

Technical Characteristics VITALYTY Series

ANSI/ASTM Standards

Products: **Earth, Wind, Fire**

Sizes (")/thickness (mm): **18"x18"/9, 9"x18"/9, 12"x12"/9, 9"x9"/9**

Sides: **Calibrated** (Not rectified)

Surface: **Glazed** (GL)

Product Group: **Porcelain Tile – P1 Class** (Water Absorption $\leq 0.5\%$)

Porcelain Quality certification: **VITALYTY series is PTCA certified**

Made in: **USA** (production site in Lawrenceburg, KY)



Technical characteristics	Test method	ANSI 137.1: Values required for Glazed Porcelain tiles – P1 Class	VITALYTY Series Values
Water absorption	ASTM C373	$\leq 0.5\%$	Conforms
Breaking strength	ASTM C648	≥ 250 pounds	Conforms
Resistance to surface abrasion (PEI)	ASTM C1027	not required	V
Chemical Resistance	ASTM C650	not required	Resistant
Stain Resistance	CTI 81-7 D	not required	Resistant
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
Crazing resistance	ASTM C424	no sample must show visible signs	Resistant
Frost resistance	ASTM C1026	no sample must show visible signs	Resistant
Bond strength	ASTM C482	≥ 50 PSI	Conforms
Edge warpage	ASTM C485	$\max \pm 0.75\%$ or $\pm 0.09''$	Conforms
Diagonal warpage	ASTM C485	$\max \pm 0.50\%$ or $\pm 0.08''$	Conforms
Nominal dimensions	ASTM C499	$\max \pm 3.0\%$ of nominal dimensions	$\max \pm 1.5\%$
Caliber range	ASTM C499	$\max \pm 0.50\%$ or $\pm 0.08''$	Conforms
Thickness	ASTM C499	$\max \pm 0.040$ inch	$\max \pm 0.030$ inch
Wedging	ASTM C502	$\max \pm 0.50\%$ or $\pm 0.08''$	Conforms
Shade Variation	ANSI A137.1	According to manufacturer's statement	V4 (Substantial variation)
DCOF (Dynamic Coefficient of Friction)	ANSI A137.1	≥ 0.42 (internal wet environments)	≥ 0.42

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