

## Grate-Lock® 1-1/2" Channel Height

PRODUCT SELECTION/DESIGN TABLES																																															
GAUGE	WIDTH	WGHT/LF	CATALOG NUMBER	SPAN																																											
				2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"																																	
18	12"	2.9	MG121518	U 443	196	110	70	49	36	27	21	17	14	12	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 440	293	220	176	146	125	110	97	88	80	73	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 591	263	147	94	65	48	37	29	23	19	16	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 440	293	220	176	146	125	110	97	88	80	73	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 890	395	222	142	99	72	55	44	35	29	24	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 440	293	220	176	146	125	110	97	88	80	73	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 549	244	137	87	61	44	34	27	22	18	15	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 546	364	273	218	182	156	136	121	109	99	91	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
	9"	2.3	MG91518	U 591	263	147	94	65	48	37	29	23	19	16	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 440	293	220	176	146	125	110	97	88	80	73	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 890	395	222	142	99	72	55	44	35	29	24	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 440	293	220	176	146	125	110	97	88	80	73	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 549	244	137	87	61	44	34	27	22	18	15	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 546	364	273	218	182	156	136	121	109	99	91	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 733	326	183	117	81	59	45	36	29	24	20	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 546	364	273	218	182	156	136	121	109	99	91	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
	6"	1.9	MG61518	U 1104	490	276	176	122	90	69	54	44	36	30	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 546	364	273	218	182	156	136	121	109	99	91	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 667	296	166	106	74	54	41	32	26	22	18	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 663	442	331	265	221	189	165	147	132	120	110	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 891	396	222	142	99	72	55	44	35	29	24	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 663	442	331	265	221	189	165	147	132	120	110	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54
				U 1341	596	335	214	149	109	83	66	53	44	37	D .10	.14	.22	.33	.48	.65	.84	1.06	1.31	1.59	1.89	C 663	442	331	265	221	189	165	147	132	120	110	D .04	.10	.17	.26	.38	.52	.68	.86	1.06	1.28	1.54

## Grate-Lock® 3" Channel Height

PRODUCT SELECTION/DESIGN TABLES																																															
GAUGE	WIDTH	WGHT/LF	CATALOG NUMBER	SPAN																																											
				2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"																																	
18	12"	3.9	MG123018	U 1057	611	345	222	155	114	88	70	57	48	41	D .02	.07	.12	.19	.28	.39	.51	.65	.80	.98	1.20	C 529	529	529	529	472	405	354	316	287	263	244	D .01	.03	.07	.14	.22	.31	.41	.52	.64	.79	.95
				U 1881	840	472	302	210	154	118	93	76	62	52	D .03	.08	.13	.21	.31	.42	.55	.68	.86	1.01	1.21	C 705	705	705	567	472	405	354	315	283	258	236	D .01	.04	.11	.17	.24	.33	.44	.55	.68	.82	.98
				U 2834	1260	709	453	315	231	177	140	113	94	79	D .04	.07	.13	.21	.29	.39	.52	.66	.80	.99	1.19	C 1058	945	709	567	472	405	354	315	283	258	236	D .02	.06	.11	.16	.23	.32	.42	.53	.65	.80	.93
				U 1276	775	438	282	197	160	123	98	80	66	56	D .02	.07	.12	.20	.28	.45	.59	.75	.93	1.13	1.35	C 638	638	638	638	591	559	492	440	398	365	337	D .01	.03	.07	.15	.23	.36	.47	.60	.74	.90	1.08
	9"	4.1	MG93018	U 2275	1029	581	373	261	193	149	118	97	81	69	D .03	.07	.13	.21	.30	.41	.54	.69	.87	1.06	1.27	C 851	851	851	700	587	506	446	400	363	333	309	D .01	.04	.11	.17	.24	.33	.44	.56	.69	.85	1.02
				U 3418	1519	854	547	380	279	214	169	137	113	95	D .03	.07	.12	.20	.28	.39	.50	.64	.79	.95	1.13	C 1134	1134	854	684	570	480	427	380	342	310	286	D .02	.05	.10	.15	.23	.31	.40	.51	.63	.76	.91
				U 1461	950	536	345	241	178	137	109	89	74	63	D .02	.07	.13	.20	.29	.40	.53	.67	.84	1.02	1.23	C 730	730	730	730	722	622	548	491	446	409	379	D .01	.03	.07	.14	.23	.32	.42	.54	.67	.82	.98
				U 2597	1477	831	532	369	271	208	164	133	110	92	D .03	.09	.16	.25	.36	.48	.63	.79	.98	1.19	1.40	C 974	974	974	974	831	712	623	554	498	453	415	D .01	.04	.10	.20	.28	.38	.50	.63	.78	.95	1.12
	6"	4.3	MG63014	U 4984	2215	1246	797	554	407	311	246	199	165	138	D .04	.09	.15	.24	.34	.46	.60	.76	.94	1.14	1.35	C 1461	1461	1246	997	831	712	623	554	498	453	415	D .02	.06	.12	.19	.27	.36	.48	.61	.75	.91	1.08

NOTES: 1. THESE TABLES ARE PREPARED BASED ON TESTS 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 THE RESULTS CHECKED AND ADJUSTED WHERE REQUIRED BY CALCULATIONS IN ACCORDANCE WITH SECTION 2 OF THE SAME SPECIFICATION.  
2. SYMBOLS ARE AS FOLLOWS: U = ALLOWABLE SIMPLE SPAN UNIFORM LOAD (LBS/FT), C = ALLOWABLE SIMPLE SPAN CONCENTRATED LINE LOAD (LB.) AT MIDSPAN, D = VERTICAL DEFLECTION (IN.) AT MIDSPAN  
3. SPANS TO THE LEFT OF THE HEAVY LINE PRODUCE DEFLECTION OF 1/4" OR LESS UNDER A UNIFORM LOAD OF 100 LBS. PER SQUARE FOOT.

## Grate-Lock® 2-1/2" Channel Height

PRODUCT SELECTION/DESIGN TABLES																																															
GAUGE	WIDTH	WGHT/LF	CATALOG NUMBER	SPAN																																											
				2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"																																	
18	12"	3.7	MG122518	U 1057	552	312	200	140	103	80	64	52	43	36	D .03	.10	.17	.27	.39	.54	.71	.90	1.13	1.38	1.61	C 529	529	529	501	420	362	319	286	260	239	217	D .01	.05	.12	.22	.31	.43	.57	.72	.90	1.09	1.33
				U 1552	691	390	251	175	129	100	79	65	54	46	D .05	.10	.18	.28	.41	.56	.74	.95	1.18	1.44	1.73	C 705	705	585	470	394	339	299	268	243	223	207	D .02	.07	.14	.23	.33	.45	.59	.76	.94	1.15	1.38
				U 2141	954	538	346	241	178	137	109	89	74	63	D .04	.09	.16	.25	.36	.50	.65	.83	1.04	1.27	1.52	C 1053	715	538	432	362	312	274	246	223	204	189	D .04	.07	.13	.20	.29	.40	.52	.67	.83	1.01	1.22
				U 1276	655	370	238	166	123	95	76	62	52	44	D .03	.10	.17	.27	.39	.54	.71	.91	1.13	1.39	1.67	C 638	638	638	595	499	432	381	342	312	285	261	D .01	.05	.12	.22	.31	.43	.57	.72	.91	1.10	1.31
	9"	3.2	MG92518	U 1949	869	491	316	220	163	126	100	82	69	58	D .05	.10	.18	.29	.41	.57	.75	.96	1.19	1.46	1.76	C 851	851	736	592	496	428	378	339	308	283	261	D .02	.09	.15	.23	.33	.45	.60	.76	.95	1.17	1.40
				U 2774	1235	696	447	312	230	177	140	114	95	81	D .04	.09	.17	.26	.38	.51	.67	.86	1.06	1.30	1.55	C 1134	926	696	559	467	402	354	316	286	262	242	D .02	.07	.13	.21	.30	.41	.54	.69	.85	1.04	1.24
				U 1276	783	442	284	199	147	113	90	74	62	52	D .03	.10	.17	.27	.39	.54	.71	.91	1.13	1.38	1.63	C 730	730	730	711	596	514	454	407	370	338	310	D .01	.05	.12	.22	.31	.43	.57	.72	.90	1.09	1.31
				U 2357	1050	593	381	266	196	151	121	98	82	70	D .04	.10	.18	.28	.41	.56	.74	.94	1.17	1.43	1.72	C 974	974	889	714	598	516	454	407	369	339	314	D .02	.07	.14	.23	.33	.45	.59	.75	.94	1.14	1.38
	6"	3.2	MG62518	U 3722	1654	931	596	414	304	233	184	149	123	103	D .05	.10	.18	.29	.42	.56	.74	.93	1.15	1.39	1.65	C 1461	1241	931	744	620	532	465	414	372	338	310	D .03	.09	.14	.23	.33	.45	.58	.74	.92	1.11	1.32

## Grate-Lock® 4" Channel Height

PRODUCT SELECTION/DESIGN TABLES															
GAUGE	WIDTH	WGHT/LF	CATALOG NUMBER	SPAN											
				2'-0"	3'-0"	4'-0"	5'-0"	6							