

## Grip-Strut® - Comparative Performance Tables 10 Diamond Plank & Walkway – 24” Width

**Note:** The data in these tables represents the performances of both side channels ignoring grating surface performance. These values are not to be used for product selection but should be used when comparisons are being made with other products whose published information does not include grating surface performance. For Product selection and Design Tables, see our website.

U=Uniform Load (lb./ft.<sup>2</sup>) C= Concentrated Load (lb.) D=Deflection (in.)

Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number	Span																			
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"			
Steel 14 ga. Plank	2" (50.8)	7.4 (11.0)	102014	U	514	329	228	168	128	102	82	68	57	49									
				D	.05	.08	.12	.16	.21	.27	.33	.40	.47	.55									
				C	1028	822	685	587	514	457	411	374	343	316	294	274	257	228	206	187	171		
Steel 12 ga. Plank	2" (50.8)	10.4 (15.5)	102012	U	650	416	289	212	162	128	104	86	72	62	53								
				D	.07	.08	.11	.15	.19	.24	.30	.37	.43	.51	.59								
				C	1300	1040	867	743	650	578	520	473	433	400	371	347	325	289	260	236	217		
Steel 14 ga. Walkway	4.5" (114.3)	8.9 (13.2)	104514-U	U	1330	851	591	434	332	263	213	176	148	126	109	95	83	66	53				
				D	.02	.04	.05	.07	.09	.12	.14	.17	.20	.24	.28	.32	.36	.46	.57				
				C	2660	2128	1773	1520	1339	1182	1064	967	887	818	760	709	665	591	532	484	443		
Steel 12 ga. Walkway	4.5" (114.3)	12.5 (18.6)	104512-U	U	2125	1360	944	694	531	420	340	281	236	201	173	151	133	105	85	70	59		
				D	.02	.03	.05	.06	.08	.11	.13	.16	.19	.22	.26	.30	.34	.43	.53	.64	.76		
				C	4200	3400	2833	2429	2125	1889	1700	1545	1417	1308	1214	1133	1062	944	850	773	708		
Steel 12 ga. Walkway	4.5" (114.3)	12.5 (18.6)	104512-U	U	2125	1360	944	694	531	420	340	281	236	201	173	151	133	105	85	70	59		
				D	.02	.03	.05	.06	.08	.11	.13	.16	.19	.22	.26	.30	.34	.43	.53	.64	.76		
				C	4200	3400	2833	2429	2125	1889	1700	1545	1417	1308	1214	1133	1062	944	850	773	708		

### Load/Deflection Conversion Formulas

In the elastic range, deflection is proportional to the applied load for both uniform and concentrated loads. This relationship can be used to determine the deflection that any load which is less than the allowable load will produce, as shown in Example A. Also, if desired, the load which will produce a specific deflection can also be determined if the load is in the elastic range as illustrated in Example B.

### Example A

What deflection will a 300 lb. concentrated load produce on a plank (catalog number 103012) spanning 5'-0"?

See page 16 for item 103012 at a span = 5'-0" C = 480 lb. D = 0.26"  
D @ 300 lb. = 0.26"/480 lb. x 300 lb. = 0.16"

### Example B

If a plank (catalog number 103012) is spanning 6'-0", what concentrated load will produce a 1/4" deflection?

See page 16 for item 103012 at a span = 6'-0" C = 400 lb. D = 0.26"  
C @ 1/4" = 400 lb./0.26" x 0.25" = 385 lb.