

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

## PIN SPECIFICATIONS

- 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—Class 5 Type I

## APPROVALS/LISTINGS

- ICC Evaluation Service, Inc.  
#ESR-1955 T3 Fasteners
- City of Los Angeles  
#RR-25739 T3 pins



## Collated Gas Fasteners in Concrete (T3)

PART NUMBER SERIES	SHANK DIAMETER (INCH)	MINIMUM PENETRATION (INCH)	INSTALLED IN STONE AGGREGATE CONCRETE CONCRETE COMPRESSIVE STRENGTH ALLOWABLE LOAD - Ultimate Load					
			2000 PSI		4000 PSI		6000 PSI	
			TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)
T3 Straight Shank	0.125	5/8	<b>83</b> 414	<b>109</b> 611	<b>78</b> 426	<b>80</b> 574	.....	.....
		3/4	<b>107</b> 541	<b>156</b> 855	<b>104</b> 593	<b>195</b> 977	.....	.....
T3 Step Shank	0.104/0.125	5/8	.....	.....	<b>60</b> 357	<b>117</b> 587	<b>107</b> 533	<b>191</b> 957

PART NUMBER SERIES	SHANK DIAMETER (INCH)	MINIMUM PENETRATION (INCH)	INSTALLED IN LIGHTWEIGHT CONCRETE / DECK / BLOCK ALLOWABLE LOAD - Ultimate Load					
			3000 PSI LIGHT WEIGHT CONCRETE		3000 PSI LIGHT WEIGHT CONCRETE WITH METAL DECK		HOLLOW CONCRETE MASONRY UNITS (CMU ANY LOCATION)	
			TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)
T3 Straight Shank	0.125	5/8	<b>84</b> 418	<b>108</b> 540	<b>72</b> 361	<b>242</b> 1210	<b>20</b> 243	<b>34</b> 264
		3/4	<b>108</b> 540	<b>173</b> 864	<b>93</b> 470	<b>288</b> 1442	.....	.....
T3 Step Shank	0.104/0.125	5/8	.....	.....	<b>54</b> 269	<b>230</b> 1150	<b>71</b> 357	<b>123</b> 613

**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 the 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 in concrete is 3 inches unless otherwise approved. **Note 8:** For Sl: 1 lbf = 4.448 N, 1 inch = 25.4 mm, 1 ksi = 6.89MPa. **Note 9:** T3 straight shank allowable tension value in face shell of hollow CMU is 133 lbs.

## Gas Fasteners in Steel

PART NUMBER	SHANK DIAMETER (INCH)	TYPE OF SHANK	INSTALLED IN A36 STRUCTURAL STEEL STEEL THICKNESS INCHES ALLOWABLE LOAD - Ultimate Load					
			3/16 (.1875)		1/4 (.250)		3/8 (.375)	
			TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)	TENSION (LBS)	SHEAR (LBS)
T3012	0.125	SMOOTH	<b>63</b> 676	<b>162</b> 1356	<b>239</b> 1285	<b>211</b> 1417	<b>113</b> 914 <sup>8</sup>	<b>197</b> 1327 <sup>8</sup>
T3012S	0.125	TAPER SMOOTH	<b>183</b> 958	<b>332</b> 1660	<b>237</b> 1184	<b>356</b> 1782	<b>189</b> 943 <sup>10</sup>	<b>392</b> 1960 <sup>7</sup>
INSTALLED IN ASTM A 572 GRADE 50 STEEL STEEL THICKNESS INCHES								
T3012	0.125	SMOOTH	<b>103</b> 733	<b>222</b> 1682	<b>147</b> 950	<b>119</b> 973	<b>147</b> 856 <sup>9</sup>	<b>112</b> 1014 <sup>9</sup>

**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:** Fastener penetration is .25" minimum. **Note 11:** For Sl: 1 lbf = 4.448 N, 1 inch = 25.4 mm, 1 ksi = 6.89MPa