TECHNICAL BULLETIN 7

Structural Brick Compressive Strength Data Table

Selected Brick Colors	Average Net Area Unit Compressive Strength psi (MPa)		Assumed Wall Assembly Design Strength (f'_m) psi (MPa)	
Arctic White	11,000	(75.84)	3,844	(26.50)
Autumn Red	12,000	(82.74)	4,000	(27.58)
Bronzestone	11,900	(82.05)	4,000	(27.58)
Canyon Rose	13,600	(93.77)	4,000	(27.58)
Cedar	13,200	(91.01)	4,000	(27.58)
Copperstone	14,000	(96.53)	4,000	(27.58)
Desert Sand	14,000	(96.53)	4,000	(27.58)
Golden Buff	15,400	(106.18)	4,000	(27.58)
Ironstone	14,600	(100.66)	4,000	(27.58)
Midnight Black	15,000	(103.42)	4,000	(27.58)
Monterey	14,400	(99.28)	4,000	(27.58)
Mountain Red	15,600	(107.56)	4,000	(27.58)
Ochre Buff	14,700	(101.35)	4,000	(27.58)
Park Rose	13,600	(93.77)	4,000	(27.58)
Platinum	11,000	(75.84)	3,844	(26.50)
Smokey Mountain	15,500	(106.87)	4,000	(27.58)
Tumbleweed	15,400	(106.18)	4,000	(27.58)
Walnut	12,800	(88.25)	4,000	(27.58)

- 1. Clay and shales are naturally occuring materials that vary, to some degree, throughout the deposits and strata layers. Consequently, various physical properties of the brick units, including the unit compressive strength values noted above are variable. The data above is based on historic data, not future projections. The data for the noted colors, and other colors, is kept on file, available upon request.
- 2. Assumed Wall Assembly Design Strengths f'_m. are based on TMS 602-22, Section 1.4-B-2(a), Table 1, and represent the design strength of wall assemblies comprised of masonry units, mortar, and grout. Mortar is assumed to be ASTM C270 compliant Type M, or Type S mortar. Grout is assumed to be ASTM C476 compliant grout with 28-day minimum compressive strength (f'_c) equal to or greater than f'_m.
- 3. Wall Assembly Design Strengths (f'_m) in excess of 4,000 psi can be acheived based on job specific prism testing.

