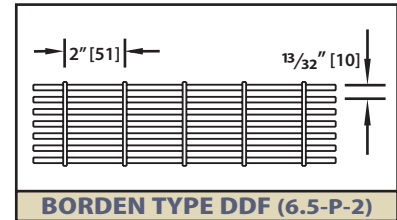
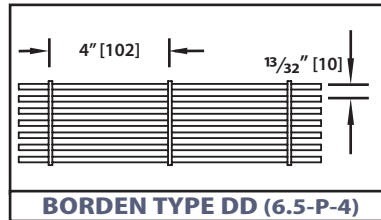


## Pressure Locked Grating Steel



## LOAD TABLE

Size No.	Bearing Bar Size	Weight (#/ft. <sup>2</sup> )	Moment of Inertia (in. <sup>4</sup> /f.w.)	Section Modulus (in. <sup>3</sup> /f.w.)	Maximum span recommended for 1/4" deflection under uniform load of 100 psf. (normal pedestrian traffic) in inches															
					Span in Inches															
					24	30	36	42	48	54	60	66	72	78	84	96	108			
1	3/4" x 1/8"	10.29	0.1298	0.3462	54	U	1038	665	462	339	260	205	166	<b>Table in accordance with NAAMM MBG 531-00</b> F - 18,000 psi E - 29,000,000 psi						
		Du				0.099	0.155	0.223	0.304	0.397	0.503	0.621								
		Dc				0.079	0.124	0.179	0.243	0.318	0.402	0.497								
2	3/4" x 3/16"	15.18	0.1947	0.5192	60	U	1558	997	692	509	389	308	249	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width						
		Du				0.099	0.155	0.223	0.304	0.397	0.503	0.621								
		Dc				0.079	0.124	0.179	0.243	0.318	0.402	0.497								
3	1" x 1/8"	13.94	0.3077	0.6154	67	U	1846	1182	821	603	462	365	295	566	519	479				
		Du				0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670	0.787					
		Dc				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629					
4	1" x 3/16"	20.24	0.4615	0.9231	75	U	2769	1772	1231	904	692	547	443	366	308	262	226	173	137	
		Du				0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670	0.787	0.912	1.192	1.508		
		Dc				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730	0.953	1.207		
5	1 1/4" x 1/8"	17.10	0.6010	0.9615	80	U	2885	1846	1282	942	721	570	462	381	321	273	235	180	142	
		Du				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730	0.953	1.207		
		Dc				0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584	0.763	0.965		
6	1 1/4" x 3/16"	24.98	0.9014	1.4423	88	U	4327	2769	1923	1413	1082	855	692	572	481	410	353	270	214	
		Du				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730	0.953	1.207		
		Dc				0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584	0.763	0.965		
7	1 1/2" x 1/8"	20.27	1.0385	1.3846	91	U	4154	2658	1846	1356	1038	821	665	549	462	393	339	260	205	
		Du				0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006		
		Dc				0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.636	0.804		
8	1 1/2" x 3/16"	29.72	1.5577	2.0769	101	U	6231	3988	2769	2035	1558	1231	997	824	692	590	509	389	308	
		Du				0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006		
		Dc				0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.636	0.804		
9	1 3/4" x 3/16"	34.46	2.4736	2.8269	113	U	8481	5428	3769	2769	2120	1675	1357	1121	942	803	692	530	419	
		Du				0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862		
		Dc				0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.545	0.689		
10	2" x 3/16"	39.20	3.6923	3.6923	125	U	11077	7089	4923	3617	2769	2188	1772	1465	1231	1049	904	692	547	
		Du				0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754		
		Dc				0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603		
11	2 1/4" x 3/16"	43.94	5.2572	4.6731	137	U	14019	8972	6231	4578	3505	2769	2243	1854	1558	1327	1144	876	692	
		Du				0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.530	0.670		
		Dc				0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	0.324	0.424	0.536		
12	2 1/2" x 3/16"	48.68	7.2115	5.7692	148	U	17308	11077	7692	5651	4327	3419	2769	2289	1923	1639	1413	1082	855	
		Du				0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603		
		Dc				0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.381	0.483		

All loads and deflections are based on gross sections and nominal sizes of bearing bars. The values listed are for design selection only and are not intended to be "absolute".

Actual load capacity will be affected slightly by variations which can be expected due to material and manufacturing tolerances.

$\frac{1}{4}$ " is considered the maximum deflection which is consistent with pedestrian comfort, but may be exceeded for other application at the discretion of the Engineer.

**When serrated gratings are specified, increase the depth of the grating selected from the table by 1/4" to allow for the serrations.**

PANEL WIDTHS (inches)																					
# Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<sup>3</sup> / <sub>16</sub> " Bars	<sup>19</sup> / <sub>32</sub>	1	1 <sup>13</sup> / <sub>32</sub>	1 <sup>13</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>32</sub>	3 <sup>7</sup> / <sub>16</sub>	3 <sup>27</sup> / <sub>32</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>21</sup> / <sub>32</sub>	5 <sup>1</sup> / <sub>16</sub>	5 <sup>15</sup> / <sub>32</sub>	5 <sup>7</sup> / <sub>8</sub>	6 <sup>9</sup> / <sub>32</sub>	6 <sup>11</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>32</sub>	7 <sup>1</sup> / <sub>2</sub>	7 <sup>29</sup> / <sub>32</sub>	8 <sup>5</sup> / <sub>16</sub>	8 <sup>23</sup> / <sub>32</sub>
<sup>1</sup> / <sub>8</sub> " Bars	<sup>17</sup> / <sub>32</sub>	<sup>15</sup> / <sub>16</sub>	1 <sup>11</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>32</sub>	2 <sup>9</sup> / <sub>16</sub>	2 <sup>31</sup> / <sub>32</sub>	3 <sup>3</sup> / <sub>8</sub>	3 <sup>25</sup> / <sub>32</sub>	4 <sup>3</sup> / <sub>16</sub>	4 <sup>19</sup> / <sub>32</sub>	5	5 <sup>13</sup> / <sub>32</sub>	5 <sup>13</sup> / <sub>16</sub>	6 <sup>7</sup> / <sub>32</sub>	6 <sup>5</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>32</sub>	7 <sup>7</sup> / <sub>16</sub>	7 <sup>27</sup> / <sub>32</sub>	8 <sup>1</sup> / <sub>4</sub>	8 <sup>21</sup> / <sub>32</sub>
# Bars	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
<sup>3</sup> / <sub>16</sub> " Bars	9 <sup>1</sup> / <sub>8</sub>	9 <sup>17</sup> / <sub>32</sub>	9 <sup>15</sup> / <sub>16</sub>	10 <sup>11</sup> / <sub>32</sub>	10 <sup>3</sup> / <sub>4</sub>	11 <sup>5</sup> / <sub>32</sub>	11 <sup>9</sup> / <sub>16</sub>	11 <sup>31</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>8</sub>	12 <sup>25</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>16</sub>	13 <sup>19</sup> / <sub>32</sub>	14	14 <sup>13</sup> / <sub>32</sub>	14 <sup>13</sup> / <sub>16</sub>	15 <sup>5</sup> / <sub>32</sub>	15 <sup>3</sup> / <sub>8</sub>	16 <sup>1</sup> / <sub>32</sub>	16 <sup>27</sup> / <sub>32</sub>	17 <sup>1</sup> / <sub>4</sub>	
<sup>1</sup> / <sub>8</sub> " Bars	9 <sup>1</sup> / <sub>16</sub>	9 <sup>15</sup> / <sub>32</sub>	9 <sup>7</sup> / <sub>8</sub>	10 <sup>9</sup> / <sub>32</sub>	10 <sup>11</sup> / <sub>16</sub>	11 <sup>3</sup> / <sub>32</sub>	11 <sup>1</sup> / <sub>2</sub>	11 <sup>29</sup> / <sub>32</sub>	12 <sup>5</sup> / <sub>16</sub>	12 <sup>23</sup> / <sub>32</sub>	13 <sup>3</sup> / <sub>8</sub>	13 <sup>17</sup> / <sub>32</sub>	13 <sup>15</sup> / <sub>16</sub>	14 <sup>11</sup> / <sub>32</sub>	14 <sup>3</sup> / <sub>4</sub>	15 <sup>5</sup> / <sub>32</sub>	15 <sup>9</sup> / <sub>16</sub>	15 <sup>31</sup> / <sub>32</sub>	16 <sup>3</sup> / <sub>8</sub>	16 <sup>25</sup> / <sub>32</sub>	17 <sup>3</sup> / <sub>16</sub>
# Bars	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
<sup>3</sup> / <sub>16</sub> " Bars	17 <sup>21</sup> / <sub>32</sub>	18 <sup>1</sup> / <sub>16</sub>	18 <sup>15</sup> / <sub>32</sub>	18 <sup>7</sup> / <sub>8</sub>	19 <sup>9</sup> / <sub>32</sub>	19 <sup>11</sup> / <sub>16</sub>	20 <sup>3</sup> / <sub>32</sub>	20 <sup>1</sup> / <sub>2</sub>	20 <sup>29</sup> / <sub>32</sub>	21 <sup>5</sup> / <sub>16</sub>	21 <sup>23</sup> / <sub>32</sub>	22 <sup>1</sup> / <sub>8</sub>	22 <sup>17</sup> / <sub>32</sub>	22 <sup>15</sup> / <sub>16</sub>	23 <sup>11</sup> / <sub>32</sub>	23 <sup>3</sup> / <sub>4</sub>	24 <sup>5</sup> / <sub>32</sub>	24 <sup>9</sup> / <sub>16</sub>	24 <sup>31</sup> / <sub>32</sub>	25 <sup>3</sup> / <sub>8</sub>	25 <sup>25</sup> / <sub>32</sub>
<sup>1</sup> / <sub>8</sub> " Bars	17 <sup>19</sup> / <sub>32</sub>	18	18 <sup>13</sup> / <sub>32</sub>	18 <sup>13</sup> / <sub>16</sub>	19 <sup>7</sup> / <sub>32</sub>	19 <sup>5</sup> / <sub>8</sub>	20 <sup>1</sup> / <sub>32</sub>	20 <sup>7</sup> / <sub>16</sub>	20 <sup>27</sup> / <sub>32</sub>	21 <sup>1</sup> / <sub>4</sub>	21 <sup>21</sup> / <sub>32</sub>	22 <sup>1</sup> / <sub>16</sub>	22 <sup>15</sup> / <sub>32</sub>	22 <sup>7</sup> / <sub>8</sub>	23 <sup>9</sup> / <sub>32</sub>	23 <sup>11</sup> / <sub>16</sub>	24 <sup>3</sup> / <sub>32</sub>	24 <sup>1</sup> / <sub>2</sub>	24 <sup>29</sup> / <sub>32</sub>	25 <sup>5</sup> / <sub>16</sub>	25 <sup>23</sup> / <sub>32</sub>
# Bars	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
<sup>3</sup> / <sub>16</sub> " Bars	26 <sup>3</sup> / <sub>16</sub>	26 <sup>19</sup> / <sub>32</sub>	27	27 <sup>13</sup> / <sub>32</sub>	27 <sup>13</sup> / <sub>16</sub>	28 <sup>7</sup> / <sub>32</sub>	28 <sup>5</sup> / <sub>8</sub>	29 <sup>1</sup> / <sub>32</sub>	29 <sup>7</sup> / <sub>16</sub>	29 <sup>27</sup> / <sub>32</sub>	30 <sup>1</sup> / <sub>4</sub>	30 <sup>21</sup> / <sub>32</sub>	31 <sup>1</sup> / <sub>16</sub>	31 <sup>15</sup> / <sub>32</sub>	31 <sup>7</sup> / <sub>8</sub>	32 <sup>9</sup> / <sub>32</sub>	32 <sup>11</sup> / <sub>16</sub>	33 <sup>3</sup> / <sub>32</sub>	33 <sup>1</sup> / <sub>2</sub>	33 <sup>29</sup> / <sub>32</sub>	34 <sup>5</sup> / <sub>16</sub>
<sup>1</sup> / <sub>8</sub> " Bars	26 <sup>1</sup> / <sub>8</sub>	26 <sup>17</sup> / <sub>32</sub>	26 <sup>15</sup> / <sub>16</sub>	27 <sup>11</sup> / <sub>32</sub>	27 <sup>3</sup> / <sub>4</sub>	28 <sup>5</sup> / <sub>32</sub>	28 <sup>9</sup> / <sub>16</sub>	28 <sup>31</sup> / <sub>32</sub>	29 <sup>3</sup> / <sub>8</sub>	29 <sup>25</sup> / <sub>32</sub>	30 <sup>3</sup> / <sub>16</sub>	30 <sup>19</sup> / <sub>32</sub>	31	31 <sup>13</sup> / <sub>32</sub>	31 <sup>13</sup> / <sub>16</sub>	32 <sup>7</sup> / <sub>32</sub>	32 <sup>5</sup> / <sub>8</sub>	33 <sup>1</sup> / <sub>32</sub>	33 <sup>7</sup> / <sub>16</sub>	33 <sup>27</sup> / <sub>32</sub>	34 <sup>1</sup> / <sub>4</sub>
# Bars	86	87	88	89																	
<sup>3</sup> / <sub>16</sub> " Bars	34 <sup>23</sup> / <sub>32</sub>	35 <sup>1</sup> / <sub>8</sub>	35 <sup>17</sup> / <sub>32</sub>	35 <sup>15</sup> / <sub>16</sub>																	
<sup>1</sup> / <sub>8</sub> " Bars	34 <sup>21</sup> / <sub>32</sub>	35 <sup>1</sup> / <sub>16</sub>	35 <sup>15</sup> / <sub>32</sub>	35 <sup>7</sup> / <sub>8</sub>																	