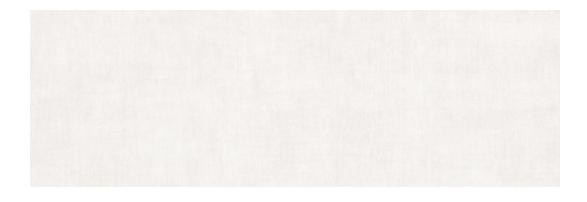
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TECHNICAL DATA OF PRODUCT

-CONTROL LABORATORY-

CODE	R0001352			
ITEM	KB TAPIZ MARFIL			
FORMAT	30 X 90			
GROUP	BIII - Annexe L - DOP PBREVBIII-001			
BODY	WHITE BODY WALL TILE			
FINISH	RECTIFIED PRODUCT WITH SUBSTANTIAL SHADE VARIATION			
CLASS	Glazed			
ANALISIS OF PRODUCTION (Constant test)	2022			
RECOMMENDATIONS FOR USE	2 Interior wall tiles			
AREA OF USAGE	Interiors			
PATTERN	12			
FIXING	Minimal grout joint 1,5 mm. Do not bond.			



KB TAPIZ MARFIL 30 X 90



















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TECHNICAL SPECIFICATIONS OF THE PRODUCT AS PER THE NORMS UNE-EN ISO 13006 AND EN 14411

PHYSICAL PROPERTIES

		TEST-NORM	PRESCRIBED VALUE OF NORM	KERABEN	
	SLIP RESISTANCE	UNE-41901 EX Manufacturer's declaration		NOT APPLICABLE (1)	
		ANSI A137: DCOF	Manufacturer's declaration	NOT APPLICABLE (2)	
		DIN 51130	Manufacturer's declaration	NOT APPLICABLE (3)	
		DIN 51097	Manufacturer's declaration	NOT APPLICABLE (4)	
.:	WATER ABSORPTION	ISO 10545-3	>10%	12% < E < 18%	
1	BREAKING STRENGTH	ISO 10545-4	600 N	1000 N	
-	MODULUS OF RUPTURE	ISO 10545-4	12 N/mm²	19 N /mm²	
0	RESISTANCE TO ABRASION	NOT APPLICABLE NOT APPLICABLE		NOT APPLICABLE	
	ІМРАСТО	ISO 10545-5 Manufacturer's declaration NOT		NOT APPLICABLE	
X	COEFFICIENT OF EXPANSION	ISO 10545-8	ISO 10545-8 9 · 10 ⁻⁶ K ⁻¹ 6,5		
	THERMAL RESISTANCE	ISO 10545-9	SO 10545-9 Manufacturer's declaration RESISTS		
奖	CRAZING RESISTANCE	ISO 10545-11	45-11 Required RESISTS		
業	FROST RESISTANCE	ISO 10545-12	Manufacturer's declaration	NOT APPLICABLE	

NPD: No performance determined



















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CHEMICAL PROPERTIES

			TEST-NORM	NORM ISO 13006	KERABEN
	RESISTANCE TO ACIDS (WEAK)	CITRIC ACID	ISO 10545-13	Manufacturer's declaration	LA (5)
		HYDROCHLORIC ACID	ISO 10545-13	Manufacturer's declaration	(5) LA
		POTASSIUM HYDROXIDE (ÁLKALI)	ISO 10545-13	Manufacturer's declaration	(5) LA
	RESISTANCE TO ACIDS (STRONG)	LACTIC ACID	ISO 10545-13	Manufacturer's declaration	(5) HA
		HYDROCHLORIC ACID	ISO 10545-13	Manufacturer's declaration	(5) HA
		POTASSIUM HYDROXIDE (ÁLKALI)	ISO 10545-13	Manufacturer's declaration	HA (5)
	RESISTANCE TO HOUSEHOLD CLEANING PRODUCTS		ISO 10545-13	Minimum B	A (5)
×	RESISTANCE TO STAINING		ISO 10545-14	Minimum 3	5

⁽⁵⁾ Classes A, LA and HA mean that no visual effect is observed if a test solution is applied.

DIMENSION TEST-NORM ISO 10545-2

		NORM IS	O 13006	KERABEN		
	LENGTH	±0,3%	±1,00mm	±0,06%	898,0±0,50mm	
	WIDTH	±0,3%	±0,89mm	±0,17%	298,0±0,50mm	
	THICKNESS	±5,00%	±0,50mm	±5,00%	10,6 ±0,50mm	
P	STRAIGHTNESS OF SIDES	±0,3%	±0,80mm	±0,07%	≤0,60 mm	
P ₀₀	SQUARENESS	±0,3%	±1,50mm	±0,07%	≤0,60 mm	
	SURFACE FLATNESS	±0,4%	± 1,80mm	+0,12% / -0,06%	+1,10mm / -0,50mm	

RECOMMENDED JOINTS BY TYPE OF SURFACE

	INDOOR FLOORS		INDO	INDOOR WALLS		OUTDOOR FLOORS		AÇADES	SUGGESTED SALES PRODUCT
	MINIMUM WIDTH	MAXIMUM Surface Area	MINIMUM WIDTH	MAXIMUM SURFACE AREA	MINIMUM WIDTH	MAXIMUM SURFACE AREA	MINIMUM WIDTH	MAXIMUM SURFACE AREA	UNE EN 13888
TILE JOINT	Non-rectif ≥ 2,5mm. Rectified ≥ 2mm	In the whole surface	Non-rectif ≥ 2,5mm. Rectified ≥ 2mm	In the whole surface	≥3mm	In the whole surface	≥2,5 mm	In the whole surface	WALL OR FLOOR TILES: Fugabella ECO Porcelana 0-5 (CG2"WA) (0 - 5 mm) FAÇADES: Fugabella ECO 2-12 (CG2"WA) (2 - 12 mm)
PERIMETER JOINTL	≥5 mm	Round the perimeter of the surface in rooms of over 7m ²	≥5 mm	Round the perimeter of the surface in rooms of over 7m ²	≥5 mm	Round the perimeter of the surface in rooms of over 7m ²	≥5 mm	Round the perimeter of the surface and inner corners and, in general, at special points where movement in the ceramic tiles is needed	Fugabella ECO PU (8 - 35 mm)
EXPANSION/PARTITION JOINT	≥5 mm	40 - 80 m²	≥5 mm	40 - 80 m²	≥5 mm	20 - 40 m² or very 8 to 10 linear metres	8 - 10 mm		Fugabella ECO PU (8 - 35 mm)
STRUCTURAL JOINT	The width of the structural joint in the substrate	Continuining the structural joint of de building	The width of the structural joint in the substrate	Continuining the structural joint of de building	The width of the structural joint in the substrate. It must include a bead of polyurethane or compensation profile	Continuining the structural joint of de building	The width of the structural joint in the substrate. It must include a bead of polyurethane or compensation profile	Continuining the structural joint of de building	Fugabella ECO PU 40 (6 - 35 mm)

Tile joint: Joints between adjoining tiles designed to offset expansion and contraction and to conceal slight dimensional differences in the pressed tiles.

Perimeter joint: Joints that must be left round the edges of wall and floor surfaces and round vertical elements like columns, partition walls are

Expansion/partition joint-Joints that run between tiles, dividing up at like surface or its length, depending on the location of the tiled surface, indoors or out. They are designed to offset expansion and contraction and to conceal slight nominal differences in the pressed tiles.

Structural joint: Joints in the substrate to absorb possible structural movements, regardless of the type of covering bonded to it. For this reason, structural joints coinciding with the ones in the substrate must also be left between the tiles.

TYPES OF GROUTING MATERIALS

CG1: Normal cementitious grouts
CG2: Improved cementitious grouts
CG2: Improved cementitious grouts
CG3: Improved cementitious grouts
CG3: Synthetic resins (generally epoxy)
L: Portland cement grout, only recommended for undemanding situations, such as indoor areas with no additional stresses. Not recommended for areas subject to thorough cleaning or strict hygiene conditions or bathrooms, given its high porosity.



















⁽⁶⁾ Class 5 means that the stains produced with test solutions can be cleaned with a wet cloth.

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INSTRUCTIONS FOR FIXING THE PRODUCT, MAINTENANCE & CLEANING

To achieve optimum results in the laying of this product it is essential that you carry out the following recommendations .

Before fixing

- Prior to the setting of the tile, verify that the ceramic product adjusts to the job specification. The number code and alphabetic code appearing on the box label refers to the shade and caliber respectively. Do not mix and match tiles from cartons showing different shade and caliber information on the same installation site.
- · Handle the tiles with care to avoid problems of chipping and scratching.
- · Plaster the walls and screed the floors before laying.

During fixing

- · To fix the tiles, use a quality cement / adhesive and comb both walls, floors and the pieces themselves, combing with a jagged trowel of a size suitable to the format of the tile in question.
- · The use of traditional gouts, used for white or red bodied glazed tiles, will not guarantee good adhesion of porcelain tiles. To guarantee good adhesion to the base, for porcelain tiles, the use of specific adhesive and grout is essential.
- In areas requiring waterproof reinforcement, use special epoxi waterproof mortars to seal the grouts. For an adequate waterproof sealing between bath walls and bathtub, the usage of an specific PVC glued profile, a special epoxi waterproof mortar or an special elastic waterproof silicone grout is recommended.
- · When sealing, use the appropriate tools such as serrated trowels, drop hammer and rubber trowels. Do not use wedges to set the width of joint. For optimal placement is recommended mechanisms such as leveling pins.
- The sides of the tiles must be perfectly clean before the next tile can be laid. The tiles must be laid perfectly straight in order to maintain the vertical and horizontal alignment of all of the joints. In those cases in which you wish to bond the tiles, it should not be more than 20% of the tile.
- · With polished and/or rectified material, the tiles are slightly bevelled, to avoid chipping and simplify laying. For this type of material, when joining the tiles, a gap of at least 1,5 mm must be left for rectified wall tiles and 2 mm for rectified floor tiles, which will then be grouted with "fine seal" type grout, free of any aggregates. In case of non-rectified material, the gap left for the joint must always be at least 2,5 mm wide. Sealing materials that contain "carbon black" (black grout) must not be used.
- · On walls with internal angles, 5 millimetres of space must be left free for posible expansion of the tiles. It will be necessary to correctly and accurately plan and do 5 mm perimeter boundary joints on surfaces greater than 7 sq. meters, and 5 mm of expansion joints every 20 to 40 sq. meters of surface for exteriors and double that for interiors. Laying without joints is not recommended from a technical point of view.

After fixing / Maintenance

- · Once the grouting process has been finished, we must remove any excess grout, before it can harden, going ahead with a first cleaning, using non-abrasive products (hydrofluoric acid and derivatives). The use of hot water with a neutral detergent is enough.
- $\cdot \mbox{ Placed tiles must be properly protected untill the construction activity finishes.} \\$
- · For cleaning the tiles, you must use a clean sponge. Do not use a scourer or any other materials that might scratch the surface of the tiles. Do not use any product that is abrasive or excessively acidic.

For a good maintenance of the ceramic floor tili, we recomend the use of a neutral detergent of high cleaning power as FilaCleaner.

Recommendations for cases of intense and/or embedded dirt:	Product to use:
· Cement, lime water, stripes metals, oxides.	DETERDEK
· Waste epoxy joints resin.	FILA CR10
· Fats, beverages, food, rubber, dyes, marker, plastic paint droplets.	FILA PS/87
· Graffitis.	FILA NOPAINT STAR
· Candel wax, tree resins, waste adhesive tape	FILASOLV

OTHER CONSIDERATIONS

- \cdot In case the product ordered is for installation of Ventilated facades or bonded facades, please contact Keraben Systems for consultation and assistance.
- · Laying the tiles means that they have been accepted, and , as a result, no claims will be accepted for material installed, arising from a failure to comply with these premises.
- $\cdot \text{ The data shown in the next technical page are valid only for the samples of the particular production previously reviewed.}$
- · For proof of actual productions, you must contact Keraben Group S.A.U. directly.

















