

Grate-Lock Safety Grating - Safe Loading Tables

4" Channel height — 6", 9", and 12" widths

Product selection/design table

Allowable loads and deflections: U=Uniform load (lb./ft.²) C=Concentrated load (lb.) D=Deflection (in.)

Gauge	Width	Weight Lb./in.ft.	Cat. No.	Defl/ Load Code	Clear Span (Lin.Ft.)																	
					2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	
18	12"	4.24	MG124018	U	1057	996	560	359	249	183	140	111	90	74	62	53	46	40	35	31	28	
				D	0.03	0.06	0.11	0.16	0.24	0.34	0.42	0.54	0.66	0.81	0.96	1.09	1.26	1.45	1.65	1.90	2.11	
				C	529	529	529	529	529	529	529	498	448	408	374	345	320	299	280	264	249	
				D	0.00	0.01	0.04	0.08	0.13	0.21	0.32	0.44	0.53	0.65	0.77	0.87	1.01	1.17	1.33	1.50	1.68	
	9"	3.70	MG94018	U	1881	1329	747	478	332	244	187	148	120	99	83	71	61	53	47	41	37	
				D	0.02	0.06	0.12	0.18	0.26	0.35	0.47	0.58	0.72	0.86	1.03	1.21	1.41	1.60	1.83	2.05	2.34	
				C	705	705	705	705	705	641	560	498	448	408	374	345	320	299	280	264	249	
				D	0.01	0.02	0.06	0.12	0.20	0.28	0.36	0.46	0.57	0.70	0.83	0.96	1.12	1.28	1.47	1.65	1.85	
	6"	3.16	MG64018	U	4232	1993	1121	717	498	366	280	221	179	148	125	106	92	80	70	62	55	
				D	0.03	0.06	0.10	0.18	0.25	0.34	0.44	0.55	0.69	0.83	0.99	1.17	1.35	1.54	1.77	1.98	2.24	
				C	1058	1058	1058	897	747	641	560	498	448	408	374	345	320	299	280	264	249	
				D	0.01	0.04	0.08	0.13	0.19	0.26	0.35	0.45	0.55	0.67	0.80	0.93	1.07	1.24	1.41	1.60	1.78	
16*	12"	5.21	MG124016	U	1276	1215	685	439	306	226	173	138	112	93	79	69	60	53	47	42	37	
				D	0.03	0.06	0.11	0.17	0.25	0.34	0.45	0.51	0.71	0.86	1.03	1.11	1.29	1.49	1.71	1.95	2.20	
				C	638	638	638	638	638	638	638	619	560	512	472	450	420	395	373	354	337	
				D	0.00	0.01	0.04	0.08	0.14	0.21	0.33	0.46	0.57	0.69	0.83	0.89	1.03	1.20	1.37	1.56	1.76	
	9"	4.55	MG94016	U	2275	1612	907	580	403	296	227	179	145	120	101	86	75	66	58	52	47	
				D	0.02	0.06	0.10	0.16	0.24	0.37	0.48	0.60	0.75	0.91	1.07	1.27	1.48	1.71	1.96	2.22	2.51	
				C	851	851	851	851	851	777	680	604	544	495	453	420	393	369	348	330	314	
				D	0.01	0.02	0.05	0.10	0.18	0.29	0.38	0.49	0.60	0.73	0.86	1.01	1.18	1.37	1.56	1.78	2.01	
	6"	3.89	MG64016	U	5118	2418	1360	870	604	444	340	269	218	180	151	129	111	97	85	75	67	
				D	0.02	0.06	0.10	0.16	0.22	0.30	0.40	0.51	0.63	0.76	0.90	1.05	1.22	1.41	1.59	1.80	2.02	
				C	1134	1134	1134	1088	907	777	680	604	544	495	453	418	389	363	340	320	302	
				D	0.01	0.03	0.07	0.12	0.18	0.25	0.32	0.41	0.50	0.60	0.72	0.85	0.98	1.13	1.28	1.44	1.61	
14	12"	6.49	MG124014	U	1461	1448	814	521	362	266	204	161	131	109	92	79	69	61	54	48	43	
				D	0.01	0.06	0.10	0.16	0.24	0.32	0.42	0.54	0.67	0.82	0.98	1.16	1.35	1.57	1.80	2.06	2.33	
				C	730	730	730	730	730	730	730	724	655	599	554	515	483	455	430	409	391	
				D	0.00	0.01	0.04	0.07	0.12	0.20	0.30	0.43	0.54	0.65	0.78	0.93	1.08	1.26	1.44	1.65	1.87	
	9"	5.62	MG94014	U	2597	1988	1120	719	501	369	284	225	184	153	129	111	96	84	75	67	60	
				D	0.02	0.06	0.11	0.17	0.25	0.34	0.44	0.57	0.70	0.85	0.02	1.21	1.41	1.63	1.88	2.14	2.42	
				C	974	974	974	974	974	969	852	761	688	629	581	540	505	475	449	426	406	
				D	0.01	0.02	0.05	0.10	0.17	0.27	0.36	0.45	0.56	0.68	0.82	0.97	1.13	1.31	1.50	1.71	1.93	
	6"	4.80	MG64014	U	5843	2895	1629	1042	724	532	407	322	261	215	181	154	133	116	102	91	82	
				D	0.03	0.06	0.12	0.19	0.28	0.37	0.48	0.61	0.75	0.91	1.08	1.26	1.47	1.69	1.92	2.19	2.48	
				C	1461	1461	1461	1303	1086	931	814	724	651	592	513	501	465	434	407	386	367	
				D	0.01	0.04	0.09	0.15	0.21	0.30	0.39	0.49	0.60	0.73	0.87	1.01	1.18	1.35	1.54	1.75	1.98	

Notes:

These tables are prepared based on test conducted in accordance with the 1980 edition, section 6.2 of the American Iron and Steel Institute Specification for the design of cold-rolled steel structural members with results checked and adjusted where required by calculations in accordance with section 2 of the same specification.

Safe Allowable Loads with deflections equal to or less than L/120

Safe Allowable Loads with deflections equal to or less than L/240

* Available on special order. Consult factory.