## MARQUIS

Inspiration, design & more

AUTUMN/WINTER TILE COLLECTION

# Presentation & more

MARQUIS COLLECTION is a Spanish brand specialising in the manufacture of porcelain floor and wall tiles.

Our company infrastructure is backed by a business group with an experienced history in the ceramics industry. The know-how accumulated from their century-long trajectory, coupled with our productive and logistic facilities (with a surface area of over 160,000m², equipped with the latest ceramic technology), our use of raw materials from leading suppliers at an international level, and, above all, the professionalism of our entire staff, enables us to offer ceramic and porcelain products with a guarantee of high quality.

To this end, our company is ISO 9001 certified, assuring our compliance with strict quality management requirements.





# Mission Vision Values & more

### MISSION

To offer a full range of aesthetic ceramic products, made in Spain using state-of-the-art technology.

### VISION

To consolidate our brand as a reference point in the sector through decorative solutions which contribute added value to all types of interior and exterior projects.

### **VALUES**

### Quality

We are committed to continuous improvement. Aspiring to achieve the highest degree of quality allows us to increase our efficiency and productivity every day.

### Commitment

We are fully committed to professionalism and excellence in all phases of our work.

### Honesty

With our employees, clients and external collaborators, always maintaining a positive attitude.

### **Proximity**

As a company, we wish to provide the best service to our customers through respect and active listening. Maximum customer orientation.

### Collaboration

With the members of our team, with our clients and with our collaborators, promoting integrity and mutual trust. We're passionate about teamwork!

### Responsibility

We want to contribute to a better world, which is why we make a responsible contribution towards our immediate environment, society in general and sustainability.

## Sustainability & more

Our commitment to sustainability is based on two main areas: the efficient use of energy resources and the treatment, reduction and recycling of waste.

We have two facilities for thermal oil waste heat recovery: one which uses heat from exhaust gases for cogeneration, and the other which uses the residual heat from the plant's baking ovens.

In addition to this, we control particulate matter emissions through dry-air suction filters, which are monitored online to verify their correct operation, and combustion emissions, which are audited and verified by the competent authority.

On the other hand, all our waste is classified, stored and delivered to authorised handlers who certify its correct treatment.

We also make efficient use of water throughout the production process, and we use a packaging system which minimises the use of materials and the production of waste.

We hold the Integrated Environmental Authorisation and Global EPD (Integral Product Declaration) certified by AENOR.



### Contents & more

8	S H E R W O O D Wood Porcelain Tiles
10	ESPACIO Stone Porcelain Tiles
12	IBIZA Marble Porcelain Tiles
14	DIAMANTE Marble Porcelain Tiles
15	M A R A Hydraulic Porcelain Tiles
16	M E D I T E R R A N E A N Hydraulic Porcelain Tiles
17	BRICK NEUTRAL Brick Porcelain Tiles
18	BRICKTREND Brick Porcelain Tiles
20	A N C I E N Brick Wall Tiles

### Sherwood

### Wood

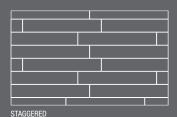
### Porcelain Tiles

### 15x90 cm

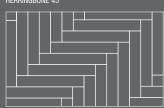
Inspired by the solid woods of monumental trees, so appreciated for their scarcity and quality, the Sherwood Collection is composed of different strips that allow a truly impressive result and deeply faithful to the original material, but with all the advantages of ceramics.

The collection includes two colours (White and Honey) in one format, the pieces can be placed horizontally, vertically or in a locked form, so the decorative possibilities are considerable.

www.marquis-collection.com









LAYING SUGGESTIONS

TECHNICAL DATA		SHERWOOD HONEY	SHERWOOD WHITE
BENDING ISO-1054	15-4	≥ 35	≥ 35
HARDNESS MOHS/	'EN-101	6	6
ABRASION-PEI ISO	-10545-7	Ш	IV
CRAZING ISO-10545-11		PASS	PASS
CHEMICAL ATTACK RESISTANCE (ISO-10545-13)	STAINS	5	5
	CLEANING AGENTS	А	А
	POOL ADDITIVES	А	А
	ACIDS/BASES	LA/HA	LA/HA
FROST RESISTANCE ISO-10545-12		PASS	PASS
SLIP RESISTANCE DIN 51130-R		R-9	R-9
SLIP RESISTANCE UNE-ENV 12633		C1	C1
GROUP		С	D

PACKING LIST	SHERWOOD
SIZE	15x90 cm
PCS / BOX	8
SQM / BOX	1,08
BOX / PAL	48
SQM / PAL	51,84
KG / BOX	26,62
KG / SQM	24,65
KG / PAL	1278











SHERWOOD WHITE 15x90 cm 5,9"x 35,5"





**216462SW** SHERWOOD WHITE 15x90 cm / 5,9"x 35,5"



**216461SH** SHERWOOD HONEY 15x90 cm / 5,9"x 35,5"





**216111SG** ESPACIO GREY 32x62,5 cm / 12,6" x 24,6"



**216120SDG** ESPACIO DECO GREY 32x62,5 cm / 12,6"x 24,6"



**216105SW** ESPACIO WHITE 32X62,5 cm / 12,6"X 24,6"



**216114SDW** ESPACIO DECO WHITE 32x62,5 cm / 12,6"x 24,6"





### Espacio

### Stone

### Porcelain Tiles

### 32x62,5 cm

The Espacio Collection represents the essence and depth of natural stone with all the advantages of porcelain tiles in terms of strength, maintenance and durability. It stands out for the exceptional versatility and avant-garde aesthetics.

In addition, due to its chromatic range – available in grey and white – Espacio easily adapts to contemporary decorative projects.









TECHNICAL DATA		ESPACIO GREY	ESPACIO DECO GREY	ESPACIO WHITE	ESPACIO DECO WHITE
BENDING ISO-1054	15-4	≥ 35	≥ 35	≥ 35	≥ 35
HARDNESS MOHS/	'EN-101	6	6	6	6
ABRASION-PEI ISO	-10545-7	Ш	-	IV	-
CRAZING ISO-1054	5-11	PASS	PASS	PASS	PASS
	STAINS	5	5	5	5
CHEMICAL ATTACK	CLEANING AGENTS	А	А	А	А
RESISTANCE (ISO-10545-13)	POOL ADDITIVES	А	А	А	А
	ACIDS/BASES	LA/HA	LA/HA	LA/HA	LA/HA
FROST RESISTANCE	E ISO-10545-12	PASS	PASS	PASS	PASS
SLIP RESISTANCE DIN 51130-R		R-9	-	R-9	-
SLIP RESISTANCE UNE-ENV 12633		C1	-	C1	-
GROUP		C.	W	D	W

PACKING LIST	ESPACIO / ESPACIO DECO
SIZE	32x62,5 cm
PCS / BOX	5
SQM / BOX	1
BOX / PAL	48
SQM / PAL	48
KG / BOX	19,90
KG / SQM	19,90
KG / PAL	955



### <u>Ibiza</u>

### Marble

### Porcelain Tiles

### 32x62,5 cm

The classic, elegant and minimalist style of white marble is reinvented as a decorative trend with the Ibiza White, which stands out for the neutrality and purity of its background and the fine details of its soft grey veins.

The beauty of this marble, with an outstanding timeless aesthetic, and the high technical performance of the porcelain material, make it a highly appreciated product by architects, decorators and interior designers all over the world.

TECHNICAL DATA		IBIZA WHITE	
BENDING ISO-1054	15-4	≥ 35	
HARDNESS MOHS/	'EN-101	6	
ABRASION-PEI ISO	-10545-7	IV	
CRAZING ISO-1054	5-11	PASS	
	STAINS	5	
CHEMICAL ATTACK RESISTANCE (ISO-10545-13)	CLEANING AGENTS	А	
	POOL ADDITIVES	А	
	ACIDS/BASES	LA/HA	
FROST RESISTANCE ISO-10545-12		PASS	
SLIP RESISTANCE DIN 51130-R		R-9	
SLIP RESISTANCE UNE-ENV 12633		C1	
GROUP		В	

PACKING LIST	IBIZA
SIZE	32x62,5 cm
PCS / BOX	5
SQM / BOX	1
BOX / PAL	48
SQM / PAL	48
KG / BOX	19,90
KG / SQM	19,90
KG / PAL	955













### **Diamante**

Marble

Porcelain Tiles

33,15x33,15 cm

Geometry in its purest form. This is Diamante, a marble-inspired collection that gives surfaces a touch of timeless elegance. Its neutral tones (white, grey and black) and its matte finish make it the perfect material to recreate a contemporary and sophisticated style, that does not go unnoticed.

The contrast of lines gives ample possibilities, when it comes to achieving a decorative effect with outstanding prominence.

TECHNICAL DATA		DIAMANTE
BENDING ISO-1054	5-4	≥ 35
HARDNESS MOHS/	EN-101	
ABRASION-PEI ISO-10545-7		-
CRAZING ISO-10545-11		PASS
	STAINS	5
CHEMICAL ATTACK	CLEANING AGENTS	А
RESISTANCE (ISO-10545-13)	POOL ADDITIVES	A
	ACIDS/BASES	LA/HA
FROST RESISTANCE ISO-10545-12		PASS
SLIP RESISTANCE DIN 51130-R		
SLIP RESISTANCE UNE-ENV 12633		C1
GROUP		В
-		

PACKING LIST	DIAMANTE
SIZE	33,15x33,15 cm
PCS / BOX	12
SQM / BOX	1,32
BOX / PAL	48
SQM / PAL	63,36
KG / BOX	22,04
KG / SQM	16,70
KG / PAL	1058





24/477D DIAMANTE

**216477D** DIAMANTE 33,15x33,15 cm 13,1"x 13,1"









MARA 33,15x33,15 cm / 13,1"x 13,1"



**216482M** MARA 33,15x33,15 cm 13,1"x 13,1"

### Mara

Hydraulic

Porcelain Tiles

33,15x33,15 cm

Mara is a reinterpretation of the traditional hydraulic tile with a continuous modular pattern. Its design is based on the repetition of a pattern composed of unique motifs that facilitate the configuration of endless surfaces with a powerful added value for interior design professionals.

Mara Collection can be installed as flooring or cladding in all types of interior spaces, exclusively or in combination with other finishes, such as wood, soft stones or neutral cements, and can also be used as a decorative resource for delimiting specific areas.

TECHNICAL DATA		MARA
BENDING ISO-1054	5-4	≥ 35
HARDNESS MOHS/	EN-101	5
ABRASION-PEI ISO	-10545-7	IV
CRAZING ISO-1054	5-11	PASS
	STAINS	5
CHEMICAL ATTACK RESISTANCE (ISO-10545-13)	CLEANING AGENTS	А
	POOL ADDITIVES	А
	ACIDS/BASES	LA/HA
FROST RESISTANCE ISO-10545-12		PASS
SLIP RESISTANCE DIN 51130-R		R9
SLIP RESISTANCE UNE-ENV 12633		C1
GROUP		С

PACKING LIST	MARA
SIZE	33,15x33,15 cm
PCS / BOX	12
SQM / BOX	1,32
BOX / PAL	48
SQM / PAL	63,36
KG / BOX	22,04
KG / SQM	16,70
KG / PAL	1058

### Mediterranean

### Hydraulic

### Porcelain Tiles

### 33,15x33,15 cm

The hydraulic porcelain tiles from the Mediterranean Collection are a first-class ally in interior decoration. In addition to combining perfectly with other materials, such as wood or cement, they can also be placed on floors and walls and can even be used for kitchen or bathroom countertops and tables.

The Mediterranean Collection is available in two finishes: Mix, colourful and fresh, and Black, for those looking for a more calm and elegant result.

www.marquis-collection.com

TECHNICAL DATA		MED. MIX	MED. BLACK
BENDING ISO-1054	15-4	≥ 35	≥ 35
HARDNESS MOHS/	EN-101	5	5
ABRASION-PEI ISO	-10545-7	IV	IV
CRAZING ISO-1054	5-11	PASS	PASS
	STAINS	5	5
CHEMICAL ATTACK RESISTANCE (ISO-10545-13)	CLEANING AGENTS	А	А
	POOL ADDITIVES	А	А
	ACIDS/BASES	LA/HA	LA/HA
FROST RESISTANCE ISO-10545-12		PASS	PASS
SLIP RESISTANCE DIN 51130-R		R-9	R-9
SLIP RESISTANCE UNE-ENV 12633		C1	C1
GROUP		С	С

PACKING LIST	MEDITERRANEAN
SIZE	33,15x33,15 cm
PCS / BOX	12
SQM / BOX	1,32
BOX / PAL	48
SQM / PAL	63,36
KG / BOX	22,04
KG / SQM	16,70
KG / PAL	1058



216467MM MEDITERRANEAN MIX 33,15x33,15 cm 13,1"x 13,1"



216472MB MEDITERRANEAN BLACK 33,15x33,15 cm 13,1"x 13,1"





MEDITERRANEAN MIX 33 15x33 15 cm / 13 1"x 13 1"





BRICK NEUTRAL GREY 11x33,15 cm / 4,3"x 13,1"



**216493BNA**BRICK NEUTRAL AQUA
11x33,15 cm / 4,3"x 13,1"

**216494BNG**BRICK NEUTRAL GREY
11x33,15 cm / 4,3"x 13,1"

### **Brick Neutral**

Brick

Porcelain Tiles

11x33,15 cm

Brick Neutral is a new vision of a timeless product that brings style to any interior space. With its two exquisite tones, Aqua and Grey, this collection made of porcelain, stands out for its versatility when covering all types of surfaces, providing a fresh and different touch. In addition, Brick Neutral can be combined with other finishes, such as cements or stones and even wood.

Framed in the line of the most basic bricks, Brick Neutral is a porcelain product particularly suitable for laying as cladding, horizontally or vertically, and also as paving, both in private homes and in public spaces.

TECHNICAL DATA	BRICK NEUTRAL AQUA	BRICK NEUTRAL GREY	
BENDING ISO-1054	5-4	≥ 35	≥ 35
HARDNESS MOHS/	EN-101	5	5
ABRASION-PEI ISO	-10545-7	П	Ш
CRAZING ISO-1054	PASS	PASS	
	STAINS	5	5
CHEMICAL ATTACK	CLEANING AGENTS	А	А
RESISTANCE (ISO-10545-13)	POOL ADDITIVES	А	А
	ACIDS/BASES	LA/HA	LA/HA
FROST RESISTANCE	PASS	PASS	
SLIP RESISTANCE D	R-9	R-9	
SLIP RESISTANCE UNE-ENV 12633		C1	C1
GROUP		В	В

PACKING LIST	BRICK NEUTRAL
SIZE	11x33,15 cm
PCS / BOX	31
SQM / BOX	1,13
BOX / PAL	60
SQM / PAL	67,80
KG / BOX	18,90
KG / SQM	16,70
KG / PAL	1132

### Bricktrend

### Brick

### Porcelain Tiles

### 8,15x33,15 cm

The Bricktrend Collection features a three-tone base made The Bricktrend Collection features a three-tone base made up of soft shades of textured stone, enhanced by the small 8,15×33,15 cm format, which creates a thinner, trendier line, as the name suggests. The collection is completed with the addition of decorative bricks which match each of the base tones. Adorned with raised, classic motifs, engraved onto the stone itself and subtly worn down, for a romantic, timeless air.

Bricktrend is a reinterpretation of the brick as a design object, giving real added value to a space.

TECHNICAL DATA		BRICKTREND GREY	BRICKTREND DECO GREY	
BENDING ISO-1054	15-4	≥ 35	≥ 35	
HARDNESS MOHS	/EN-101	6	6	
ABRASION-PEI ISO	-10545-7	IV		
CRAZING ISO-1054	5-11	PASS PASS		
	STAINS	5		
CHEMICAL ATTACK RESISTANCE (ISO-10545-13)	CLEANING AGENTS	А	А	
	POOL ADDITIVES	А	А	
	ACIDS/BASES	LA/HA	LA/HA	
FROST RESISTANCE ISO-10545-12		PASS	PASS	
SLIP RESISTANCE DIN 51130-R		R-9	-	
SLIP RESISTANCE UNE-ENV 12633		C1		
GROUP		С	W	

PACKING LIST	BRICKTREND / BRICKTREND DECO
SIZE	8,15x33,15 cm
PCS / BOX	46
SQM / BOX	1,24
BOX / PAL	54
SQM / PAL	66,96
KG / BOX	20,71
KG / SQM	16,7
KG / PAL	1118















216465BG BRICKTREND GREY 8,15x33,15 cm 3,2"x 13,1"



216466BDG BRICKTREND DECO GREY 8,15x33,15 cm 3,2"x 13,1"



**215715AN** ANCIEN NEUTRAL 7,5x30 cm / 3"x 11,8"

216463AB ANCIEN BLUE 7,5x30 cm / 3"x 11,8" **215718AGY** ANCIEN GREY 7,5x30 cm / 3"x 11,8"

**216464AGN** ANCIEN GREEN 7,5x30 cm / 3"x 11,8"















SLOSSY SL





### Ancien

### Brick

### **Wall Tiles**

### 7,5x30 cm

Our range of brick tiles grows with the addition of Ancien, a coating with a very special shine that brings brightness and a vibrant decorative charge to the environments. The neutrality of the available tones (Neutral, Grey, Blue and Green) is one of the main hallmarks of a collection, that reinterprets the brick and transforms it into a design element, with a prominent role both in the home and in all types of commercial spaces.

The shades of the Ancien Collection form the perfect setting in any room, as they provide texture and luminosity in equal parts. This model of cladding combines perfectly with wood, stone or rustic style flooring. The brick format is still in full trend, consolidating itself as a decorative resource of the highest level.

TECHNICAL DATA	ANCIEN NEUTRAL	ANCIEN GREY	ANCIEN BLUE	ANCIEN GREEN
DIMENSIONAL PROPERTIES (According to size)	PASS	PASS	PASS	PASS
WATER ABSORPTION (>10%)	PASS	PASS	PASS	PASS
BENDING STRENGHT (N/Mm², min.15)	PASS	PASS	PASS	PASS
BREAKING LOAD (N, min.600)	PASS	PASS	PASS	PASS
RESISTANCE TO CRACKING (Pass the test)	PASS	PASS	PASS	PASS
RESISTANCE TO DOMESTIC CHEMICALS AND SWIMMING POOL SALTS (min. class B)	PASS	PASS	PASS	PASS
RESISTANCE TO STAINS (min. class 3)	PASS	PASS	PASS	PASS
GROUP	W	W	W	W

PACKING LIST	ANCIEN
SIZE	7,5x30 cm
PCS / BOX	22
SQM / BOX	0,5
BOX / PAL	160
SQM / PAL	80
KG / BOX	6,8
KG / SQM	13,6
KG / PAL	1111

### Application Groups & more







SLIGHT VARIATION



DO NOT INTERLOCK







MODERATE VARIATION



DO NOT INTERLOCK MORE THAN 15%



FLOOR TILES



LAPPATO



SUBSTANTIAL VARIATION



WALL TILES



GLOSSY MATTE

#	

GROUPS

CONDITIONS FOR LAYING TILES (PLACEMENT)

Mohs

**OBSERVATIONS** 



RECOMMENDED FOR MODERATE TO LOW FOOT TRAFFIC. SUITABLE FOR BEDROOMS AND/OR BATHROOMS IN HOUSES (AVOID ANY KIND OF ABRASSION).



SUITABLE FOR MODERATE TO LOW FOOT TRAFFIC, E.G. MOST ROOMS IN THE HOUSE, EXCEPT FOR KITCHENS OR AREAS WITH DIRECT ACCESS TO OUTSIDE.



FLOORING RECOMMENDED FOR MODERATE FOOT TRAFFIC. SUITABLE FOR ANY ROOM IN THE HOUSE, INCLUDING THE KITCHEN OR ENTRANCE HALL.



FLOORING SUITABLE FOR HEAVY FOOT TRAFFIC, E.G. ENTRANCES WITH DIRECT ACCESS TO OUTSIDE, ALL ROOMS IN THE HOUSE, AND PROFESSIONAL OFFICES.

SUITABLE MEANS MUST BE INSTALLED (DOORMATS, ETC.) IN ORDER TO PREVENT DAMAGE FROM ABRASIVE ELEMENTS



FLOORING SUITABLE AND RECOMMENDED FOR AREAS WITH VERY HEAVY FOOT TRAFFIC, E.G. COMMERCIAL APPLICATIONS, BUILDING ENTRANCES AND CORRIDORS.

SUITABLE MEANS MUST BE INSTALLED (DOORMATS, ETC.) IN ORDER TO PREVENT DAMAGE FROM ABRASIVE ELEMENTS



FLOOR TILES ONLY SUITABLE FOR OPEN (ROOFLESS) EXTERIORS (WHERE THERE IS A RISK OF WATER) LAYING INDOORS IS NOT RECOMMENDED IN ANY CASE.

THE "ANTI-SLIP" REQUIREMENT IS NECESSARY



WALL TILES ONLY SUITABLE AS WALL COVERINGS.

NOT APPLICABLE

NOT APPLICABLE

APPLIES TO ALL POROUS MODELS, SOME DECORATED MODELS AND PORCELAIN WALLS

### NOTES

If a model has a combination that can be defined as two distinct groups (e.g. III-5, could be Group B or Group C), the Technical Director will be responsible for defining to which laying group the model belongs to, depending on the type of model and its aesthetic characteristics.

When generating a model where the PEI-MOHS combination is not included in the definitions of this table, the Technical Director will define the placement group to which it belongs.

(\*) The inclusion in groups D and GT is only guaranteed if suitable means are installed in the areas with direct access to the exterior to prevent damage from abrasive elements.

FOR SPECIAL REQUESTS, PLEASE CONTACT THE FACTORY.

FORMAT /	THICKNESS

FORMAI / I	HICKNESS
8,15x33,15 / 3,2"x13,1"	7,5 mm
11x33,15 / 4,3"x13,1"	7,5 mm
33,15x33,15 / 13,1"x13,1"	7,5 mm
32x62,5 / 12,6"x24,6"	9 mm
MURO 32x62,5 / 12,6"x24,6"	11 mm
20,2x66,2 / 8"x26,1"	10 mm
40,8X66,2 / 16,1"x26,1"	9,5 mm
15x90 / 5,9"x35,5"	11 mm

### BUILDING TECHNICAL CODE (UNE ENV 12633)

CLASS 1	DRY INDOOR AREAS, GRADE < 6%
CLASS 2	DRY INDOOR AREAS, GRADE > 6% WET INDOOR AREAS, COVERED TERRACES, LOCKER ROOMS, SHOWERS, TOILETS , KITCHENS, ETC.
CLASS 3	AREAS WITH WATER , GREASE, LUBRICANT, ETC. WET INDOOR AREAS, GRADE > 6% OUTDOOR, SWIMMING POOLS

### CTE-12633

ANGLE	R	ANGLE	CLASS
6° - 10°	R9	< 15°	0
10° - 19°	R10	15° - 35°	
19° - 27°	R11	35° - 45°	
27° - 35°	R12	> 45°	3
> 35°	R13		

### Installation Advice & information

### GENERAL GUIDELINES FOR LAYING TILES IN INTERIORS

- 1. Prior to laying the tiles, it is essential that the supporting surface has completely set, meaning that it is dry and hard and has finished shrinking, in order to avoid the appearance of bubbles or cracks due to the lack of stability.
- 2. Before placing the tiles, check the quality, tone and thickness of each piece to ensure that it is free from any visible defect. For a greater decorative effect, mix pieces from various different boxes. Handle the pieces carefully to avoid smudging or chipping the edges of the tiles.
- 3. Do not wet or submerge the pieces in water before placing and do not use traditional adhesive (thickly laid adhesive). Apply a thin layer of C2 fast-drying adhesive (norm EN12.004) using a toothed trowel to place the piece. For large pieces (with one side over 40 cm in length) use the double adhesive method. Always follow the adhesive manufacturer's guidelines closely: method, time and amount of water to be mixed, time available to place the piece, etc.
- 4. Joints of at least 1.5mm should be used to lay the tile. Ensure that the adhesive has completely hardened before rounding off. Fill the joint with filler in order to prevent leakage. Do not use glue adhesive, grout or any kind of adhesive-based joint.
- 5. If you wish to link pieces, do not overlap for any more than 15% of the longest side of the piece (for example, for 12.8x65 pieces, do not link more than 15%  $\approx$ 10 cm.)
- 6. If you have to carry out additional construction, the paving must be protected in order to avoid scratches from any abrasive material.
- 7. To alter the installation or rounding-off of the tiles, remove any remaining adhesive or filler with a product designed for this purpose (residue remover), following the manufacturer's guidelines. Before using a chemical product, we always recommend that you do a patch test on a piece of the tile that is not visible.
- 8. For daily tile cleaning, just use hot water and a domestic detergent. Do not use harsh cleaning products or products that contain acid, especially hydrochloric acid or hydrofluoric acid.

### PLACEMENT AND MAINTENANCE OF SPECIAL PIECES

Our catalogue includes a range of special pieces that are not made from ceramics. These include marble, glass, metal, resin, etc. Pay special attention to the placement and cleaning guidelines included in the box containing these pieces. For these pieces, do not use harsh cleaning materials (scouring pad, hydrochloric acid or other products that contain acid).

TYPE OF STAIN	RECOMMENDED DETERGENT
vegetable and animal fat     beer, wine, ice cream, coffee     flaxseed oil	Alkaline based: • caustic soda • potash
vats, lime deposits     rust stains     felt tip pens, marker	Acid based: • hydrochloric acid • nitric acid • sulphuric acid • oxalic acid
mechanical oils     glue, tyre glue     resins or enamels, enamel waxes	Solvents:  • trilene  • turpentine  • acetone
everyday cleaning	Ordinary detergents

NOTE: Do not use cleaning agents which contain hydrofluoric acid.

### LAYING PORCELAIN TILES

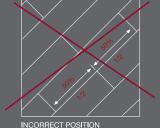
Although the guidelines for laying rectified porcelain tile are the same as for every kind of tile, rectified porcelain material is particularly delicate, especially around the edges. It is therefore very important that, as well as following the general guidelines, you also pay particular attention to the following:

- 1. It is very important that the supporting surface is flat. The surface upon which the tiles are to be placed should have been levelled.
- 2. Handle the material carefully to avoid smudging or chipping the edge of the tiles.
- 3. Do not submerge the tiles in water as the humidity could cause changes to its surface. Use a thin layer of adhesive (type C1 for interiors and type C2 for exteriors according to EN 12.004).
- 4. Always use a joint with a minimum width of 1.5mm.
- 5. If you wish to link pieces, do not overlap any more than 15% of the length of the piece.

### PLACING REQUIREMENTS

The use of a minimum joint width of approx. 1.5mm is required.
We recommend that joints are laid in a staggered format, with a maximum overlap of 15% of the length of the piece.





**ANTI SLIP RATINGS** 

TILE	COLOUR	SLIP RATING
SHERWOOD	HONEY, WHITE	R-9
ESPACIO	GREY, WHITE	R-9
IBIZA	WHITE	R-9
DIAMANTE		
MARA		R-9
MEDITERRANEAN	BLACK, MIX	R-9
BRICK NEUTRAL	GREY, AQUA	
BRICKTREND	GREY	R-9
ANCIEN	NEUTRAL, GREY, BLUE, GREEN	

### **R-9 ANTI SLIP RATING**

Tiles with an R-9 anti slip rating provide minor resistance to slips. R-9 rated tiles are best used in internal livings areas which are generally dry.

### MODULUS OF RUPTURE - UNE - EN ISO 10545-4

The flexion resistance test consists of subjecting a whole tile to three-point loading, with the centre point in contact with the glazed face. It is expressed in Newtons per mm2.

### SCRATCH RESISTANCE (MOHS) - EN - 101

The sample is placed in an autoclave and subjected to a pressure of 5 kg/cm for two hours. If the glazed surface does not crack after one cycle, the product is considered to have passed.

### CRACKING RESISTANCE - UNE - EN ISO 10545-11

The sample is placed in an autoclave and subjected to a pressure of 5 kg/cm2 for two hours. If the glazed surface does not crack after one cycle, the product is considered to have passed.

### RESISTANCE TO CHEMICAL ATTACK - UNE - EN ISO 10545-13

To test the resistance to chemical attack from certain household cleaning products and swimming pool additives, the piece is subjected to solutions of such substances for 24 hours, and then examined for any change in appearance. The results are classified from high to low, according to the following classes: GA - GB - GC. To test the acid and base resistance, the piece is subjected to solutions of Hydrochloric Acid, Citric Acid and Potassium Hydroxide for 4 days and then examined for any change in appearance. The results are classified from high to low, according to the following classes: GLA - GLB - GLC or GHA - GHB - GHC, depending on the remaining concentrate of the applied solutions.

### STAIN RESISTANCE - UNE - EN ISO 10545-14

To test stain resistance, solutions of lodine, light-coloured oil and olive oil are applied to the piece and allowed to dry for 24 hours. Then, the piece is cleaned, and its surface is examined for any change in appearance. Stain results are classified from high to low on a scale of 5-4-3-2-1, with a minimum admissible value of 3.

### FROST RESISTANCE - UNE - EN ISO 10545-12

The test consists of subjecting ten tiles of the same type, soaked in water, to a continuous icing – de-icing process of at least 100 cycles, at temperatures ranging from +5°C to -5°C, without the pieces being damaged.

### WEAR RESISTANCE (PEI) - UNE - EN ISO 10545-7

To test the resistance to wear, or PEI rating, 8 pieces measuring 10x10cm have their enamelled surface subjected to an abrasive solution comprising a mixture of different-sized metal balls, corundum sand and distilled water. The pieces are rotated by revolutions of between 100 and 12000 turns and, depending on when wear becomes visible, the tiles are classified as follows:

PEI	No. of rotations	Observations
PEI 0	100 rotations	Visible Wear
PEI I	150 rotations	Visible Wear
PEI II	600 rotations	Visible Wear
PEI III	750-1500 rotations	Visible Wear
PEI IV	<sup>7</sup> 2100-12000 rotations	Visible Wear
PEI V	>12000 rotations	Visible Wear

The higher the PEI, the more resistant the tile to abrasive agents.



QEP Co. UK Ltd.

The Maltsters, Wetmore Road, Burton upon Trent, Staffordshire, DE14 1LS
Tel: 01283 245430



