

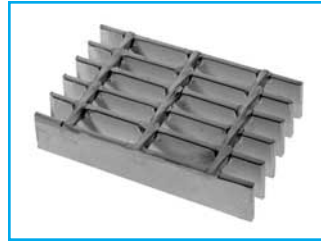
# Steel Bar Grating

## WELDED CLOSE-MESH

13/16" Center to Center of Bearing Bars



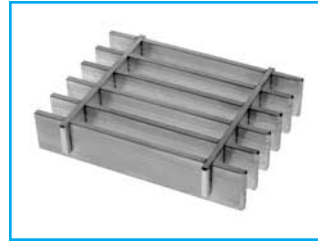
**13-W-4**  
Cross Rods 4" C/C



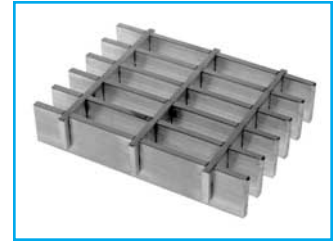
**13-W-2**  
Cross Rods 2" C/C

## PRESS-LOCKED CLOSE-MESH

13/16" Center to Center of Bearing Bars



**13-P-4**  
Cross Bars 4" C/C



**13-P-2**  
Cross Bars 2" C/C

### LOAD & DEFLECTION TABLE

Bar Size	Symbol	Approx. Weight psl	Sec. Mod Per Ft. Of Width	SPAN (Length of Bearing Bar)	SPAN (Length of Bearing Bar)																	
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"												
3/4" x 1/8"	13-4-32	W 5.3	P 0.173	U	519	332	231	170	130	103												
				D	0.099	0.155	0.223	0.304	0.397	0.503												
				C	519	415	346	297	260	231												
3/4" x 3/16"	13-2-32	W 6.7	P 0.260	U	0.079	0.124	0.179	0.243	0.318	0.402												
				D	0.079	0.124	0.179	0.243	0.318	0.402												
				C	779	623	519	445	389	346												
1" x 1/8"	13-4-42	W 7.8	P 0.308	U	779	498	346	254	195	154												
				D	0.099	0.155	0.223	0.304	0.397	0.503												
				C	779	623	519	445	389	346												
1" x 3/16"	13-2-33	W 8.6	P 0.462	U	0.079	0.124	0.179	0.243	0.318	0.402												
				D	0.079	0.124	0.179	0.243	0.318	0.402												
				C	779	623	519	445	389	346												
1-1/4" x 1/8"	13-4-42	W 6.9	P 0.481	U	923	591	410	301	231	182												
				D	0.074	0.116	0.168	0.228	0.298	0.377												
				C	923	738	615	527	462	410												
1-1/2" x 1/8"	13-2-42	W 7.5	P 0.692	U	0.060	0.093	0.134	0.182	0.238	0.302												
				D	0.060	0.093	0.134	0.182	0.238	0.302												
				C	1385	886	615	452	346	274												
1-1/4" x 3/16"	13-4-43	W 10.2	P 0.721	U	1385	886	615	452	346	274												
				D	0.074	0.116	0.168	0.228	0.298	0.377												
				C	1385	1108	923	791	692	615												
1-1/2" x 3/16"	13-2-43	W 10.8	P 1.038	U	1385	886	615	452	346	274												
				D	0.060	0.093	0.134	0.182	0.238	0.302												
				C	1385	1108	923	791	692	615												
1-3/4" x 1/8"	13-4-52	W 8.5	P 1.413	U	1442	923	641	471	361	285												
				D	0.060	0.093	0.134	0.182	0.238	0.302												
				C	1442	1154	962	824	721	641												
1-1/2" x 1/8"	13-2-52	W 9.1	P 0.692	U	0.048	0.074	0.107	0.146	0.191	0.241												
				D	0.048	0.074	0.107	0.146	0.191	0.241												
				C	1442	1154	962	824	721	641												
1-3/4" x 3/16"	13-4-53	W 12.6	P 1.846	U	2163	1385	962	706	541	427												
				D	0.060	0.093	0.134	0.182	0.238	0.302												
				C	2163	1731	1442	1236	1082	962												
2" x 3/16"	13-2-53	W 15.8	P 2.337	U	0.048	0.074	0.107	0.146	0.191	0.241												
				D	0.048	0.074	0.107	0.146	0.191	0.241												
				C	2077	1329	923	678	519	410												
2-1/4" x 1/8"	13-4-62	W 10.1	P 2.885	U	2077	1329	923	678	519	410												
				D	0.050	0.078	0.112	0.152	0.199	0.251												
				C	2077	1662	1385	1187	1038	923												
2-1/4" x 3/16"	13-2-62	W 12.1	P 1.038	U	0.040	0.062	0.089	0.122	0.159	0.201												
				D	0.040	0.062	0.089	0.122	0.159	0.201												
				C	2077	1662	1385	1187	1038	923												
2-1/2" x 1/8"	13-4-63	W 15.0	P 1.413	U	3115	1994	1385	1017	779	615												
				D	0.050	0.078	0.112	0.152	0.199	0.251												
				C	3115	2492	2077	1780	1558	1385												
2-1/2" x 3/16"	13-2-63	W 15.6	P 1.846	U	0.040	0.062	0.089	0.122	0.159	0.201												
				D	0.040	0.062	0.089	0.122	0.159	0.201												
				C	3115	2492	2077	1780	1558	1385												
2-3/4" x 1/8"	13-4-73	W 17.4	P 2.337	U	4240	2714	1885	1385	1060	838												
				D	0.043	0.067	0.096	0.130	0.170	0.215												
				C	4240	3392	2827	2423	2120	1885												
2" x 3/16"	13-2-73	W 20.6	P 2.885	U	0.034	0.053	0.077	0.104	0.136	0.172												
				D	0.034	0.053	0.077	0.104	0.136	0.172												
				C	5538	3545	2462	1808	1385	1094												
2-1/4" x 1/8"	13-4-83	W 19.8	P 2.337	U	5538	3545	2462	1808	1385	1094												
				D	0.037	0.058	0.084	0.114	0.149	0.189												
				C	5538	4431	3692	3165	2769	2462												
2-1/2" x 3/16"	13-2-83	W 20.4	P 2.885	U	0.030	0.047	0.067	0.091	0.119	0.151												
				D	0.030	0.047	0.067	0.091	0.119	0.151												
				C	8654	6923	5769	4945	4327	3846												
2-3/4" x 1/8"	13-4-93	W 22.2	P 2.337	U	7010	4486	3115	2289	1752	1385												
				D	0.033	0.052	0.074	0.101	0.132	0.168												
				C	7010	5608	4673	4005	3505	3115												
2-1/2" x 3/16"	13-2-93	W 25.4	P 2.885	U	0.026	0.041	0.060	0.081	0.106	0.134												
				D	0.026	0.041	0.060	0.081	0.106	0.134												
				C	8654	6923	5769	4945	4327	3846												
2-3/4" x 3/16"	13-4-103	W 24.6	P 2.885	U	8654	5538	3846	2826	2163	1709												
				D	0.030	0.047	0.067	0.091	0.119	0.151												
				C	8654	6923	5769	4945	4327	3846												

U = safe uniform load, psf  
 C = safe concentrated load, plw  
 D = deflection, inches  
 E = modulus of elasticity, 29,000,000 psi  
 F = fiber stress, 18,000 psi  
**Material:** ASTM A-569 standard  
**Deflection:** Spans and loads to the right of the bold line exceed 1/4" deflection for uniform load of 100 psf which provides safe pedestrian comfort. These can be exceeded for other types of loads with engineer's approval.  
**Serrated Bars:** For serrated grating, the depth of grating required for a specified load is 1/4" deeper than that shown in the table.

**General:** Loads and deflections are theoretical and based on static loading.

### W/P-13 PANEL WIDTH (inches)

Note: P-Press-Locked cross bars typically extend 1/8" each side. W-Welded cross rods may extend 1/8" each side. Panel widths do not include these extensions.

No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1/8" Bar	15 <sup>1</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>4</sub>	2 <sup>9</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>16</sub>	5	5 <sup>13</sup> / <sub>1</sub>												