

GENERAL
CATALOG

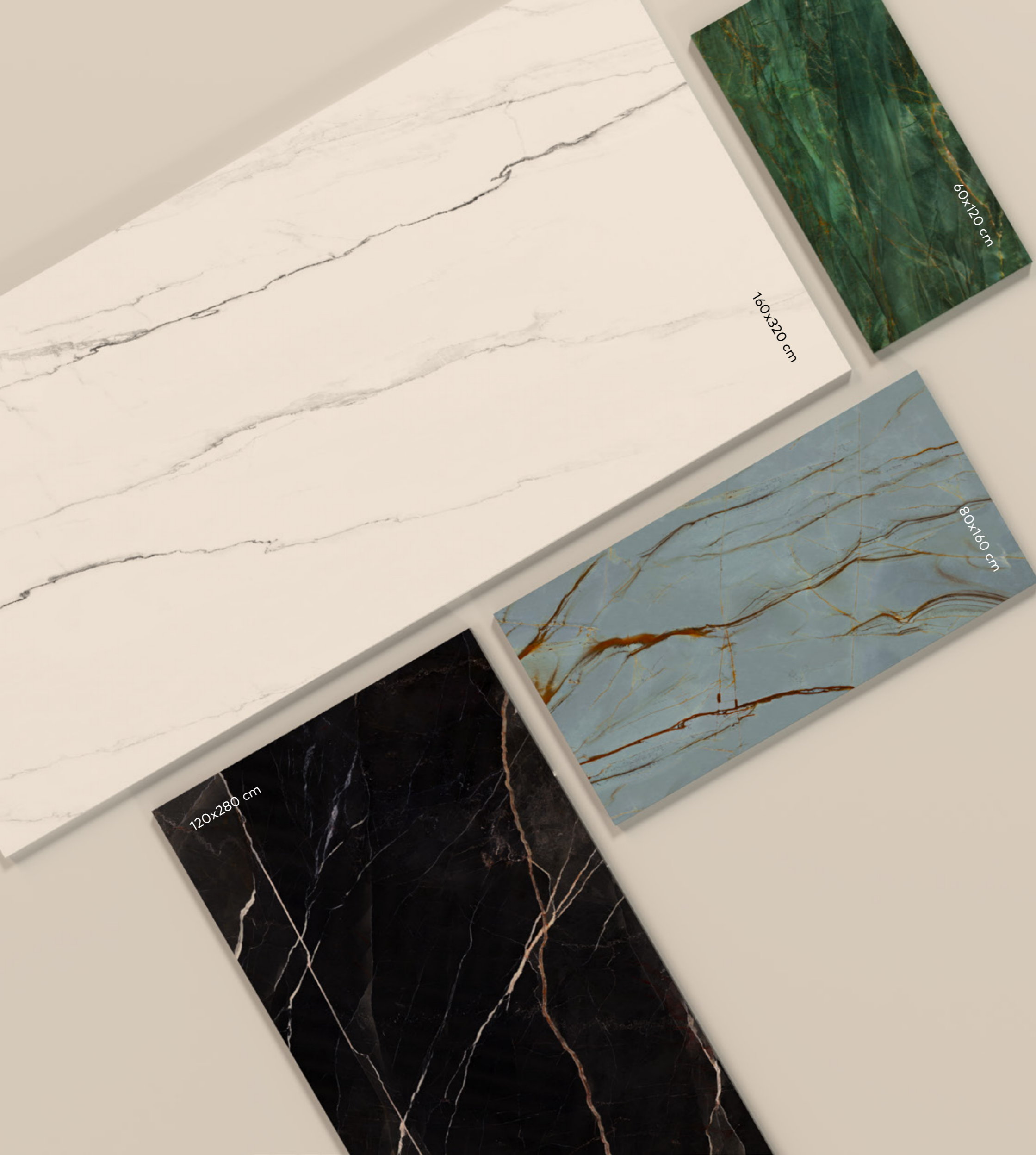


PISHGAMAN MEMARI ARYA

WE WILL ALWAYS BE THERE, FOR YOU

IMPERIO Company heading towards widen its range of products, relying on valuable trust of its customers, has established an office in Castellon Spain. This new attempt facilitates access to raw material and enables approach to new European export market. IMPERIO's avant-garde brand "IMPERIO DE CERAMICA" targets luxurious and modern market of residential projects, villas, boutiques, hotels, etc. In search for beauty, Imperio finds the sensual support of the most precious materials that nature has to offer to induce ostentatious luxury or sophisticated use of materials for a much more modern elegance. Imperio interprets the environment emphasizing the search for individual pleasure through

beauty by each and every new design in its range of series. Along with the world's industry leaders, Imperio is the choice of those who immerse themselves in glamour, sensuality and novelty; seeking luxury, elegance, modernity and decisive styles through exclusive and original designs from most prominent Spanish and Italian design studios. Each porcelain ceramic tile of this collection embodies a new story. The pattern expresses innovative, stylistic and contemporary trends that are different but matching by the constant reference to a warm and welcoming atmosphere.



Variety of Sizes

To Create an Architectural Dream

IMPERIO celebrates the uniqueness of every architectural narrative. Our porcelain ceramics span a breathtaking spectrum of sizes, ensuring every design ambition materializes. With IMPERIO, embrace boundless possibilities.

The Gold Standard in Diverse Ceramic Portfolios

The Apex of Luxurious Interior
Design with IMPERIO

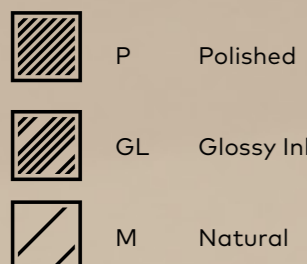


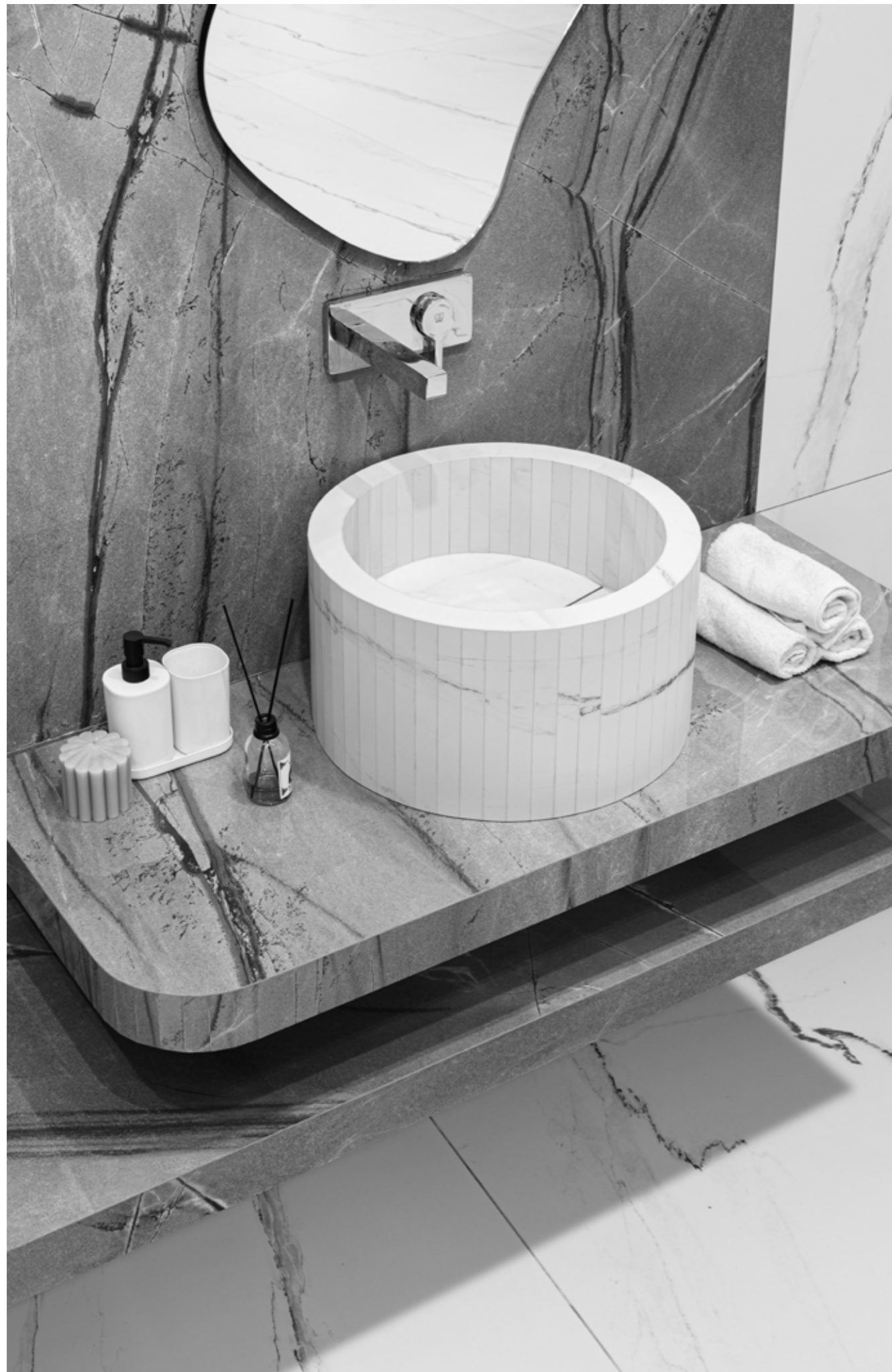
Finishing

Dive deep into IMPERIO's world where every tactile surface echoes luxury. Whether it's the muted grace of matte, the radiant luster of polished, or the intricate allure of relief – our ceramics elevate sensory experiences.

Usage

IMPERIO's ceramic tapestry is not just vast but resplendent in its diversity, showcasing our mastery. Whether it's the commercial core, rejuvenated office spaces, therapeutic hospitals, secure banks, luxurious hotels, or recreational arenas – our footprint is ubiquitous, echoing excellence. At IMPERIO, we don't just shape projects; we create experiences, solidifying our position as the ceramic connoisseur.





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Modern & Luxury

Essence of Modern Opulence

Redefining Elegance and Innovation in Ceramics. At IMPERIO, we understand that our discerning clientele seeks more than just functionality in ceramics; they desire a blend of luxury and contemporary design that elevates their living spaces. Our exclusive collection embodies this ethos, offering an unparalleled fusion of sophisticated style and cutting-edge innovation. Each piece is crafted with meticulous attention to detail, ensuring not only an aesthetic that resonates with modern luxury but also a quality that stands the test of time. From the sleek contours of our designs to the opulent finishes that characterize our range, IMPERIO ceramics are a testament to our commitment to excellence in every aspect. Step into a world where elegance meets modernity, and let IMPERIO transform your spaces into a haven of upscale refinement and contemporary charm.

PRODUCTS



Wall: Exotic Polished — 120x280 cm
Floor: The Style Base Natural — 120x280 cm



Exotic

Exotic is inspired by the Brazilian Patagonia Green Quartzite which is an exquisite natural stone. This luxurious exotic quartz unveils a mixture of vibrant color palettes and impressive lush greens, adorned with bold veining that intertwines to create an intense canvas enriched with earthy shades of amber and gold. Step into the realm of luxury with "Exotic" and its stunning bookmatch pattern.



Wall: Exotic Polished — 120x280 cm

Wall: Exotic Polished — 120x280 cm
Floor: Polaris Natural — 120x280 cm
Counter: Exotic Polished and Mystic Black Polished



Wall: Exotic and Pacific Polished — 120x280 cm
Floor: The Style Base and Pacific Natural — 120x280 cm



Wall: Exotic Polished — 120x280 cm
Floor: The Style Base Natural — 120x280 cm

Novelty

Exotic



Actual product colors may slightly vary from the images shown. Note that minor deviations could be possible at the faces' intersections.





Wall: Onyx Avorio Polished — 120x280 cm
Floor: Onyx Avorio Polished — 120x280 cm

Onyx Avorio

Onyx Avorio is a unique and very elegant marble with a wonderful selection of white and gold hues along with distinctive veining on an ivory background. These have been carefully drawn together to create cloudy, transparent effects and a natural texture which draws the eye and exudes a dignified personality. The simple beauty of neutral marble tones and milky veining create the essence of pairing with a wide variety of styles and evoking an exquisite three-dimensional impression.





Wall: Onyx Avorio Polished — 120x280 cm
Floor: Onyx Avorio Polished — 120x280 cm



Floor: Onyx Avorio Polished — 120x280 cm

Novelty

Onyx Avorio

Available other sizes upon demand. For more detail
please contact sales department.



120x280 cm
IMZ305L-P
Polished | 5 Faces



Pacific

Pacific is the realm of calmness, evokes one of the finest Italian pure white marble with the name of Sivec white. Its clear and white homogenous character make it to be one of the best luxurious marbles, shades of white and shady gray subtle veins make it an ideal for architectural applications.



Wall: Pacific Natural — 120x280 cm
 Floor: Pacific Natural — 120x280 cm



Wall: Pacific Natural — 120x280 cm
Floor: Pacific Natural — 120x280 cm



Novelty

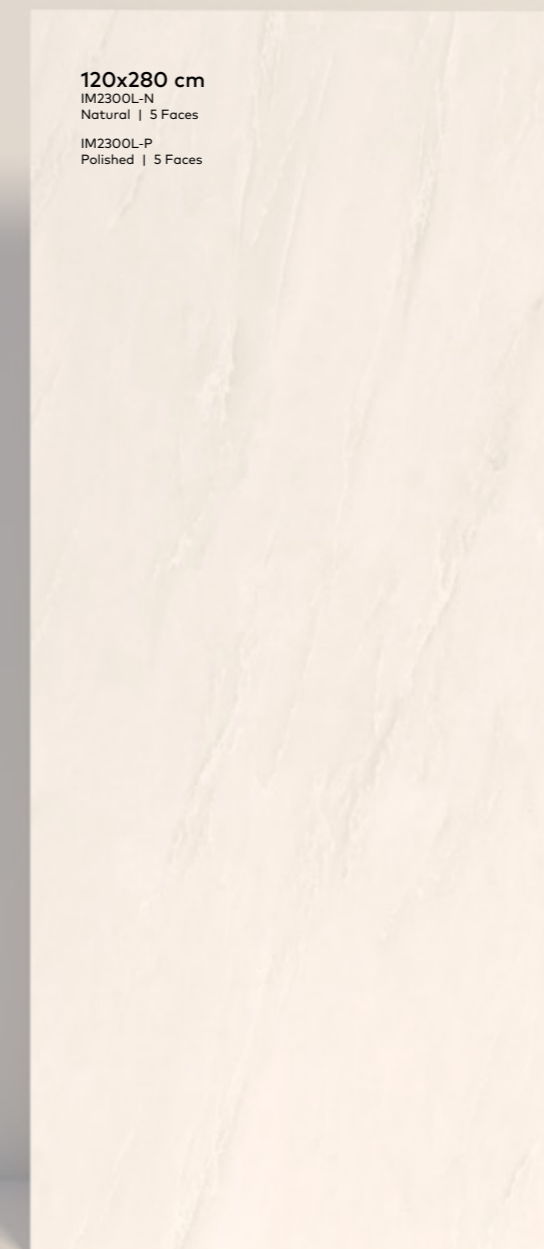
Pacific

Available other sizes upon demand. For more detail
please contact sales department.



Wall: Pacific Natural — 120x280 cm
Floor: Pacific Natural — 120x280 cm

Wash Basin: Polaris and The Style Base Natural Evo-dry



120x280 cm
IM2300L-N
Natural | 5 Faces
IM2300L-P
Polished | 5 Faces



Crafting Elegance with Spanish Soul

Live the Spanish Tradition

Essence of Spanish Craftsmanship in Ceramics. At Imperio, our Spanish roots are more than a heritage; they are a hallmark of excellence and authenticity in ceramic craftsmanship. Nestled in the heart of Spain, our brand embodies the vibrant culture, artistic history, and passionate spirit of our homeland. Each Imperio piece is a testament to the meticulous artistry and innovative spirit that Spanish artisans are renowned for.

We blend the timeless beauty of Spanish designs with contemporary aesthetics, creating ceramics that are not just functional, but also pieces of cultural artistry. The warm hues, intricate patterns, and exquisite textures in our products are inspired by Spain's rich artistic legacy, offering our customers a piece of Spanish elegance in their everyday lives. With Imperio, you don't just bring home ceramics; you bring home a piece of Spain.



Wall: Blue Roma and Perla Venata Polished — 120x280 cm
Floor: Blue Roma Natural — 160x320 cm

Wash Basin: Blue Roma Polished



Blue Roma

Blue Roma is another quartzite treasure from northeast Brazil. Its spectacular blueish-grey background with criss-crossed and graceful copper veins represents an enriched surface. The complemented contrast of the vein and background depicts an avant-garde style in your spaces. With the amazing essence of the Blue Roma texture, which represents a vibrant blue and copper mixture, you will experience a luxurious and elegance.



Wall: Blue Roma Polished — 120x280 cm



Wall: Blue Roma Polished — 120x280 cm

Blue Roma



Available other sizes upon demand. For more detail
please contact sales department.

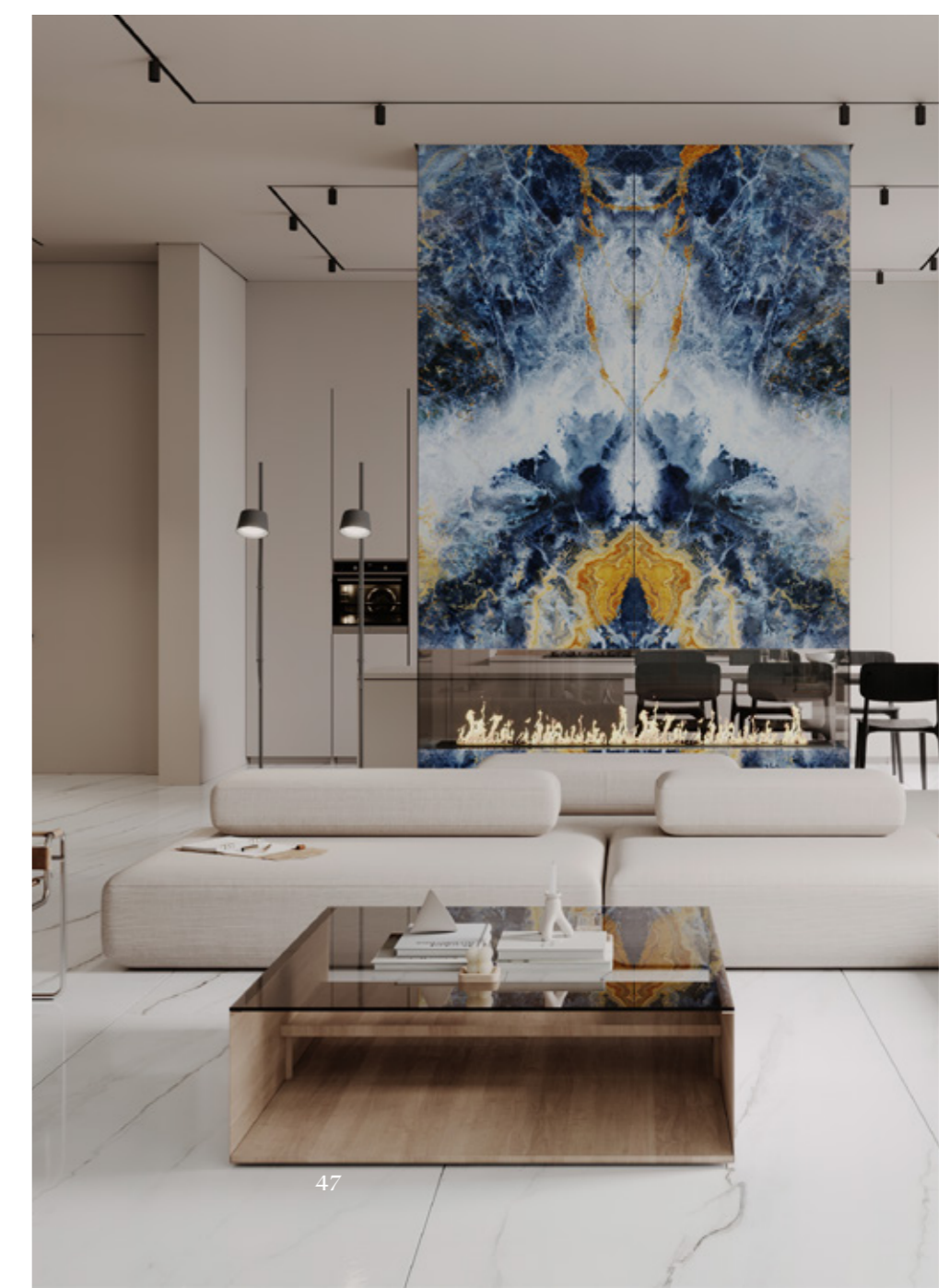




Wall: Ocean Blue Polished — 120x280 cm
Floor: Polaris Polished — 120x280 cm

Ocean Blue

Ocean Blue has a unique shade of blue that is complemented by special orange highlights, creating an unforgettable and inspiring combination. Its chromatic depth evokes the enchanting waves and swirling shades of the sea. Explore its intricate details and mesmerizing colors from every angle, as the blue large slabs are guaranteed to elevate any surface, imparting a luxurious aesthetic to the objects or spaces you cherish.





Wall: Ocean Blue Polished — 120x280 cm
Floor: The Style Base Natural Evo-dry — 120x280 cm



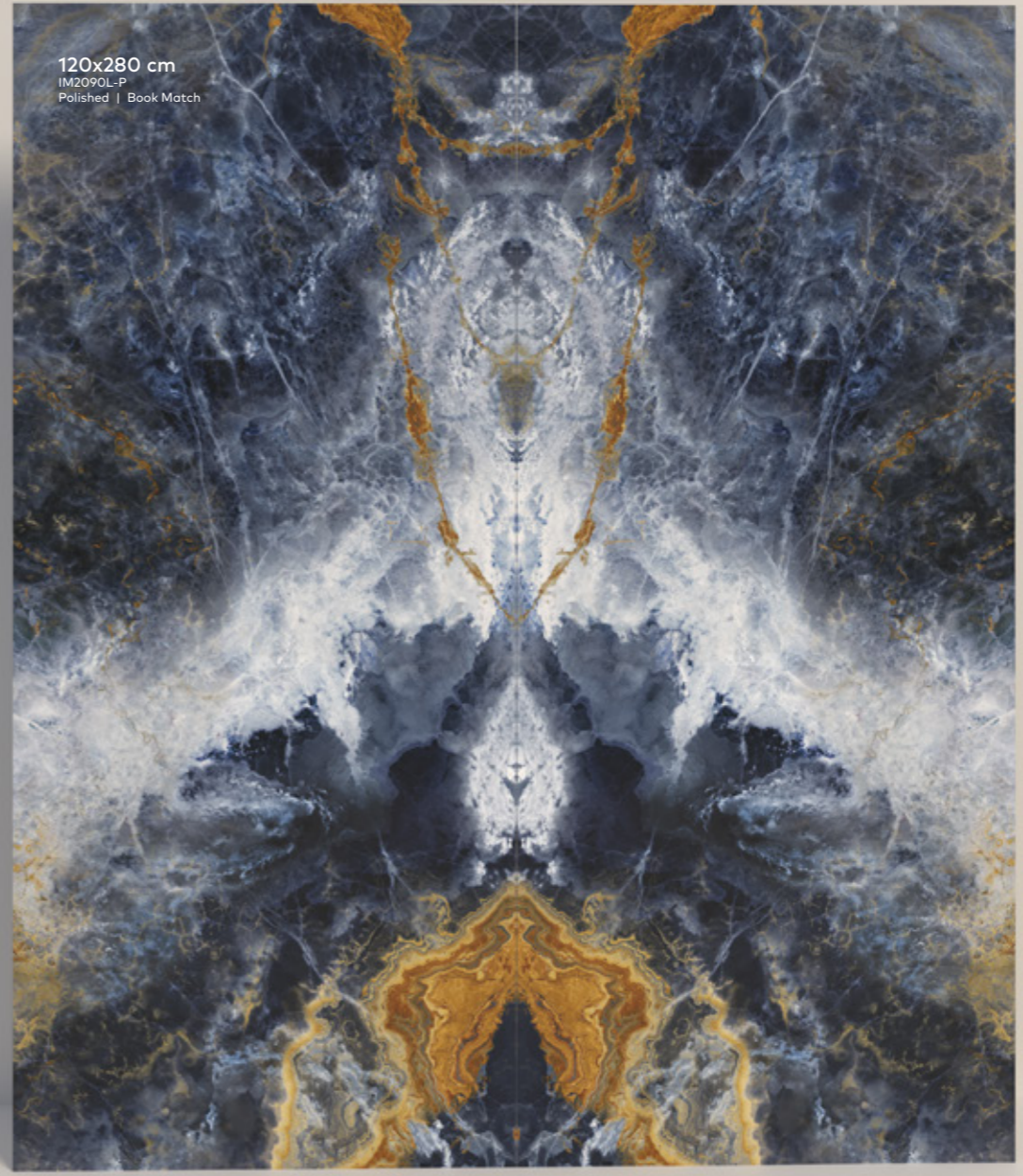


Wall: Ocean Blue Polished — 120x280 cm
Floor: Polaris Polished — 120x280 cm

Ocean Blue



Note that minor deviations could be possible at the faces' intersections.



120x280 cm
IM2090L-P
Polished | Book Match



Countertop and Backsplash: Perla Venata Polished — 120x280 cm
 Floor: Perla Venata Polished — 120x280 cm



Perla Venata

Perla Venata a Brazilian quartzite, embodies the essence of elegance in its simplicity, magnifying any space it adorns. What distinguishes this quartzite isn't solely the conspicuous golden veins, but also the unique crystallization effects it exhibits. These exceptional attributes contribute to the unique textures that envelop the stone, resulting in a profound sense of depth, even in its natural finish state.

HOT DRINKS

- Espresso
- Latte
- Mocha
- Cappuccino
- Americano
- Hot Chocolate
- Doppio

TEA

- Green Tea
- Black Tea
- Mint Tea
- White Tea
- Macchiato
- Vanilla Tea
- Cold Green Tea

ICED DRINKS

- Iced Espresso
- Iced Latte
- Iced Mocha
- Iced Cappuccino
- Iced Americano
- Iced Hot Chocolate
- Iced Doppio

Wall: Perla Venata Polished — 120x280 cm
Floor: The Style Base Natural Evo-dry — 120x280 cm

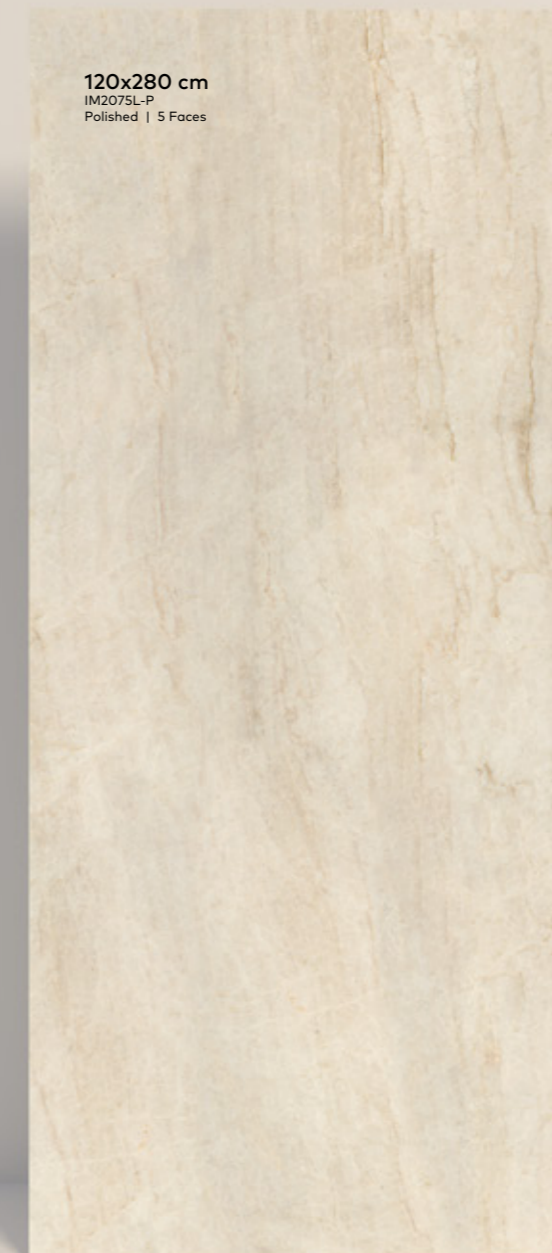
Perla Venata



Available other sizes upon demand. For more detail
please contact sales department.



Wall: Perla Venata Polished — 120x280 cm
Floor: The Style Base Natural Evo-dry — 120x280 cm
Wash Basin: Perla Venata Polished





Miracle Green

Miracle Green is a stunning porcelain masterpiece that draws inspiration from the timeless elegance of Avocado Brazilian quartzite. Its rich and vibrant green backdrop, adorned with intricate white veins that gracefully traverse the surface, imbues a feeling of opulence and sophistication. These natural patterns exude both serenity and power, creating a sense of tranquility and authority. The captivating color palette of Miracle Green captures the very essence of nature, infusing your surroundings with a revitalizing and refreshing atmosphere.



Wall: Miracle Green Polished — 120x280 cm
 Floor: The Style Base Natural Evo-dry — 120x280 cm
 Wash Basin: Miracle Green Polished and Polaris Natural



Counter : Miracle Green Polished — 120x280 cm
Floor: Perla Venata Polished — 120x280 cm



Wall: Miracle Green Polished — 120x280 cm
Floor: Polaris and Miracle Green Polished — 120x280 cm

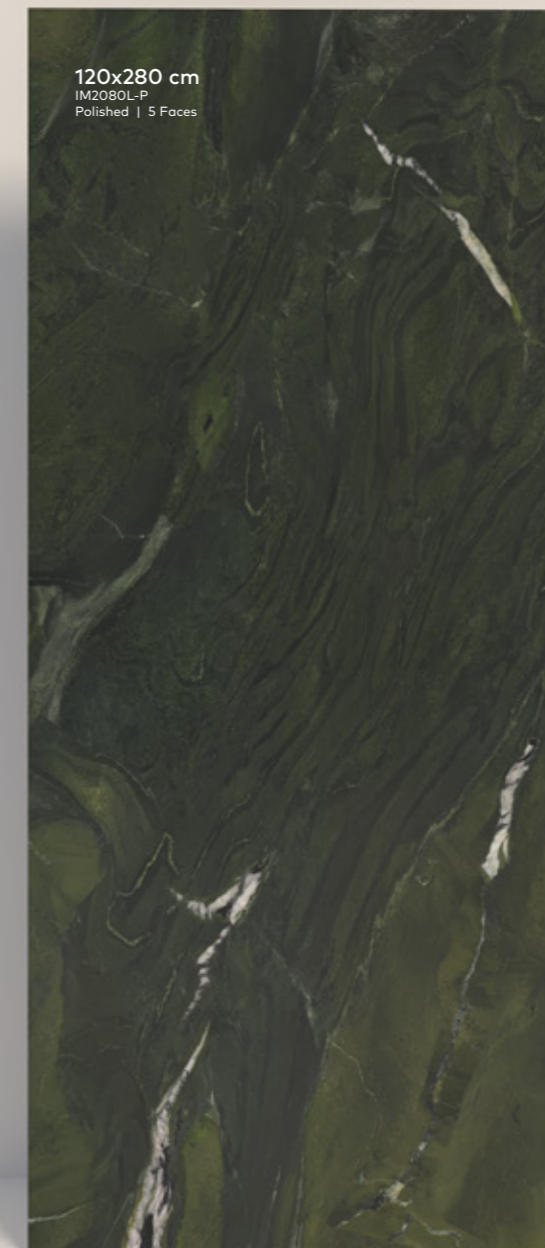




Wall: Miracle Green Polished — 120x280 cm
Floor: Polaris and Miracle Green Polished — 120x280 cm

Miracle Green

Available other sizes upon demand. For more detail
please contact sales department.



Vena Vecchia

Vena Vecchia is a remarkable natural stone design that boasts an elegant ivory appearance complemented by a delicate combination of caramel and merlot veins. golden flecks interspersed throughout the stone add a touch of glamour, making this marble a timeless classic with high decorative value. This exquisite marble is sourced from the Carrara region of Italy. varying intensities of grey and rusty gold veins beautifully wind their way across a beige backdrop, contributing to the unrivaled character of each slab. The result is a stunning and inimitable design that is sure to make a statement in any space.



Wall: Vena Vecchia Polished — 120x280 cm
Floor: The Style Base Natural Evo-dry — 120x280 cm



Wall: Vena Vecchia Polished — 120x280 cm
Floor: Perla Vennata Polished — 120x280 cm



Wall: Vena Vecchia Polished — 120x280 cm
Floor: The Style Base Natural Evo-dry — 120x280 cm

Vena Vecchia



Note that minor deviations could be possible at the faces' intersections.



120x280 cm
IMZ095L-P
Polished | Book Match



Aurora

Aurora was born by extraordinary details from amalgamating luxury green color, highlighting the golden veins, to lighting up golden shades of the material. To design and develop Aurora an exceptional amount of work has gone into researching and technically perfecting the final product. The outcome is a luxurious and glamorous masterpiece in each and every slab, a perfect choice to enrich interior designs.



Wall: Aurora Polished and Pacific Natural — 120x280 cm
Floor: Pacific Natural — 120x280 cm



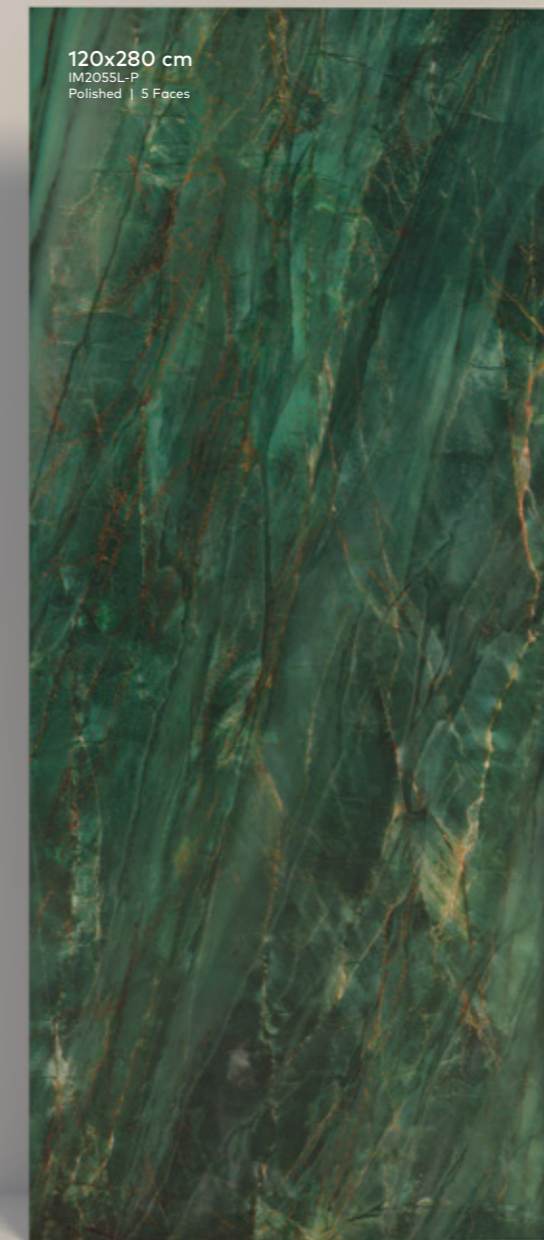


Wall: Aurora Polished — 120x280 cm

Aurora



Available other sizes upon demand. For more detail please contact sales department.





Polaris

Polaris is a new approach to modernity. Polaris has a pure white and homogeneous texture and exceptional charming linear black veins that brings minimal and modern concepts to your settings. Black and white dualism is the heart of Polaris. It sums up the purity and beauty of natural materials that creates functional and modern environments in multi-faced designs.



Wall: Polaris Natural — 120x280 cm
Floor: The Style Base Natural — 120x280 cm



Wall: Polaris Polished — 120x280 cm
Floor: Polaris Polished — 120x280 cm





Floor: Polaris Polished — 120x280 cm

Polaris



Available other sizes upon demand. For more detail please contact sales department.



160x320 cm
IM2025X-P
Polished | 4 Faces

IM2025X-N
Natural | 4 Faces

120x280 cm
IM2025L-P
Polished | 5 Faces

IM2025L-N
Natural | 5 Faces

80x160 cm
IM2025C-P
Polished | 8 Faces

IM2025C-M
Matte | 8 Faces

60x120 cm
IM2025R-P
Polished | 6 Faces

IM2025R-M
Matte | 6 Faces



Wall: Mystic Black Polished — 120x280 cm
Floor: Polaris Natural — 120x280 cm

Mystic Black

Mystic Black is an artistic marble with unique white and golden longitudinal delicate veins and deep black background. The contrast of its background and veins accompanied with moderate shades produce a refine and irreplaceable material in the world of modern luxury.





Wall: Mystic Black Polished — 120x280 cm
Floor: Polaris Natural — 120x280 cm



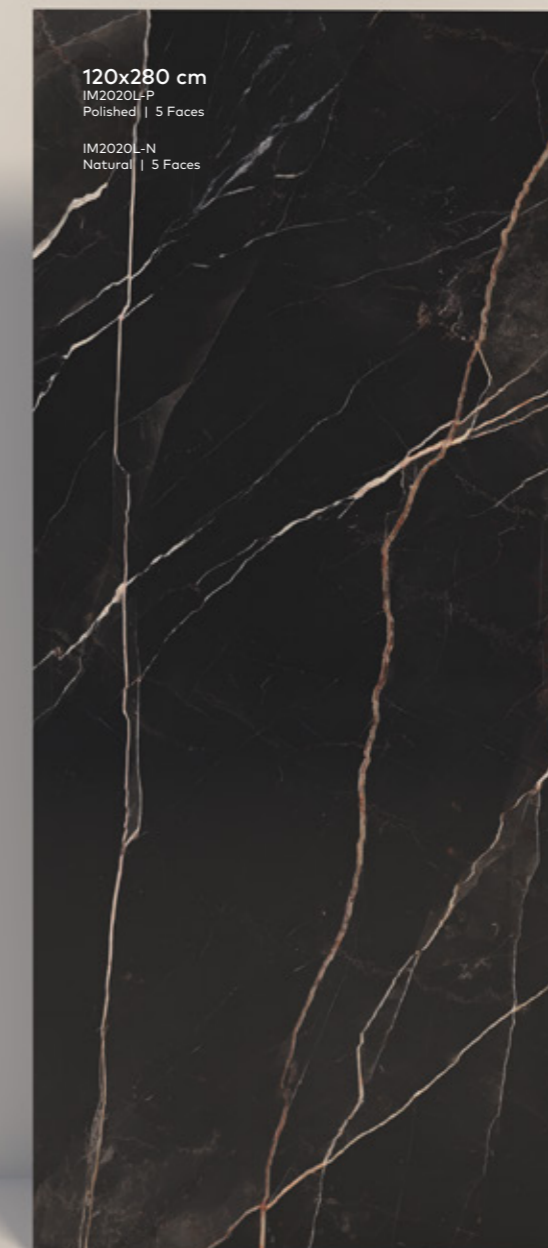
Wall: Mystic Black Polished — 120x280 cm



Floor: Mystic Black Polished — 120x280 cm

Mystic Black

Available other sizes upon demand. For more detail
please contact sales department.



120x280 cm
IM2020L-P
Polished | 5 Faces

IM2020L-N
Natural | 5 Faces



Invisible Gold

Invisible Gold is characterized by its white background and intertwined light golden and grey veins. Warp and weft veining creates a perfect structure which brings elegance to your spaces. This design in its polished surface appears as a jewel, in a brilliant texture which let you dress up and furnish spaces with a total look that has astonishing and glorious effect.





Wall: Invisible Gold Polished — 120x280 cm
Box: Invisible Gold Polished



Wall: Invisible Gold Polished — 120x280 cm
Box: Invisible Gold Polished





Counter: Invisible Gold Polished — 120x280 cm

Invisible Gold

Available other sizes upon demand. For more detail
please contact sales department.



120x280 cm
IM2040L-P
Polished | 5 Faces



Atlantis Black

Atlantis Black with a strong personality will add a great accent to stylish and elegant projects. Its saturated nature, sharp and vivid veins and dense background provide a visually charismatic pattern which makes this product a great choice for designers with different tastes.



Wall: Atlantis Black Polished and
The Syle Base Natural Evo-dry — 120x280
Floor: The Style Base Natural Evo-dry — 120x280 cm



Wall: Atlantis Black Polished — 120x280 cm
Floor: Fantastic Grey Polished — 120x280 cm



Wall: Atlantis Black Polished and The Syle Base Natural Evo-dry — 120x280
Floor: The Style Base Natural Evo-dry — 120x280 cm

Atlantis Black



Note that minor deviations could be possible at the faces' intersections.



Fantastic Grey

Fantastic grey features a mid-tone grey background with thin dark brown and dark grey veins. Although Fantastic Grey contains lots of details and colors, it yet keeps its grey characteristics. This marble conveys both a touch of elegance and robustness. It is an ideal choice for contemporary and modern interiors. Spaces designed by Fantastic Grey can tell stories with their unique and unforgettable details.



Wall: Fantastic Grey Polished — 120x280 cm
Floor: Invisible Gold Polished — 120x280 cm



Wall: Fantastic Grey Polished — 120x280 cm
Floor: Polaris Natural — 120x280 cm

Wall: Fantastic Grey Polished — 120x280 cm
Floor: Polaris Natural — 120x280 cm



Fantastic Grey

Available other sizes upon demand. For more detail
please contact sales department.





Panda

Panda reflects the art of nature, a white marble with black and green shades moving across its surface. Its eye-catching black veins motivate senses by inviting the viewers to feel its sophisticated chromatic intensity. Black and white combination along with green shades and inclusions in different faces makes a careful balanced pattern and veining that provides a strong personality to the interiors.



Wall: Panda Polished — 120x280 cm
Floor: Polaris Natural — 80x160 cm



Wall: Panda Polished — 120x280 cm







Wall: Panda Polished — 120x280 cm
Floor: Polaris Natural — 120x280 cm

Panda



Note that minor deviations could be possible at the faces' intersections.



120x280 cm
IM2065L-P
Polished | Book Match

Elevating Standards, Crafting Excellence

In an epoch where global standards benchmark quality, IMPERIO endeavors to transcend. Anchored by our avant-garde quality control lab, each ceramic piece evolves into a paragon of perfection. Our alliance with the standards organization amplifies our commitment. At IMPERIO, we don't chase standards; we generate them.



ISO 9001

ISO 9001 is the international standard for quality management system



12/10271

CE marking is an administrative marking that indicates conformity with health, safety, and environmental protection standards for products sold within the European Economic Area.



Modena Centro Prove s.r.l. è un laboratorio di prova che opera nel settore delle analisi chimiche e dei servizi tecnologici.



Laboratorio Cerámico Sebastián Carpi was the first national laboratory tests to be created for the evaluation of the quality of ceramic tiles.



European standard that defines terms and specifications of ceramic tiles



Seramik Araştırma Merkezi Turkish Ceramic Research Center Standard testing laboratory



Ministry of Road & Urban Development Road, Housing & Urban Development Research Center



8906997838

Institute of Standards and Industrial Research of Iran



Reference Projects

A Resounding Legacy in Iran's Ceramic Expanse

In Iran's ceramic domain, IMPERIO emerges as a beacon of unmatched excellence. With an unparalleled track record in both national and private endeavors, we've adorned a staggering 10 million square meters across 2,500 architectural marvels. In facades alone, our signature graces another 4 million square meters across 1100 landmarks. Beyond numbers, our collaborative journey with 8400+ industry maestros underscores our commitment. For those in quest of ceramic perfection, IMPERIO is the destination.



| A . | Years | Category | City |
|--|-------|-------------------------|---------|
| Abali Hotel | 1394 | Hotel | Tehran |
| Administrative Building Of Pishgaman Trade Center Yazd | 1395 | Commercial | Yazd |
| Agha Gol Residence | 1400 | Residential | Tehran |
| Almati Residence | 1393 | Residential | Almati |
| Ana Service And Exhibition Center | 1396 | Showroom | Kish |
| Ano | 1401 | Commercial | Mashhad |
| Anzali Free Zone Building | 1394 | Administrative | Anzali |
| Arad Tower Mashhad | 1397 | Commercial | Mashhad |
| Aren Shopping Center | 1393 | Commercial | Tehran |
| Arg Twin Towers | 1396 | Residential | Qom |
| Arian | 1401 | Administrative | Mashhad |
| Armitaj | 1392 | Administrative | Mashhad |
| Arsh Ajoudaniyeh Commercial Complex | 1394 | Commercial | Tehran |
| Arzesh Afarinane Saba | 1398 | Commercial | Tehran |
| Atana Hotel | 1399 | Administrative | Tehran |
| Azadi Clinic | 1394 | Hospital- Health Center | Tehran |
| B . | Years | Category | City |
| Bahonar Hospital Kerman | 1395 | Hospital- Health Center | Kerman |
| Bank Afarin Farmaniye Branch | 1395 | Bank | Tehran |
| Bank Kar Afarin Mashhad | 1396 | Bank | Mashhad |
| Bank Mellat Niavaran Branch | 1393 | Bank | Tehran |
| Baqiyatallah Dormitory | 1400 | Hotel | Tehran |
| Baqiyatullah Dormitory | 1400 | Hotel | Tehran |
| Baran 14 | 1400 | Residential | Tehran |
| Blood Research And Fractionation Building | 1395 | Hospital- Health Center | Tehran |
| C . | Years | Category | City |
| Central Administrative Building Of Shiraz City Train | 1396 | Administrative | Shiraz |
| Central Bank Multi -Story Prking Lot | 1400 | Bank | Tehran |
| Central Branch Of Karafarin Bank | 1399 | Administrative | Tehran |
| Commercial Jordan | 1399 | Administrative | Tehran |
| Court Of Administrative Justice | 1396 | Administrative | Tehran |
| D . | Years | Category | City |
| Dadman Administrative | 1397 | Administrative | Tehran |
| Darlan Daro | 1397 | Administrative | Pardis |
| Darulshafa Hospital | 1397 | Hospital- Health Center | Basra |
| Dena Hospital | 1391 | Hospital- Health Center | Shiraz |
| Dornika | 1400 | Commercial | Mashhad |
| E . | Years | Category | City |

| Ecomal Commercial Center | 1397 | Commercial | Karaj |
|---|-------|--------------------------|---------------|
| Ecomall | 1397 | Commercial | Karaj |
| Ecomall Hyperstar | 1397 | Hyper - Market | Karaj |
| Faculty Of Agriculture And Art Of Shahid University | 1395 | Educational | Tehran |
| Fannavaran Office Building | 1396 | Administrative | Tehran-Pardis |
| F . | Years | Category | City |
| Farkhonde Jordan | 1401 | Administrative | Mashhad |
| Farkhunde Jordan Office | 1401 | Administrative | Mashhad |
| Forensic Medicine Of Urmia | 1399 | Administrative | Tehran |
| G . | Years | Category | City |
| Golbaran Commercial & Recreational | 1397 | Commercial | Khuzestan |
| Gueno | 1396 | Administrative | Tehran |
| Gueno Administrative | 1396 | Administrative | Tehran |
| H . | Years | Category | City |
| Hajir Sanat Administrative | 1396 | Administrative | Tehran |
| Hisense | 1400 | Administrative | Tehran |
| I . | Years | Category | City |
| Imam Ali Najaf Hospital | 1391 | Hospital - Health Center | Najaf |
| Industry Mine Bank-Yazd | 1395 | Bank | Yazd |
| Iran Darouk | 1397 | Administrative | Tehran |
| Iran Elevator Trade Center | 1400 | Commercial | Tehran |
| Iranmall Official Building | 1394 | Administrative | Tehran |
| Islamic Azad University North Tehran Branch | 1395 | Educational | Tehran |
| Islamic Azad University Of Science And Research | 1395 | Educational | Tehran |
| Istak | 1400 | Administrative | Tehran |
| J . | Years | Category | City |
| Jamaran Office | 1395 | Administrative | Tehran |
| Jordan Commercial | 1400 | Commercial | Tehran |
| Jordan Skin And Hair Clinic | 1397 | Hospital- Health Center | Tehran |
| K . | Years | Category | City |
| Karestan Commercial Center | 1397 | Commercial | Tehran |
| Karina Mall Kish | 1395 | Commercial | Kish |
| Kerman Airport | 1400 | Airport | Kerman |
| Khalije Fars Commercial Center | 1394 | Commercial | Tehran |
| Kish Research Center | 1397 | Administrative | Kish |
| Koohsangi Residential & Commercial Complex | 1392 | Commercial | Mashhad |
| Kouroush Commercial & Recreation Center | 1393 | Commercial | Tehran |
| L . | Years | Category | City |
| Laleh | 1400 | Residential | Tehran |

| | | | |
|--|--------------|-------------------------|-------------|
| Lamkadeh Sofa Gallery | 1393 | Showroom | Tehran |
| Library Of Allameh Tabatabai University | 1396 | Educational | Tehran |
| M . | Years | Category | City |
| Madinah Al-Reza Hotel | 1392 | Hotel | Mashhad |
| Mapna | 1396 | Administrative | Kish |
| Mashhad City Council Hall | 1394 | Administrative | Mashhad |
| Mehre Of Iranian Kuhsangi | 1397 | Commercial | Mashhad |
| Mellat Bank Branches Administration Building | 1396 | Bank | Gorgan |
| Milad Hospital-Urmia | 1397 | Hospital- Health Center | Urmia |
| Ministry Of Agriculture Central Building | 1397 | Administrative | Tehran |
| Moallem Insurance | 1395 | Administrative | Tehran |
| Mofid University Qom | 1395 | Educational | Qom |
| Moheb Kosar Hospital | 1393 | Hospital- Health Center | Tehran |
| Mollasadra Administrative | 1400 | Administrative | Tehran |
| Mr. Pazuki Residence | 1399 | Administrative | Tehran |
| N . | Years | Category | City |
| Nazeran Hospital | 1399 | Administrative | Tehran |
| Negin-E Alborz | 1400 | Administrative | Ahvaz |
| Negine Pasargad Hotel | 1394 | Hotel | Mashhad |
| Nobahar Commercial Center | 1393 | Commercial | Kermanshah |
| Novin Pelas Hotel | 1401 | Hotel | Mashhad |
| O . | Years | Category | City |
| Official Building Of Mapna Company | 1395 | Administrative | Tehran |
| Official Building Pharmacy Of Iran Hormun | 1394 | Administrative | Tehran |
| P . | Years | Category | City |
| Pars Hospital-Rasht | 1394 | Hospital- Health Center | Rasht |
| Pars Residence | 1395 | Residential | Kerman |
| Parsian Shahr Kord Hospital | 1397 | Hospital- Health Center | Shahrekord |
| Penta Exhibition And Office Building | 1398 | Administrative | Parand |
| Q . | Years | Category | City |
| Qeshm Airport | 1396 | Airport | Qeshm |
| R . | Years | Category | City |
| Rayan Business Complex | 1394 | Administrative | Tehran |
| Razi Hospital | 1398 | Hospital- Health Center | Tehran |
| Razi Hospital | 1397 | Hospital- Health Center | Tehran |
| Refah Sanandaj Bank | 1397 | Bank | Sanandaj |
| Residence Raspina | 1395 | Residential | Saari |
| Rodhen Azad University | 1396 | Educational | Rodhen |
| Royal Commercial | 1395 | Commercial | Tehran |

| | | | |
|---|--------------|-------------------------|-------------|
| Royal-E Mirdamad | 1397 | Commercial | Tehran |
| Royaye Shargh | 1397 | Commercial | Tehran |
| S . | Years | Category | City |
| Saadi Hospital-Basra | 1396 | Hospital- Health Center | Basra |
| Salsabil Hotel | 1394 | Hotel | Mashhad |
| Sam Group | 1400 | Commercial | Tehran |
| Saman Bank Branch Of Sajjad Boulevard Mashhad | 1386 | Bank | Mashhad |
| Sana Center | 1397 | Commercial | Tehran |
| Sarafha Administrative | 1401 | Administrative | Mashhad |
| Seoul Hospital South Korea | 1401 | Hospital- Health Center | Mashhad |
| Setareh Vanak | 1400 | Administrative | Tehran |
| Shahr-E Aftab | 1394 | Service - Recreational | Tehran |
| Shaparak | 1394 | Service - Recreational | Tehran |
| Shiraz International Airport | 1396 | Airport | Shiraz |
| Shiraz Railway Station | 1388 | Metro - Train Station | Shiraz |
| Simin Farmanieh Administrative | 1400 | Administrative | Tehran |
| Sina Hospital | 1401 | Hospital- Health Center | Mashhad |
| Sina Noor Shahriyar | 1395 | Hospital- Health Center | Shahriyar |
| Spadana Administrative Office | 1396 | Administrative | Mashhad |
| Subhanian Office | 1399 | Administrative | Tehran |
| Sunstar | 1400 | Administrative | Tehran |
| T . | Years | Category | City |
| Taha Powish Drilling Company | 1399 | Administrative | Tehran |
| Tax Administrative | 1400 | Administrative | Tehran |
| Tax Office | 1400 | Administrative | Tehran |
| Toranj Tower | 1395 | Residential | Tehran |
| U . | Years | Category | City |
| Urmia International Airport | 1396 | Airport | Urmia |
| V . | Years | Category | City |
| Vanak Administrative | 1399 | Administrative | Tehran |
| Velayat Official Building | 1395 | Administrative | Tehran |
| Vina Administrative | 1394 | Administrative | Tehran |
| W . | Years | Category | City |
| Water And Sewage Area2 | 1395 | Administrative | Tehran |
| Y . | Years | Category | City |
| Yas Kerman Doctors Building | 1395 | Hospital- Health Center | Kerman |

TECHNICAL
INFORMATION

Technical Characteristics

| CHARACTERISTICS | Annex G Group Bla | | Test Method | IMPERIO Test Result |
|---|---|--------------|----------------|---------------------|
| | Requirments for normal size n >15cm | | | |
| DIMENSIONS AND SURFACE QUALITY | | | | |
| Length and width (cm) | ±0.6% | max ±2mm | EN ISO 10545-2 | Affirmative |
| Thickness | +5% | max ±0.5mm | EN ISO 10545-2 | Affirmative |
| Rectangularity | ±0.5% | max ±2mm | EN ISO 10545-2 | Affirmative |
| Straightness of sides | ±0.5% | max ±1.5mm | EN ISO 10545-2 | Affirmative |
| Length and width (cm) | N >15cm ±0.6% | max ±2mm | EN ISO 10545-2 | Affirmative |
| Thickness | ±5% | max ±0.5mm | EN ISO 10545-2 | Affirmative |
| Rectangularity | ±0.5% | max ±2mm | EN ISO 10545-2 | Affirmative |
| Straightness of sides | ±0.5% | max ±1.5mm | EN ISO 10545-2 | Affirmative |
| Surface flatness | ±0.5% | max ±2mm | EN ISO 10545-2 | Affirmative |
| SURFACE FLATNESS | | | | |
| a) Center curvature ,related to diagonal calculated from the work sizes | +0.5% | max ±2mm | EN ISO 10545-2 | Affirmative |
| b) Edge curvature, related to the corresponding work size | ±0.5% | max ±2mm | EN ISO 10545-2 | Affirmative |
| c) Warpage, related to diagonal calculated from the work size | ±0.5% | max ±2mm | EN ISO 10545-2 | Affirmative |
| PHYSICAL PROPERTIES | | | | |
| Water absorption (in %by mass) | E <0.5%Individual | Maximum 0.6% | EN ISO 10545-3 | Affirmative |
| BREAKING STRENGTH (N)for Thickness ≥7.5mm | Not Less Than 1300N | | EN ISO 10545-4 | Affirmative |
| Flexural tensile strength or Modulus of rupture (N /mm²) | Minimum 35N /mm² Individual Minimum 32N /mm² | | | Affirmative |
| Impact resistance ,as: Coefficient of restitution (COR) | Declared Value | | EN ISO 10545-5 | Affirmative |
| Resistance to deep abrasion of unglazed tiles : Removed value (mm³) | Maximum 175 mm³ | | EN ISO 10545-6 | Affirmative |
| Resistance to surface abrasion of glazed tiles intended for use on floors | Abrasion class and cycles passed | | EN ISO 10545-7 | Affirmative |
| Coefficient of linear thermal expansion | Declared Value | | EN ISO 10545-8 | Affirmative |
| Resistance to thermal shock | Pass according to EN ISO 10545-1 | | EN ISO 10545-9 | Affirmative |

| CHARACTERISTICS | Annex G Group Bla | | Test Method | IMPERIO Test Result |
|---|---|--|-----------------|---------------------|
| | Requirments for normal size n >15cm | | | |
| PHYSICAL PROPERTIES | | | | |
| Frost resistance | Pass according to EN ISO 10545-1 | | EN ISO 10545-12 | Affirmative |
| Water absorption (in %by mass) | E ≤0.5% Individual maximum 0.6% | | EN ISO 10545-3 | Affirmative |
| Breaking strength for thickness 7.5mm and more | Not less than 1300N | | EN ISO 10545-4 | Affirmative |
| Flexural tensile strength or Modulus of rupture (N /mm²) | Minimum 35N /mm² Individual minimum 32N /mm² | | | Affirmative |
| Resistance to deep abrasion of unglazed tiles: Removed Volume | Maximum 175mm³ | | EN ISO 10545-6 | Affirmative |
| Coefficient of linear thermal expansion | Declared value | | EN ISO 10545-8 | Affirmative |
| Resistance to thermal shock | Pass according to EN ISO 10545-1 | | EN ISO 10545-9 | Aft mative |
| Frost Resistance | Pass according to EN ISO 10545-1 | | EN ISO 10545-12 | Affirmative |
| CHEMICAL PROPERTIES | | | | |
| Resistance to the low concentration of acids & alkanes | Declared Value | | EN ISO 10545-13 | Affirmative |
| Resistance to the high concentration of acids & alkanes | Declared Value | | | Affirmative |
| Resistance to household chemicals & swimming pool salts | Minimum Class B | | | Affirmative |
| Resistance to staining (unglazed tiles) | Declared Value | | EN ISO 10545-14 | Affirmative |
| Resistance to staining (Unglazed tiles) | Declared value | | EN ISO 10545-14 | Affirmative |
| Resistance to the low concentration of acids & alkalis | Declared value | | EN ISO 10545-13 | Affirmative |
| Resistance to the high concentration of acids & alkalis | Declared value | | | Affirmative |
| Resistance to household chemicals & swimming Pool Salts | Minimum class B | | | Affirmative |

Technical Characteristics

WATER ABSORPTION

ISO 10545-3

The water absorption of IMPERIO slabs is minimized thanks to production and quality control standards of an extremely high level, which guarantees compactness and a reduced level of porosity. The value given in the tables of technical characteristics refers to the percentage of water absorbed with respect to the mass.

BENDING RESISTANCE

ISO 10545-4

The value expressed allows an analysis of the ability of the slabs to withstand static and dynamic stress in the test conditions.

ABRASION RESISTANCE

ISO 10545-6

The test is performed on unglazed (UGL) surfaces in order to determine the quantity of material that is removed following the action of an abrasive disc (150 revs). The IMPERIO slabs prove to be more resistant the less material is removed by the disc.

FROST RESISTANCE

ISO 10545-12

Outdoor applications are particularly prone to deterioration due to frost, because in the event that any water absorbed turns into ice, this can lead to the tile breaking. The IMPERIO slabs are not damaged by frost in any way thanks to their compactness and low porosity.

RESISTANCE TO CHEMICAL AGGRESSION

ISO 10545-13

The laboratory analysis is able to determine the resistance of glazed (GL) and unglazed (UGL) surfaces to chemical aggression by using acids and bases with a high concentration in line with the following classification: LA, HA, A: no visible effect.

SLIPPERINESS

DIN 51130-1

In this test, a person is asked to stand on a flat surface covered with tiles and sprinkled with oil. This surface is then tilted until the person, wearing specific footwear, starts to slip. The following classification is established by the angle of inclination of the tiled surface at the moment the person starts to slip:

up to <6° unclassified
6°< to 10° R9

STAIN RESISTANCE

ISO 10545-14

Three different elements (oil, iodine solution, and green chrome solution) are applied to and left on the tiles for 24 hours, after which they are then cleaned:

» Class E 5

The stain is removed with hot running water for 5 minutes.

» Class E 4

The stain is removed using a weak neutral detergent and a non-abrasive sponge.

» Class E 3

The stain is removed using a basic detergent containing an abrasive agent and a rotating brush with hard bristles.

» Class E 2

The stain is removed using a suitable solvent, left on the stain for 24 hours.

» Class E1

The stain cannot be removed.

CHARACTERISTICS OF THE IMPERIO SLABS

The IMPERIO slabs are produced only with natural, mineral raw materials. Research on the product has made it possible to obtain an effect that is extremely close to the natural material, with the advantage that the typical defects and blemishes in the original product found in nature can be removed using technology.

» Basic formats and special trims can be supplied in autonomous shades. Any minor variations in size fall within the standard tolerance values;

» Any minor dots add to the natural feel of the material;

» Any second choice or discontinued products are sold on an "as seen" basis and may not be returned;

» The use of IMPERIO slabs with non-rectified edges is allowed only after the de-tensioning of the slab by removing any excess from the outer edges, as per the specifications in the technical manual.

DOCUMENTATION

The engineered surface reserves the right to make changes to the products illustrated in this catalog for production requirements or with the aim of improving the technical/aesthetic quality. The samples are purely indicative. The packaging and weight information is shown may vary for production requirements. To avoid any problems, we recommend contacting the sales department at the time of placing an order.

USE AND MAINTENANCE

SUGGESTIONS FOR CORRECT FITTING AND CLEANING

Although the slabs are mainly intended for furnishing, IMPERIO slabs may also be fitted in the traditional way as flooring and wall coverings to create spaces with a "total look". The following specifications refer to slabs fitted as flooring and wall coverings. With regard to the gluing of the slabs on furnishing elements, we recommend you consult the IMPERIO technical manual.

FITTING

When you receive the material ordered and in any case before fitting, it is important to check carefully the characteristics of the material (compliance with size, shade, and quality). No complaints will be accepted for any materials that have already been fitted if the defects were visible prior to fitting. To obtain the best aesthetic results, we recommend mixing the graphics accurately to avoid repeating patterns and to obtain the best possible results in terms of layout and color. The slabs can be fitted using specific high-performance adhesives for porcelain stoneware, adhesives in category C2 or above. We recommend applying the adhesive on both sides to prevent any breakages of the material once fitted. Please remember that at the time of fitting, the substrate must be stable, dry, and properly prepared, not frosted, and not too hot and that it is necessary in any case to follow the instructions provided by the manufacturers of the materials for the specific substrates and adhesives used. Cement-based adhesives must be applied at room temperature, in general between 5°C and 30/35°C. It is hereby understood that we recommend observing the technical times indicated by the manufacturers of the adhesives used. The most suitable adhesives for fitting the IMPERIO slabs are listed in the European Standard currently in force: EN12004. When fitting the material, avoid using pencils (graphite) or permanent markers to make marks on the surface, particularly on polished products. The IMPERIO slabs can be shaped and cut using purpose-built diamond discs and equipment for porcelain stoneware.

JOINTS AND GROUTING

We strongly advise against fitting the slabs without joints. We also recommend a minimum joint of 3 mm (this type of fitting allows the grout to have a better grip on the sides of the slabs, greater absorption of any movements of the substrate, and consequently of the slabs themselves). In large, open spaces it is absolutely essential to position the expansion joints at regular intervals; in smaller rooms, on the other hand, it is sufficient to leave a slight space between the tiled surface and the walls around the room, adding a final touch with a skirting board or with the wall covering. Please refer in any case to the advice/suggestions of the planner, the works director, or the tile fitter to avoid problems of any sort. For the best possible results, we suggest using tone-on-tone grouting. It is important to remove any excess grouting immediately and accurately after application while still fresh, using a sponge and plenty of water. A few days after fitting, once the joints are completely dry, it is essential to thoroughly clean the tiled surface using buffered acids (see the after fitting instructions) in order to completely remove all cement-based residues.

CLEANING "AFTER FITTING"

Properly cleaning the files after they have been fitted is crucial. If residues of grouting are not properly removed, this may leave marks that are difficult to remove later, due to a film of cement that can absorb any kind of dirt. It is essential to loosen and eliminate these residues completely using buffered acids diluted in water (read the instructions for use on the packages of the products used), soon after fitting, and to thoroughly rinse any residues from the fitted surface in order to prevent any damage to the material. It is preferable to try cleaning a small part of the surface first; if the results are good, the entire surface can then be cleaned. After this, the floor must then be cleaned using a basic or alkaline detergent. These must be degreasing because the surface treatment might help to trap dirt. For Polished slabs with a marble effect, IMPERIO recommends taking special care when cleaning the surface using buffered acids, as the surface may be damaged if the acid is not removed quickly. For polished surfaces, the use of non-abrasive cleaning equipment is necessary to prevent the surface from losing its shine or becoming scratched.

ROUTINE CLEANING

For routine cleaning of the IMPERIO slabs, we strongly advise against the use of waxes, greasy soaps, fillers and various treatments (water repellent) treatments. In order to prevent any shiny patinas from forming on the slabs, IMPERIO would like to point out that hydrofluoric acid (HF) and its derivatives cause irrevocable damage to its products. For routine cleaning operations, IMPERIO recommends the use of bleach and ammonia, appropriately diluted in water; for the Polished finish, it suggests drying the floor after cleaning to avoid any marks.

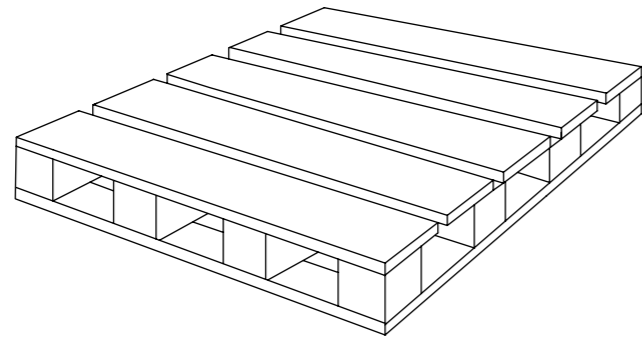
EXTRAORDINARY CLEANING

In the case of particularly stubborn stains, we recommend the use of specific detergents, which are indicated in greater detail in the table entitled "cleaning products". Furthermore, it should not be forgotten that it is easier to remove any stain when still fresh. It is always important to test the detergents on a small area before applying them to the entire surface, particularly on Polished surfaces.

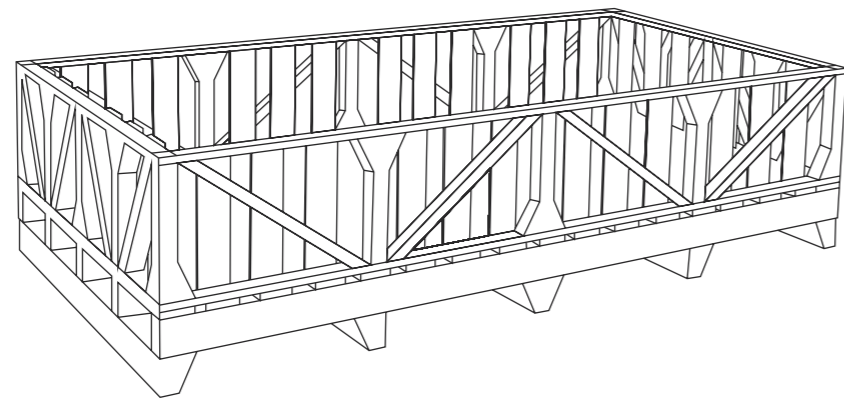
RAISED FLOORINGS

In the case of raised floorings, it is not possible to use a large quantity of water; we, therefore, recommend using a floor cloth that has been properly wrung. Routine cleaning must be carried out using purpose made floor cloths, lukewarm water, and detergent, reducing the amount of water used. Stains can still be removed using concentrated products directly on the stains.

Packing



| Size | Thickness | SQM/Box | Pieces/Box | KG/Box | Box/Pallet | KG/Pallet | SQM/Pallet |
|--------------------|-----------|---------|------------|--------|------------|-----------|------------|
| 20x120 cm | 11.5 mm | 0.96 | 4 | 26 | 84 | 2021 | 80.64 |
| 60x120 cm Polished | 11.5 mm | 1.44 | 2 | 38.2 | 60 | 2292 | 86.4 |
| 60x120 cm Matte | 11.5 mm | 1.44 | 2 | 37.5 | 60 | 2250 | 86.4 |
| 60x60 cm | 20 mm | 0.72 | 2 | 31.04 | 40 | 1241.6 | 28.8 |
| 100x100 cm | 10 mm | 2 | 2 | 46 | 42 | 1932 | 84 |



| Size | Thickness | SQM/Box | Pieces/Box | KG/Box | Box/Pallet | KG/Pallet | SQM/Pallet |
|------------|-----------|---------|------------|--------|------------|-----------|------------|
| 80x160 cm | 9.5 mm | 1.28 | - | 27.4 | 50 | 1370 | 64 |
| 120x120 cm | 9.5 mm | 1.44 | - | 32.5 | 45 | 1530 | 64.8 |
| 120x240 cm | 9.5 mm | 2.88 | - | 62 | 36 | 2354 | 103.68 |
| 120x280 cm | 9.5 mm | 3.36 | - | 72 | 36 | 2730 | 120.96 |
| 160x320 cm | 9.5 mm | 5.12 | - | 110 | 22 | 2600 | 112.64 |

Technical Details

Table -2 Characteristic of Ceramic Tiles Required for Different Applications

| CHARACTERISTICS ^{a)} | | FLOORINGS | | WALLS | | TEST METHOD |
|-------------------------------|---|-----------|----------|----------|----------|-------------------------------------|
| A) | DIMENSIONS AND SURFACE QUALITY | INTERIOR | EXTERIOR | INTERIOR | EXTERIOR | REFERENCE |
| A.1 | Length and Width (cm) | X | X | X | X | EN ISO 10545-2 |
| A.2 | Thickness | X | X | X | X | EN ISO 10545-2 |
| A.3 | Straightness of Sides (i.e. Facial Sides) ^{b)} | X | X | X | X | EN ISO 10545-2 |
| A.4 | Rectangularity ^{b)} | X | X | X | X | EN ISO 10545-2 |
| A.5 | Surface Flatness | X | X | X | X | EN ISO 10545-2 |
| A.6 | Surface Quality | X | X | X | X | EN ISO 10545-2 |
| B) | PHYSICAL PROPERTIES | INTERIOR | EXTERIOR | INTERIOR | EXTERIOR | REFERENCE |
| B.1 | Water Absorption | X | X | X | X | EN ISO 10545-3 |
| B.2 | Breaking Strength ^{c)} | X | X | X | X | EN ISO 10545-4 |
| B.3 | Flexural Tensile Strength ^{d)} or Modules of Rupture ^{d)} | X | X | X | X | EN ISO 10545-4 |
| B.4 a | Resistance to Deep Abrasion -Unglazed Tiles ^{e)} | X | X | | | EN ISO 10545-6 |
| B.4 b | Resistance to Surface Abrasion -Glazed Tiles ^{e)} | X | X | | | EN ISO 10545-7 |
| B.5 | Linear Thermal Expansion ^{g)} | X | X | X | X | EN ISO 10545-8 |
| B.6 | Resistance to Thermal Shock ^{f)} | X | X | X | X | EN ISO 10545-9 |
| B.7 | Resistance to Cracking ^{g)} | X | X | X | X | EN ISO 10545-11 |
| B.8 | Freeze -Thaw Resistance ^{h)} | | X | | X | EN ISO 1015-12 |
| B.9 | Slipperiness | X | X | | | FprCEN /TS 16165:2011 ⁱ⁾ |

| CHARACTERISTICS ^{o)} | | FLOORINGS | | WALLS | | TEST METHOD |
|-------------------------------|---|-----------------|-----------------|-----------------|-----------------|-------------------|
| B.10 a | Bond Strength / Adhesion ^{k)} - Cementitious Adhesives | | | X | X | EN 12004:2007,4.1 |
| B.10 b | Bond Strength / Adhesion ^{k)} - Dispersion Adhesives | | | X | X | EN 12004:2007,4.2 |
| B.10 c | Bond Strength / Adhesion ^{k)} - Reaction Resin Adhesives | | | X | X | EN 12004:2007,4.3 |
| B.10 d | Bond Strength / Adhesion ^{k)} - Mortar | | | X | X | EN ISO 10545-12 |
| B.11 | Moisture Expansion ^{q)} | X | X | X | X | EN ISO 10545-10 |
| B.12 | Small Color Differences ^{m)} | X | X | X | X | EN ISO 10545-16 |
| B.13 | Impact Resistance ⁿ⁾ | X | X | | | EN ISO 10545-5 |
| B.14 | Reaction to Fire ^{o)} | X | | X | X | WT |
| B.15 | Tactility ^{p)} | X | X | | | CEN TS 15209) |
| C) | CHEMICAL PROPERTIES | INTERIOR | EXTERIOR | INTERIOR | EXTERIOR | REFERENCE |
| C.1 a | Resistance to Staining -Glazed Tiles ^{s)} | X | X | X | X | EN ISO 10545-14 |
| C.1 b | Resistance to Staining -Unglazed Tiles ^{s)} | X | X | X | X | EN ISO 10545-14 |
| C.2 a | Resistance to Acids and Alkalis of Low Concentration ^{t)} | X | X | X | X | EN ISO 10545-13 |
| C.2 b | Resistance to Acids and Alkalis of High Concentration ^{t)} | X | X | X | X | EN ISO 10545-13 |
| C.2 c | Resistance to Household Cleaning Agents and Swimming Pool Chemicals ^{t)} | X | X | X | X | EN ISO 10545-13 |
| C.3 a | Release of Cadmium -Glazed Tilest ^{u)} | X | X | X | X | EN ISO 10545-15 |
| C.3 b | Release of Lead -Glazed Tilest ^{u)} | X | X | X | X | EN ISO 10545-15 |
| C.3 c | Release of Other Dangerous Substances ^{u)} | X | X | X | X | As Relevant |

Ceramic tiles shall be classified into groups according to two parameters: by their method of manufacture (also referred to "shaping") that is, extrusion (method A) or dry-pressing (method B), and by their water absorption level (see 3.9 and Table 1). The groups do not presuppose the usage of the products. The requirements for each product group shall be as given in Annexes A to L.

Table 1 - Classification of ceramic tiles with respect to water absorption and shaping

| Shaping | Water Absorption (E_b) | | | |
|-------------------------|--|---|---|--|
| | Group I $E_b \leq 3\%$ | Group II _a $3\% < E_b \leq 6\%$ | Group II _b $6\% < E_b \leq 10\%$ | Group III $E_b > 10\%$ |
| Method A Extruded | Group AI _a $E_b \leq 0.5\%$ (see Annex L) | Group AII _{a-1} ^{a)} (see Annex B) | Group AII _{b-1} ^{a)} (see Annex D) | Group AIII (see Annex F) |
| | Group AI _b $0.5\% < E_b \leq 3\%$ (see Annex A) | Group AII _{a-2} ^{a)} (see Annex C) | Group AII _{b-2} ^{a)} (see Annex E) | Group BIII _b (see Annex K) |
| Method B Dry-pressed | Group BI _a $E_b \leq 0.5\%$ (see Annex G) | Group BII _a (see Annex I) | Group BII _b (see Annex J) | |
| | Group BI _b $0.5\% < E_b \leq 3\%$ (see Annex H) | | | |

a) Groups AII and AII_b are divided into two parts (parts 1 and 2) with different product specifications. Part 1 covers most of the tiles in the group; part 2 covers certain specific products, which are manufactured under different names (e.g. terre cuite in France and Belgium, cotton in Italy, and baldosin Catalan in Spain).

b) Group BIII covers glazed ceramic tiles only. There is no quantity of dry-pressed unglazed tiles produced with water absorption greater than 10% that is not covered by this product group.

Requirements for Dry-pressed Ceramic Tiles With Low Water Absorption of GROUP BI_a (E_b ≤0.5%)

Requirements for Dimension and Surface Quality and for Physical and Chemical Properties of this Group of Ceramic Tiles Shall be in Accordance With Table G.1

Table G.1 - Requirements for Dry-pressed Ceramic Tiles with Low Water Absorption, GROUP BI_a (E_b ≤0.5%)

| CHARACTERISTICS | Requirements for Nominal Size N | | | Test Method |
|--|--|-----------|---------|----------------|
| | 7 cm < N < 15 cm | N ≥ 15 cm | | |
| | (mm) | % | (mm) | |
| A) DIMENSIONS AND SURFACE QUALITY | | | | |
| A.1 LENGTH AND WIDTH | | | | |
| The Work Size Shall be Chosen as Follows for : | | | | |
| a) Modular Tiles : | In order to allow a nominal joint width of between 2 and 5mm | | | - |
| b) Non -modular Tiles : | So that the difference between the work size and normal size is not more than 2% (max 0.5mm) | | | - |
| The Permissible Deviation of the Average Size for the Each Tile (2 or 4Sides) From the Work Size (W) | +0.9 mm | ±0.6% | ±2.0 mm | EN ISO 10545-2 |
| A.2 THICKNESS | | | | |
| a) The Thickness Shall be specified | Declared thickness | | | - |
| b) The Permissible Deviation ,of the Average Thickness of Each Tile from the Work Size Thickness | +0.5 mm | ±5% | +0.5 mm | EN ISO 10545-2 |
| A.3 STRAIGHTNESS OF SIDES (Facial Sides) | | | | |
| The Maximum Permissible Deviation from Straightness, Related to the Corresponding Wok Size | +0.75 mm | ±0.5% | +1.5 mm | EN ISO 10545-2 |
| A.4 RECTANGULARITY_b | | | | |
| The Maximum Permissible Deviation from Rectangularity, Related to the Corresponding Work Size | +0.75 mm | ±0.5% | +2 mm | EN ISO 10545-2 |
| A.5 SURFACE FLATNESS | | | | |

- a Requirements for these characteristics are given in Annex A to L.
- b Not applicable for ceramic tiles having curved shapes.
- c For floorings only.
- d For walls only.
- e See N.2.2.
- f For ceramic tiles which intended use is subject to localized thermal shock
- g For glazed ceramic tiles only.
- h For ceramic tiles that are intended to be used where frost may apply.
- i For floorings on pedestrian circulation areas (where required are regulation).
- j Unless a different test method is required by national regulations in the market of the relevant Member State(s) for the intended use, in which case the test method and results shall be declared as given therein.
- k For walls when performing the test with actual ceramic tiles and suitable adhesive(s) or mortar only.
- l See N.2.3.
- m See N.2.6.
- n See N.2.1.
- o For ceramic tiles intended to be used for internal floorings and for internal and external walls only.
- p For tactile paving surface only i.e. when required for blind or vision impaired persons.
- q See N.2.5.
- r See N.2.4.
- s When relevant, see Notes 1 and 2 in ZA.1 for the release of other dangerous substances, if any.
- t For glazed ceramic tiles only, when intended to be used on worktops and on wall surfaces where food preparation takes place and food may be in direct contact with the glazed tile surface. As indicative limits, reference could be made to Direct 2005/31/CE.

NOTE 1 Characteristics given in this table in "plain" text are relevant to all intended uses, while those in "italics" are additionally relevant for the specific intended use(s) only.

NOTE 2 Characteristics, given in this table in "bold" text, are the mandated essential characteristics or the corresponding proxy characteristics (for CE marketing, see Annex ZA) and those in "normal" text, the voluntary characteristics (not for CE marketing).

| CHARACTERISTICS | Requirements for Nominal Size N | | | Test Method |
|---|--|-----------|-------|-----------------------------------|
| | 7 cm < N < 15 cm | N ≥ 15 cm | | |
| | (mm) | % | (mm) | |
| b) Edge Curvature, Related to the Corresponding Work Size | +0.75 mm | ±0.5% | +2 mm | EN ISO 10545-2 |
| B) PHYSICAL PROPERTIES | | | | |
| B.1 WATER ABSORPTION (IN % BY MASS) | E _w ≤ 0.5 Individual maximum 0.6% | | | EN ISO 10545-3 |
| B.2 BREAKING STRENGTH, FOR : | | | | |
| a) Thickness ≥ 7.5mm | Not less than 1300N | | | EN ISO 10545-4 |
| b) Thickness < 7.5mm | Not less than 700N | | | EN ISO 10545-4 |
| B.3 FLEXURAL TENSILE STRENGTH OR MODULUS OF RUPTURE ^d | Minimum 35N /mm ² Individual minimum 32N / mm ² | | | EN ISO 10545-4 |
| B)PHYSICAL PROPERTIES | | | | |
| B.4 ABRASION RESISTANCE | | | | |
| a) Resistance to Deep Abrasion of Unglazed Tiles : Removed Volume | Maximum 175 mm ³ | | | EN ISO 10545-6 |
| b) Resistance to Surface Abrasion of Glazed Tiles Intended for Use on Floors ^e | Abrasion class and cycles passed | | | EN ISO 10545-7 |
| B.5 COEFFICIENT OF LINEAR THERMAL EXPANSION | | | | |
| - From Ambient Temperature to 100 °C | Declared value ^f | | | EN ISO 10545-8 |
| B.6 THERMAL SHOCK RESISTANCE | Pass according to EN ISO 10545-1 ^g | | | EN ISO 10545-9 |
| B.7 CRAZING RESISTANCE: Glazed Tiles ^h | Pass according to EN ISO 10545-1 ^g | | | EN ISO 10545-11 ^h |
| B.8 FROST RESISTANCE | Pass according to EN ISO 10545-1 ^g | | | EN ISO 10545-12 |
| B.9 SLIPPERINESS | Declared value (s) ^g | | | PrCEN /TS 16165:2011 ⁱ |
| B.10 BOND STRENGTH / ADHESION ^j , FOR : | | | | |
| a) Cementitious Adhesives ^k | Declared value (s) | | | EN 12004:2007,4.1 ^l |

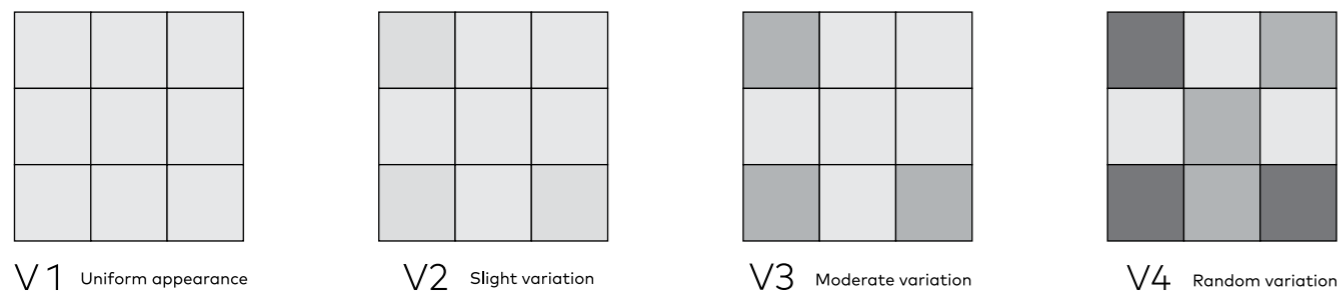
| CHARACTERISTICS | Requirements for Nominal Size N | | | Test Method |
|--|--|-----------|------|--------------------------------|
| | 7 cm < N < 15 cm | N ≥ 15 cm | | |
| | (mm) | % | (mm) | |
| b) Dispersion Adhesives ^k | Declared value (s) | | | EN 12004:2007,4.2 ^l |
| a) Glazed Tiles | ΔE < 0.75 | | | EN ISO 10545-16 |
| b) Unglazed Tiles | ΔE < 1.0 | | | EN ISO 10545-16 |
| B.13 IMPACT RESISTANCE, as: | | | | |
| - Coefficient of Restitution (COR) | Declared value ^f | | | EN ISO 10545-5 |
| B.14 REACTION TO FIRE | (Class A1 or A1 _{FL}) ^m | | | - |
| B.15 TACTILITY ⁿ | Declared surface description ^g | | | CEN /TS 15209 ^o |
| C) CHEMICAL PROPERTIES | | | | |
| C.1 RESISTANCE TO STAINING, FOR : | | | | |
| a) Glazed Tiles | Minimum class 3 | | | EN ISO 10545-14 |
| b) Unglazed Tiles | Declared value ^f | | | EN ISO 10545-14 |
| C.2 RESISTANCE TO CHEMICAL | | | | |
| a) Resistance to Low Concentration of Acids and Alkalis | Declared value ^f | | | EN ISO 10545-13 |
| b) Resistance to High Concentration of Acids and Alkalis | Declared value ^f | | | EN ISO 10545-13 |
| c) Resistance to Household Chemicals and Swimming Pool Salts | Minimum class B | | | EN ISO 10545-13 |
| C.3 RELEASE OF DANGEROUS SUBSTANCES | | | | |
| a) Cadmium (in mg /dm ²) | Declared value ^g | | | EN ISO 10545-15 |
| b) Lead (in mg /dm ²) | Declared value ^g | | | EN ISO 10545-15 |
| c) Other Dangerous Substances ^o | Declared value | | | As Relevant |

- a Similar joint widths may be used to apply to the traditional systems based on non-metric sizes.
- b Not applicable for tiles having curved shapes.
- c Because of firing, a slight variation from the standard color is unavoidable. This does not apply to intentional irregularities of color variation of the face of tiles(which can be unglazed, glazed, or partly glazed) or to the color variation over a tile area which is characteristic of the given tile and desirable. Spots or colored dots which are introduced for decorative purposes are not considered a defect.
- d Not applicable to ceramic tiles with breaking strength > 3000 N
- e Where required, the abrasion class resistance according to Annex M may be declared.
- f See Annex N additional information on applicability.
- g See table 2 for uses where it is applicable.
- h Certain decorative effects may have a tendency to craze. They are to be identified by the manufacturer, in which case the crazing test given in EN ISO 11-10545 is not applicable.
- i Unless a different test method is required by national regulations in the market of the relevant member state(s) for the intended use, in which case the test method and result shall be declared as given therein (as long as consolidated European test method is not available).
- j For intended uses subject to requirements against accidental fall of the object on to transit areas only. Tests are to be performed using the actual tiles and suitable adhesive and/or mortar.
- k For the types of adhesives, defined in EN 12004:2007 only.
- l The proposed test methods are intended to determine the adhesion strength of the adhesive and have not been developed to determine ceramic the characteristics. Thus, there might be no correlation between the declared bond strength and the performance of the tile in use (other factors proper installation techniques and type of background support will influence the final performance).
- m Ceramics, as a homogeneously distributed material used for ceramic tiles, is considered as a material of known and stable performance with respect to the reaction to fire performance as it does not consist of any organic material. As such it does not contribute to the fire and it may be considered without the need for testing (CWT) as the class AT material7. The reaction to the fire performance of ceramic tiles may also be classified also as class AT according to EN ISO 1-13501.
- n For tactile paving surface i.e. when required for blind or vision impaired persons.
- o When relevant, see notes 1 and 2 in ZA.1 for the performance of the product concerning these characteristics, if any to be declared.

Symbology



SHADE VARIATION



Cleaning Products

| TYPES OF DETERGENT <small>Where the sale is permitted</small> | SOLVENTS <small>(bleach, turpentine, acetone, trichloroethylene, nitro thinner)</small> | | | ACIDS <small>(muriatic acid, hydrochloric acid, phosphoric acid)</small> | | | ALKALINE -BASED DETERGENTS <small>(professional alkaline detergents)</small> | | |
|--|--|-------|----------|---|-------|----------|--|-------|----------|
| | Matte | Satin | Polished | Matte | Satin | Polished | Matte | Satin | Polished |
| TYPE OF STAINS | | | | | | | | | |
| Coffee | | | ■ | | | | | | |
| Lime scail | | | | ■ | ■ | ■ | | | |
| Tar | ■ | ■ | | | | | | | |
| Concrete | | | | ■ | ■ | ■ | | | |
| Candle wax | ■ | ■ | ■ | | | | | | |
| Coca Cola | | | ■ | | | | | | |
| Glue | ■ | ■ | ■ | | | | | | |
| Chewing gum | ■ | ■ | ■ | | | | ■ | ■ | |
| Rubber marks from tyres or shoes | ■ | ■ | ■ | | | | | | |
| Grease ,Oil | | | | | | | ■ | ■ | ■ |
| Ink | ■ | ■ | ■ | | | | | | |
| Nicotine | ■ | ■ | ■ | | | | | | |
| Felt -tip pen | ■ | ■ | ■ | | | | | | |
| Tomato | | | ■ | | | | | | |
| Resins | ■ | ■ | ■ | | | | | | |
| Rust | | | | ■ | ■ | ■ | | | |
| Nail varnish | ■ | ■ | ■ | | | | | | |
| Cigarette burns | | | | ■ | ■ | ■ | | | |
| Tea | | ■ | ■ | | | | | | |
| Wall point | ■ | ■ | ■ | ■ | ■ | ■ | | | |

For information and advice, please contact IMPERIO directly.

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