

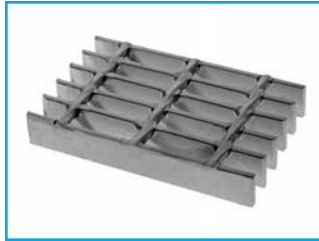
Steel Bar Grating

WELDED CLOSE-MESH

11/16" Center to Center of Bearing Bars



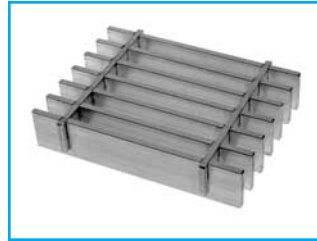
11-W-4
Cross Rods 4" C/C



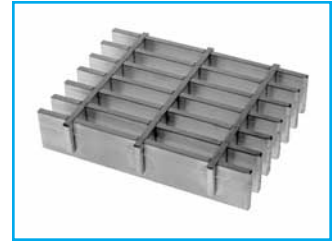
11-W-2
Cross Rods 2" C/C

PRESS-LOCKED CLOSE-MESH

11/16" Center to Center of Bearing Bars



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



11-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)																
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"								
3/4" x 1/8"	11-4-32	W	6.2	U	614	393	273	200	153	121	98									
		P	6.6	D	0.099	0.155	0.223	0.304	0.397	0.503	0.621									
	11-2-32	W	6.8	C	614	491	409	351	307	273	245									
3/4" x 3/16"	11-4-33	W	9.1	U	920	589	409	301	230	182	147									
		P	9.9	D	0.099	0.155	0.223	0.304	0.397	0.503	0.621									
	11-2-33	W	9.7	C	920	736	614	526	460	409	368									
1" x 1/8"	11-4-42	W	8.1	U	1091	698	485	356	273	215	175	144	121							
		P	8.5	D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670							
	11-2-42	W	8.6	C	1091	873	727	623	545	485	436	397	364							
1" x 3/16"	11-4-43	W	11.9	U	1636	1047	727	534	409	323	262	216	182							
		P	12.7	D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670							
	11-2-43	W	12.5	C	1636	1309	1091	935	818	727	655	595	545							
1-1/4" x 1/8"	11-4-52	W	10.0	U	1705	1091	758	557	426	337	273	225	189	161	139					
		P	10.7	D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730					
	11-2-52	W	10.5	C	1705	1364	1136	974	852	758	682	620	568	524	487					
1-1/4" x 3/16"	11-4-53	W	14.7	U	2557	1636	1136	835	639	505	409	338	284	242	209					
		P	16.0	D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730					
	11-2-53	W	15.3	C	2557	2045	1705	1461	1278	1136	1023	930	852	787	731	639				
1-1/2" x 1/8"	11-4-62	W	11.9	U	2455	1571	1091	801	614	485	393	325	273	232	200	153	121			
		P	12.6	D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006			
	11-2-62	W	12.4	C	2455	1964	1636	1403	1227	1091	982	893	818	755	701	614	545			
1-1/2" x 3/16"	11-4-63	W	17.5	U	3682	2356	1636	1202	920	727	589	487	409	349	301	230	182			
		P	18.8	D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006			
	11-2-63	W	18.1	C	3682	2945	2455	2104	1841	1636	1473	1339	1227	1133	1052	920	818			
1-3/4" x 3/16"	11-4-73	W	20.4	U	5011	3207	2227	1636	1253	990	802	663	557	474	409	313	247			
		P	21.7	D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862			
	11-2-73	W	21.0	C	5011	4009	3341	2864	2506	2227	2005	1822	1670	1542	1432	1253	1114			
2" x 3/16"	11-4-83	W	23.2	U	6545	4189	2909	2137	1636	1293	1047	866	727	620	534	409	323			
		P	24.5	D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754			
	11-2-83	W	23.8	C	6545	5236	4364	3740	3273	2909	2618	2380	2182	2014	1870	1636	1455			
2-1/4" x 3/16"	11-4-93	W	26.0	U	8284	5302	3682	2705	2071	1636	1325	1095	920	784	676	518	409			
		P	27.3	D	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.530	0.670			
	11-2-93	W	26.6	C	8284	6627	5523	4734	4142	3682	3314	3012	2761	2549	2367	2071	1841			
2-1/2" x 3/16"	11-4-103	W	28.8	U	10227	6545	4545	3340	2557	2020	1636	1352	1136	968	835	639	505			
		P	30.1	D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603			
	11-2-103	W	29.4	C	10227	8182	6818	5844	5114	4545	4091	3719	3409	3147	2922	2557	2273			

U = safe uniform load, psl
 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 psl 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-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 ^{1/16}	1 1/2	2 ^{3/16}	2 7/8	3 ^{9/16}	4 1/4	4 5/16	5 5/8	6 5/16	7	7 11/16	8 3/8	9 1/16	9 3/4	10 7/16	11 1/8	11 3/16	12 1/2	13 3/16
3/16" Bar	7/8	1 ^{9/16}	2 1/4	2 5/16	3 3/8	4 5/16	5	5 11/16	6 3/8	7 1/16	7 3/4	8 7/16	9 1/8	9 13/16	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 5/16	16 5/8	17 5/16	18	18 11/16	19 3/8	20 1/16	20 3/4	21 7/16	22 1/8	22 3/16	23 1/2	24 3/16	24 7/8	25 9/16	26 1/4
3/16" Bar	13 5/16	14 5/8	15 5/16	16	16 11/16	17 3/8	18 1/16	18 3/4	19 7/16	20 1/8	20 3/16	21 1/2	22 3/16	22 7/8	23 9/16	24 1/4	24 5/16	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 7/16	33 1/8	33 3/16	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 7/16	31 1/8	31 3/16	32 1/2	33 3/16	33 7/8	34 9/16	35 1/4	35 5/16					