

Ramset fasteners may be specified by their type or catalog number to satisfy fastening requirements.

PIN SPECIFICATIONS

APPROVALS/LISTINGS

Made from AISI 1060-1065 steel. Austempered to a core hardness of 52-56 Rc

Typical tensile strength: 270,000 psi

Typical shear strength: 162,000 psi

STANDARD FINISHES

- · Proprietary black
- Mechanical zinc plate to a minimum thickness of .0002 meets requirements of ASTM B695

All clips are electroplated zinc with yellow cromate and meet ASTM B633 requirements

ICC Evaluation Service, Inc. #ESR-1955 T3 Fasteners

FASTENERS IN CONCRETE

	FASTENER PART NUMBER	SHANK DIA. (INCH)	MINIMUM PENETRATION (INCH)	INSTALLED IN STONE AGGREGATE CONCRETE CONCRETE COMPRESSIVE STRENGTH ALLOWABLE LOAD — Ultimate Load						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)		HEAR LBS)	TENSION (LBS)	SHEAR (LBS)
GAS ASSEMBLIES	MP034TH*, M034*	0.125	5/8	78 426	80 <i>574</i>	62 308		72 361 242	1210	133 <i>691</i>	
	M100*, BR2*		3/4	104 <i>593</i>	195 <i>977</i>	132 <i>658</i>	206 <i>1057</i>	93 470 288	3 1442	84 444	87 446
	14STUD	0.125	5/8	91 454		57 <i>373</i>					
	M034BB	0.104/ .118	3/4	51 256	83 418					36 184	58 290
		0.104/ .125	5/8	62 310		106 <i>528</i>		44 220			
	38HSMP034, 12HSMP034 34HSMP034, 10HSMP034 114HSMP034, 14TRHMP034 38TRHMP034, TSHMP034 12CCMP034L, 34CCMP034L	0.104/ .125	5/8	60 357	117 <i>587</i>	107 <i>533</i>	191 <i>957</i>	54 269 230	1150	71 357	123 <i>613</i>
POWDER	M100BB, 38HSSS10 12HSSS10, 34HSSS10 10HSSS10, TSHSS10 12CCSS10L, 34CCSS10L 14TRHSS10, 38TRHSS10	0.125/ .150	3/4	107 <i>559</i>	213 <i>1067</i>	161 <i>803</i>	248 1240	96 478 23 1	l 1156	102 <i>512</i>	166 831

^{*} ESR-1955 pin specs apply. Note 1: **ALLOWABLE** loads are shown in the **LARGE BOLD** font, *Ultimate* loads are shown in *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: Jobsite testing may be required to determine actual jobsite 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	SHANK DIA.	IA. TYPE OF	INSTALLED IN A36 STRUCTURAL STEEL STEEL THICKNESS INCHES ALLOWABLE LOAD — Ultimate Load								
NUMBER			11 Gauge	e (.119)	3/16 (.1875)	1/4 (.	250)	3/8 (.	375)	
	(INCH)		TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	
M012	0.104/.118	SMOOTH					148 <i>744</i>	157 <i>787</i>	166 8327	157 <i>787</i> ⁷	

^{**} Fasteners shall have minimum 0.32-inch penetration when installed into 3/8-inch thick steel.

Note 1: **ALLOWABLE** loads are shown in the **LARGE BOLD** font, *Ultimate* loads are shown in *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: Jobsite testing may be required to determine actual jobsite 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 inch minimum. 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.