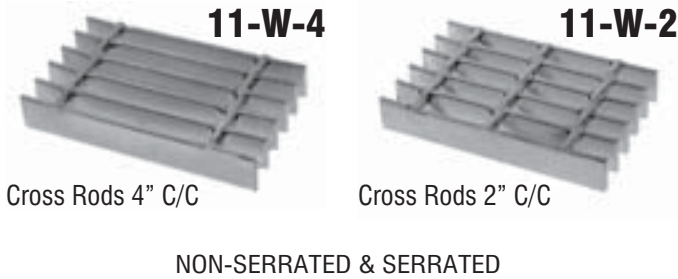
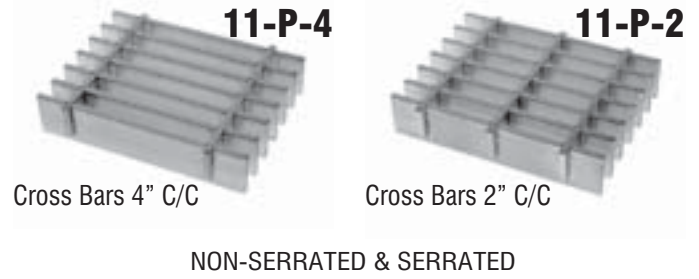


Steel Bar Grating Close-Mesh

WELDED (W) 11/16" C/C Bearing Bars



PRESS-LOCKED (P) 11/16" C/C Bearing Bars



LOAD & DEFLECTION TABLE

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

Bar Size	Symbol	Approx. Weight psf	Sec. Mod Per Ft. Of Width		SPAN (Direction of Bearing Bar)														
					24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	96"	108"		
3/4" x 1/8" Non-Serrated Only	11-W-4	6.2		U	614	393	273	200	153	121	98								
	11-P-4	6.6	0.205	C	0.099	0.155	0.223	0.304	0.397	0.503	0.621								
	11-P-2	7.6		D	614	491	409	351	307	273	245								
	11-W-4	9.1		U	0.079	0.124	0.179	0.243	0.318	0.402	0.497								
3/4" x 3/16" Non-Serrated Only	11-W-4	9.9	0.307	U	920	589	409	301	230	182	147								
	11-P-4	11.3		D	0.099	0.155	0.223	0.304	0.397	0.503	0.621								
	11-P-2	8.1		C	920	736	614	526	460	409	368								
	11-W-4	8.1		D	0.079	0.124	0.179	0.243	0.318	0.402	0.497								
1" x 1/8"	11-W-4	8.1	0.364	U	1091	698	485	356	273	215	175	144	121						
	11-W-2	8.6		D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670						
	11-P-4	8.5		C	1091	873	727	623	545	485	436	397	364						
	11-P-2	9.4		D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536						
1" x 3/16"	11-W-4	11.9	0.545	U	1636	1047	727	534	409	323	262	216	182						
	11-W-2	12.5		D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670						
	11-P-4	12.7		C	1636	1309	1091	935	818	727	655	595	545						
	11-P-2	14.2		D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536						
1-1/4" x 1/8"	11-W-4	10.0	0.568	U	1705	1091	758	557	426	337	273	225	189						
	11-W-2	10.5		D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536						
	11-P-4	10.7		C	1705	1364	1136	974	852	758	682	620	568						
	11-P-2	12.0		D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429						
1-1/4" x 3/16"	11-W-4	14.7	0.852	U	2557	1636	1136	835	639	505	409	338	284						
	11-W-2	15.3		D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536						
	11-P-4	16.0		C	2557	2045	1705	1461	1278	1136	1023	930	852						
	11-P-2	17.9		D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429						
1-1/2" x 1/8"	11-W-4	11.9	0.818	U	2455	1571	1091	801	614	485	393	325	273						
	11-W-2	12.4		D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447						
	11-P-4	12.6		C	2455	1964	1636	1403	1227	1091	982	893	818						
	11-P-2	13.9		D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358						
1-1/2" x 3/16"	11-W-4	17.5	1.227	U	3682	2356	1636	1202	920	727	589	487	409						
	11-W-2	18.1		D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447						
	11-P-4	18.8		C	3682	2945	2455	2104	1841	1636	1473	1339	1227						
	11-P-2	20.7		D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358						
1-3/4" x 3/16"	11-W-4	20.4	1.670	U	5011	3207	2227	1636	1253	990	802	663	557						
	11-W-2	21.0		D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383						
	11-P-4	21.7		C	5011	4009	3341	2864	2506	2227	2005	1822	1670						
	11-P-2	23.6		D	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306						
2" x 3/16"	11-W-4	23.2	2.182	U	6545	4189	2909	2137	1636	1293	1047	866	727						
	11-W-2	23.8		D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335						
	11-P-4	24.5		C	6545	5236	4364	3740	3273	2909	2618	2380	2182						
	11-P-2	26.4		D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268						
2-1/4" x 3/16"	11-W-4	26.0	2.761	U	8284	5302	3682	2705	2071	1636	1325	1095	920						
	11-W-2	26.6		D	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298						
	11-P-4	27.3		C	8284	6627	5523	4734	4142	3682	3314	3012	2761						
	11-P-2	29.2		D	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238						
2-1/2" x 3/16"	11-W-4	28.8	3.409	U	10227	6545	4545	3340	2557	2020	1636	1352	1136						
	11-W-2	29.4		D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268						
	11-P-4	30.1		C	10227	8182	6818	5844	5114	4545	4091	3719	3409						
	11-P-2	32.0		D	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215						

U = safe uniform load, psf
 C = safe concentrated load, psf
 D = deflection, inches
 E = modulus of elasticity, 29,000,000 psi
 F = fiber stress, 18,000 psi

Material: ASTM A-1011
 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.

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