

TEST REPORT

Name of Sample	MVG1763, MVG1764, MVG1765 Magma range	Shade	V3
Spacer	2mm	Nominal Size	15x15cm
Size	150 x 150 mm	Thickness	7,4 mm
m²/box	0,79 m ² /box	pcs/box	35
Surface	GL (Glazed)	Body	Porcelain

Characteristics	Method	Specification	Results
Indoor dry residential floors	Manufacturer's Recommendation	According to Manufacturer's Criteria	FLC, FWI, WWS, WFA
Indoor light commercial floors, including the areas FIR			
Indoor medium commercial floors, including the areas FLC and FIR			
Indoor heavy commercial floors, including the areas FMC, FLC, FIR			
Indoor dry residential and commercial walls			
Indoor wet residential and commercial floors			
Indoor and outdoor, wet or dry, residential and commercial walls, including the areas WID. For regions reaching below freezing temperatures, non frost resistant tiles are indoor only.			
Swimming pool interior walls, including the areas WRC and WID			
External facades, including the areas WRC and WID			
Floor - Very Heavy Outdoor Commercial and Outdoor Residential			
Floor - Light to Heavy Outdoor Commercial and Outdoor Residential			
Floor - Ramp Very Heavy Outdoor Commercial and Outdoor Residential			
Floor - Ramp Light to Heavy Outdoor Commercial and Outdoor Residential			

Characteristics	Method	Specification	Results
Water Absorption	ISO 10545-3	ISO 13006: ≤ 0,5	≤ 0,50
Breaking Strength	ISO 10545-4	ISO 13006: ≥ 700	≥ 1000
Modulus of Rupture	ISO 10545-4	ISO 13006: ≥ 35	≥ 38
Moisture Expansion	ISO 10545-10	ISO 13006: ≤ 0,6	≤ 0,2
Resistance to Cracking	ISO 10545-11	ISO 13006: 1	3
Coefficient of Restitution	ISO 10545-5	ISO 13006: ≥ 0,55	≥ 0,60

NOTE: Check if the product is suitable for the intended use. When it has the WFA use specification, it can be used in facade, provided that its indication is included in the constructive and executive project, which is the responsibility of the designer, according to the ABNT NBR 13755 standard.

The characteristics defined by the performance standard ABNT NBR 15575 are only applicable to residential areas and are directly related to the performance of the installed product. Therefore, the statements are valid when the installation guidelines described by the manufacturer are followed.

*According to information in the ANFACER sectorial performance manual

Characteristics		Method	Specification	Results
Deviation of W/N:	W - Work size (mm) N - Nominal Size (mm)	ISO 10545-2	ISO 13006: $\pm 3,00$	$\pm 3,00$
Deviation of r/W:	r - Average tile size (mm) W - Work size (mm)	ISO 10545-2	ISO 13006: $\pm 0,90$	$\pm 0,90$
Rectangularity:	Deviation from W (mm)	ISO 10545-2	ISO 13006: $\pm 0,75$	$\pm 0,75$
Straightness of sides:	Deviation from W (mm)	ISO 10545-2	ISO 13006: $\pm 0,75$	$\pm 0,75$
Edge curvature:	Deviation from W (mm)	ISO 10545-2	ISO 13006: $\pm 0,75$	$\pm 0,75$
Central Curve	Deviation in relation to dW (mm)	ISO 10545-2	ISO 13006: $\pm 1,06$	$\pm 1,06$
Warping:	Deviation in relation to dW (mm)	ISO 10545-2	ISO 13006: $\pm 1,06$	$\pm 1,06$
e/eW deviation:	e - Average thickness of a piece (mm) eW - Manufacturing thickness (mm)	ISO 10545-2	ISO 13006: 7,03 - 7,77	7,03 - 7,77
Visual Analysis:	Surface Quality (%)	ISO 10545-2	ISO 13006: ≥ 95	≥ 95
Water Absorption:	(%)	ISO 10545-3	ISO 13006: $\leq 0,5$	$\leq 0,50$
Breaking Load:	(N)	ISO 10545-4	ISO 13006: ≥ 700	≥ 1000
Modulus of Rupture:	(MPa)	ISO 10545-4	ISO 13006: ≥ 35	≥ 38
Expansion by Moisture:	(mm/m)	ISO 10545-10	ISO 13006: $\leq 0,6$	$\leq 0,2$
Cracking Resistance:	(Ciclos)	ISO 10545-11	ISO 13006: 1	3
Stain Resistance				
Penetrating Agent	Chrome Green (40% in oil)	ISO 10545-14	ISO 13006: \geq Classe 3	Classe 5
Film Forming Agent	Olive Oil	ISO 10545-14	ISO 13006: \geq Classe 3	Classe 5
Oxidizing Action Agent	Alcoholic Iodine	ISO 10545-14	ISO 13006: \geq Classe 3	Classe 5
Chemical Resistance				
Household product	Ammonium Chloride 100g/L	ISO 10545-13	ISO 13006: \geq GB	GA
Pool water treatment	Sodium hypochlorite 20mg	ISO 10545-13	ISO 13006: \geq GB	GA
Low concentration alkali	Hidróxido do Potássio 30g/L	ISO 10545-13	ISO 13006: to be declared	GLB
Low concentration acid	Hydrochloric Acid 3% (v/v)	ISO 10545-2	ISO 13006: to be declared	GLB
Low concentration acid	Citric Acid 100g/L	ISO 10545-2	ISO 13006: to be declared	GLB
Solar absorptance - α^*		NBR 15575 - 3-	NBR 15575:to be declared	0.6 - 0.7
Solar Reflectance - ρ^*		NBR 15575 - 3-	NBR 15575:to be declared	0.4 - 0.3
Solar Emittance - ϵ^*		NBR 15575 - 3-	NBR 15575:to be declared	0.75 - 0.85
Solar Reflectance Index - SRI H=5 (W/m ² K)*		NBR 15575 - 3-	NBR 15575:to declared	65 - 40
Impact of Hard Object		NBR 15575 - 3-	NBR 15575: No Break (5J)	No Break (5J)
Service life: (years)		NBR 15575 - 3-	NBR 15575:13	20 Indoor, 13 Outdoor
Moisture Resistance		NBR 15575 - 3-	NBR 15575: To declare	Resistant
Wet Friction Coefficient		NBR 16919-	NBR 16919: $\geq 0,40$	$\geq 0,40$
Dry Friction Coefficient		NBR 16919-	NBR 16919: to be declared	$\geq 0,50$
Flammability		NBR 15575 - 3-	NBR 15575: Class I	Class 1