

# Certificate of Technical Specifications

portinari

ambientes com emoção

PRODUCT: CARVALHO ESSENCIAL BE HARD  
FORMAT: 190.0 X 1170.0 X 9.0 mm


CONTAINS: 6 Pieces 1.33 m<sup>2</sup> 14.32 SQFT

GROUP: Bla

Technical Characteristics	ISO	Req.	Unit	Specification
DIM. VAR. IN REL. W. OF THE GREATER SIDE	10545-2	±1.0	mm	±0.50
DIM. VAR. IN REL. W. OF THE MINOR SIDE	10545-2	±0.50	mm	±0.50
THICKNESS VARIATION	10545-2	±0.45	mm	±0.45
STRAIGHTNESS OF THE GREATER SIDE	10545-2	±0.80	mm	±0.80
STRAIGHTNESS OF THE MINOR SIDE	10545-2	±0.50	mm	±0.50
DEVIATION FROM ORTHOGONALITY OF THE GREATER SIDE	10545-2	±1.50	mm	±1.50
DEVIATION FROM ORTHOGONALITY OF THE MINOR SIDE	10545-2	±0.50	mm	±0.50
CENTRAL DIAGONAL CURVATURE DEVIATION	10545-2	±1.80	mm	±1.80
DEVIATION OF THE CURVATURE OF THE SIDES	10545-2	±1.80	mm	±1.80
DEVIATION OF THE CURVATURE OF THE SIDES	10545-2	±0.76	mm	±0.76
BENDING OVER DIAGONAL	10545-2	±1.80	mm	±1.80
QUALITY OF SURFACE	10545-2	≥95	%	≥95
WATER ABSORPTION	10545-3	≤0.5	%	≤0.5
RESISTANCE TO BENDING	10545-4	≥35	N/mm <sup>2</sup>	≥35
BREAKING STRENGTH	10545-4	≥1300	N	≥1300
CLASS OF USAGE	-	Specify	USE	6
THERMAL SHOCK RESISTANCE	10545-9	-	-	-
LINEAR EXPANSION COEFFICIENT X 10-6	10545-8	-	C-1	-
MOISTURE EXPANSION	10545-10	≤0.60	mm/m	≤0.30
GRAZING RESISTANCE	10545-11	Required	-	OK
RESISTANCE TO CHEMICALS	10545-13	Minimum Class GB	-	GA
RESISTANCE ATTACKS ACID/ALKALINE	10545-13	Specify	-	GLB
SURFACE RESISTANCE TO STAINS	10545-14	Minimum Class 3	-	4
COEFFICIENT OF FRICTION WET	NBR 16919	Specify		≥0.6*
CHANGES IN HUE				V3

Note: Product in accordance with ABNT NBR 13006 standard  
Reaction to fire evaluation (NBR15575): Class I (non-combustible)  
Class 6: All residential and commercial areas with heavy traffic.

\*For products from March 2026 onward; between August 2022 and February 2026 consider friction ≥ 0.7; and for products prior to August 2022 consider friction ≥ 0.5.

  
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Responsável Técnico