

AEROSMITH FASTENING SYSTEMS

TECHNICAL BULLETIN 101:

Performance Table-

Allowable working values for Aerosmith Fastening Systems fasteners (lbs).

CONCRETE

			Installed in Stone Aggregate Concrete Concrete Compressive Strength (psi)						Installed in Lightweight Aggregate Concrete Concrete Compressive Strength (psi)	
Series	Shank Diameter (inch)	Min Penetration (inch)	2000 psi		3000 psi		4000 psi		3000 psi	
			Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear
144 Fasteners	0.140	3/4 1	45 110	80 165	70 175	115 185	90 235	145 205	80 143	85 152

Note 1: Except as noted, values shown reflect an 8 to 1 safety factor.

Note 2: Bold values shown reflect 10 to 1 safety factor due to shallow embedment.

Note 3: Values shown are for concrete at the designed strength and are for the fastener only. Wood, steel, etc. connected members must be investigated separately.

Note 4: Cyclic, fatigue or shock loads and other design criteria may require a different safety factor.

Note 5: Job-site testing may be required to determine actual job-site values.

Note 6: Tension Value for a 3/4" min. embedment in Precast Hollow 5000 psi is 95 lbs.

Note 7: Edge distance is 3" unless otherwise approved.

STEEL

			Installed in Steel Steel Thickness (inches)						
Series	Shank Diameter (inch)	Type of Shank	3/16 Shear Tension		1 Shear	/ 4 Tension			
144 Fasteners	0.144	Smooth	130	665	270	700			

Note 1: Values shown reflect a 10 to 1 safety factor for tension and 5 to 1 for shear.

Note 2: Values shown are for fastenings that have the entire pointed end of the fastener through the steel plate.

Note 3: Job-site testing may be required to determine actual job-site values.

Note 4: Cyclic, fatigue or shock loads and other design criteria may require a different safety factor.

Aerosmith Fastening Systems

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