

Safety Grating Stair Treads and Ladder Rungs Load Tables

GRIP STRUT STEEL STAIR TREAD LOAD TABLE																	
SPAN	CHANNEL DEPTH - IN.	2-DIAMOND				3-DIAMOND				4-DIAMOND				5-DIAMOND			
		14 GA.		12 GA.		14 GA.		12 GA.		14 GA.		12 GA.		14 GA.		12 GA.	
		U	C	U	C	U	C	U	C	U	C	U	C	U	C	U	C
2'-0"	1-1/2	1191	472	1576	624	761	443	1006	587	549	435	750	595	434	425	575	563
	2	1978	783	2513	995	1262	737	1604	936	911	604	1158	917	721	573	916	897
2'-6"	1-1/2	764	378	1011	500	488	356	645	470	353	349	481	476	278	342	369	452
	2	1268	611	1611	797	810	590	1029	750	584	578	742	734	463	566	587	719
3'-0"	1-1/2	532	315	703	418	340	300	450	393	245	300	335	398	194	300	258	378
	2	892	524	1121	665	563	492	716	626	407	483	517	614	322	473	409	601
4'-0" (1)	2	498	394	633	501	318	373	404	472	230	364	292	463	182	356	232	454

ALUMINUM & STAINLESS STEEL STAIR TREAD LOAD TABLE																									
MATERIAL	GAUGE	2-DIAMOND		3-DIAMOND		4-DIAMOND		4-DIAMOND		5-DIAMOND		5-DIAMOND													
		ALUMINUM		ALUMINUM		ALUMINUM		STAINLESS		ALUMINUM		STAINLESS													
		U	C	U	C	U	C	U	C	U	C	U	C												
2'-0"	2	1328	526	1862	737	862	503	1208	705	607	481	867	687	610	483	525	416	396	388	607	595	394	386	338	331
2'-6"	2	850	420	1191	590	551	402	773	564	388	392	555	550	390	387	336	336	253	388	388	540	252	381	216	330
3'-0"	2	590	350	827	491	383	335	537	470	270	327	385	458	271	323	233	279	176	321	270	450	175	319	150	275
4'-0" (1)	2	332	263	465	369	215	252	302	353	152	245	216	344	152	244	131	210	99	241	151	338	98	241	84	221

(1) INTERMEDIATE STRINGER IS RECOMMENDED FOR SPANS OVER 4 FT.
 * AVAILABLE ON SPECIAL ORDER
 U - UNIFORM LOAD (LB./SQ. FT.), C - CONCENTRATED LOAD (LB.)

GRIP STRUT CARRIER PLATE SPECIFICATIONS							
STANDARD				W/ ABRASIVE NOSING			
A	B	C	D	A	B	C	D
4-3/4" (2-Dia.)	1-1/2" 2"	3/4" 1"	2-5/8" 2-5/8"	-	-	-	-
7" (3-Dia.)	1-1/2" 2"	3/4" 1"	3-3/8" 3-3/8"	8-1/8" (3-Dia.)	1-1/2" 2"	3/4" 1"	4-1/2" 4-1/2"
9-1/2" (4-Dia.)	1-1/2" 2"	3/4" 1"	5-7/8" 5-7/8"	10-1/2" (4-Dia.)	1-1/2" 2"	3/4" 1"	6-7/8" 6-7/8"
11-3/4" (5-Dia.)	1-1/2" 2"	3/4" 1"	8-1/8" 8-1/8"	-	-	-	-

(1) STAINLESS STEEL NOT AVAILABLE IN 2 AND 3-DIAMOND WIDTHS

LOAD DATA - SAFETY FACTOR 1.5						
	SPAN					
	16"	18"	20"	24"	30"	36"
C	528	469	422	352	281	234
D	.058	.074	.092	.132	.206	.297

C - CONCENTRATED LOAD (LB.), D - DEFLECTION (IN.)
 VALUES ARE BASED ON CONCENTRATED LOAD PLACED AT MID-SPAN

GRIP STRUT STANDARD SIZES & RECOMMENDED SPANS(1)						
			STANDARD STAIR TREADS		STAIR TREADS W/ ABRASIVE NOSING	
SPAN IN.	GAUGE	CHANNEL DEPTH IN.	CATALOG NUMBER	SIZE IN.	CATALOG NUMBER	SIZE IN.
UP TO 30	14	1-1/2	T-21514	2-Dia.-4-3/4	-	-
			T-31514	3-Dia.-7	T-31514-N	3-Dia.-8-1/8
			T-41514	4-Dia.-9-1/2	T-41514-N	4-Dia.-10-1/2
30 TO 36	14	1-1/2	T-21514	2-Dia.-4-3/4	-	-
			T-31514	3-Dia.-7	T-31514-N	3-Dia.-8-1/8
			T-41514	4-Dia.-9-1/2	T-41514-N	4-Dia.-10-1/2
36 TO 42	14	1-1/2	T-21514	2-Dia.-4-3/4	-	-
			T-31514	3-Dia.-7	T-31514-N	3-Dia.-8-1/8
			T-41514	4-Dia.-9-1/2	T-41514-N	4-Dia.-10-1/2
42 TO 48	14	2	T-21514	2-Dia.-4-3/4	-	-
			T-32014	3-Dia.-7	T-32014-N	3-Dia.-8-1/8
			T-42014	4-Dia.-9-1/2	T-42014-N	4-Dia.-10-1/2
ALUMINUM						
UP TO 42	.080"	2	T-22012-A	2-Dia.-4-3/4	-	-
			T-32012-A	3-Dia.-7	T-32012-A-N	3-Dia.-8-1/8
			T-52012-A	5-Dia.-11-3/4	-	-
UP TO 48	.100"	2	T-22010-A*	2-Dia.-4-3/4	-	-
			T-32010-A*	3-Dia.-7	T-32010-A-N*	3-Dia.-8-1/8
			T-52010-A*	5-Dia.-11-3/4	-	-
STAINLESS STEEL						
UP TO 30	TYPE 316L 16 GA.	2	T-42016-SL	4-Dia.-9-1/2	-	-
			T-52016-SL	5-Dia.-11-3/4	-	-
UP TO 36	TYPE 304L 16 GA.	2	T-42016-S	4-Dia.-9-1/2	-	-
			T-52016-S	5-Dia.-11-3/4	-	-

(1) RECOMMENDATIONS ARE BASED ON APPROX. MIN. LOADS OF 300 LB. UNIFORM. SPECIFIC PERFORMANCE CRITERIA MAY VARY BY MUNICIPALITY/BUILDING CODE BODY AND SHOULD BE LOCALLY CHECKED PRIOR TO FINALIZING SPECIFICATIONS. *AVAILABLE ON SPECIAL ORDER

GRIP STRUT HEAVY DUTY STAIR TREAD LOAD TABLE*							
STAIR TREAD			SPAN				
MATERIAL/GAUGE	CHANNEL DEPTH - IN.	WEIGHT (LB./FT.)	CATALOG NO.	2'-0"	2'-6"	3'-0"	4'-0"
STEEL 10 GA.	2	7.4	HT-22010	U 2412	1544	1026	629
	C 1860			1487	1240	929	
ALUMINUM .150"	2	2.6	HT-220-15A	U 1463	934	651	364
	C 1127			902	751	564	

* MAXIMUM ALLOWABLE TREAD LOADS.
 U - UNIFORM LOAD (LB./SQ. FT.), C - CONCENTRATED LOAD (LB.)

