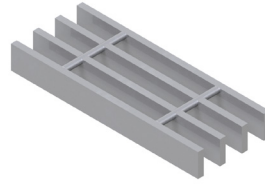


# LOAD TABLES | STANDARD, IMPERIAL

## LOAD TABLES - CLOSE-MESH

Grating Type: **15W4**  
 Design Code: **NAAMM MBG 534**  
 Material: **ASTM A1011CS Type B**  
 Surface: **Smooth**



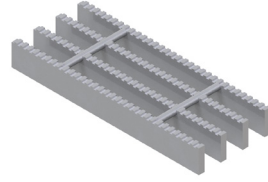
U = Safe Uniform Load (lbs/ft<sup>2</sup>)  
 D<sub>u</sub> = Deflection Due to Safe Uniform Load (in)  
 C = Safe Concentrated Load (lbs/ft of grating width)  
 D<sub>c</sub> = Deflection Due to Safe Concentrated Load (in)  
 Allowable Extreme Fiber Stress = 18 ksi

Bearing Bar Size (inches)	Approx. Weight (lbs/ft <sup>2</sup> )	Ped. Span (inches)	Load / Deflection	Span (ft -in)												Section Properties			
				2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"	5' - 6"	6' - 0"	6' - 6"	7' - 0"	7' - 6"	8' - 0"	S <sub>x</sub> (in <sup>3</sup> )/ft	I <sub>x</sub> (in <sup>4</sup> )/ft	
1" x 1/8"	6.27	55	U	800	512	356	261	200	158	128								0.267	
			D <sub>u</sub>	0.07	0.12	0.17	0.23	0.30	0.38	0.47									0.133
			C	800	640	533	457	400	356	320									
			D <sub>c</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37									
1" x 3/16"	9.03	60	U	1,200	768	533	392	300	237	192								0.400	
			D <sub>u</sub>	0.07	0.12	0.17	0.23	0.30	0.38	0.47									0.200
			C	1,200	960	800	686	600	533	480									
			D <sub>c</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37									
1 1/4" x 1/8"	7.65	65	U	1,250	800	556	408	313	247	200	165							0.417	
			D <sub>u</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45	0.45							0.260
			C	1,250	1,000	833	714	625	556	500	455								
			D <sub>c</sub>	0.05	0.07	0.11	0.15	0.19	0.24	0.30	0.36	0.36							
1 1/4" x 3/16"	11.10	71	U	1,875	1,200	833	612	469	370	300	248	208						0.625	
			D <sub>u</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45	0.54	0.54						0.391
			C	1,875	1,500	1,250	1,071	938	833	750	682	625							
			D <sub>c</sub>	0.05	0.07	0.11	0.15	0.19	0.24	0.30	0.36	0.43	0.43						
1 1/2" x 1/8"	9.03	74	U	1,800	1,152	800	588	450	356	288	238	200	170					0.600	
			D <sub>u</sub>	0.05	0.08	0.11	0.15	0.20	0.25	0.31	0.38	0.45	0.52	0.52					0.450
			C	1,800	1,440	1,200	1,029	900	800	720	655	600	554						
			D <sub>c</sub>	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.42					
1 1/2" x 3/16"	13.18	82	U	2,700	1,728	1,200	882	675	533	432	357	300	256	220				0.900	
			D <sub>u</sub>	0.05	0.08	0.11	0.15	0.20	0.25	0.31	0.38	0.45	0.52	0.61	0.61				0.675
			C	2,700	2,160	1,800	1,543	1,350	1,200	1,080	982	900	831	771					
			D <sub>c</sub>	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49	0.49				
1 3/4" x 3/16"	15.25	92	U	3,675	2,352	1,633	1,200	919	726	588	486	408	348	300	261	230		1.225	
			D <sub>u</sub>	0.04	0.07	0.10	0.13	0.17	0.22	0.27	0.32	0.38	0.45	0.52	0.60	0.68	0.68		1.072
			C	3,675	2,940	2,450	2,100	1,838	1,633	1,470	1,336	1,225	1,131	1,050	980	919			
			D <sub>c</sub>	0.03	0.05	0.08	0.10	0.14	0.17	0.21	0.26	0.31	0.36	0.42	0.48	0.54	0.54		
2" x 3/16"	17.32	102	U	4,800	3,072	2,133	1,567	1,200	948	768	635	533	454	392	341	300		1.600	
			D <sub>u</sub>	0.04	0.06	0.08	0.11	0.15	0.19	0.23	0.28	0.34	0.39	0.46	0.52	0.60	0.60		1.600
			C	4,800	3,840	3,200	2,743	2,400	2,133	1,920	1,745	1,600	1,477	1,371	1,280	1,200			
			D <sub>c</sub>	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.23	0.27	0.31	0.36	0.42	0.48	0.48		
2 1/2" x 3/16"	21.46	120	U	7,500	4,800	3,333	2,449	1,875	1,481	1,200	992	833	710	612	533	469		2.500	
			D <sub>u</sub>	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.23	0.27	0.31	0.36	0.42	0.48	0.48		3.125
			C	7,500	6,000	5,000	4,286	3,750	3,333	3,000	2,727	2,500	2,308	2,143	2,000	1,875			
			D <sub>c</sub>	0.02	0.04	0.05	0.07	0.10	0.12	0.15	0.18	0.21	0.25	0.29	0.34	0.38	0.38		

Spans and loads in red exceed a deflection of 1/4" for uniform loads of 100 lbs./sq. ft. Experience has shown that 1/4" deflection is the maximum deflection to give pedestrian comfort, but can be exceeded for other types of loads at the discretion of the specifying professional.

# LOAD TABLES - CLOSE-MESH

Grating Type: **15W4**  
 Design Code: **NAAMM MBG 534**  
 Material: **ASTM A1011CS Type B**  
 Surface: **Serrated**



U = Safe Uniform Load (lbs/ft<sup>2</sup>)  
 D<sub>u</sub> = Deflection Due to Safe Uniform Load (in)  
 C = Safe Concentrated Load (lbs/ft of grating width)  
 D<sub>c</sub> = Deflection Due to Safe Concentrated Load (in)  
 Allowable Extreme Fiber Stress = 18 ksi

Bearing Bar Size (inches)	Approx. Weight (lbs/ft <sup>2</sup> )	Ped. Span (inches)	Load / Deflection	Span (ft -in)												Section Properties	
				2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"	5' - 6"	6' - 0"	6' - 6"	7' - 0"	7' - 6"	8' - 0"	S <sub>x</sub> (in <sup>3</sup> )/ft
1" x 1/8"	6.27	44	U	450	288	200	147	113									0.150
			D <sub>u</sub>	0.10	0.16	0.22	0.30	0.40									0.056
			C	450	360	300	257	225									
			D <sub>c</sub>	0.08	0.12	0.18	0.24	0.32									
1" x 3/16"	9.03	49	U	675	432	300	220	169	133								0.225
			D <sub>u</sub>	0.10	0.16	0.22	0.30	0.40	0.50								0.084
			C	675	540	450	386	338	300								
			D <sub>c</sub>	0.08	0.12	0.18	0.24	0.32	0.40								
1 1/4" x 1/8"	7.65	55	U	800	512	356	261	200	158	128							0.267
			D <sub>u</sub>	0.07	0.12	0.17	0.23	0.30	0.38	0.47							0.133
			C	800	640	533	457	400	356	320							
			D <sub>c</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37							
1 1/4" x 3/16"	11.10	60	U	1,200	768	533	392	300	237	192							0.400
			D <sub>u</sub>	0.07	0.12	0.17	0.23	0.30	0.38	0.47							0.200
			C	1,200	960	800	686	600	533	480							
			D <sub>c</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37							
1 1/2" x 1/8"	9.03	65	U	1,250	800	556	408	313	247	200	165						0.417
			D <sub>u</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45						0.260
			C	1,250	1,000	833	714	625	556	500	455						
			D <sub>c</sub>	0.05	0.07	0.11	0.15	0.19	0.24	0.30	0.36						
1 1/2" x 3/16"	13.18	71	U	1,875	1,200	833	612	469	370	300	248	208					0.625
			D <sub>u</sub>	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45	0.54					0.391
			C	1,875	1,500	1,250	1,071	938	833	750	682	625					
			D <sub>c</sub>	0.05	0.07	0.11	0.15	0.19	0.24	0.30	0.36	0.43					
1 3/4" x 3/16"	15.25	82	U	2,700	1,728	1,200	882	675	533	432	357	300	256	220			0.900
			D <sub>u</sub>	0.05	0.08	0.11	0.15	0.20	0.25	0.31	0.38	0.45	0.52	0.61			0.675
			C	2,700	2,160	1,800	1,543	1,350	1,200	1,080	982	900	831	771			
			D <sub>c</sub>	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49			
2" x 3/16"	17.32	92	U	3,675	2,352	1,633	1,200	919	726	588	486	408	348	300	261	230	1.225
			D <sub>u</sub>	0.04	0.07	0.10	0.13	0.17	0.22	0.27	0.32	0.38	0.45	0.52	0.60	0.68	1.072
			C	3,675	2,940	2,450	2,100	1,838	1,633	1,470	1,336	1,225	1,131	1,050	980	919	
			D <sub>c</sub>	0.03	0.05	0.08	0.10	0.14	0.17	0.21	0.26	0.31	0.36	0.42	0.48	0.54	
2 1/2" x 3/16"	21.46	111	U	6,075	3,888	2,700	1,984	1,519	1,200	972	803	675	575	496	432	380	2.025
			D <sub>u</sub>	0.03	0.05	0.07	0.10	0.13	0.17	0.21	0.25	0.30	0.35	0.41	0.47	0.53	2.278
			C	6,075	4,860	4,050	3,471	3,038	2,700	2,430	2,209	2,025	1,869	1,736	1,620	1,519	
			D <sub>c</sub>	0.03	0.04	0.06	0.08	0.11	0.13	0.17	0.20	0.24	0.28	0.32	0.37	0.42	

Spans and loads in red exceed a deflection of 1/4" for uniform loads of 100 lbs./sq. ft. Experience has shown that 1/4" deflection is the maximum deflection to give pedestrian comfort, but can be exceeded for other types of loads at the discretion of the specifying professional.

LOAD TABLES - SD IMPERIAL