

## Aluminum Pressure Locked Grating



Close Mesh Series; ADA (3/16" Thick Bar) ; 7-P-4 & 7- P-2 (7/16" On Center) Spacing; Rectangular

Series Type & Name	BB HGT	BB THK	PED MAX	LBS./SF		LOAD/ DEFL	Clear Span																		
				7-P-4	7-P-2		12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
PL-1-75-A & PL-1-75-A-2	3/4"	1/8"	41"	NA	NA	U	2571	1143	643	411	286	210	161	127	103	85	71	61	52	46	40	36	32	28	26
						D	0.048	0.108	0.192	0.300	0.433	0.588	0.770	0.972	1.202	1.452	1.718	2.033	2.331	2.718	3.059	3.509	3.920	4.258	4.855
						C	1286	857	643	514	429	367	321	286	257	234	214	198	184	171	161	151	143	135	129
						D	0.038	0.086	0.154	0.240	0.346	0.470	0.614	0.779	0.960	1.163	1.381	1.625	1.886	2.155	2.463	2.770	3.114	3.458	3.854
PL-1-75 & PL-1-75-2	3/4"	3/16"	45"	4.7	5.2	U	3857	1714	964	617	429	315	241	190	154	127	107	91	79	69	60	53	48	43	39
						D	0.048	0.108	0.192	0.300	0.432	0.588	0.768	0.970	1.198	1.446	1.726	2.022	2.360	2.717	3.058	3.443	3.919	4.359	4.853
						C	1928	1286	964	771	643	551	482	429	386	351	321	297	275	257	241	227	214	203	193
						D	0.038	0.086	0.154	0.240	0.346	0.470	0.614	0.778	0.961	1.163	1.381	1.624	1.878	2.159	2.457	2.776	3.106	3.466	3.843
PL-1-100-A & PL-1-100-A-2	1"	1/8"	51"	4.5	4.8	U	4571	2032	1143	731	508	373	286	226	183	151	127	108	93	81	71	63	56	51	46
						D	0.036	0.081	0.144	0.225	0.324	0.441	0.577	0.730	0.901	1.088	1.296	1.518	1.759	2.018	2.290	2.590	2.894	3.271	3.623
						C	2286	1524	1143	914	762	653	571	508	457	416	381	352	327	305	286	269	254	241	229
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.460	0.583	0.720	0.872	1.037	1.218	1.413	1.621	1.845	2.082	2.333	2.604	2.886
PL-1-100 & PL-1-100-2	1"	3/16"	56"	6.2	6.7	U	6857	3047	1714	1097	762	560	429	339	274	227	190	162	140	122	107	95	85	76	69
						D	0.036	0.081	0.144	0.225	0.324	0.441	0.577	0.730	0.899	1.090	1.293	1.518	1.765	2.026	2.301	2.603	2.928	3.250	3.622
						C	3428	2286	1714	1371	1143	980	857	762	686	623	571	527	490	457	429	403	381	361	343
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.036	1.216	1.412	1.619	1.845	2.079	2.333	2.600	2.881
PL-1-125-A & PL-1-125-A-2	1-1/4"	1/8"	60"	5.5	5.8	U	7143	3175	1786	1143	794	583	446	353	286	236	198	169	146	127	112	99	88	79	71
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.460	0.584	0.721	0.871	1.035	1.216	1.413	1.620	1.850	2.084	2.328	2.595	2.863
						C	3572	2381	1786	1429	1191	1020	893	794	714	649	595	549	510	476	446	420	397	376	357
						D	0.023	0.052	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829	0.973	1.129	1.296	1.473	1.664	1.867	2.080	2.303
PL-1-125 & PL-1-125-2	1-1/4"	3/16"	66"	7.8	8.3	U	10714	4762	2679	1714	1190	875	670	529	429	354	298	254	219	190	167	148	132	119	107
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.461	0.583	0.721	0.871	1.038	1.219	1.413	1.616	1.839	2.077	2.328	2.605	2.876
						C	5357	3571	2679	2143	1786	1531	1339	1190	1071	974	893	824	765	714	670	630	595	564	536
						D	0.023	0.052	0.092	0.144	0.207	0.282	0.369	0.466	0.576	0.697	0.830	0.973	1.128	1.295	1.475	1.664	1.865	2.080	2.305
PL-1-150-A & PL-1-150-A-2	1-1/2"	1/8"	69"	6.7	7.2	U	10286	4571	2571	1646	1143	840	643	508	411	340	286	243	210	183	161	142	127	114	103
						D	0.024	0.054	0.096	0.150	0.216	0.294	0.384	0.486	0.599	0.726	0.865	1.012	1.176	1.351	1.539	1.730	1.944	2.167	2.403
						C	5143	3429	2571	2057	1714	1469	1286	1143	1029	935	857	791	735	686	643	605	571	541	514
						D	0.019	0.043	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.080	1.229	1.387	1.554	1.732	1.919
PL-1-150 & PL-1-150-2	1-1/2"	3/16"	76"	9.4	10.1	U	15429	6857	3857	2469	1714	1259	964	762	617	510	429	365	315	274	241	214	190	171	154
						D	0.024	0.054	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.865	1.014	1.177	1.349	1.536	1.738	1.939	2.167	2.396
						C	7714	5143	3857	3086	2571	2204	1929	1714	1543	1403	1286	1187	1102	1029	964	908	857	812	771
						D	0.019	0.043	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.080	1.228	1.388	1.555	1.733	1.919
PL-1-175 & PL-1-175-2	1-3/4"	3/16"	85"	10.9	11.6	U	21000	9333	5250	3360	2333	1714	1313	1037	840	694	583	497	429	373	328	291	259	233	210
						D	0.021	0.046	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.740	0.869	1.009	1.156	1.316	1.488	1.665	1.859	2.057
						C	10500	7000	5250	4200	3500	3000	2625	2333	2100	1909	1750	1615	1500	1400	1313	1235	1167	1105	1050
						D	0.016	0.037	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	0.926	1.054	1.189	1.333	1.485	1.646
PL-1-200 & PL-1-200-2	2"	3/16"	94"	12.5	13.2	U	27429	12191	6857	4389	3048	2239	1714	1355	1097	907	762	649	560	488	429	380	339	304	274
						D	0.018	0.041	0.072	0.113	0.162	0.220	0.288	0.365	0.450	0.545	0.648	0.760	0.882	1.013	1.153	1.302	1.460	1.625	1.798
						C	13714	9143	6857	5486	4571	3918	3429	3048	2743	2494	2286	2110	1959	1829	1714	1613	1524	1444	1371
						D	0.014	0.032	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.810	0.921	1.040	1.167	1.300	1.440

PL-1-225 & PL-1-225-2	2-1/4"	3/16"	103"	14.0	14.7	U	34714	15429	8679	5554	3857	2834	2170	1714	1389	1148	964	822	708	617	542	480	429	385	347
						D	0.016	0.036	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.783	0.900	1.023	1.155	1.297	1.445	1.599
						C	17357	11571	8679	6943	5786	4959	4339	3857	3471	3156	2893	2670	2480	2314	2170	2042	1929	1827	1736
						D	0.013	0.029	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.720	0.819	0.925	1.037	1.155	1.280
PL-1-250 & PL-1-250-2	2-1/2"	3/16"	111"	16.2	16.9	U	42857	19047	10714	6857	4762	3499	2679	2116	1714	1417	1190	1014	875	762	670	593	529	475	429
						D	0.014	0.032	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.810	0.922	1.040	1.166	1.300	1.441
						C	21428	14286	10714	8571	7143	6122	5357	4762	4286	3896	3571	3297	3061	2857	2679	2521	2381	2256	2143
						D	0.012	0.026	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.648	0.737	0.832	0.933	1.040	1.152

U - Uniform Load- Lbs./Sf. D - Deflection in Inches C - Concentrated Load- Lbs./Ft. of Width at Mid Span; Loading data derived from 10.1053 bearing bars per foot of Grating width. The provided loading and deflection values are theoretical and based on a maximum allowable Fiber stress (Fs) of 12,000 PSI. Elastic Modulus (E) is stated as 10,000,000 PSI. Spans listed in the table represent clear spans (inside structural supports).

Span and loading values to the left of the bolded black line result in a deflection of 1/4" or less under a uniform load of 100 Lbs./Sf., ensuring safe pedestrian comfort. The corresponding maximum pedestrian spans under this criterion are detailed in the PED MAX column.

Span and loading values positioned to the right of the bolded black line are applicable to various load types at the discretion of a licensed engineer. In the case of Grating featuring a serrated surface (with a bearing bar height of 1" or taller and thickness of 3/16"), a deduction of 1/4" from the bearing bar height requirement is necessary, and the relevant loading information from the table should be referenced accordingly. For instance, a serrated bearing bar measuring 1-1/2" x 3/16" would exhibit equivalent strength and loading characteristics as a smooth (non-serrated) bearing bar with dimensions of 1-1/4" x 3/16".

The technical information provided is theoretical and intended for assessment by individuals with technical expertise, with any use thereof to beat their independent discretion and risk.

♿ Sizes with a 3/16" bearing bar thickness meet ADA compliant spacing requirements (1/2" maximum clear opening) when the direction of bearing bars (span) are installed perpendicular to the dominant direction of travel.

## Shandong Kind Hold New Material Co.,Ltd

—Superior Quality. Reliability. Fast Service—

Add: Unit 2, No.4 building, Dinghao Square, Jinan, Shangdong Province, China

Tel: +86-18954132627 Website: www.kindhold.com Email: info@kindhold.com

