# Performance Properties

#### LN-201-2020

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### **Performance Properties – US**

PROPERTIES	TEST PROCEDURE -	TYPICAL RESULTS		
		MATTE	HONED	POLISHED
Determination of Water Absorption	ASTM C373	≤ 0.1 %	≤ 0.1%	≤ 0.1%
Visible Abrasion Resistance	ASTM C1027-09	Class 5	Class 5	Class 5
Linear Thermal Expansion	ASTM C372	5.8 * 10 <sup>-6</sup> /°C	5.8 * 10 <sup>-6</sup> /°C	5.8 * 10 <sup>-6</sup> /°C
Thermal Shock Resistance	ASTM C484	Passed	Passed	Passed
Moisture Expansion	ASTM C370	< 0.1mm/m	< 0.1mm/m	< 0.1mm/m
Resistance to Chemical Substances	ASTM C650	Passed	Passed	Passed
Resistance to Staining	ASTM C1378	Class A	Class A	Class A
Crazing Resistance	ASTM C424	No Crazing	No Crazing	No Crazing
UV Resistance	DIN 51094	No Change	No Change	No Change
Anti-slip Properties	ANSI A137.1	0.42	0.21	0.21
	DIN 51130	R9	-	-
	DIN 51097	Class A	Class A	-
	UNE-ENV 12633	Class 1	Class 0	Class 0

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# Performance Properties

### **Performance Properties – European**

		TEST RESULTS		
PROPERTIES	TEST PROCEDURE	REQUIRMENT	TYPICAL RESULT	
Size				
Length and Width		±0.6% max	±0.1%	
Thickness		±5.0% max	±0.5%	
Linearity	ISO 10545.2	±0.5% max	±0.1%	
Wedging		±0.6% max	±0.1%	
Warpage		±0.6% max	±0.1%	
			3	
Water Absorption	ISO 10545.3	< 0.5%	0.1%	
Flexural Strength	ISO 10545.4	Breaking modulus > 35 N/mm²	> 53 N/mm²	
Deep Abrasion Resistance	ISO 10545.6	≤ 175 mm²	≤ 142 mm³	
Coefficient of Linear Thermal expansion	ISO 10545.8	≤ 9 * 10 <sup>-6</sup> /°C	6 * 10 <sup>-6</sup> /°C	
Frost Resistance	ISO 10545.12	No Alternation	No Alternation	
Chemical Resistance	ISO 10545.13	Min. UB	UA	
Stain Resistance	ISO 10545.14	No visible variation	Cleanable by hot water	
UV Resistance	DIN 51094	No Change	No Change	
Friction Coefficient	B.C.R.A. Method	0.40 ≤ µ ≤ 0.74	> 0.40 (Matte finish)	
Fire Resistance	EN 13501-1 (96/603/EC)		A1	

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