

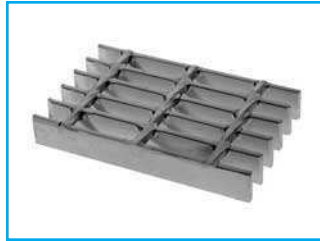
Steel Bar Grating

WELDED CLOSE-MESH

5/8" Center to Center of Bearing Bars



10-W-4
Cross Rods 4" C/C



10-W-2
Cross Rods 2" C/C

PRESS-LOCKED CLOSE-MESH

5/8" Center to Center of Bearing Bars



10-P-4
Cross Bars 4" C/C



10-P-2
Cross Bars 2" C/C

LOAD & DEFLECTION TABLE

Bar Size	Symbol	Approx. Weight psf	Sec. Mod Per Ft. Of Width	SPAN (Length of Bearing Bar)									
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"
3/4" x 1/8"	10-4-32	W 6.8	0.225	U 675	432	300	220	169	133	108			
		P 7.2		D 0.099	0.155	0.223	0.304	0.397	0.503	0.621			
	10-2-32	W 7.3		C 675	540	450	386	338	300	270			
		P 8.1		D 0.079	0.124	0.179	0.243	0.318	0.402	0.497			
3/4" x 3/16"	10-4-33	W 9.9	0.338	U 1013	648	450	331	253	200	162			
		P 10.7		D 0.099	0.155	0.223	0.304	0.397	0.503	0.621			
	10-2-33	W 10.5		C 1013	810	675	579	506	450	405			
		P 12.2		D 0.079	0.124	0.179	0.243	0.318	0.402	0.497			
1" x 1/8"	10-4-42	W 8.8	0.400	U 1200	768	533	392	300	237	192			
		P 9.2		D 0.074	0.116	0.168	0.228	0.298	0.377	0.466			
	10-2-42	W 9.4		C 1200	960	800	686	600	533	480			
		P 10.2		D 0.060	0.093	0.134	0.182	0.238	0.302	0.372			
1" x 3/16"	10-4-43	W 13.0	0.600	U 1800	1152	800	588	450	356	288			
		P 13.8		D 0.074	0.116	0.168	0.228	0.298	0.377	0.466			
	10-2-43	W 13.6		C 1800	1440	1200	1029	900	800	720			
		P 15.3		D 0.060	0.093	0.134	0.182	0.238	0.302	0.372			
1-1/4" x 1/8"	10-4-52	W 10.9	0.625	U 1875	1200	833	612	469	370	300			
		P 11.6		D 0.060	0.093	0.134	0.182	0.238	0.302	0.372			
	10-2-52	W 11.4		C 1875	1500	1250	1071	938	833	750			
		P 12.9		D 0.048	0.074	0.107	0.146	0.191	0.241	0.298			
1-1/4" x 3/16"	10-4-53	W 16.1	0.938	U 2813	1800	1250	918	703	556	450			
		P 17.4		D 0.060	0.093	0.134	0.182	0.238	0.302	0.372			
	10-2-53	W 16.7		C 2813	2250	1875	1607	1406	1250	1125			
		P 19.3		D 0.048	0.074	0.107	0.146	0.191	0.241	0.298			
1-1/2" x 1/8"	10-4-62	W 13.0	0.900	U 2700	1728	1200	882	675	533	432			
		P 13.7		D 0.050	0.078	0.112	0.152	0.199	0.251	0.310			
	10-2-62	W 13.5		C 2700	2160	1800	1543	1350	1200	1080			
		P 15.0		D 0.040	0.062	0.089	0.122	0.159	0.201	0.248			
1-1/2" x 3/16"	10-4-63	W 19.2	1.350	U 4050	2592	1800	1322	1013	800	648			
		P 20.5		D 0.050	0.078	0.112	0.152	0.199	0.251	0.310			
	10-2-63	W 19.8		C 4050	3240	2700	2314	2025	1800	1620			
		P 22.4		D 0.040	0.062	0.089	0.122	0.159	0.201	0.248			
1-3/4" x 3/16"	10-4-73	W 22.3	1.838	U 5513	3528	2450	1800	1378	1089	882			
		P 23.6		D 0.043	0.067	0.096	0.130	0.170	0.215	0.266			
	10-2-73	W 22.9		C 5513	4410	3675	3150	2756	2450	2205			
		P 25.5		D 0.034	0.053	0.077	0.104	0.136	0.172	0.213			
2" x 3/16"	10-4-83	W 25.4	2.400	U 7200	4608	3200	2351	1800	1422	1152			
		P 26.7		D 0.037	0.058	0.084	0.114	0.149	0.189	0.233			
	10-2-83	W 26.0		C 7200	5760	4800	4114	3600	3200	2880			
		P 28.6		D 0.030	0.047	0.067	0.091	0.119	0.151	0.186			
2-1/4" x 3/16"	10-4-93	W 28.5	3.038	U 9113	5832	4050	2976	2278	1800	1458			
		P 29.8		D 0.033	0.052	0.074	0.101	0.132	0.168	0.207			
	10-2-93	W 29.1		C 9113	7290	6075	5207	4556	4050	3645			
		P 31.7		D 0.026	0.041	0.060	0.081	0.106	0.134	0.166			
2-1/2" x 3/16"	10-4-103	W 31.6	3.750	U 11250	7200	5000	3673	2813	2222	1800			
		P 32.9		D 0.030	0.047	0.067	0.091	0.119	0.151	0.186			
	10-2-103	W 32.2		C 11250	9000	7500	6429	5625	5000	4500			
		P 34.8		D 0.024	0.037	0.054	0.073	0.095	0.121	0.149			

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-10 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	3/4	13/8	2	25/8	3 1/4	3 7/8	4 1/2	5 1/8	5 3/4	6 3/8	7	7 5/8	8 1/4	8 7/8	9 1/2	10 1/8	10 3/4	11 3/8	12
3/16" Bar	13/16	1 7/16	2 1/16	2 11/16	3 5/16	3 15/16	4 9/16	5 3/16	5 13/16	6 7/16	7 1/16	7 11/16	8 5/16	8 15/16	9 9/16	10 3/16	10 13/16	11 7/16	12 1/16
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	12 5/8	13 1/4	13 7/8	14 1/2	15 1/8	15 3/4	16 3/8	17	17 5/8	18 1/4	18 7/8	19 1/2	20 1/8	20 3/4	21 3/8	22	22 5/8	23 1/4	23 7/8
3/16" Bar	12 11/16	13 5/16	13 15/16	14 9/16	15 3/16	15 13/16	16 7/16	17 1/16	17 11/16	18 5/16	18 15/16	19 9/16	20 3/16	20 13/16	21 7/16	22 1/16	22 11/16	23 5/16	23 15/16
No. of Bars	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
1/8" Bar	24 1/2	25 1/8	25 3/4	26 3/8	27	27 5/8	28 1/4	28 7/8	29 1/2	30 1/8	30 3/4	31 3/8	32	32 5/8	33 1/4	33 7/8	34 1/2	35 1/8	35 3/4
3/16" Bar	24 9/16	25 3/16	25 13/16	26 7/16	27 1/16	27 11/16	28 5/16	28 15/16	29 9/16	30 3/16	30 13/16	31 7/16	32 1/16	32 11/16	33 5/16	33 15/16	34 9/16	35 3/16	35 13/16