



TRAKFAST PINS PULLOUT LOADS / CONCRETE AND HOLLOW BLOCK

Performance Tables FASTENERS IN CONCRETE

FASTENER PART NUMBER	SHANK DIA. (INCH)	MINIMUM PENETRATION (INCH)	INSTALLED IN STONE AGGREGATE CONCRETE CONCRETE COMPRESSIVE STRENGTH ALLOWABLE LOAD – <i>Ultimate Load</i>						HOLLOW BLOCK Grade N, Type 1	
			4000 PSI		6000 PSI		3000 PSI Lightweight LOWER FLUTE		FACE SHELL Min 1-1/4" face thickness	
			TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)
GAS ASSEMBLIES	MP034TH*, M034* M100*, BR2*	5/8	78 426	80 574	62 308	-----	72 361	242 1210	133 691	-----
		3/4	104 593	195 977	132 658	206 1057	93 470	288 1442	84 444	87 446
	14STUD	0.125	91 454	-----	57 373	-----	-----	-----	-----	-----
	M034BB	0.104/.118	51 256	83 418	-----	-----	-----	-----	36 184	58 290
	34CLIP	0.104/.125	62 310	-----	106 528	-----	44 220	-----	-----	-----
	38HSMPO34, 12HSMPO34 34HSMPO34, 10HSMPO34 114HSMPO34, 14TRHMP034 38TRHMP034, TSHMP034 12CCMP034L, 34CCMP034L	0.104/.125	60 357	117 587	107 533	191 957	54 269	230 1150	71 357	123 613
POWDER ASSEMBLIES	M100BB, 38HSS10 12HSS10, 34HSS10 10HSS10, TSH10 12CCSS10L, 34CCSS10L 14TRHSS10, 38TRHSS10	0.125/.150	107 559	213 1067	161 803	248 1240	96 478	231 1156	102 512	166 831

* ESR-1955 pin data applies. **Note 1:** ALLOWABLE loads are shown in the **LARGE BOLD** font, *Ultimate* loads are shown in *smaller italic* font. **Note 2:** Testing conducted in accordance with ICC AC70 & ASTM E1190
Note 3: Safety factors are based on coefficient of variation. In accordance with ICC AC70, the safety factor will be no less than 5. **Note 4:** Values shown in concrete are for fastener only. Connected members must be investigated separately. **Note 5:** Cyclic, fatigue, shock loads and other design criteria may require a different safety factor. **Note 6:** Job-site testing may be required to determine actual job site values.
Note 7: Minimum edge distance is 3 inches unless otherwise approved. In hollow block applications, no more than one fastener per cell. **Note 8:** For SI: 1 lbf = 4.448 N, 1 inch = 25.4 mm, 1 ksi = 6.89MPa.
Tables converted to metric are available on our website.

GAS FASTENERS IN STEEL

PART NUMBER	SHANK DIA. (INCH)	TYPE OF SHANK	INSTALLED IN A36 STRUCTURAL STEEL STEEL THICKNESS INCHES ALLOWABLE LOAD – <i>Ultimate Load</i>					
			3/16 (.1875)		1/4 (.250)		3/8 (.375)	
			TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)
FPP012	0.109	SMOOTH	200 1047	315 1570	230 1220	305 1526	210 1048 ⁷	215 1076 ⁷
M012 FPP012S	0.104/.118	SMOOTH	-----	-----	148 744	157 787	166 832 ⁷	157 787 ⁷
T3012	0.125	SMOOTH	63 676	162 1356	239 1285	211 1417	113 914 ⁸	197 1327 ⁸
INSTALLED IN ASTM A 572 GRADE 50 STEEL STEEL THICKNESS INCHES								
T3012	0.125	SMOOTH	103 733	222 1682	147 950	119 973	147 856 ⁹	112 1014 ⁹

Note 1: ALLOWABLE loads are shown in the **LARGE BOLD** font, *Ultimate* loads are shown in *smaller italic* font. **Note 2:** Testing conducted in accordance with ICC AC70 & ASTM E1190.
Note 3: Safety factors are based on coefficient of variation. In accordance with ICC AC70, the safety factor will be no less than 5. **Note 4:** Cyclic, fatigue, 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:** Values shown are for fastenings that have the entire pointed end of the fastener driven through the steel plate; except as noted below. **Note 7:** Fastener penetration is .31" minimum. **Note 8:** Fastener penetration is .29" minimum. **Note 9:** Fastener penetration is .27" minimum. **Note 10:** For SI: 1 lbf = 4.448 N, 1 inch = 25.4 mm, 1 ksi = 6.89MPa
Tables converted to metric are available on our website.

Performance/
Submittal