



Technical guide for furnishing & design

1620x3240

12+ | 20+

06.2021 - EN

Technical specifications - furniture industry



physical and chemical properties	norm-test method	Laminam 12+	Laminam 12+ Lucidato
density	EN 14617-1 ASTM C97	2500 kg/m ³ (average value)	2500 kg/m ³ (average value)
water absorption	EN 14617-1	average value ≤ 0,1% *	average value ≤ 0,1% *
bending strength	EN 14617-2	50 MPa (average value)	50 MPa (average value)
freeze and thaw resistance	EN 14617-5	resistant	resistant
dry heat resistance	EN 12722 EN 438-2 par.16	5 (no visible effect till 200°C)	5 (no visible effect till 200°C)
chemical resistance	ISO 10545-13	from class A to B	from class A to C
chemical resistance	ASTM C650	resistant	resistant (except potassium hydroxide)
cold liquid resistance	EN 12720	5 no visible effect except ink (2)	from class 5 to 2
cleaner product resistance	PTP 53 CATAS	5 no visible effect	from class 5 to 3
abrasion resistance	EN 14617-4	28,0 mm	28,0 mm
hygiene properties	Metodo CATAS	excellent (high degree of removal of bacterial cells >99% after cleaning with a biocide-free detergent)	excellent (high degree of removal of bacterial cells >99% after cleaning with a biocide-free detergent)
resistance to fungi	ASTM G21	no fungal growth	no fungal growth
lead and cadmium given off	ISO 10545-15	0 mg/dm ³	0 mg/dm ³
overall migration	UNI EN 1186	0 mg/dm ² no significant migration	0 mg/dm ² no significant migration
VOC emission	UNI EN 16000-9	class A+ french	class A+ french
shock resistance	ISO 4211-4 EN 14617-9	no damage to ball drop 400mm average value 3 J	no damage to ball drop 400mm average value 3 J
light resistance	UNI EN 15187	5 no visible effect	5 no visible effect
thermal shock resistance	EN 14617-6	resistant	resistant
resistance to staining	ASTM C1378	resistant	resistant (except ink and methylene blue)

* Value relative to the ceramic body only

The unique features of Laminam products do not allow for a perfect comparison with ceramic tiles. The test results are therefore only indicative and not binding.

Technical specifications - furniture industry



physical and chemical properties	norm-test method	1620x3240 Full Size Laminam 12+	1620x3240 Full Size Laminam 12+ Lucidato
Full Size: "length and width" nominal size: 1620x3240mm size / (63.7"x 127.5")	Laminam	minimum size: ≥ 1630x3250mm full size untrimmed	minimum size: ≥ 1630x3250mm full size untrimmed
weight	Laminam	average value 30 kg/m ²	average value 30 kg/m ²
surface quality / % pieces with no visible flaws	ISO 10545-2	> 95%	> 95%
water absorption	ISO 10545-3 / ASTM C373	average value ≤ 0,1% *	average value ≤ 0,1% *
breaking strength in N	ISO 10545-4	> 4000 * (sample dimensions 400x800 mm)	> 4000 * (sample dimensions 400x800 mm)
modulus of rupture in N / mm ²	ISO 10545-4	average value 50 * (sample dimensions 400x800 mm)	average value 50 * (sample dimensions 400x800 mm)
resistance to deep abrasion	ISO 10545-6	≤ 175 mm ³	≤ 175 mm ³
coefficient of linear thermal expansion / 10 ⁻⁶ / °C	ISO 10545-8	6,6 average value *	6,6 average value *
resistance to thermal shock	ISO 10545-9	resistant *	resistant *
chemical resistance	ISO 10545-13	class: from A to B	class: from A to C
stain resistance	ISO 10545-14	class: from 4 to 5	class: from 2 to 5
resistant to freeze-thaw	ISO 10545-12	resistant *	resistant *
fire reaction	EN 13501 (rev. 2005)	A2 - s1,d0	A2 - s1,d0
overall migration	UNI EN 1186	0 mg/dm ² no significant migration	no significant migration
VOC emission	UNI EN 16000-9	class A+ french	class A+ french
shock resistance	ISO 4211-4	no damage to ball drop 400mm	no damage to ball drop 400mm
light resistance	UNI EN 15187	5 no visible effect	5 no visible effect
thermal shock resistance	EN 14617-6	resistant	resistant
resistance to staining	ASTM C1378	resistant	resistant (except ink and methylene blue)

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bending strength	EN 14617-2	50 MPa (average value)	50 MPa (average value)
freeze and thaw resistance	EN 14617-5	resistant	resistant
dry heat resistance	EN 12722 EN 438-2 par.16	5 (no visible effect till 200°C)	5 (no visible effect till 200°C)
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weight	Laminam	average value 50,4 kg/m ²	average value 50,4 kg/m ²
surface quality / % pieces with no visible flaws	ISO 10545-2	> 95%	> 95%
water absorption	ISO 10545-3 / ASTM C373	average value ≤ 0,1% *	average value ≤ 0,1% *
breaking strength in N	ISO 10545-4	> 10000 * (sample dimensions 400x800 mm)	> 10000 * (sample dimensions 400x800 mm)
modulus of rupture in N / mm ²	ISO 10545-4	average value 50 * (sample dimensions 400x800 mm)	average value 50 * (sample dimensions 400x800 mm)
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