ALUMINUM PLANK

% Open Area	
Rectangular Punched	34%

% Open Area	
Diagonal ALPlk8	8%
Diagonal ALPlk15	15%

LOAD & DEFLECTION TABLE

* Based on punched plank.

HEAVY DUTY PLANK (PLK SERIES)

Plank Size Inches	Ped. Span Inches	Sec. Prop. S_x* (in^3)	I_x* (in^4)	Approx. Weight lbs/sqft Non Punched	Approx. Weight lbs/sqft Rect Punched		Clear Span (Direction of Support Bars) 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"
3/4	39	0.224	0.105	2.2	1.8	U	447	286	198	146	111	88	71					
						Du	0.153	0.238	0.342	0.467	0.606	0.770	0.946					
						C	447	358	298	255	223	198	179					
						Dc	0.122	0.191	0.275	0.373	0.487	0.616	0.764					
1	48	0.412	0.243	2.6	2.2	U	822	526	365	268	205	162	131	108	91			
						Du	0.122	0.190	0.273	0.372	0.485	0.614	0.756	0.913	1.090			
						C	822	658	548	470	411	365	329	299	274			
						Dc	0.097	0.152	0.219	0.298	0.389	0.492	0.608	0.735	0.875			
1-1/4	57	0.704	0.491	3.2	2.8	U	1408	901	626	459	352	278	225	186	156	133	114	88
						Du	0.103	0.161	0.232	0.316	0.413	0.522	0.644	0.780	0.926	1.088	1.254	1.651
						C	1408	1126	939	805	704	626	563	512	469	433	402	352
						Dc	0.083	0.129	0.186	0.253	0.330	0.418	0.516	0.624	0.743	0.872	1.011	1.321
1-1/2	66	1.083	0.869	3.8	3.4	U	2165	1386	962	707	541	427	346	286	240	205	176	135
						Du	0.090	0.140	0.202	0.275	0.359	0.453	0.560	0.678	0.805	0.948	1.094	1.432
						C	2165	1732	1443	1237	1082	962	866	787	721	666	618	541
						Dc	0.072	0.112	0.161	0.220	0.287	0.363	0.448	0.542	0.645	0.758	0.878	1.148
1-3/4	74	1.479	1.365	4.4	4.0	U	2956	1892	1314	965	739	584	473	391	328	279	241	184
						Du	0.078	0.122	0.175	0.239	0.312	0.395	0.487	0.590	0.701	0.821	0.954	1.243
						C	2956	2365	1971	1689	1478	1314	1182	1075	985	909	844	739
						Dc	0.062	0.097	0.140	0.191	0.250	0.316	0.390	0.472	0.561	0.659	0.764	0.998
2	83	1.989	2.074	4.9	4.5	U	3979	2546	1768	1299	994	785	636	526	442	376	324	248
						Du	0.069	0.108	0.155	0.211	0.276	0.349	0.431	0.522	0.621	0.728	0.844	1.102
						C	3979	3183	2652	2273	1989	1768	1591	1446	1326	1224	1136	994
						Dc	0.055	0.086	0.124	0.169	0.221	0.280	0.345	0.418	0.497	0.584	0.676	0.883
2-1/4	91	2.591	3.008	5.5	5.0	U	5223	3342	2321	1705	1305	1031	835	690	580	494	426	326
						Du	0.063	0.098	0.141	0.191	0.250	0.316	0.390	0.472	0.562	0.660	0.765	0.999
						C	5223	4178	3482	2984	2611	2321	2089	1899	1741	1607	1492	1305
						Dc	0.050	0.078	0.113	0.153	0.200	0.253	0.313	0.378	0.450	0.528	0.613	0.800
2-1/2	97	3.028	3.888	5.9	5.5	U	6080	3891	2702	1985	1520	1201	972	804	675	575	496	380
						Du	0.056	0.088	0.127	0.172	0.225	0.285	0.352	0.426	0.506	0.594	0.689	0.901
						C	6080	4864	4053	3474	3040	2702	2432	2211	2026	1871	1737	1520
						Dc	0.045	0.070	0.101	0.138	0.180	0.228	0.282	0.341	0.405	0.476	0.552	0.721

U = Safe uniform load (psf)
C = Safe concentrated load (lbs/ft width)
D = Deflection (inches)
E = Modulus of Elasticity, 10,000,000 psi
F = Allowable Fiber Stress, 12,000 psi
Material: ASTM B221, 6063-T6

Loads and deflections shown in this table are theoretical and based on static loading.

Finish: Mill finish unless otherwise specified.

Deflection: Spans and loads to the right of the bold line exceed 1/4" deflection for uniform load of 100 psf. This can be exceeded for other types of loads with the Engineer's approval.