

CTMA HANDBOOK FOR CONCRETE TILES

PART II - PERFORMANCE

A- PRODUCT PERFORMANCE

1-	Compression Strength	-	4000 psi *	-	ASTM C-39
2-	Absorption	-	12.%	-	ASTM C-67 (Section 8)
3-	Moisture Content	-	7. % *	-	ASTM C-67 (Section 5)
4-	Density	-	140 lbs cubic/ft	-	ASTM C-642
5-	Length Change (+/-)	-	0.1% max. *	-	ASTM C-157 (CTMA Modified)**
6-	Bond Strength (shear)	-	50 psi	-	ASTM C-482
7-	Abrasion Resistance	-	20 wear index	-	ASTM C-1353
8-	COF	-	0.6	-	ASTM C-1028
9-	Breaking Load (max. load)	-	300 lbs	-	ASTM C-67 (Section 21)
10-	Freeze/Thaw (Optional)	-	See Mfr.	-	ASTM C-67 (Section 9)

NOTES:

- 1- *Tested seven days from date of manufacture.
- 2- Tile manufactured date stamped on cartons is now a CTMA requirement
- 3- **Length Change (Q-Tile field tests according to ASTM C-67, Sec. 15)

B- TILE ASSEMBLY PERFORMANCE

1-	COF	-	0.6	-	ASTM C-1028
2-	Bond Strength (Installation Bond)	-	50 psi	-	ASTM C-482
3-	Dimensional Stability (Curling) *	-	Retain bond *	-	CTMA CT-104 *
4-	Bond Strength (shear)	-	50 psi *	-	ASTM C-482 (CTMA Modified) *
5-	Check coverage (on back of tile)	-	Periodically	-	ANSI A108.5 A-4.3.3.3.3
6-	Sound Transmission	-	RF 900-2K	-	**

NOTES:

- 1- *After 41 days wet/dry cycling, then tile assembly is tested
- 2- **CTIOA has allowed the CTMA use of their RF 900-2k
- 3- CTMA specifications states, "backbuttering mandatory on all exterior concrete tile installations." (ANSI A108.5 A-4.3.3.3.3 = 95% coverage)