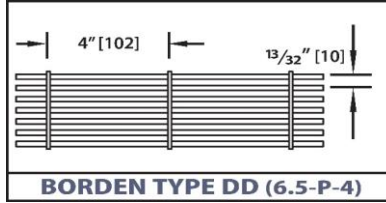




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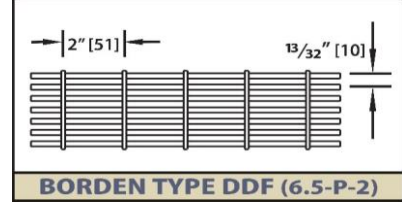
**Pressure Locked Grating  
Aluminum**

**LOAD TABLE**



**BORDEN TYPE DD (6.5-P-4)**

Free air % for 1/8 " bars: 67.07%  
Free air % for 3/16 " bars: 52.16%



**BORDEN TYPE DDF (6.5-P-2)**

Free air % for 1/8 " bars: 64.90%  
Free air % for 3/16 " bars: 50.48%

| Size No. | Bearing Bar Size | Weight lbs/sq.ft. | Moment of Inertia | Section Modulus | Maximum span recommended for 1/4" deflection under uniform load of 100 psf. (normal pedestrian traffic) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|----------|------------------|-------------------|-------------------|-----------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|--|
|          |                  |                   |                   |                 | Span in Inches  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |  |  |  |  |  |
|          |                  |                   |                   |                 | 24  | 30    | 36    | 42    | 48    | 54    | 60    | 66    | 72    | 78    | 84    | 96    | 108   |       |       |  |  |  |  |  |  |
| 1        | 3/4"x1/8"        | 3.47              | 0.1298            | 0.3462          | 42  | U     | 692   | 443   | 308   | 226   | 173   | 137   | 111   |       |       |       |       |       |       |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.192 | 0.3   | 0.432 | 0.588 | 0.768 | 0.972 | 1.2   |       |       |       |       |       |       |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 692   | 554   | 462   | 396   | 346   | 308   | 277   |       |       |       |       |       |       |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.154 | 0.24  | 0.346 | 0.47  | 0.614 | 0.778 | 0.96  |       |       |       |       |       |       |       |  |  |  |  |  |  |
| 2        | 3/4"x3/16"       | 5.11              | 0.1947            | 0.5192          | 46  | U     | 1038  | 665   | 462   | 339   | 260   | 205   | 166   |       |       |       |       |       |       |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.192 | 0.3   | 0.432 | 0.588 | 0.768 | 0.972 | 1.2   |       |       |       |       |       |       |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 1038  | 831   | 692   | 593   | 519   | 462   | 415   |       |       |       |       |       |       |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.154 | 0.24  | 0.346 | 0.47  | 0.614 | 0.778 | 0.96  |       |       |       |       |       |       |       |  |  |  |  |  |  |
| 3        | 1"x1/8"          | 4.69              | 0.3077            | 0.6154          | 52  | U     | 1231  | 788   | 547   | 402   | 308   | 243   | 197   | 163   | 137   | 117   |       |       |       |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.144 | 0.225 | 0.324 | 0.441 | 0.576 | 0.729 | 0.9   | 1.089 | 1.296 | 1.521 |       |       |       |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 1231  | 985   | 821   | 703   | 615   | 547   | 492   | 448   | 410   | 379   |       |       |       |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.115 | 0.18  | 0.259 | 0.353 | 0.461 | 0.583 | 0.72  | 0.871 | 1.037 | 1.217 |       |       |       |       |  |  |  |  |  |  |
| 4        | 1"x3/16"         | 6.81              | 0.4615            | 0.9231          | 57  | U     | 1846  | 1182  | 821   | 603   | 462   | 365   | 295   | 244   | 205   | 175   | 151   | 115   | 91    |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.144 | 0.225 | 0.324 | 0.441 | 0.576 | 0.729 | 0.9   | 1.089 | 1.296 | 1.521 | 1.764 | 2.304 | 2.916 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 1846  | 1477  | 1231  | 1055  | 923   | 821   | 738   | 671   | 615   | 568   | 527   | 462   | 410   |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.115 | 0.18  | 0.259 | 0.353 | 0.461 | 0.583 | 0.72  | 0.871 | 1.037 | 1.217 | 1.411 | 1.843 | 2.333 |       |  |  |  |  |  |  |
| 5        | 1 1/4"x1/8"      | 5.76              | 0.6010            | 0.9615          | 61  | U     | 1923  | 1231  | 855   | 628   | 481   | 380   | 308   | 254   | 214   | 182   | 157   | 120   | 95    |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.115 | 0.18  | 0.259 | 0.353 | 0.461 | 0.583 | 0.72  | 0.871 | 1.037 | 1.217 | 1.411 | 1.843 | 2.333 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 1923  | 1538  | 1282  | 1099  | 962   | 855   | 769   | 699   | 641   | 592   | 549   | 481   | 427   |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.092 | 0.144 | 0.207 | 0.282 | 0.369 | 0.467 | 0.576 | 0.697 | 0.829 | 0.973 | 1.129 | 1.475 | 1.866 |       |  |  |  |  |  |  |
| 6        | 1 1/4"x3/16"     | 8.41              | 0.9014            | 1.4423          | 68  | U     | 2885  | 1846  | 1282  | 942   | 721   | 570   | 462   | 381   | 321   | 273   | 235   | 180   | 142   |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.115 | 0.18  | 0.259 | 0.353 | 0.461 | 0.583 | 0.72  | 0.871 | 1.037 | 1.217 | 1.411 | 1.843 | 2.333 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 2885  | 2308  | 1923  | 1648  | 1442  | 1282  | 1154  | 1049  | 962   | 888   | 824   | 721   | 641   |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.092 | 0.144 | 0.207 | 0.282 | 0.369 | 0.467 | 0.576 | 0.697 | 0.829 | 0.973 | 1.129 | 1.475 | 1.866 |       |  |  |  |  |  |  |
| 7        | 1 1/2"x1/8"      | 6.83              | 1.0385            | 1.3846          | 70  | U     | 2769  | 1772  | 1231  | 904   | 692   | 547   | 443   | 366   | 308   | 262   | 226   | 173   | 137   |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.096 | 0.15  | 0.216 | 0.294 | 0.384 | 0.486 | 0.6   | 0.726 | 0.864 | 1.014 | 1.176 | 1.536 | 1.944 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 2769  | 2215  | 1846  | 1582  | 1385  | 1231  | 1108  | 1007  | 923   | 852   | 791   | 692   | 615   |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.077 | 0.12  | 0.173 | 0.235 | 0.307 | 0.389 | 0.48  | 0.581 | 0.691 | 0.811 | 0.941 | 1.229 | 1.555 |       |  |  |  |  |  |  |
| 8        | 1 1/2"x3/16"     | 10.01             | 1.5577            | 2.0769          | 77  | U     | 4154  | 2658  | 1846  | 1356  | 1038  | 821   | 665   | 549   | 462   | 393   | 339   | 260   | 205   |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.096 | 0.15  | 0.216 | 0.294 | 0.384 | 0.486 | 0.6   | 0.726 | 0.864 | 1.014 | 1.176 | 1.536 | 1.944 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 4154  | 3323  | 2769  | 2374  | 2077  | 1846  | 1662  | 1510  | 1385  | 1278  | 1187  | 1038  | 923   |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.077 | 0.12  | 0.173 | 0.235 | 0.307 | 0.389 | 0.48  | 0.581 | 0.691 | 0.811 | 0.941 | 1.229 | 1.555 |       |  |  |  |  |  |  |
| 9        | 1 3/4"x3/16"     | 11.60             | 2.4736            | 2.8269          | 87  | U     | 5654  | 3618  | 2513  | 1846  | 1413  | 1117  | 905   | 748   | 628   | 535   | 462   | 353   | 279   |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.082 | 0.129 | 0.185 | 0.252 | 0.329 | 0.417 | 0.514 | 0.622 | 0.741 | 0.869 | 1.008 | 1.317 | 1.666 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 5654  | 4523  | 3769  | 3231  | 2827  | 2513  | 2262  | 2056  | 1885  | 1740  | 1615  | 1413  | 1256  |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.066 | 0.103 | 0.148 | 0.202 | 0.263 | 0.333 | 0.411 | 0.498 | 0.592 | 0.695 | 0.806 | 1.053 | 1.333 |       |  |  |  |  |  |  |
| 10       | 2"x3/16"         | 13.20             | 3.6923            | 3.6923          | 96  | U     | 7385  | 4726  | 3282  | 2411  | 1846  | 1459  | 1182  | 976   | 821   | 699   | 603   | 462   | 365   |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.072 | 0.113 | 0.162 | 0.221 | 0.288 | 0.365 | 0.45  | 0.545 | 0.648 | 0.761 | 0.882 | 1.152 | 1.458 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 7385  | 5908  | 4923  | 4220  | 3692  | 3282  | 2954  | 2685  | 2462  | 2272  | 2110  | 1846  | 1641  |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.058 | 0.09  | 0.13  | 0.176 | 0.23  | 0.292 | 0.36  | 0.436 | 0.518 | 0.608 | 0.706 | 0.922 | 1.166 |       |  |  |  |  |  |  |
| 11       | 2 1/4"x3/16"     | 14.80             | 5.2572            | 4.6731          | 105   | U     | 9346  | 5982  | 4154  | 3052  | 2337  | 1846  | 1495  | 1236  | 1038  | 885   | 763   | 584   | 462   |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.064 | 0.1   | 0.144 | 0.196 | 0.256 | 0.324 | 0.4   | 0.484 | 0.576 | 0.676 | 0.784 | 1.024 | 1.296 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 9346  | 7477  | 6231  | 5341  | 4673  | 4154  | 3738  | 3399  | 3115  | 2876  | 2670  | 2337  | 2077  |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.051 | 0.08  | 0.115 | 0.157 | 0.205 | 0.259 | 0.32  | 0.387 | 0.461 | 0.541 | 0.627 | 0.819 | 1.037 |       |  |  |  |  |  |  |
| 12       | 2 1/2"x3/16"     | 16.39             | 7.2115            | 5.7692          | 114   | U     | 11538 | 7385  | 5128  | 3768  | 2885  | 2279  | 1846  | 1526  | 1282  | 1092  | 942   | 721   | 570   |  |  |  |  |  |  |
|          |                  |                   |                   |                 |   | Du    | 0.058 | 0.09  | 0.13  | 0.176 | 0.23  | 0.292 | 0.36  | 0.436 | 0.518 | 0.608 | 0.706 | 0.922 | 1.166 |  |  |  |  |  |  |
|          |                  | C                 |                   |                 |   | 11538 | 9231  | 7692  | 6593  | 5769  | 5128  | 4615  | 4196  | 3846  | 3550  | 3297  | 2885  | 2564  |       |  |  |  |  |  |  |
|          |                  | Dc                |                   |                 |   | 0.046 | 0.072 | 0.104 | 0.141 | 0.184 | 0.233 | 0.288 | 0.348 | 0.415 | 0.487 | 0.564 | 0.737 | 0.933 |       |  |  |  |  |  |  |

*Table compiled as per  
ANSI/NAAMM MBG 534-14*  
F - 12,000 psi  
E - 10,000,000 psi  
Alloys 6061 T6 and 6063 T6

U - Safe Uniform Load (lbs./sq.ft.)  
C - Safe Conc. load (lbs./ft. width)  
D - Deflection in inches

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.

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

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