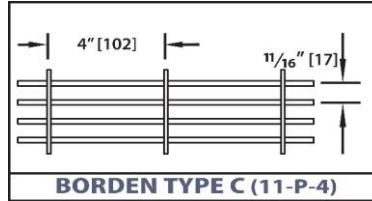




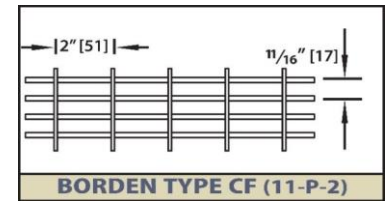
www.bordengratings.com

Sidewalk Grating Steel

LOAD TABLE



Free air % of 1/8 " bars: 79.26%
Free air % of 3/16 " bars: 70.45%



Free air % of 1/8 " bars: 76.70%
Free air % of 3/16 " bars: 68.18%

Grating Type	Weight lbs./ft ² kg/m ²	I in. ⁴ mm ⁴	S in. ³ mm ³	CL-625		OBC				H20	5 TON	3 ton	1 ton	Car
				Span L in. mm	Span L in. mm	veh>9000 kg		4000kg<veh<9000kg	4000kg>veh					
						parallel	perpendicular							
C-1 3/4"x1/8"	7.48 36.53	0.0767 31927	0.2045 3352	6.72 171	12.77 324	7.25 184	12.86 327	3.07 78	3.79 96	11.26 286	6.63 168	4.68 119	3.93 100	7.80 198
C-2 3/4"x3/16"	10.27 50.12	0.1151 47890	0.3068 5028	7.58 192	13.15 334	8.42 214	13.38 340	3.43 87	4.50 114	11.89 302	7.19 183	5.27 134	4.89 124	9.45 240
C-3 1"x1/8"	9.34 45.59	0.1818 75678	0.3636 5959	8.05 205	13.37 340	9.07 230	13.67 347	3.63 92	4.89 124	12.24 311	7.50 191	5.59 142	5.42 138	10.36 263
C-4 1"x3/16"	13.05 63.72	0.2727 113518	0.5455 8938	9.58 243	14.05 357	11.14 283	14.60 371	4.26 108	6.16 156	13.36 339	8.50 216	6.64 169	7.13 181	13.29 338
C-5 1 1/4"x1/8"	11.19 54.66	0.3551 147809	0.5682 9311	9.77 248	14.14 359	11.40 290	14.72 374	4.34 110	6.31 160	13.50 343	8.63 219	6.77 172	7.35 187	13.66 347
C-6 1 1/4"x3/16"	15.83 77.31	0.5327 221714	0.8523 13966	12.15 309	15.21 386	14.64 372	16.17 411	5.33 135	8.29 211	15.25 387	10.19 259	8.41 214	10.02 255	18.24 463
C-7 1 1/2"x1/8"	13.05 63.72	0.6136 255415	0.8182 13408	11.87 301	15.08 383	14.25 362	16.00 406	5.21 132	8.05 205	15.04 382	10.01 254	8.21 209	9.70 246	17.69 449
C-8 1 1/2"x3/16"	18.62 90.90	0.9205 383122	1.2273 20111	15.30 389	16.62 422	18.92 481	18.09 460	6.63 168	10.90 277	17.57 446	12.26 311	10.56 268	13.55 344	24.29 617
C-9 1 3/4"x3/16"	21.40 104.50	1.4616 608384	1.6705 27374	19.02 483	18.29 464	23.97 609	20.36 517	8.17 208	13.98 355	20.30 516	14.70 373	13.12 333	17.72 450	31.43 798
C-10 2"x3/16"	24.19 118.09	2.1818 908141	2.1818 35754	23.32 592	20.21 513	29.80 757	22.98 584	9.95 253	17.54 446	23.45 596	17.52 445	16.06 408	22.54 572	39.68 1008
C-11 2 1/4"x3/16"	26.97 131.68	3.1065 1293037	2.7614 45251	28.18 716	22.39 569	36.41 925	25.94 659	11.97 304	21.57 548	27.03 686	20.71 526	19.39 493	27.99 711	49.02 1245
C-12 2 1/2"x3/16"	29.75 145.28	4.2614 1773713	3.4091 55865	33.62 854	24.83 631	43.80 1113	29.26 743	14.22 361	26.08 662	31.02 788	24.28 617	23.12 587	34.09 866	55.20 1402
C-13 2 3/4"x3/16"	32.54 158.87	5.6719 2360813	4.1250 67597	39.63 1007	27.52 699	51.97 1320	32.92 836	16.71 424	31.06 789	35.43 900	28.22 717	27.24 692	40.83 1037	60.68 1541
C-14 3"x3/16"	35.32 172.46	7.3636 3064977	4.9091 80446	46.21 1174	30.47 774	59.03 1499	36.94 938	19.44 494	36.51 927	40.27 1023	32.54 827	31.76 807	48.21 1225	66.16 1680

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	14
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	7 3/4	8 7/16	9 1/8	
1/8" Bars	13/16	1 1/2	2 3/16	2 7/8	3 9/16	4 1/4	4 15/16	5 5/8	6 5/16	7	7 11/16	8 3/8	9 1/16	
# Bars	15	16	17	18	19	20	21	22	23	24	25	26	27	
3/16" Bars	9 13/16	10 1/2	11 3/16	11 7/8	12 9/16	13 1/4	13 15/16	14 5/8	15 5/16	16	16 11/16	17 3/8	18 1/16	
1/8" Bars	9 3/4	10 7/16	11 1/8	11 13/16	12 1/2	13 3/16	13 7/8	14 9/16	15 1/4	15 15/16	16 5/8	17 5/16	18	
# Bars	28	29	30	31	32	33	34	35	36	37	38	39	40	
3/16" Bars	18 3/4	19 7/16	20 1/8	20 13/16	21 1/2	22 3/16	22 7/8	23 9/16	24 1/4	24 15/16	25 5/8	26 5/16	27	
1/8" Bars	18 11/16	19 3/8	20 1/16	20 3/4	21 7/16	22 1/8	22 13/16	23 1/2	24 3/16	24 7/8	25 9/16	26 1/4	26 15/16	
# Bars	41	42	43	44	45	46	47	48	49	50	51	52	53	
3/16" Bars	27 11/16	28 3/8	29 1/16	29 3/4	30 7/16	31 1/8	31 13/16	32 1/2	33 3/16	33 7/8	34 9/16	35 1/4	35 15/16	
1/8" Bars	27 5/8	28 5/16	29	29 11/16	30 3/8	31 1/16	31 3/4	32 7/16	33 1/8	33 13/16	34 1/2	35 3/16	35 7/8	

Table compiled as per ANSI/NAAMM MBG 534-14

Revised Sept. 2019