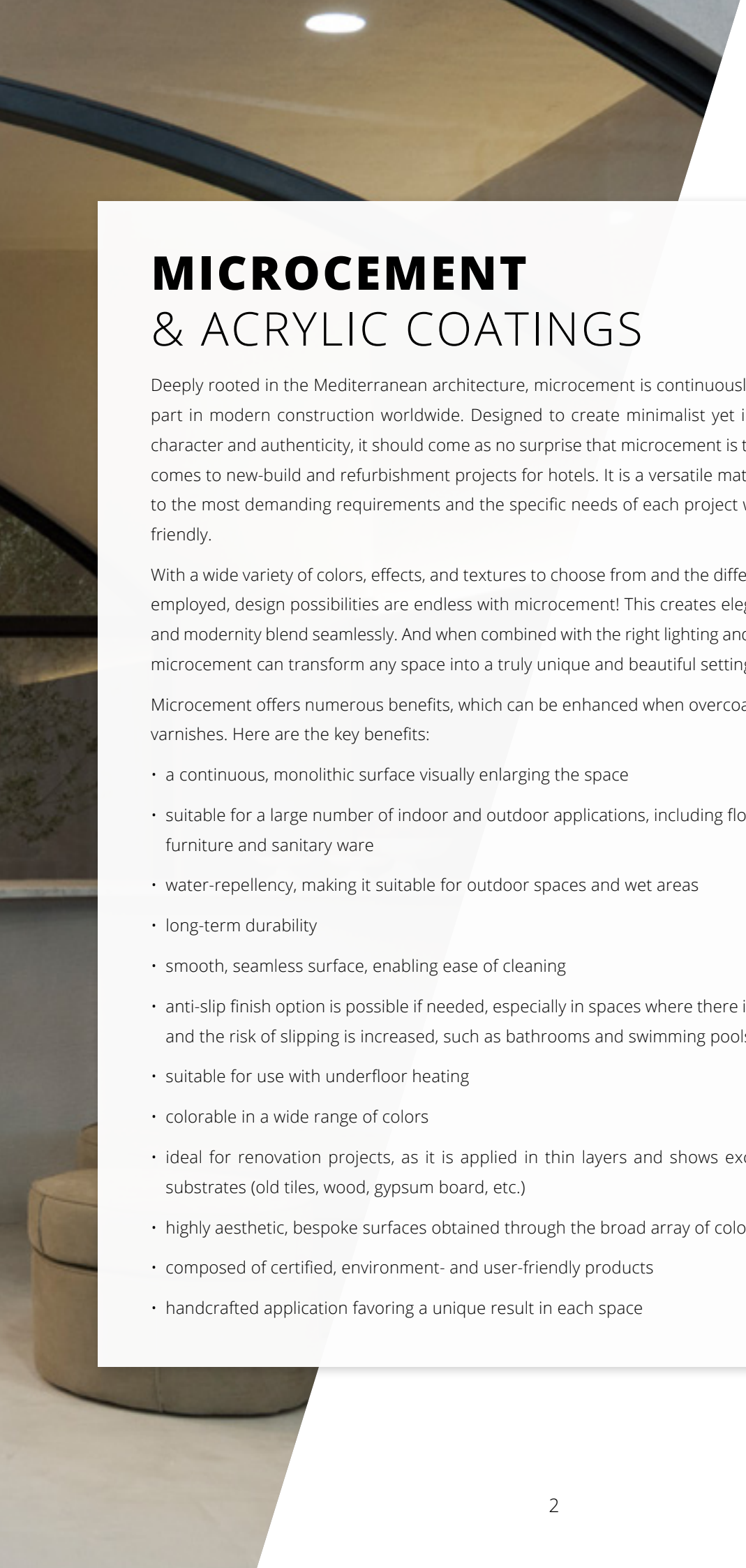
Lobby Concept Hotelia 2017



MICROCEMENT
& ACRYLIC COATINGS

Deeply rooted in the Mediterranean architecture, microcement is continuously evolving, playing a leading part in modern construction worldwide. Designed to create minimalist yet inviting spaces infused with character and authenticity, it should come as no surprise that microcement is the preferred choice when it comes to new-build and refurbishment projects for hotels. It is a versatile material able to adapt perfectly to the most demanding requirements and the specific needs of each project while being environmentally friendly.

With a wide variety of colors, effects, and textures to choose from and the different techniques that can be employed, design possibilities are endless with microcement! This creates elegant spaces where tradition and modernity blend seamlessly. And when combined with the right lighting and other decorative elements, microcement can transform any space into a truly unique and beautiful setting.

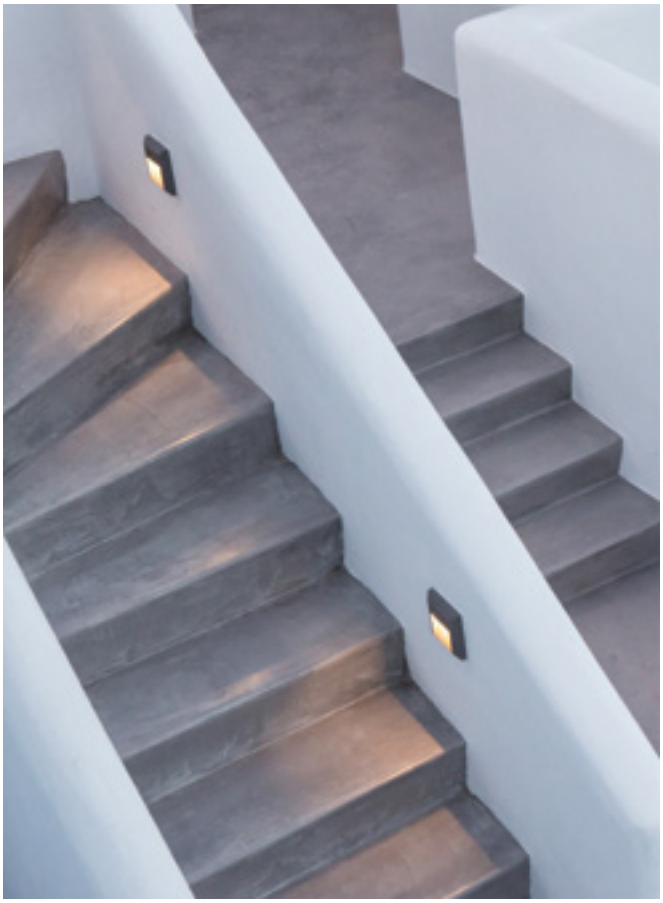
Microcement offers numerous benefits, which can be enhanced when overcoated with suitable protective varnishes. Here are the key benefits:

- a continuous, monolithic surface visually enlarging the space
- suitable for a large number of indoor and outdoor applications, including floors, walls, stairwells, built-in furniture and sanitary ware
- water-repellency, making it suitable for outdoor spaces and wet areas
- long-term durability
- smooth, seamless surface, enabling ease of cleaning
- anti-slip finish option is possible if needed, especially in spaces where there is a heavy presence of water and the risk of slipping is increased, such as bathrooms and swimming pools
- suitable for use with underfloor heating
- colorable in a wide range of colors
- ideal for renovation projects, as it is applied in thin layers and shows excellent adhesion to various substrates (old tiles, wood, gypsum board, etc.)
- highly aesthetic, bespoke surfaces obtained through the broad array of colors, effects and textures
- composed of certified, environment- and user-friendly products
- handcrafted application favoring a unique result in each space

Fava Eco Residences, Santorini, Greece

Based on the technical expertise gained through extensive experience in the field, ISOMAT has developed a complete range of microcement and decorative acrylic coatings, aiming to provide product solutions to cover even the most demanding applications. ISOMAT microcement and acrylic coating systems provide excellent waterproofing, high resistance, and anti-scratch properties along with timeless appeal.

Fava Eco Residences, Santorini, Greece



Sivanis Apartments, Paros, Greece

Villa Estia, Mykonos, Greece

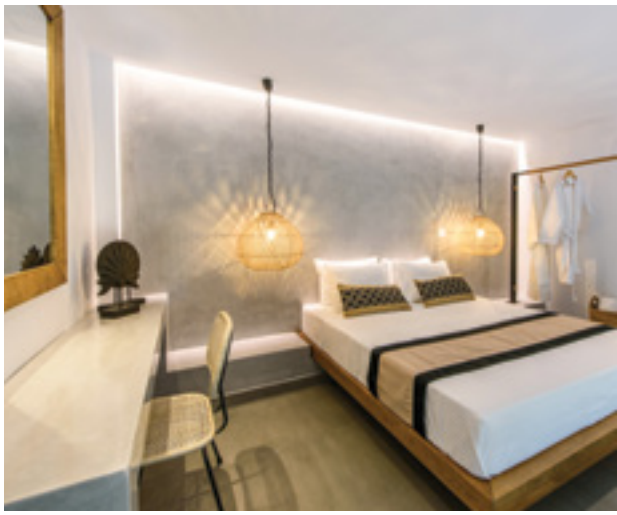
ISOMAT has developed two product families, the DUROCRET-DECO and ACRYL-DECO families, both of which deliver unique, high decorative value finishes that can transform any space.

In detail, the DUROCRET-DECO family includes microcement coatings that come in powder form and can be colored with the addition of high-quality powder pigments. The ACRYL-DECO family includes acrylic, pasty, ready-to-use coatings that can be colored in-store through the ISOMAT COLOR SYSTEM tinting system. Microcement coatings are selected when an earthy, more calming feel is desired, while acrylic coatings constitute the most well-suited choice for an ultra-smooth finish. DUROCRET-DECO FLEX and DUROCRET-DECO FINISH are certified, environment- and user-friendly products, while acrylic coatings are ideal for those applications where high elasticity is a critical consideration.

FIND RECOMMENDED COLORS

DUROCRET-DECO FLEX:
Flexible, decorative microcement coating for floors, walls and built-in furniture. Colorable with ISOMAT DECO-COLOR pigments, giving a variety of colors.

DUROCRET-DECO FINISH:
Extra fine-grained, decorative microcement coating for floors, walls and built-in furniture. Colorable with ISOMAT DECO-COLOR pigments, giving a variety of colors.



Aggelo Boutique Hotel, Crete, Greece

Amaronda Resort & Spa, Chalkida, Greece

Villa Estia, Mykonos, Greece

Nimbus Hotel, Santorini, Greece

Sivanis Apartments, Paros, Greece

ACRYL-DECO BASE:
Coarse, ready-mixed, acrylic base coat for the ACRYL-DECO decorative coatings.

ACRYL-DECO SOLO:
Ready-mixed, acrylic decorative base and finish coat for floors, walls & built-in furniture. Delivers a smooth, microcement-like finish. Easily colorable through the ISOMAT COLOR SYSTEM tinting system at points of sale.

ACRYL-DECO FINISH:
Ready-mixed, acrylic decorative coating for floors, walls & built-in furniture. Delivers an ultra-smooth, microcement-like finish. Easily colorable through the ISOMAT COLOR SYSTEM tinting system at points of sale.

DUROCRET-DECO EPOXY:
Three-component decorative microcement coating enhanced with epoxy resins, for floors, walls and special applications. Delivers a smooth finish and can be colored in a wide range of colors with the use of ISOMAT DECO-COLOR pigments.

Following the application of the microcement or acrylic coating, the surface is sealed and waterproofed with a suitable varnish for maximum durability. Choosing the right varnish depends on project requirements, both aesthetic and functional.

ISOMAT has developed a range of polyurethane varnishes with exceptional resistance to mechanical stress, UV radiation and weathering, available in satin-matt and gloss finishes, depending on the project's design requirements. For a slip-resistant finish, after the application of the main varnishes, the anti-slip, UV-stable, transparent, two-component, polyurethane protective varnish VARNISH-PU ANTI-SLIP should be used.

DECORATIVE ACRYLIC COATINGS

5. Sealing with the polyurethane water-based varnish VARNISH-PU 2KW, satin-matt
4. Application of the decorative acrylic base and finish coat ACRYL-DECO SOLO for a smooth finish
3. Application of the coarse acrylic base coat ACRYL-DECO BASE, reinforced with a special 160 g/m^2 fiberglass mesh
2. Priming with the acrylic water-based primer FLEX-PRIMER
1. Screed

Onoma Hotel, Thessaloniki, Greece

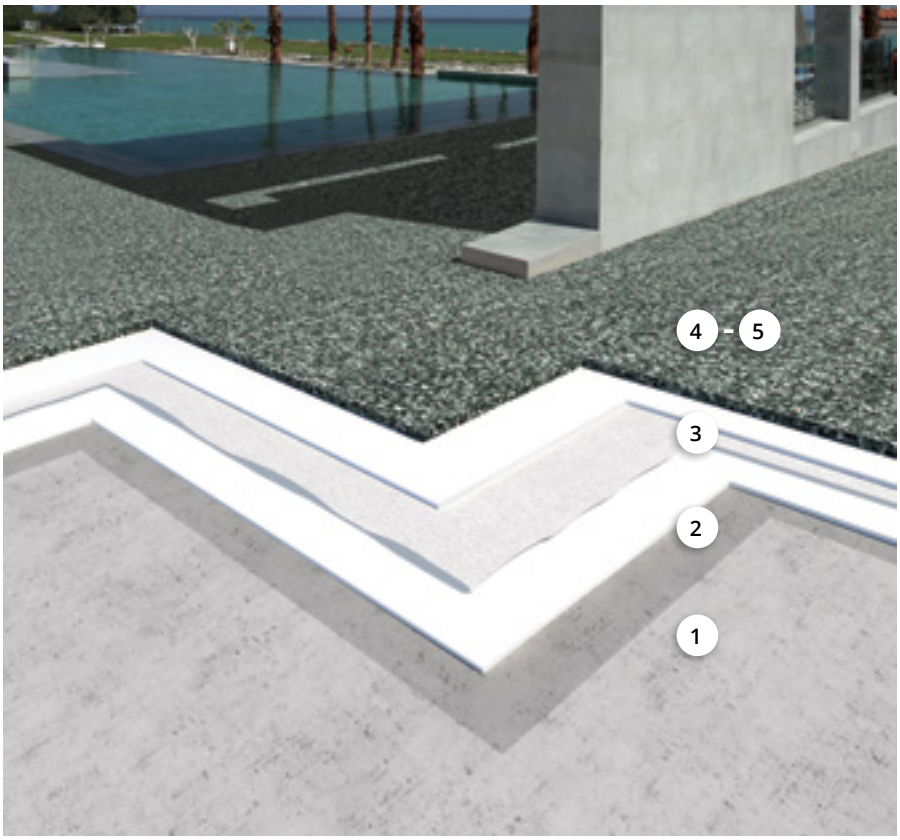
STONE CARPET

Stone carpets constitute a popular flooring solution for hotels. Perfect for indoor and outdoor applications, with the use of suitable varnishes, stone carpets can be installed in a variety of spaces, including pool surrounds, balconies, flat roofs, walkways, garden landscaping, reception areas, lobbies, etc., delivering the following benefits:

- a slip-resistant surface, even when wet, thanks to the open pore texture allowing water to pass through
- high resistance to abrasion and mechanical wear
- waterproofing solution for exterior spaces
- weather resistance and UV-stability with non-yellowing properties
- poured-in-place system, able to meet the specific architectural design requirements of any space
- resistance to common household cleaners, oils, and seawater
- a naturally beautiful and highly aesthetic result along with endless color combinations by mixing the aggregates
- color stability thanks to the use of naturally occurring aggregates
- suitable for prolonged pedestrian and light vehicular traffic

ISOMAT has developed its own decorative stone carpet flooring system consisting of:

- a polyurethane waterproofing membrane, in case of outdoor application to a slab above basements, on flat roofs, balconies, etc. (for ground slabs, the use of a flexible cementitious slurry or a special epoxy primer is recommended)
- ISOFLEX-PU 650 resin binder in gloss finish or VARNISH-PU 1K in satin-matt (VARNISH-PU 1K is solvent-free, meaning it is ideal for indoor applications)
- ISOMAT NATURAL COLORED STONES



STONE CARPET FOR SWIMMING POOL SURROUNDS

5. Optional application of one **ISOFLEX-PU 650** layer for enhanced mechanical properties
4. Application of **ISOFLEX-PU 650** mixed with **ISOMAT NATURAL COLORED STONES**
3. Waterproofing with the polyurethane liquid waterproofing membrane **ISOFLEX-PU 500** (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with **PRIMER-PU 100**
1. Sloping screed

ISOMAT NATURAL COLORED STONES COLOR CHART


01 Thassos


02 Bianco Carrara


03 Bardiglio


04 Grigio


05 Botticino


06 Giallo Siena


07 Arabescato


08 Rosa


09 Marrone

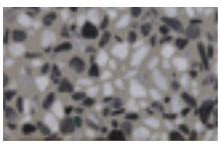

10 Verde


Villa Jasmin, Tunisia

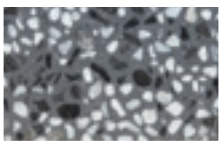
TERRAZZO

Inherently creative and founded on the concept of providing unique experiences, the hotel industry most often than not adopts innovative and intricate architectural designs to achieve an edgy, avant-garde style. A typical example is the decorative terrazzo flooring, which is making a strong comeback, ranking among the top global design and architectural trends with its distinctive vintage aesthetic and the great number of practical benefits offered through the use of high-quality contemporary materials by ISOMAT. Delivering incredibly durable, seamless surfaces providing a modern take on an ancient aesthetic, it is ideal for both new-build and refurbishment projects.

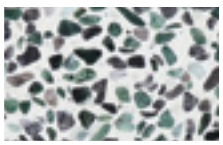
INDICATIVE **TERRAZZO** COLOR COMBINATIONS



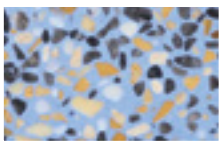
01 Citizen



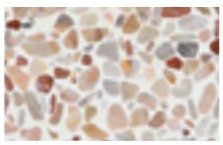
02 Midnight



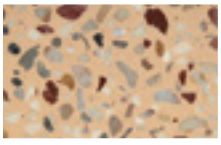
03 Forest



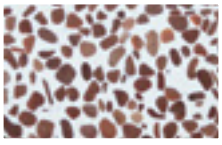
04 Ocean



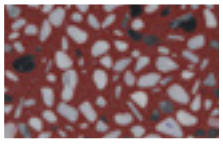
05 Classico



06 Nature

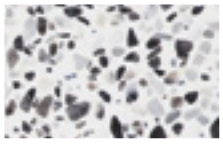


07 Marrone



08 Flame

09 Antarctica



10 Mineral

Suitable for interior and exterior applications in residential or commercial settings, including hotels, restaurants, walkways, garden landscaping, etc. Here are the key benefits:

- a modern terrazzo look with timeless appeal, making it one of the most sought-after materials by today's forward-thinking architects and designers
- a decorative finish that can be customized to meet project needs
- poured-in-place flooring, able to meet the specific architectural design requirements of any space
- a wide range of color combinations
- a seamless, smooth surface that makes rooms look spacious and ensures better hygiene thanks to easier cleaning while hiding dirt and imperfections compared to monochromatic surfaces
- UV and abrasion resistance for floors guaranteed to stand the test of time
- a non-porous surface, making it ideal for exterior applications
- certified, user- and environment-friendly products, ideal for projects pursuing green building certifications

ISOMAT's decorative terrazzo flooring is composed of:

a) DUROCRET-TERRAZZO high-strength white cementitious mortar-binder, colorable with ISOMAT DECO-COLOR inorganic powder pigments delivering numerous colors, and

b) ISOMAT NATURAL COLORED STONES

Their combination gives virtually infinite color and design possibilities, satisfying any decor or taste while adding character and visual interest to the project.

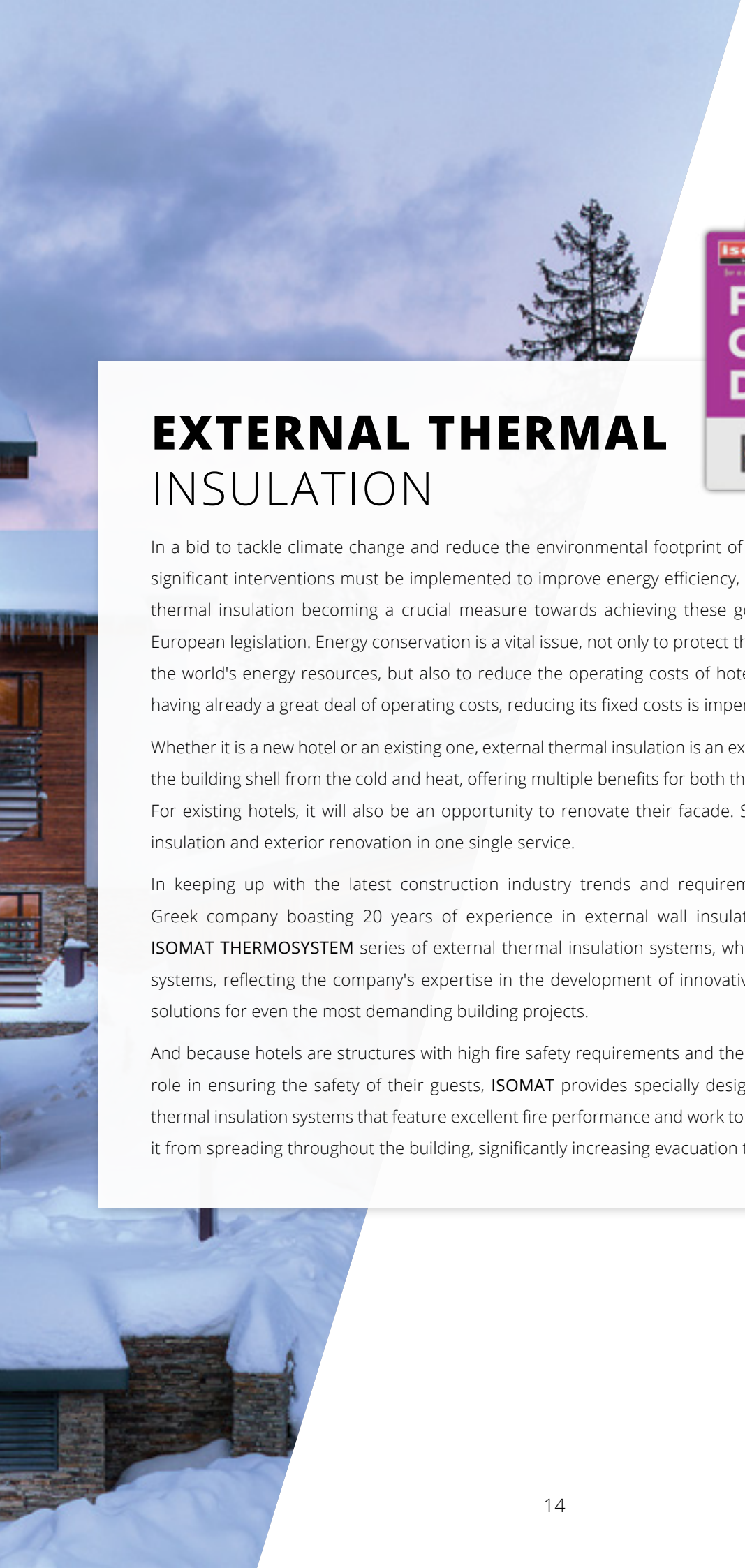
The system is sealed and protected by means of polyurethane varnishes, polyaspartic coatings or suitable impregnations, depending on the application method, the required resistance and the desired finish.

GET INSPIRED BY COLOR COMBINATIONS

MODERN TERRAZZO FLOOR

5. Sealing with the polyurethane varnish VARNISH-PU 2KW, satin-matt
4. Surface grinding and polishing
3. Application of DUROCRET-TERRAZZO mixed with ISOMAT NATURAL COLORED STONES
2. Priming with the acrylic water-based primer FLEX-PRIMER
1. Screed

Euphoria Club Hotel & Resort, Borovets, Bulgaria



EXTERNAL THERMAL INSULATION

In a bid to tackle climate change and reduce the environmental footprint of buildings, significant interventions must be implemented to improve energy efficiency, with external thermal insulation becoming a crucial measure towards achieving these goals in line with European legislation. Energy conservation is a vital issue, not only to protect the environment and the world's energy resources, but also to reduce the operating costs of hotel facilities. For a hotel having already a great deal of operating costs, reducing its fixed costs is imperative.

Whether it is a new hotel or an existing one, external thermal insulation is an excellent solution for shielding the building shell from the cold and heat, offering multiple benefits for both the owner and the occupants. For existing hotels, it will also be an opportunity to renovate their facade. So, owners achieve thermal insulation and exterior renovation in one single service.

In keeping up with the latest construction industry trends and requirements, ISOMAT is the only Greek company boasting 20 years of experience in external wall insulation. It has developed the ISOMAT THERMOSYSTEM series of external thermal insulation systems, which consists of five certified systems, reflecting the company's expertise in the development of innovative and high-quality product solutions for even the most demanding building projects.

And because hotels are structures with high fire safety requirements and their fire protection plays a key role in ensuring the safety of their guests, ISOMAT provides specially designed products and external thermal insulation systems that feature excellent fire performance and work to contain the fire and prevent it from spreading throughout the building, significantly increasing evacuation times.

Installing ISOMAT THERMOSYSTEM external thermal insulation systems comes with immediate and multiple benefits.

Thanks to the ISOMAT THERMOSYSTEM systems, the building becomes energy-efficient, contributing to significant energy savings and a reduction of fuel consumption for heating and cooling. Conservation and efficient use of energy not only contributes to green building and the protection of the environment, but also drastically reduces the operating costs of hotels. While the initial investment required may be a significant hurdle, the long-term benefits, both in terms of cost savings and positive environmental impact, outweigh the upfront costs. Additionally, hotel guests enjoy a more stable and comfortable temperature in their room and other hotel areas, enhancing the overall experience.

Plus, the use of materials that are resistant to fire and have a high fire rating is an integral part of ensuring that structures can withstand fire emergencies, minimize damage, and protect hotel guests by slowing the spread of fire and providing more time for evacuation. Responding to the evolving needs and demands in the construction industry, ISOMAT has developed two innovative products that are part of the external thermal insulation systems and show excellent performance in high temperatures and fire with an A2-s1,d0 reaction to fire classification in accordance with EN 13501-1.

When it comes to old hotels, external thermal insulation is an excellent facade renovation opportunity as the building envelope acquires a new, beautiful look with MARMOCRYL colored ready-mixed renders by ISOMAT, which are available in a wide variety of colors through the ISOMAT COLOR SYSTEM tinting system.

Miraggio Thermal Spa Resort, Chalkidiki, Greece

ISOMAT has also developed the specialty FACADE fan deck, an innovative tool designed to allow for confident selection of paint and render colors for building facades. To ensure no fading, chalking, loss of gloss or changes to the paint film or render texture occur over time, inorganic pigments have been incorporated to impart high resistance to UV radiation and weathering, minimizing maintenance costs. And for those wishing to have ultra-modern, rich dark colors applied over large thermally insulated facades without fear of compromising the thermal properties of the system, ISOMAT offers highly reflective dark colors developed with the special COOL TECHNOLOGY. These dark colors - shown at the back of the fan deck - are not meant just for architectural details but can be safely applied to large building facades, reducing the heat entering the building during the summer months, thereby achieving energy savings, reducing cooling costs and improving thermal comfort inside the building. Plus, the new building envelope also becomes vapor-permeable, allowing the building to breathe, whilst offering total waterproofing and protection against weathering.

DISCOVER
THE FACADE
FAN DECK

ISOMAT THERMOSYSTEM external thermal insulation systems are easily, quickly, and correctly applied by trained, certified professionals, who adhere to the current construction industry standards and regulations.

Coco-mat Athens BC, Athens, Greece

Ikos Dassia Resort, Corfu, Greece

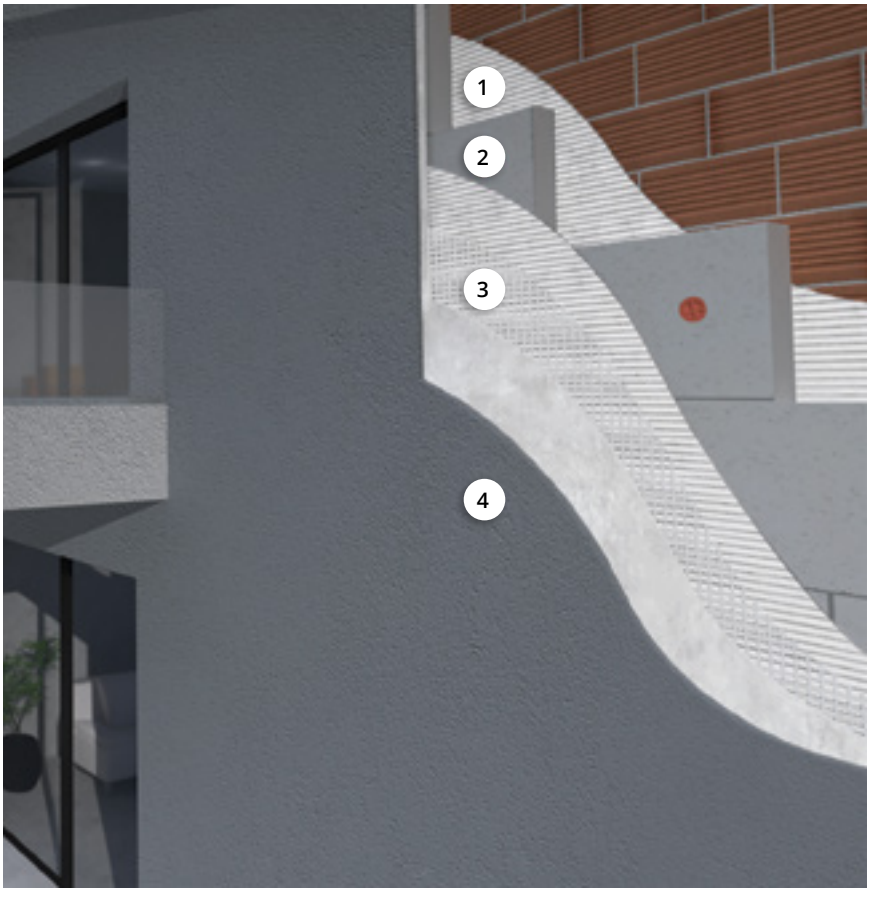
Grecotel Pella Beach, Chalkidiki, Greece

ISOMAT THERMOSYSTEM SYSTEMS

ISOMAT has developed the ISOMAT THERMOSYSTEM series of five different external thermal insulation composite systems to meet different building needs, including new build and refurbishment projects.

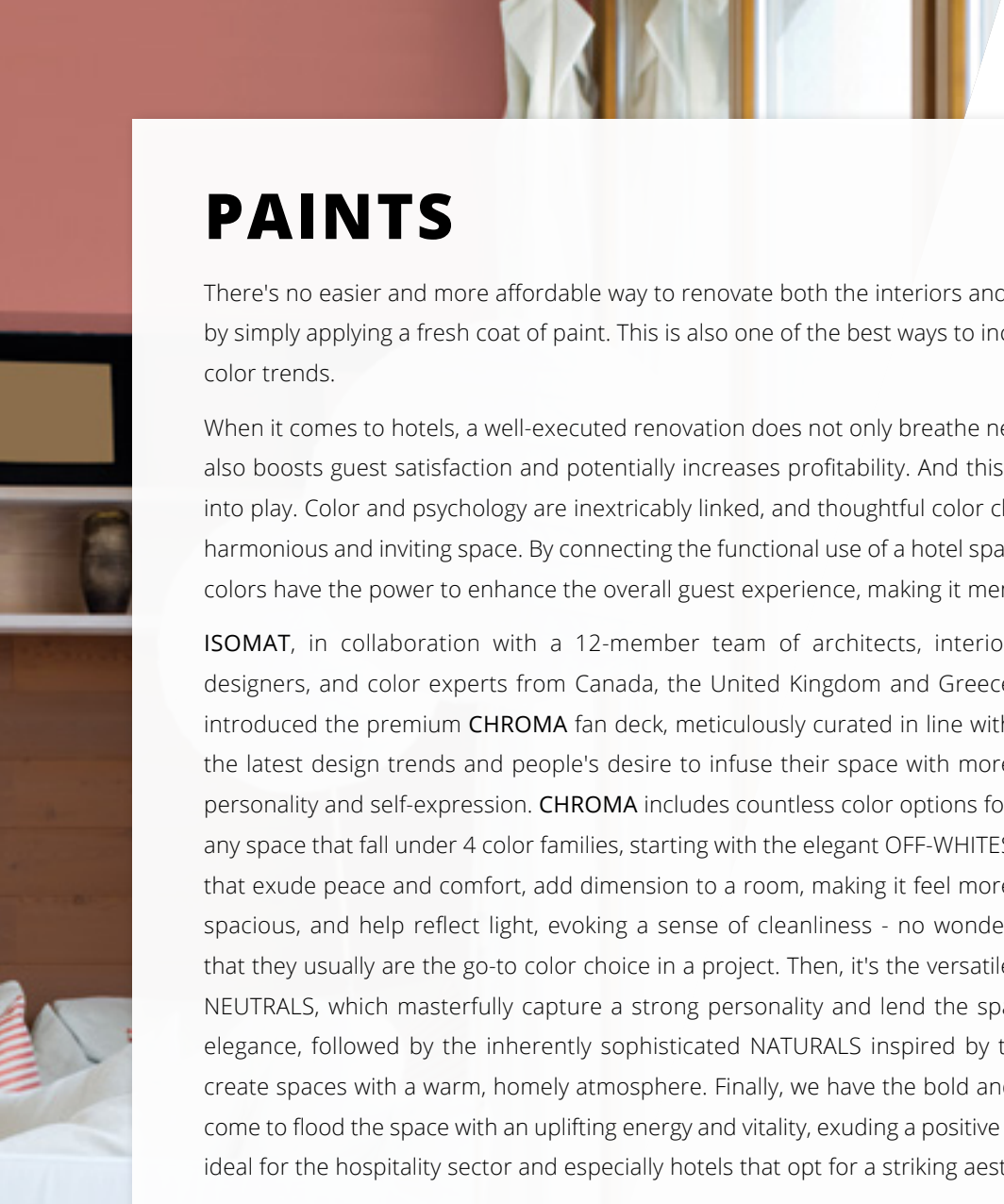
- ISOMAT THERMOSYSTEM CLASSIC constitutes a reliable, cost-effective external thermal insulation solution. It has a B-s1,d0 reaction to fire classification in accordance with EN 13501-1.
- ISOMAT THERMOSYSTEM PREMIUM is the ideal solution for building facades with high requirements in terms of durability and resistance to weathering, ensuring long-term performance. It has a B-s1,d0 reaction to fire classification in accordance with EN 13501-1.
- ISOMAT THERMOSYSTEM FLEX is the optimal solution for structures with challenging requirements in terms of high flexibility to compensate for vibration and thermal expansion/contraction.
- ISOMAT THERMOSYSTEM XPS provides building facades with high mechanical strength and impact resistance.
- ISOMAT THERMOSYSTEM WOOL is the ideal solution for those applications where trusted fire performance is critical consideration, given that mineral wool provides unrivalled fire protection since it is practically non-combustible. This system has achieved a A2-s1,d0 reaction to fire classification in accordance with EN 13501-1. It also features excellent soundproofing properties.

ISOMAT THERMOSYSTEM external wall insulation systems are certified in accordance with ETAG 004 or EAD 040083-00-0404. External thermal insulation composite systems (ETICS) with renderings are based on expanded polystyrene (EPS), extruded polystyrene (XPS), and mineral wool (MW). Choose one of the available ISOMAT THERMOSYSTEM certified systems and rest assured that the high quality of the products will ensure the desired end result, as they have been successfully tested in accordance with the stringent European Technical Approval Guideline for External Thermal Insulation Composite Systems (ETICS) drawn up by the European Organisation for Technical Approvals (EOTA). Certified systems, under normal operating and maintenance conditions, maintain their properties consistently throughout the expected service life, which can reach up to 25 years!



ISOMAT THERMOSYSTEM PREMIUM

4. Application of MARMOCRYL colored pasty renders, available in FINE & DECOR for a smooth or coarse-textured finish respectively (substrate primed with ML-PRIMER)
3. Application of ISOMAT AK-T55 (base coat) reinforced with THERMOSYSTEM fiberglass mesh 161 g/m^2
2. Mechanical fixing of graphite EPS thermal insulation boards
1. Bonding of thermal insulation boards with ISOMAT AK-T35



PAINTS

There's no easier and more affordable way to renovate both the interiors and exteriors of a building than by simply applying a fresh coat of paint. This is also one of the best ways to incorporate some of the latest color trends.

When it comes to hotels, a well-executed renovation does not only breathe new life into the property, but also boosts guest satisfaction and potentially increases profitability. And this is where paint colors come into play. Color and psychology are inextricably linked, and thoughtful color choice is central to creating a harmonious and inviting space. By connecting the functional use of a hotel space with the aesthetic details, colors have the power to enhance the overall guest experience, making it memorable.

ISOMAT, in collaboration with a 12-member team of architects, interior designers, and color experts from Canada, the United Kingdom and Greece introduced the premium CHROMA fan deck, meticulously curated in line with the latest design trends and people's desire to infuse their space with more personality and self-expression. CHROMA includes countless color options for any space that fall under 4 color families, starting with the elegant OFF-WHITES that exude peace and comfort, add dimension to a room, making it feel more spacious, and help reflect light, evoking a sense of cleanliness - no wonder that they usually are the go-to color choice in a project. Then, it's the versatile NEUTRALS, which masterfully capture a strong personality and lend the space an air of unpretentious elegance, followed by the inherently sophisticated NATURALS inspired by the wealth of nature, which create spaces with a warm, homely atmosphere. Finally, we have the bold and optimistic BRIGHTS, which come to flood the space with an uplifting energy and vitality, exuding a positive outlook on life, making them ideal for the hospitality sector and especially hotels that opt for a striking aesthetic appeal.

DISCOVER
THE CHROMA
FAN DECK

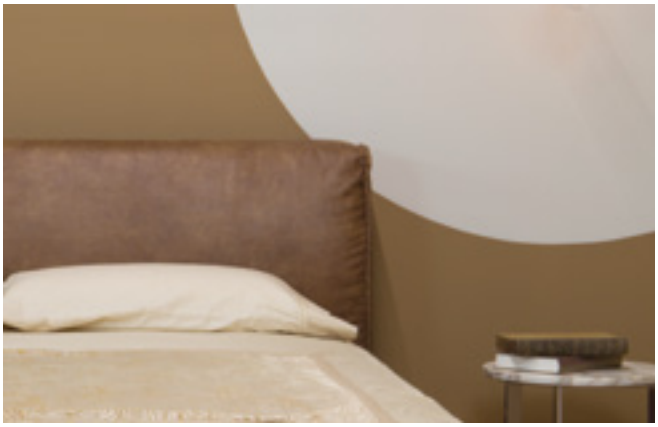
As for hotel exteriors, ISOMAT developed the specialty FACADE fan deck, an innovative tool designed to allow for confident color selection. It showcases 100 color combinations that make use of three colors - triadic color schemes. The first color is usually applied to the largest part of the building facade, the second one to the architectural details and the third one with a beautiful gloss finish to the metal elements. And when it comes to choosing exterior paint or render colors, one should always opt for products that show exceptional color stability and increased resistance to damage from UV rays, rain, and other weather conditions. This is exactly the case with the colors included in the FACADE fan deck, which have been formulated with inorganic pigments. These pigments feature high UV resistance, preventing fading, chalking, loss of sheen or alteration of the acrylic paint film. This way the color selected will last longer and look as fresh as day one!

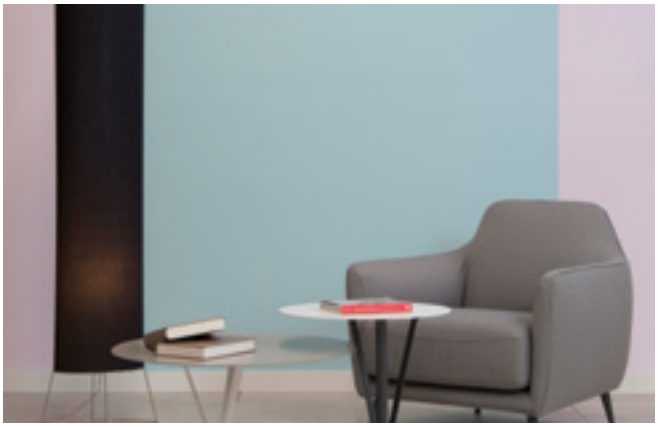
Plus, thanks to the ISOMAT COLOR SYSTEM tinting system there's a virtually infinite range of durable color options for interior and exterior paints, which are user- and environment-friendly and feature advanced properties, i.e. resistance to repeated washing and weathering, while having excellent opacity, flow and surface coverage.

The pandemic period has shown us how important surface hygiene and indoor air quality are for our health and quality of life. This is why ISOMAT has developed the new antimicrobial eggshell paint for interior use ISOMAT SMART CLEAN PAINT, offering a multitude of benefits, especially for hotels. It is certified by the UK-based specialized microbiological testing and consultancy service IMSL for its antimicrobial and antifungal properties. Expertly formulated with silver ion technology, it protects interior wall surfaces in busy hotel spaces from bacteria, fungi and mold. Thanks to its eggshell finish, it prevents common household stains from bonding to the coating, making them easy to wash away. Plus, being a class 1 wet scrub-rated paint (EN ISO 11998), it ensures that colors remain intact and surfaces look fresh for long, giving peace of mind. Finally, its soft, subtle sheen and velvety appearance cast beautifully any color from the CHROMA fan deck, creating a unique atmosphere and aesthetic look to any space.

With sustainability as its strategic priority, ISOMAT is the first Greek company to develop a paint bearing the German Blue Angel ecolabel, one of the strictest in the world. ISOMAT ZERO PAINT is an innovative interior flat matt paint that comes to revolutionize paint technology, offering both applicators and end-users optimal environmental conditions! Specially formulated without preservatives and plasticizers, it is user- and environment-friendly and suitable for presensitized people experiencing allergies to freshly applied paint due to isothiazolinones, the most frequently used preservatives in water-based paints. And thanks to the extremely low VOC emissions, it is nearly odorless and contributes to good indoor air quality, ensuring a safe and healthy living and working environment. This makes it ideal for nurseries, children's activity centers and hotels that aim to reduce their environmental footprint and are focused on creating a comfortable environment for their guests. Plus, ISOMAT ZERO PAINT is the first interior paint in Europe that can be tinted through the ISOMAT COLOR SYSTEM tinting system to 230 Blue Angel-certified colors, unlike other similar paints that are available only in white.

EXPLORE ALL COLORS





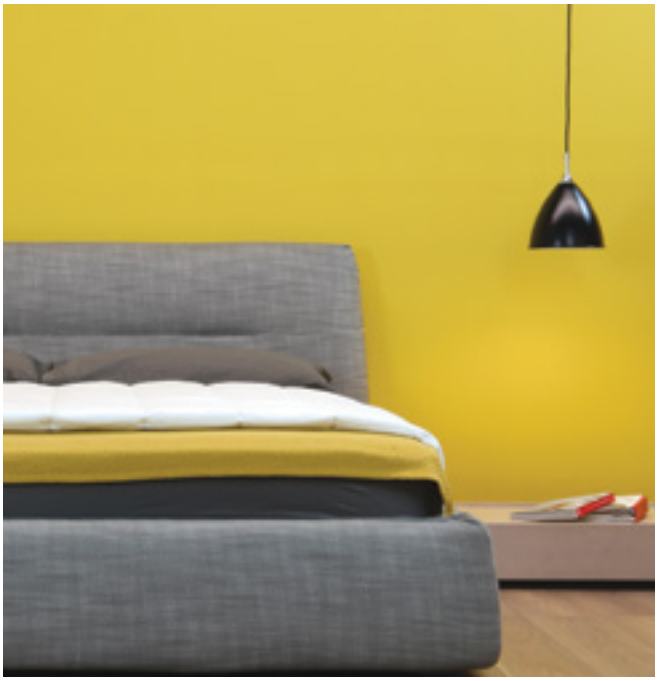
Amaronda Resort & Spa, Chalkida, Greece

It should be noted that ISOMAT interior paints bear the Eurofins Indoor Air Comfort® Gold (IACG) certification for the best-in-class low volatile organic compound (VOC) emissions, thus meeting stringent demands for good indoor air quality and ensuring a healthy and safe living environment.

Furthermore, the ISOMAT COLOR SYSTEM interior paint line includes products suitable for the most demanding applications, such as certified eco-friendly paints, anti-mold paints for areas with high-humidity levels (bathrooms and kitchens), paints for spaces requiring frequent touch-ups, and special products that block dust, pollutants, tobacco tar and nicotine from seeping into the substrate.

The ISOMAT COLOR SYSTEM exterior paint line includes, among other products, waterproofing paints, silicone paints with excellent resistance to weathering and cool paints with high solar reflectance, which enhance the building's thermal properties, ensuring a more stable temperature, essential to feeling comfortable and establishing a good energy balance, even during the hot summer months.

The range also includes specially designed paints for wood and metal surfaces, even for direct application to rust, as well as special complementary products that remove and protect surfaces from graffiti.



White Luxury Rooms, Thessaloniki, Greece

Miraggio Thermal Spa Resort, Chalkidiki, Greece

WOOD CARE

For its noble and luxurious nature, wood is a timeless material suited for use in hotel decoration projects, both indoors and outdoors. Being a natural material, it is affected by weather conditions and is heavily damaged by moisture and UV radiation, especially in coastal areas. Besides that, wood is also vulnerable and prone to insect attack. To maintain its natural beauty and extend its lifespan, proper care should be taken from the very beginning using the right materials.

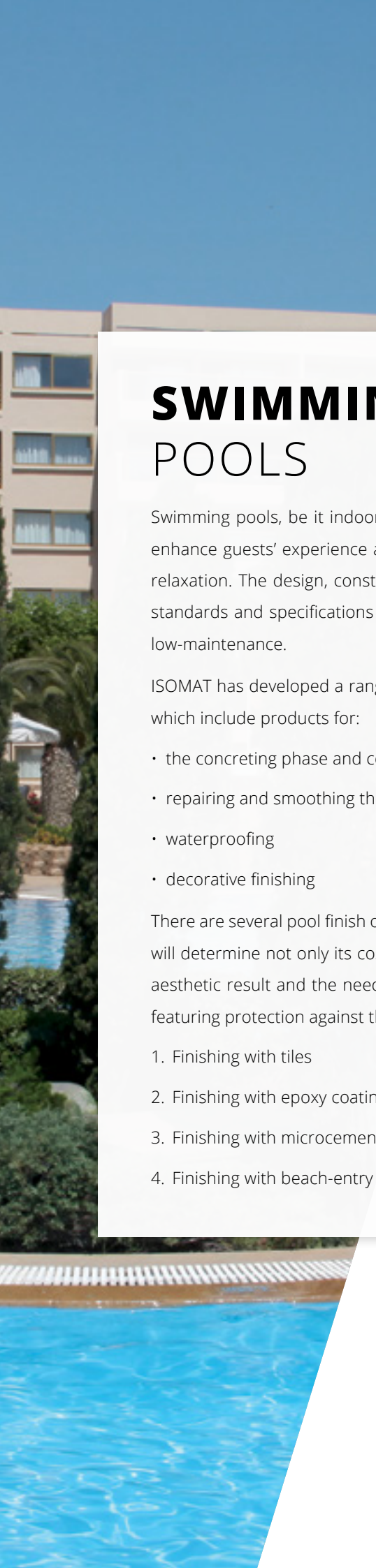
ISOMAT has developed a range of high-quality products to protect and bring out the natural beauty of this delicate material.

ISOMAT's woodcare product series includes premium preservative products and special protective impregnation varnishes ideal for various wooden surfaces, e.g. doors, window frames, garden furniture, or any other wooden construction, offering protection against woodworm, fungi, blue stains and other harmful microorganisms. Thanks to their special composition, ISOMAT's wood protection products help preserve and refresh your wooden construction by providing water-repellency and supreme and long-lasting protection from harsh weather conditions, aging and UV radiation exposure.

Whether it's a new or an old wooden surface that needs to be renewed and maintained, ISOMAT products are designed to meet a range of aesthetic goals, accommodate different qualities and types of wood, and withstand various environmental conditions.

Amaronda Resort & Spa, Chalkida, Greece

Sani Resort, Chalkidiki, Greece



SWIMMING POOLS

Swimming pools, be it indoors or outdoors, are typically found in luxurious resorts or hotel settings to enhance guests' experience and appeal to high-end customers, offering pure indulgence and complete relaxation. The design, construction and installation of swimming pools are subject to stringent quality standards and specifications in order to ensure that they are aesthetically pleasing, fully functional and low-maintenance.

ISOMAT has developed a range of integrated systems for the construction of in-ground swimming pools, which include products for:

- the concreting phase and construction of the pool shell
- repairing and smoothing the pool surface for a level and stable substrate
- waterproofing
- decorative finishing

There are several pool finish options and selecting the right one for your pool is an important decision that will determine not only its cost and appearance but also longevity and safety. Depending on the desired aesthetic result and the needs of your project, ISOMAT offers the following decorative finishing options featuring protection against the detrimental effects of chlorine and solar radiation:

1. Finishing with tiles
2. Finishing with epoxy coating
3. Finishing with microcement coatings
4. Finishing with beach-entry pool coatings

POOL WATERPROOFING & TILING

Opting for tiles for your pool finish is a popular solution that provides long-term durability along with unlimited versatility, allowing for visually appealing, custom designs that match individual style and preferences.

The waterproofing layer in this case is applied under tiles and must deliver the following:

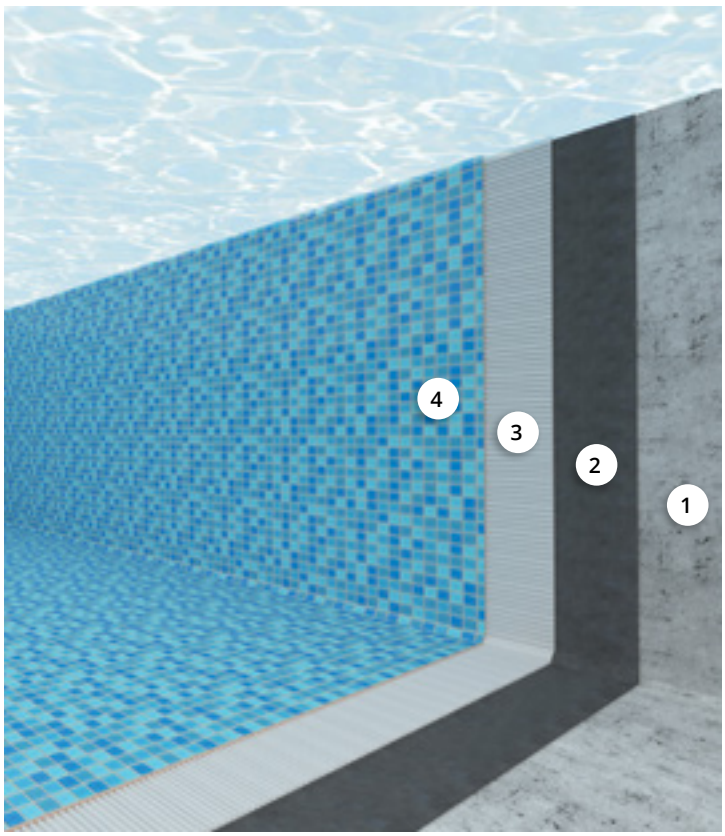
- adequate flexibility, to resist expansion and contraction
- long-term durability, given that its position between the pool's structural elements makes future interventions difficult and costly
- strong adhesion to the substrate
- resistance to probable negative pressure, when the pool is emptied

The selected tile adhesive must show high flexibility and resistance to weather conditions, the pool water and the chemicals contained therein.

The tile grout must be water-repellent and resistant to chemicals used for pool water treatment and maintenance.

Arminda Hotel Spa, Crete, Greece

Coco-mat Athens BC, Athens, Greece



POOL WATERPROOFING & TILING

4. Tile grouting with the colored epoxy tile grout **MULTIFILL-EPOXY THIXO**
3. Tile fixing with the ultra-flexible tile adhesive C2TE S2 **ISOMAT AK-25**
2. Waterproofing with the highly flexible cement-based slurry **AQUAMAT-ELASTIC**
1. Concrete/Screed

Four Seasons Astir Palace Hotel, Athens, Greece

POOL WATERPROOFING & FINISHING WITH EPOXY COATING

An affordable way to prepare the final surface of a swimming pool would be to use a special paint, such as an epoxy coating.

In this case, the waterproofing layer must deliver the following:

- long-term durability, since its position between the pool's structural elements and the epoxy layer makes future interventions difficult and costly
- strong adhesion to the pool's structural elements to resist the probable negative pressure when the pool is emptied
- a smooth surface over which the epoxy coating is to be applied

The epoxy coating to be used for the pool finish must have the following properties:

- elasticity to withstand cracking caused by possible expansion and contraction stresses
- resistance to pool water and the chemicals used for pool water treatment and those contained in the strong tile cleaners
- resistance to weather conditions (UV radiation, frost, etc.)

Sani Resort, Chalkidiki, Greece

POOL WATERPROOFING & FINISHING WITH MICROCEMENT COATING

Microcement pools are a revolutionary architectural trend in the world of swimming pools.

In this application type, the waterproofing layer must show:

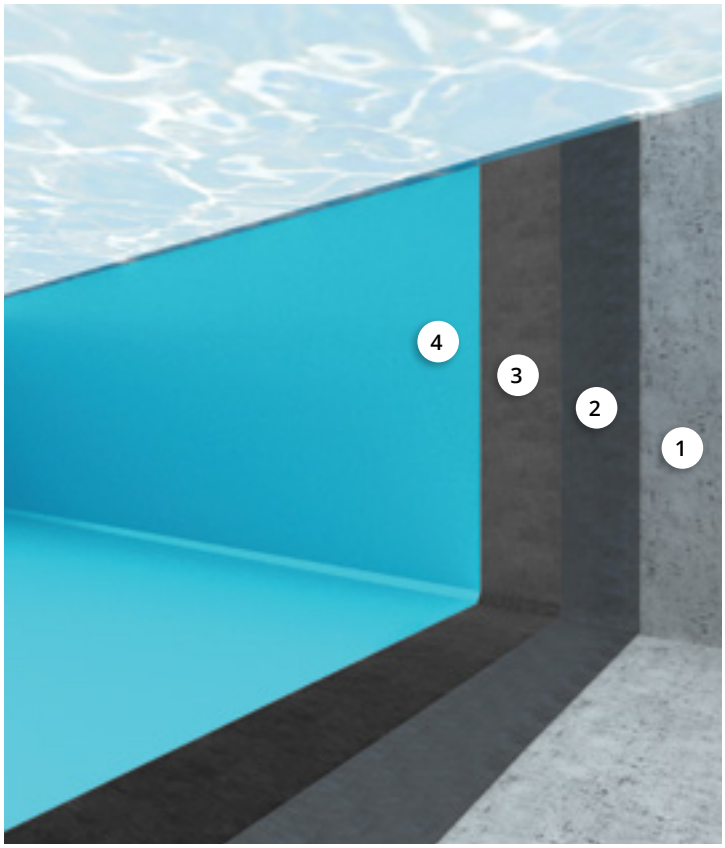
- elasticity
- long-term durability
- strong adhesion to pool's structural elements
- smooth finish

The epoxy decorative microcement coating is suitable for demading applications, including swimming pools, and features the following properties:

- elasticity, to withstand cracking caused by expansion and contraction
- resistance to the pool water and the chemicals contained therein (e.g. chlorine)
- ultra-smooth finish

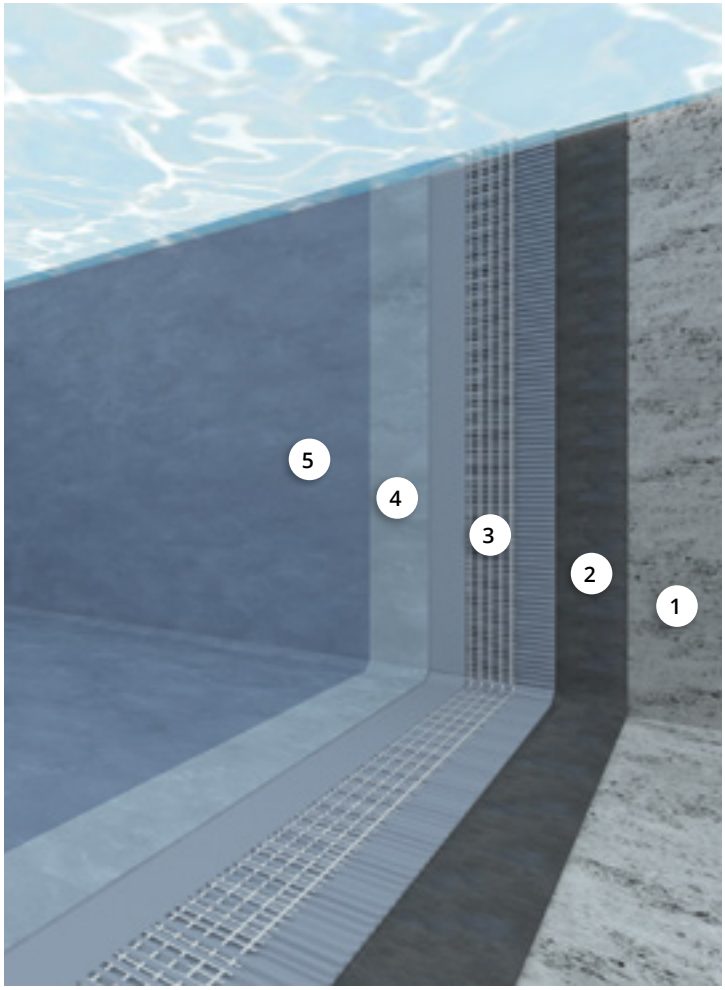
The system is sealed with proper polyurethane varnishes featuring UV stability. For a slip-resistant finish, after the application of the main varnishes, the anti-slip, UV-stable, transparent, two-component, polyurethane protective varnish VARNISH-PU ANTI-SLIP (satin) should be used.

Private villa in Serifos, Greece



POOL WATERPROOFING & FINISHING WITH EPOXY COATING

4. Application of the special epoxy coating for swimming pools **EPOXYCOAT-S**
3. Priming with **EPOXYPRIMER-500** water-based epoxy primer
2. Waterproofing with **AQUAMAT-MONOELASTIC** highly flexible, fiber-reinforced, cement-based slurry
1. Concrete/Screed



POOL WATERPROOFING & FINISHING WITH MICROCEMENT COATING

5. Sealing with the protective polyurethane varnish **VARNISH-PU 2K**, in gloss or satin
4. Coating with **DUROCRET-DECO FINISH** extra fined-grained, colored, decorative microcment for a smooth finish
3. Coating with **DUROCRET-DECO FLEX** flexible, colored, decorative microcment, reinforced with fiberglass mesh 160 g/m²
2. Waterproofing with **AQUAMAT-ELASTIC** highly flexible cement-based slurry
1. Concrete/Screed

BEACH-ENTRY POOLS

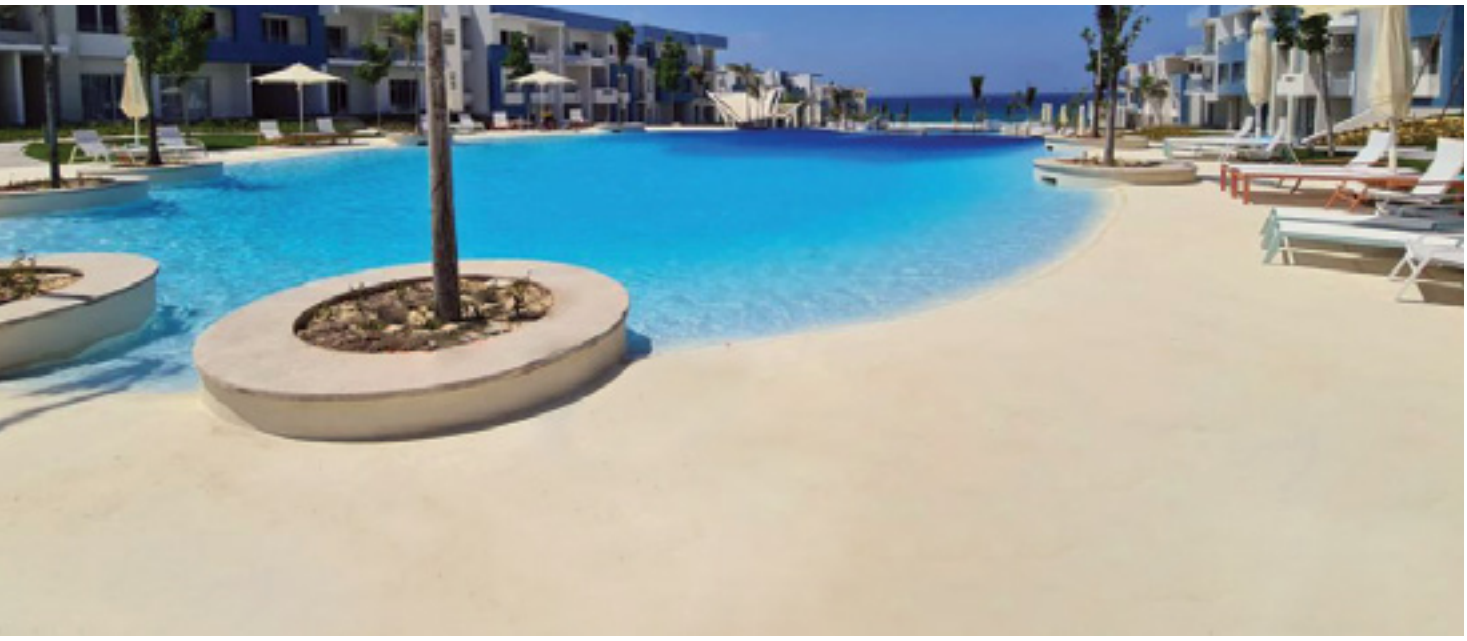
Beach-entry pools, also known as zero-entry pools, are becoming a dominant architectural trend gaining prominence all over the world thanks to their high-end aesthetic. They are mostly found in boutique hotels and luxury villas where a personalized, upscale experience is an absolute must. With a gradual entry mimicking a beach shore and a finish simulating the texture and color of the sand, beach-entry pools are a swimming oasis that can be enjoyed anywhere and by anyone. Unlike traditional swimming pools, beach-entry pools blend a stunning aesthetic with innovative functionality with the freeform design replacing pool steps and ladders in the pool entry with a gentle slope, delivering a seamless transition from the deck into the water. Plus, the use of proper materials will create a beach atmosphere with a natural finish.

Here are the key benefits of ISOMAT beach-entry pool systems:

- a premium, visually stunning result
- in full harmony with the surrounding landscape
- a custom freeform shape offering unparalleled design flexibility
- realistic beach sand feel without the hassle and mess of actual sand
- seamless surface for optimal hygienic conditions
- non-slip finish
- UV resistance and long-term durability
- various color combinations available, allowing for the creation of a pool that appears as a natural body of water
- no more ladders or steps, ideal for children and people with disabilities
- a beach shore style pool, perfect for a number of recreational activities

For the construction of a beach-entry pool, ISOMAT has developed the following systems to be applied after positive and negative side waterproofing is done:

- Sand Carpet: This system delivers the ultimate beach-like sand feel and texture to pool surrounds. For its application, it is necessary to apply EPOXYCOAT-S epoxy coating in RAL 1013 (Oyster White) to the pool interior and exterior surfaces. For the pool entry and surrounding area only the application of the Sand Carpet system is recommended. To create a Sand Carpet, quartz sand is broadcast to saturation over the last epoxy coating layer and then the system is sealed with VARNISH-PU 2K polyurethane varnish.

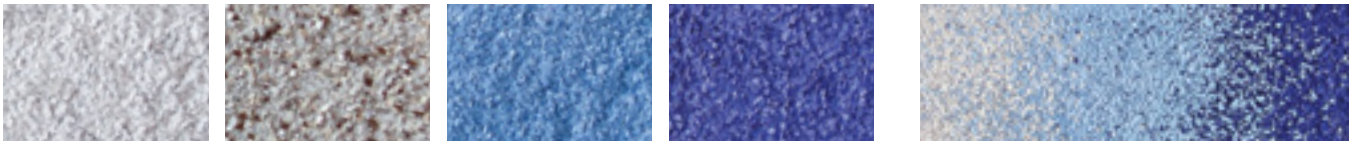


Fouka Bay, North Coast, Marsa Matrouh, Egypt

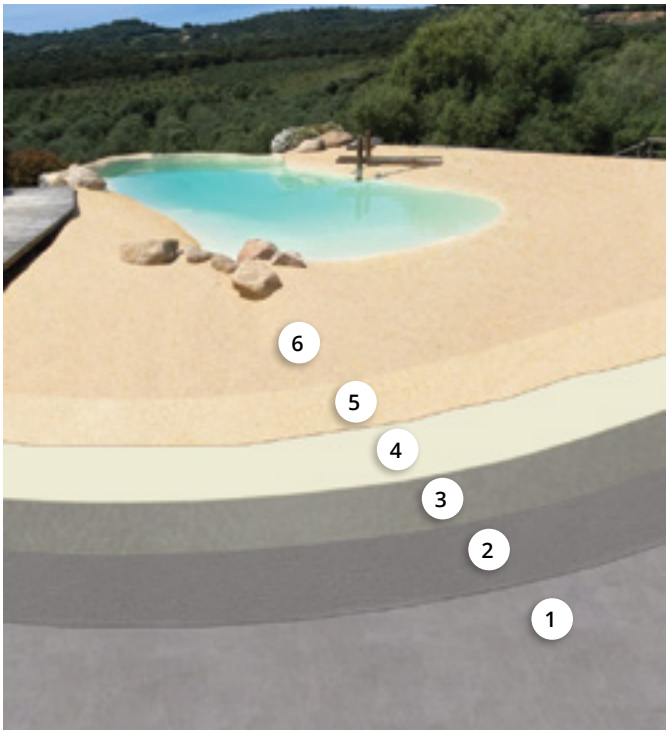
- **Pool Flake Coating**: This system is applied to the pool interior, walls and bottom where flakes of different colors or color combinations can be used, delivering a wide variety of beautiful effects to choose from. **ISOMAT DECO-FLAKES** are broadcast to saturation over the wet layer of the epoxy coating selected (examples are **DUROFLOOR-PSF** epoxy primer or **DUROFLOOR-R** epoxy coating). The beige color can be used to bring the look of actual beach sand or, for a more impressive result, a white-to-dark blue gradient can be incorporated going from the entry point to the shallow and deeper ends of the pool. Finally, the system is sealed with **VARNISH-PU 2K** transparent polyurethane varnish.

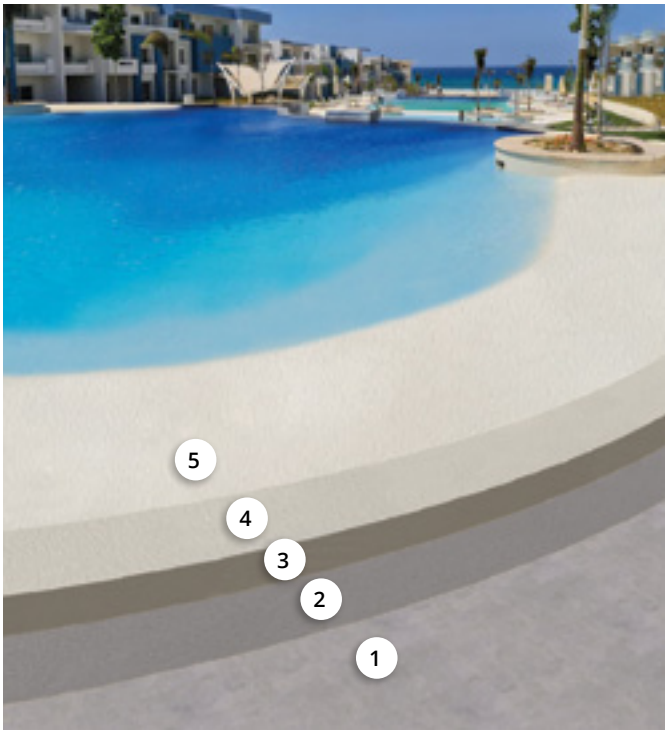
ISOMAT DECO-FLAKES INDICATIVE COLORS

Indicative
white-to-dark blue gradient



1500 White **8000** Sand Beige **6080** Light Blue **6200** Dark Blue





POOL WATERPROOFING & SAND CARPET SYSTEM

6. Sealing with the polyurethane varnish **VARNISH-PU 2K**
5. **M32 quartz sand** (0.1-0.4 mm) broadcast to saturation
4. Application of the special epoxy coating for swimming pools **EPOXYCOAT-S**
3. Priming with the epoxy water-based primer **EPOXYPRIMER-500**
2. Waterproofing with the highly flexible cement-based slurry **AQUAMAT-ELASTIC**
1. Sloping concrete/screed

POOL WATERPROOFING & POOL FLAKE COATING SYSTEM

5. Sealing with the polyurethane varnish **VARNISH-PU 2K**
4. **ISOMAT DECO-FLAKES** broadcast to saturation
3. Priming with the epoxy primer **DUROFLOOR-PSF**
2. Waterproofing with the highly flexible cement-based slurry **AQUAMAT-ELASTIC**
1. Sloping concrete/screed

Grand Hyatt Hotel, Athens, Greece

FLAT ROOFS
& BALCONIES

With unobstructed views of the sea, a hotel flat roof can serve as a roof garden, restaurant, reception venue or pool bar. Most of the times, a flat roof blends seamlessly into the surrounding environment, e.g. being either a green roof or white, like those typical ones found in the Aegean Islands.

Choosing the right waterproofing material is crucial in achieving a successful result, meaning that it should have high resistance to weathering and mechanical stresses, show elasticity and strong adhesion to the substrate, and feature long-term durability.

Before selecting the suitable waterproofing method and the right materials, it is important to carefully consider the intended use of the roof. In existing hotels where the flat roof is to be renovated or used for another purpose, waterproofing should be carried out anew.

In response to market developments and the latest construction industry trends, ISOMAT's dedicated R&D centers developed a wide range of products and integrated systems ideal for:

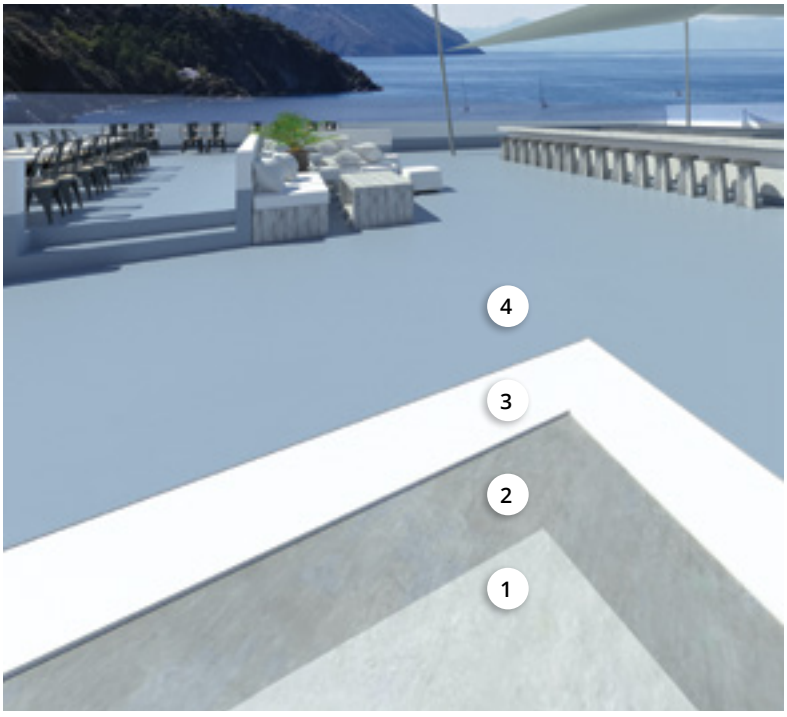
- flat roof and/or balcony waterproofing and tiling
- flat roof and/or balcony waterproofing and finishing with a walkable colored polyurethane floor coating
- flat roof and/or balcony waterproofing and finishing with decorative stone carpet flooring with natural colored stones
- flat roof waterproofing and green roof installation
- flat roof waterproofing with an exposed, non-walkable waterproofing layer
- post-applied flat roof and/or balcony waterproofing with no need to remove existing coverings

Grand Hyatt Hotel, Athens, Greece

FLAT ROOF OR BALCONY WATERPROOFING & PROTECTION WITH A WALKABLE POLYURETHANE COATING

In the event that flat roofs are to be used as restaurants, parking garages, etc., ISOMAT proposes as an alternative to tiles that the waterproofing membrane be coated with a colored, elastic, protective polyurethane coating, which provides long-lasting color stability to prevent fading and degradation over time, excellent resistance to mechanical stresses and weathering, while delivering a seamless and very easy-to-clean smooth or non-slip finish.

The proposed waterproofing layer that is pre-applied is a liquid-applied 100% polyurethane waterproofing membrane. ISOMAT has developed a wide range of polyurethane waterproofing and protection systems meeting the diverse requirements of different roof types.



4. Protection with the elastic, UV-stable, polyurethane coating TOPCOAT-PU 720
3. Waterproofing with ISOFLEX-PU 500 polyurethane liquid waterproofing membrane (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with PRIMER-PU 100
1. Sloping concrete/screed

FLAT ROOF OR BALCONY WATERPROOFING & PROTECTION WITH A WALKABLE POLYASPARTIC COATING

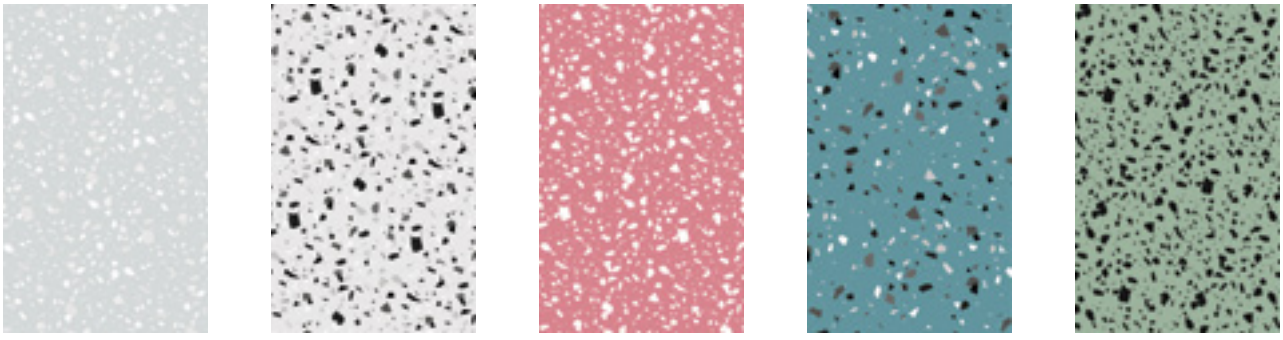
In cases where immediate return-to-service along with exceptional mechanical and chemical resistance properties are required, the highly elastic hot spray-applied hybrid polyurea waterproofing membrane is the ideal solution. Its application requires a special high-pressure and high-temperature spray equipment to be used by experienced, highly skilled installers. It forms a monolithic finish with excellent attainable physical properties while featuring thermal stability, allowing for foot traffic after a few minutes. It can be applied even in thick layers in one pass with relative humidity or residual moisture having little to no effect on its performance. Being applicable even to vertical and curved surfaces, it is ideal for complex structures and details. Furthermore, with a ~100% solids formula and very low VOC emissions, it stands out as a great environmentally friendly waterproofing option. And as most hot spray-applied polyurea membranes used in construction projects, it should not be left exposed to UV radiation, meaning the use of the fast-curing, aliphatic polyaspartic coating TOPCOAT-PAS 760 is required to provide UV stability. This system constitutes a definitive waterproofing solution thanks to its exceptional performance and long service life.

4. Protection with the protective polyaspartic coating TOPCOAT-PAS 760
3. Waterproofing with the highly elastic hot spray-applied hybrid polyurea waterproofing membrane ISOMAT-PUA 1240
2. Priming with PRIMER-PU 100
1. Sloping concrete/screed

FLAT ROOF OR BALCONY WATERPROOFING & FINISHING WITH FLAKE FLOORING

ISOMAT's decorative flake flooring is an utterly unique and ultra-modern option for residential, commercial and industrial settings. It is used to decorate and protect new floor surfaces or breathe new life into old, tired-looking ones. The use of decorative flakes adds character and visual interest to plain liquid waterproofing layers, making it well-suited for flat roofs, terraces or balconies serving as restaurants, parking lots, etc. where a unique, multicolored finish is preferred over a monochromatic design.

INDICATIVE **FLAKE FLOORING** COLOR COMBINATIONS



Here are the key benefits of ISOMAT's decorative flake flooring:

- easy and fast installation with minimal thickness, ideal for renovations
- a customizable look matching any decor through the wide range of possible combinations between a) the color of the floor coating to be applied, b) the color of the flakes, c) the size of the flakes, and d) the broadcast density
- elasticity and resistance to tear and wear, making it suitable even for challenging applications
- waterproofing solution for flat roofs, terraces, balconies, etc.
- exceptional UV-stability with non-yellowing properties, ensuring superior durability even in outdoor applications
- a smooth, seamless finish ensuring easy cleaning while helping hiding dirt and imperfections compared to monochromatic surfaces
- a unique, visually appealing look
- resistance to common household cleaners, oils, and seawater
- suitable for pedestrian and vehicular traffic, depending on the material used for the base layer

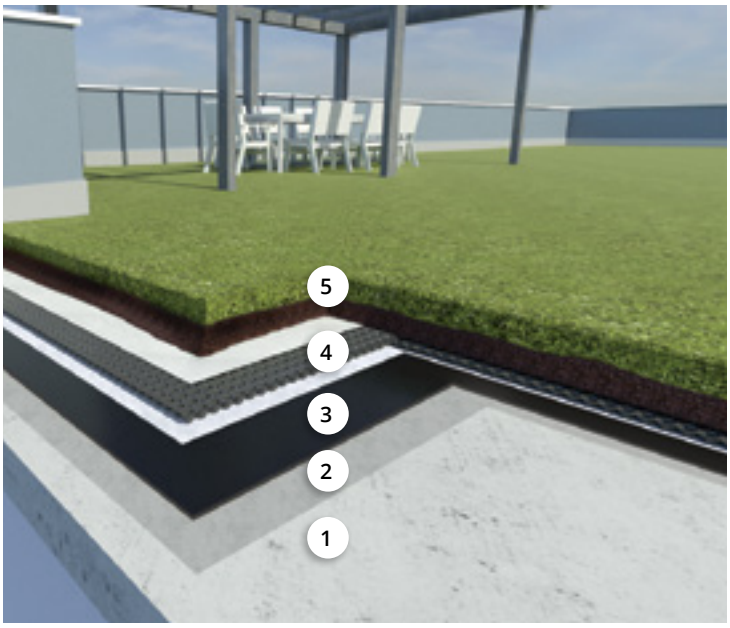
6. Sealing with the transparent polyurethane waterproofing membrane ISOFLEX-PU 650
5. Broadcasting of ISOMAT DECO-FLAKES
4. Coating with the elastic, UV-stable, polyurethane protective coating TOPCOAT-PU 720
3. Waterproofing with the polyurethane liquid waterproofing membrane ISOFLEX-PU 500 (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with the polyurethane primer for porous substrates PRIMER-PU 100
1. Sloping concrete/screed

FLAT ROOF WATERPROOFING & GREEN ROOF INSTALLATION

Thanks to the multiple benefits offered, modern green roof technology is continuously gaining ground, with more and more hotels going green. For those hotels located in the countryside, a living roof brings architecture into harmony with environmental design and smoothly blends the hotel into the natural surroundings. Similarly, for urban hotels, a living roof is an oasis greenery in the city's stifling atmosphere. In addition, green roofs have a proven return on investment by improving the thermal performance of a roof and protecting the underlying waterproofing layers significantly prolonging their expected service life. At the same time, green roofs contribute to rainwater management, reducing the urban heat island effect by lowering the temperature of the roof surface, while through photosynthesis they absorb carbon dioxide and emit oxygen. In addition, green roofs act as sound barriers for the building. But the most important benefit of green roofs is their contribution to protecting the environment and enhancing the sustainability of the built environment.

ISOMAT has developed and offers an integrated system for green roofs. The waterproofing layer is recommended to be formed with a polyurethane-bituminous liquid membrane providing:

- Resistance to residual moisture
- Strong adhesion to the substrate
- Elasticity
- Long-term durability
- Resistance to root penetration



5. Vegetation layer
4. Geotextile and drainage membrane for green roofs **DELTA-FLORAXX TOP**
3. Waterproofing with the polyurethane-bituminous membrane **ISOFLEX-PU 560 BT**
2. Priming with **PRIMER-PU 100**
1. Sloping concrete/screed

FLAT ROOF OR BALCONY WATERPROOFING & TILING

For flat roofs serving as restaurants, reception venues, pool bars or roof gardens, opting for tiles constitutes a highly durable and visually-appealing solution. However, it is necessary that absolute waterproofing is pre-applied, since post-application in costly and time-consuming.

ISOMAT recommends waterproofing using liquid-applied polyurethane waterproofing materials featuring high resistance to expansion/contraction and vibration, and resistance to wear and tear caused by aging or exposure to weather conditions.

Tiling should be carried out using high-performance elastic adhesives enhanced with resins to be able to effectively withstand expansion/contraction and vibration. It is recommended that tiles be grouted accordingly with high-quality, polymer-modified, water-repellent grouts. In case where fast-track application and return-to-service are required, rapid-setting tile adhesives and grouts should be used.

In the event that waterproofing is carried out on a flat roof already covered with tiles and their removal is not desired, ISOMAT has developed the innovative transparent polyurethane liquid waterproofing membrane ISOFLEX-PU 650, which is applied to existing tile surfaces, wooden decks, terrazzo, glass blocks, etc., without affecting their appearance.

6. Tile grouting with the highly water-repellent, colored, quick-setting tile grout CG2 WA MULTIFILL-DIAMOND 1-12
5. Tile fixing with the ultra-flexible tile adhesive C2 TE S2 ISOMAT AK-25
4. Quartz sand (0.3-0.8 mm) broadcasting
3. Waterproofing with ISOFLEX-PU 540 polyurethane liquid waterproofing membrane (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with PRIMER-PU 100
1. Sloping concrete/screed

NON-ACCESSIBLE FLAT ROOF WATERPROOFING WITH A LIQUID WATERPROOFING MEMBRANE

In the event the hotel flat roof is not intended to accommodate traffic, there are many suitable waterproofing materials and choosing the right one depends on the slope of the roof and its requirements for weather resistance.

With year-long experience and deep expertise in waterproofing materials, ISOMAT has developed the ISOFLEX liquid waterproofing product range for flat roofs, which includes four different products providing specialty waterproofing solutions meeting the diverse requirements of each flat roof. All products deliver a white, seamless, elastic, waterproof and vapor-permeable membrane and are applicable even to uneven substrates. Plus, thanks to their high solar reflectance, they improve the energy efficiency of the building by keeping the temperature on the roof surface low and thus reducing the need for air conditioning along with the utility bill during hot summer months.

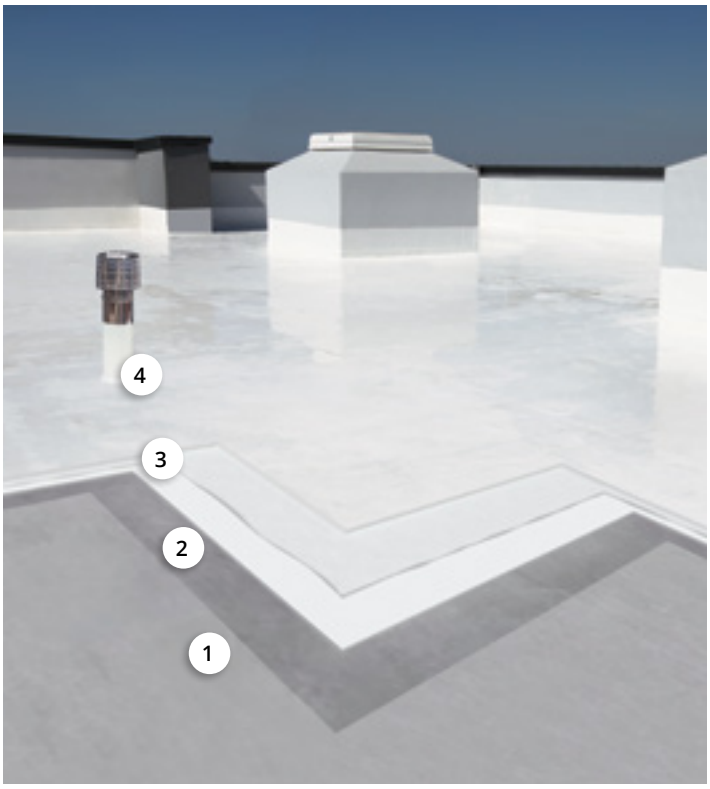
ISOFLEX-AEGEAN is the ideal waterproofing solution for hotels located in sunny places, as in the Greek islands, since this product features timeless whiteness, which is maintained for many years, without the waterproofing membrane turning yellow over time.

ISOFLEX-HYBRID is a hybrid, liquid waterproofing membrane, based on acrylic and polyurethane resins, highly resistant to short-term ponding water. Also suited for use in hotels located in areas with very low temperatures.

ISOFLEX is the reliable and long-proven waterproofing solution for flat roofs having at least a slight slope to naturally drain the water away.

3. Waterproofing with the timeless white, polyhybrid liquid waterproofing membrane for flat roofs ISOFLEX-AEGEAN (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with ISO-PRIMER
1. Sloping concrete/screed

For highly demanding applications, ISOFLEX-PU 500 one-component polyurethane waterproofing membrane is the premium waterproofing solution proposed by ISOMAT. It has exceptional resistance to mechanical and chemical stresses, weathering, long-term ponding water and UV radiation while maintaining its mechanical properties over a temperature span of -40ºC to +90ºC. Furthermore, it has an expected working life of 25 years in accordance with EAD 030350-00-0402. When it comes to easy and quick waterproofing of roof details, wall-floor junctions, flashings around chimneys, skylights, vent pipes, solar panels, etc., ISOMAT recommends using ISOFLEX-PU 500 DTL fiber-reinforced polyurethane liquid waterproofing membrane.



4. Detail waterproofing with the fiber-reinforced polyurethane liquid waterproofing membrane ISOFLEX-PU 500 DTL
3. Waterproofing with ISOFLEX-PU 500 polyurethane liquid waterproofing membrane (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with PRIMER-PU 100
1. Sloping concrete/screed

NON-ACCESSIBLE FLAT ROOF WATERPROOFING OVER OLD BITUMINOUS MEMBRANES

For existing buildings, flat roof retrofit waterproofing doesn't necessarily mean that old bituminous sheet membranes need to be removed. In fact, the flat roof can be quickly and effectively re-waterproofed by means of the elastomeric, water-based, liquid waterproofing membrane ISOFLEX-HYBRID. It shows resistance to weathering and improves the energy efficiency of the building by keeping the roof surface cool thanks to its high solar reflectance. It is highly recommended for flat roofs that tend to collect standing water due to inadequate slopes. Also suited for use in areas with very low temperatures.

3. Waterproofing with the hybrid liquid waterproofing membrane for flat roofs ISOFLEX-HYBRID (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with ISO-PRIMER
1. Bituminous membranes

WET AREAS

Hotels feature many wet rooms with different requirements in terms of waterproofing, from simple en-suite bathrooms, shared WC and showers, to restaurant kitchens, spa and wellness areas that probably include an indoor pool, sauna, hammam, etc., which have the highest humidity levels. These spaces project a sense of cleanliness and hygiene and of course unique aesthetics, the most important criteria for guests looking to book accommodation.

Proper waterproofing of these spaces is of vital importance, as misguided choice of materials could lead to mold, tile detachment, peeling paint on walls and moisture seeping through the surfaces and walls into adjacent rooms, causing even greater problems. Choosing the right waterproofing and finishing materials will guarantee a perfect aesthetic result.

ISOMAT offers two systems that protect from water ingress and deliver different aesthetic results, catering to the preferences of both the architect and the owner:

1. Waterproofing & tiling
2. Waterproofing & finishing with microcement or acrylic coatings

Euphoria Retreat, Mystras, Greece

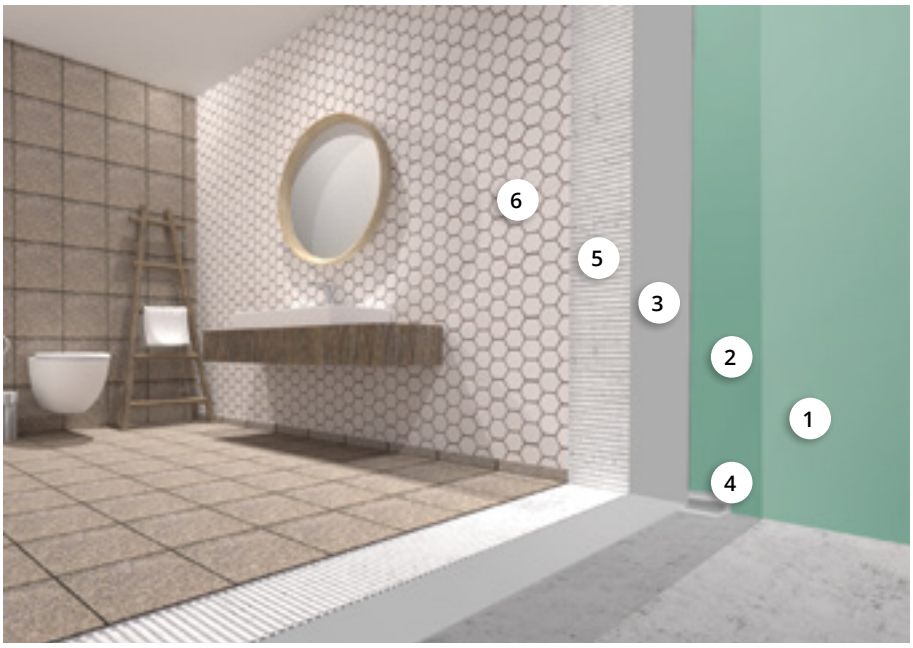
Euphoria Retreat, Mystras, Greece

TILING

A timeless and durable choice, tiles of any type, including mosaics, constitute the usual surface finishing solution for bathrooms and shared wet rooms in hotels. There's a great number of designs, patterns and available sizes on the market, meeting even the most demanding style requirements.

However, for the tiles to withstand the test of time, proper substrate preparation and correct application using the best-suited materials are required. Waterproofing prior to tiling is necessary, so that no risk of detachment caused by water ingress will occur over time. Tiles should be fixed by means of a high-performance adhesive featuring increased elasticity,and resistance to moisture, mechanical stresses and vibration. As for the grout, it should show high water-repellency and color stability, prevent mold growth and deliver a smooth result for easier cleaning.

Four Seasons Astir Palace Hotel, Athens, Greece



BATHROOM WATERPROOFING & TILING

6. Tile grouting with the water-repellent, colored grout with porcelain effect CG2 WA **MULTIFILL SMALTO 1-8**
5. Tile fixing with the high-performance extra flexible adhesive C2 TE S2 **ISOMAT AK-22**
4. Joint-sealing membrane
3. Waterproofing with the water-based elastomeric membrane **ISOMAT SL-17**
2. Priming with **UNI-PRIMER**
1. Moisture-resistant plasterboard

Old Castle Oia, Santorini, Greece

MICROCEMENT & ACRYLIC COATINGS

Microcement coatings are the ideal choice when it comes to bathrooms and other wet rooms thanks to the smooth and monolithic surface they deliver, without seams and joints, being thus easy to clean, evoking a much stronger sense of hygiene in the space. Modern microcement or acrylic coating materials are highly resistant to moisture, a property that is further enhanced when overcoated with specially recommended varnishes. They can be colored in a wide variety of colors and deliver a unique aesthetic effect, depending on the application technique and style selected. Prior to their application, it is essential to perform waterproofing using a cement-based waterproofing slurry.

Applying a microcement or acrylic coating is a quick and cost-effective bathroom renovation solution, as it does not require removing existing, firmly fixed tiles.

Aggelo Boutique Hotel, Crete, Greece

Sivanis Apartments, Paros, Greece

BATHROOM WATERPROOFING & FINISHING WITH MICROCEMENT

6. Sealing with the water-based, protective, polyurethane varnish **VARNISH-PU 2KW**, satin-matt
5. Coating with **DUROCRET-DECO FINISH** extra fined-grained, colored, decorative microcment for a smooth finish
4. Coating with **DUROCRET-DECO FLEX** flexible, colored, decorative microcment, reinforced with fiberglass mesh 160 g/m²
3. Waterproofing with **AQUAMAT-ELASTIC** highly flexible, fiber-reinforced, cement-based slurry
2. Priming with **FLEX-PRIMER**
1. Moisture-resistant plasterboard

Arminda Hotel & Spa, Crete, Greece

Athens Capital Center Hotel MGallery Collection, Athens, Greece

LARGE-FORMAT TILES

Responding to the demand for expansive and sleek design, large-format tiles (big slabs) have emerged as a dominant trend in modern, elegant spaces. With minimal grout lines, they deliver an almost seamless appearance evoking a sense of spaciousness all while offering the added benefits of easier cleaning, reduced maintenance, and improved hygiene. They redefine the physical and visual dynamics of our living spaces, from vast flooring that flows effortlessly across rooms to towering accent walls that draw attention.

It's no wonder they are widely used in new and renovated hotels, from reception and dining areas to rooms, bathrooms, balconies, and beyond. One could argue that these tiles invite a sense of grandeur and openness that was once unimaginable, as their installation poses a challenge for professional installers and requires special skills and specialty materials.

And this is where ISOMAT steps in with the innovative, high-performance adhesive ISOMAT AK-24 CRYSTAL GEL, designed specifically for large-format tiles. ISOMAT's new Crystal Gel technology combines the Crystal Seeding technology with Gel properties in a single product. Featuring an exceptionally smooth, creamy consistency, quicker setting time than traditional standard-set adhesives, barely affected by summer/winter conditions, and longer open time, it ensures effortless application and faster project completion. When it comes to applications where fast-track application, high flexibility, strong adhesion and moisture resistance are required, ISOMAT AK-24 CRYSTAL GEL paired with the high-performance, highly water-repellent, quick-setting tile grout MULTIFILL-DIAMOND 1-12, is the ideal system for large-format tiles, including marble, in both interior and exterior settings.

BATHROOM WATERPROOFING & TILING WITH LARGE-FORMAT TILES

4. Tile grouting with the highly water-repellent, colored, quick-setting tile grout CG2 WA MULTIFILL-DIAMOND 1-12
3. Tile fixing with the high-performance, extra-flexible tile adhesive C2 TE S1 ISOMAT AK-24 CRYSTAL GEL
2. Waterproofing with the highly flexible cement-based slurry AQUAMAT-ELASTIC
1. Screed

PARKING STRUCTURES

A hotel car park is usually the first reception area for guests arriving by car. Desides aesthetics, long-term durability along with resistance to wear, moisture, weather conditions and mechanical stresses are the most important criteria that car park flooring systems must meet. In response to market requirements for heavy-duty floor coatings with long-lasting and aesthetically appealing effect, ISOMAT has developed a wide range of integrated product systems for:

- substrate priming
- repair and filling of substrate irregularities
- top coating

Depending on the type of the car park structure and the intended use, ISOMAT recommends the following flooring solutions:

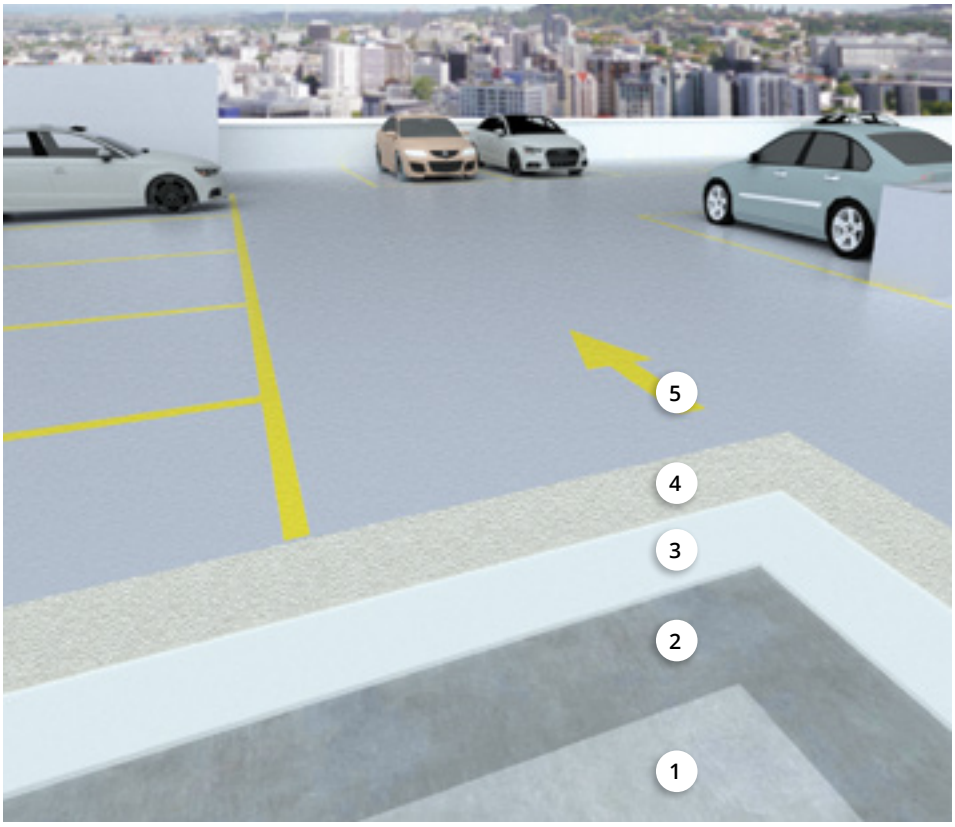
- For internal car park decks subject to very high mechanical stresses and frequent heavy to extra heavy vehicular traffic load (car and heavy truck traffic), it is recommended to use one of the following:

1. a self-leveling epoxy floor coating or epoxy paint, depending on the use,
2. a polyurethane floor coating, when high resistance to expansion/contraction and impact is required, or
3. a polyurea membrane, when durability, fast-track application and immediate return-to-service are required.

- For internal car park decks subject to medium mechanical stresses and medium vehicular traffic load, the use of an epoxy paint is recommended.
- For top decks and exposed parking areas, it is recommended to use a polyurethane coating with exceptional resistance to UV radiation.

RESIN FLOORING COMPARISON TABLE			
BENEFITS	**EPOXY**	**POLYURETHANE**	**POLYUREA**
Service life	LONG		
Vehicular traffic	HEAVY		EXTRA HEAVY
Return-to-service	AFTER 3 - 7 DAYS		< 24 HOURS
Mechanical strength	EXCELLENT		EXCEPTIONAL
Chemical resistance	EXCELLENT		
Resistance to temperature fluctuations	(-30°C) - (+100°C)		(-40°C) - (+110°C)
Resistance to expansion/contraction	LOW	EXCELLENT	
Crack-bridging ability	LOW	EXCELLENT	
Ease of cleaning	HIGH		
Custom colors	YES, UPON ORDER		

In case a solid color floor surface is not required, the decorative Flake Flooring is recommended, which combines all the aforementioned advantages with a special aesthetic effect. Compared to monochromatic surfaces, it helps hiding dirt, imperfections, stains and scratches, while providing a customizable look matching any decor through the wide range of possible combinations between a) the color of the floor coating to be applied, b) the color of the flakes, c) the size of the flakes, and d) the broadcast density.



POLYURETHANE FLOOR COATING FOR EXPOSED CAR PARK DECKS

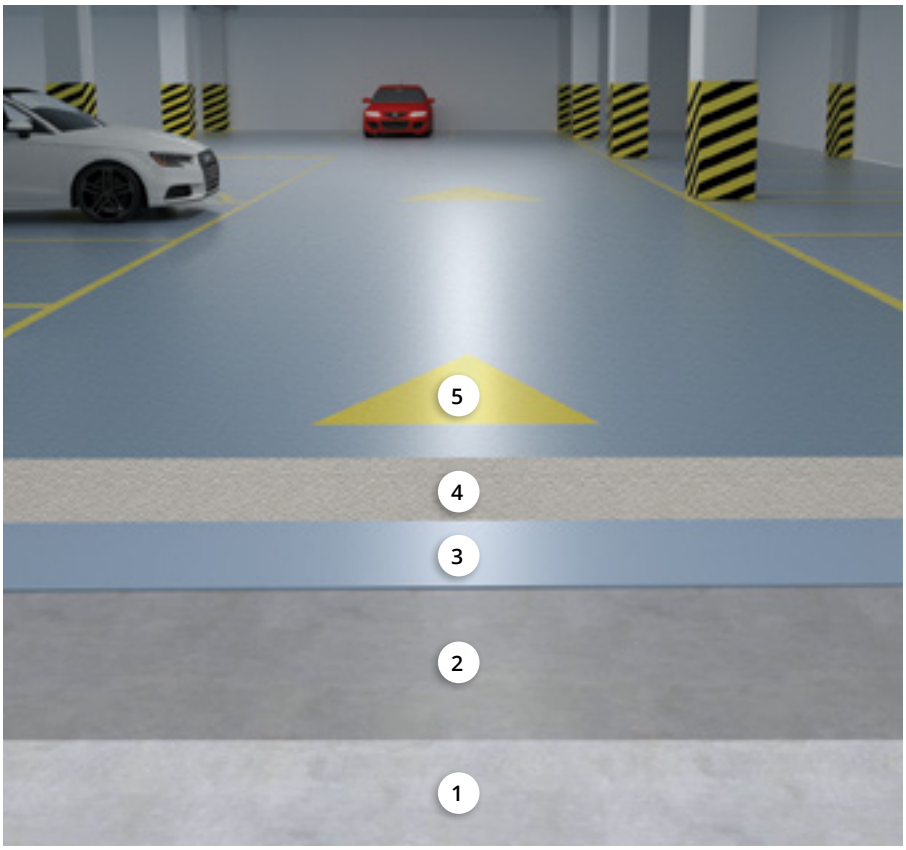
5. Protection with the elastic, UV-stable, polyurethane coating **TOPCOAT-PU 720**
4. Quartz sand broadcasting
3. Waterproofing with **ISOFLEX-PU 500** polyurethane liquid waterproofing membrane (optionally reinforced with polyester fleece, depending on the substrate)
2. Priming with **PRIMER-PU 100**
1. Sloping concrete/screed

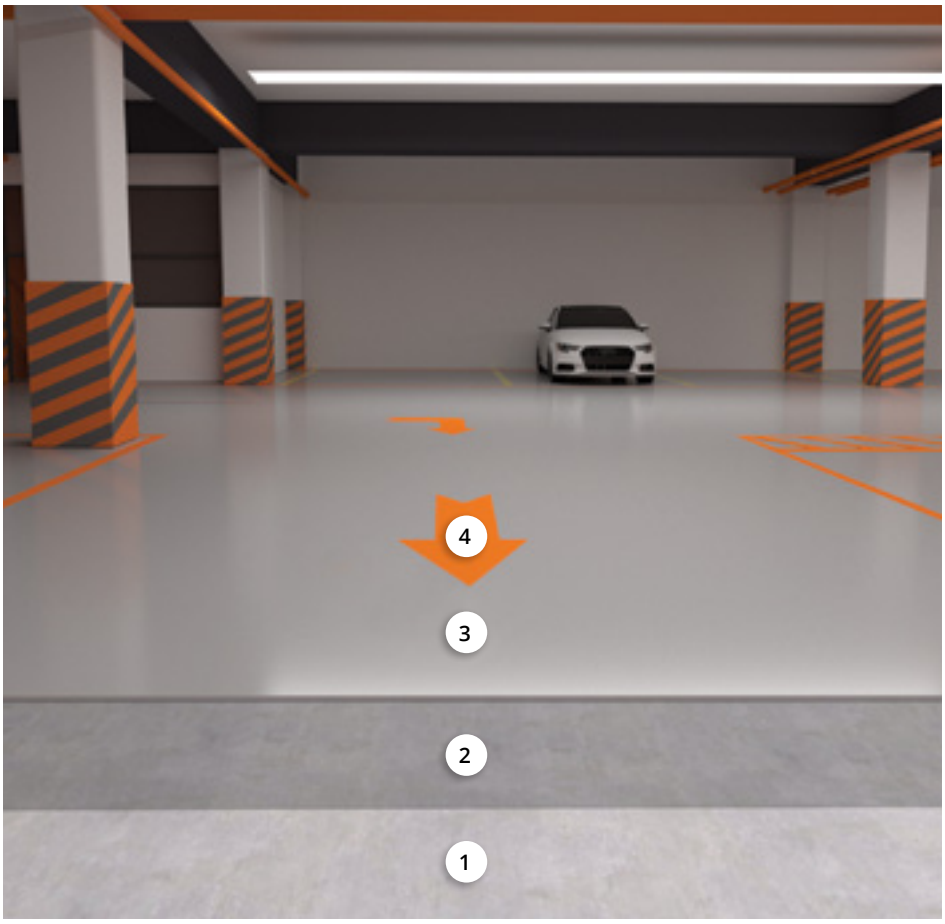
High-risk areas where slip and fall accidents happen most, e.g. industrial production facilities, ramps, etc., an anti-slip finish is strongly recommended. There are different levels of floor slip-resistance that need to be thought through very carefully when choosing the right one, taking into consideration both the risk of slipping that the area may present and its ease of cleaning, since the more non-slip a floor surface is, the more difficult it can be to clean.

The Met Hotel, Thessaloniki, Greece

ANTI-SLIP EPOXY FLOOR COATING FOR CAR PARK DECKS

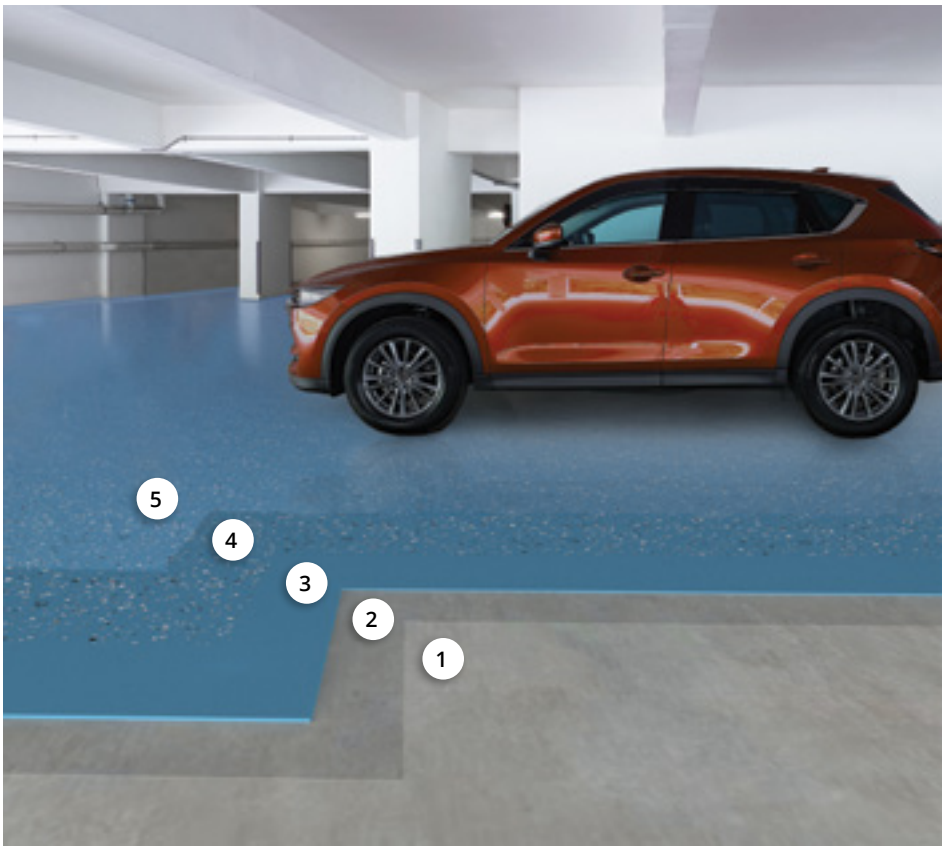
5. Painting with liquid-applied epoxy coating **DUROFLOOR-R**
4. Quartz sand broadcasting
3. Coating with self-leveling epoxy flooring **DUROFLOOR-SLF**
2. Priming with **DUROPRIMER-PRO**
1. Concrete with **EXTRA-TOP** surface hardener





POLYUREA MEMBRANE FOR BASEMENT CAR PARK DECKS

4. Line marking with the elastic, UV-stable, polyurethane coating **TOPCOAT-PU 720**
3. Coating with the highly elastic hot spray-applied pure polyurea membrane **ISOMAT-PUA 1360**
2. Priming with **DUROFLOOR-PSF**
1. Concrete with **EXTRA-TOP** surface hardener



FLAKE FLOORING FOR CAR PARK DECKS

5. Sealing with the transparent polyurethane varnish **VARNISH-PU 2K**
4. **ISOMAT DECO-FLAKES** broadcasting
3. Coating with the self-leveling epoxy flooring **DUROFLOOR-11**
2. Priming with **DUROFLOOR-PSF**
1. Concrete with **EXTRA-TOP** surface hardener

UNDERGROUND STRUCTURES

Hotel basements are mainly used as car parks, warehouses, kitchens, wellness facilities, gyms, offices, etc. In order for these spaces to be fully functional, it is important that they be effectively waterproofed. Moisture problems in below-grade structures are very common, especially in coastal areas, possibly due to groundwater or rainwater.

ISOMAT has developed integrated below-grade waterproofing systems for:

- the concreting phase for new buildings
- negative- and positive-side waterproofing of new structures
- negative-side waterproofing of new structures

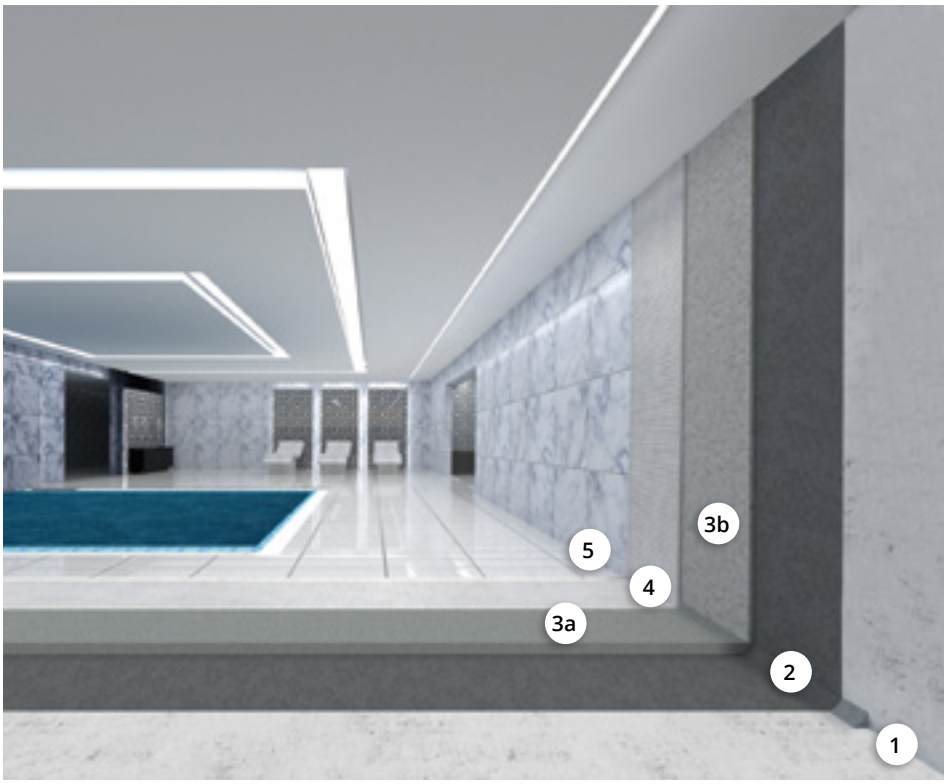
When it comes to new structures, it is crucial that thoughtful design is conducted from the very beginning to prevent moisture problems, as retrofit interventions are difficult. Therefore, choosing the right materials and having them applied correctly is necessary. Normally, the go-to solution for basements is positive-side waterproofing, which is applied to the exterior surfaces of the structure to prevent water intrusion into buildings following the construction of their foundation walls, using either a waterproofing cementitious slurry or a liquid polyurethane-bituminous membrane. In the event that there is no access or ability to get access to the exterior surfaces, then negative-side waterproofing is applied to interior basement walls using waterproofing cementitious slurries, which withstand negative water pressure.

In any case, the waterproofing layer to be applied should provide:

- a definitive solution to the problem, in cases ranging from simple moisture to water under pressure
- vapor-permeability while ensuring sustainability and usability of the basement area
- reliability and optimum life expectancy, especially given its difficult accessibility

POSITIVE-SIDE BASEMENT WATERPROOFING DURING CONSTRUCTION

4. Drainage membrane with integrated geotextile
3. Waterproofing with the polyurethane-bituminous membrane ISOFLEX-PU 560 BT
2. Priming with PRIMER-PU 100
1. Concrete



NEGATIVE-SIDE BASEMENT WATERPROOFING & TILING

5. Tile grouting with the water-repellent, colored grout with porcelain effect CG2 WA **MULTIFILL-SMALTO 1-8**
4. Tile fixing with the high-performance extra flexible adhesive C2 TE S2 **ISOMAT AK-22**

3b. Thin plaster coat

3a. Smoothing/Leveling screed

2. Waterproofing with the waterproofing cement-based slurry **AQUAMAT**

1. Concrete

Miraggio Thermal Spa Resort, Chalkidiki, Greece

"GREEN" HOTELS

The unequivocal threat climate change poses to human well-being and the planet mandates the adoption and implementation of additional practices that will help reduce our environmental footprint. Sustainability is a strategic priority for ISOMAT and should be a priority for the global construction industry, considering buildings are responsible for about 50% of resource extraction and consumption, and for more than 30% of the EU's total waste generated annually, according to European Commission data. They are also responsible for 40% of the EU's energy consumption and 36% of energy-related greenhouse gas emissions. And this is why going green with energy-efficient and sustainable buildings is now an imperative.

The hospitality industry, and particularly hotels, holds a large share of construction activity. As such, there is a strong focus on ensuring the sustainability of these structures from the design stage through to the construction and operation phases. Hotels are committed to reducing the environmental impact of its buildings, optimizing energy efficiency and providing a healthy environment for guests. In light of these developments, sustainability rating systems are gaining ground especially in the requirements set for new hotels. These sustainability rating systems assess the impact of buildings on the environment, natural resources, biodiversity, human health and society, while also focusing on the energy performance of buildings. Such systems include LEED, BREEAM, WELL, GREEN STAR, CASBEE, etc. LEED is the most widely used green building rating system in the world and is now synonymous with the concept of sustainable construction.

It is important to stress that LEED is a holistic system, meaning it focuses on the building as a whole, covering the design, construction and operation of the building, and not just the products. However, choosing the right products can help a hotel earn credits towards LEED certification. Here's how choosing ISOMAT products can help you achieve LEED certification for your project:

- With the use of user- and environment-friendly products having Environmental Product Declarations (EPDs) or carrying internationally recognized certifications, namely EMICODE® and Indoor Air Comfort Gold certifications.
- With the installation of an external thermal insulation system, the installation of a green roof, or the use of roofing materials with high solar reflectance, all of which optimize the building's energy efficiency and reduce the urban heat island effect.

It is important not to overlook the crucial role of the **WELL Building Standard (WELL)** in the construction industry, the first standard of its kind to focus solely on the health and wellness of building occupants. WELL is premised on a holistic view of human health in the built environment addressing behavior, operations and design. It sits alongside other sustainability certifications, such as **LEED**, and is poised to gain prominence in the construction industry, particularly in hospitality settings that prioritise human-centered design and user experience.

WELL extends beyond the design and construction phases, focusing primarily on operations and behavior within buildings. However, **choosing the right products can help a building earn points towards WELL certification** and here's how:

- By applying integrated waterproofing and external thermal insulation solutions to limit the growth of bacteria and mold inside the building.
- By opting for green roof systems that provide opportunities for on-site food production by supporting a variety of garden plants and herbs.
- By optimizing thermal comfort through the use of certified external thermal insulation systems and reducing the amount of heat entering the building from the roofs (e.g. coatings with high solar reflectance, green roofs, etc.).
- By using products that minimize human exposure to hazardous substances and do not pose a risk to human health. Typical examples are the **EMICODE®** and **Indoor Air Comfort GOLD** certifications regarding emissions of volatile organic compounds (VOCs).

Moxy Athens City, LEED Gold, Athens, Greece

REFERENCE PROJECTS

Sani Resort, Chalkidiki, Greece

Metropol Palace, Belgrade, Serbia

Limassol Del Mar, Limassol, Cyprus

Ever Eden Beach Resort, Athens, Greece

Four Seasons Astir Palace Hotel, Athens, Greece

MarBella Elix Hotel, Karavostasi, Greece

Ambassadori Hotel Tbilisi, Georgia

Amada Colossos Resort, Athens, Greece

ON Residence, Thessaloniki, Greece

ISOMAT is a multinational Group specializing in the development and manufacture of building chemicals, mortars and paints. For 45 years, ISOMAT has been making a history of quality, reliability, deep expertise and continuous business growth. ISOMAT Group has three production units; one in the parent company in Greece and two in its subsidiaries in Romania and Serbia. In addition, it has 5 commercial subsidiaries in Germany, Bulgaria, Slovenia, Turkey, and Russia, and exports to over 80 countries worldwide.

ISOMAT is committed to innovation and the continuous development of new product solutions that enable sustainable construction. By drawing on scientific knowledge, its dedicated R&D team of highly qualified experts at 7 R&D centers and the 3 Quality Control labs in Greece and abroad have as their mission to optimize existing products and develop every year a great number of pioneering products and best-in-class solution systems in line with the ever-changing market needs and the latest technological developments in the construction industry.

Sustainability is a strategic priority for ISOMAT and that is why we have added to our logo the tagline "For a sustainable future", serving as a pledge of our commitment to this cause. With a clear aim to actively play our part towards a more sustainable future, we make sure that the products we develop, the manufacturing process, and the actions in which we participate are environmentally and socially responsible. Our products are produced through optimized processes that minimize negative environmental impact by conserving energy and water while limiting greenhouse gas emissions. Recycling and efficient waste management are also key priorities for us. This is how we significantly reduce our environmental footprint every year. We move forward along the path to sustainability by developing and producing more and more high-quality products that contribute to a healthy living and working environment. These products have been awarded internationally recognized certifications for both their technical characteristics and their friendliness towards applicators, end users, and the environment. Such certifications are EMICODE®, Indoor Air Comfort GOLD, Blue Angel and EU Ecolabel. Staying true to continually reducing our environmental footprint, ISOMAT has developed EPDs to improve transparency and carefully monitor the life cycle of its products to ensure compliance with established processes. ISOMAT is the first Greek company to have such an extensive EPD portfolio covering a wide range of materials and integrated systems for every construction need. In view of the above, it is clear why ISOMAT products are selected as the main materials in major projects pursuing green building certifications such as LEED, BREEAM, etc. Opting for green, certified building materials is a step towards sustainable construction and a more sustainable future for all of us!

isomat
building quality
for a sustainable future

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