

Bar Size	Symbol / Approx. Weight*** Lbs/Sq. Ft.			Ped. Span	Sec. Mod. Per Ft. Of Width		Clear Span																					
							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"	15W4 4.7#	15P4 5.1#	15S4 4.6#	44"	.150	U	450	288	200	147	113	89	U=Safe uniform load, lb/sq ft C=Safe concentrated load, lb/ft of grating width, at mid-span D=Deflection in inches															
	D	.099	.155			.223	.304	.397	.503																			
	C	450	360			300	257	225	200																			
	D	.079	.124			.179	.243	.318	.402																			
3/4" x 3/16"	15W4 6.9#	15P4 7.7#	15S4 6.7#	48"	.225	U	675	432	300	220	169	133	108	Data is theoretical and based on 18,000 psi. Install Cross Rods on Top.														
	D	.099	.155			.223	.304	.397	.503	.621																		
	C	675	540			450	386	338	300	270																		
	D	.079	.124			.179	.243	.318	.402	.497																		
1" x 1/8"	15W4 6.1#	15P4 6.5#	15S4 6.0#	54"	.267	U	800	512	356	261	200	158	128	106	89	<div>% Open Area<sup>1</sup></div> <table><tr><td>Bars</td><td>1/8"</td><td>3/16"</td></tr><tr><td>4"cc</td><td>80%</td><td>73%</td></tr><tr><td>2"cc</td><td>74%</td><td>67%</td></tr></table> <div><sup>1</sup>Open Area % for reference only - %'s will vary with material &amp; mfg. process.</div>				Bars	1/8"	3/16"	4"cc	80%	73%	2"cc	74%	67%
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	4"cc	80%	73%																									
	2"cc	74%	67%																									
D	.074	.116	.168	.228	.298	.377	.466	.563	.670																			
C	800	640	533	457	400	356	320	291	267																			
D	.060	.093	.134	.182	.238	.302	.372	.451	.536																			
1" x 3/16"	15W4 8.9#	15P4 9.8#	15S4 8.7#	60"	.400	U	1200	768	533	392	300	237	192	159	133					<div>% Open Area<sup>1</sup></div> <table><tr><td>Bars</td><td>1/8"</td><td>3/16"</td></tr><tr><td>4"cc</td><td>80%</td><td>73%</td></tr><tr><td>2"cc</td><td>74%</td><td>67%</td></tr></table> <div><sup>1</sup>Open Area % for reference only - %'s will vary with material &amp; mfg. process.</div>				Bars	1/8"	3/16"	4"cc	80%
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D	.074	.116	.168	.228	.298	.377	.466	.563	.670																			
C	1200	960	800	686	600	533	480	436	400																			
D	.060	.093	.134	.182	.238	.302	.372	.451	.536																			
1-1/4" x 1/8"	15W4 7.5#	15P4 8.2#	15S4 7.3#	64"	.417	U	1250	800	556	408	313	247	200	165	139	118	102	<div>% Open Area<sup>1</sup></div> <table><tr><td>Bars</td><td>1/8"</td><td>3/16"</td></tr><tr><td>4"cc</td><td>80%</td><td>73%</td></tr><tr><td>2"cc</td><td>74%</td><td>67%</td></tr></table> <div><sup>1</sup>Open Area % for reference only - %'s will vary with material &amp; mfg. process.</div>						Bars	1/8"	3/16"	4"cc	80%
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D	.060	.093	.134	.182	.238	.302	.372	.451	.536	.629	.730																	
C	1250	1000	833	714	625	556	500	455	417	385	357																	
D	.048	.074	.107	.146	.191	.241	.298	.360	.429	.504	.584																	
1-1/4" x 3/16"	15W4 11.0#	15P4 12.3#	15S4 10.8#	71"	.625	U	1875	1200	833	612	469	370	300	248	208	178	153			<div>% Open Area<sup>1</sup></div> <table><tr><td>Bars</td><td>1/8"</td><td>3/16"</td></tr><tr><td>4"cc</td><td>80%</td><td>73%</td></tr><tr><td>2"cc</td><td>74%</td><td>67%</td></tr></table> <div><sup>1</sup>Open Area % for reference only - %'s will vary with material &amp; mfg. process.</div>		Bars	1/8"	3/16"	4"cc	80%	73%	2"cc
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D	.060	.093	.134	.182	.238	.302	.372	.451	.536	.629	.730																	
C	1875	1500	1250	1071	938	833	750	682	625	577	536																	
D	.048	.074	.107	.146	.191	.241	.298	.360	.429	.504	.584																	
1-1/2" x 1/8"	15W4 8.9#	15P4 9.6#	15S4 8.7#	74"	.600	U	1800	1152	800	588	450	356	288	238	200	170	147	113	89									
	D	.050	.078			.112	.152	.199	.251	.310	.376	.447	.524	.608	.794	1.006												
	C	1800	1440			1200	1029	900	800	720	655	600	554	514	450	400												
	D	.040	.062			.089	.122	.159	.201	.248	.300	.358	.420	.487	.636	.804												
1-1/2" x 3/16"	15W4 13.1#	15P4 14.4#	15S4 12.8#	82"	.900	U	2700	1728	1200	882	675	533	432	357	300	256	220	169	133									
	D	.050	.078			.112	.152	.199	.251	.310	.376	.447	.524	.608	.794	1.006												
	C	2700	2160			1800	1543	1350	1200	1080	982	900	831	771	675	600												
	D	.040	.062			.089	.122	.159	.201	.248	.300	.358	.420	.487	.636	.804												
1-3/4" x 3/16"	15W4 15.2#	15P4 16.5#	15S4 14.9#	92"	1.225	U	3675	2352	1633	1200	919	726	588	486	408	348	300	230	181									
	D	.043	.067			.096	.130	.170	.215	.266	.322	.383	.450	.521	.681	.862												
	C	3675	2940			2450	2100	1838	1633	1470	1336	1225	1131	1050	919	817												
	D	.034	.053			.077	.104	.136	.172	.213	.257	.306	.360	.417	.545	.689												
2" x 3/16"	15W4 17.3#	15P4 18.6#	15S4 16.9#	102"	1.600	U	4800	3072	2133	1567	1200	948	768	635	533	454	392	300	237									
	D	.037	.058			.084	.114	.149	.189	.233	.282	.335	.393	.456	.596	.754												
	C	4800	3840			3200	2743	2400	2133	1920	1745	1600	1477	1371	1200	1067												
	D	.030	.047			.067	.091	.119	.151	.186	.225	.268	.315	.365	.477	.603												
2-1/4" x 3/16"	15W4 19.4#	15P4 20.7#	15S4 19.0#	111"	2.025	U	6075	3888	2700	1984	1519	1200	972	803	675	575	496	380	300									
	D	.033	.052			.074	.101	.132	.168	.207	.250	.298	.350	.406	.530	.670												
	C	6075	4860			4050	3471	3038	2700	2430	2209	2025	1869	1736	1519	1350												
	D	.026	.041			.060	.081	.106	.134	.166	.200	.238	.280	.324	.424	.536												
2-1/2" x 3/16"	15W4 21.4#	15P4 22.7#	15S4 20.9#	120"	2.500	U	7500	4800	3333	2449	1875	1481	1200	992	833	710	612	469	370									
	D	.030	.047			.067	.091	.119	.151	.186	.225	.268	.315	.365	.477	.603												
	C	7500	6000			5000	4286	3750	3333	3000	2727	2500	2308	2143	1875	1667												
	D	.024	.037			.054	.073	.095	.121	.149	.180	.215	.252	.292	.381	.483												

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

Deflection:

To ensure safe pedestrian comfort, maximum deflection (D) should be limited to 1/4" for uniform load of 100 psf (denoted by values to the left of heavy line in table above) however, this can be exceeded for non-pedestrian loading conditions at engineer's discretion.

Serrated Grating:

For serrated grating, the depth of grating required for a specified load is 1/4" greater than shown in the above table.