

LOAD & DEFLECTION TABLE:

Loads and deflections are theoretical and based on static loading.

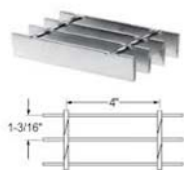
Bar Size	Symbol	# per sf	Sec. Mod per ft. of width	SAFE SPAN (Direction of Bearing Bar)								
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"			
3/4" x 1/8" Non-Serrated Only	19W4	3.9	0.12	355	227	158	116	89	0.397	70	0.503	
	19P4	4.3		355	284	237	203	178	158			
	19P2	5.2		0.079	0.124	0.179	0.243	0.318	0.402			
3/4" x 3/16" Non-Serrated Only	19W4	5.6	0.18	533	341	237	174	133	105			
	19P4	6.4		533	426	355	305	266	237			
	19P2	7.8		0.079	0.124	0.179	0.243	0.318	0.402			
1" x 1/8"	19W4	5.0	0.21	632	404	281	206	158	125	101	84	0.563
	19W2	5.5		0.074	0.116	0.168	0.228	0.298	0.377	0.466		
	19P4	5.4		632	505	421	361	316	281	253	230	
	19P2	6.3		0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	
1" x 3/16"	19W4	7.2	0.32	947	606	421	309	237	187	152	125	
	19W2	7.8		0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	
	19P4	8.1		947	758	632	541	474	421	379	344	
19P2	9.5	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451			
1-1/4" x 1/8"	19W4	6.1	0.33	987	632	439	322	247	195	158	130	110
	19W2	6.6		0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536
	19P4	6.8		987	789	658	564	493	439	395	359	329
	19P2	8.1		0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429
19P2	8.1	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	
1-1/4" x 3/16"	19W4	8.9	0.49	1480	947	658	483	370	292	237	196	164
	19W2	9.5		0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536
	19P4	10.2		1480	1184	987	846	740	658	592	538	493
	19P2	12.1		0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429
19P2	12.1	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	
1-1/2" x 1/8"	19W4	7.2	0.47	1421	909	632	464	355	281	227	188	158
	19W2	7.7		0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447
	19P4	7.9		1421	1137	947	812	711	632	568	517	474
	19P2	9.2		0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358
19P2	9.2	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	
1-1/2" x 3/16"	19W4	10.5	0.71	2132	1364	947	696	533	421	341	282	237
	19W2	11.2		0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447
	19P4	11.8		2132	1705	1421	1218	1066	947	853	775	711
	19P2	13.8		0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358
19P2	13.8	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	
1-3/4" x 3/16"	19W4	12.2	0.97	2901	1857	1289	947	725	573	464	384	322
	19W2	12.8		0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383
	19P4	13.5		2901	2321	1934	1658	1451	1289	1161	1055	967
	19P2	15.4		0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306
19P2	15.4	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	
2" x 3/16"	19W4	13.9	1.26	3789	2425	1684	1237	947	749	606	501	421
	19W2	14.5		0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335
	19P4	15.2		3789	3032	2526	2165	1895	1684	1516	1378	1263
	19P2	17.1		0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268
19P2	17.1	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	
2-1/4" x 3/16"	19W4	15.5	1.6	4796	3069	2132	1566	1199	947	767	634	533
	19W2	16.1		0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298
	19P4	16.8		4796	3837	3197	2741	2398	2132	1918	1744	1599
	19P2	18.7		0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238
19P2	18.7	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	
2-1/2" x 3/16"	19W4	17.2	1.97	5921	3789	2632	1933	1480	1170	947	783	658
	19W2	17.8		0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268
	19P4	18.5		5921	4737	3947	3383	2961	2632	2368	2153	1974
	19P2	20.4		0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215
19P2	20.4	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	

U = safe uniform load (psf)
 C = safe concentrated load (psf)
 D = deflection in inches
 E = modulus of elasticity, 29,000,000 (psi)
 F = fiber stress, 18,000 (psi)
Material: ASTM-A-1011 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 othertypes 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.

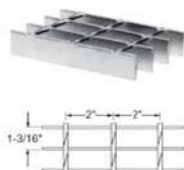
19W4 & 19P4 STANDARD PANEL WIDTH (inches)

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
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"
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
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"
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"



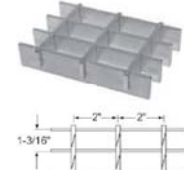
19W4



19W2



19P4



19P2