

# Certificate of Technical Specifications

**portinari**

ambientes com emoção

PRODUCT: SERENA HD NO HARD BOLD  
 FORMAT: 595.0 X 595.0mm X 9.5 mm CONTAINS: 5 pieces 1,77 m2 19,05 SQFT GROUP: Bla

Technical Characteristics	ISO	Req.	Unit	Specification
DIM. VAR. IN REL. W. OF THE GREATER SIDE	10545-2	±2.0	mm	±2.0
DIM. VAR. IN REL. W. OF THE MINOR SIDE	10545-2	±2.0	mm	±2.0
THICKNESS VARIATION	10545-2	±5.0	%	±5.0
STRAIGHTNESS OF THE GREATER SIDE	10545-2	±1.50	mm	±1.50
STRAIGHTNESS OF THE MINOR SIDE	10545-2	±1.50	mm	±1.50
DEVIATION FROM ORTHOGONALITY OF THE GREATER SIDE	10545-2	±2.0	mm	±2.0
DEVIATION FROM ORTHOGONALITY OF THE MINOR SIDE	10545-2	±2.0	mm	±2.0
CENTRAL DIAGONAL CURVATURE DEVIATION	10545-2	±2.0	mm	±2.0
DEVIATION OF THE CURVATURE OF THE SIDES	10545-2	±2.0	mm	±2.0
DEVIATION OF THE CURVATURE OF THE SIDES	10545-2	±2.0	mm	±2.0
BENDING OVER DIAGONAL	10545-2	±2.0	mm	±2.0
QUALITY OF SURFACE	10545-2	≥95	%	≥95
WATER ABSORPTION	10545-3	≤0.5	%	≤0.5
RESISTANCE TO BENDING	10545-4	≥35	N/mm2	≥35
BREAKING STRENGTH	10545-4	≥1300	N	≥1300
CLASS OF USAGE		Specify	Use	5
THERMAL SHOCK RESISTANCE	10545-9	-	-	-
LINEAR EXPANSION COEFFICIENT X 10-6	10545-8	-	°C-1	-
MOISTURE EXPANSION	10545-10	-	mm/m	≤0.30
GRAZING RESISTANCE	10545-11	-	-	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	NBR16919	Specify		≥0.5
CHANGES IN HUE				V3

Note: Product in accordance with ABNT NBR 13006 standard  
 Reaction to fire evaluation (NBR15575): Class I (non-combustible)  
 USE 5 - All residential and commercial areas with moderate traffic.

  
 Jamilson Pinter Júnior  
 Responsável Técnico RC1 e RC2

  
 Gialdino da Luz  
 Responsável Técnico RC3 e RC4