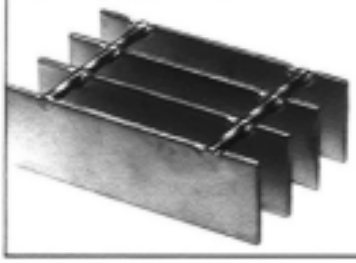
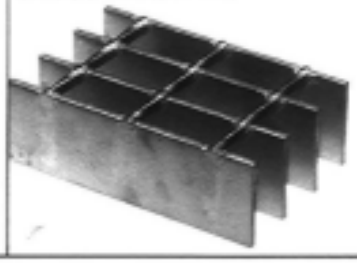
STEEL WELDED GRATING

1-3/16" CENTER TO CENTER OF BEARING BARS

19-4	19-2
CROSS BARS 4" C/C	CROSS BARS 2" C/C

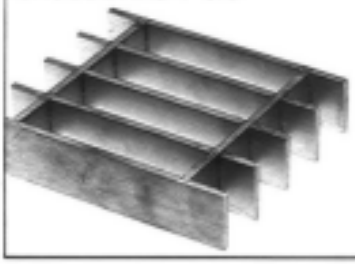


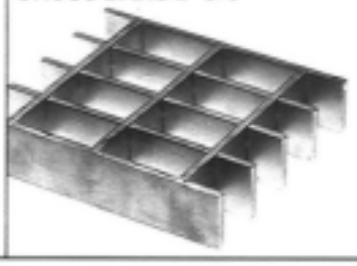


STEEL PRESSURE-LOCKED GRATING

1-3/16" CENTER TO CENTER OF BEARING BARS

19-4	19-2
CROSS BARS 4" C/C	CROSS BARS 2" C/C





STATIC LOAD TABLE – Loads & deflections are theoretical, based on a maximum allowable fiber stress of 18,000 PSI. E = 30,000,000 PSI.

Bar Size	Symbol	Approx. Weight*** Lbs./Sq. Ft.	Sec. Mod. Per Ft. Of Width		SPAN (LGTH. OF BRG. BAR) 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"
3/4" x 1/8"	19-4-32	*4.0 **4.3	.122	U	366	234	163	120	92	72	104	86	72	96	83	72	64
				D	.096	.150	.216	.295	.386	.484	.451	.546	.647	.609	.708	.967	1.23
	19-2-32	*4.6 **4.9		C	366	293	244	209	183	163	146	133	122	113	104	92	83
				D	.077	.120	.173	.235	.307	.389	.359	.435	.517	.488	.560	.770	.979
3/4" x 3/16"	19-4-33	*5.6 **6.4	.183	U	549	351	244	179	137	108	86	70	58	48	41	32	26
				D	.096	.150	.216	.294	.383	.482	.451	.546	.647	.609	.708	.967	1.23
	19-2-33	*6.3 **7.1		C	549	439	366	314	275	244	219	199	183	169	157	138	122
				D	.077	.120	.173	.236	.308	.389	.359	.435	.517	.488	.560	.770	.979
1" x 1/8"	19-4-42	*5.1 **5.4	.216	U	648	415	288	212	162	128	104	86	72	61	52	40	32
				D	.072	.112	.162	.221	.288	.364	.451	.546	.647	.609	.708	.967	1.23
	19-2-42	*5.7 **6.0		C	648	518	432	370	324	288	259	236	216	199	185	162	144
				D	.057	.090	.129	.176	.230	.291	.359	.435	.517	.488	.560	.770	.979
1" x 3/16"	19-4-43	*7.3 **8.0	.325	U	975	624	433	318	244	193	156	129	108	92	78	60	48
				D	.072	.113	.162	.221	.289	.366	.451	.546	.648	.609	.708	.967	1.23
	19-2-43	*8.0 **8.7		C	975	780	650	557	488	435	390	355	325	298	278	244	217
				D	.058	.090	.130	.177	.231	.292	.361	.437	.520	.488	.560	.770	.979
1-1/4" x 1/8"	19-4-52	*6.1 **6.5	.339	U	1017	651	452	332	254	201	163	134	113	96	83	63	50
				D	.058	.090	.130	.177	.231	.293	.362	.435	.520	.609	.708	.967	1.23
	19-2-52	*6.8 **7.2		C	1017	814	678	581	509	452	407	370	339	313	291	254	226
				D	.046	.072	.104	.142	.185	.234	.289	.350	.416	.488	.560	.770	.979
1-1/4" x 3/16"	19-4-53	*8.9 **9.7	.507	U	1521	973	676	497	380	300	243	201	169	144	124	94	75
				D	.058	.090	.130	.177	.230	.291	.359	.435	.518	.608	.705	.967	1.23
	19-2-53	*9.6 **10.4		C	1521	1217	1014	869	761	676	608	553	507	468	435	380	338
				D	.046	.072	.104	.141	.184	.233	.288	.348	.415	.487	.565	.770	.979
1-1/2" x 1/8"	19-4-62	*7.3 **7.9	.488	U	1464	937	651	478	366	289	234	194	163	139	120	92	72
				D	.048	.075	.108	.147	.192	.233	.299	.363	.433	.508	.590	.772	.967
	19-2-62	*7.9 **8.5		C	1464	1171	976	837	732	651	586	532	488	450	418	366	325
				D	.038	.060	.086	.118	.153	.194	.240	.290	.345	.405	.470	.614	.770
1-1/2" x 3/16"	19-4-63	*10.6 **11.8	.730	U	2190	1402	973	715	548	433	350	290	243	207	179	137	108
				D	.048	.075	.108	.147	.192	.243	.300	.364	.431	.506	.589	.769	.971
	19-2-63	*11.2 **12.4		C	2190	1752	1460	1251	1095	973	876	796	730	674	626	548	487
				D	.038	.060	.086	.118	.154	.196	.240	.290	.346	.406	.471	.615	.778
1-3/4" x 3/16"	19-4-73	*12.2 **13.5	.994	U	2982	1908	1325	974	746	589	477	394	331	282	243	186	147
				D	.041	.064	.093	.126	.165	.208	.257	.311	.370	.434	.503	.657	.832
	19-2-73	*12.9 **14.2		C	2982	2386	1988	1704	1491	1325	1193	1084	994	918	852	746	663
				D	.033	.051	.074	.101	.132	.167	.206	.249	.296	.348	.403	.527	.667
2" x 3/16"	19-4-83	*13.9 **15.1	1.299	U	3897	2494	1732	1272	974	770	624	515	433	369	318	244	192
				D	.036	.056	.081	.110	.144	.182	.225	.272	.324	.380	.441	.577	.728
	19-2-83	*14.5 **15.7		C	3897	3118	2598	2227	1949	1732	1559	1417	1299	1199	1113	974	866
				D	.029	.045	.065	.088	.115	.146	.180	.218	.259	.304	.353	.461	.583
2-1/4" x 3/16"	19-4-93	*15.4 **16.7	1.644	U	4932	3156	2192	1610	1233	974	789	652	548	467	403	308	244
				D	.032	.050	.072	.098	.128	.162	.200	.242	.288	.338	.392	.512	.649
	19-2-93	*16.1 **17.4		C	4932	3946	3288	2818	2466	2192	1973	1793	1644	1518	1409	1233	1096
				D	.026	.040	.058	.078	.102	.130	.160	.194	.230	.271	.314	.410	.518
2-1/2" x 3/16"	19-4-103	*17.1 **18.3	2.029	U	6087	3896	2705	1988	1522	1202	974	805	676	570	497	380	301
				D	.029	.045	.065	.088	.115	.146	.180	.218	.259	.304	.353	.460	.584
	19-2-103	*17.7 **18.9		C	6087	4870	4058	3478	3044	2705	2435	2213	2029	1873	1739	1522	1353
				D	.023	.036	.052	.071	.092	.117	.144	.174	.207	.243	.282	.369	.467

NOTE: When grating with serrated bearing bars is specified, the depth of grating required for a specified load should be 1/4" greater than that shown in the load table.

NOTE: Spans and loads to the right of the heavy line exceed a deflection of 1/4" for uniform loads of 100#/sq. ft. which provide safe pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer.

Material: ASTM A-569 standard; ASTM A-570 available on specification.

U – Safe Uniform Load in lbs. per sq. ft.

C – Safe Concentrated Load in lbs. per foot of Grating Width.

D – Deflection in inches.

***Weight depends on panel width, cross bar selection, mill tolerance and manufacturing tolerance.

PANEL WIDTH CHART IN INCHES **DIMENSIONS SHOWN ARE OUT TO OUT OF BEARING BARS**

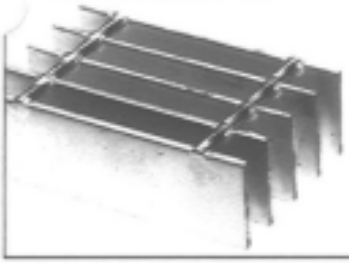
No. of Bars		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
19-4	1/8 Bar	1 5/16	2 1/2	3 11/16	4 7/8	6 1/16	7 1/4	8 7/16	9 5/8	10 13/16	12	13 3/16	14 3/8	15 9/16	16 3/4	17 15/16
19-2	3/16 Bar	1 3/8	2 9/16	3 3/4	4 15/16	6 1/8	7 5/16	8 1/2	9 11/16	10 7/8	12 1/16	13 1/4	14 7/16	15 5/8	16 13/16	18

No. of Bars		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
19-4	1/8 Bar	19 1/8	20 5/16	21 1/2	22 11/16	23 7/8	25 1/16	26 1/4	27 7/16	28 5/8	29 13/16	31	32 3/16	33 3/8	34 9/16	35 3/4
19-2	3/16 Bar	19 3/16	20 3/8	21 9/16	22 3/4	23 15/16	25 1/8	26 5/16	27 1/2	28 11/16	29 7/8	31 1/16	32 1/4	33 7/16	34 5/8	35 13/16

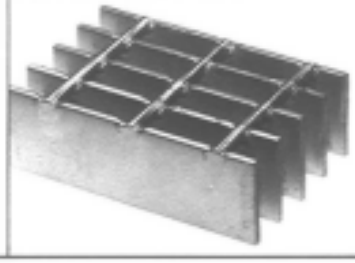
STEEL WELDED GRATING

15/16" CENTER TO CENTER OF BEARING BARS

15-4 — CROSS BARS 4" C/C



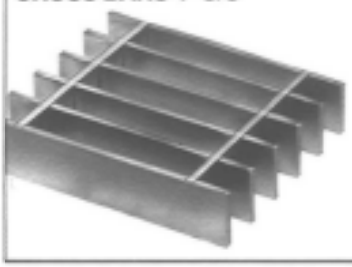
15-2 — CROSS BARS 2" C/C



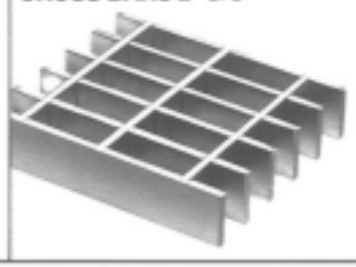
STEEL PRESSURE-LOCKED GRATING

15/16" CENTER TO CENTER OF BEARING BARS

15-4 — CROSS BARS 4" C/C



15-2 — CROSS BARS 2" C/C



STATIC LOAD TABLE – Loads & deflections are theoretical. Based on a maximum allowable fiber stress of 18,000 PSI, E = 30,000,000 PSI.

Bar Size	Symbol	Approx. Weight*** Lbs./Sq. Ft.	Sec. Mod. Per Ft. Of Width		SPAN (LGTH. OF BRG. BAR) 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"
3/4" x 1/8"	15-4-32	*4.8 **4.8	.153	U	459	294	204	150	115	91							
				D	.096	.150	.215	.293	.391	.486							
	15-2-32	*5.5 **5.5		C	459	367	306	262	230	204							
				D	.077	.120	.172	.234	.307	.387							
3/4" x 3/16"	15-4-33	*6.9 **7.0	.230	U	690	442	307	225	173	136							
				D	.096	.150	.216	.293	.393	.485							
	15-2-33	*7.5 **7.7		C	690	552	460	394	345	307							
				D	.077	.120	.173	.235	.307	.389							
1" x 1/8"	15-4-42	*6.2 **6.4	.272	U	816	522	362	266	204	161	131	108	91				
				D	.072	.119	.162	.220	.294	.364	.451	.544	.649				
	15-2-42	*6.9 **7.2		C	816	653	544	466	408	363	326	297	272				
				D	.058	.090	.129	.176	.230	.291	.359	.435	.518				
1" x 3/16"	15-4-43	*9.0 **9.3	.409	U	1227	785	545	401	307	242	196	162	136				
				D	.072	.113	.162	.221	.295	.365	.451	.545	.648				
	15-2-43	*9.8 **10.1		C	1227	982	818	701	614	545	491	446	409				
				D	.058	.090	.130	.177	.231	.292	.361	.437	.520				
1-1/4" x 1/8"	15-4-52	*7.5 **7.9	.427	U	1281	820	569	418	320	253	205	169	142	121	105		
				D	.058	.090	.130	.177	.236	.293	.362	.436	.519	.610	.711		
	15-2-52	*8.2 **8.7		C	1281	1025	854	732	641	569	512	466	427	394	366		
				D	.046	.072	.104	.142	.185	.234	.289	.350	.416	.489	.567		
1-1/4" x 3/16"	15-4-53	*11.1 **11.3	.638	U	1914	1225	850	625	479	378	306	253	213	181	156		
				D	.058	.090	.130	.177	.236	.292	.360	.436	.519	.608	.705		
	15-2-53	*11.7 **12.2		C	1914	1531	1276	1094	957	851	766	696	638	589	547		
				D	.046	.072	.104	.141	.184	.234	.288	.349	.415	.487	.565		
1-1/2" x 1/8"	15-4-62	*9.0 **9.5	.614	U	1842	1179	819	601	461	364	295	244	205	174	150	115	91
				D	.048	.075	.108	.147	.196	.243	.300	.363	.432	.506	.586	.767	.972
	15-2-62	*9.6 **10.6		C	1842	1474	1228	1052	921	819	737	670	614	567	526	461	409
				D	.038	.060	.086	.118	.154	.194	.240	.290	.345	.406	.470	.615	.777
1-1/2" x 3/16"	15-4-63	*13.1 **13.7	.919	U	2757	1764	1225	900	689	545	441	365	306	261	225	172	136
				D	.048	.075	.108	.147	.192	.243	.300	.364	.432	.507	.588	.767	.972
	15-2-63	*13.8 **14.8		C	2757	2206	1838	1575	1379	1225	1103	1003	919	848	788	689	613
				D	.038	.060	.086	.118	.154	.194	.240	.291	.346	.406	.477	.615	.779
1-3/4" x 3/16"	15-4-73	*15.2 **15.8	1.251	U	3753	2402	1668	1226	938	741	600	496	417	355	306	235	184
				D	.041	.064	.093	.126	.165	.208	.257	.311	.371	.434	.504	.660	.828
	15-2-73	*15.8 **16.9		C	3753	3002	2502	2145	1877	1668	1501	1365	1251	1155	1072	938	834
				D	.033	.051	.074	.101	.132	.167	.206	.249	.296	.348	.403	.527	.667
2" x 3/16"	15-4-83	*17.3 **17.9	1.634	U	4902	3137	2179	1601	1226	968	784	648	545	464	400	306	242
				D	.036	.056	.081	.110	.144	.182	.225	.272	.324	.380	.441	.575	.729
	15-2-83	*17.9 **19.0		C	4902	3922	3268	2801	2451	2179	1961	1783	1634	1508	1401	1226	1089
				D	.029	.045	.065	.088	.115	.146	.180	.218	.259	.304	.353	.461	.583
2-1/4" x 3/16"	15-4-93	*19.2 **20.0	2.068	U	6204	3971	2757	2026	1551	1225	993	820	689	587	506	388	306
				D	.032	.050	.072	.098	.128	.162	.200	.242	.288	.338	.392	.512	.647
	15-2-93	*19.9 **21.1		C	6204	4963	4136	3545	3102	2757	2482	2256	2068	1909	1773	1551	1379
				D	.026	.040	.058	.078	.102	.130	.160	.194	.230	.270	.314	.410	.519
2-1/2" x 3/16"	15-4-103	*21.3 **22.1	2.553	U	7659	4902	3404	2501	1915	1513	1225	1037	851	725	625	479	378
				D	.029	.045	.645	.088	.115	.146	.180	.223	.259	.304	.353	.461	.583
	15-2-103	*22.0 **23.2		C	7659	6127	5106	4377	3830	3404	3064	2785	2553	2357	2188	1915	1702
				D	.023	.036	.052	.071	.092	.117	.144	.174	.207	.243	.282	.369	.467

NOTE: When grating with serrated bearing bars is specified, the depth of grating required for a specified load should be 1/4" greater than that shown in the load table.

NOTE: Spans and loads to the right of the heavy line exceed a deflection of 1/4" for uniform loads of 100#/sq. ft. which provide safe pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer.

Material: ASTM A-569 standard; ASTM A-570 available on specification.

U – Safe Uniform Load in lbs. per sq. ft.

C – Safe Concentrated Load in lbs. per foot of Grating Width.

D – Deflection in inches.

***Weight depends on panel width, cross bar selection, mill tolerance and manufacturing tolerance.

PANEL WIDTH CHART IN INCHES

DIMENSIONS SHOWN ARE OUT TO OUT OF BEARING BARS

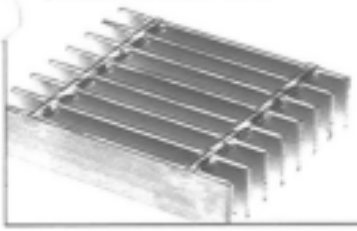
No. of Bars			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
15-4 or 15-2	15-4	1/8 Bar	1 1/16	2	2 5/16	3 1/8	4 3/16	5 1/4	6 1/16	7 5/8	8 9/16	9 1/2	10 7/16	11 3/8	12 5/16	13 1/4	14 3/16	15 1/8	16 1/16	17	17 15/16	18 7/8
	15-2	9/16 Bar	1 1/8	2 1/16	3	3 15/16	4 7/8	5 13/16	6 3/4	7 11/16	8 5/8	9 9/16	10 1/2	11 7/16	12 3/8	13 5/16	14 1/4	15 3/16	16 1/8	17 1/16	18	18 15/16

No. of Bars			22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
15-4 or 15-2	15-4	1/8 Bar	19 13/16	20 3/4	21 11/16	22 5/8	23 9/16	24 1/2	25 7/16	26 5/16	27 5/16	28 1/4	29 3/16	30 1/8	31 1/16	32	32 15/16	33 7/8	34 13/16	35 3/4
	15-2	9/16 Bar	19 7/8	20 13/16	21 3/4	22 11/16	23 5/8	24 9/16	25 1/2	26 7/16	27 3/8	28 5/16	29 1/4	30 3/16	31 1/8	32 1/16	33	33 15/16	34 7/8	35 13/16

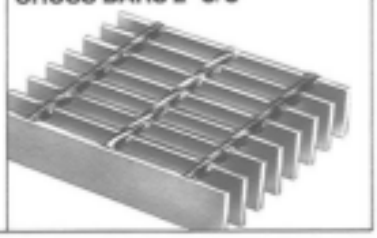
STEEL WELDED CLOSE-MESH GRATING

11/16" CENTER TO CENTER OF BEARING BARS

11-4 — CROSS BARS 4" C/C



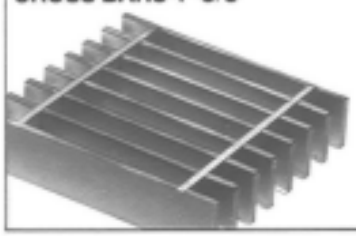
11-2 — CROSS BARS 2" C/C



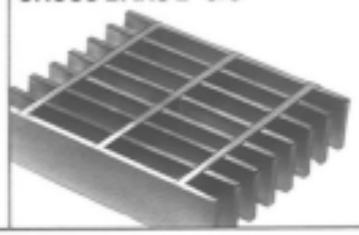
STEEL PRESSURE-LOCKED CLOSE-MESH GRATING

11/16" CENTER TO CENTER OF BEARING BARS

11-4 — CROSS BARS 4" C/C



11-2 — CROSS BARS 2" C/C



STATIC LOAD TABLE – Loads & deflections are theoretical, based on a maximum allowable fiber stress of 18,000 PSI. E = 30,000,000 PSI.

Bar Size	Symbol	Approx. Weight*** Lbs./Sq. Ft.	Sec. Mod. Per Ft. Of Width		SPAN (LGTH. OF BRG. BAR) 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"
3/4" x 1/8"	11-4-32	*6.1 **6.6	.207	U	621	397	276	203	155	123	99						
				D	.095	.151	.216	.295	.374	.486	.595						
	11-2-32	*6.6 **7.6		C	621	496	414	355	310	277	248						
				D	.076	.119	.173	.234	.308	.389	.478						
3/4" x 3/16"	11-4-33	*9.1 **9.0	.311	U	933	597	415	305	233	184	149						
				D	.095	.151	.216	.295	.374	.486	.599						
	11-2-33	*9.7 **10.4		C	933	746	623	534	466	414	373						
				D	.076	.119	.173	.234	.308	.389	.480						
1" x 1/8"	11-4-42	*8.0 **8.5	.369	U	1107	708	492	361	277	219	177	146	123				
				D	.072	.111	.159	.219	.288	.366	.451	.547	.673				
	11-2-42	*8.5 **9.5		C	1107	885	738	632	554	493	443	402	369				
				D	.057	.090	.129	.176	.231	.293	.360	.434	.518				
1" x 3/16"	11-4-43	*11.9 **11.9	.554	U	1662	1064	739	543	416	328	266	220	185	157			
				D	.072	.111	.159	.219	.288	.366	.451	.547	.673	.760			
	11-2-43	*12.6 **13.3		C	1662	1330	1109	950	832	738	665	606	555	510			
				D	.057	.090	.129	.176	.231	.293	.360	.434	.518	.608			
1-1/4" x 1/8"	11-4-52	*9.9 **10.3	.578	U	1734	1110	771	566	434	343	277	229	193	164	142		
				D	.057	.090	.129	.176	.231	.291	.358	.433	.520	.608	.704		
	11-2-52	*10.4 **11.3		C	1734	1388	1157	991	868	772	693	630	579	533	497		
				D	.046	.072	.104	.141	.183	.233	.288	.349	.416	.487	.565		
1-1/4" x 3/16"	11-4-53	*14.9 **14.8	.804	U	2592	1659	1152	846	648	512	415	343	288	245	212	162	
				D	.057	.090	.129	.176	.231	.291	.358	.433	.520	.608	.704	.921	
	11-2-53	*15.6 **16.2		C	2592	2074	1728	1481	1296	1152	1038	943	864	796	742	648	
				D	.046	.072	.104	.141	.183	.233	.288	.349	.416	.487	.565	.737	
1-1/2" x 1/8"	11-4-62	*11.8 **12.6	.831	U	2493	1596	1108	814	623	492	399	330	277	236	204	156	123
				D	.047	.075	.106	.147	.192	.243	.300	.365	.433	.506	.587	.774	.978
	11-2-62	*12.3 **13.9		C	2493	1995	1662	1425	1246	1107	996	908	831	767	714	624	554
				D	.038	.059	.087	.117	.154	.195	.241	.289	.347	.406	.470	.614	.777
1-1/2" x 3/16"	11-4-63	*17.0 **17.8	1.244	U	3732	2388	1659	1219	933	737	597	493	415	353	305	233	184
				D	.047	.075	.106	.147	.192	.243	.300	.365	.433	.506	.587	.774	.978
	11-2-63	*17.7 **19.7		C	3732	2985	2489	2133	1866	1658	1493	1356	1245	1147	1068	932	828
				D	.038	.059	.087	.117	.154	.195	.241	.289	.347	.406	.470	.614	.777
1-3/4" x 3/16"	11-4-73	*20.4 **20.8	1.694	U	5082	3252	2259	1659	1271	1004	813	672	565	481	415	318	251
				D	.042	.064	.092	.126	.165	.208	.258	.310	.371	.435	.506	.664	.838
	11-2-73	*21.0 **22.7		C	5082	4065	3389	2903	2542	2259	2033	1848	1695	1563	1453	1272	1130
				D	.033	.052	.074	.101	.132	.167	.206	.249	.297	.347	.403	.527	.667
2" x 3/16"	11-4-83	*23.2 **23.8	2.212	U	6636	4247	2949	2167	1659	1311	1062	877	737	628	542	415	328
				D	.036	.056	.081	.111	.144	.183	.226	.273	.325	.384	.447	.580	.732
	11-2-83	*23.8 **25.7		C	6636	5309	4424	3792	3318	2950	2655	2412	2211	2041	1897	1660	1476
				D	.029	.045	.064	.088	.115	.145	.180	.217	.259	.303	.353	.460	.583
2-1/4" x 3/16"	11-4-93	*25.9 **26.5	2.800	U	8400	5376	3733	2743	2100	1659	1344	1111	933	795	686	525	415
				D	.032	.050	.072	.098	.127	.162	.199	.241	.287	.338	.393	.512	.646
	11-2-93	*26.5 **28.4		C	8400	6720	5600	4800	4200	3733	3360	3055	2799	2584	2401	2100	1868
				D	.026	.039	.057	.079	.102	.129	.160	.194	.230	.270	.314	.410	.518
2-1/2" x 3/16"	11-4-103	*28.7 **29.3	3.456	U	10368	6636	4608	3385	2592	2048	1659	1371	1152	982	846	648	512
				D	.028	.044	.064	.088	.116	.145	.180	.217	.260	.304	.354	.465	.585
	11-2-103	*29.4 **31.2		C	10368	8288	6912	5924	5184	4608	4148	3770	3456	3192	2961	2592	2304
				D	.023	.036	.051	.071	.092	.116	.144	.173	.207	.242	.282	.369	.467

NOTE: When grating with serrated bearing bars is specified, the depth of grating required for a specified load should be 1/4" greater than that shown in the load table.

NOTE: Spans and loads to the right of the heavy line exceed a deflection of 1/4" for uniform loads of 100#/sq. ft. which provide safe pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer.

Material: ASTM A-569 standard; ASTM A-570 available on specification.

U – Safe Uniform Load in lbs. per sq. ft.

C – Safe Concentrated Load in lbs. per foot of Grating Width.

D – Deflection in inches.

***Weight depends on panel width, cross bar selection, mill tolerance, and manufacturing tolerance.

PANEL WIDTH CHART IN INCHES

DIMENSIONS SHOWN ARE OUT TO OUT OF BEARING BARS

No. of Bars		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
11-4	1/8 Bar	9/16	1 1/16	2 9/16	2 1/16	3 9/16	4 1/4	4 13/16	5 5/16	6 13/16	7	7 11/16	8 3/16	9 1/16	9 3/4	10 7/16	11 1/16	11 13/16	12 1/2	13 3/16	13 7/8	14 9/16	15 1/4
11-2	3/16 Bar	1/8	1 1/16	2 1/4	2 13/16	3 5/8	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	13 15/16	14 5/8	15 5/16

No. of Bars		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
11-4	1/8 Bar	15 15/16	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 13/16	23 1/2	24 3/16	24 7/8	25 5/16	26 1/4	26 15/16	27 5/8	28 5/16	29	29 11/16	30 3/8
11-2	3/16 Bar	16	16 11/16	17 3/8	18 1/16	18 3/4	19 7/16	20 1/8	20 13/16	21 1/2	22 3/16	22 7/8	23 9/16	24 1/4	24 15/16	25 5/8	26 5/16	27	27 11/16	28 3/8	29 1/16	29 3/4	30 7/16

No. of Bars		46	47	48	49	50	51	52	53	54
11-4	1/8 Bar	31 1/16	31 3/4	32 7/16	33 1/8	33 13/16	34 1/2	35 3/16	35 7/8	36 9/16
11-2	3/16 Bar	31 1/8	31 13/16	32 1/2	33 3/16	33 7/8	34 9/16	35 1/4	35 15/16	36 5/8

STEEL PRESSURE-LOCKED CLOSE-MESH GRATING

7/16" CENTER TO CENTER OF BEARING BARS

7-4

CROSS BARS 4" C/C

7-2

CROSS BARS 2" C/C

STATIC LOAD TABLE – Loads & deflections are theoretical. Based on a maximum allowable fiber stress of 18,000 PSI, E = 30,000,000 PSI.

Bar Size	Symbol	Approx. Weight* Lbs./Sq. Ft.	Sec. Mod. Mo. of Inert. Of Width		SPAN (LGTH. BRG. BAR) 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"
3/4" x 1/8"	7-4-32	9.8	.324	U	972	622	432	317	243	192	156						
				D	.095	.151	.216	.295	.374	.486	.594						
	7-2-32	10.8		C	972	778	648	555	483	432	390	193					
				D	.076	.119	.173	.234	.308	.389	.481	.718					
3/4" x 3/16"	7-4-33	13.7	.486	U	1458	933	648	476	365	288	233						
				D	.095	.151	.216	.295	.374	.486	.592						
	7-2-33	15.1		C	1458	1166	972	833	730	648	583	531	288	243			
				D	.076	.119	.173	.234	.308	.389	.480	.582					
1" x 1/8"	7-4-42	12.7	.575	U	1725	1104	767	563	431	341	276	228	192	163			
				D	.072	.111	.159	.219	.288	.366	.451	.547	.673	.748			
	7-2-42	13.7		C	1725	1380	1151	985	862	767	690	627	576	530			
				D	.057	.090	.129	.176	.231	.293	.360	.434	.518	.606			
1" x 3/16"	7-4-43	18.1	.865	U	2595	1661	1153	847	649	513	415	343	283	246	212		
				D	.072	.111	.159	.219	.288	.366	.451	.547	.673	.753	.873		
	7-2-43	19.5		C	2595	2076	1730	1462	1296	1154	1038	943	849	800	742		
				D	.057	.090	.129	.176	.231	.293	.360	.434	.518	.611	.708		
1-1/4" x 1/8"	7-4-52	15.7	.902	U	2706	1732	1203	884	677	535	433	358	301	256	221	169	
				D	.057	.090	.129	.176	.231	.291	.358	.433	.520	.608	.704	.911	
	7-2-52	16.7		C	2706	2165	1805	1547	1354	1204	1083	985	903	832	774	676	
				D	.046	.072	.104	.141	.183	.233	.288	.349	.416	.487	.565	.738	
1-1/4" x 3/16"	7-4-53	22.6	1.348	U	4044	2588	1797	1320	1011	799	647	535	449	383	330	253	200
				D	.057	.090	.129	.176	.231	.291	.358	.433	.520	.608	.704	.910	1.15
	7-2-53	24.0		C	4044	3235	2696	2310	2022	1798	1618	1471	1347	1245	1155	1012	900
				D	.046	.072	.104	.141	.183	.233	.288	.349	.416	.487	.565	.738	.934
1-1/2" x 1/8"	7-4-62	18.9	1.298	U	3894	2492	1731	1272	974	769	623	515	433	369	318	243	192
				D	.047	.075	.106	.147	.192	.243	.300	.365	.433	.506	.587	.774	.978
	7-2-62	20.2		C	3894	3115	2597	2226	1948	1730	1558	1416	1299	1199	1113	972	864
				D	.038	.059	.087	.117	.154	.195	.241	.289	.347	.406	.470	.614	.777
1-1/2" x 3/16"	7-4-63	27.2	1.942	U	5826	3729	2589	1902	1457	1151	932	770	647	552	476	364	288
				D	.047	.075	.106	.147	.192	.243	.300	.365	.433	.506	.587	.774	.978
	7-2-63	29.1		C	5826	4661	3884	3329	2914	2590	2330	2118	1941	1794	1666	1456	1296
				D	.038	.059	.087	.117	.154	.195	.241	.289	.347	.406	.470	.614	.777
1-3/4" x 3/16"	7-4-73	31.6	2.643	U	7929	5075	3524	2589	1982	1566	1269	1048	881	751	647	496	392
				D	.042	.064	.092	.126	.165	.206	.258	.310	.371	.435	.506	.664	.838
	7-2-73	33.5		C	7929	6344	5286	4531	3964	3524	3173	2882	2643	2441	2265	1984	1764
				D	.033	.052	.074	.101	.132	.167	.206	.249	.297	.347	.403	.527	.667
2" x 3/16"	7-4-83	36.2	3.543	U	10,629	6803	4724	3471	2657	2100	1701	1405	1181	1006	868	664	525
				D	.036	.056	.081	.111	.144	.183	.226	.273	.325	.384	.447	.580	.732
	7-2-83	38.1		C	10,629	8504	7086	6074	5314	4725	4253	3864	3543	3270	3038	2656	2363
				D	.029	.045	.064	.088	.115	.145	.180	.217	.259	.303	.353	.460	.583
2-1/4" x 3/16"	7-4-93	40.1	4.370	U	13,110	8390	5827	4281	3278	2590	2098	1734	1457	1241	1070	819	647
				D	.032	.050	.072	.098	.127	.162	.199	.241	.287	.338	.393	.512	.646
	7-2-93	42.0		C	13,110	10,488	8741	7492	6556	5828	5245	4769	4371	4033	3745	3276	2912
				D	.026	.039	.057	.079	.102	.129	.160	.194	.230	.270	.314	.410	.518
2-1/2" x 3/16"	7-4-103	45.9	5.394	U	16,182	10,356	7192	5284	4046	3196	2589	2140	1798	1532	1321	1011	799
				D	.028	.044	.064	.088	.116	.145	.180	.217	.260	.305	.354	.465	.586
	7-2-103	47.8		C	16,182	12,945	10,788	9247	8092	7191	6473	5885	5394	4979	4624	4044	3596
				D	.023	.036	.051	.071	.092	.116	.144	.173	.207	.242	.282	.369	.467

NOTE: When grating with serrated bearing bars is specified, the depth of grating required for a specified load should be 1/4" greater than that shown in the load table.

NOTE: Spans and loads to the right of the heavy line exceed a deflection of 1/4" for uniform loads of 100# sq. ft. which provide safe pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer.

Material: ASTM A-569 standard; ASTM A-570 available on specification.

U – Safe Uniform Load in lbs. per sq. ft.

C – Safe Concentrated Load per foot of Grating Width.

D – Deflection in inches.

*Weight depends on panel width, cross bar selection, mill tolerance and manufacturing tolerances.

PANEL WIDTH CHART IN INCHES **DIMENSIONS SHOWN ARE OUT. TO OUT OF BEARING BARS**

No. of Bars		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
7-4	1/8 Bar	9/16	1	1 1/16	1 1/16	2 9/16	2 9/16	3 9/16	3 9/16	4 1/16	4 1/16	4 1/16	5 1/16	5 1/16	6 1/16	6 1/16	7 1/16	7 1/16	8	8 1/16	8 1/16	9 1/16	9 1/16	10 1/16	10 1/16	11 1/16	11 1/16	11 1/16	12 1/16
7-2	3/16 Bar	1/16	1 1/16	1 1/16	1 1/16	2 1/16	2 1/16	3 1/16	3 1/16	4 1/16	4 1/16	5	5 1/16	5 1/16	6 1/16	6 1/16	7 1/16	7 1/16	8 1/16	8 1/16	8 1/16	9 1/16	9 1/16	10 1/16	10 1/16	11 1/16	11 1/16	12	12 1/16

No. of Bars		30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
7-4	1/8 Bar	12 1/16	13 1/16	13 1/16	14 1/16	14 1/16	15	15 1/16	15 1/16	16 1/16	16 1/16	17 1/16	17 1/16	18 1/16	18 1/16	18 1/16	19 1/16	19 1/16	20 1/16	20 1/16	21 1/16	21 1/16	22	22 1/16	22 1/16	23 1/16	23 1/16	24 1/16	24 1/16
7-2	1/8 Bar	12 1/16	13 1/16	13 1/16	14 1/16	14 1/16	15 1/16	15 1/16	15 1/16	16 1/16	16 1/16	17 1/16	17 1/16	18 1/16	18 1/16	19	19 1/16	19 1/16	20 1/16	20 1/16	21 1/16	21 1/16	22 1/16	22 1/16	22 1/16	23 1/16	23 1/16	24 1/16	24 1/16

No. of Bars		58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
7-4	1/8 Bar	25 1/16	25 1/16	25 1/16	26 1/16	26 1/16	27 1/16	27 1/16	28 1/16	28 1/16	29	29 1/16	29 1/16	30 1/16	30 1/16	31 1/16	31 1/16	32 1/16	32 1/16	32 1/16	33 1/16	33 1/16	34 1/16	34 1/16	35 1/16	35 1/16	36
7-2	1/8 Bar	25 1/16	25 1/16	26	26 1/16	26 1/16	27 1/16	27 1/16	28 1/16	28 1/16	29 1/16	29 1/16	29 1/16	30 1/16	30 1/16	31 1/16	31 1/16	32 1/16	32 1/16	33	33 1/16	33 1/16	34 1/16	34 1/16	35 1/16	35 1/16	36 1/16