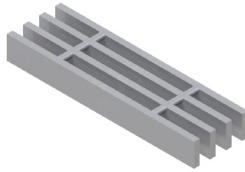


LOAD TABLES | STANDARD DUTY, IMPERIAL

STANDARD DUTY

Load Tables - ADA

Grating Type: **11W4**
 Design Code: **NAAMM MBG 534-19**
 Material: **ASTM A1011CS Type B**
 Surface: **Smooth**



U = Safe Uniform Load (lbs/ft²)
 D_u = Deflection Due to Safe Uniform Load (in)
 C = Safe Concentrated Load (lbs/ft of grating width)
 D_c = Deflection Due to Safe Concentrated Load (in)
 Allowable Extreme Fiber Stress = 18 ksi

Bearing Bar Size (inches)	Approx. Weight (lbs/ft ²)	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 _x (in ³ /ft)	I _x (in ⁴ /ft)	
1" x 3/16"	11.84	65	U	1,636	1,047	727	534	409	323	262	216							0.545	
			D _u	0.07	0.12	0.17	0.23	0.30	0.38	0.47	0.56								
			C	1,636	1,309	1,091	935	818	727	655	595							0.273	
			D _c	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45								
1 1/4" x 3/16"	14.62	77	U	2,557	1,636	1,136	835	639	505	409	338	284	242					0.852	
			D _u	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45	0.54	0.63						
			C	2,557	2,045	1,705	1,461	1,278	1,136	1,023	930	852	787					0.533	
			D _c	0.05	0.07	0.11	0.15	0.19	0.24	0.30	0.36	0.43	0.50						
1 1/2" x 3/16"	17.40	89	U	3,682	2,356	1,636	1,202	920	727	589	487	409	349	301	262			1.227	
			D _u	0.05	0.08	0.11	0.15	0.20	0.25	0.31	0.38	0.45	0.52	0.61	0.70				
			C	3,682	2,945	2,455	2,104	1,841	1,636	1,473	1,339	1,227	1,133	1,052	982			0.920	
			D _c	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49	0.56				
1 3/4" x 3/16"	20.37	99	U	5,011	3,207	2,227	1,636	1,253	990	802	663	557	474	409	356	313		1.670	
			D _u	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			
			C	5,011	4,009	3,341	2,864	2,506	2,227	2,005	1,822	1,670	1,542	1,432	1,336	1,253		1.462	
			D _c	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" x 3/16"	23.15	110	U	6,545	4,189	2,909	2,137	1,636	1,293	1,047	866	727	620	534	465	409		2.182	
			D _u	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			
			C	6,545	5,236	4,364	3,740	3,273	2,909	2,618	2,380	2,182	2,014	1,870	1,745	1,636		2.182	
			D _c	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			
2 1/2" x 3/16"	28.71	130	U	10,227	6,545	4,545	3,340	2,557	2,020	1,636	1,352	1,136	968	835	727	639		3.409	
			D _u	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			
			C	10,227	8,182	6,818	5,844	5,114	4,545	4,091	3,719	3,409	3,147	2,922	2,727	2,557		4.261	
			D _c	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			

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.

11W4 (in)

# of Bars	2	3	4	5	6	7	8	9	10	11
3/16" Bars	7/8	1-9/16	2-1/4	2-15/16	3-5/8	4-5/16	5	5-11/16	6-3/8	7-1/16
# of Bars	12	13	14	15	16	17	18	19	20	21
3/16" Bars	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
# of Bars	22	23	24	25	26	27	28	29	30	31
3/16" Bars	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	20-13/16
# of Bars	32	33	34	35	36	37	38	39	40	41
3/16" Bars	21-1/2	22-3/16	22-7/8	23-9/16	24-1/4	24-15/16	24-15/16	26-5/16	27	27-11/16

STANDARD DUTY

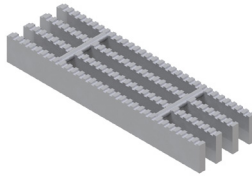
Load Tables - ADA

Grating Type: **11W4**

Design Code: **NAAMM MBG 534-19**

Material: **ASTM A1011CS Type B**

Surface: **Serrated**



U = Safe Uniform Load (lbs/ft²)

D_u = Deflection Due to Safe Uniform Load (in)

C = Safe Concentrated Load (lbs/ft of grating width)

D_c = Deflection Due to Safe Concentrated Load (in)

Allowable Extreme Fiber Stress = 18 ksi

Bearing Bar Size (inches)	Approx. Weight (lbs/ft ²)	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 _x (in ³ /ft)	I _x (in ⁴ /ft)	
1" x 3/16"	9.05	53	U	920	589	409	301	230	182									0.307	
			D _u	0.10	0.16	0.22	0.30	0.40	0.50										
			C	920	736	614	526	460	409									0.115	
			D _c	0.08	0.12	0.18	0.24	0.32	0.40										
1 1/4" x 3/16"	11.84	65	U	1,636	1,047	727	534	409	323	262	216							0.545	
			D _u	0.07	0.12	0.17	0.23	0.30	0.38	0.47	0.56								
			C	1,636	1,309	1,091	935	818	727	655	595							0.273	
			D _c	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45								
1 1/2" x 3/16"	14.62	77	U	2,557	1,636	1,136	835	639	505	409	338	284	242					0.852	
			D _u	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45	0.54	0.63						
			C	2,557	2,045	1,705	1,461	1,278	1,136	1,023	930	852	787					0.533	
			D _c	0.05	0.07	0.11	0.15	0.19	0.24	0.30	0.36	0.43	0.50						
1 3/4" x 3/16"	17.40	89	U	3,682	2,356	1,636	1,202	920	727	589	487	409	349	301	262			1.227	
			D _u	0.05	0.08	0.11	0.15	0.20	0.25	0.31	0.38	0.45	0.52	0.61	0.70				
			C	3,682	2,945	2,455	2,104	1,841	1,636	1,473	1,339	1,227	1,133	1,052	982			0.920	
			D _c	0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.30	0.36	0.42	0.49	0.56				
2" x 3/16"	20.37	99	U	5,011	3,207	2,227	1,636	1,253	990	802	663	557	474	409	356	313		1.670	
			D _u	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			
			C	5,011	4,009	3,341	2,864	2,506	2,227	2,005	1,822	1,670	1,542	1,432	1,336	1,253		1.462	
			D _c	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"	25.93	120	U	8,284	5,302	3,682	2,705	2,071	1,636	1,325	1,095	920	784	676	589	518		2.761	
			D _u	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			
			C	8,284	6,627	5,523	4,734	4,142	3,682	3,314	3,012	2,761	2,549	2,367	2,209	2,071		3.107	
			D _c	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.

11W4 (in)

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# of Bars	12	13	14	15	16	17	18	19	20	21
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3/16" Bars	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	20-13/16
# of Bars	32	33	34	35	36	37	38	39	40	41
3/16" Bars	21-1/2	22-3/16	22-7/8	23-9/16	24-1/4	24-15/16	24-15/16	26-5/16	27	27-11/16