

# Extruded Aluminum Plank Grating Load Table

Extruded Aluminum Plank Grating consists of 6" wide planks of extruded aluminum, welded to each other to form panels. Panel ends have an extruded aluminum end bar welded in place. Grating is available unpunched or punched in standard patterns.

Plank Depth	Weight PSF		2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"	5' - 6"	6' - 0"	6' - 6"	7' - 0"	8' - 0"	
1"	3.10	U	760	486	338	248	190	<b>Loads and deflections are theoretical values based on 10,000 PSI unit stress. For pedestrian comfort deflections in excess of 1/4" are not recommended.</b>  <b>U= Uniform Load , lbs. per sq. ft.</b> <b>C= Concentrated Mid-Span Load, lbs. per ft. of grating width</b> <b>D= Deflection in inches</b>							
		D	0.089	0.138	0.1999	0.271	0.354								
		C	760	608	507	434	380								
		D	0.071	0.111	0.159	0.217	.283								
1 1/4"	3.60	U	1247	798	554	407	312	246	199	<b>U= Uniform Load , lbs. per sq. ft.</b> <b>C= Concentrated Mid-Span Load, lbs. per ft. of grating width</b> <b>D= Deflection in inches</b>					
		D	0.075	0.117	0.169	0.230	0.301	0.381	0.470						
		C	1247	997	831	712	623	554	499						
		D	0.060	0.094	0.135	0.184	0.241	0.304	0.376						
1 1/2"	4.30	U	1863	1193	828	608	466	368	298	246	<b>U= Uniform Load , lbs. per sq. ft.</b> <b>C= Concentrated Mid-Span Load, lbs. per ft. of grating width</b> <b>D= Deflection in inches</b>				
		D	0.064	0.100	0.143	0.195	0.255	0.323	0.398	0.482					
		C	1863	1491	1242	1065	932	828	745	678					
		D	0.051	0.080	0.115	0.156	0.204	0.258	0.319	0.385					
1 3/4"	4.60	U	2390	1530	1062	780	598	472	382	316	266	<b>U= Uniform Load , lbs. per sq. ft.</b> <b>C= Concentrated Mid-Span Load, lbs. per ft. of grating width</b> <b>D= Deflection in inches</b>			
		D	0.055	0.087	0.125	0.170	0.222	0.280	0.346	0.419	0.499				
		C	2390	1912	1593	1366	1195	1062	956	869	797				
		D	0.044	0.069	0.100	0.136	0.177	0.224	0.277	0.335	0.399				
2"	5.30	U	3463	2217	1539	1131	866	684	554	458	385	328	283	<b>U= Uniform Load , lbs. per sq. ft.</b> <b>C= Concentrated Mid-Span Load, lbs. per ft. of grating width</b> <b>D= Deflection in inches</b>	
		D	0.051	0.079	0.114	0.155	0.203	0.256	0.317	0.383	0.456	0.535	0.621		
		C	3463	2771	2309	1979	1732	1539	1385	1259	1154	1066	990		
		D	0.041	0.063	0.091	0.124	0.162	0.205	0.253	0.307	0.365	0.428	0.496		
2 1/4"	5.50	U	4130	2643	1836	1349	1033	816	661	546	459	391	337	<b>U= Uniform Load , lbs. per sq. ft.</b> <b>C= Concentrated Mid-Span Load, lbs. per ft. of grating width</b> <b>D= Deflection in inches</b>	
		D	0.045	0.071	0.102	0.139	0.181	0.230	0.284	0.343	0.408	0.479	0.556		
		C	4130	3304	2753	2360	2065	1836	1652	1502	1377	1271	1180		
		D	0.036	0.057	0.082	0.111	0.145	0.184	0.227	0.274	0.327	0.383	0.445		
2 1/2"	5.70	U	4835	3094	2149	1579	1209	955	774	639	537	458	395	302	<b>U= Uniform Load , lbs. per sq. ft.</b> <b>C= Concentrated Mid-Span Load, lbs. per ft. of grating width</b> <b>D= Deflection in inches</b>
		D	0.041	0.064	0.093	0.126	0.165	0.208	0.257	0.311	0.370	0.434	0.504	0.658	
		C	4835	3868	3223	2763	2418	2149	1934	1758	1612	1488	1381	1209	
		D	0.033	0.051	0.074	0.101	0.132	0.167	0.206	0.249	0.296	0.348	0.403	0.526	

BarnettBates aluminum plank and band bars are 6063 - T6 extrusions per ASTM B 221.