

Technical Specifications

Products: **CAESAR, ALEXANDER, NAPOLEON**
 Sizes/Thicknesses (mm): **NOT RECTIFIED 12"x12"/8; 18"x18"/9**
 Product group: **Porcelain Tiles - class P1** (Water absorption $\leq 0,5 \%$)
 Surface: **GLAZED (GL)**

Technical characteristics	Test method	ANSI A137.1: Values required for Glazed Porcelain Tiles Class P1	EMPEROR Values	
Water absorption	ASTM C373	$\leq 0.5 \%$	$\leq 0.05 \%$	
Breaking strength	ASTM C648	≥ 250 pounds	Compliant	
Resistance to surface abrasion	ASTM C1027 (PEI method)	Not required	5	
Scratch resistance	CTI 81-7 A	Not required	7	
Linear thermal expansion	ASTM C372	Not required	$\alpha \leq 8 \cdot 10^{-6} \text{ }^\circ\text{C}^{-1}$ $\alpha \leq 4.4 \cdot 10^{-6} \text{ }^\circ\text{F}^{-1}$	
Thermal shock resistance	ASTM C484	No sample must show visible signs	Resistant	
Chemical resistance	ASTM C650	Not required	Resistant	
Stain resistance	CTI-T-81 D	Not required	Resistant	
Frost resistance	ASTM C1026	Not required	Resistant	
Bond strength	ASTM C482	≥ 50 PSI	Compliant	
Dimensions	Warpage Edge	$\pm 0.75 \%$ or max ± 0.09 inch	Compliant	
	Warpage Diagonal	$\pm 0.50 \%$ or max ± 0.08 inch	Compliant	
	Nominal sizes	$\pm 3.0 \%$ of nominal dimensions	$\pm 1.50 \%$	
	Caliber range	$\pm 0.50 \%$ or max ± 0.08 inch	Compliant	
	Thickness	ASTM C499	≤ 0.040 inch	≤ 0.030 inch
	Wedging	ASTM C502	$\pm 0.50 \%$ or max ± 0.08 inch	Compliant
Shade Variation	ANSI A137.1	According to manufacturer's statement	V4	
Slip resistance	ASTM C1028	COF ≥ 0.60 slip resistant	dry-neolite: COF ≥ 0.60 wet-neolite: COF ≥ 0.60	
Slip resistance	ANSI A137.1 (BOT 3000)	DCOF ≥ 0.42	DCOF ≥ 0.42	

