



RANIBA

The Treasury of Royalty

120x240cm

PRODUCT BOOK

YEAR \ 2019 - 2020

Defination of dimension

AN ASPECT OR FEATURE OF A THING.

A MEASURABLE EXTENT OF
SOME KIND,
SUCH AS LENGTH, BREADTH,
DEPTH OR HEIGHT.

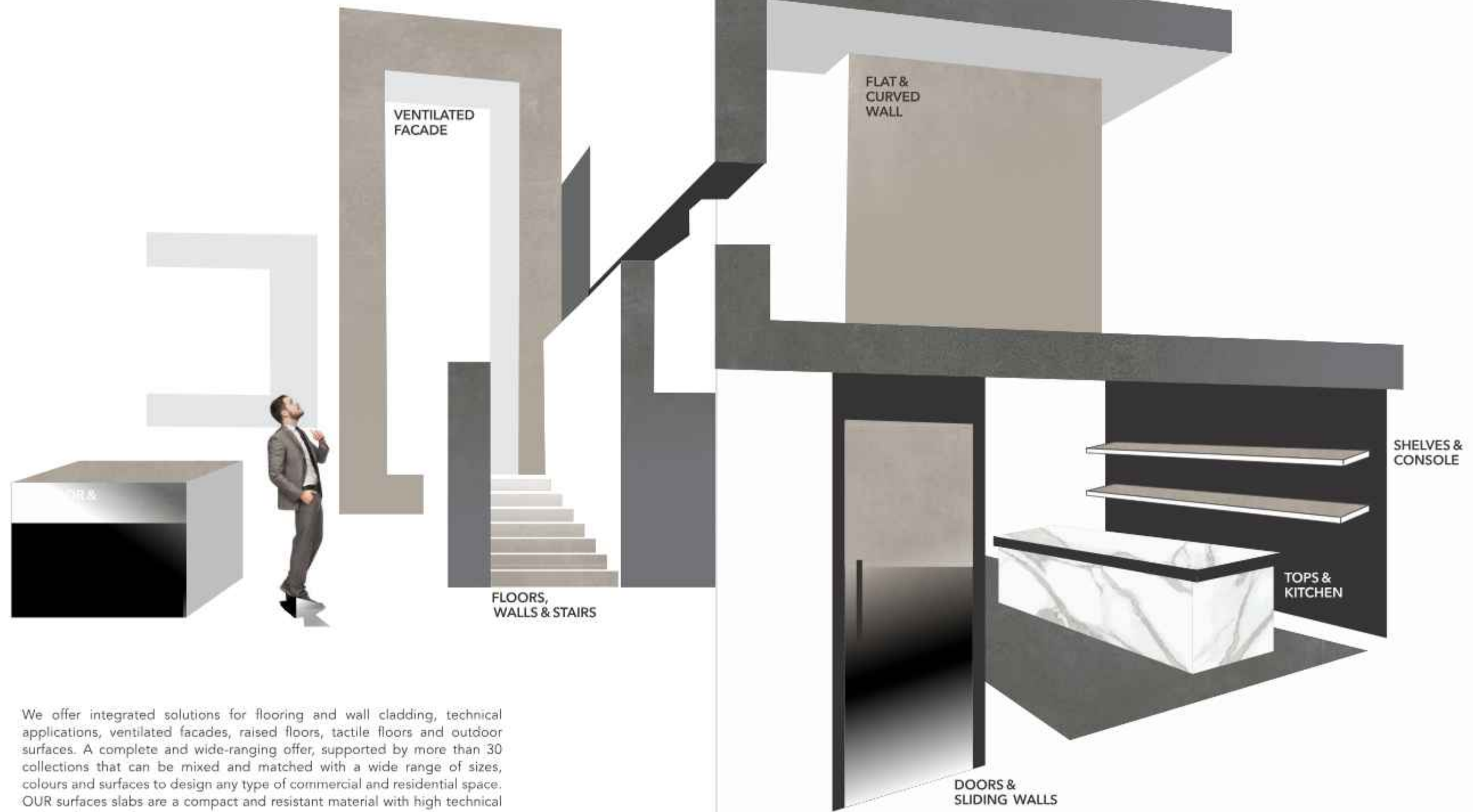


Step into the
new dimension of
infinity slab



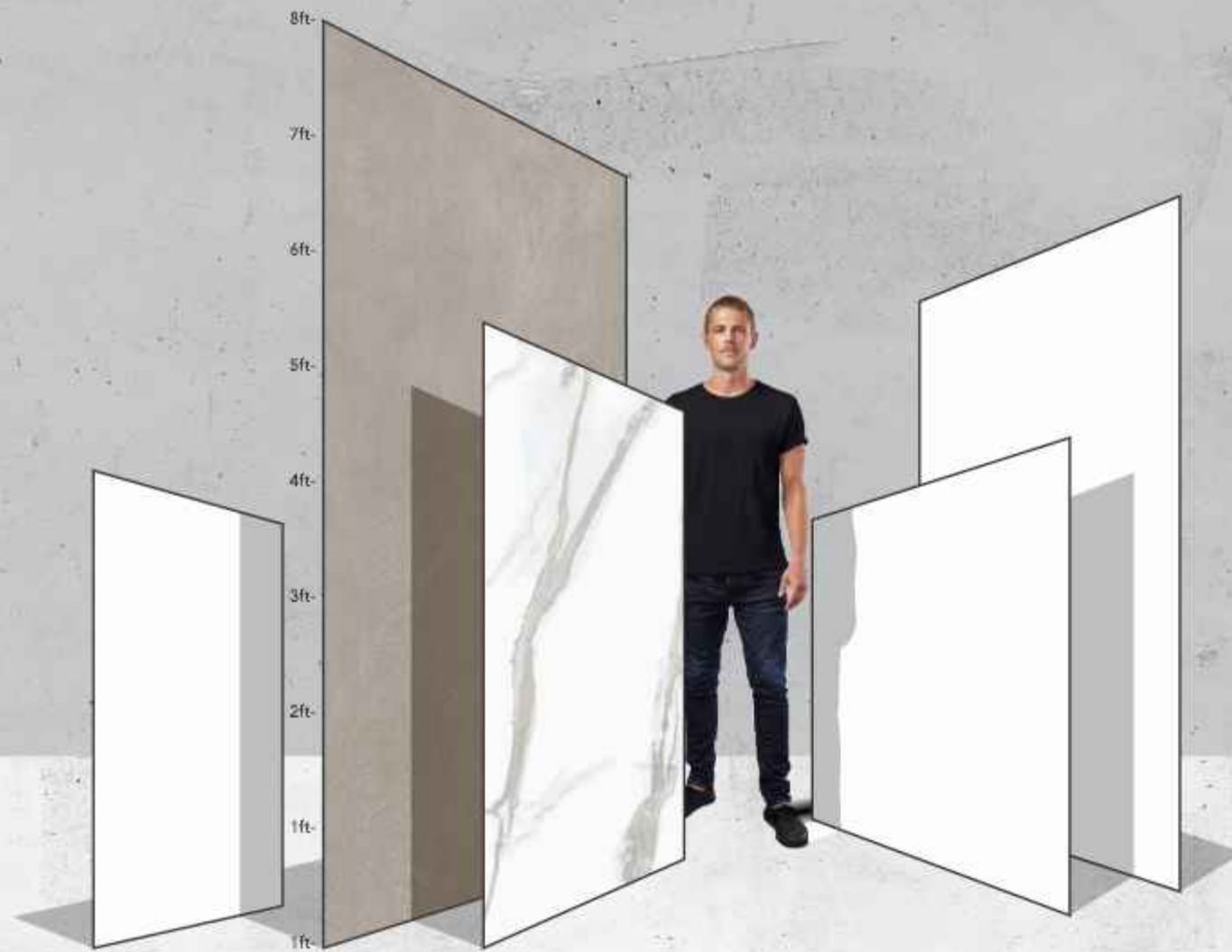
Shape your ideas with infinity slabs

Infinity Slab is a revolutionary new
hi-tech product that lets you customized to
any large-sized ceramics.



We offer integrated solutions for flooring and wall cladding, technical applications, ventilated facades, raised floors, tactile floors and outdoor surfaces. A complete and wide-ranging offer, supported by more than 30 collections that can be mixed and matched with a wide range of sizes, colours and surfaces to design any type of commercial and residential space. OUR surfaces slabs are a compact and resistant material with high technical and aesthetic performances.

Choose your sizes
with infinity slabs



COMPREHENSIVE RANGE OF PRODUCTS
ALLOWS IT TO EFFECTIVELY MEET ALL
DESIGN AND COMMERCIAL
REQUIREMENTS.



120 x 240cm
120 x 120cm
90 x 180cm
80 x 160cm
60 x 120cm

OUR's cutting-edge production system combined with the high level of expertise and professionalism of the business units and comprehensive range of products allows it to effectively meet all design and commercial requirements. The company's solid structure is able to meet the demands of an ever-evolving market, by offering an effective, accurate and high-quality services.



The slabs are obtained through a vitrification process, i.e. the complete fusion of sand, quartz, feldspar, kaolin, clay and natural colouring oxides to form a single material: these raw materials are fired at temperatures above 1200°C to create a compact and solid product with exceptional hardness and unparalleled mechanical properties. OUR slabs meet the criteria of innovative architecture, able to perfectly combine striking aesthetics with high technological performance.

Choose your sizes with infinity slabs



HIGH GLOSS

Super gloss finishing and a touch of glorified glamour is what make these tiles an exception. Their sophisticated outlook and trendy colors shimmer and brighten up the mood & spaces.

METALLIC

Trendy and appealing designs of these tiles are total hit and dearly favorable. Bring home a new kind of interior designing and watch these tiles transforming your boring gloomy spaces into fun and functionality.

POLISHED

Fine finishing and smoothness of tile surface make this collection another beautiful heaven of possibilities. Smart choice of tiles goes hand in hand with any interior decors.

SILK

Textural smoothness combined with fascinating colour schemes open a vast range of possibilities for your space. It becomes very difficult for the onlookers to stay away from the tempting impulse to touch those tiles.

GLINT

Classy yet contemporary is the appeal of this fabulous collection of vitrified tiles. Originality and diverse shades of colourful tiles has made this collection a worthy possession of all times.

MATT

Sobriety of surface quality and boldness of this collection is something as unique as your personality. Not so loud yet full of creative surprises are much welcomed for an extraordinary surrounding.

CARVING

The surface of the tiles are given an extra cosy effect by carving out surface of the tile in a creative way, which adds glamour and attraction to your interiors.

get advantage of technical features with infinity slabs



FLEXIBLE
STRENGTH



CHEMICAL
RESISTANCE



FLEXURAL
STRENGTH



WATERPROOF
SURFACE



RESISTANCE
TO FIRE



FROST
RESISTANCE



HYGIENIC
SURFACE



SCRATCH
RESISTANCE



ECO
FRIENDLY



Our creation has been categorized and sorted in cool trendy ways. It is easier to pick and decorate your own surroundings just the way you want. More options and better judgments about our various tiles will conquer your heart once and for all.

120x
240cm

Our set forth a new milestone with the massive and stunning tiles to create your ambience charismatic and captivating.





RANIBA
The Treasury of Royalty

\ STATUARIO ABSOLUTE



Finish \
POLISHED

Technical features \



**120x
240cm**



\ STATUARIO ONE



Finish \
POLISHED

Technical features \



**120x
240cm**

\ STATUARIO BLANCO



Finish \
POLISHED

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty

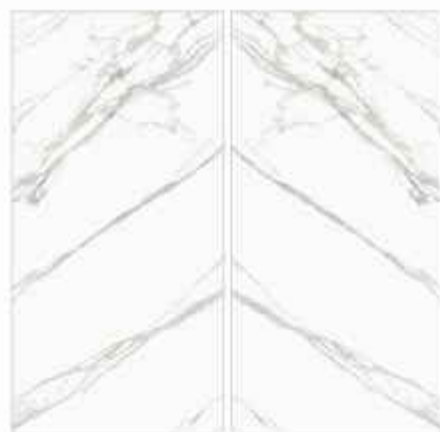


120x
240cm



RANIBA
The Treasury of Royalty

\ STATUARIO CLASSIC



BOOK MATCH - A+B

Finish \
POLISHED

Technical features \



**120x
240cm**





RANIBA
The Treasury of Royalty

\ STATUARIO SUPER



Finish \
POLISHED

Technical features \



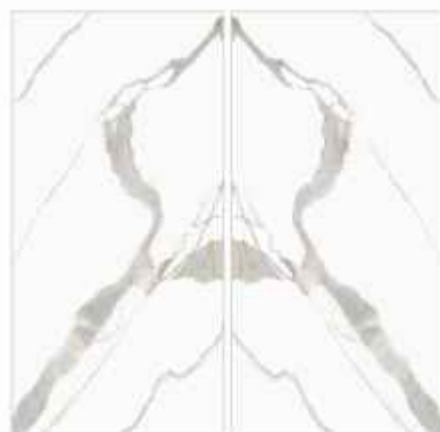
**120x
240cm**





RANIBA
The Treasury of Royalty

\ STATUARIO INFINITY



BOOK MATCH - A+B

Finish \
POLISHED

Technical features \



**120x
240cm**





RANIBA
The Treasury of Royalty

\ CALCUTTA



Finish \
POLISHED

Technical features \



**120x
240cm**



Preview of \ CALCUTTA



RANIBA
The Treasury of Royalty

\ CARRARA

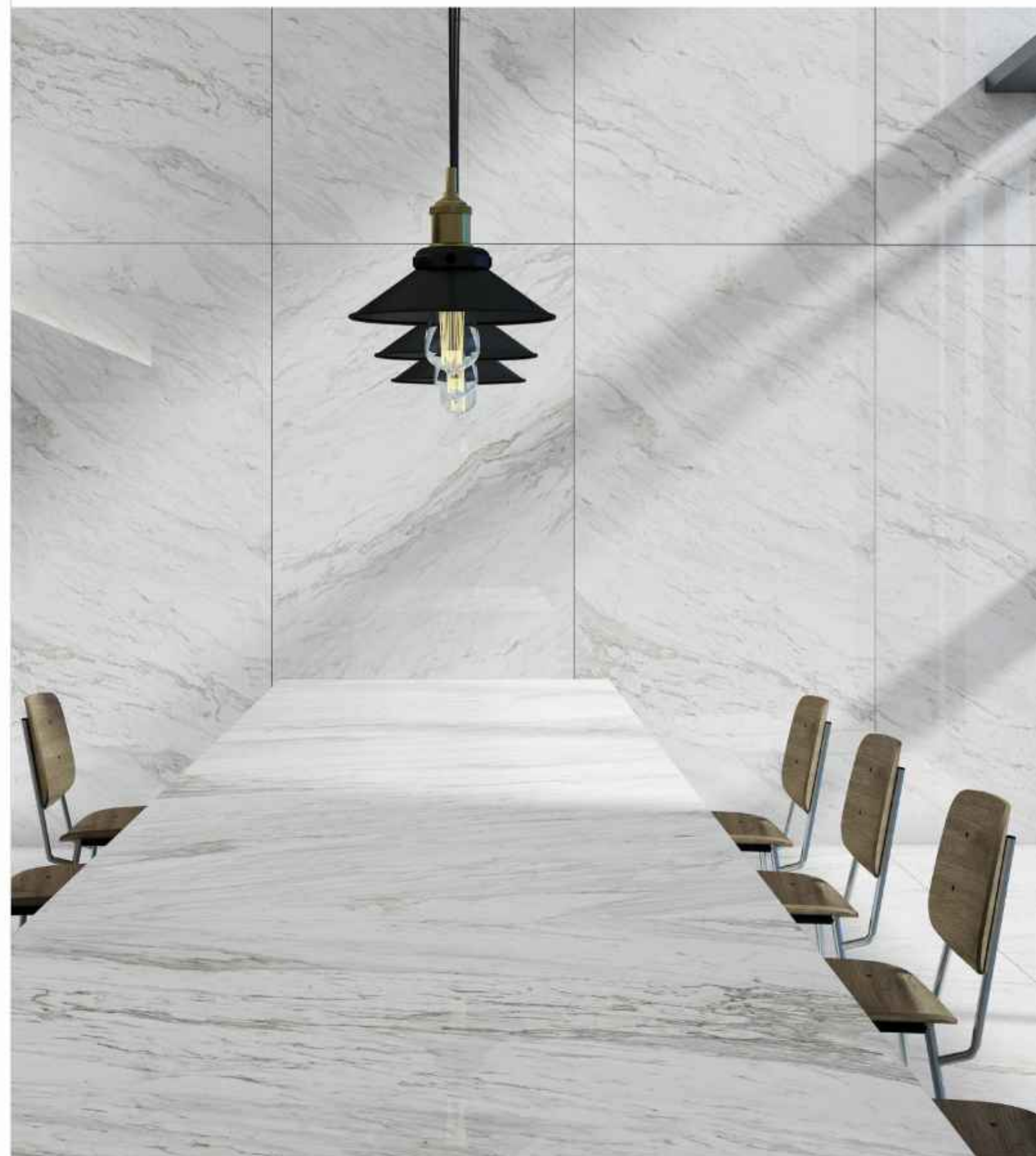


Finish \
POLISHED

Technical features \



**120x
240cm**



Preview of \ CARRARA

\ ROBINSON WHITE

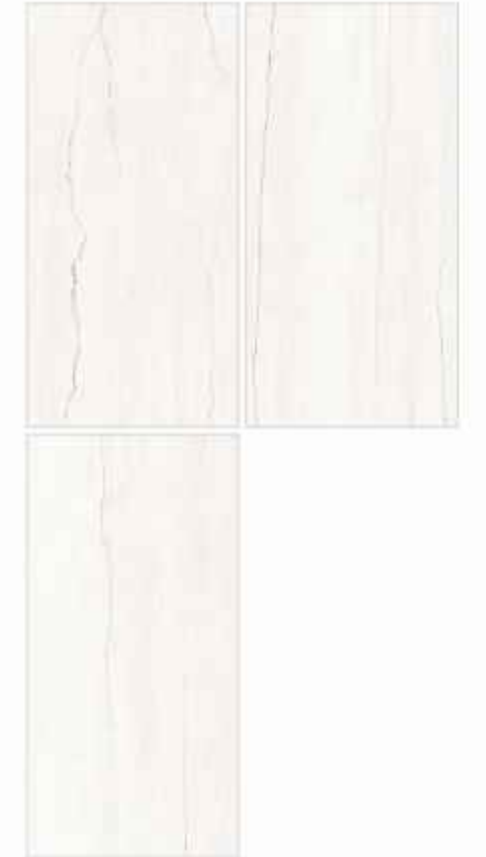


Finish \
POLISHED

Technical features \



\ ORANGE STREAK



Finish \
POLISHED

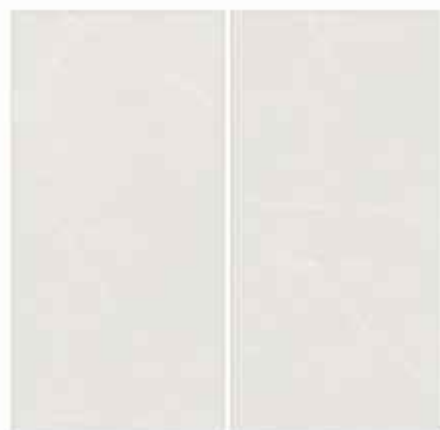
Technical features \





RANIBA
The Treasury of Royalty

\ LIEM BIANCO



Finish \
POLISHED

Technical features \



**120x
240cm**



Preview of \ LIEM BIANCO



RANIBA
The Treasury of Royalty

\ BIANCO MARMO



Finish \
POLISHED

Technical features \



WALL SPACE



FLOOR SPACE



WALL SPACE



COMMERCIAL SPACE



PUBLIC SPACE



COUNTER TOPS



WALL CLADDING



BUILDING FACADE

**120x
240cm**



Preview of \ BIANCO MARMO



RANIBA
The Treasury of Royalty

\ ONYX BIANCO



Finish \
POLISHED

Technical features \



WALL AND FLOOR



WALL AND FLOOR



WALL AND FLOOR



WALL AND FLOOR



WALL AND FLOOR



WALL AND FLOOR



WALL AND FLOOR



WALL AND FLOOR

**120x
240cm**



Preview of \ ONYX BIANCO

\ ONYX MANGO



Finish \
POLISHED

Technical features \



**120x
240cm**

\ ARMANI GREY



Finish \
POLISHED

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty

\ QUARTZITE SILVER



Finish \
POLISHED

Technical features \



**120x
240cm**



Preview of \ QUARTZITE SILVER



RANIBA
The Treasury of Royalty

\ PICASO OLIVE



Finish \
POLISHED

Technical features \

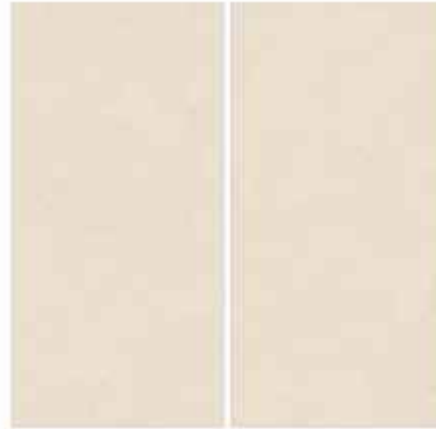


**120x
240cm**



Preview of \ PICASO OLIVE

\ PULPIS BLOSSOM



Finish \
POLISHED

Technical features \



**120x
240cm**

\ PULPIS FLASH



Finish \
POLISHED

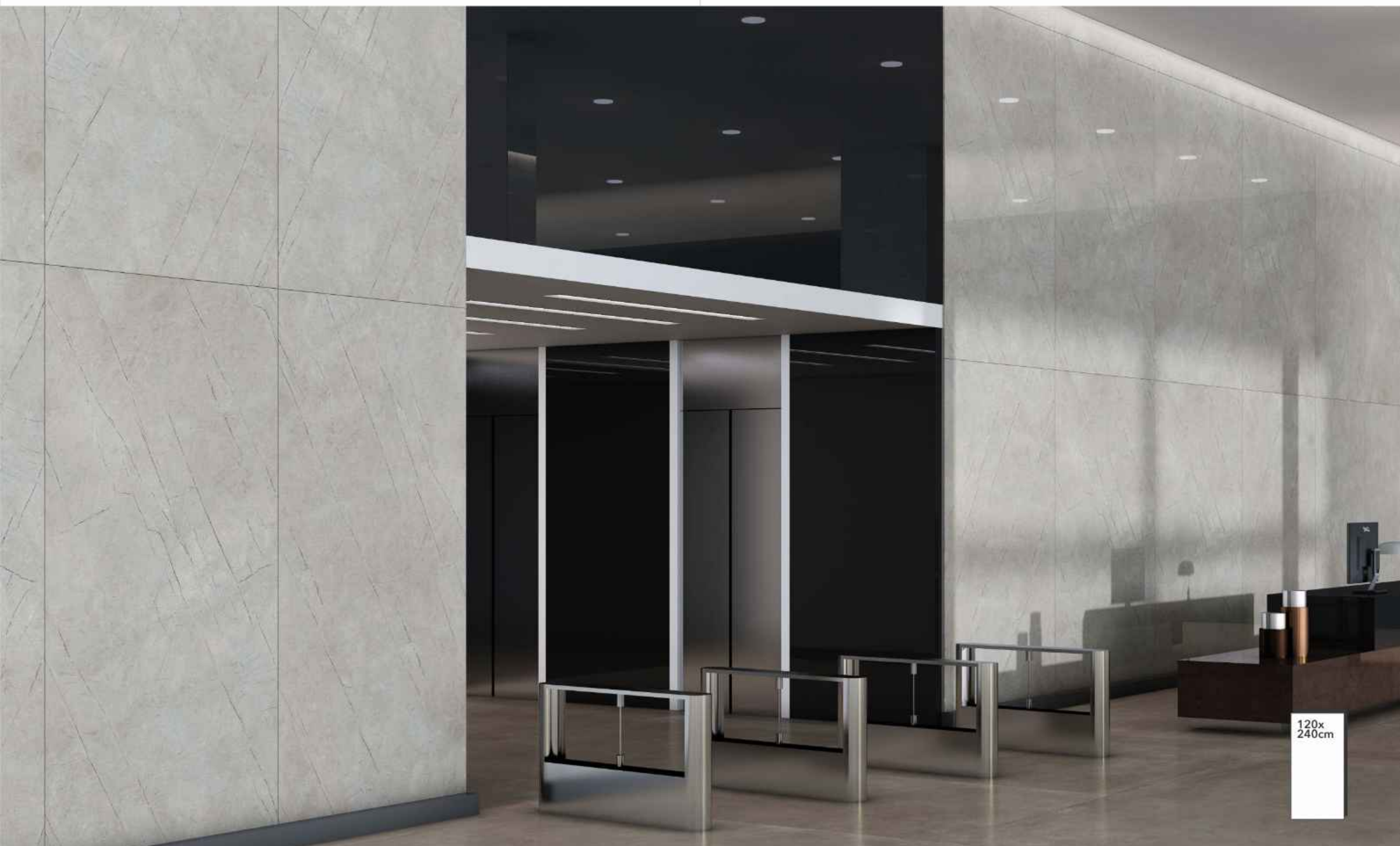
Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty



120x
240cm

\ BOTTOCINO CLASSIC



Finish \
POLISHED

Technical features \



**120x
240cm**

\ ROYAL BURBERRY



Finish \
POLISHED

Technical features \



**120x
240cm**

\ BRESCIA

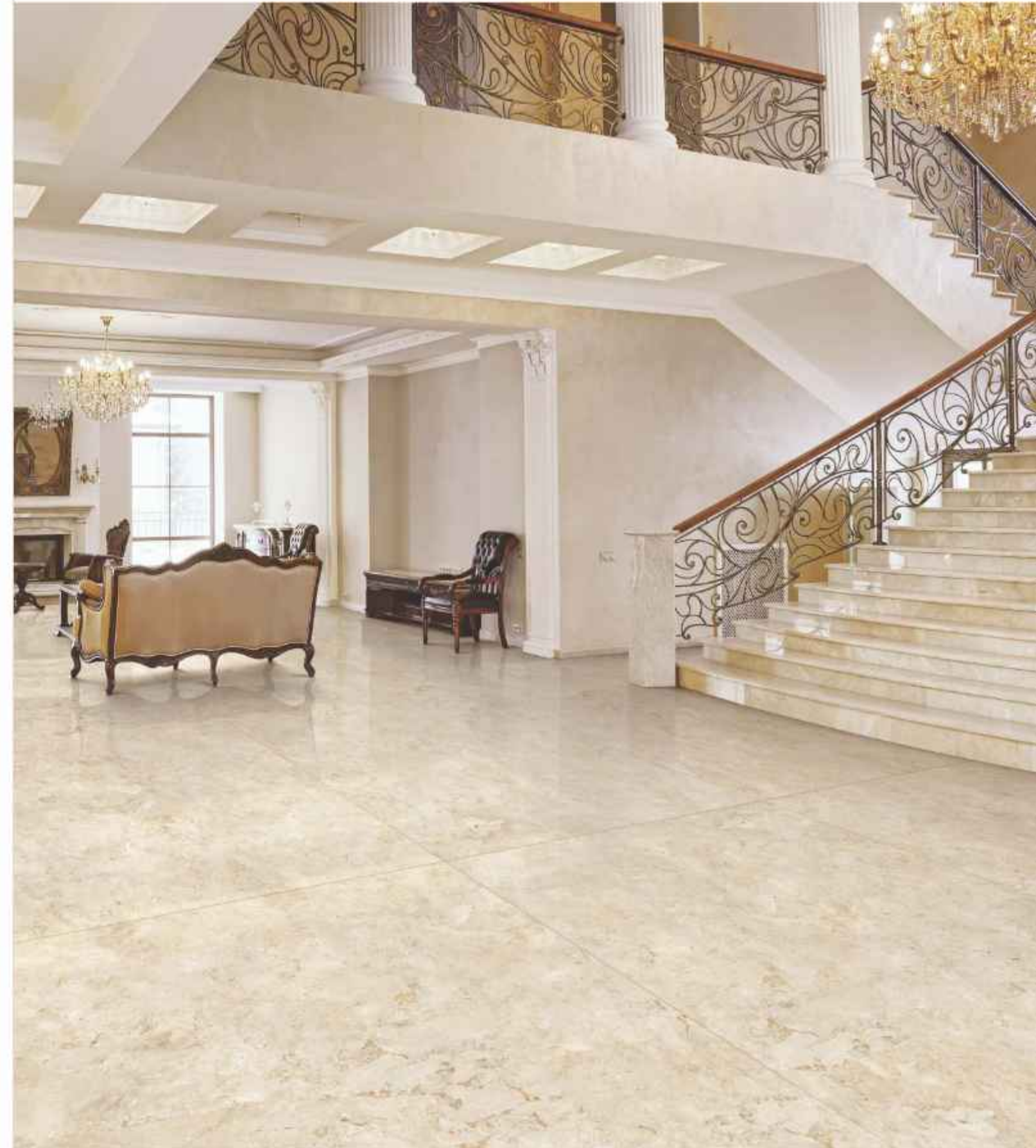


Finish \
POLISHED

Technical features \



**120x
240cm**





RANIBA
The Treasury of Royalty

\ BRESCIA BEIGE



BOOK MATCH - A+B

Finish \
POLISHED

Technical features \



**120x
240cm**

\ BRESCIA FAME



Finish \
POLISHED

Technical features \



**120x
240cm**



RANIBA
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120x
240cm



RANIBA
The Treasury of Royalty

\ CONCRITE NOOK



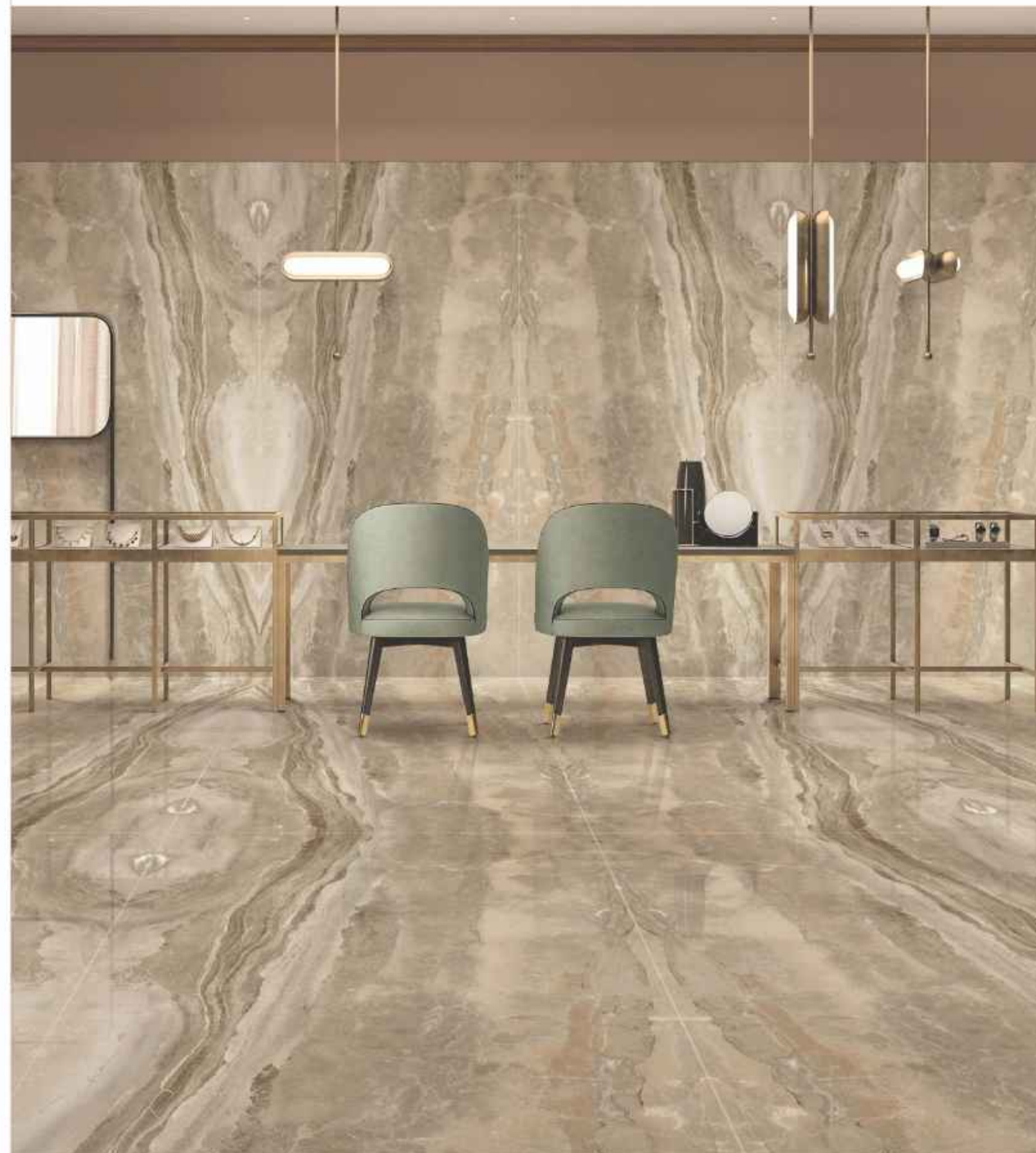
BOOK MATCH - A+B

Finish \
POLISHED

Technical features \



**120x
240cm**





RANIBA
The Treasury of Royalty

\ MOONSTONE BEIGE



Finish \
POLISHED

Technical features \



**120x
240cm**





RANIBA
The Treasury of Royalty

\ TRAVERTINO CLASSICO



Finish \
POLISHED

Technical features \



WALL SPACE



WALL THICKNESS



WALL SPACE



WALL SPACE



WALL SPACE



WALL SPACE

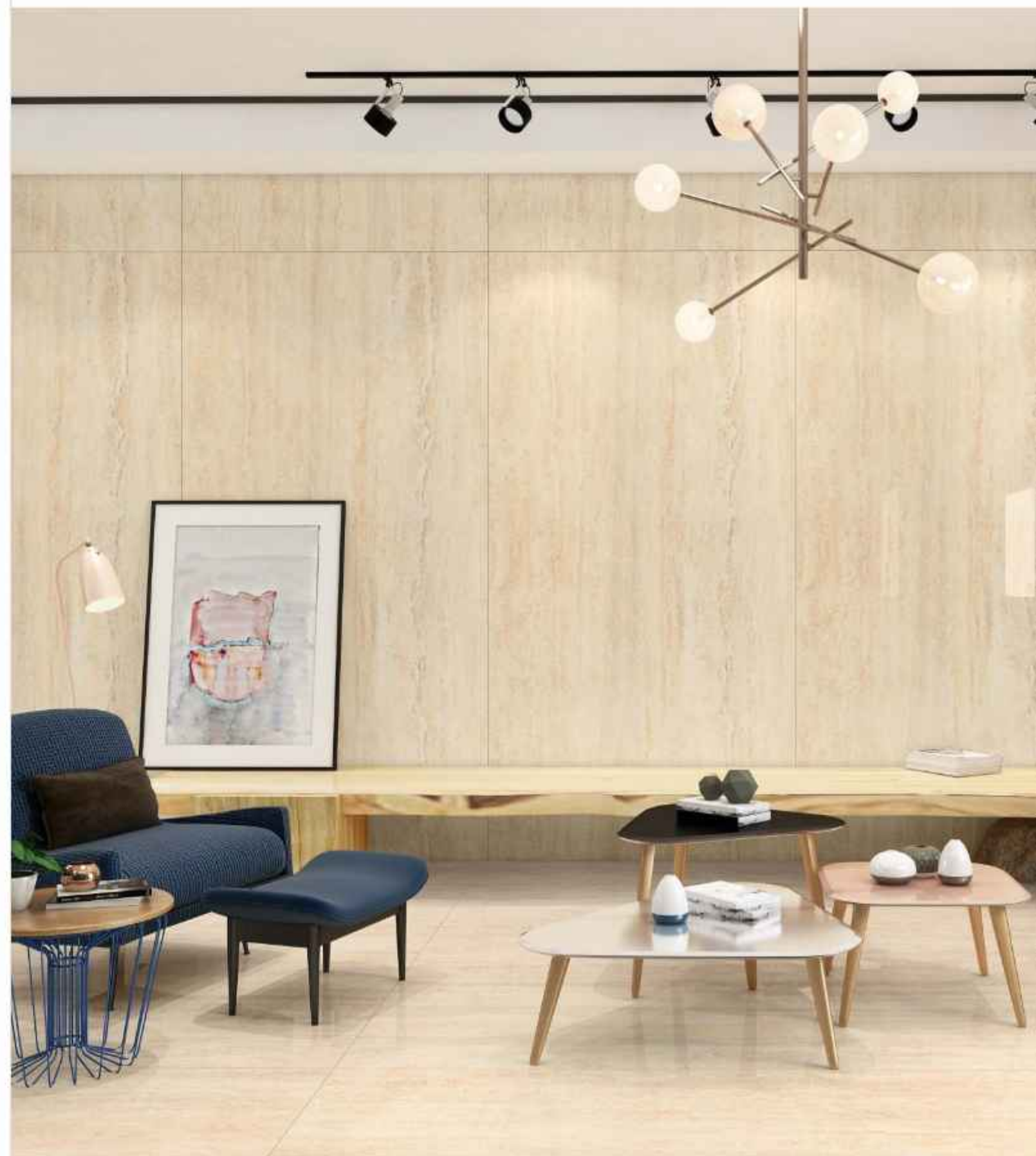


WALL SPACE



WALL SPACE

**120x
240cm**





RANIBA
The Treasury of Royalty

\ DYNO BEIGE



Finish \
POLISHED

Technical features \



**120x
240cm**



Preview of \ DYNO BEIGE



RANIBA
The Treasury of Royalty

\ VERSACE AURUM



Finish \
POLISHED

Technical features \



**120x
240cm**



Preview of \ VERSACE AURUM

\ PICASO ARTE



BOOK MATCH - A+B

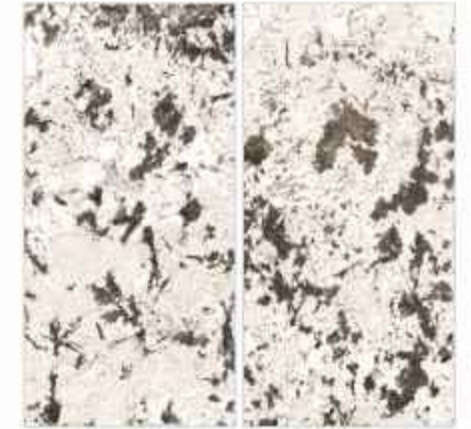
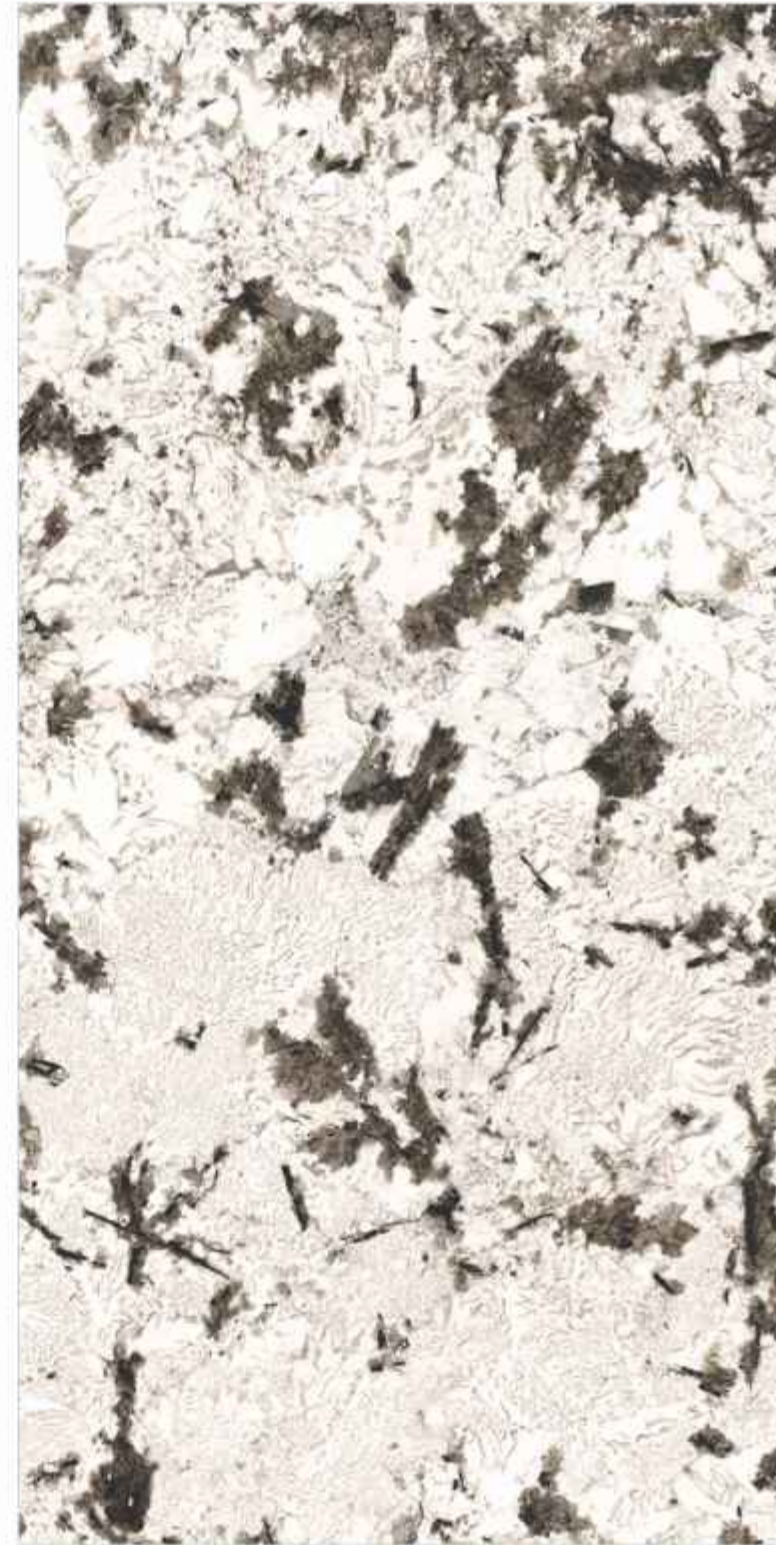
Finish \
POLISHED

Technical features \



**120x
240cm**

\ ARTIC WHITE



Finish \
POLISHED

Technical features \



**120x
240cm**



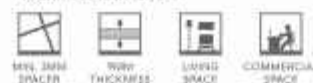
RANIBA
The Treasury of Royalty

\ EMPERADOR GRIGIO



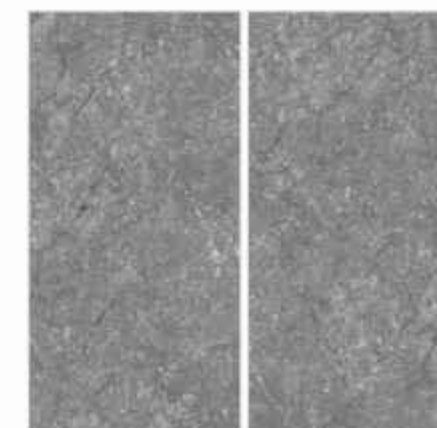
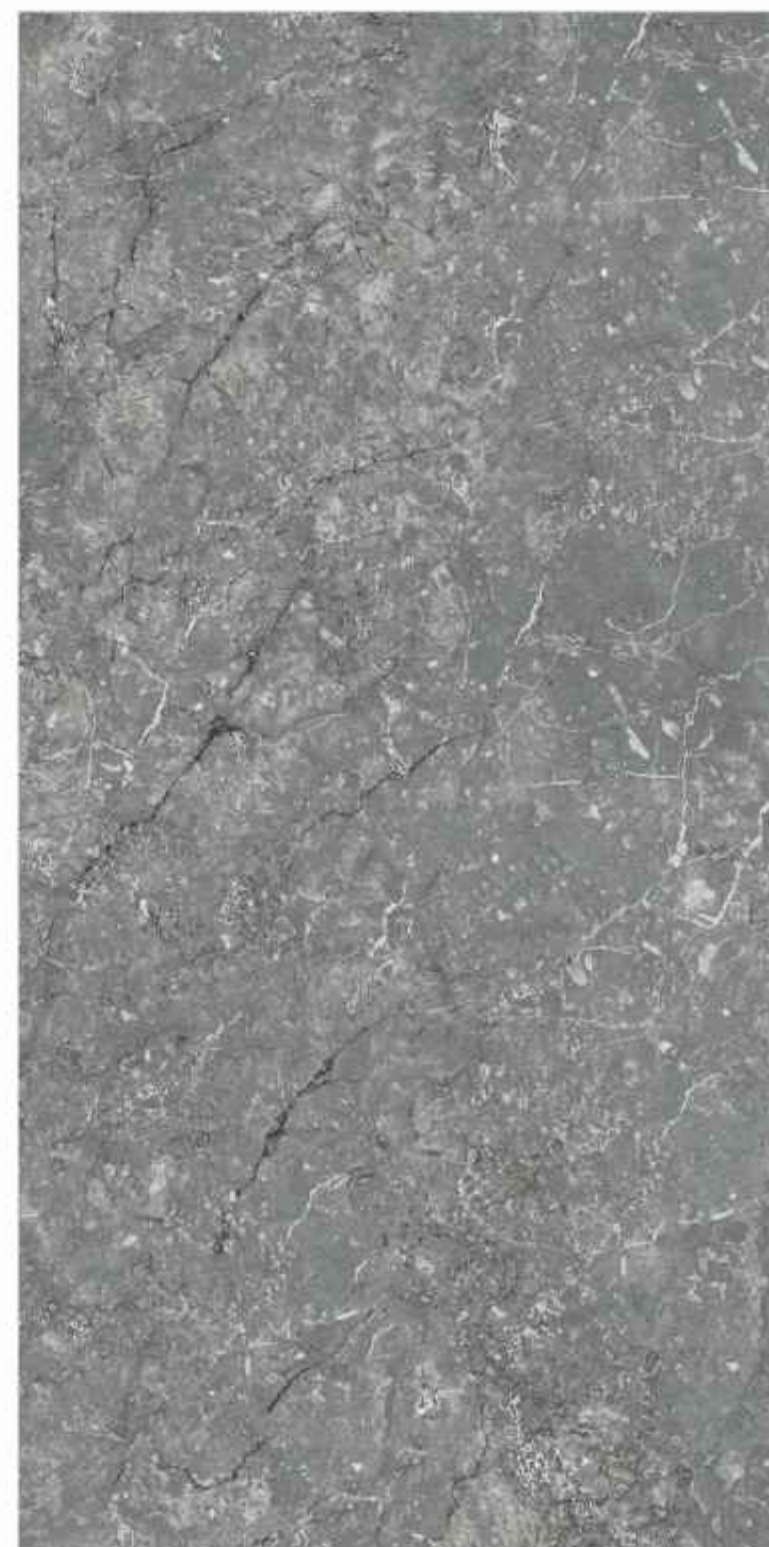
Finish \
POLISHED

Technical features \



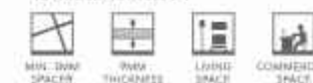
**120x
240cm**

\ WILLIAM GREY



Finish \
POLISHED

Technical features \

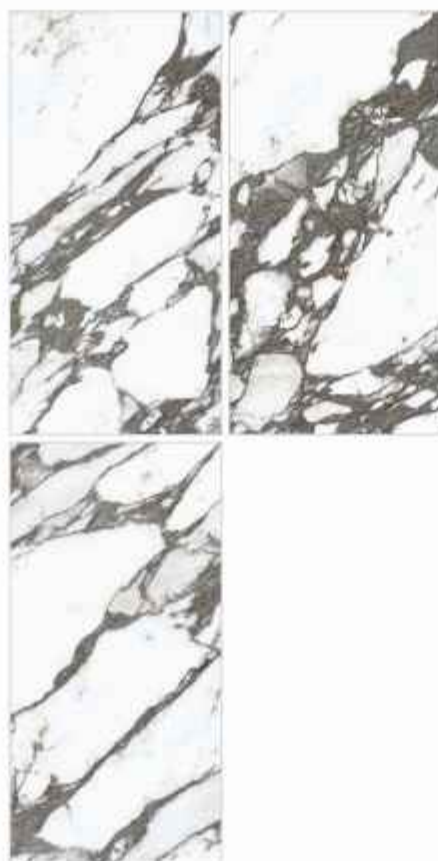


**120x
240cm**



RANIBA
The Treasury of Royalty

\ NEBULA COLLATE



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



Preview of \ NEBULA COLLATE



RANIBA
The Treasury of Royalty

\ CALCUTTA INFINITY



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



Preview of \ CALCUTTA INFINITY



RANIBA
The Treasury of Royalty

\ RIO STONE



Finish \

HIGH GLOSS

Technical features \



WALL SPACE



WALL SPACE



WALL SPACE



WALL SPACE



WALL SPACE



WALL SPACE



WALL SPACE



WALL SPACE

**120x
240cm**

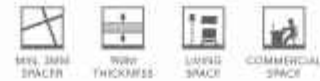


\ ARMANI VERDE



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**

\ ARMANI ORO



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty



120x
240cm



RANIBA
The Treasury of Royalty

\ LIEM GREY



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**

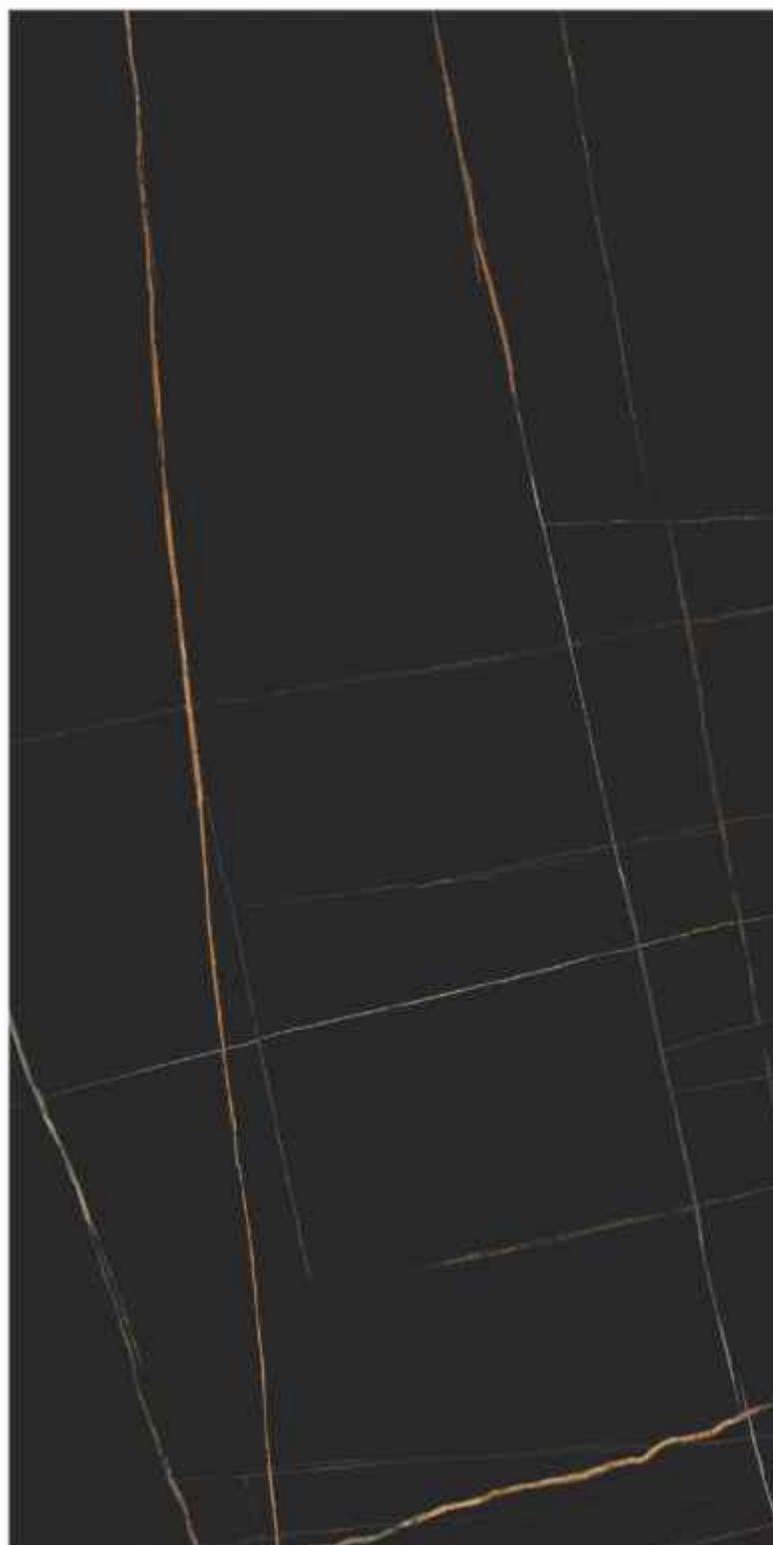


Preview of \ LIEM GREY



RANIBA
The Treasury of Royalty

\ SAINT LAURENT



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



Preview of \ SAINT LAURENT



RANIBA
The Treasury of Royalty

\ EMPERADOR DARK



Finish \
HIGH GLOSS

Technical features \



WALL AND
FLOOR



WALL
THICKNESS



LIVING
SPACE



COMMERCIAL
SPACE



PUBLIC
SPACE



COUNTER
TOPS



WALL
CLADDING



BUILDING
FACADE

**120x
240cm**



Preview of \ EMPERADOR DARK



RANIBA
The Treasury of Royalty

\ BLUE BRESCIA

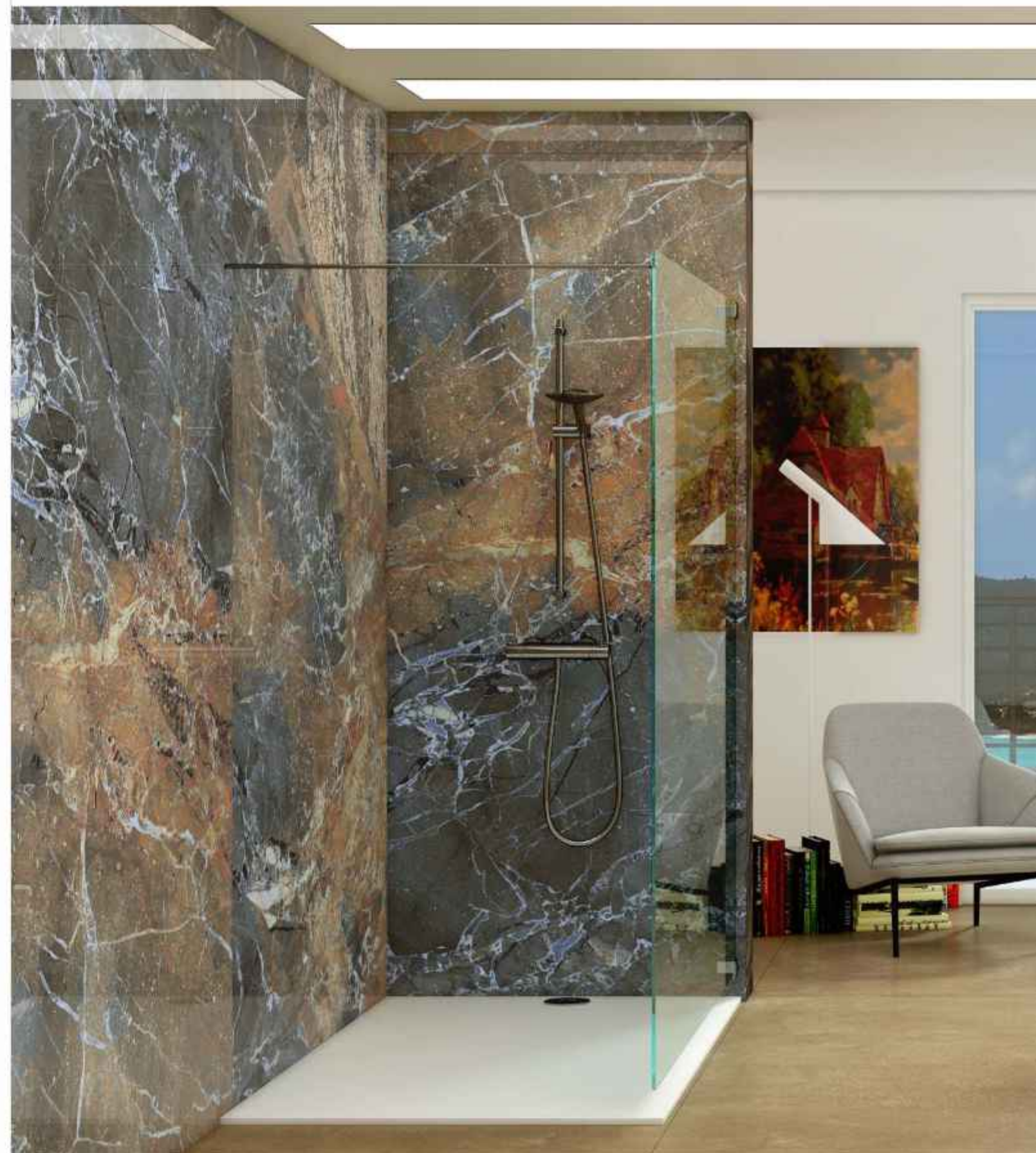


Finish \
HIGH GLOSS

Technical features \

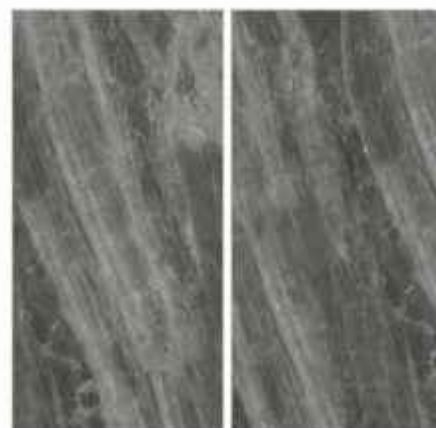


**120x
240cm**



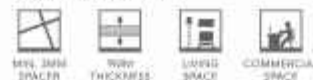
Preview of \ BLUE BRESCIA

\ LOUIS GREY



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**

\ GRANDE VENA



BOOK MATCH - A+B

Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty

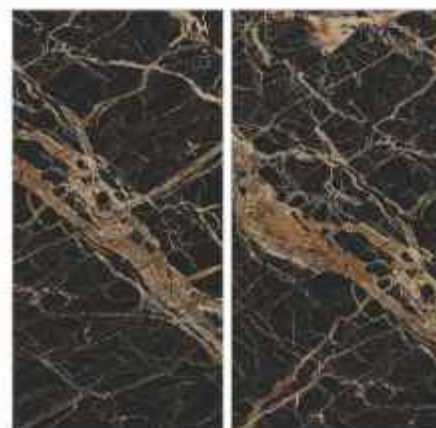
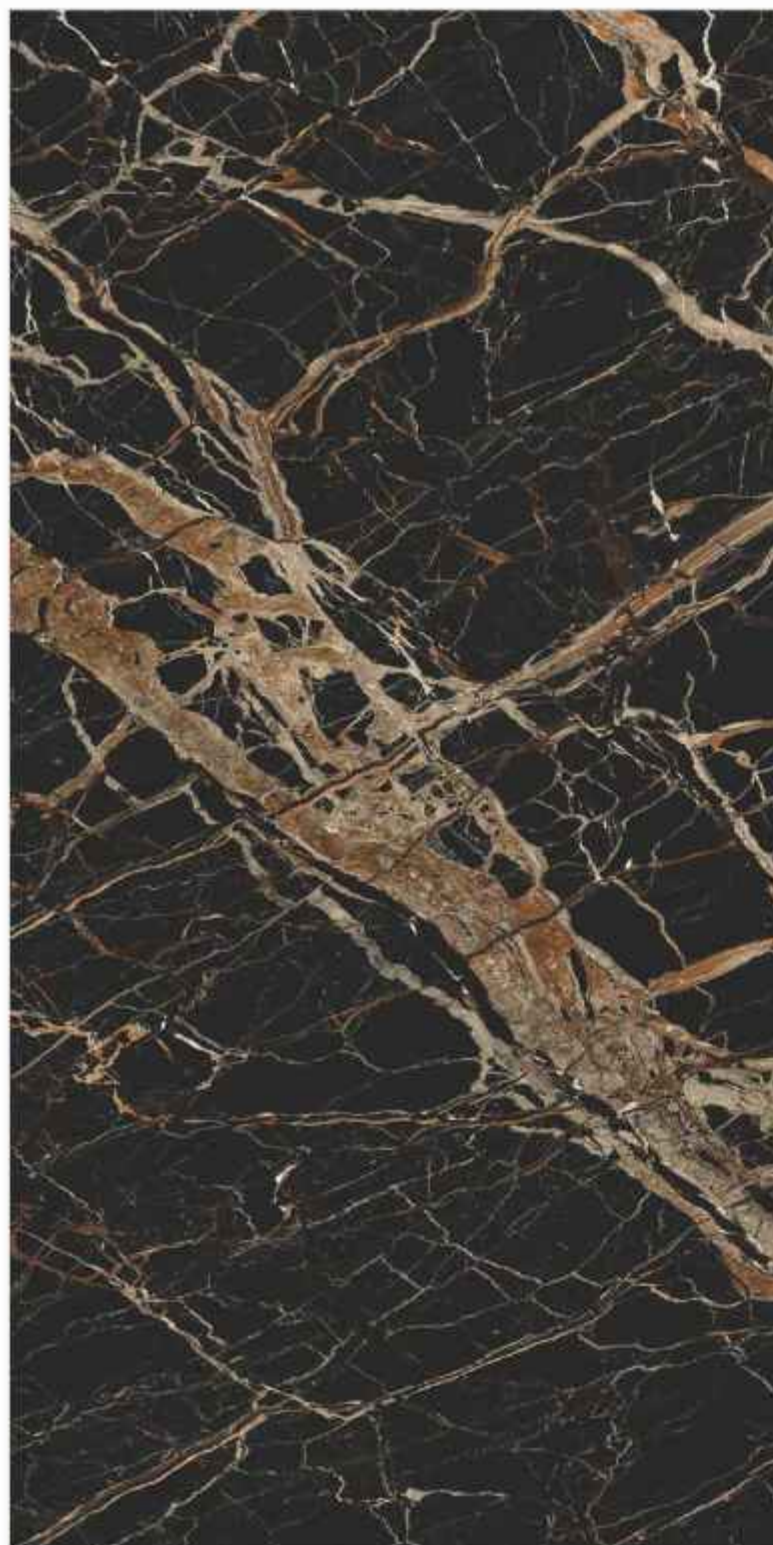


120x
240cm



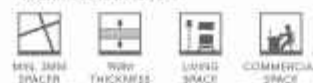
RANIBA
The Treasury of Royalty

\ ESTRADA



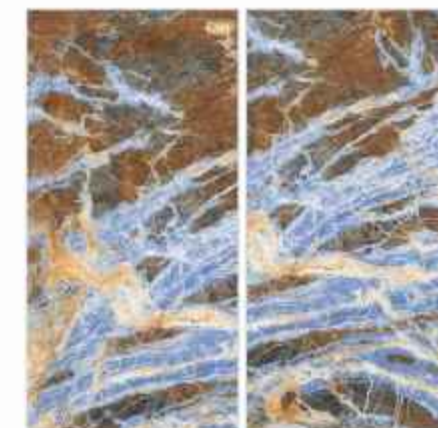
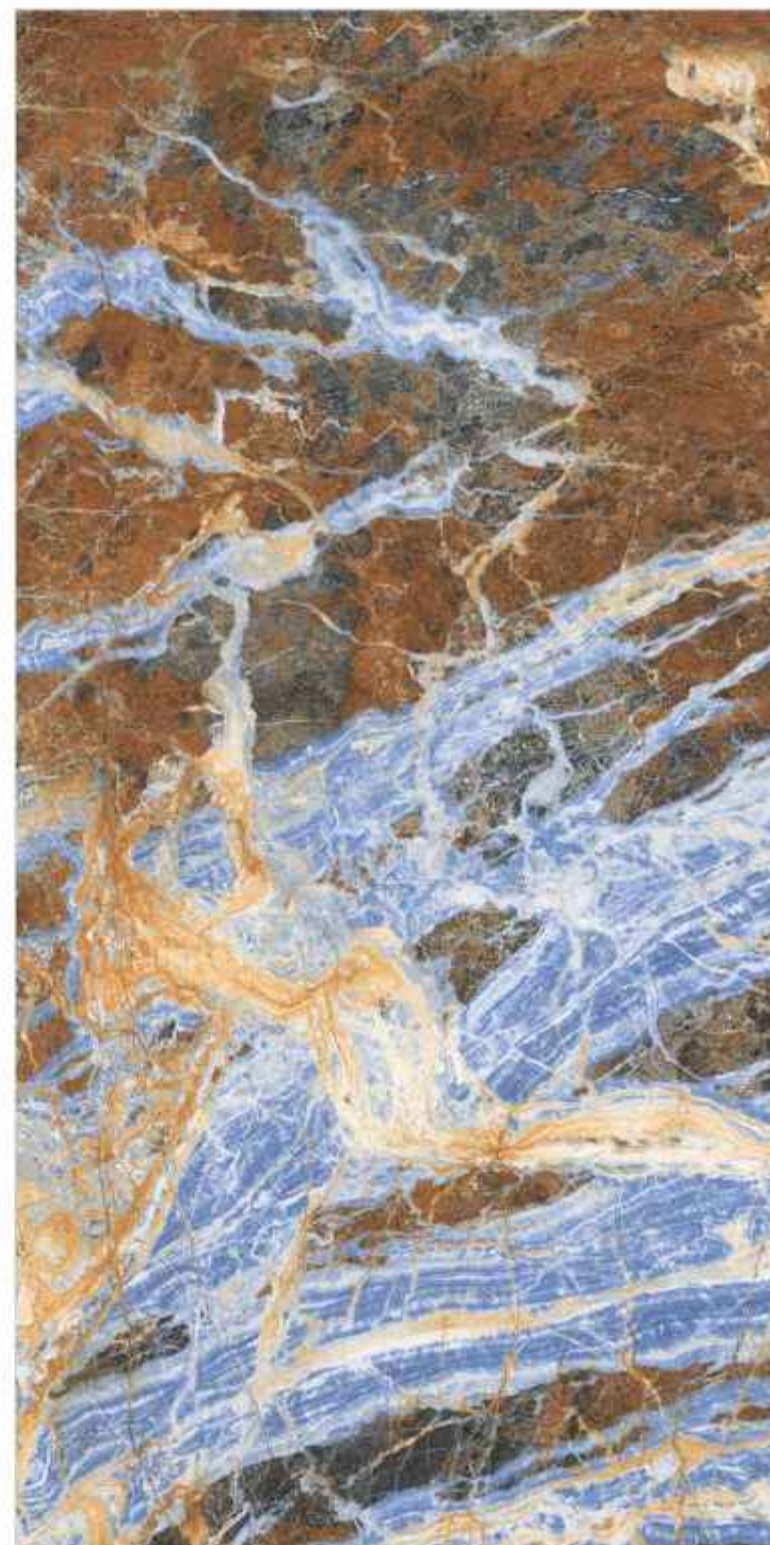
Finish \
HIGH GLOSS

Technical features \



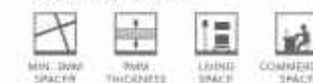
**120x
240cm**

\ RAINBOW ROCK



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty



120x
240cm



RANIBA
The Treasury of Royalty

\ TRAVERTINO



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



Preview of \ TRAVERTINO



RANIBA
The Treasury of Royalty

\ LUSTRO VENEER



Finish \
HIGH GLOSS

Technical features \



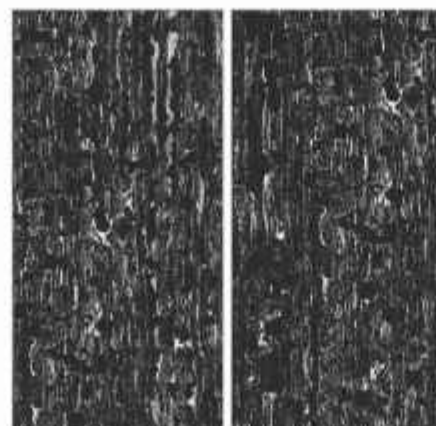
**120x
240cm**





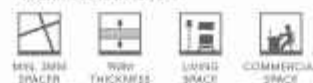
RANIBA
The Treasury of Royalty

\ BLACK PORTORO



Finish \
HIGH GLOSS

Technical features \



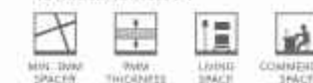
**120x
240cm**

\ RIVER BLACK



Finish \
HIGH GLOSS

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty



120x
240cm



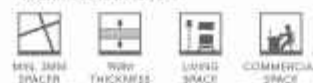
RANIBA
The Treasury of Royalty

\ STATUARIO SUPER



Finish \
SILK

Technical features \



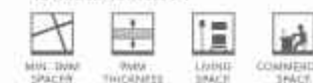
**120x
240cm**

\ CALCUTTA



Finish \
SILK

Technical features \



**120x
240cm**

\ BOTTOCINO CLASSIC



Finish \
SILK

Technical features \



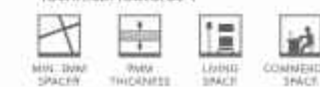
**120x
240cm**

\ ROYAL BURBERRY



Finish \
SILK

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty

\ ARMANI GREY

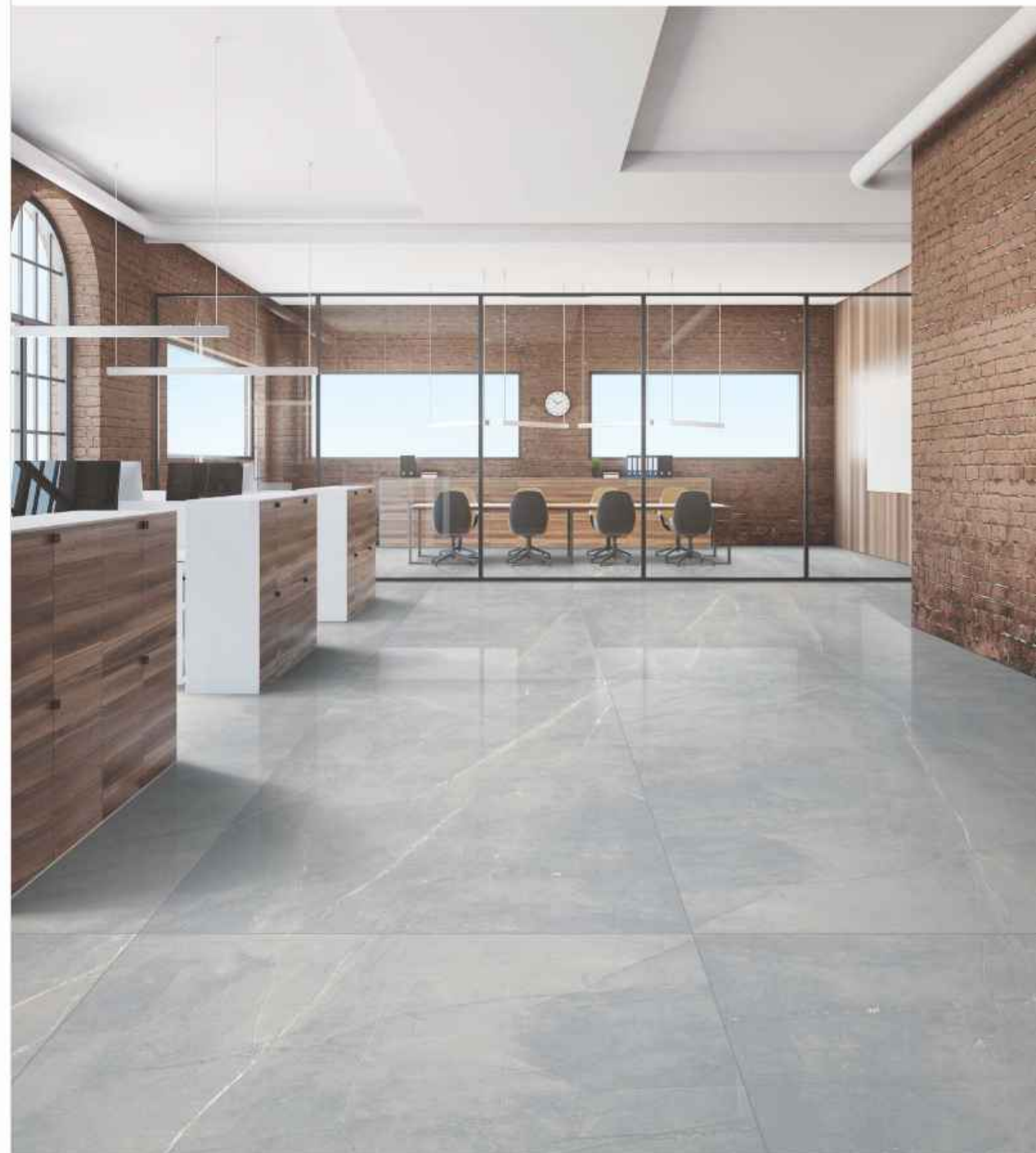


Finish \
SILK

Technical features \

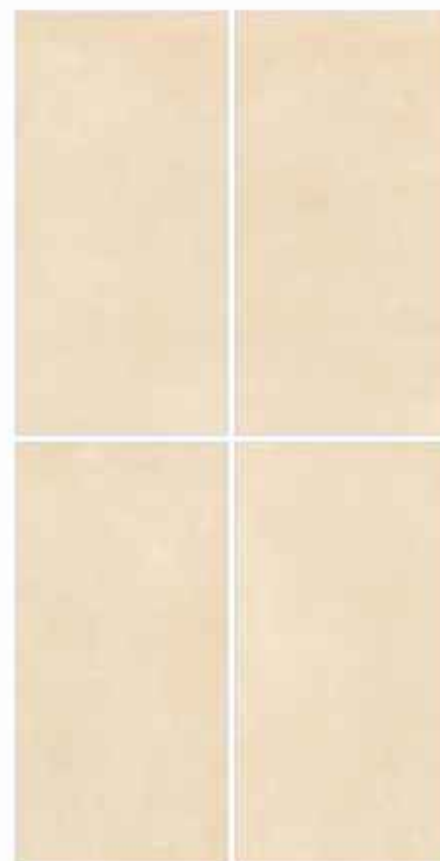


**120x
240cm**



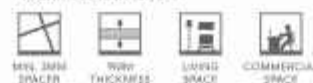
Preview of \ ARMANI GRAY

\ ANTHRACITE IVORY



Finish \
MATT

Technical features \



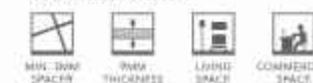
**120x
240cm**

\ ANTHRACITE BRUNO



Finish \
MATT

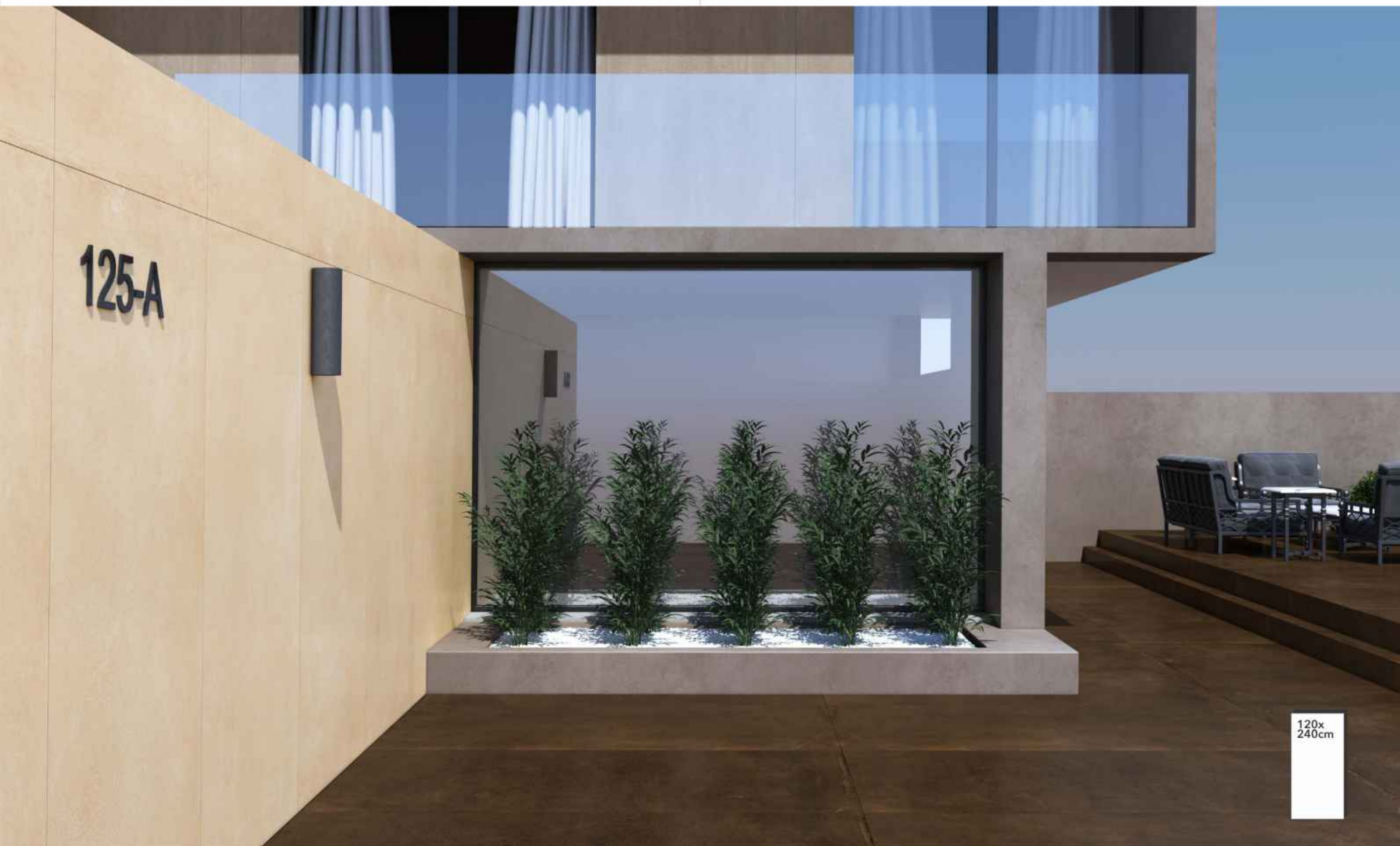
Technical features \



**120x
240cm**

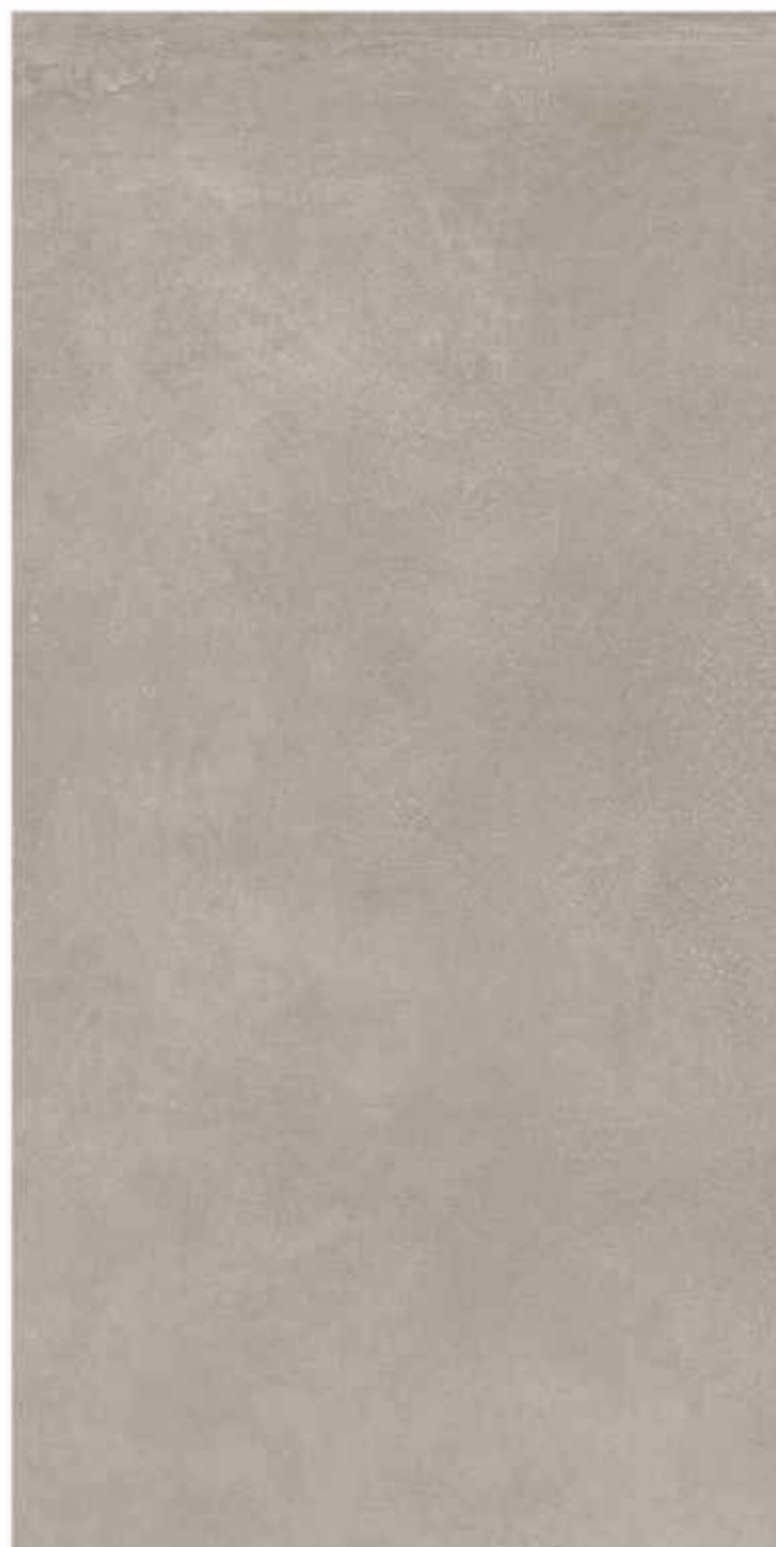


RANIBA
The Treasury of Royalty



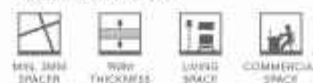
120x
240cm

\ ANTHRACITE CEMENTO



Finish \
MATT

Technical features \



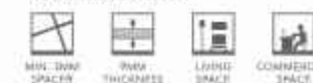
**120x
240cm**

\ ANTHRACITE GREY

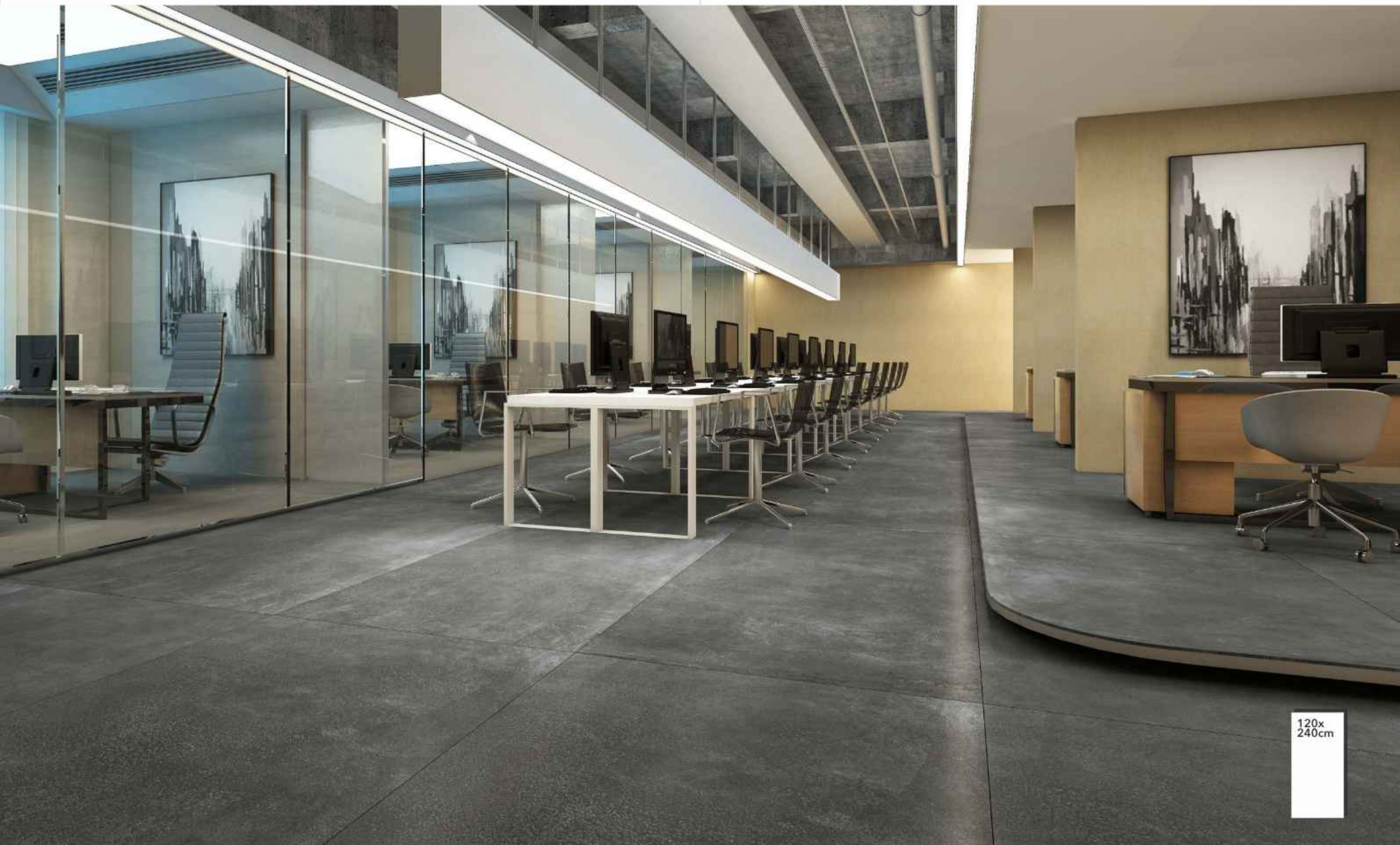


Finish \
MATT

Technical features \

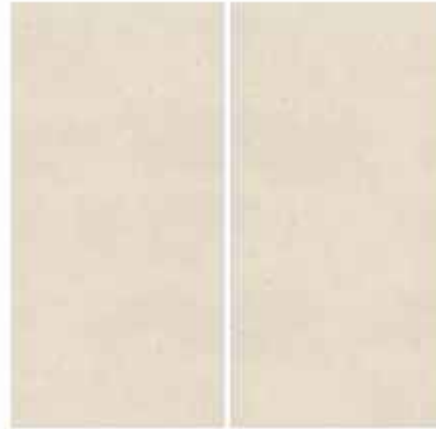


**120x
240cm**



120x
240cm

\ BOTTEGA CREMA



Finish \
MATT

Technical features \



**120x
240cm**

\ BOTTEGA LATTE



Finish \
MATT

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty



120x
240cm

\ BOTTEGA BRUNO



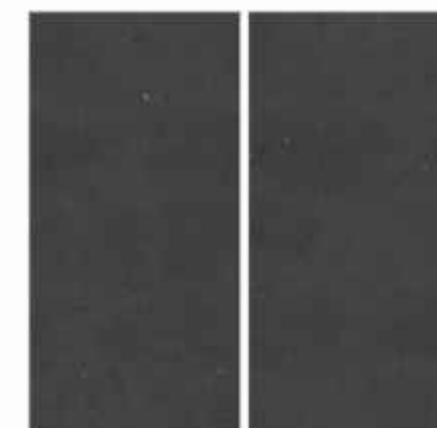
Finish \
MATT

Technical features \



**120x
240cm**

\ BOTTEGA GRIS



Finish \
MATT

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty



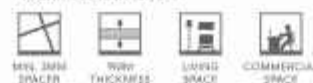
120x
240cm

\ STONE BEIGE



Finish \
MATT

Technical features \



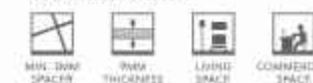
**120x
240cm**

\ STONE BROWN



Finish \
MATT

Technical features \



**120x
240cm**



RANIBA
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\ STONE GREY



Finish \
MATT

Technical features \



WALL AND
SPACE



WALL
THICKNESS



WALL
SPACE



COMMERCIAL
SPACE



PUBLIC
SPACE



COUNTER
TOPS



WALL
GLAZING



BUILDING
FACADE

120x
240cm



Preview of \ STONE GREY



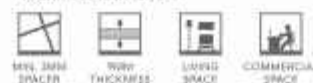
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\ STONE CEMENTO



Finish \
MATT

Technical features \



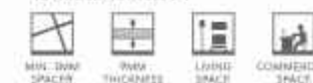
**120x
240cm**

\ IRISH WOOD



Finish \
MATT

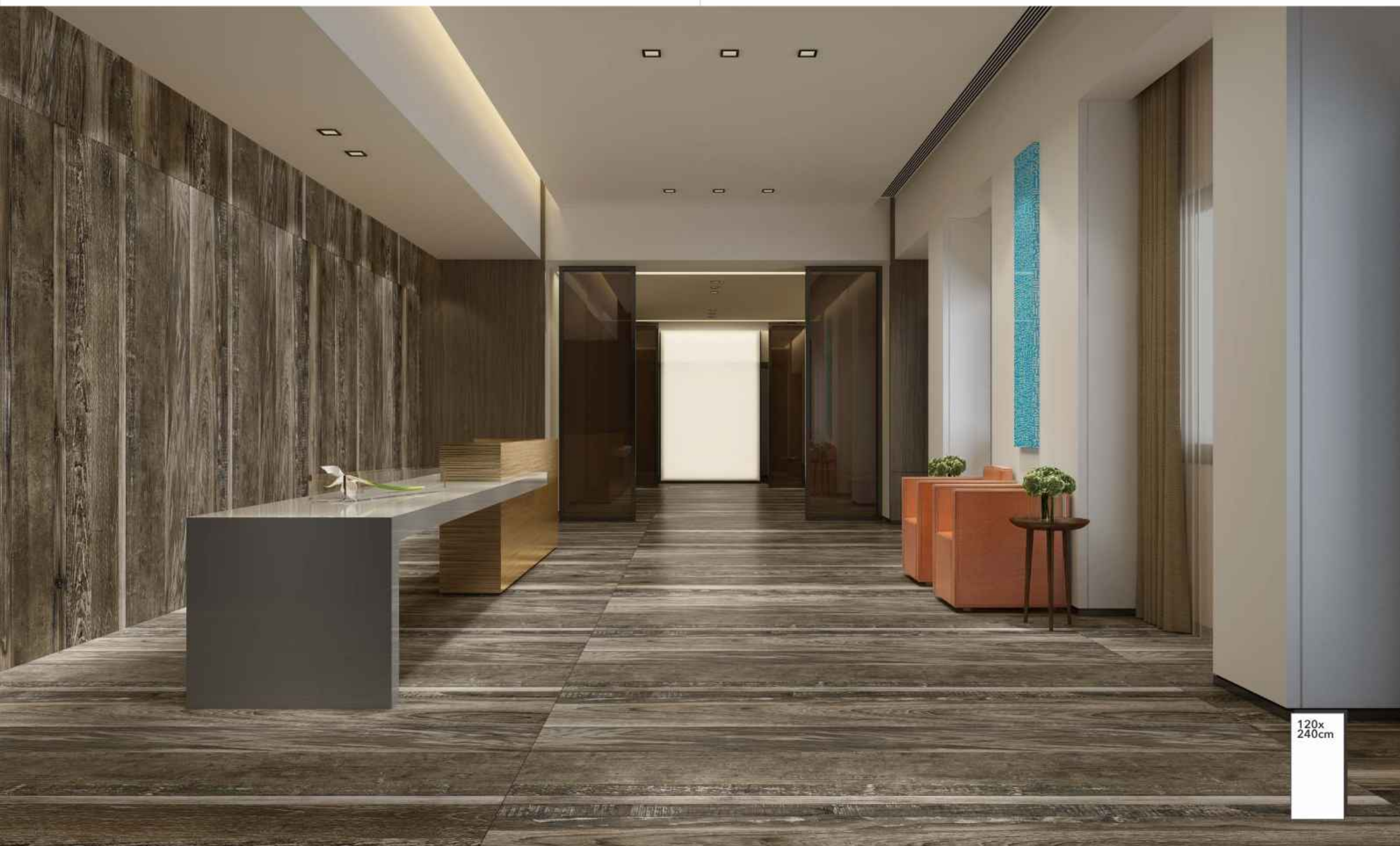
Technical features \



**120x
240cm**



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120x
240cm

\ COLOMBUS GREY



Finish \
MATT

Technical features \



**120x
240cm**

\ COLOMBUS NERO



Finish \
MATT

Technical features \



**120x
240cm**



RANIBA
The Treasury of Royalty

\ BRAZILLIA CEMENTO



Finish \
MATT

Technical features \



**120x
240cm**



**120x
240cm**

TECHNICAL SPECIFICATIONS

CHARACTERISTICS	STANDARD AS PER ISO-13006/EN14411 GROUP B1A	MEAN VALUE OF OUR PGVT	MEAN VALUE OF OUR GVT	TEST METHOD
REGULATORY PROPERTIES				
Deviation in length & width	±0.5 %	±0.1 %	±0.1 %	ISO-10545-2
Deviation in thickness	±5.0 %	±4.0 %	±4.0 %	ISO-10545-2
Straightness in side	±0.5 %	±0.1 %	±0.1 %	ISO-10545-2
Rectangularity	±0.6 %	±0.1 %	±0.1 %	ISO-10545-2
Surface flatness	±0.5 %	±0.2 %	±0.2 %	ISO-10545-2
Color difference	Unaltered	No change	No change	ISO-10545-16
Glossiness	As per mfg.	Min. 90%	Min. 4%	GLOSSOMETER
SURFACE MECHANICAL PROPERTIES				
Water absorption	< 0.50 %	< 0.05 %	< 0.05 %	ISO-10545-3
Apparent density	> 2.0 g/cc	> 2.10 g/cc	> 2.10 g/cc	DIN 51082
MASSIVE MECHANICAL PROPERTIES				
Modulus of rupture	Min. 35 N/mm²	Min. 40 N/mm²	Min. 40 N/mm²	ISO-10545-4
Breaking strength	Min. 1300 N	Min. 2000 N	Min. 2000 N	ISO-10545-4
Impact resistance	As per mfg.	Min. 0.55	Min. 0.55	ISO-10545-5
SURFACE MECHANICAL PROPERTIES				
Surface abrasion resistance	As per mfg	Min. Class-3	Min. Class-4	ISO-10545-7
MOH's hardness	As per mfg.	Min. 4	Min. 5	EN 101
THERMO HYDROMETRIC PROPERTIES				
Frost resistance	No damage	No damage	No damage	ISO-10545-12
Thermal shock resistance	No damage	No damage	No damage	ISO-10545-9
Moisture expansion	Nil	Nil	Nil	ISO-10545-10
Thermal expansion (COE)	Max. 9.0x10 ⁻⁶	Max. 6.5x10 ⁻⁶	Max. 6.5x10 ⁻⁶	ISO-10545-8
Crazing resistance	As per mfg.	Min. 10 Cycle	Min. 10 Cycle	ISO-10545-11
CHEMICAL PROPERTIES				
Chemical resistance	No damage	No damage	No damage	ISO-10545-13
Stain resistance	Resistant	Resistant	Resistant	ISO-10545-14
SAFETY PROPERTIES				
Slip resistance	As per mfg.	> 0.40	> 0.40	ISO-10545-17
Fire resistance	As per mfg.	Fireproof	Fireproof	N. A.
Lead & Cadmium given off by glazed tiles	As per mfg.	Doesn't yield Pb & Cd	Doesn't yield Pb & Cd	ISO-10545-15

PACKING DETAILS

Sr. No.	Size	Thickness (approx.)	Pieces / Box	Area / Box (approx.)		Packing
1	120x240cm	9 to 9.5 mm	1 pcs.	2.88 sq. mtr.	31.00 sq. ft.	Box + Iron pallet

EXCLUSIVE FEATURES OF OUR TILES

AS FLOOR TILES FOR CONTINUOUS SURFACES WITH ALL THE GUARANTEED SAFETY THAT OF 9mm THICKNESS PROVIDES.

AS WALL TILES TO DRESS PRESTIGIOUS SPACES AND SCENIC WALLS WITH A SINGLE SLAB AND VERTICAL INSTALLATION.

AS FOR OUTDOORS FOR VENTILATES FACADES THAT ARE LARGE AND ENDURING.

AS DESIGN APPLICATIONS AS A BACKSPLASH, KITCHEN TOPS, COUNTER TOPS AND SPECTACULAR EXPANSES.

UNALTERABLE OVER TIME:
Colour and brightness does not change over time.

STAIN, DETERGENT AND SCRATCH RESISTANT:
Resistant to chemicals. It is non-porous and resistant to acids.

HIGH BREAKING LOAD STRENGTH:
Resistant to loads, compression and bending.

EASY TO HANDLE AND TO MAINTAIN:
Doesn't require special water proofing treatments after installation.

CONSISTENCY OF SURFACE IN SUBSEQUENT PRODUCT RUNS:
Shades and graphics remain the same and are completely reproducible in every subsequent production run.

THE EXCELLENCE OF PORCELAIN STONEWARE:
The expressive aesthetics of large slabs combined with the properties and advantages of Vitrified stoneware in 9mm thickness, offering the same technical performance as more traditional formats, actually surpassing those of the natural material.

MORE IMPACT FOR INTERIOR & ARCHITECTURE:
Infinity Slab dictates the elegant and residential spaces where luxury and contemporary design meet. Perfect for creating floors and walls of tremendous impact in prestigious hospitality venues, in wiliness areas and in dining areas.

MAJESTIC SPLENDOR:
The Infinity Slab 120x240mm, 120x120mm and 80x160mm Vitrified stoneware sizes make INFINITY SLAB a veritable furnishing and design element. The large slabs can be combined with the other marble effect surfaces of Ours for elegant chromatic compositions

POWERFUL BEAUTY:
Large vitrified stoneware slabs that reinterpret the luxury of marble can be used outdoors in extensive ventilated facades for total continuity with the indoor spaces, or for outdoor commercial spaces of the utmost visual impact.

SEDUCTIVE DESIGN:
The myriad of advantages of vitrified stoneware include resistance to slipping, resistance to stains and detergents, the visual potential of the large 120x240mm, 120x120mm and 80x160mm sizes and the precious look of marble, for contemporary spaces of tremendous aesthetic seduction.

MARVELLOUS MASTERPIECE:
The large size marble-inspired vitrified stoneware slabs reinterpret a selection of prestigious natural marble with absolute fidelity, creating planning harmony with the Marvel decor for residential and commercial ambiances of strong character.

EXCELLENT PRIVILEGE:
Veining and natural shading lend character to wide expanse of marble effect porcelain stoneware surfaces of high graphic variability and realistic aesthetics rich in detail. The honed surface exudes the luminosity and unevenness of the matter of inspiration, making floors, panels and expenses polished and mirror-like.

PACKAGING SYSTEM:

Specific types of packaging are used to store and transport slabs with the maximum safety. Slabs are packed in customised Pallet. They can also be placed in specially designed A-frames for transportation.

PACKAGING IN PALLET:

For orders of two or more articles in the same size or in multiple modular sizes - slabs must be placed in the same pallet, until full. Pallet should be shipped filled to capacity.

PACKAGING IN A-FRAMES:

A-frames are only used when requested by the customer.

For orders for two or more articles in the same size or in multiple modular sizes slabs must be placed in the same A-frame, until full. A-frames should be shipped filled to capacity.

HANDLING:

Crates must be handled one at a time. Only if they are identical, they can be stacked in piles of up to 10.

Handling Crates by the Long Side

This is the recommended option. Crates must be handled using forks at least 1.2mtr. long extended to their maximum possible width to cover as much of the surface of the crate as possible.

Handling Crates by the Short Side (B)

Crates must be handled using forks at least 2.1mtr. long extended to their maximum possible width to cover as much of the surface of the crate as possible.

EQUIPMENT:

When handling slabs, it is essential always to use the equipment specifically designed for use with large ceramic slabs.

Suction cup handling bars

Applying this device to the slab increases its rigidity. This allows it to be moved, with the aid of special trolleys, in conditions of maximum safety.

Reinforced trolley

Use of these trolleys is strictly recommended when handling slabs with holes for the passage of wiring or pipes.

Workbench with aluminium profiles

A workbench with aluminium profiles should always be used.

ADVICE FOR LAYING AND MAINTENANCE:

Laying

Before laying on any surface, make sure that the material is appropriate and sufficient in terms of quantity, shade and work-size to suit the laying needs. All regulations and precautions concerning the correct execution of the work must be followed (preparing the bed, grout or adhesive composition, respect for drying times, position of the expansion joints, beating, etc...)

Laying with adhesives

Laying must be done by qualified staff using appropriate equipment. The surface to be laid (screed) must be perfectly level. Maximum recommended value no more than 3mm for an uneven surface measured with a 2mtr. ruler. The surface to be laid must be well seasoned, dust-free and with no visible cracks. During laying the use of appropriate lighting is strongly recommended. The choice of adhesive depends on the type of tile (type and size), the type of surface laid on and the type of foreseen use. Check that the tiles are laid correctly before the adhesive dries in order to facilitate any required corrections.

Laying with fresh mortar

Laying with fresh cement-based mortar or "thick layers" is not recommended for sizes more than 30 cm long and with non-absorbent supports.

Joints

Joints are very important elements for maintaining a good tiled surface, it is recommended to make use of the collaboration and/or advice of a professional layer. The company declines all responsibility for laying without joints; minimum joint laying has a gap of 2 mm. The joints must be positioned:

on structural joints;
between the floor and the wall (perimeter joints);
between one tile and another (laying joints);
between the tiles and other materials (e.g. combinations of ceramics/linoleum /wood).

Grouting laid surfaces

Before grouting wait for the adhesive to dry completely and make sure that the laying joints are empty and free of all traces of adhesive and/or dust. Grout small areas at a time (4-5 sq. mtr.). This is particularly important for structured products, non-slip and polished surfaces. Remove excess grout from the tiles using diagonal movements when the product is still damp and remove all residues, particularly for external surfaces. Clean carefully using a sponge dampened in clean, limpid water and go over the whole surface, including the gaps, with a damp cloth. For grouting which has a strong colour contrast to the laid tiles, test the grout on a small, hidden area. When using epoxy grouts, clean with a sponge and plenty of water. The reaction and hardening times of these products make it impossible to remove any residues once they have hardened. The day after grouting, completely clean the surface with an alkaline detergent. Consult the grout manufacturers to verify the correct choice of grout for the type of tile.

Cleaning and maintenance after laying

Work sites are deemed to be completely finished once they have been cleared of all tools and materials used during the operations. To reduce the risk of damaging tiled surfaces, protect them and avoid the presence of abrasive materials (dust and residues from operations carried out after laying) as far as possible.

Initial cleaning

Washing after laying is of fundamental importance to all operations carried out afterwards and to assure correct maintenance. Careful initial cleaning keeps floors beautiful and protected longer and is done once only before using the floor. Initial cleaning should be carried out 4-5 days after laying, and in any case no longer than 10 days after laying and grouting. The grouted and cleaned surface may have a concrete film which cannot be removed using water alone, and therefore an acid-based product, suitably diluted (from 1:10 to 1:4 in cold water) should be used, following the manufacturer's instructions.

The first operation is to wet the tiled surface and particularly the gaps (grout is not usually acid-resistant). Spread the prepared acid solution and leave for a short time (2 minutes). Do not allow the applied product to dry. Remove the solution using a brushing machine (with a non-abrasive disk), wet vac or other means and/or manually, then rinse well. It should be remembered that machine cleaning (which is particularly recommended for textured products and large surfaces) must always be completed by hand in tight corners, along walls and any spaces that the brushing machine cannot easily reach. It is always advisable to test the resistance of the product to acids on an unlaid tile or a small hidden surface; particularly for lapped or polished products. It is not recommended to use cleaning products containing hydrofluoric acid (HF) or its derivatives.

Ordinary cleaning

Ordinary cleaning removes dirt and marks and restores the surface to its original appearance. Porcelain stoneware tiles do not require protective treatment, and a thorough, systematic clean is sufficient to maintain the surface. Careful cleaning must be done by washing normally using hot water, a cloth or soft sponge and, if required, neutral detergents. For large areas, industrial washing machines can be used, with completion by hand where required.

Recommendations

Do not rub the surfaces using abrasive tools, such as metallic sponges or hard brushes, which could scratch them or leave indelible marks. Grease and oil residues can be removed using detergents using organic or alkaline solvents (pH>9) followed by careful rinsing. Avoid the use of soap as this tends to leave a slimy layer, particularly when used with hard water. Do not use products containing wax or shining agents;

Avoid the use of abrasive detergents on shiny and/or polished surfaces; they may be used on matt materials, checking first on a small hidden tiled area. Generally speaking, when using any non-neutral detergent, check first on an unlaid tile or a small hidden portion of the floor.

CUTTING SPECIFICATIONS

Cutting with disk

In order to do a correct cutting into one slab 12mm (1/2") it is recommended the use of segmented cutting disks and specifications as described below.

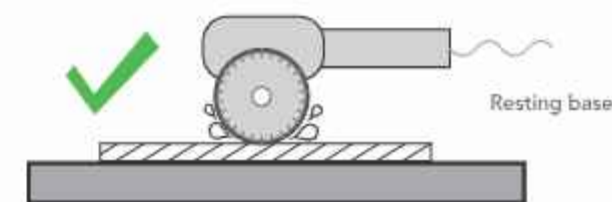
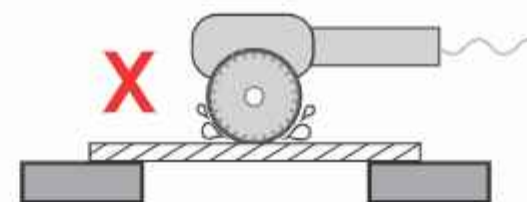
Disk diameter	RPM	Cutting speed (m/min)-(feet/min)
300 mm - 12"	2600 rpm	1/2 m/min - 4 feet/min
350 mm - 14"	2300 rpm	1/2 m/min - 4 feet/min
400 mm - 16"	1900 rpm	1/2 m/min - 4 feet/min

To ensure correct finishes, it is recommended lowering the speed at both ends to 25% 0.3m/min - 1 feet/min. If the cutting also requires beveling it is also recommend to slow the speed in the cutting path to 0.6 m/min - 2feet/min.

In order to avoid stress into the slab, it is imperative the use of cutting surfaces that are perfectly levelled and good disk refrigeration. The disk must have a direct application to the cutting edge with refrigeration liquid or water during all the operation.

For inner cutting, as it has been said before, is mandatory the prior drilling at the corners to ensure a 5mm - 3/16" radius. Therefore, the drill must have 10 mm - 6/16" diameter or more.

Cutting



Drilling

