

## METROPOLITAN CERAMICS®

**PERFORMANCE SPECIFICATIONS**

By ANSI Standard Specification A137.1 Metropolitan Ceramics' unglazed tile is classified as quarry tile, however, the exceptional technical characteristics noted enable them to be used in virtually any application suitable for ceramic tile. Metropolitan Ceramics' unglazed tile meets both the ASTM standards, the ANSI A137.1 specification for quarry tile, and Metropolitan internal requirements as listed.

<b>Specification</b>	<b>Test</b>	<b>Standard</b>	<b>Result</b>
Abrasion Resistance	ASTM C501	Index of 35 or better	Metropolitan tests at >80 or better.
Absorption 5-hour boil	ASTM C373	5%	Metropolitan tests at 3% maximum and qualifies as vitreous.
Breaking Strength	ASTM C648	Min. 250 lbs.	Metropolitan tests at 400 lbs. or better.
Compressive Strength	ASTM C67	No industry standard	Metropolitan tests at 10,000 P.S.I. or better.
Facial Size Variation	ASTM C499	Average facial dimension of each tile not to exceed 4% from nominal dimension(s)	Metropolitan meets the standard.
Freeze/ Thaw	ASTM C67	No industry standard	ASTM test is 50 cycles.
	Metropolitan internal test	Metropolitan internal standard is 3,000 cycles.	
Shear Bond Strength	ASTM C482	50 P.S.I. or better	Metropolitan exceeds the standard.
Static Coefficient of Friction	ASTM C1028	No industry standard	At time of manufacture, all Metropolitan colors meet or exceed measure of 0.70 dry and 0.60 wet. Metropolitan Down to Earth colors meet or exceed 0.80 dry and 0.70 wet. Metropolitan X-COLORS and METRO TREAD (enhanced slip resisting products) meet or exceed 0.90 dry and 0.70 wet.
Thickness	ASTM C499	Max. range of .050"	Metropolitan meets the standard.
Warpage	ASTM C485	Max. 1.5% along any edge. 1.0% on either diagonal.	Metropolitan meets the standard.
Wedging	ASTM C502	Max. 1.0%	Metropolitan meets the standard.