



**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)			
MP034TH*, M034* M100*, BR2*	0.125	5/8	<b>78</b> 426	<b>80</b> 574	<b>62</b> 308	-----	<b>72</b> 361	<b>242</b> 1210	<b>133</b> 691	-----			
		3/4	<b>104</b> 593	<b>195</b> 977	<b>132</b> 658	<b>206</b> 1057	<b>93</b> 470	<b>288</b> 1442	<b>84</b> 444	<b>87</b> 446			
14STUD	0.125	5/8	<b>91</b> 454	-----	<b>57</b> 373	-----	-----	-----	-----	-----			
GAS ASSEMBLIES M034BB	0.104/ .118	3/4	<b>51</b> 256	<b>83</b> 418	-----	-----	-----	-----	<b>36</b> 184	<b>58</b> 290			
			34CLIP	0.104/ .125	5/8	<b>62</b> 310	-----	<b>106</b> 528	-----	<b>44</b> 220	-----		
GAS ASSEMBLIES 38HSMP034, 12HSMP034 34HSMP034, 10HSMP034 114HSMP034, 14TRHMP034 38TRHMP034, TSHMP034 12CCMP034L, 34CCMP034L	0.104/ .125	5/8	<b>60</b> 357	<b>117</b> 587	<b>107</b> 533	<b>191</b> 957	<b>54</b> 269	<b>230</b> 1150	<b>71</b> 357	<b>123</b> 613			
			POWDER ASSEMBLIES M100BB, 38HSS10 12HSS10, 34HSS10 10HSS10, TSHSS10 12CCSS10L, 34CCSS10L 14TRHSS10, 38TRHSS10	0.125/ .150	3/4	<b>107</b> 559	<b>213</b> 1067	<b>161</b> 803	<b>248</b> 1240	<b>96</b> 478	<b>231</b> 1156	<b>102</b> 512	<b>166</b> 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	<b>200</b> 1047	<b>315</b> 1570	<b>230</b> 1220	<b>305</b> 1526	<b>210</b> 1048 <sup>7</sup>	<b>215</b> 1076 <sup>7</sup>
M012 FPP012S	0.104/.118	SMOOTH	-----	-----	<b>148</b> 744	<b>157</b> 787	<b>166</b> 832 <sup>7</sup>	<b>157</b> 787 <sup>7</sup>
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>
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:** 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