

Fray X

Porcelain tiles



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Size 11³/₄" x 23⁵/₈"
23⁵/₈" x 47¹/₄"
23⁵/₈" x 23⁵/₈"

Thickness \pm 9 mm

Finish Matte, Outdoor Sensitech

V2 SLIGHT VARIATION



Field tiles	Commercial size (in)	Nominal size (in)	Thickness (mm)	Finish	Edge
	12" x 24"	11 ³ / ₄ " x 23 ⁵ / ₈ "	9 mm	Matte	Rectified
	24" x 48"	23 ⁵ / ₈ " x 47 ¹ / ₄ "	9 mm	Matte	Rectified
	24" x 24"	23 ⁵ / ₈ " x 23 ⁵ / ₈ "	9 mm	Matte	Rectified
	Outdoor Paver	23 ⁵ / ₈ " x 23 ⁵ / ₈ "	20 mm	Outdoor Sensitech	Rectified
Mosaics and coordinating trims	Commercial size (in)	Nominal size (in)	Thickness (mm)	Finish	Please refer to caliber chart for working size. Close joints are not recommended.
	Mosaic 2" x 2"	11 ³ / ₄ " x 11 ³ / ₄ "	9 mm	Matte	
	Outline Mosaic	11 ⁷ / ₃₂ " x 13 ³ / ₄ "	9 mm	Matte	
	Bullnose 3" x 24"	2 ⁷ / ₈ " x 23 ⁵ / ₈ "	9 mm	Matte	
	Cove Base 6" x 12"	5 ⁷ / ₈ " x 11 ³ / ₄ "	8.5 mm	Matte	

Property	Test Method	Requirements			
		Calibrated	Rectified		
Regularity characteristics	Nominal Size		$\pm 3.00\%$	-3.00% ÷ +2.00%	Compliant
	Caliber Range	ASTM C499	$\pm 0.50\%$ or ± 0.08 in (± 2.0 mm) (*)	$\pm 0.25\%$ or ± 0.03 in (± 0.8 mm) (*)	Compliant
	Thickness⁽¹⁾		Range: 0.04 in (1.02 mm)		Compliant
	Wedging	ASTM C502	$\pm 0.50\%$ or ± 0.08 in (± 2.0 mm) (*)	$\pm 0.25\%$ or ± 0.03 in (± 0.8 mm) (*)	Compliant
	Warpage Edge	ASTM C485	$\pm 0.75\%$ or ± 0.09 in (± 2.3 mm) (*)	$\pm 0.40\%$ or ± 0.05 in (± 1.3 mm) (*)	Compliant
Warpage Diagonal	$\pm 0.50\%$ or ± 0.08 in (± 2.0 mm) (*)		$\pm 0.40\%$ or ± 0.07 in (± 1.8 mm) (*)	Compliant	
Structural characteristics	Water Absorption	ASTM C373	$\leq 0.5\%$		$\leq 0.5\%$
Bulk mechanical characteristics	Breaking Strength	ASTM C648	Matte \pm 9		Outdoor Sensitech \pm 20
			Average ≥ 250 lbf. (1.11 kN) Individual ≥ 225 lbf. (1.00 kN)		≥ 2000 lbf. avg
Bulk mechanical characteristics	Modulus of Rupture	ASTM C1050	Outdoor Sensitech \pm 20		Outdoor Sensitech \pm 20
			5000 psi.		Compliant
Surface mechanical characteristics	Mohs' Scratch Hardness	C1895	Subject to the project ⁽³⁾		MOHS 7-8: Hard. Suitable for high-traffic residential and light commercial areas.
Physical properties	Bond Strength	ASTM C482	≥ 50 psi. (0.34 Mpa)		≥ 100 psi.
Thermal and hygrometric characteristics	Resistance to Freeze/Thaw Cycling	ASTM C1026			Resistant
	Thermal Shock Resistance	ASTM C484			Resistant
Chemical characteristics	Chemical Resistance	ASTM C650			Unaffected
	Stain Resistance	ASTM C1378			Unaffected
Safety characteristics	Dynamic Coefficient of Friction (DCOF)	ANSI A326.3	Subject to the project ^{(2) (3)}		Matte \pm 9
			≥ 0.42 Wet Interior Wet (IW) ⁽²⁾	≥ 0.60 Wet Exterior Wet (EW) ⁽²⁾	Outdoor Sensitech \pm 20

(*) Whichever is less.

(1) Whichever is less, for tiles up to 24"x24" (610 mm x 610 mm).

(2) DCOF ≥ 0.42 Wet may not be a requirement for all projects.

(3) The specifier shall determine tiles appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers' guidelines and recommendations. For updated manufacturer classification according to ANSI A326.3, Section 4 - "Product Use Categories", please refer to our website.

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