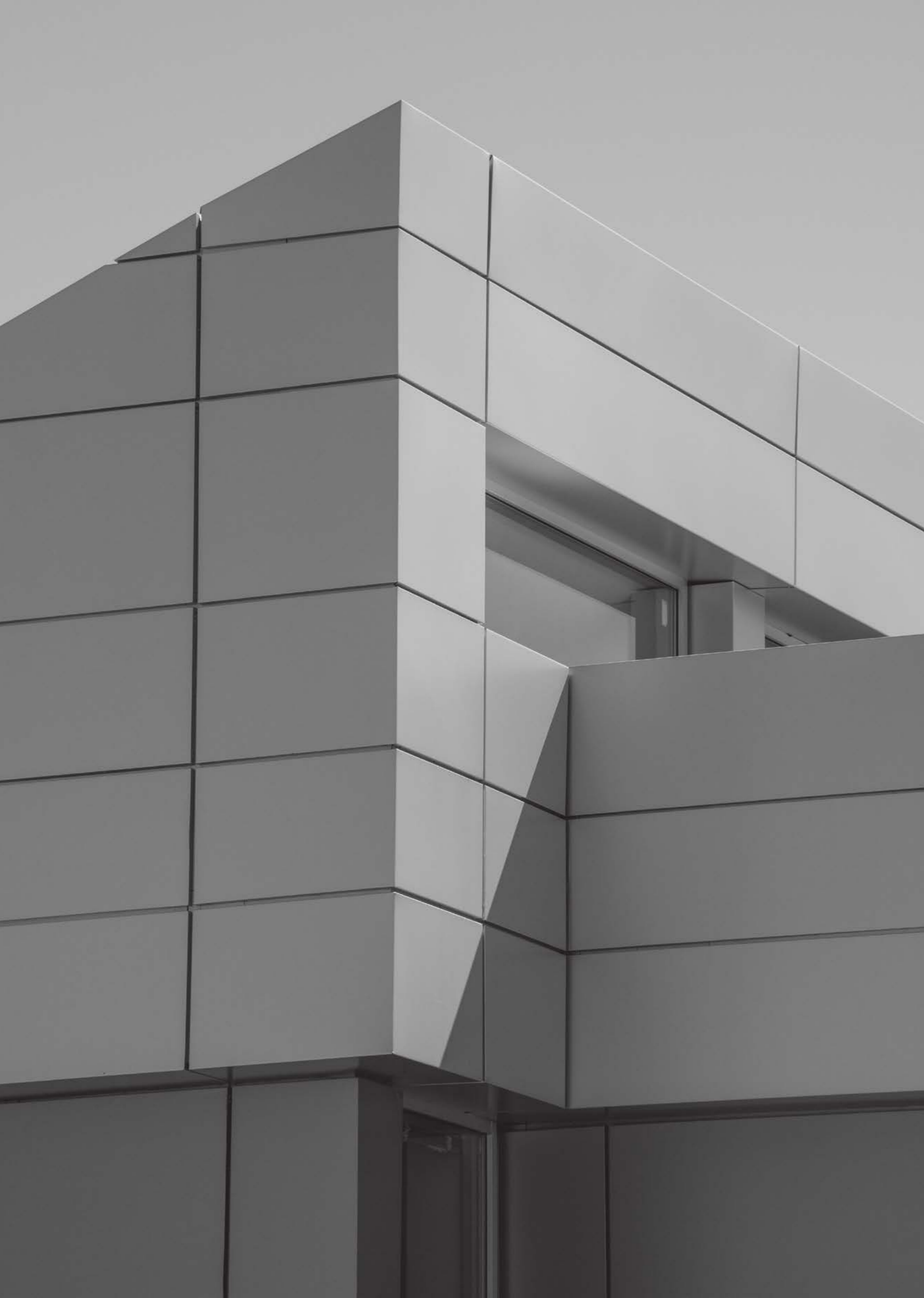


**GENERAL
CATALOG**



PISHGAMAN MEMARI ARYA

WE WILL ALWAYS BE THERE, FOR YOU

PISHGAMAN MEMARI ARYA has been established in 2008, started its activities by producing porcelain ceramics in OEM (Original Equipment Manufacturer) under its own brand of PMA.

Believing in the value of investing in HR, all sales forces of the company, are selected among graduated CIVIL ENGINEERS with side operational experiences and have been trained in several different fields.

PMA has Enriched its customers need cognition by large and wide connection with the country's be and reliable consultant companies and Architectural offices.

After the recognition of customer needs, most trended designs are selected from well-known Italian design ateliers finalized by high-quality raw materials, machinery, and technology.

All products are real porcelain, producing as full-body porcelain. Different range of porcelain ceramics producing in sizes 20x120 ,60x120, 80x160, 100x100, 120x240, 120x280 and 160x320 cm, carefully monitored by PMA's QC team.

These products are appropriated for different application areas. All products in PMA obtained ISIRI CERAMICS together with Europe CE. In addition, PMA is sampling randomly among its production and sending them to different qualified LAB such as Road, Housing & Urban Development Research Center, SAM institute Turkey, all reports are recorded.

Product Selection Consulting Services are provided by our Sales Forces, considering Customer's need, situation, Project Fields of Application & Products technical characteristics. To enhance the quality of our services after delivering the goods, all sales forces with the support of the technical support department provide different services such as technical visits during project execution, case assistance according to customers need.

All projects subject to heavy traffic with specific usage are supported by our technical assistance in order to improve their maintenance while periodic visits. PMA has set its mission, based on Training & Learning. In this regard, has organized related seminars and workshops.

Variety of Sizes



To Create an Architectural Dream

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

The Gold Standard in Diverse Ceramic Portfolios

The Pinnacle of Porcelain
Facades in Iran

Finishing

Dive deep into PMA'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.

	P	Polished
	SP	Semi Polished
	M/N	Matte / Natural

Usage

PMA'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 PMA, we don't just shape projects; we create experiences, solidifying our position as the ceramic connoisseur.





Complementary product portfolio

Furniture

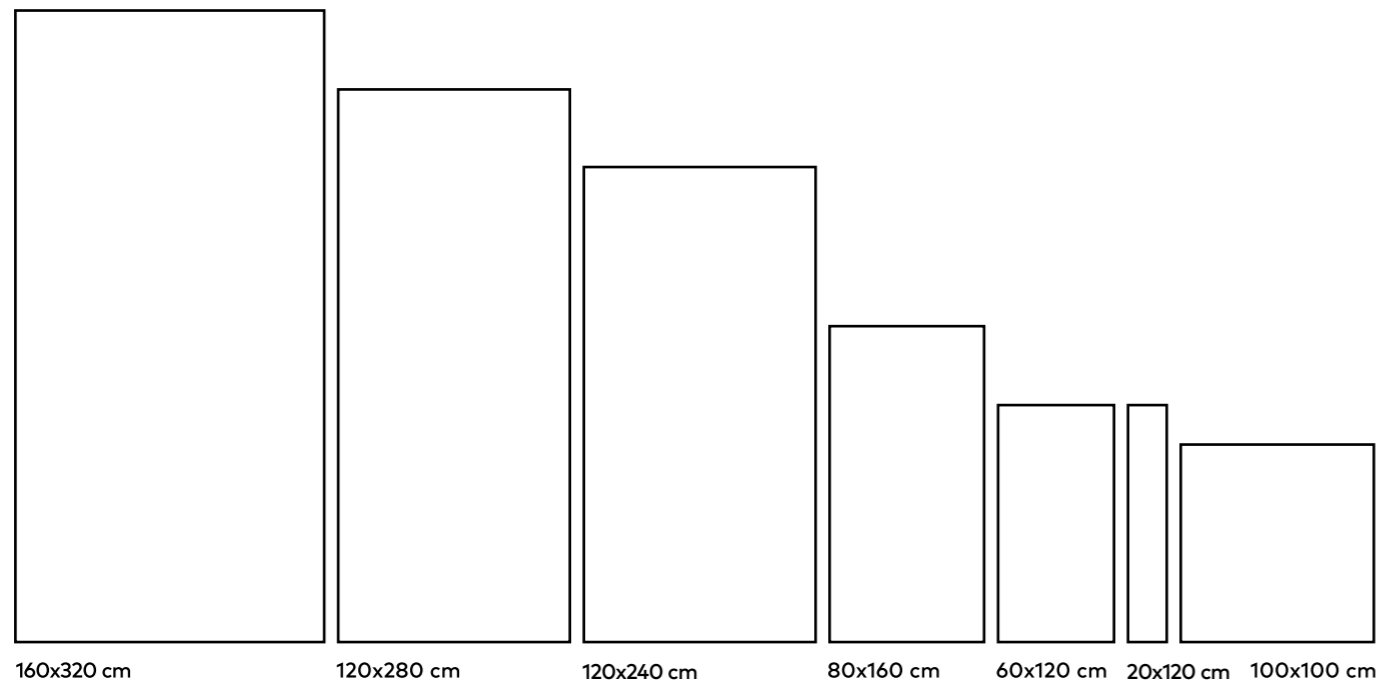
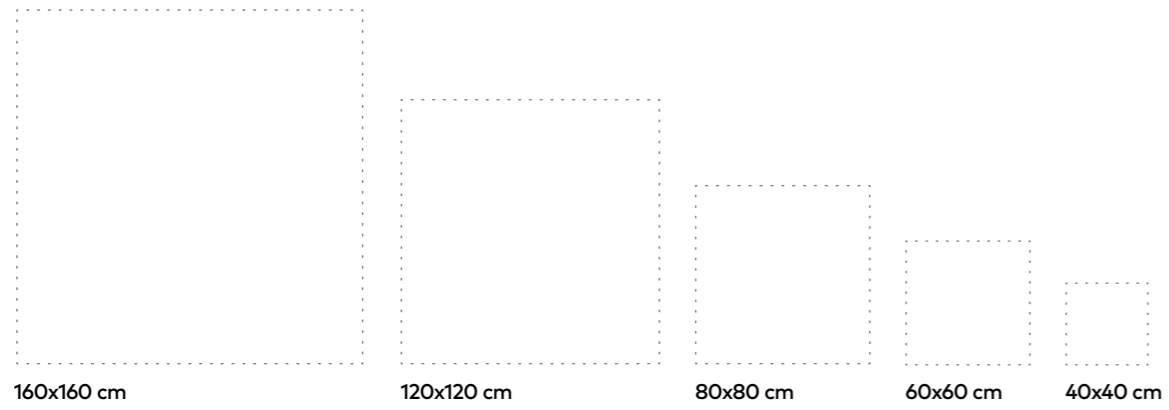
In the ceramic realm, PMA sprawls as a masterpiece. Beyond porcelain ceramics, our offerings resonate with the brand's touch of quality and innovation. Whether it's foundational construction chemicals, exquisite furniture, or precision cutting PMA promises excellence.

PMA's Precision Craft, Cutting Services Beyond Par

Any Shape

Craftsmanship at PMA transcends creation. With our avant-garde cutting services, we promise impeccable precision, translating every architectural vision into tangible reality. At PMA, perfection is the norm.

 By Order
 Standard



General Index

Products	13	20x120 cm	60x120 cm	80x160 cm	100x100 cm	120x240 cm	120x280 cm	160x320 cm
Pantheon Marble	18		✓	✓	✓		✓	
Calacatta Gold	29		✓	✓	✓	✓	✓	
Elegant Blue	39			✓			✓	
Golden Black	44		✓					
Saint Laurent	50			✓	✓	✓	✓	✓
Statuario Extra	57		✓		✓		✓	
Nero Marquina	65		✓	✓		✓	✓	✓
Elegant Grey	71						✓	
Calacatta Silva	76		✓	✓	✓	✓	✓	✓
Diamond	82		✓					
Pietra Grey	90		✓					
Oxide	101						✓	
Metallic Blue	107			✓				
Native	119						✓	
Stonetech	126			✓				
Riven Slate	135						✓	
Lithos	141			✓				
Monocolor Night	153		✓					
Contemporary	163		✓					
Natural Concrete	169		✓	✓	✓	✓	✓	✓
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PRODUCTS



Design Alcove

**A Confluence of
Global Aesthetics and
Indigenous Artistry**

PMA's Design Studio is a sanctuary where global trends harmonize with indigenous creativity. Home to passionate virtuosos, we ensure each creation is an epitome of timeless elegance and modern finesse. At PMA's Design Studio, the future of ceramics is produced today.

000	White
001	Light Gray
002	Medium Gray
003	Dark Gray
004	Black
005	White
006	Light Gray
007	Medium Gray
008	Dark Gray
009	Black
010	White
011	Light Gray
012	Medium Gray
013	Dark Gray
014	Black
015	White
016	Light Gray
017	Medium Gray
018	Dark Gray
019	Black

The image features two pieces of grey, textured stone, possibly marble, set against a plain white background. One piece is positioned vertically on the left, while the other lies horizontally on the right. The word "MARBLE" is superimposed across the center of the image in a large, bold, grey, sans-serif font. The letters are semi-transparent, allowing the texture of the stone to be seen through them. The overall composition is minimalist and emphasizes the natural texture and form of the stone.

MARBLE

Pantheon Marble

Pantheon Marble has an outstanding styling. Its grey surface embraces pure white veining in detailed smooth base texture with disperse splashes and slight movements of taupe veins that increases the beauty and enhances the grace of Pantheon Marble's design. Pantheon Marble's minimal and modern style gives you the chance of experiencing elegance and luminosity.



Facade: Pantheon Marble Light Grey Matte — 60x120 cm



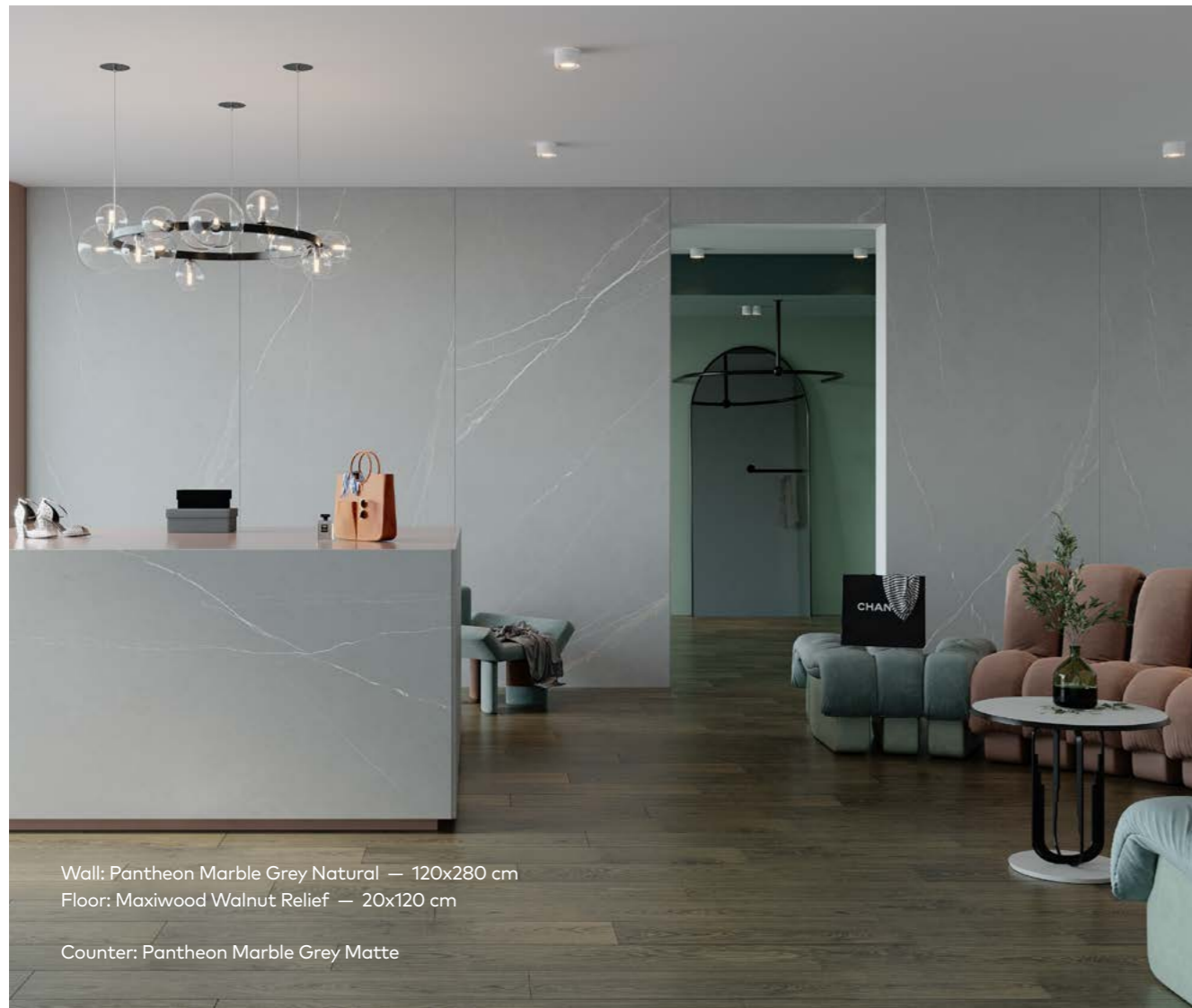


Floor: Pantheon Marble Light Grey Matte — 100x100 cm





Floor: Pantheon Light Grey Matte — 60x120 cm



Wall: Pantheon Marble Grey Natural — 120x280 cm
Floor: Maxiwood Walnut Relief — 20x120 cm
Counter: Pantheon Marble Grey Matte





Floor: Pantheon Light Grey Matte — 100x100 cm

Pantheon Marble



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



Grey

120x280 cm
FGM-L1325
Natural | 5 Faces

Light Grey

80x160 cm
LFG-C1320
Semipolished | 6 Faces

60x120 cm
FGM-R1320
Matte | 6 Faces

80x160 cm
LFG-C1325
Semipolished | 6 Faces

60x120 cm
FGM-R1325
Matte | 6 Faces

Anthracite

80x160 cm
LFG-C1330
Semipolished | 6 Faces

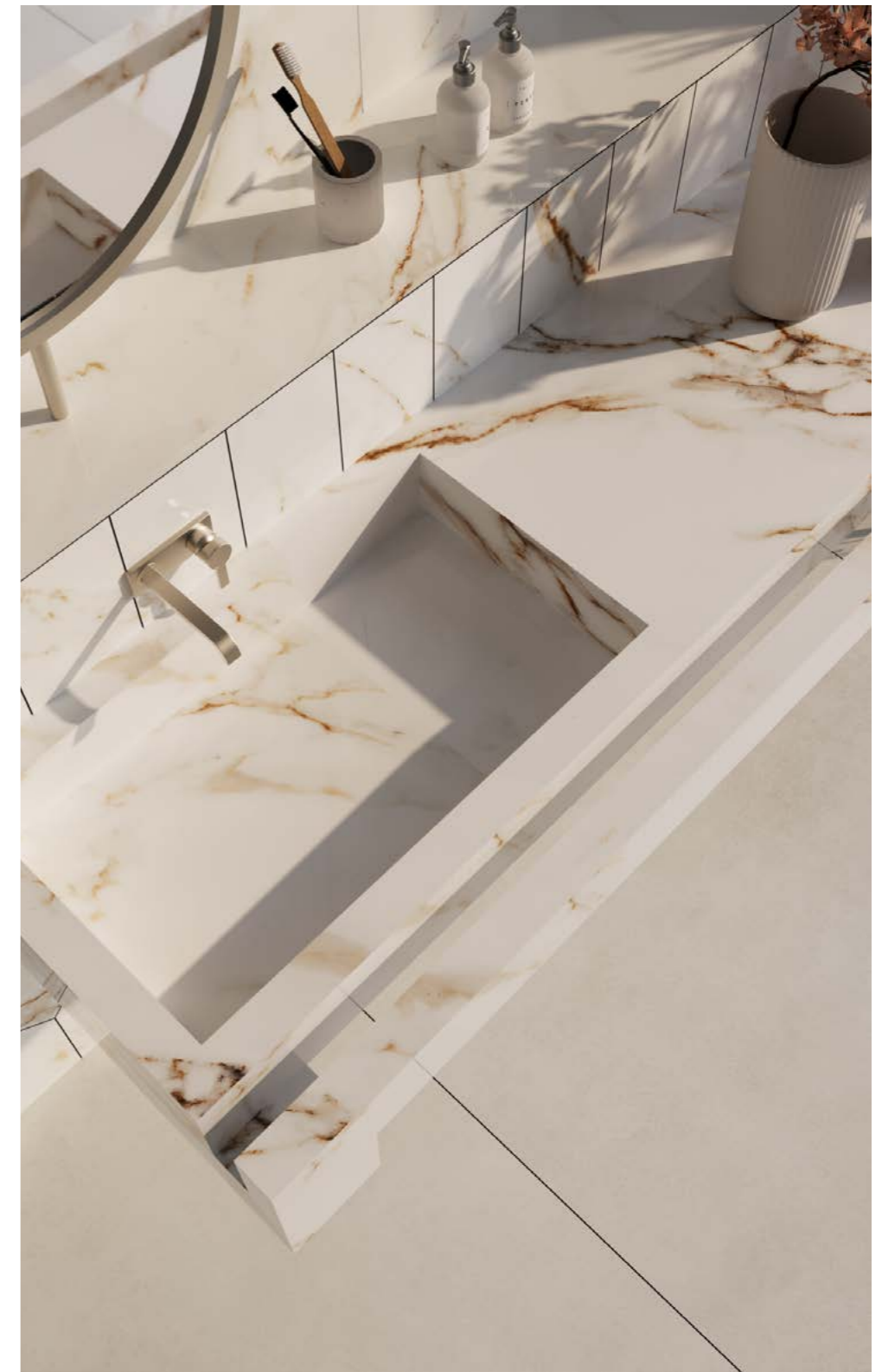
60x120 cm
FGM-R1330
Matte | 6 Faces

100x100 cm
FGM-W1320
Matte | 11 Faces



Wall: Calacatta Gold Polished — 120x280 cm
Floor: Natural Concrete Ash Soft Matte — 120x280 cm

Wash Basin: Calacatta Gold Polished / Carol

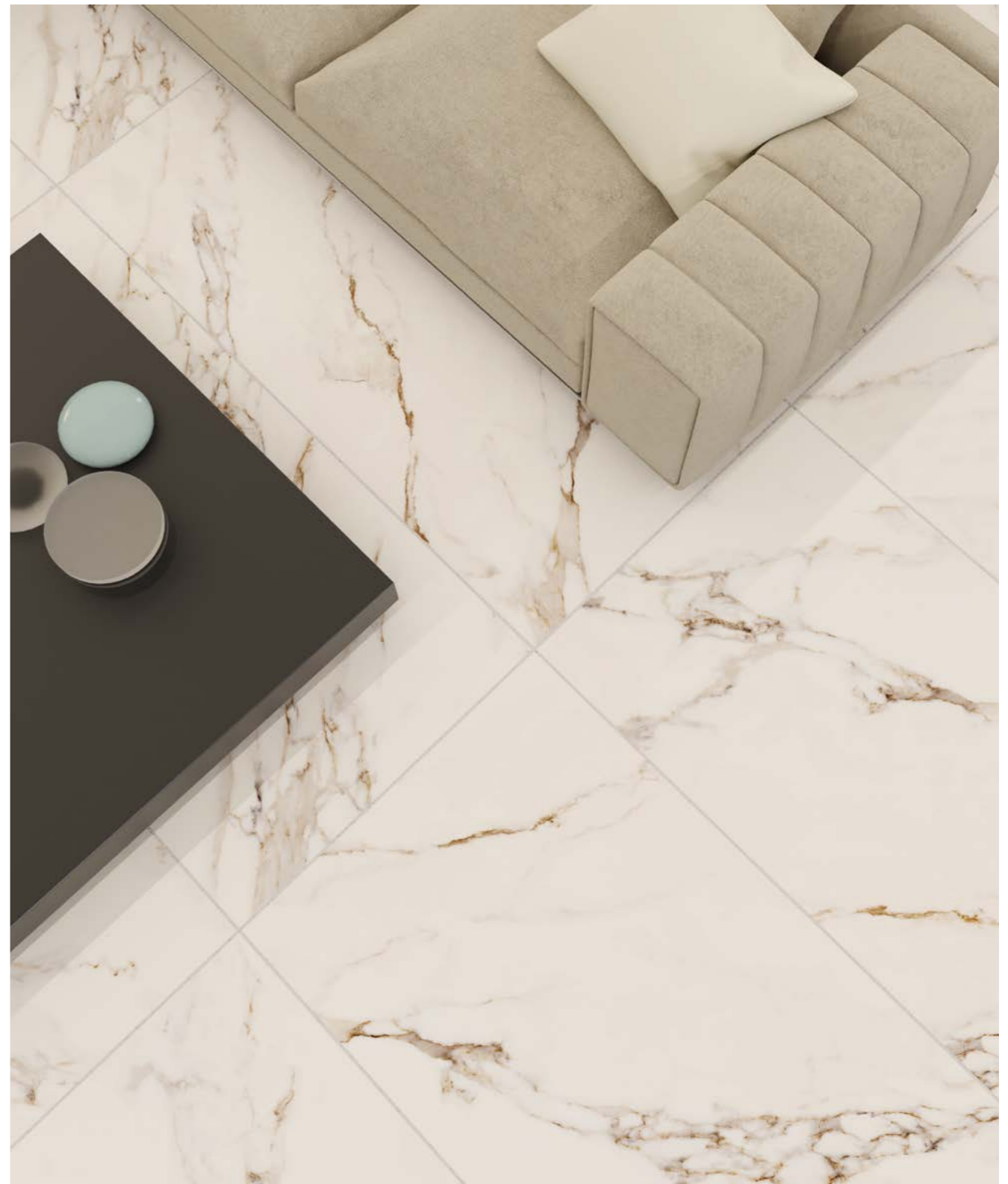


Calacatta Gold

Calacatta Gold marble tile is a treat to the eyes. Its creamy white background is gently infused with deep grey veining and the occasional ribbons of gold demonstrate a striking piece. The marble's natural and unlimited variation creates a luxurious artwork in every piece.



Wall: Calacatta Gold Polished — 80x160 cm
Floor: Calacatta Gold Polished — 80x160 cm



Wall: Calacatta Gold Polished — 80x160 cm
Floor: Calacatta Gold Polished — 80x160 cm



Wall: Calacatta Gold and Saint Laurent Polished — 120x280 cm
Floor: Calacatta Gold Polished — 100x100 cm





Wall: Calacatta Gold Polished — 120x280 cm
 Floor: Natural Concrete Light Grey Soft Matte — 120x280 cm
 Wash Basin: Calacatta Gold Polished / Mirror

Calacatta Gold



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



120x280 cm
 FGPB-L5180
 Polished | 5 Faces

FGPB-L5155
 Polished | Book Match

120x240 cm
 FGPB-A5180
 Polished | 6 Faces

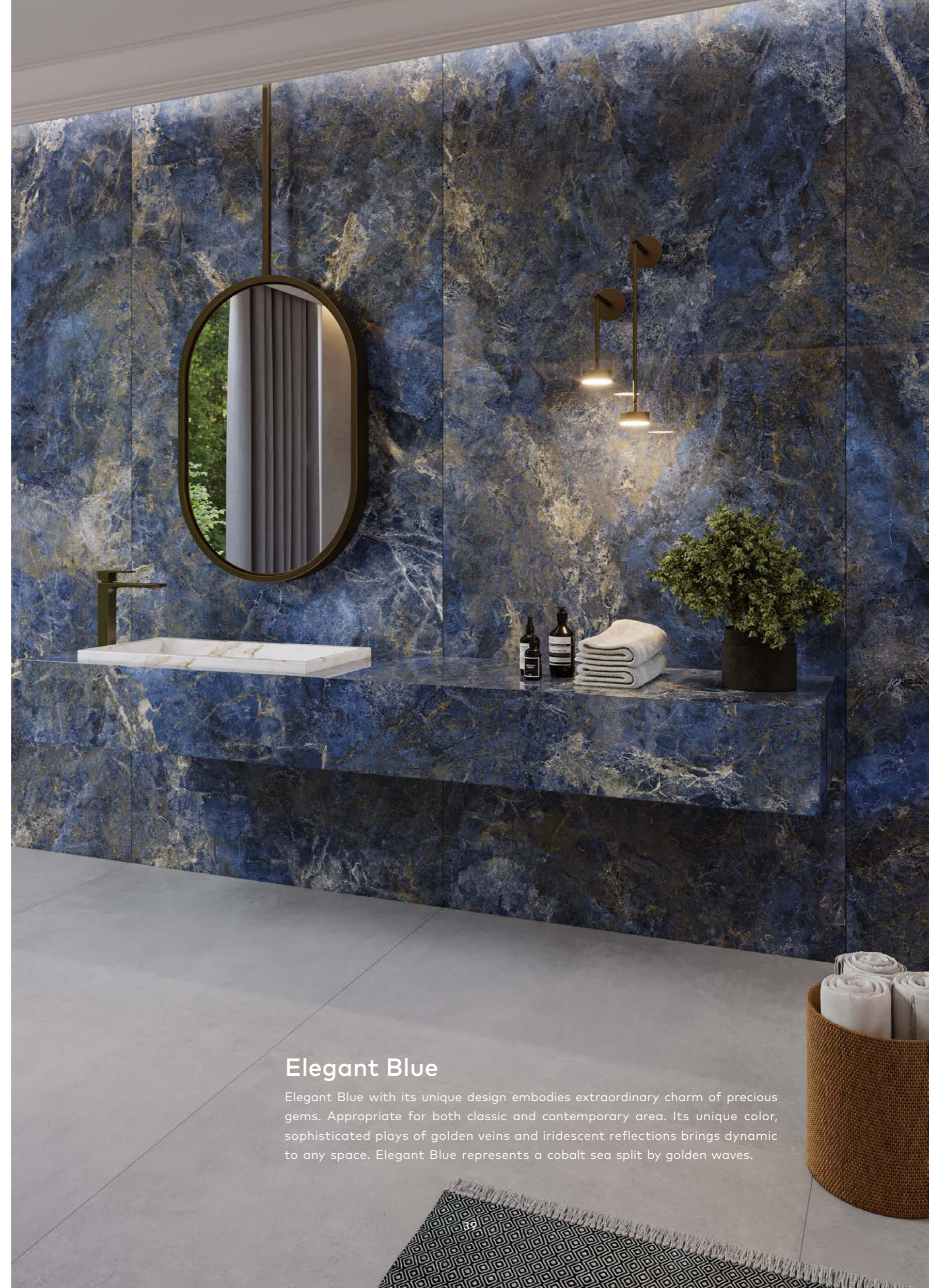
80x160 cm
 FGPB-C1280
 Polished | 8 Faces

60x120 cm
 FGPB-R1280
 Polished | 11 Faces

100x100 cm
 FGPB-W1280
 Polished | 12 Faces



Wall: Elegant Blue Polished — 120x280 cm
 Floor: Natural Concrete Light Grey Soft Matte — 120x280 cm
 Wash Basin: Calacatta Gold Polished / Laver



Elegant Blue

Elegant Blue with its unique design embodies extraordinary charm of precious gems. Appropriate for both classic and contemporary area. Its unique color, sophisticated plays of golden veins and iridescent reflections brings dynamic to any space. Elegant Blue represents a cobalt sea split by golden waves.



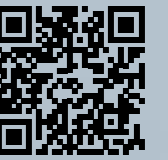
Wall: Elegant Blue Polished — 120x280 cm
Floor: Calacatta Silva Natural — 120x280 cm



Wall: Elegant Blue Polished — 120x280 cm
Floor: Natural Concrete Light Grey Soft Matte — 120x280 cm

Elegant Blue

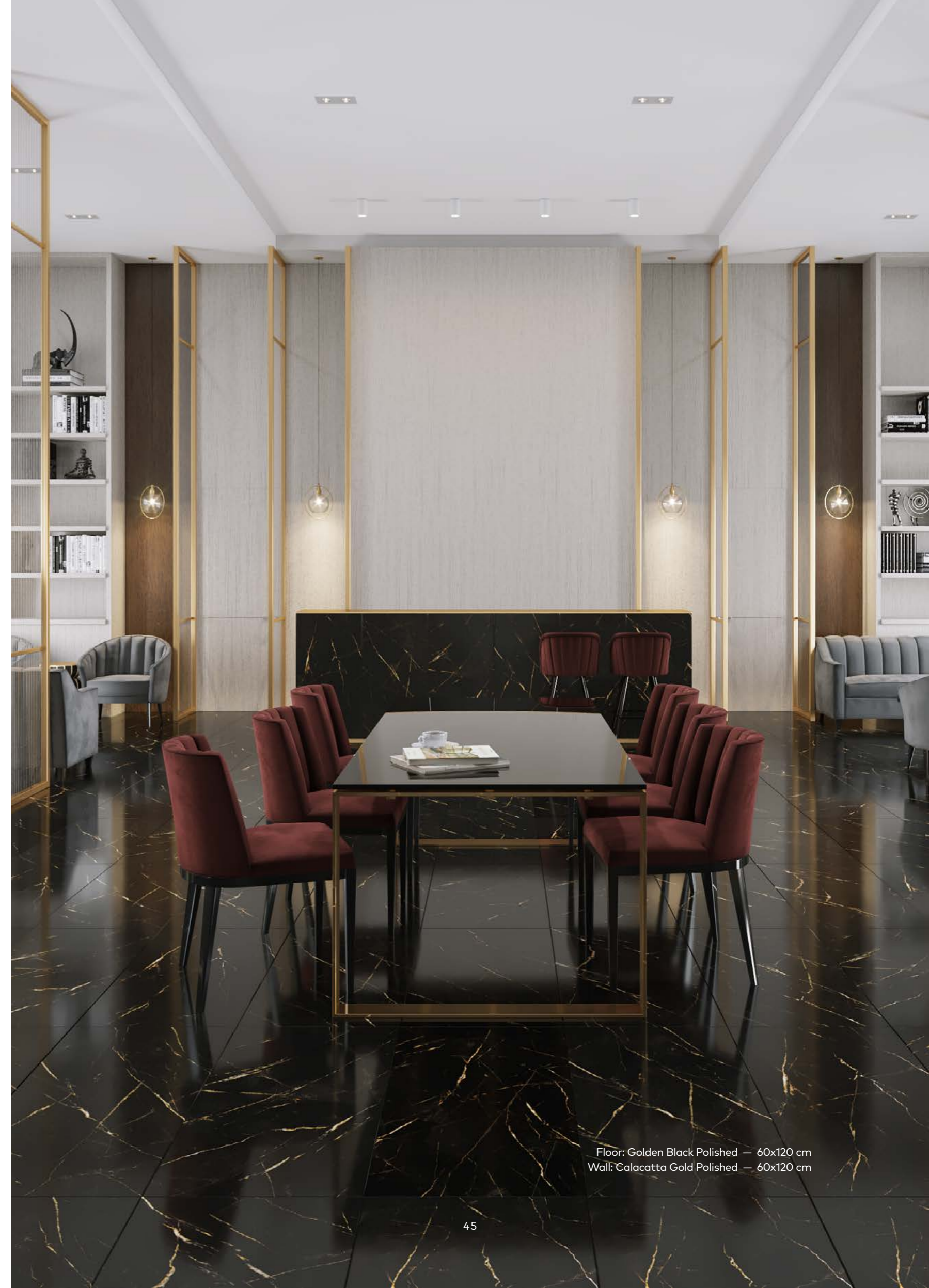
Available other sizes upon demand. For more detail
please contact sales department.





Golden Black

Golden Black marble is one of the best designs of Royal collection, a combination of golden and black color with a few white streaks. Its marble-effect brings sort of glamor which only a dramatic worthwhile material is able to produce. Golden Black provides a sense of wealth and luxury. Its fine details such as random veining patterns and shiny surface, represents exclusive marble choice.



Floor: Golden Black Polished — 60x120 cm
Wall: Calacatta Gold Polished — 60x120 cm



Floor: Golden Black Polished — 60x120 cm
Wall: Calacatta Gold Polished — 60x120 cm

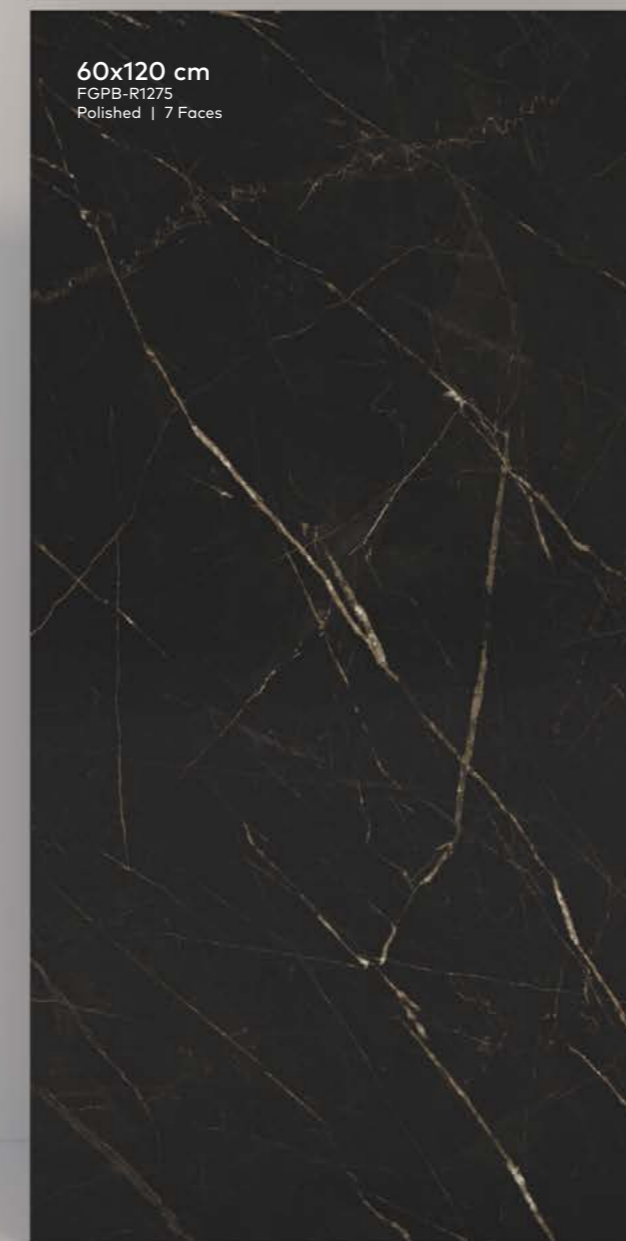




Floor: Golden Black Polished — 60x120 cm

Golden Black

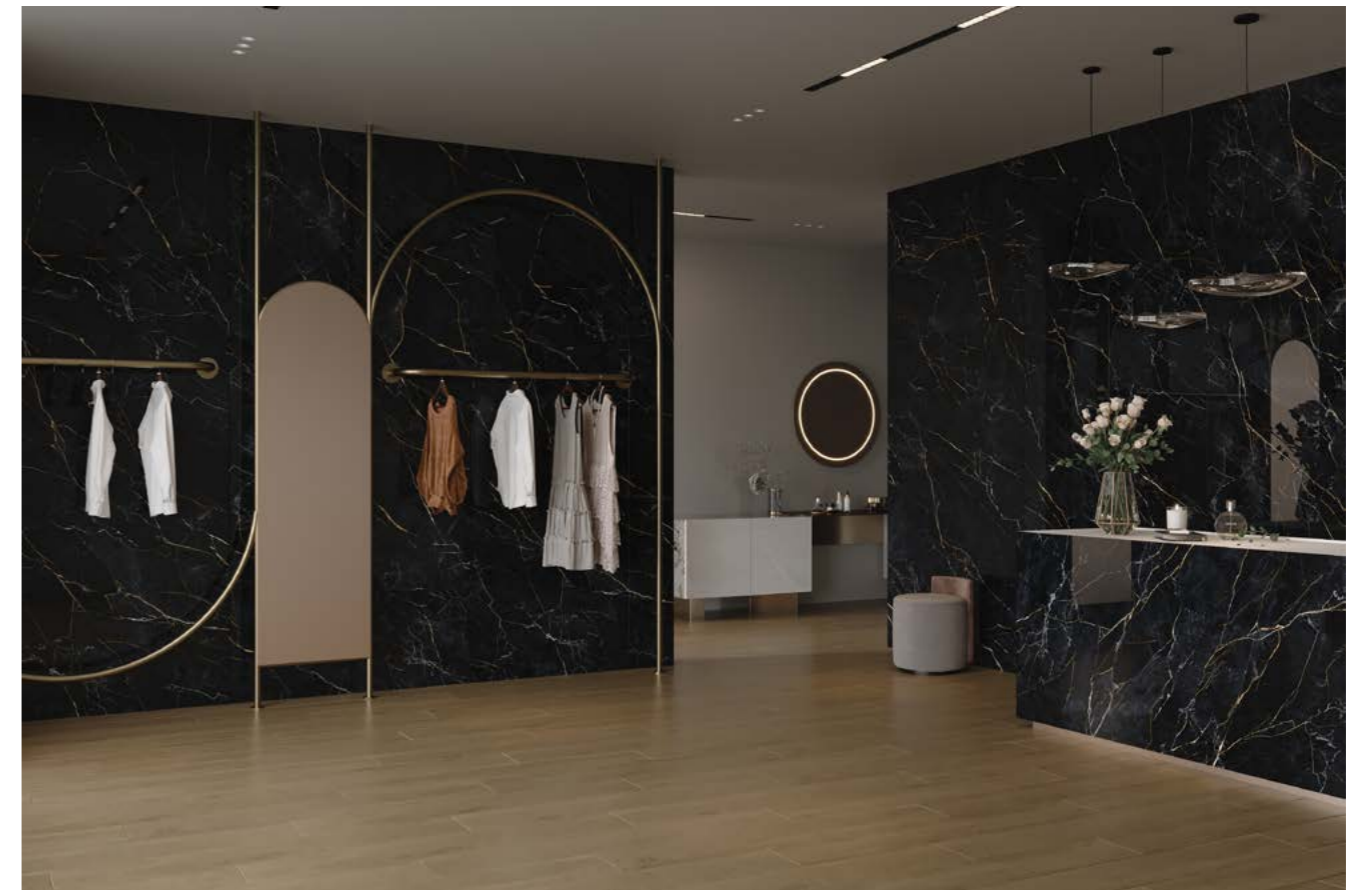
Available other sizes upon demand. For more detail
please contact sales department.



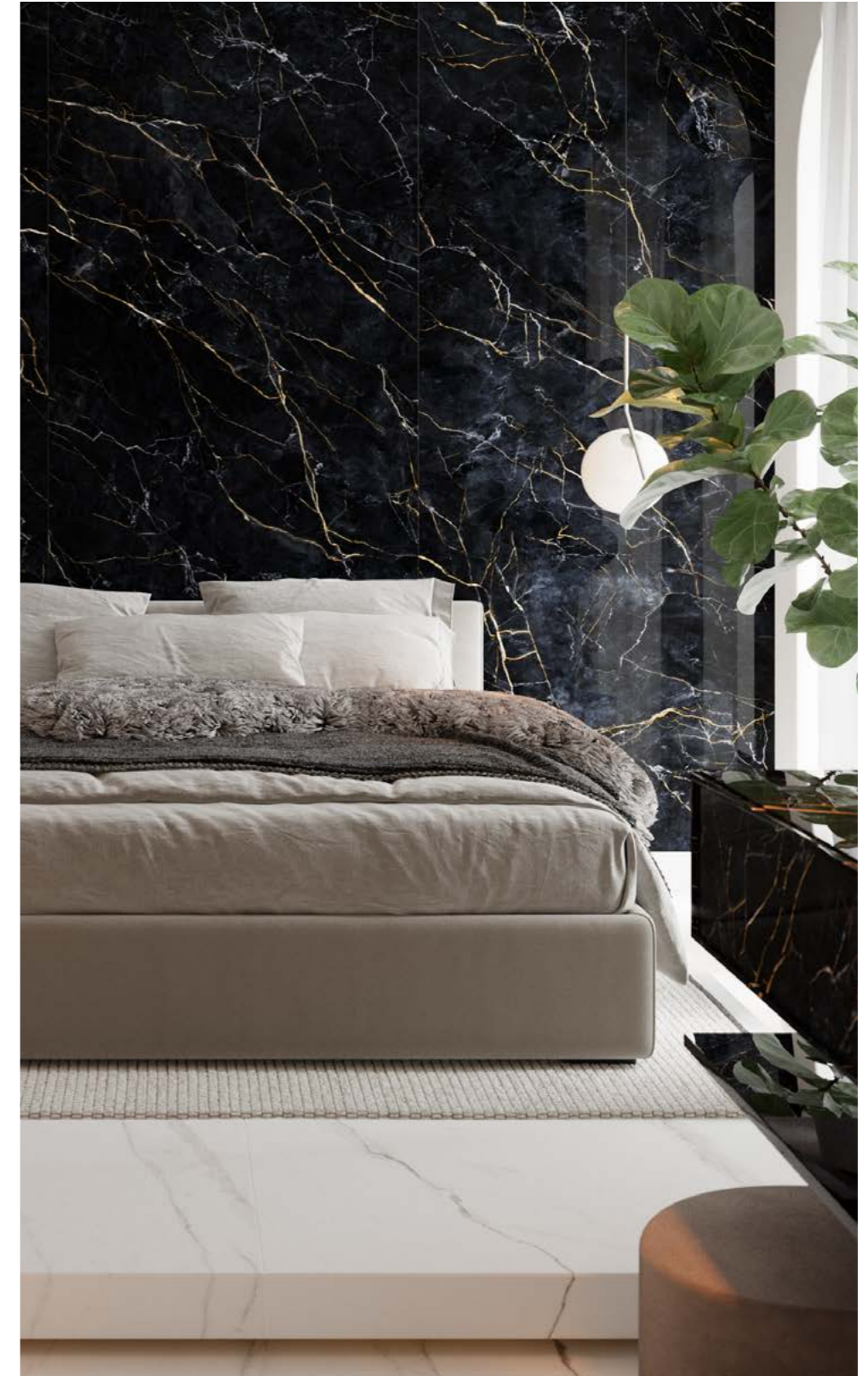


Saint Laurent

Saint Laurent Marble with black background covered by white and golden veins is one of the most beautiful marble effect tiles. The combination of black, white, and gold creates a unique look for unique designs. Infuse depth and luxury into your home with PMA's daring Golden Black Marble effect floor and wall tiles.



Wall: Saint Laurent Polished — 120x280 cm
Floor: Maxiwood Walnut Relief — 20x120 cm



Wall: Saint Laurent Polished — 120x280 cm



Wall: Saint Laurent Polished — 120x280

Saint Laurent



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





Wall: Statuario Extra Polished — 120x280 cm
Floor: Statuario Extra Polished — 120x280 cm



Statuario Extra

Statuario Extra marble is one of the most renowned and charming marbles, enriched with dark and grey veins and thinner patterns. Its clean white background contrasted with grey veining doubles its beauty. Statuario Extra with dramatic, artistic, and large-scale singular vein patterns brings a refined Italian design touch to your architectural projects.

Wall: Statuario Extra Polished — 120x280 cm
Floor: Natural Concrete Light Grey Soft Matte — 120x280 cm
Wash Basin: Statuario Extra Polished / Mirror





Floor: Statuario Extra Polished — 120x280 cm
Wall: Statuario Extra Polished — 120x280 cm





Floor: Statuario Extra Polished — 60x120 cm

Statuario Extra

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



120x280 cm
FGPB-L5185
Polished | 4 Faces

FGPB-L5210
Polished | Book Match

60x120 cm
FGPB-R1285
Polished | 10 Faces

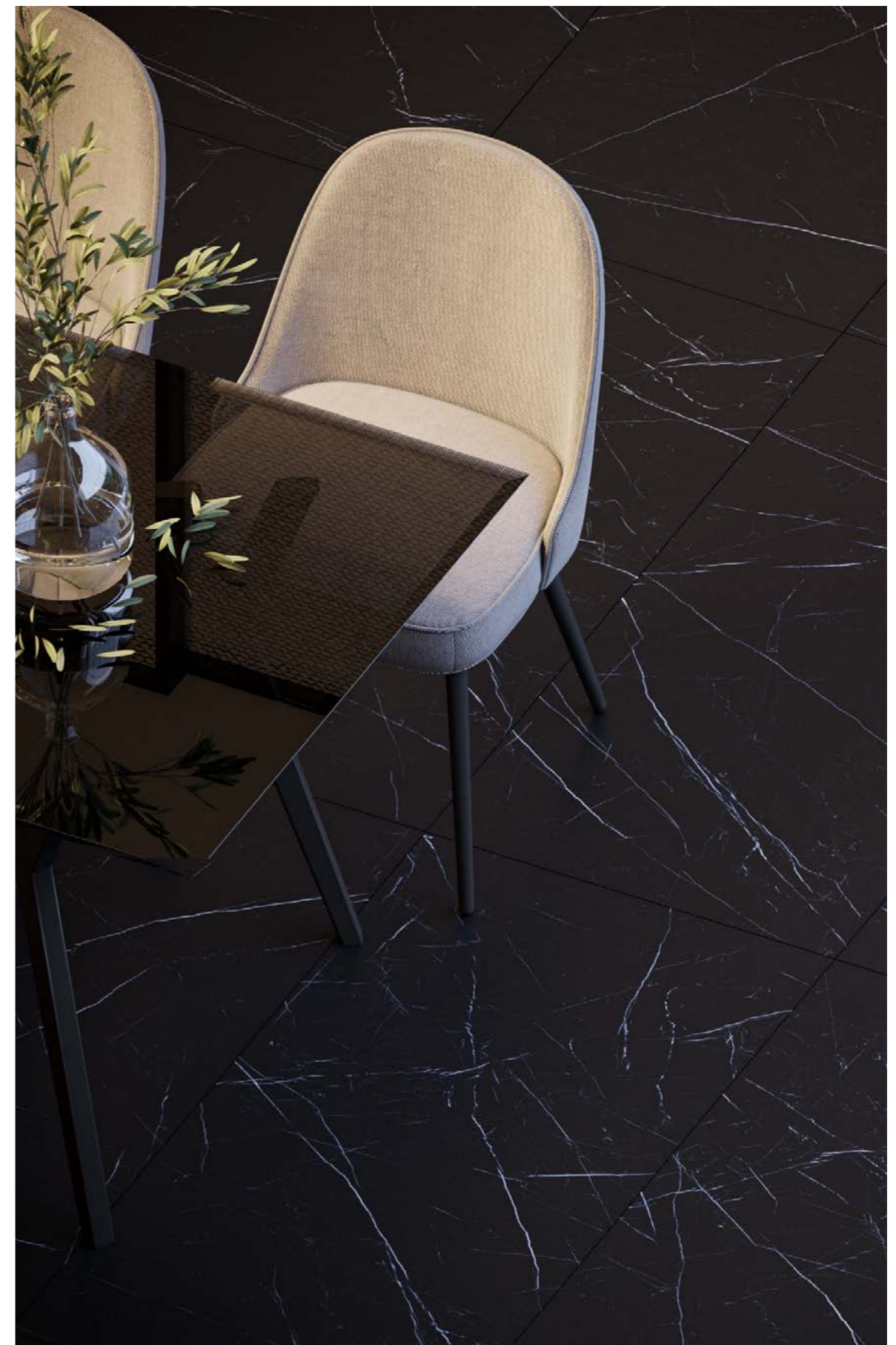
100x100 cm
FGPB-W1285
Polished | 9 Faces



Nero Marquina

Nero Marquina, has the intense elegance of black marble. With its ultra-thin white veins running along an extreme black surface, Nero Marquina by PMA is a full body porcelain slab suitable for ultra –sophisticated settings. Its visual perfection provides a unique visual impact.

Floor: Nero Marquina Natural — 120x280 cm



Floor: Nero Marquina Matte — 60x120 cm



Floor: Nero Marquina Matte — 60x120 cm



Floor: Nero Marquina Matte — 60x120 cm

Nero Marquina

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





Floor: Elegant Grey Natural — 120x280 cm
Wall: Elegant Grey Natural — 120x280 cm

Elegant Grey

Elegant Grey Marble is a striking deep grey marble with distinctive white veining. The most beautiful sought after marble inspired porcelain tile boasts prominent veins, blooms, and subtle variations that you find in any natural design product. Elegant Grey marble tiles are perfectly combined with a wide range of colors based on it's nude theme of color.



Floor: Elegant Grey Natural — 120x280 cm
Wall: Elegant Grey Natural — 120x280 cm
Wash Basin: Elegant Grey Natural / Pedestal



Floor: Elegant Grey Natural — 120x280 cm
Wall: Elegant Grey Natural — 120x280 cm



Floor: Elegant Grey Natural — 120x280 cm
Wall: Elegant Grey Natural — 120x280 cm

Elegant Grey

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



120x280 cm
FGM-LS195
Natural | 5 Faces

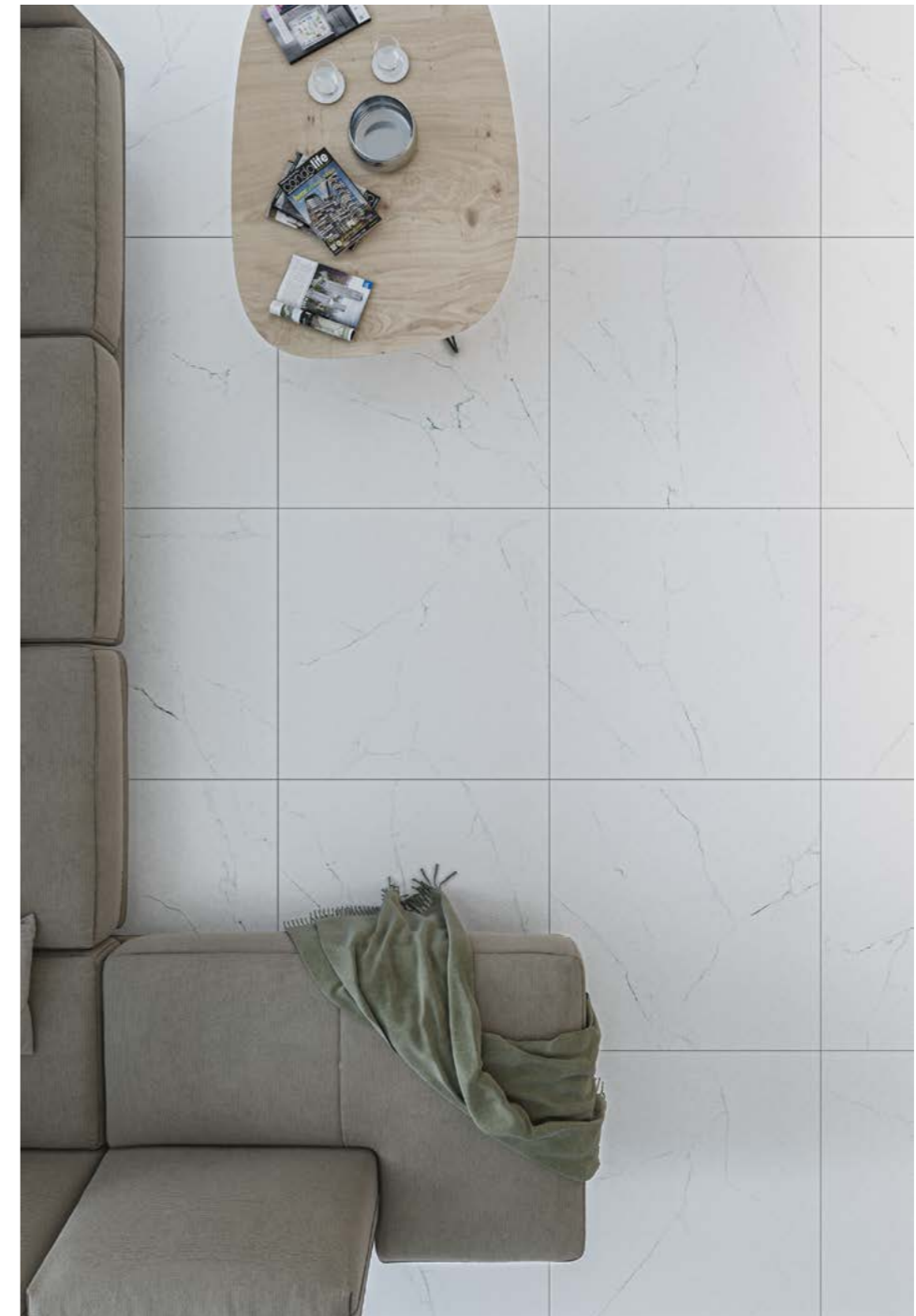


Calacatta Silva

Calacatta Silva has the beauty of natural marble. Thanks to its porcelain character this product is suitable for private spaces to commercial world and helps architects to create a combination of modernity and practicality.



Facade: Calacatta Silva Polished — 120x280 cm

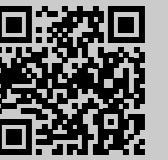


Floor: Calacatta Silva Natural — 100x100 cm



Floor: Calacatta Silva Natural — 120x280 cm
 Wall: Calacatta Silva Polished — 120x280 cm

Calacatta Silva



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





Diamond

Diamond is inspired by a quartzite whose colors reflect warmth and its simplicity gives you the sense of life and calmness. The neutral canvas is criss-crossed with delicate but defined veins of beige and gold in a way that it has a very nice shine with a rich appearance, shimmering elegance. Its crystalized structure creates a complex design with varying depths of translucency and opacity. Using this wonderful porcelain tile, turn your ideas into a reality.





Floor: Diamond Polished — 60x120 cm



Floor: Diamond Polished — 60x120 cm
Wall: Natural Concrete Anthracite Matte — 60x120 cm



Diamond

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



60x120 cm
FGPB-R1315
Full Polished | 8 Faces



Pietra Grey

The sophisticated grey background color runs through with fine, candid grains that add a harmonious visual effect to Pietra Grey porcelain slabs. An unmistakable style, superb production and high performance make Pietra Grey an irreplaceable surface for enhancing any architecture or interior design project.



Floor: Pietra Grey Polished — 60x120 cm
Wall: Calacatta White Polished — 60x120 cm



Floor: Pietra Grey Polished — 60x120 cm



Floor: Pietra Grey Polished — 60x120 cm



Pietra Grey



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



60x120 cm
FGPB-R1005
Polished | 4 Faces

Elevating Standards, Crafting Excellence

In an epoch where global standards benchmark quality, PMA 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 PMA, we don't chase standards; we generate them.



ISO 9001

ISO 9001 is the international standard for quality management system



8906997838

Institute of Standards and Industrial Research of Iran



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.



EN 14411

European standard that defines terms and specifications of ceramic tiles



SAM

Seramik Araştırma Merkezi
Turkish Ceramic Research Center
Standard testing laboratory



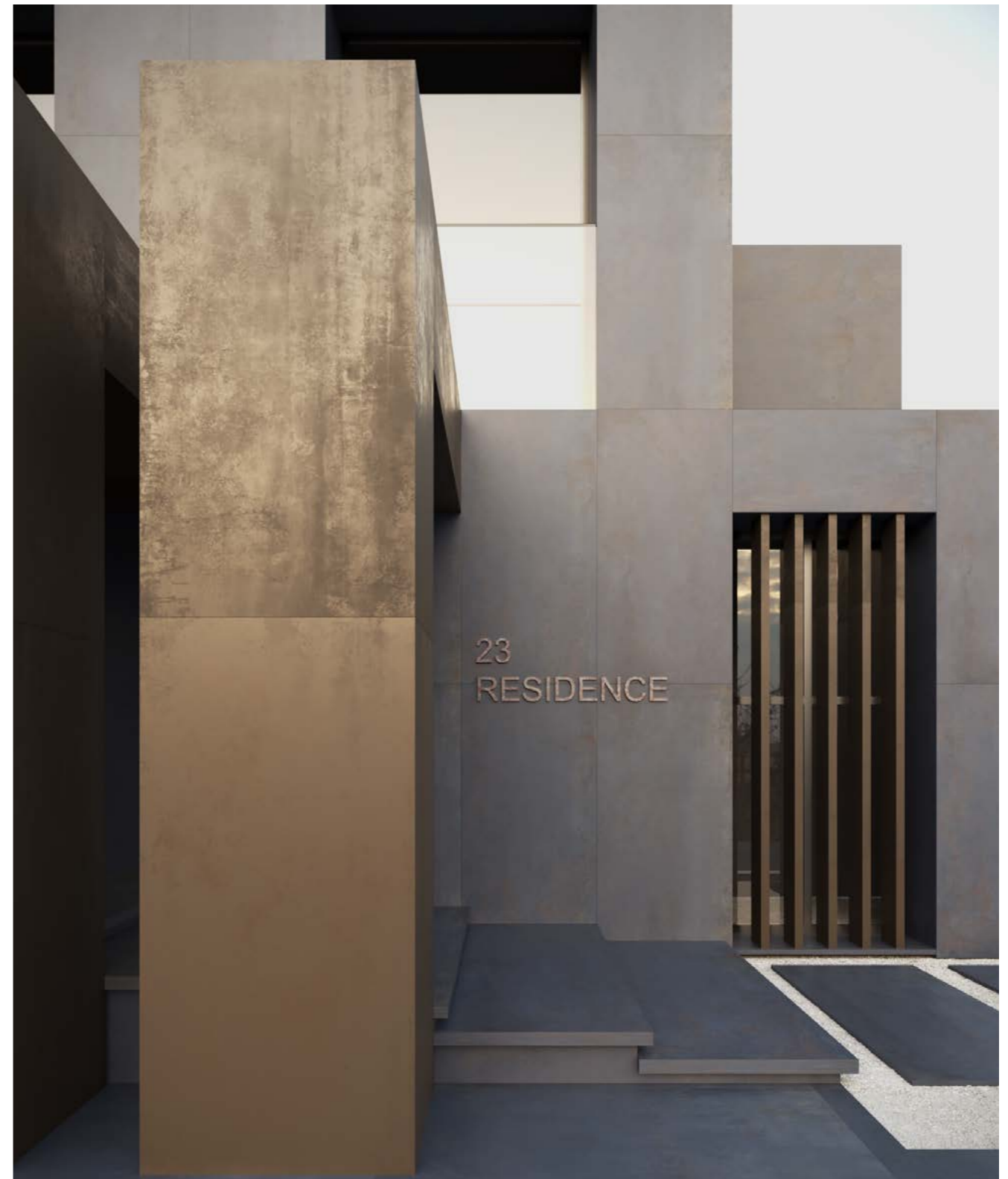
Ministry of Road & Urban
Development Road, Housing & Urban
Development Research Center



METAL



Facade: Oxide Metal — 120x280 cm
Floor: Metallic Blue Semi Polished — 80x160 cm



Oxide

Oxide is a remarkable slab that stands out with its unique and captivating design. With fabulous decorations and metal reflections, it offers the perfect opportunity to create dramatic and industrial spaces. Its intriguing mix of corten brown hues, light shades transitioning towards light grey, and a captivating matte metallic aesthetic that adds a touch of interest to any room. Oxide's noticeable oxidized appearance and warm colors instantly infuse character into your space. Combining the beauty of metal with the exceptional performance of ceramic in terms of resistance and ease of maintenance, Oxide is truly a remarkable choice.

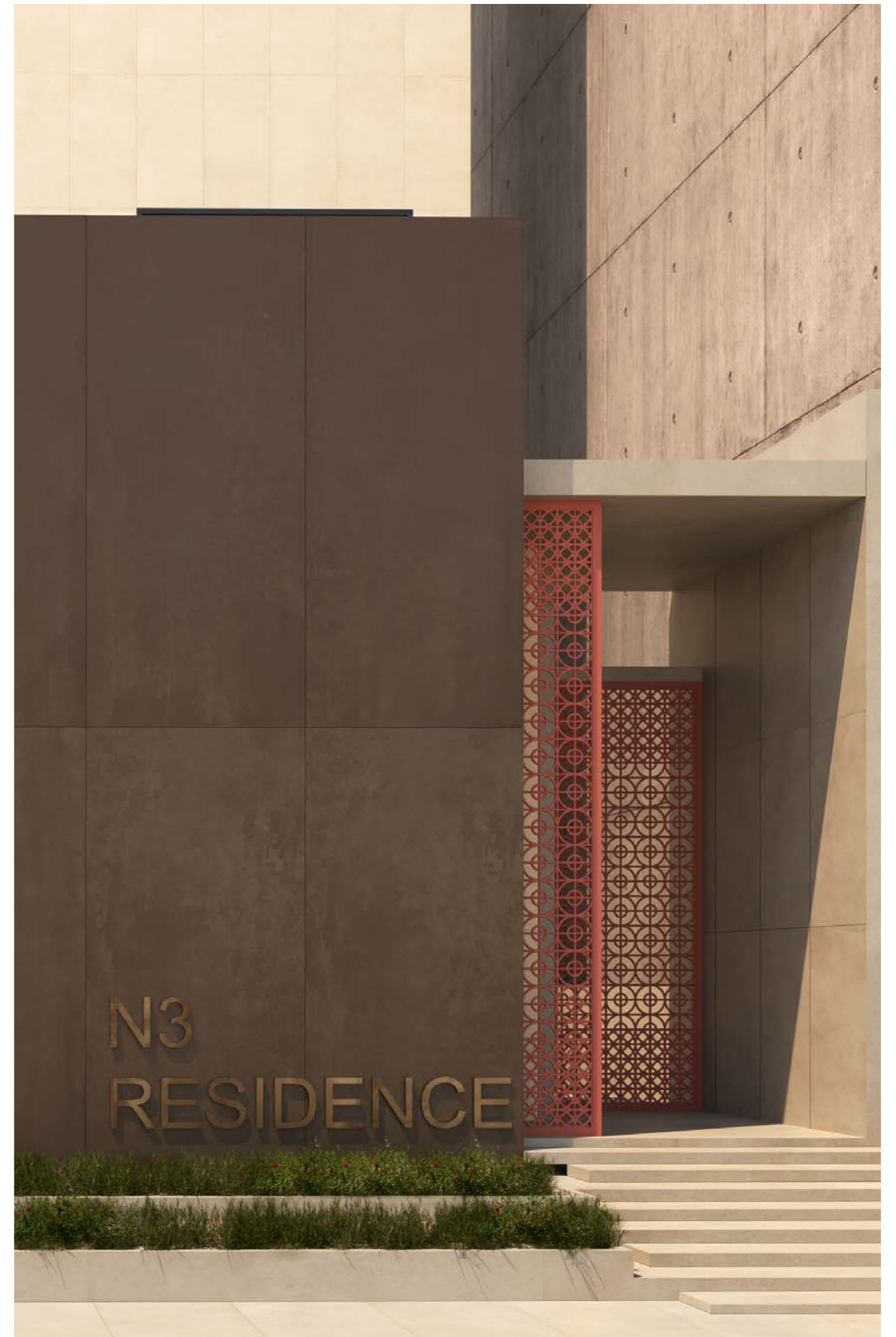


Facade: Oxide Metal — 120x280 cm and Natural Concrete Ash Matte — 60x120 cm





Facade: Oxide Metal — 120x280 cm and Natural Concrete Ash Matte — 60x120 cm





Floor: Metallic Blue Semi Polished — 80x160 cm
Wall: Metallic Blue Semi Polished — 80x160 cm

Metallic Blue

Metallic is a trace of oxidization that covers your surfaces by giving an original and unique accent. By Metallic collection, you can experience the most intimate emotion of metal and the beauty of industrial atmospheres whose delicate, refined, and unique textures enhance the natural and precious aesthetics of the material for a space with a timeless charm. Metallic with its semi polished surface brings an elegance and unconventional touch.



Wall: Metallic Blue Semipolished — 80x160 cm
Floor: Metallic Blue Semipolished — 80x160 cm



Wall: Metallic Blue Semipolished — 80x160 cm
Floor: Metallic Blue Semipolished — 80x160 cm



Facade: Oxide Metal — 120x280 cm
Floor: Metallic Blue Semi Polished — 80x160 cm



Metallic Blue

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



Oxide



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





Soaring with PMA

The Pinnacle of Porcelain Facades in Iran

When it comes to pioneering porcelain facades, PMA doesn't merely lead – they redefine excellence, soaring above all. As Iran's foremost trailblazer in ceramic facades, PMA has transformed architectural dreams into tactile realities. Boasting an illustrious legacy of 4 million square meters of porcelain ceramics across 1100 iconic facade endeavors, PMA is not just about shielding buildings but sculpting skylines. Embark on a journey with PMA – where innovations take wing.

A black and white photograph of large, rugged rocks. The word "STONE" is overlaid in large, white, bold, sans-serif capital letters across the center of the image. The rocks are dark and textured, with some showing signs of weathering and cracks. The background is a plain, light gray sky.

STONE

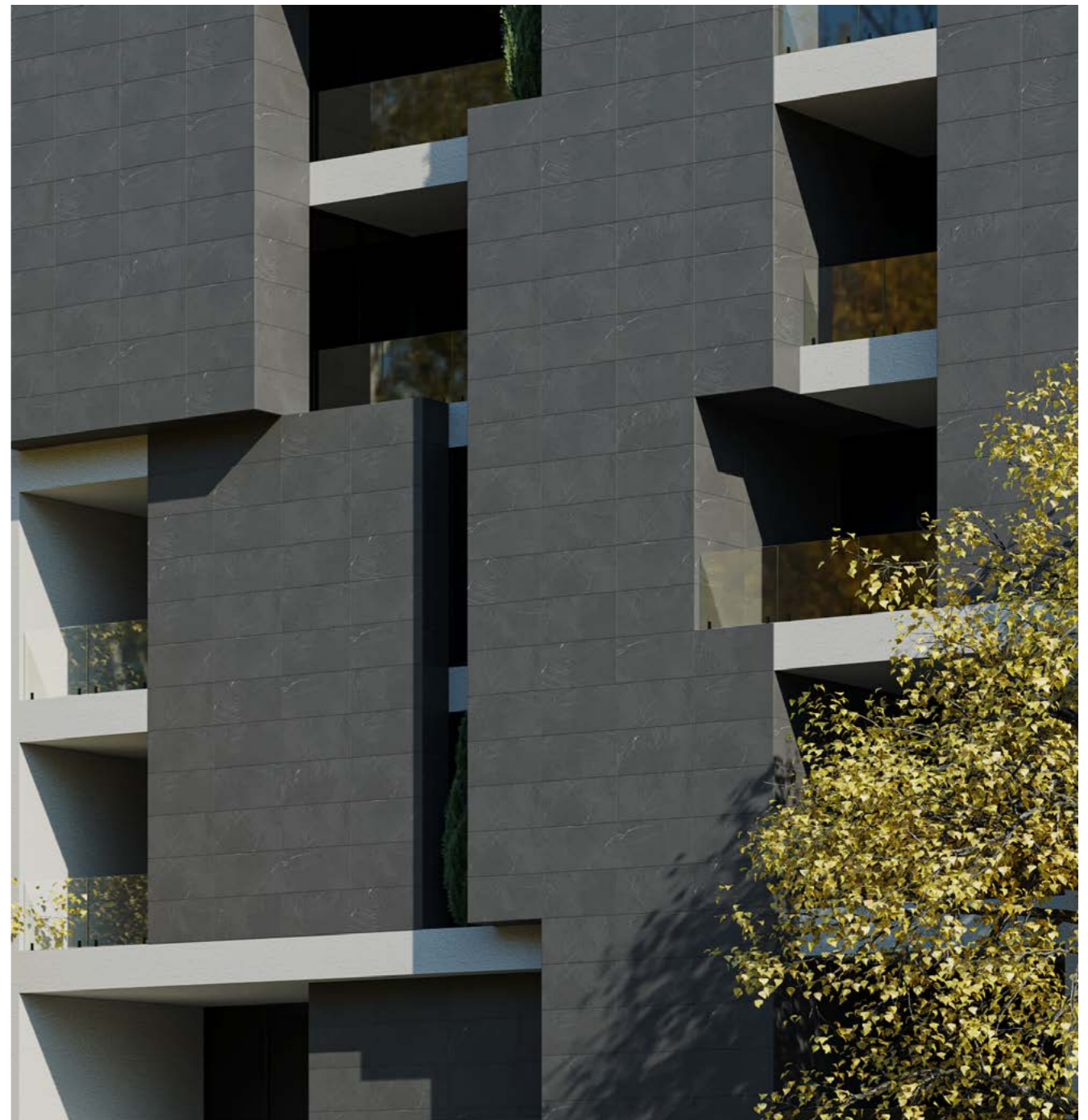


Wall: Native Black Relief — 120x280 cm
Floor: Maxiwood Silver Relief — 20x120 cm



Native

Native is an elegant slate with delicate and light veins that are deeply interwoven to create a subtle and sophisticated pattern. Native's relief texture evokes a modern interpretation of natural stone in a way that its low contrast and homogenous theme make it a perfect backdrop for any design style. It is time to upgrade your space with the natural beauty of Native and experience the durability of porcelain with a touch of natural stone charm.



Facade: Native Grey Relief — 60x120 cm



Floor: Native Grey Relief ---60x120 cm



Floor: Native Grey Relief — 60x120 cm

Native



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





Stonetech

Stonetech is «monolithic»; it indicates harmony despite being unified. Stonetech comes with a natural stone relief that is soft to touch, yet express a fine natural stone look surface. Parallel details with a sufficient amount of monotone surface make this design fashionable yet suitable for facade and outdoor applications.



Facade: Stonetech Coal Grey Relief — 60x120 cm



Wall: Stonetech Light Grey Relief — 60x120 cm
Floor: Stonetech Light Grey Relief — 60x120 cm





Facade: Stonetech Grey Relief — 60x120 cm



Floor: Stonetech Light Grey Relief — 60x120 cm

Stonetech



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





Riven Slate

Riven Slate is a mesmerizing creation inspired by volcanic rocks found in the east. It beautifully combines the elements of earth and water, as the magma of volcanoes meets cold waters to form captivating rock formations. This unique design is widely favored in contemporary and modern architecture, particularly for large surfaces. With its sophisticated blend of intense greys and neutral tones, Riven Slate effortlessly infuses any space with a minimal and modern style. The product's relief surface further enhances its appeal, adding depth and texture to its timeless charm and layered structure.



Wall: Riven Slate Light Grey Relief — 120x280 cm
 Floor: Pantheon Marble Grey Natural — 120x280 cm



Wall: Riven Slate Light Grey Relief — 120x280 cm
Floor: Pantheon Marble Grey Natural — 120x280 cm



Wall: Riven Slate Light Grey Relief — 120x280 cm
Floor: Pantheon Marble Grey Natural — 120x280 cm

Riven Slate

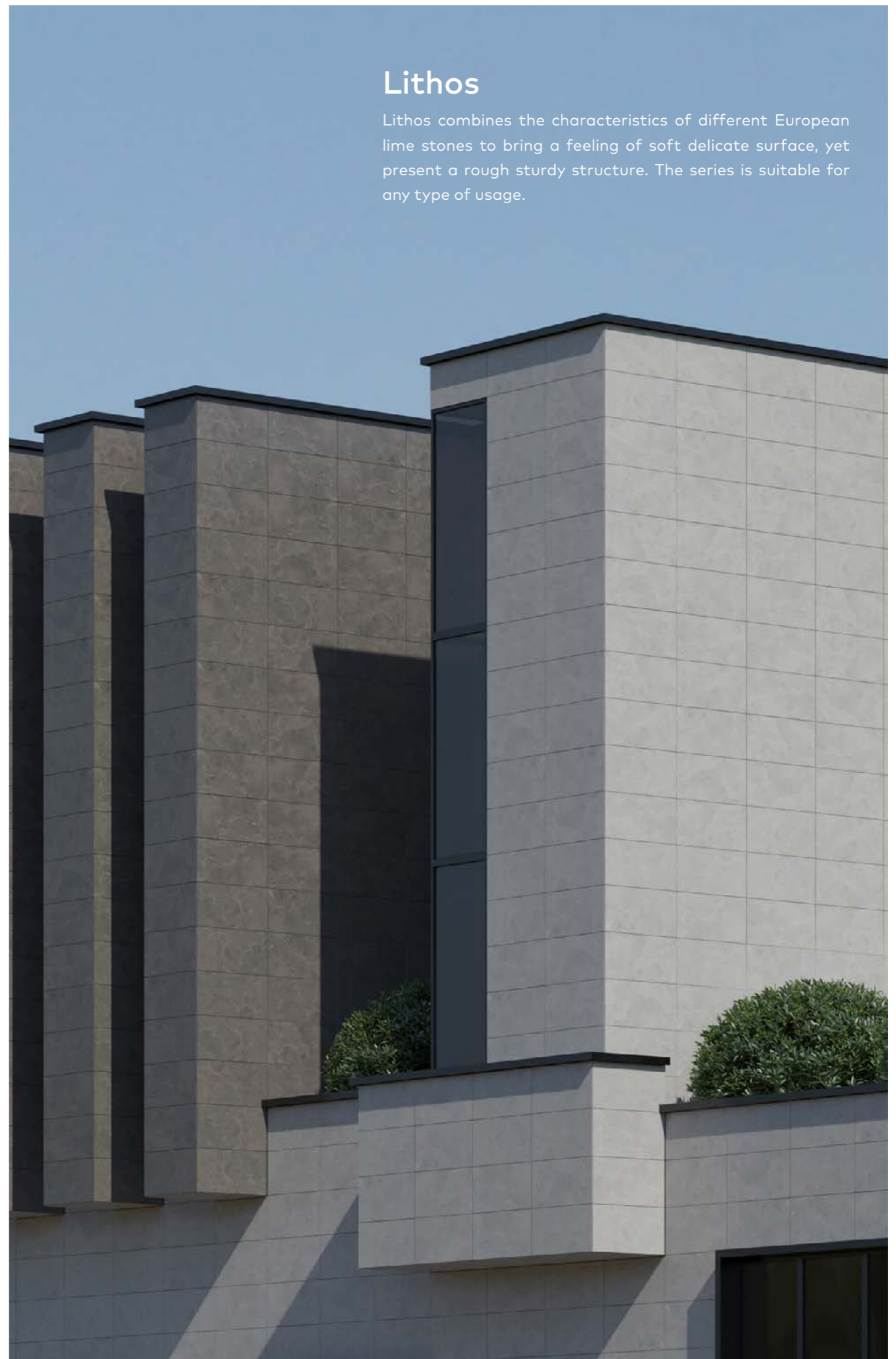


Available other sizes upon demand. For more detail
please contact sales department.





Facade: Lithos Soft Grey and grey Matte — 60x120 cm



Lithos

Lithos combines the characteristics of different European lime stones to bring a feeling of soft delicate surface, yet present a rough sturdy structure. The series is suitable for any type of usage.



Floor: Lithos Grey Matte — 60x120 cm
Wall: Lithos Grey Matte — 60x120 cm





Floor: Lithos Grey Matte — 60x120 cm

Floor: Lithos Grey Matte — 60x120 cm
Wall: Lithos Grey Matte — 60x120 cm



Lithos



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





Elite Brigade

A Sales Engineering Team Beyond Compare

In the intricate world of ceramics, while the product's quality is paramount, it's the people behind the scenes who truly shape a brand's legacy. And at the heart of PMA's success story lies its formidable sales engineering team.

This isn't just any team; it's a powerhouse of knowledge and expertise. Comprising 30 civil engineers and 21 architects, each member is an alumnus of the country's premier educational institutions. Their academic accolades only scratch the surface of their prowess. Armed with a deep understanding of both engineering intricacies and architectural nuances, they seamlessly bridge the gap between a client's vision and PMA's ceramic masterpieces.

But beyond their technical acumen, what truly sets them apart is their consultative approach. They're not just salespeople; they're partners in creation, ensuring that every project doesn't just meet but exceeds expectations.

With PMA's sales engineering team, clients aren't just purchasing ceramics; they're investing in a legacy of excellence, guided by the industry's brightest minds.

This narrative paints PMA's sales engineering team as an elite group, highlighting their educational background, technical expertise, and consultative approach.

MICRO
COLOR





Facade: Monocolor White Matte — 60x120 cm



Monocolor Night

A perfect synthesis of technology, simplicity and pureness, living all in full colors. From light of white to darkness of black with combination of joyful day colors. Monocolor series of PMA make architects dream come true by offering them a range of selected colors to create genial, flawless and solid spaces.



Facade: Monocolor White and
Monocolor Black Matte — 60x120 cm



Facade: Monocolor White Matte — 60x120 cm

Monocolor Night

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

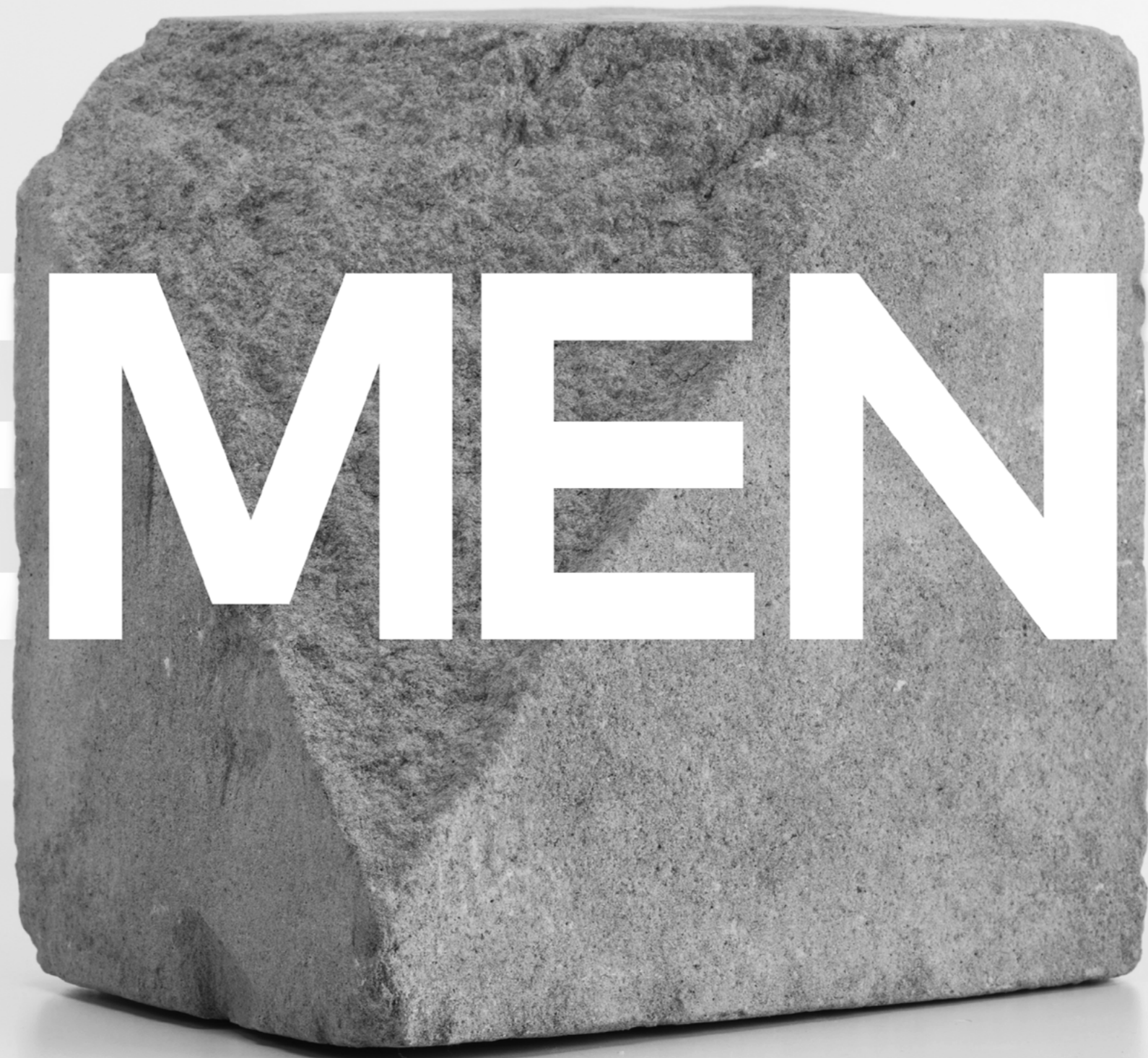


Crafting Iconic Facades & Beyond

In the architectural sonnet, a facade is the chorus. PMA ceramics are not just crafted for beauty but curated for an everlasting imprint. From bustling commercial hubs to serene hospitals, our ceramics are a symphony of design and durability.



CEMENT



Contemporary

Contemporary is a reflection of modern areas. Rough pattern and texture are combined to depict its modern appeal with a strong reference to its original material coming from the earth. Contemporary is a metropolitan inspiration accompanied by the sensation of durability that creates stylish spaces.

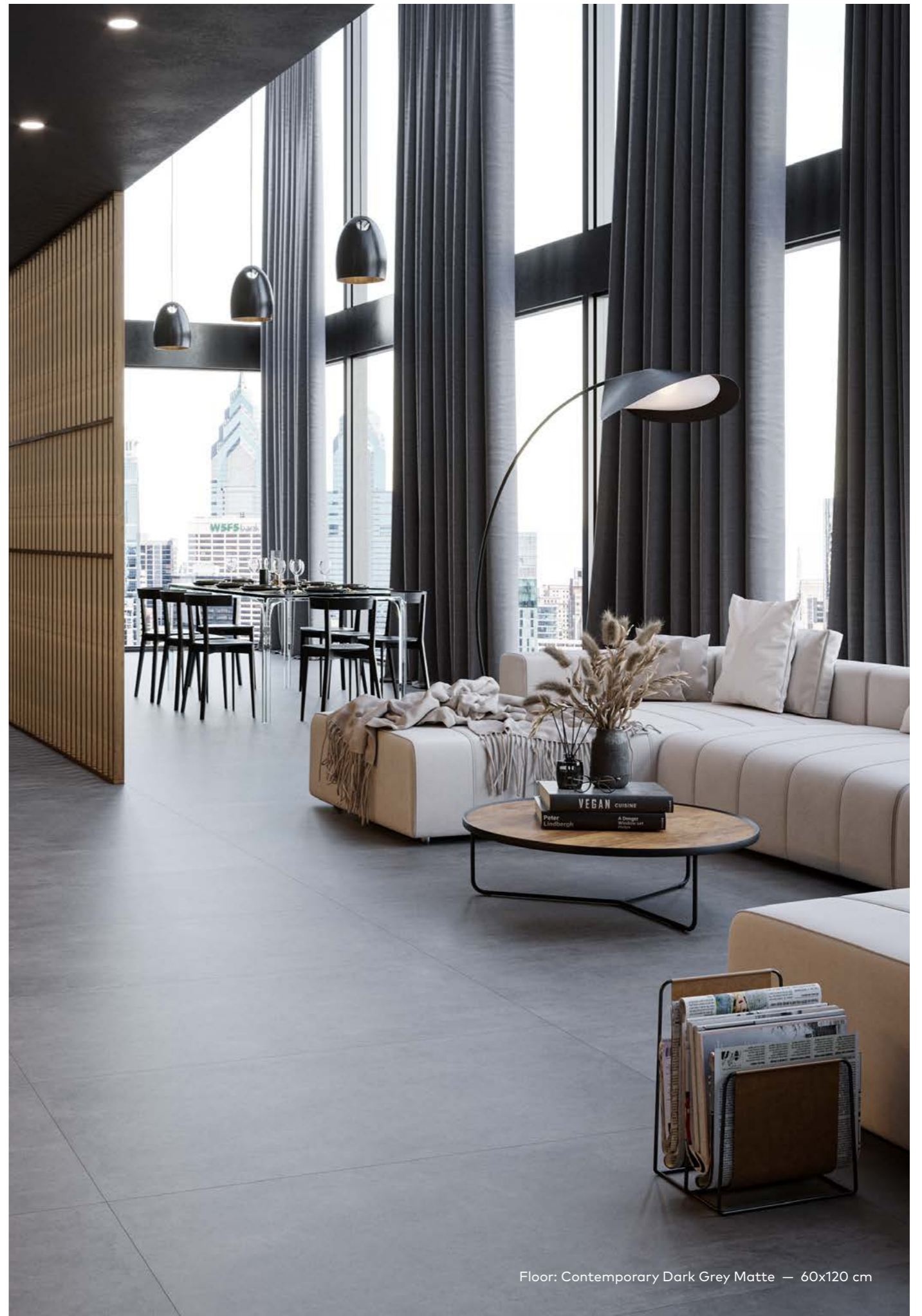




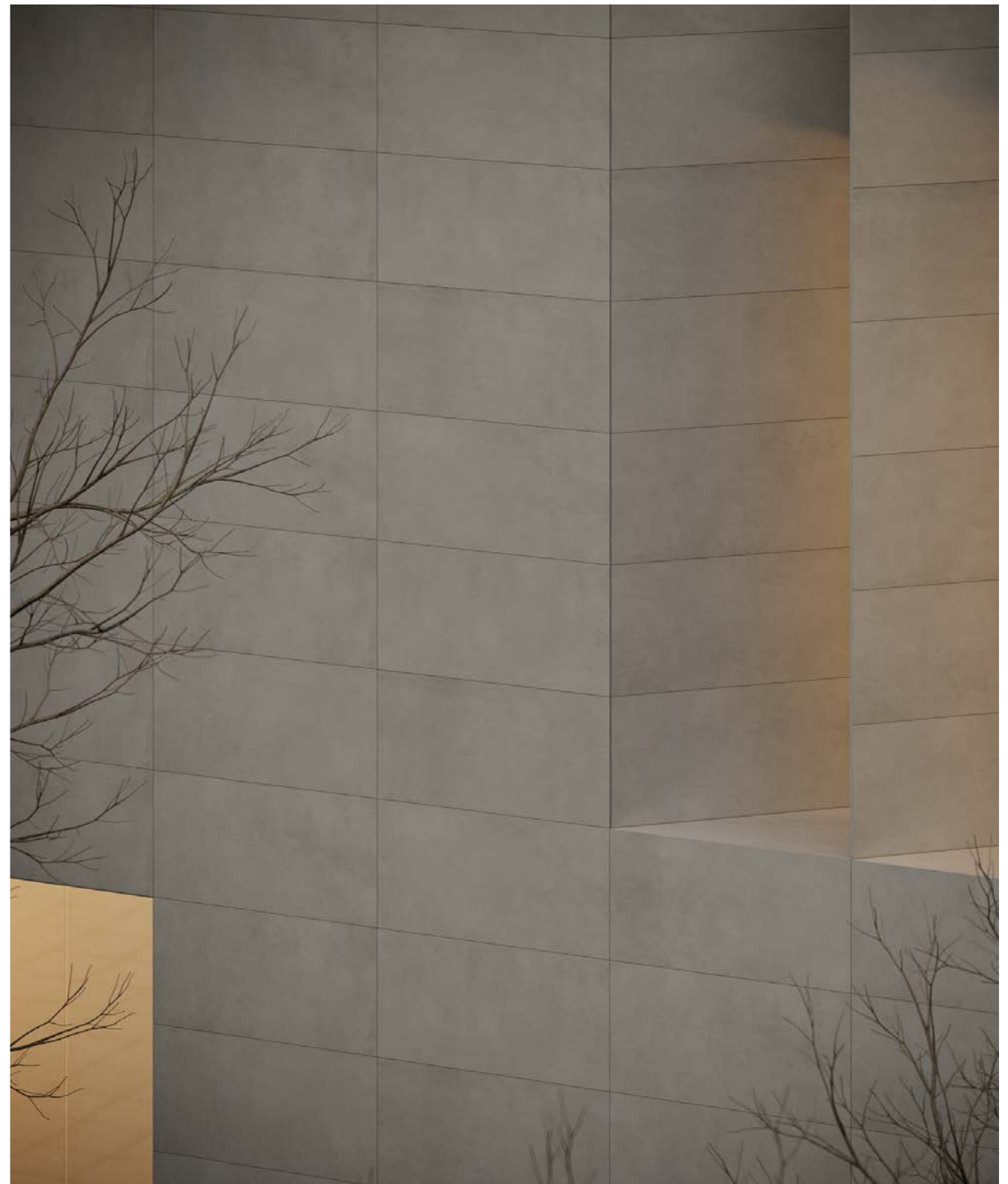
Floor: Contemporary Dark Grey Matte — 60x120 cm



Facade: Contemporary Ice and Dark Grey Matte — 60x120 cm



Floor: Contemporary Dark Grey Matte — 60x120 cm

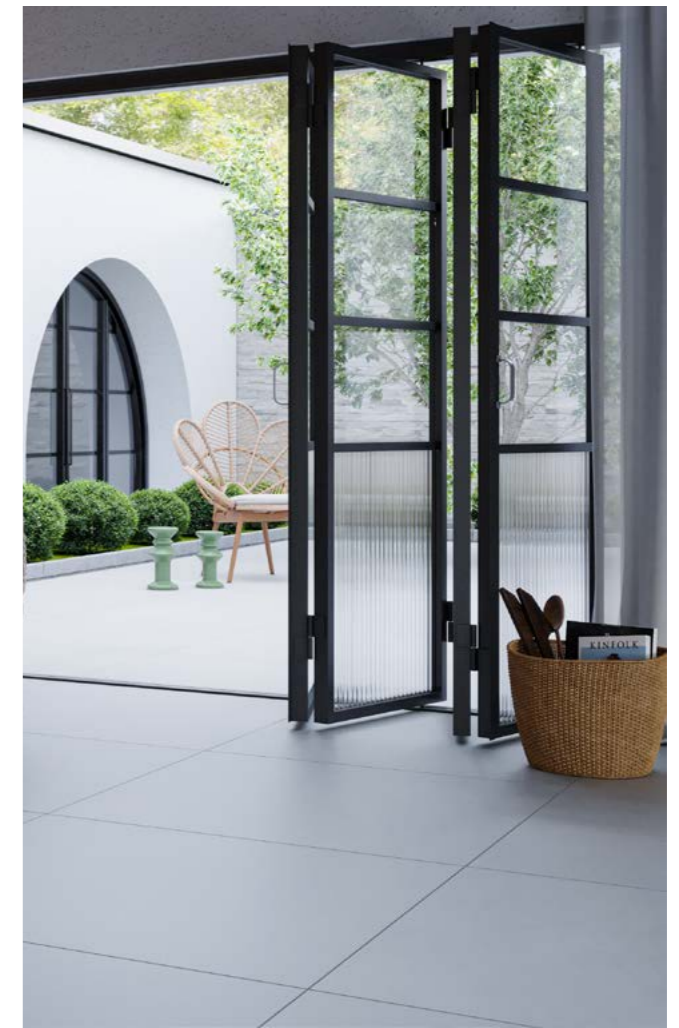


Natural Concrete

A concrete-effect collection which combines all the advantages of ceramic tiles with a perfect look to create a strong contemporary allure. Thanks to natural textures and neutral colors, concrete effect tiles are the perfect solution to a contemporary and minimalism style of design. Versatile collections to use in residential contexts and also administrative and industrial projects for indoor and outdoor spaces.



Floor: Natural Concrete Grey Matte — 100x100 cm



Floor: Natural Concrete Light Grey Matte — 100x100 cm



Floor: Natural Concrete Ash Matte — 60x120 cm
Wall: Natural Concrete Ash Matte — 120x280 cm
Wash Basin: Natural Concrete Ash Matte / Rexa
Box: Natural Concrete Dark Grey Matte





Floor: Beton Art Smoke Matte — 60x120 cm



Beton Art

The interpreter of an essential but sophisticated style that stands out for the possibility of multiple combinations of cement effects designed to create integration, key element of the most attractive combination of concrete surface. Beton Art in 5 different colors and 5 random surfaces helps architects to achieve the esthetic of cement together with durability of porcelain, meet needs of modernity in their designs.



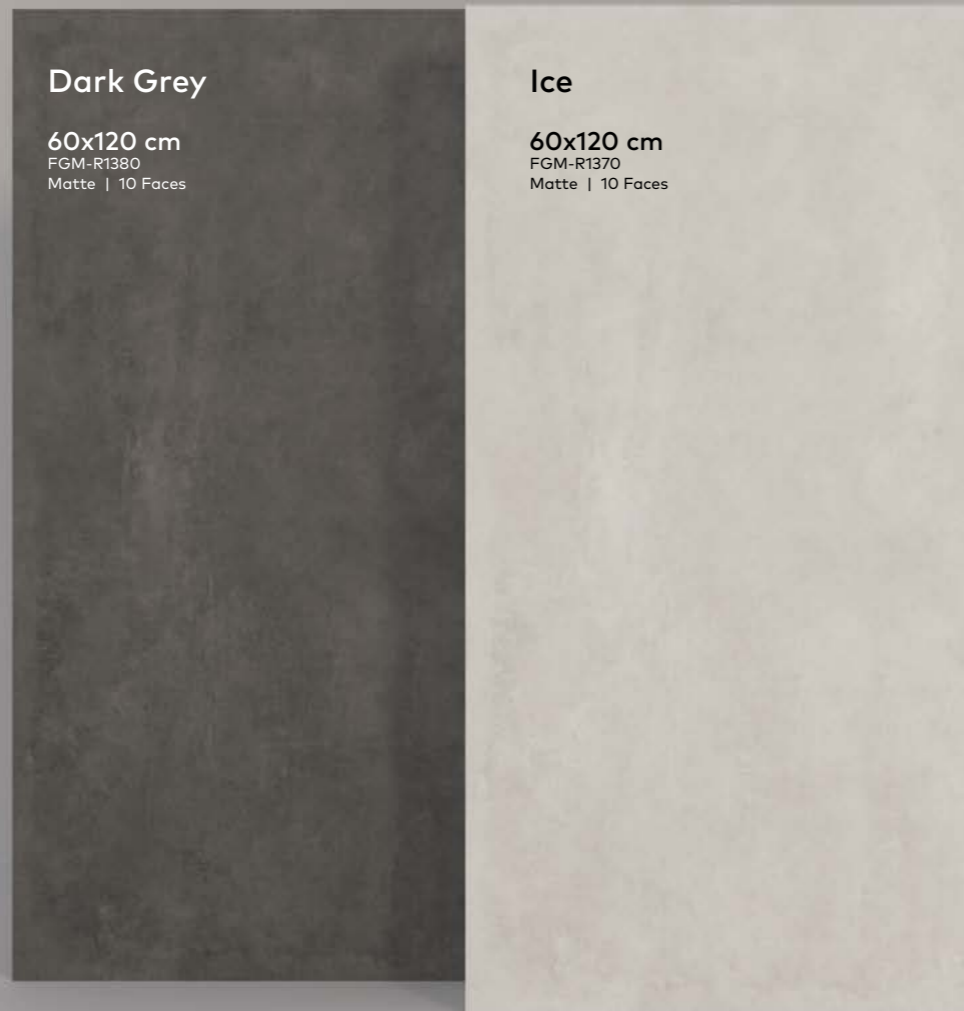
Wall: Beton Art Smoke Matte — 60x120 cm
Floor: Beton Art Grey Matte — 60x120 cm





Contemporary

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



Beton Art



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





Natural Concrete

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



Natural Concrete

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





Natural Concrete

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



Natural Concrete

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



A black and white photograph showing a close-up of a ceramic bowl and a brush. The bowl is on the left, and the brush is on the right. A shadow is cast on the white surface below the bowl and brush. The lighting is dramatic, highlighting the textures of the ceramic and the bristles of the brush.

Complementary product portfolio

In the ceramic realm, PMA sprawls as a masterpiece. Beyond porcelain ceramics, our offerings resonate with the brand's touch of quality and innovation. Whether it's foundational construction chemicals, exquisite furniture, or precision cutting – PMA promises excellence.

WOOD





Maxiwood

Maxiwood is a great mix of warmth and elegance which is perfectly in harmony with the latest innovative trends. Maxiwood surface is enhanced by relief punch that gives natural touch with new emotion of wooden material character and personality to every setting. Thanks to the stable nature of porcelain, Maxiwood is able to tackle every condition and offers new uses of wood for floors and walls in residential and commercial spaces.



Floor: Maxiwood Walnut Relief — 20x120 cm
Wall: Maxiwood Platinum Relief — 20x120 cm
and Contemporary Ice Matte — 60x120 cm



Floor: Maxiwood Almond Relief — 20x120 cm





Wall: Maxiwood Almond Relief — 20x120 cm
 Floor: Maxiwood Almond Relief — 20x120 cm

Maxiwood



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



Reference Projects

A Resounding Legacy in Iran's Ceramic Expanse

In Iran's ceramic domain, PMA 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, PMA 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	-	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		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		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
Kourosh 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

Winner of the 23rd Construction Industry Exhibition





Jewelry

Experience the perfect fusion of elegance in luxury jewelry store, adorned with PMA porcelain ceramics.

Beauty Cosmetics

Floristry

Enter a world of enchantment at valuable floristry. Where nature's beauty flourishes alongside PMA porcelain ceramics.

Boutique

Experience the world of PMA, and be amazed by the latest trends in the porcelain ceramic world. PMA porcelain ceramics are made of high-quality PMA, porcelain, ceramic, and glass. PMA porcelain ceramics are made of high-quality PMA, porcelain, ceramic, and glass. PMA porcelain ceramics are made of high-quality PMA, porcelain, ceramic, and glass.

RESERVED

TECHNICAL
INFORMATION

Technical Characteristics

CHARACTERISTICS	Annex G Group Bla		Test Method	PMA 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 /mm ²)	Minimum 35N /mm ² Individual Minimum 32N /mm ²			Affirmative
Impact resistance ,as: Coefficient of restitution (COR)	Declared Value		EN ISO 10545-5	Affirmative
Resistance to deep abrasion of unglazed tiles : Removed value (mm ³)	Maximum 175 mm ³		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	PMA 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 /mm ²)	Minimum 35N /mm ² Individual minimum 32N /mm ²			Affirmative
Resistance to deep abrasion of unglazed tiles: Removed Volume	Maximum 175mm ³		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 PMA 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 PMA 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 PMA 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 PMA SLABS

The PMA 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 PMA 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, PMA 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 PMA 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 PMA 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 PMA 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, PMA 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 PMA 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, PMA would like to point out that hydrofluoric acid (HF) and its derivatives cause irrevocable damage to its products. For routine cleaning operations, PMA 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

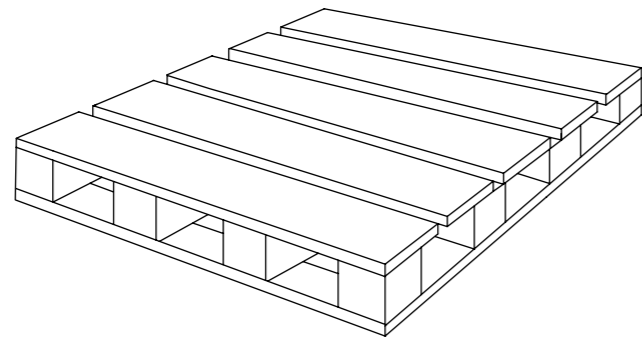
In the case of particularly stubborn stains, we recommend the use of specific detergents, which are indicated in greater detail in the table entitled "cleaning products". Furthermore, it should not be forgotten that it is easier to remove any stain when still fresh. It is always important to test the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

RAISED FLOORINGS

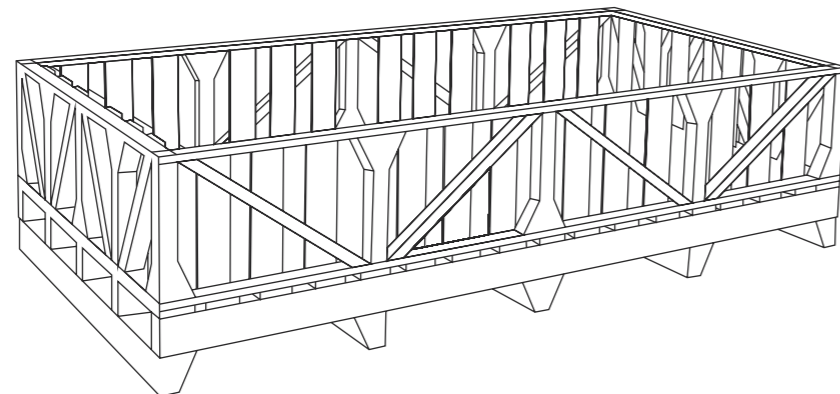
In the case of raised floorings, it is not possible to use a large quantity of water; we, therefore, recommend using a floor cloth that has been properly wrung. Routine cleaning must be carried out using purpose made floor cloths, lukewarm water, and detergent, reducing the amount of water used. Stains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

Packing

Size	Thickness	SQM/Box	Pieces/Box	KG/Box (Aprox)	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
100x100 cm	10 mm	2	2	46	42	1930	84



Size	Thickness	SQM/Box	Pieces/Box	KG/Box (Aprox)	Box/Pallet	KG/Pallet	SQM/Pallet
80x160 cm	9 mm	1.28	-	27.6	50	1380	64
120x240 cm	9.5 mm	2.88	-	61.33	36	2650	103.68
120x280 cm	9.5 mm	3.36	-	71.55	36	2910	120.96
160x320 cm	9.5 mm	5.12	-	109	24	3000	122.88



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 ^{d)}	X	X			EN ISO 10545-6
B.4 b	Resistance to Surface Abrasion -Glazed Tiles ^{d)}	X	X			EN ISO 10545-7
B.5	Linear Thermal Expansion ^{e)}	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

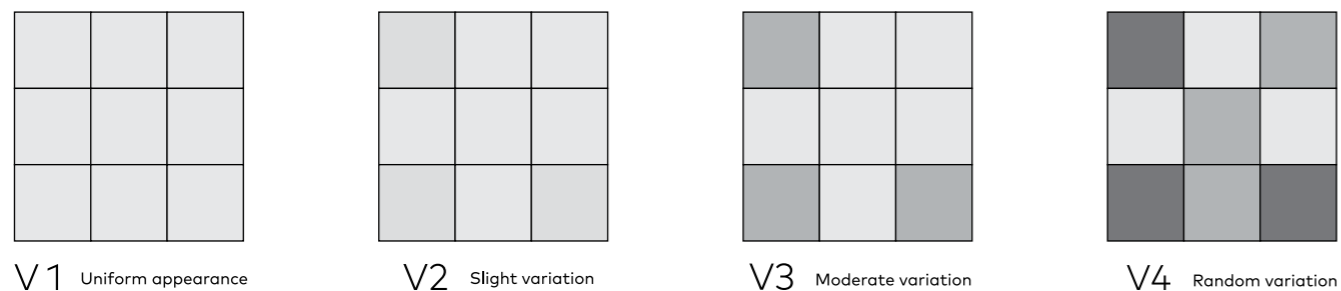
CHARACTERISTICS	Requirements for Nominal Size N			Test Method
	7 cm < N < 15 cm	N ≥ 15 cm		
	(mm)	%	(mm)	
b) Dispersion Adhesives ^k	Declared value (s)			EN 12004:2007,4.2 ^l
a) Glazed Tiles	ΔE < 0.75			EN ISO 10545-16
b) Unglazed Tiles	ΔE < 1.0			EN ISO 10545-16
B.13 IMPACT RESISTANCE, as:				
- Coefficient 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	■	■	■	■	■	■			

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