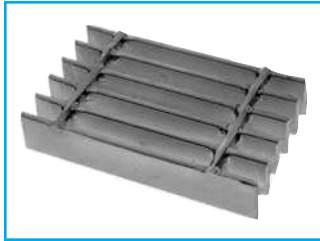


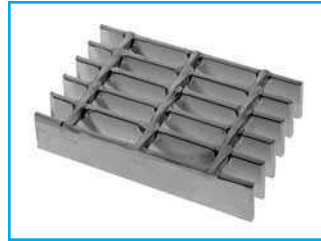
Steel Bar Grating

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	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	0.260	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
1" x 1/8"	13-4-42	W 7.8	0.308	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
1" x 3/16"	13-2-42	W 8.6	0.462	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
1-1/4" x 1/8"	13-4-43	W 10.1	0.481	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
1-1/4" x 3/16"	13-2-43	W 10.2	0.721	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
1-1/2" x 1/8"	13-4-52	W 10.8	0.692	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
1-1/2" x 3/16"	13-2-52	W 11.0	1.038	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
1-3/4" x 1/8"	13-4-53	W 10.8	1.413	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
2" x 3/16"	13-2-53	W 10.9	1.846	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
2-1/4" x 1/8"	13-4-62	W 12.1	2.337	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
2-1/4" x 3/16"	13-2-62	W 12.1	2.885	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
2-1/2" x 1/8"	13-4-63	W 15.0	2.885	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			
2-1/2" x 3/16"	13-2-63	W 16.3	2.885	U	0.079	0.124	0.179	0.243	0.318	0.402	5'-0"			
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	125		
				C	779	623	519	445	389	346	312			

U = safe uniform load, psf
 C = safe concentrated load, pfw
 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 ¹ / ₁₆	13 ³ / ₄	29 ¹ / ₁₆	37 ³ / ₈	43 ¹ / ₁₆	5	5 ¹ / ₈	6 ¹ / ₈	7 ¹ / ₁₆	8 ¹ / ₄	9 ¹ / ₁₆	9 ⁷ / ₈	10 ¹ / ₁₆	11 ¹ / ₂	12 ⁵ / ₁₆	13 ¹ / ₈	13 ⁵ / ₁₆	14 ³ / ₄	15 ⁹ / ₁₆
3/16" Bar	1	1 ¹ / ₁₆	2 ⁵ / ₈	3 ⁷ / ₁₆	4 ¹ / ₄	5 ¹ / ₁₆	5 ⁷ / ₈	6 ¹ / ₁₆	7 ¹ / ₂	8 ⁵ / ₁₆	9 ¹ / ₈	9 ⁵ / ₁₆	10 ³ / ₄	11 ⁹ / ₁₆	12 ³ / ₈	13 ³ / ₁₆	14	14 ¹ / ₁₆	15 ⁵ / ₈
No. of Bars	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
1/8" Bar	16 ³ / ₈	17 ³ / ₁₆	18	18 ¹ / ₁₆	19 ⁵ / ₈	20 ⁷ / ₁₆	21 ¹ / ₄	22 ¹ / ₁₆	22 ⁷ / ₈	23 ¹ / ₁₆	24 ¹ / ₂	25 ⁵ / ₁₆	26 ¹ / ₈	26 ⁵ / ₁₆	27 ³ / ₄	28 ⁹ / ₁₆	29 ³ / ₈	30 ³ / ₁₆	31
3/16" Bar	16 ⁷ / ₁₆	17 ¹ / ₄	18 ¹ / ₁₆	18 ⁷ / ₈	19 ¹ / ₁₆	20 ¹ / ₂	21 ⁵ / ₁₆	22 ¹ / ₈	22 ⁵ / ₁₆	23 ³ / ₄	24 ⁹ / ₁₆	25 ³ / ₈	26 ³ / ₁₆	27	27 ¹ / ₁₆	28 ⁵ / ₈	29 ¹ / ₁₆	30 ¹ / ₄	31 ¹ / ₁₆
No. of Bars	40	41	42	43	44	45													
1/8" Bar	31 ¹ / ₁₆	32 ⁵ / ₈	33 ⁷ / ₁₆	34 ¹ / ₄	35 ¹ / ₁₆	35 ⁷ / ₈													
3/16" Bar	31 ⁷ / ₈	32 ¹ / ₁₆	33 ¹ / ₂	34 ⁵ / ₁₆	35 ¹ / ₈	35 ¹⁵ / ₁₆													

