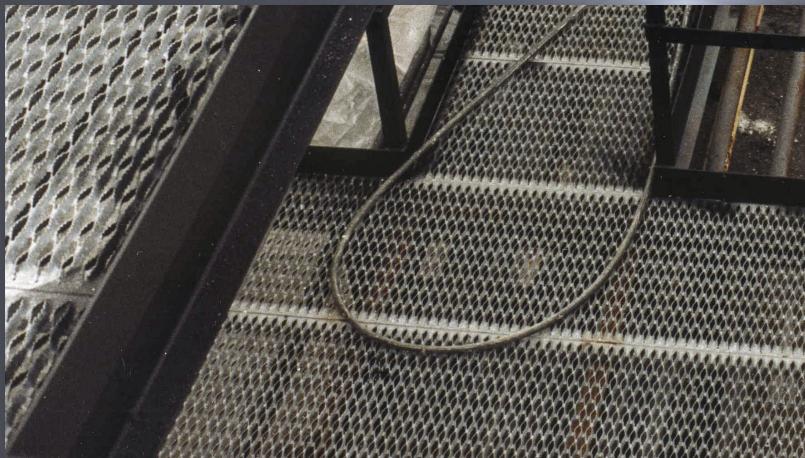




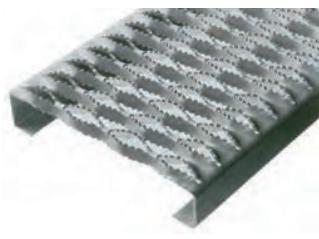
# SAFETY GRATING



**WHEN SAFETY IS THE UTMOST PRIORITY**

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Diamond-Grip Channel



Safety-Grip Channel



Safety-Tread Channel



Safety-Tread Flooring



Ladder Rungs

# SAFETY GRATING

## DIAMOND-GRIP® CHANNEL

Diamond-Grip® Channel is a one-piece metal plank grating manufactured by a cold forming process in the shape of a channel. The web of the channel is the walking surface and has rough serrated edges around diamond shaped openings.

### FEATURES & BENEFITS

- Serrated edges around diamond shaped openings provide slip resistance under slippery conditions such as snow, ice, grease, oil, etc.
- One-piece metal construction.
- Lightweight design provides high strength to weight ratio.
- Long life span requiring little maintenance.
- Simple and economical installation as planks are self-framing.
- Adaptable to cost effective custom fabrication.
- Can be easily formed in standard channel or custom shapes.



### MATERIAL SPECIFICATIONS

Grating shall be "Diamond-Grip® Channel," manufactured from (see 'Material Options' below) and complete with a (1-1/2", 2", 2-1/2", 3") side channel depth, by AMICO.



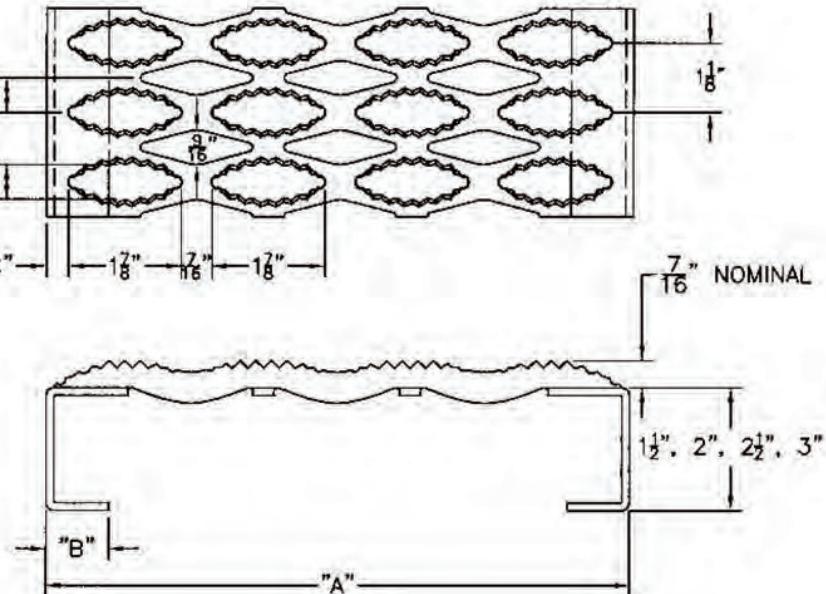
### MATERIAL OPTIONS

- ASTM-A-653, G-90 (Z-275) Pre-galvanized 14 and 12GA steel.
- ASTM-A-1011, HRP&O 14 and 12GA steel.
- ASTM B209, 5052-H32 Aluminum, .080" and .100" thick.
- ASTM A240, Type 316L 2B Stainless Steel 14GA (up to 11-3/4" width).
- ASTM A240, Type 304L 2B Stainless Steel 16GA (up to 11-3/4" width).

Channel Width A	Return Flange B	Diamond to Outside C
4-3/4"	7/8"	5/16"
7"	1"	1/4"
9-1/2"	7/8"	1/4"
11-3/4"	1"	3/16"
18-3/4"	1"	3/16"
24"	1-1/8"	7/16"

### NOTE:

- Tolerances on all dimensions are  $\pm 1/8"$
- Standard lengths are 121½" & 144".
- Tolerance on manufactured and cut lengths is  $\pm 1/8"$ .
- When cutting Diamond-Grip®, AMICO® recommends cutting to full or half diamond increments. Contact sales for actual dimensions.
- Camber is an expected condition with sheet metal products. While ASTM allowance is generous, AMICO attempts to lessen the effects. Normal clearances should offset this phenomenon, however where tolerances warrant, contact AMICO for clarification.



# SAFETY GRATING

## DIAMOND-GRIP® CHANNEL LOAD & DEFLECTION TABLES

### 4 3/4 Inch Wide - 2 Diamond

#### PRODUCT DETAILS

Type	Depth Weight	Ix IN. <sup>4</sup> Sx IN. <sup>3</sup>	CLEAR SPAN																
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"
Steel 14 GA	1-1/2" 2.3 lb/ft	U	1516	970	674	495	379	299	243	200	168	0.51	0.61	0.73					
		D	0.09	0.13	0.19	0.25	0.32	0.41											
		C	600	480	400	343	300	267	240	218	200	0.45	0.57	0.59					
		D	0.06	0.10	0.15	0.21	0.26	0.33											
	2" 2.5 lb/ft	U	2236	1431	994	730	559	442	358	296	248	212	183	159	140	110	89		
		D	0.06	0.08	0.13	0.17	0.22	0.29	0.34	0.42	0.50	0.59	0.68	0.78	0.90	1.12	1.38		
		C	885	708	590	506	443	393	354	322	295	272	253	236	221	197	177		
		D	0.06	0.07	0.10	0.14	0.17	0.23	0.27	0.33	0.40	0.46	0.54	0.63	0.71	0.90	1.11		
Steel 12 GA	1-1/2" 3.0 lb/ft	U	1790	1147	798	587	451	357	290	240	203	173	150	131	116				
		D	0.07	0.10	0.15	0.20	0.27	0.34	0.42	0.51	0.61	0.71	0.83	0.96	1.09				
		C	708	568	474	407	357	318	287	262	241	223	208	195	184				
		D	0.05	0.08	0.12	0.16	0.21	0.27	0.33	0.41	0.48	0.57	0.66	0.77	0.88				
	2" 3.3 lb/ft	U	2255	1445	1005	739	567	449	365	302	255	218	188	165	145	116	95	79	67
		D	0.05	0.07	0.10	0.14	0.19	0.24	0.29	0.35	0.42	0.50	0.58	0.67	0.76	0.98	1.22	1.49	1.79
		C	892	715	597	512	449	400	361	329	303	280	261	245	230	206	188	172	160
		D	0.04	0.06	0.08	0.11	0.15	0.19	0.21	0.28	0.34	0.40	0.46	0.53	0.61	0.78	0.97	1.19	1.43
Alum .080"	2" .93 lb/ft	U	1398	895	622	457	350	277	225	186	156	133	115	101	89				
		D	0.09	0.14	0.20	0.27	0.36	0.45	0.56	0.68	0.81	0.95	1.11	1.27	1.45				Type 5052 H32
	2" 1.16 lb/ft	C	553	443	369	317	277	247	222	202	186	172	160	149	140				
		D	0.07	0.11	0.16	0.22	0.29	0.36	0.45	0.54	0.65	0.76	0.88	1.02	1.16				
Alum .100"	2" 1.16 lb/ft	U	1794	1148	797	586	448	354	287	237	199	170	146	128	112				Type 5052 H32
		D	0.09	0.14	0.21	0.28	0.37	0.46	0.57	0.69	0.83	0.97	1.12	1.29	1.47				
	2" 1.16 lb/ft	C	710	568	473	406	355	316	284	258	237	218	203	189	178				
		D	0.08	0.12	0.17	0.23	0.30	0.37	0.46	0.56	0.66	0.78	0.90	1.03	1.18				
Stainless Steel 14 GA	2" 2.5 lb/ft	U	1730	1109	772	568	436	346	281	233	196	168	146	127	113				Type 316
		D	0.05	0.07	0.10	0.14	0.18	0.23	0.29	0.35	0.42	0.49	0.57	0.66	0.76				
	2" 2.5 lb/ft	C	685	549	458	394	345	308	278	254	233	216	202	189	178				
		D	0.04	0.06	0.08	0.11	0.15	0.19	0.23	0.28	0.33	0.39	0.46	0.53	0.61				

#### Explanation of Load Type

U = uniform load (lb/ft<sup>2</sup>)

D = corresponding deflection (in) resulting from uniform load

C = concentrated load (lb)

D = corresponding deflection (in) resulting from concentrated load

#### Note:

- All UDL and concentrated loads include a safety factor of 1.67.
- Spans and loads to the right of the bold line, based on loads indicated, may exceed deflections of L/120.
- 2½" channel not shown in tables. Available by special request only.

# SAFETY GRATING

## DIAMOND-GRIP® CHANNEL LOAD & DEFLECTION TABLES

### 7 Inch Wide - 3 Diamond

#### PRODUCT DETAILS

Type	Depth Weight	Ix IN. <sup>4</sup> Sx IN. <sup>3</sup>	CLEAR SPAN																
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"
Steel 14 GA	1-1/2"	.115	U 766	492	343	253	194	154	126	105	92								
			D 0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45	0.55								
	2.9 lb/ft	.141	C 447	358	300	258	227	203	183	168	159								
			D 0.05	0.07	0.11	0.14	0.19	0.24	0.30	0.36	0.44								
	2"	.235	U 1374	881	613	451	347	275	223	185	156	134	116	101	90	72	59		
			D 0.05	0.08	0.11	0.15	0.20	0.25	0.31	0.38	0.46	0.54	0.63	0.72	0.83	1.06	1.32		
Steel 12 GA	3.2 lb/ft	.186	C 802	642	536	461	404	361	326	297	273	254	237	222	209	188	172		
			D 0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.31	0.36	0.43	0.50	0.58	0.66	0.85	1.06		
	1-1/2"	.154	U 1304	836	582	428	329	261	212	176	148	127	110	96	85				
			D 0.07	0.11	0.16	0.22	0.29	0.36	0.45	0.55	0.65	0.77	0.90	1.04	1.18				
	3.9 lb/ft	.194	C 761	609	509	437	384	342	309	282	259	240	224	210	198				
			D 0.06	0.09	0.13	0.17	0.23	0.29	0.36	0.44	0.52	0.62	0.72	0.83	0.95				
Steel 12 GA	2"	.313	U 1710	1096	762	561	430	341	277	230	194	165	143	125	111	88	72	60	51
			D 0.05	0.08	0.11	0.15	0.20	0.26	0.32	0.38	0.46	0.54	0.63	0.72	0.83	1.06	1.32	1.62	1.95
	4.4 lb/ft	.254	C 997	799	667	573	502	447	404	368	339	314	292	274	258	232	211	194	180
			D 0.04	0.06	0.09	0.12	0.16	0.20	0.25	0.31	0.37	0.43	0.50	0.58	0.66	0.85	1.06	1.29	1.56
	3"	1.263	U 3247	2080	1446	1063	815	645	523	433	365	309	267	233	205	163	133	111	94
			D 0.04	0.06	0.08	0.11	0.14	0.18	0.22	0.27	0.32	0.38	0.44	0.50	0.57	0.73	0.91	1.11	1.33
Alum .080"	5.1 lb/ft	.532	C 1894	1516	1265	1086	951	847	763	695	639	585	545	510	479	428	388	355	328
			D 0.03	0.04	0.06	0.09	0.11	0.14	0.18	0.22	0.26	0.30	0.35	0.40	0.46	0.58	0.73	0.89	1.06
	2"	.266	U 975	624	434	319	244	193	157	130	109	93	81						
			D 0.10	0.16	0.23	0.31	0.40	0.51	0.63	0.76	0.91	1.07	1.24						
	1.2 lb/ft	.212	C 568	455	380	326	285	254	229	208	191	177	164						
			D 0.08	0.13	0.18	0.25	0.32	0.41	0.50	0.61	0.73	0.85	1.00						
Alum .100"	2"	.333	U 1169	748	520	382	292	231	187	155	130	111	95	83	73				
			D 0.08	0.12	0.17	0.23	0.30	0.37	0.46	0.56	0.67	0.78	0.90	1.04	1.18				
	1.5 lb/ft	.265	C 682	546	455	390	341	303	273	248	227	210	195	182	171				
			D 0.06	0.10	0.14	0.18	0.24	0.30	0.37	0.45	0.53	0.63	0.73	0.83	0.95				
Stainless Steel 14 GA	2"	.383	U 1819	1166	811	597	458	363	295	244	206	176	153	133	118				
			D 0.08	0.13	0.18	0.25	0.33	0.41	0.51	0.62	0.74	0.88	1.02	1.18	1.35				
	3.2 lb/ft	.310	C 1061	850	710	609	534	476	430	392	361	334	311	292	275				
			D 0.06	0.10	0.15	0.20	0.26	0.33	0.41	0.50	0.60	0.70	0.82	0.94	1.08				

#### Explanation of Load Type

U = uniform load (lb/ft<sup>2</sup>)

D = corresponding deflection (in) resulting from uniform load

C = concentrated load (lb)

D = corresponding deflection (in) resulting from concentrated load

#### Note:

- All UDL and concentrated loads include a safety factor of 1.67.
- Spans and loads to the right of the bold line, based on loads indicated, may exceed deflections of L/120.
- 2½" channel not shown in tables. Available by special request only.

# SAFETY GRATING

## DIAMOND-GRIP® CHANNEL LOAD & DEFLECTION TABLES

### 9 1/2 Inch Wide - 4 Diamond

#### PRODUCT DETAILS

Type	Depth Weight Sx IN. <sup>3</sup>	CLEAR SPAN																		
		24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"		
Steel 14 GA	1-1/2"	.128	U	779	499	346	255	195	154	125	103	87	0.52 0.62 0.74	70 56 46	0.86 1.10 1.38	221 199 181				
	3.5 lb/ft	.170	D	0.09	0.12	0.19	0.26	0.33	0.41	0.52	0.62	0.74								
	2"	.264	C	617	494	411	353	309	274	247	224	206	0.41 0.50 0.60							
	3.7 lb/ft	.224	D	0.06	0.10	0.15	0.20	0.27	0.33	0.41	0.50	0.60								
Steel 12 GA	1-1/2"	.172	U	988	634	441	325	249	198	161	133	113	96	84	73	65	1.26 205 1.01			
	4.8 lb/ft	.225	D	0.08	0.12	0.17	0.23	0.30	0.39	0.48	0.58	0.69	0.82	0.95	1.10	1.26				
	2"	.354	C	782	627	524	450	395	352	318	291	268	248	232	218	205				
	5.1 lb/ft	.306	D	0.06	0.09	0.14	0.19	0.24	0.31	0.38	0.46	0.55	0.65	0.76	0.88	1.01				
Alum .080"	3"	1.363	U	1382	886	616	453	348	276	224	186	157	134	116	101	90	72	59	49	42
	5.8 lb/ft	.605	D	0.05	0.08	0.12	0.16	0.21	0.27	0.34	0.41	0.49	0.57	0.67	0.77	0.88	1.13	1.41	1.72	2.08
	2"	.300	C	1094	876	732	628	551	491	443	404	372	345	321	301	284	255	232	213	198
	1.4 lb/ft	.256	D	0.04	0.07	0.10	0.13	0.17	0.22	0.27	0.33	0.39	0.46	0.54	0.62	0.71	0.89	1.13	1.38	1.66
Alum .100"	2"	.375	U	2270	1453	1009	741	567	548	444	367	308	263	226	197	173	137	111	92	77
	1.75 lb/ft	.32	D	0.04	0.06	0.08	0.11	0.14	0.22	0.28	0.33	0.40	0.47	0.54	0.62	0.70	0.89	1.10	1.35	1.60
	2"	.143	C	1355	1355	1355	1255	1098	976	878	799	732	676	627	586	549	488	439	399	366
	3.2 lb/ft	.165	D	0.02	0.04	0.07	0.11	0.15	0.18	0.22	0.27	0.32	0.38	0.43	0.49	0.56	0.71	0.89	1.04	1.27
Stainless Steel 16 GA	2"	.401	U	750	480	330	240	186	147	120	99	82	70	58	47	39	27	Type 304		
	3.7 lb/ft	.287	D	0.06	0.09	0.13	0.18	0.24	0.30	0.37	0.45	0.53	0.63	0.70	0.75	0.80	0.90			
	2"	.455	C	455	455	398	341	299	265	239	217	199	184	171	159	149	133			
	3.2 lb/ft	.300	D	0.04	0.07	0.11	0.15	0.19	0.24	0.30	0.36	0.43	0.51	0.59	0.67	0.76	0.97			
Stainless Steel 14 GA	2"	.401	U	1540	887	687	506	388	307	250	207	175	149	129	113	100	80	Type 316		
	3.7 lb/ft	.287	D	0.07	0.11	0.16	0.22	0.28	0.36	0.44	0.54	0.64	0.76	0.88	1.02	1.17	1.49			
	2"	.455	C	915	915	816	700	614	548	494	451	415	384	358	336	316	284			
	3.2 lb/ft	.300	D	0.04	0.08	0.13	0.17	0.23	0.29	0.36	0.43	0.52	0.61	0.71	0.82	0.93	1.19			

#### Explanation of Load Type

U = uniform load (lb/ft<sup>2</sup>)

D = corresponding deflection (in) resulting from uniform load

C = concentrated load (lb)

D = corresponding deflection (in) resulting from concentrated load

#### Note:

- All UDL and concentrated loads include a safety factor of 1.67.
- Spans and loads to the right of the bold line, based on loads indicated, may exceed deflections of L/120.
- 2½" channel not shown in tables. Available by special request only.

# SAFETY GRATING

## DIAMOND-GRIP® CHANNEL LOAD & DEFLECTION TABLES

### 11 3/4 Inch Wide - 5 Diamond

#### PRODUCT DETAILS

Type	Depth Weight	Ix IN. <sup>4</sup> Sx IN. <sup>3</sup>	CLEAR SPAN															
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"
Steel 14 GA	1-1/2"	.146	U 543 349 243	D 0.06 0.10 0.15	179 138 110	89 74 63												
	4.1 lb/ft	.178	C 493 427 357	D 0.05 0.08 0.12	307 270 242	219 201 185												
	2"	.314	U 895 574 400	D 0.05 0.08 0.12	295 226 179	146 121 102	87 75 65					57 45						
	4.5 lb/ft	.247	C 493 493 493	D 0.02 0.05 0.08	493 443 395	357 326 299	276 259 239	224 199										
					0.13 0.17	0.22	0.27	0.33 0.39	0.46 0.53	0.60	0.69 0.87							
Steel 12 GA	1-1/2"	.195	U 842 540 376	D 0.08 0.13 0.18	276 212 168	137	113 95	82 71 62	55									
	5.7 lb/ft	.244	C 815 661 552	D 0.06 0.10 0.14	474 415 370	334	305 280	260 242 227	214									
	2"	.419	U 1243 797 554	D 0.06 0.09 0.13	408 313 248	200 166 139	119 102 89	78 62 50	41									
	6.1 lb/ft	.338	C 815 815 814	D 0.03 0.06 0.10	699 613 545	491 446 409	378 351 327	307 273 245	223									
	3"	1.672	U 1666 1363 946	D 0.03 0.07 0.10	695 532 421	341 282 237	202 174 151	133 105 85	70 59									
	6.7 lb/ft	.702	C 815 815 815	D 0.01 0.03 0.05	815 815 815	815 758 695	642 596 556	521 463 417	379 347									
Alum .080"	2"	.355	U 715 457 319	D 0.15 0.23 0.33	233 179 141	114 94 79	68 58 51	45										
	1.6 lb/ft	.283	C 362 362 362	D 0.06 0.12 0.21	362 350 311	280 254 233	215 200 187	175										Type 5052 H32
Alum .100"	1.5"	.207	U 493 316 219	D 0.08 0.13 0.19	161 123 97	79 65 55	47 40 35	31										
	1.9 lb/ft	.254	C 483 386 322	D 0.07 0.11 0.15	276 241 215	193 176 161	149 138 129	121										Type 5052 H32
Alum .100"	2"	.444	U 725 464 322	D 0.06 0.09 0.13	237 181 143	116 96 81	69 59 52	45										
	2.0 lb/ft	.354	C 710 568 473	D 0.05 0.07 0.11	406 355 316	284 258 237	218 203 189	178										Type 5052 H32
Stainless Steel 16 GA	2"	.143	U 606 426 296	D 0.05 0.08 0.11	218 167 132	107 88 74	63 54 48	41 29										
	3.7 lb/ft	.165	C 376 376 376	D 0.02 0.04 0.07	376 333 296	266 242 222	205 190 178	166 148										Type 304
Stainless Steel 14 GA	2"	.427	U 1276 812 565	D 0.09 0.14 0.20	416 319 253	206 171 144	123 107 93	82 66										
	4.5 lb/ft	.313	C 899 899 830	D 0.05 0.10 0.16	713 625 557	503 459 423	392 365 343	323 290										Type 316
Explanation of Load Type																		
U = uniform load (lb/ft <sup>2</sup> )																		
D = corresponding deflection (in) resulting from uniform load																		
C = concentrated load (lb)																		
D = corresponding deflection (in) resulting from concentrated load																		
Note:																		
• All UDL and concentrated loads include a safety factor of 1.67.																		
• Spans and loads to the right of the bold line, based on loads indicated, may exceed deflections of L/120.																		
• 2 1/2" channel not shown in tables. Available by special request only.																		



# SAFETY GRATING

## DIAMOND-GRIP® WALKWAY

### PRODUCT DESCRIPTION

Diamond-Grip® Walkway is a one-piece metal plank grating manufactured by a cold forming process in the shape of an inverted channel. The web of the channel is the walking surface and has rough serrated edges around diamond shaped openings. The extended flanges support the load and provide a built in kickplate (toeboard).



### FEATURES & BENEFITS

- Serrated edges around diamond shaped openings provide slip resistance under slippery conditions such as snow, ice, grease, oil, etc.
- One-piece metal construction complete with a full height toeboard on each side of the walking surface.
- Lightweight design provides high strength to weight ratio.
- Long life span requiring little maintenance.
- Simple and economical installation as walkways are self-framing.
- Adaptable to cost effective custom fabrication.



### MATERIAL SPECIFICATIONS

Grating shall be "Diamond-Grip® Walkway," manufactured from (**see 'MATERIAL OPTIONS' below**) and complete with an (4-1/2", 5") integral toeboard, by AMICO.

#### MATERIAL OPTIONS

- ASTM-A-653, G-90 (Z-275) pre-galvanized 14 or 12GA steel.
- ASTM-A-1011, HRP&O 14 or 12GA steel.

# SAFETY GRATING

## DIAMOND-GRIP® WALKWAY LOAD & DEFLECTION TABLES

### PRODUCT DETAILS

Type	Depth Weight	Ix IN. <sup>4</sup> Sx IN. <sup>3</sup>	CLEAR SPAN															
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"
24" Wide 14 GA	4-1/2" 8.9 lb/ft	1.447	U 300 300 300	300 300 263	213 176 145	124 110 94	84 67 55	44 37										
			D 0.50 0.51 0.52	0.55 0.58 0.55	0.49 0.46 0.45	0.43 0.47 0.46	0.51 0.58 0.67	0.75 0.87										
	12.5 lb/ft	.776	C 300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300
			D 0.40 0.40 0.40	0.41 0.42 0.43	0.44 0.46 0.48	0.50 0.53 0.56	0.60 0.69 0.80	0.95 1.10										
24" Wide 12 GA	4-1/2" 12.5 lb/ft	2.457	U 475 475 475	475 475 429	348 287 240	203 177 150	135 107 87	71 60										
			D 0.45 0.46 0.47	0.49 0.52 0.51	0.47 0.43 0.42	0.41 0.43 0.43	0.48 0.54 0.62	0.72 0.84										
	12.5 lb/ft	1.171	C 475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475
			D 0.36 0.36 0.36	0.36 0.36 0.39	0.41 0.43 0.44	0.46 0.49 0.51	0.54 0.60 0.70	0.81 0.95										
24" Wide 14 GA	5" 9.6 lb/ft	1.929	U 300 300 300	300 300 263	213 176 145	124 110 94	84 67 55	44 37										
			D 0.50 0.50 0.52	0.54 0.56 0.55	0.46 0.42 0.39	0.38 0.40 0.39	0.42 0.47 0.53	0.58 0.67										
	5" 13.1 lb/ft	.917	C 300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	300 300 300	
			D 0.40 0.40 0.40	0.40 0.41 0.42	0.43 0.45 0.46	0.48 0.50 0.52	0.55 0.62 0.70	0.82 0.97										
24" Wide 12 GA	5" 13.1 lb/ft	3.247	U 475 475 475	475 475 429	348 287 240	203 177 150	135 107 87	71 60										
			D 0.45 0.46 0.46	0.48 0.50 0.49	0.44 0.39 0.37	0.36 0.37 0.36	0.39 0.43 0.49	0.56 0.65										
	13.1 lb/ft	1.385	C 475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475	475 475 475
			D 0.36 0.36 0.36	0.36 0.37 0.38	0.40 0.41 0.42	0.43 0.44 0.47	0.49 0.55 0.61	0.69 0.80										

### Explanation of Load Type

U = uniform load (lb/ft<sup>2</sup>)

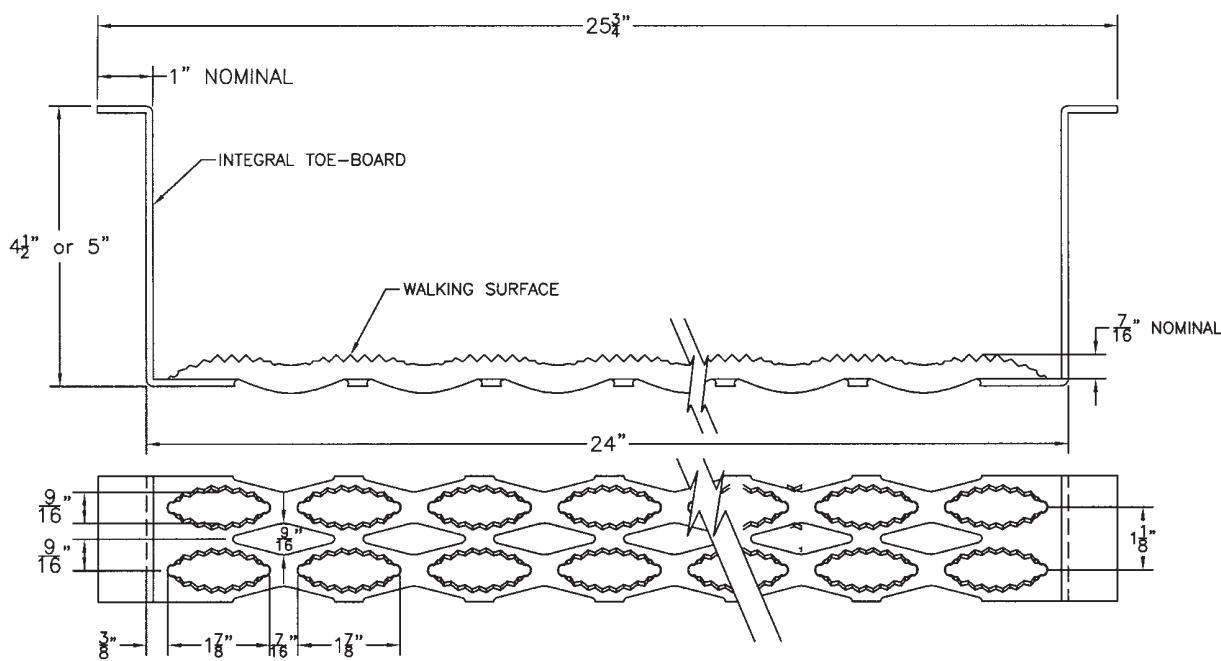
D = corresponding deflection (in) resulting from uniform load

C = concentrated load (lb)

D = corresponding deflection (in) resulting from concentrated load

### Note:

- All UDL and concentrated loads include a safety factor of 1.67.
- Strut deflection may become a limiting factor resulting in lower load values as indicated in table.



### Note:

- Tolerances on all dimensions are  $\pm 1/8"$
- Standard lengths are 121-1/2" & 144".
- Tolerance on manufactured and cut lengths is  $\pm 1/8"$ .
- When cutting Diamond-Grip®, AMICO® recommends cutting to full or half diamond increments.
- Camber is an expected condition with sheet metal products. While ASTM allowance is generous, AMICO attempts to lessen the effects. Normal clearances should offset this phenomenon, however where tolerances warrant, contact AMICO for clarification.

# SAFETY GRATING

## SAFETY-GRIP® CHANNEL

### PRODUCT DESCRIPTION

Safety-Grip® Channel is a one-piece metal plank grating manufactured by a cold forming process in the shape of a channel. The web of the channel is the walking surface and has large debossed holes, surrounded by smaller embossed traction buttons.



### FEATURES & BENEFITS

- Embossed traction buttons provide superior slip resistance in all directions and in all weather conditions.
- Large debossed holes provide maximum drainage of debris and allow up to 50% free air opening depending on channel width.
- Self-cleaning due to resilience of walking surface.
- One-piece metal construction.
- Lightweight design provides high strength to weight ratio.
- Long life span requiring little maintenance.
- Simple and economical installation as planks are self-framing.
- Adaptable to cost effective custom fabrication.
- Can be easily formed in standard channel or custom shapes.

### MATERIAL SPECIFICATIONS

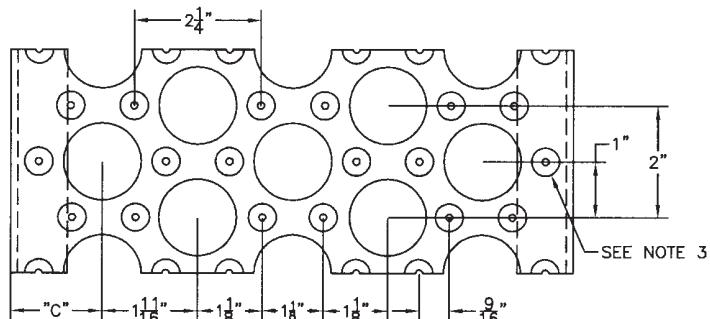
Grating shall be "Safety-Grip® Channel," manufactured from (see 'MATERIAL OPTIONS' below) and complete with a (1-1/2", 2", 3") side channel depth, by AMICO.



#### MATERIAL OPTIONS

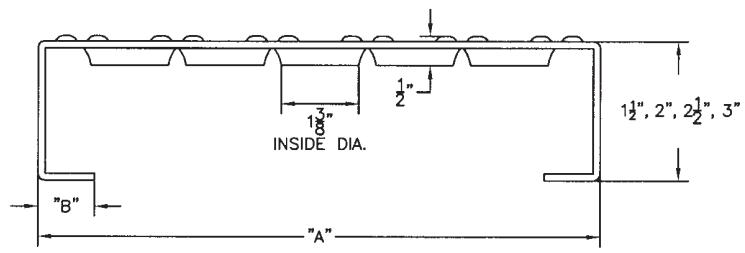
- ASTM-A-653, G-90 (Z-275) Pre-galvanized 13 or 11GA steel.
- ASTM-A-1011, HRP&O 13 or 11GA steel.
- ASTM B209, 5052H32 Aluminum .125" thick (up to 18" width).
- ASTM A240, Type 316L 2B Stainless Steel 14GA (up to 12" width).
- ASTM A240, Type 304L 2B Stainless Steel 16GA (up

CHANNEL WIDTH "A"	RETURN FLANGE "B"	Q. HOLE CHANNEL EDGE "C"
**5"	7/8"	1 21/32"
7"	1"	1 13/16"
10"	7/8"	1 5/8"
**12"	1"	1 25/32"
**18"	1"	1 13/32"
24"	1 1/18"	1 7/8"
30"	1 1/18"	2 11/32"



Note:

- Tolerances on all dimensions are  $\pm 1/8"$
- End-hole pattern shown on diagram is even. Widths indicated with \*\* have a staggered end-hole pattern.
- Outside traction buttons on all widths except 18" & 24" width.
- Standard lengths are 120" and 144".
- Tolerance on manufactured and cut lengths is  $\pm 1/8"$ .
- Camber is an expected condition with sheet metal products. While ASTM allowance is generous, AMICO attempts to lessen the effects. Normal clearances should offset this phenomenon, however where tolerances warrant, contact AMICO for clarification.









# SAFETY GRATING

## SAFETY-GRIP® WALKWAY

### PRODUCT DESCRIPTION

Safety-Grip® Walkway is a one-piece metal plank grating manufactured by a cold forming process in the shape of an inverted channel. The web of the channel is the walking surface and has large debossed holes, surrounded by smaller embossed traction buttons. The extended flanges support the load and provide a built in kickplate (toeboard).

### FEATURES & BENEFITS

- Embossed traction buttons provide superior slip resistance in all directions and in all weather conditions.
- Large debossed holes provide maximum drainage of debris and allow up to 50% free air opening depending on channel width.
- Self-cleaning due to resilience of walking surface.
- One-piece metal construction complete with a full 5" toe-board height on each side of the walking surface.
- Lightweight design provides high strength to weight ratio.
- Long life span requiring little maintenance.
- Simple and economical installation as walkways are self-framing.
- Adaptable to cost effective custom fabrication.

### MATERIAL SPECIFICATIONS

Grating shall be "Safety-Grip® Walkway," manufactured from (see 'MATERIAL OPTIONS' below) and complete with an integral 5" toe-board, by AMICO.

#### MATERIAL OPTIONS

- ASTM-A-653, G-90 (Z-275) pre-galvanized 13 or 11GA steel.
- ASTM-A-1011, HRP&O 13 or 11GA steel.

#### Note:

- Tolerances on all dimensions are  $\pm 1/8"$
- Standard lengths are 120" & 144".
- Tolerance on manufactured and cut lengths is  $\pm 1/8"$ .
- Nominal 36" walkway has a 34" walking surface.  
36" dimension is to outside of return flange.
- Camber is an expected condition with sheet metal products.  
While ASTM allowance is generous, AMICO attempts to lessen  
the effects. Normal clearances should offset this phenomenon,  
however where tolerances warrant, contact AMICO for clarification.



# SAFETY GRATING

## SAFETY-GRIP® WALKWAY LOAD & DEFLECTION TABLES

### PRODUCT DETAILS

Type	Depth Weight	Ix IN. <sup>4</sup> Sx IN. <sup>3</sup>	CLEAR SPAN																	
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"	
24" Wide 13 GA	5"	6.610	U	355	355	355	355	355	355	355	355	355	346	301	245	209	169	140	118	
	8.7 lb/ft	2.078	D	0.00	0.00	0.01	0.02	0.03	0.05	0.07	0.10	0.15	0.20	0.26	0.30	0.35	0.44	0.53	0.65	0.78
			C	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355
			D	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.07	0.09	0.12
24" Wide 11 GA	5"	9.968	U	657	657	657	657	657	657	657	619	528	455	396	348	275	223	104	155	
	11.8 lb/ft	2.880	D	0.00	0.01	0.01	0.02	0.03	0.05	0.08	0.12	0.16	0.19	0.22	0.26	0.29	0.37	0.45	0.54	0.65
			C	657	657	657	657	657	657	657	657	657	657	657	657	657	657	657	657	657
			D	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.08	0.11	0.14	0.18
30" Wide 11 GA	5"	10.090	U	384	384	384	384	384	384	384	384	384	355	306	267	234	185	150	124	104
	13.6 lb/ft	2.889	D	0.00	0.01	0.01	0.02	0.04	0.06	0.09	0.16	0.20	0.23	0.26	0.30	0.34	0.45	0.55	0.66	0.78
			C	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480
			D	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.08	0.11	0.15	0.19
36" Wide 11 GA	5"	N/A	U	185	185	185	185	185	185	185	185	185	185	185	185	185	158	128	106	89
	15.9 lb/ft	N/A	D	0.00	0.00	0.01	0.01	0.02	0.04	0.06	0.09	0.12	0.17	0.22	0.29	0.38	0.52	0.65	0.78	0.94
			C	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273
			D	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.07	0.10

### Explanation of Load Type

U = uniform load (lb/ft<sup>2</sup>)

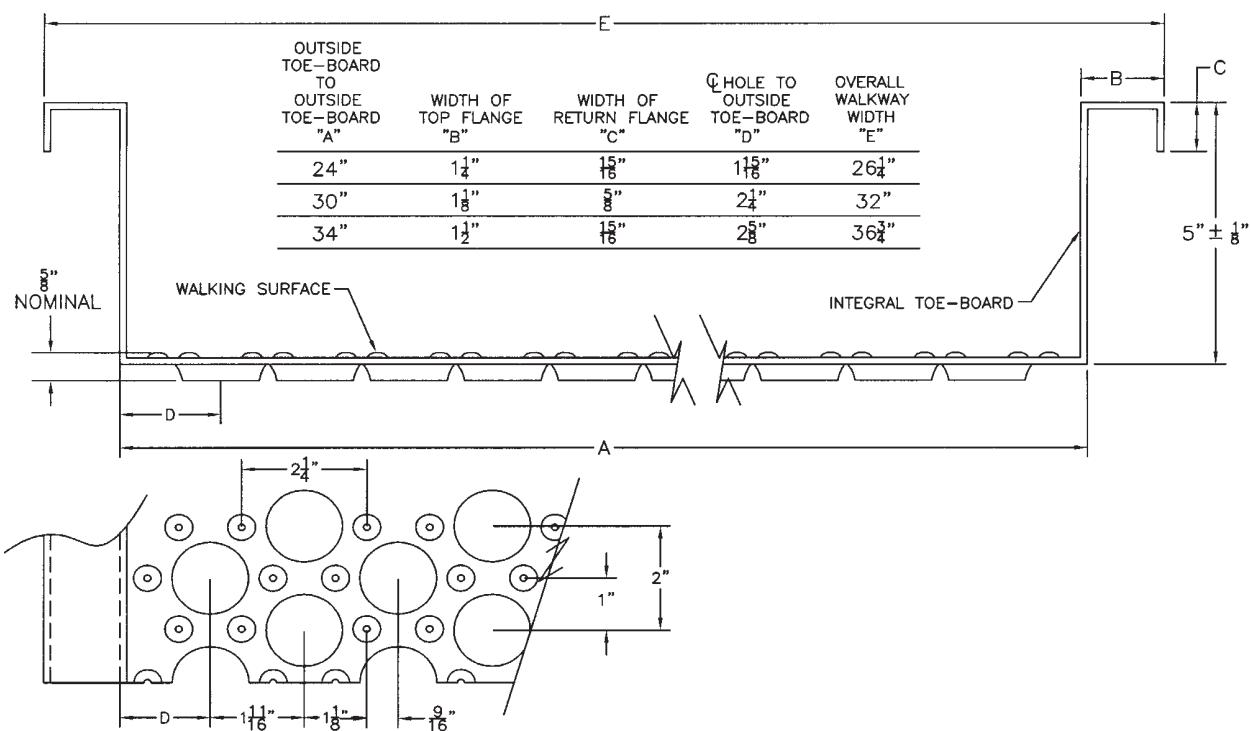
D = corresponding deflection (in) resulting from uniform load

C = concentrated load (lb)

D = corresponding deflection (in) resulting from concentrated load

### Note:

- All uniform and concentrated loads include a safety factor of 1.67.
- Area in bold outline—contact AMICO for recommendations.
- Strut deflection may become a limiting factor resulting in lower load values as indicated in table.



# SAFETY GRATING

## SAFETY-TREAD® CHANNEL

### PRODUCT DESCRIPTION

Safety-Tread® Channel is a one-piece plank grating manufactured by a cold forming process in the shape of a channel. The web of the channel is the walking surface which is covered with small perforated dimples.

### FEATURES & BENEFITS

- Perforated dimples provide superior slip resistance in all directions. Quantity of dimples under foot provides exceptional adhesive friction.
- One-piece metal construction.
- Lightweight design provides high strength to weight ratio.
- Long effective life span requiring little maintenance.
- Can be easily formed in standard channel or custom shapes.
- Simple and economical installation as planks are self-framing.
- Adaptable to cost effective custom fabrication.
- Low projections and closed area provide an acceptable walking surface for industrial as well as institutional applications (i.e., women in heels can walk comfortably and safely).
- Available in four dimpled patterns (see opposite page for specifications).



### MATERIAL SPECIFICATIONS

Grating shall be "Safety-Tread® Channel," (Standard Patterns - full, square, star, "V") pattern or Safety-Tread® Drainage Channel (Drainage Patterns square, star) pattern manufactured by AMICO from (see 'MATERIAL OPTIONS' below):



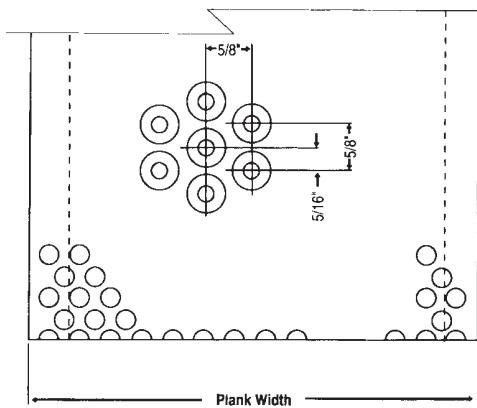
### STANDARD CHANNEL MATERIAL OPTIONS

- ASTM-A-1011, HRP&O, 13 or 11GA steel.
- ASTM-A-653, G-90 (Z-275) Pre-galvanized 13 or 11GA steel.
- ASTM B209, 5052-H32 Aluminum, .125" thick
- ASTM A240, Type 316L 2B Stainless Steel 14GA. ("V" pattern only)
- ASTM A240, Type 304L Stainless Steel 16GA. ("V" pattern only)

### DRAINAGE CHANNEL MATERIAL OPTIONS

- ASTM-A-1011, HRP&O, 13 or 11GA steel.
- ASTM-A-653, G-90 (Z-275) Pre-galvanized 13GA steel.
- ASTM A209, 5052-H32 Aluminum, .125" thick.

Safety Tread® Channel and Safety-Tread® Drainage Channel are manufactured in nominal 10' and 12' lengths. Other combinations or gauges, channel depths, and widths are available by special request



### Note:

1. Tolerances on all dimensions are  $\pm 1/8"$
2. Camber is an expected condition with sheet metal products. While ASTM allowance is generous, AMICO attempts to lessen the effects. Normal clearances should offset this phenomenon, however where tolerances warrant, contact AMICO for clarification.

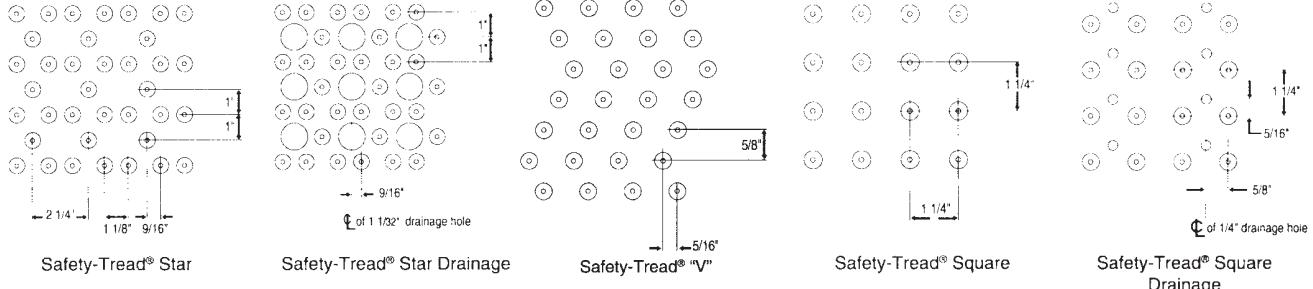


See next page for optional dimple patterns.

# SAFETY GRATING

## SAFETY-TREAD® CHANNEL LOAD & DEFLECTION TABLES

### Optional Dimpled Patterns



## LOAD & DEFLECTION TABLES

### Explanation of Load Type

U = uniform load (lb/ft<sup>2</sup>)  
D = corresponding deflection (in) resulting from uniform load  
C = concentrated load (lb)  
D = corresponding deflection (in) resulting from concentrated load

### Note:

- All uniform and concentrated loads include a safety factor of 1.67.
- Shaded areas, based on loads indicated, may exceed deflections of L/120.

### 10 Inch Wide

#### PRODUCT DETAILS

Type	Depth Weight	Ix IN. <sup>4</sup> Sx IN. <sup>3</sup>	CLEAR SPAN																
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"
Steel 13 GA	1-1/2"	.272	U 1070	773	476	370	267	219	171	145	119	103	87	77	67				
	4.24 lb/ft	.267	D 0.05	0.09	0.12	0.17	0.21	0.27	0.33	0.41	0.48	0.56	0.65	0.75	0.85				
			C 625	610	594	519	445	400	356	326	297	275	254	238	223				
	4.84 lb/ft	.404	D 0.03	0.06	0.10	0.14	0.18	0.22	0.27	0.33	0.39	0.45	0.52	0.60	0.69				
			U 1500	1108	716	560	404	332	261	221	182	158	134	118	102	80	65		
	5.54 lb/ft	.369	D 0.04	0.08	0.10	0.14	0.17	0.22	0.27	0.33	0.39	0.47	0.54	0.62	0.70	0.88	1.08		
			C 625	625	625	625	625	582	539	494	449	418	387	359	332	300	274		
	5.95 lb/ft	.511	D 0.02	0.03	0.05	0.09	0.13	0.18	0.22	0.27	0.32	0.38	0.44	0.50	0.56	0.72	0.91		

### 12 Inch Wide

#### PRODUCT DETAILS

Type	Depth Weight	Ix IN. <sup>4</sup> Sx IN. <sup>3</sup>	CLEAR SPAN																
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"
Steel 13 GA	1-1/2"	.320	U 991	716	442	346	250	205	161	137	113	97	82	72	63				
	4.83 lb/ft	.302	D 0.05	0.09	0.12	0.17	0.21	0.27	0.33	0.41	0.48	0.57	0.65	0.75	0.85				
			C 866	764	663	581	500	451	403	370	338	312	287	269	251				
	5.13 lb/ft	.453	D 0.04	0.07	0.10	0.14	0.18	0.23	0.28	0.34	0.40	0.47	0.55	0.63	0.72				
			U 1457	1053	649	508	367	301	236	200	165	143	122	108	94	75	60		
	6.33 lb/ft	.376	D 0.04	0.08	0.10	0.14	0.17	0.23	0.27	0.33	0.39	0.47	0.54	0.63	0.71	0.90	1.04		
			C 866	866	866	800	733	661	590	542	494	460	427	401	376	335	300		
	Steel 11 GA	1-1/2"	U 1118	808	499	390	282	232	182	154	127	110	94	83	72				
			D 0.06	0.10	0.12	0.18	0.22	0.29	0.35	0.43	0.50	0.60	0.69	0.81	0.93				
		2"	C 1118	933	748	656	564	509	454	418	381	355	329	310	291				
			D 0.05	0.08	0.11	0.15	0.19	0.25	0.30	0.37	0.44	0.52	0.60	0.69	0.79				

# SAFETY GRATING

## SAFETY-TREAD® FLOORING

### PRODUCT DESCRIPTION

Safety-Tread® is a metal flooring product which is covered with small perforated dimples manufactured by a cold forming process.

### OPTIONAL FEATURE:

Safety-Tread® flooring is available in two drainage patterns which incorporate embossed holes (staggered) between raised dimples.



### FEATURES & BENEFITS

- Perforated dimples provide superior slip resistance in all directions and in all weather conditions. The quantity of dimples under foot provides exceptional adhesive friction.
- Long life span requiring little maintenance.
- Can be easily formed into custom shapes.
- Adaptable to wide range of applications.
- Easily adaptable to cost effective, custom fabrication.
- Low projections and closed area provide an acceptable walking surface for industrial as well as institutional and commercial application (i.e., women in heels can walk comfortably and safely).
- Available in four dimpled patterns
- Optional drainage flooring features smaller unembossed holes (location and size variable with dimple pattern) providing drainage for liquid which may pool on walking surface in wet environments.

### MATERIAL SPECIFICATIONS

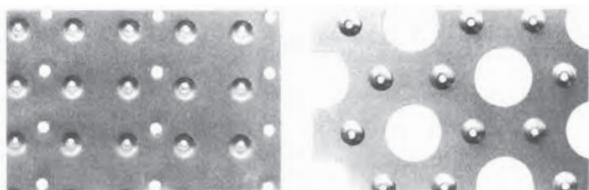
Grating shall be "Safety-Tread® Flooring" (Standard Patterns full, square, star, "V") pattern or Safety-Tread® Drainage Flooring (Drainage Patterns square, star) pattern manufactured by AMICO from (see 'MATERIAL OPTIONS' below):

#### STANDARD FLOORING MATERIAL OPTIONS

- ASTM A1011, HRP&O, 16, 13 or 11GA steel.
- ASTM A653, G-90 (Z-275) Pre-galvanized 13GA steel.
- ASTM B209, 5052H32 Aluminum, .125" thick.
- ASTM A240, Type 316L, Stainless Steel 14GA ("V" pattern only)
- ASTM A240, Type 304L, Stainless Steel 16GA ("V" pattern only)

#### DRAINAGE FLOORING MATERIAL OPTIONS

- ASTM A1011, HRP&O, 11GA steel.
- ASTM A653, G-90 (Z-275) Pre-galvanized 13GA square pattern or 11GA star pattern.
- ASTM A209, 5052H32 Aluminum, .125" thick.

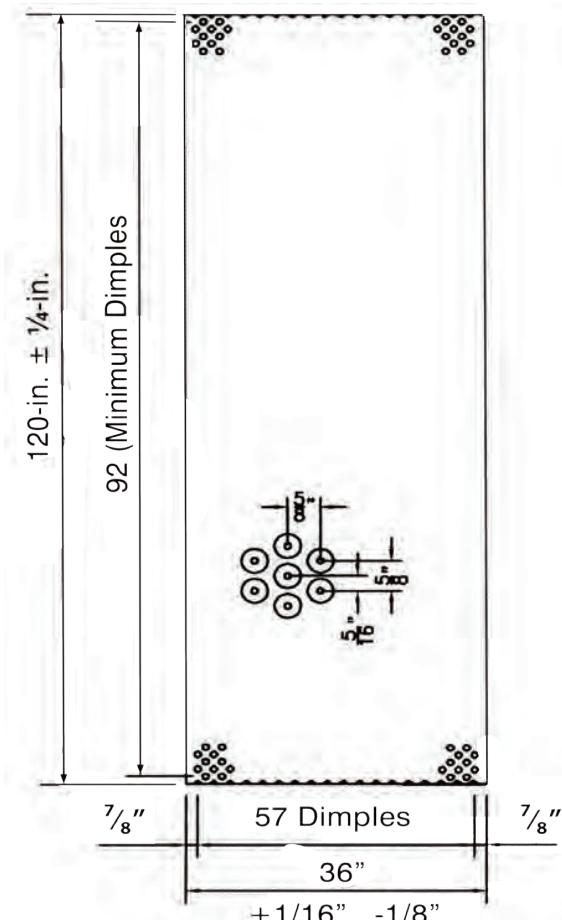


Square Drainage

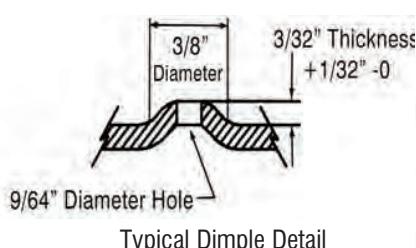
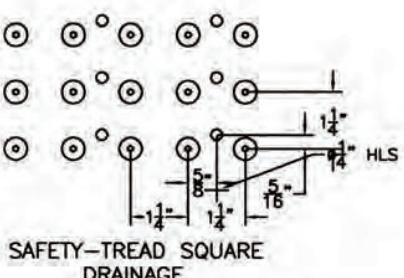
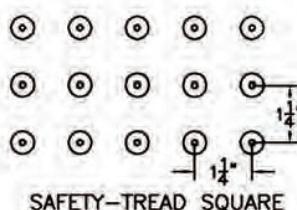
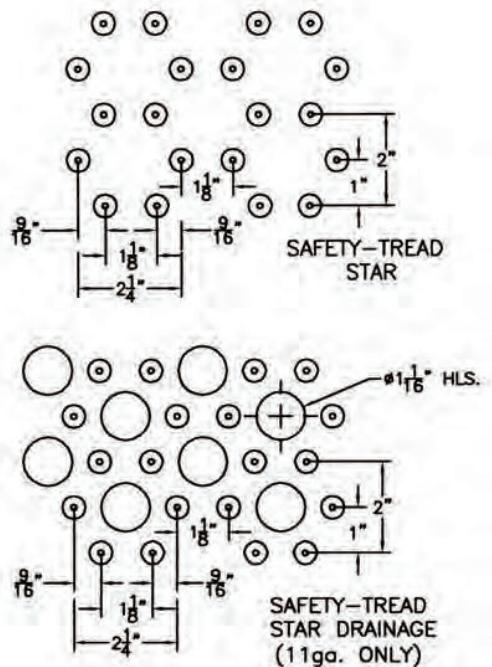
Star Drainage

# SAFETY GRATING

## SAFETY-TREAD® FLOORING



Safety-Tread Flooring Full Pattern (Standard)



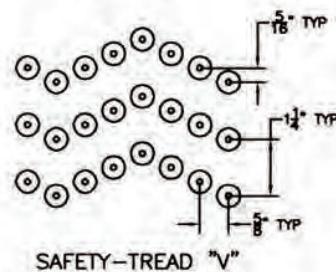
Typical Dimple Detail

### Safety-Tread® Flooring

Gauge	Material	Wt/Sq Ft
11GA	HRP&O	5.0 lb
13GA	HRP&O	3.8 lb
16GA	HRP&O	2.5 lb
13GA	Galvanized	1.7 lb
.125"	Aluminum	1.6 lb
14GA	316 L	3.28 lb
16GA	304 L	2.4 lb

### Drainage Flooring

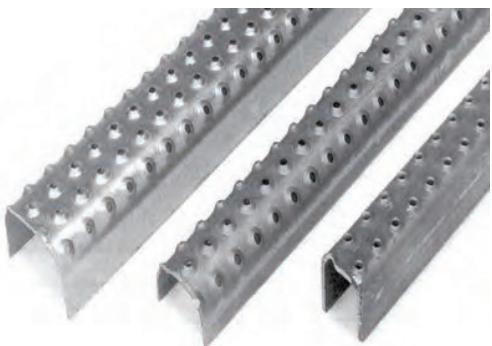
Gauge	Material	Wt/Sq Ft
11 GA	HRP&O	4.7 lb
13 GA	HRP&O	3.5 lb
16 GA	HRP&O	2.3 lb
.125"	Aluminum	1.6 lb



# SAFETY GRATING

## SAFETY-TREAD® LADDER RUNGS

Safety-Tread® Ladder Rungs are small channel shaped sections; the web of the channel being the walking surface which is covered with small perforated dimples, produced by a cold forming process.



### FEATURES & BENEFITS

- Perforated dimples provide superior slip resistance in all directions and in all weather conditions. The quantity of dimples under foot provides exceptional adhesive friction.
- Cross sectional design provides significant load carrying capacity on spans up to 24".
- Three widths of rung to choose from.
- Leading row of dimples projected on the edge of the rung provides slip resistance to the foot approaching at an angle to the walking surface.
- Long life span requiring little maintenance.
- Adaptable to a wide range of applications.
- Easily adaptable to cost effective, custom fabrication.
- Ideal for retrofit applications as rungs fit over slippery pipes, bars, etc. on existing ladders.

### MATERIAL SPECIFICATIONS

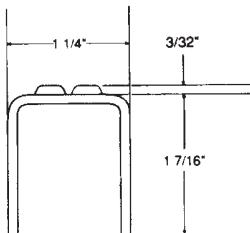
Ladder rungs shall be "Safety-Tread® Ladder Rungs," manufactured from (see 'Material Options' below) by AMICO.

#### MATERIAL OPTIONS

- ASTM A1011, 13 or 11GA, HRP&O steel.
- ASTM A653, 13 or 11GA, G-90 (Z-275) Pre-galvanized steel.

#### 1½" wide (2 hole)

Type	Weight lb/ft	Load/ Type	CLEAR SPAN (in)				
			16"	18"	20"	24"	30"
Carbon Steel 11ga	1.2	C	375	333	300	250	200
		D	0.02	0.02	0.03	0.04	0.07
Stainless Steel 14ga	1.0	C	375	333	300	250	200
		D	0.03	0.04	0.05	0.07	0.11
Aluminum 0.125in	0.52	C	313	278	250	208	
		D	0.04	0.05	0.06	0.08	



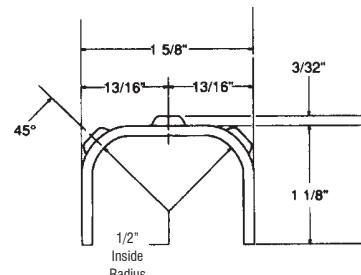
#### NOTE:

C = Allowable concentrated load (lbs)

D = Corresponding deflection (in) resulting from C.

All concentrated loads include a safety factor of 4.0, based on ultimate strength.

Ladder rungs showing concentrated load "C" at 200 lbs or above comply with OSHA standard 29CFR 1910.27(a)(1)(i) under the title "Walking-Working Surfaces—Fixed Ladders."



Ladder rungs showing concentrated load "C" at 250 lbs or above comply with OSHA standard 1917.120(b)(1) under the title "Terminal Facilities—Fixed Ladders."

Tolerance of all dimensions ±1/8".

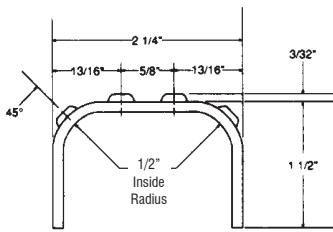
Standard lengths are 5ft.

#### 1¾" wide (3 hole)

Type	Weight lb/ft	Load/ Type	CLEAR SPAN (in)				
			16"	18"	20"	24"	30"
Carbon Steel 13ga	1.3	C	313	278	250	209	
		D	0.02	0.03	0.04	0.06	
Stainless Steel 14ga	1.1	C	250	222	200		
		D	0.03	0.04	0.04		
Aluminum 0.125in	0.5	C	250	222	200		
		D	0.04	0.05	0.06		

#### 2¼" wide (4 hole)

Type	Weight lb/ft	Load/ Type	CLEAR SPAN (in)				
			16"	18"	20"	24"	30"
Carbon Steel 13ga	1.5	C	375	333	300	250	200
		D	0.02	0.02	0.03	0.04	0.07
Stainless Steel 14ga	1.2	C	468	416	375	312	250
		D	0.03	0.04	0.05	0.07	0.10
Aluminum 0.125in	0.5	C	375	333	300	250	200
		D	0.03	0.04	0.05	0.07	0.11



# SAFETY GRATING

## STAIR TREADS

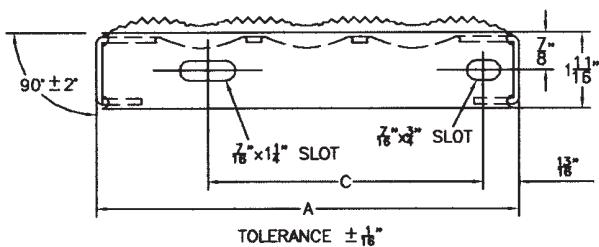
### PRODUCT DESCRIPTION

Stair treads are fabricated from AMICO standard Safety-Grip®, Diamond-Grip® and Safety-Tread® channel planks (see product specification sheets for technical details). All treads are complete with end plates welded to each end for easy connection to stringers or are available with open ends.

Treads are available from stock in sizes indicated below or can be custom fabricated from any channel product and in any material including G90 galvanized, HRP&O, aluminum and stainless steel.



### Diamond-Grip® Treads



"A" TREAD DEPTH (CHANNEL WIDTH)	CARRIER PLATE WIDTH	DIMENSION "C"
4 3/4"	4 1/2"	2 1/8"
7"	6 3/4"	3 1/2"
9 1/2"	9 1/4"	6 1/16"
11 3/4"	11 1/2"	8 3/8"

For use with 1 1/2" or 2" heights

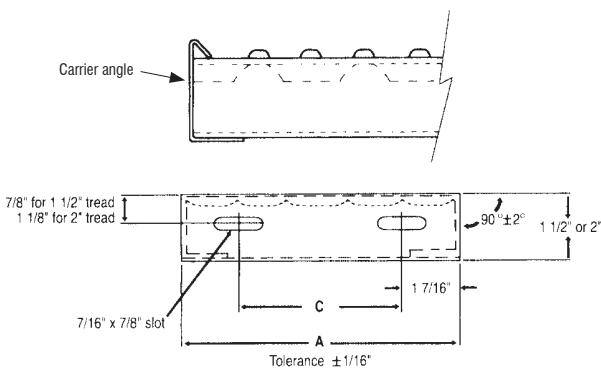
#### Standard Stock Sizes of Diamond-Grip® Stair Treads:

- D415424E 24"(W) x 9 1/2"(D) x 1 1/2" (H)
- D415430E 30"(W) x 9 1/2"(D) x 1 1/2" (H)
- D415436E 36"(W) x 9 1/2"(D) x 1 1/2" (H)



Diamond-Grip Stair Treads

### Safety-Grip® / Safety-Tread® Treads



"A" TREAD DEPTH (CHANNEL WIDTH)	CARRIER PLATE WIDTH	DIMENSION "C"
5"	4 7/8"	2 1/8"
7"	6 7/8"	4 1/8"
10"	9 7/8"	7 1/8"
12"	11 7/8"	9 1/8"
18"	17 7/8"	15 1/8"

For use with 1 1/2" or 2" heights

#### Standard Stock Sizes of Safety-Grip® Stair Treads:

- S515324E 24"(W) x 10"(D) x 1 1/2" (H)
- S515330E 30"(W) x 10"(D) x 1 1/2" (H)
- S515336E 36"(W) x 10"(D) x 1 1/2" (H)

# SAFETY GRATING

## ROOF-GRIP® ROOFTOP WALKWAY SYSTEM

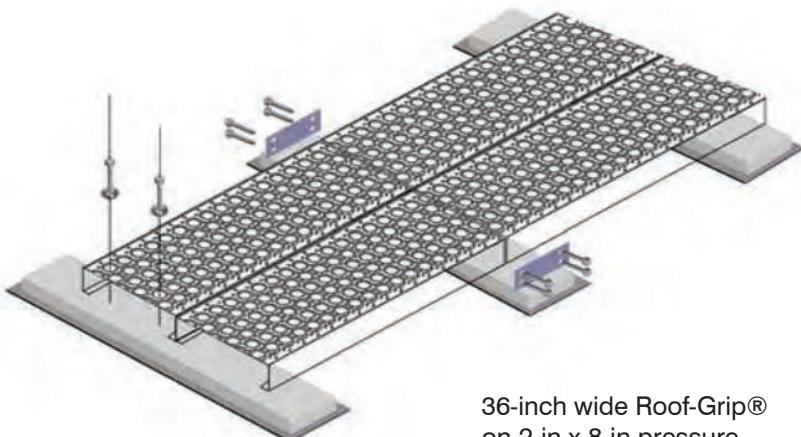
### PRODUCT DESCRIPTION

Safety-Grip and Diamond-Grip Planks are fastened together and to sleepers either metal or pressure treated wood.

Safety-Grip® Channel is a one-piece metal plank grating with large debossed holes, surrounded by smaller embossed traction buttons.

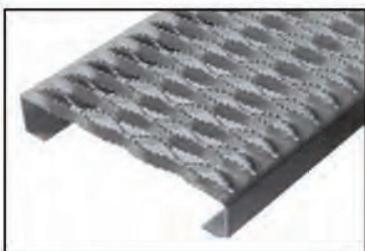


24-inch wide RoofGrip®  
on metal sleepers

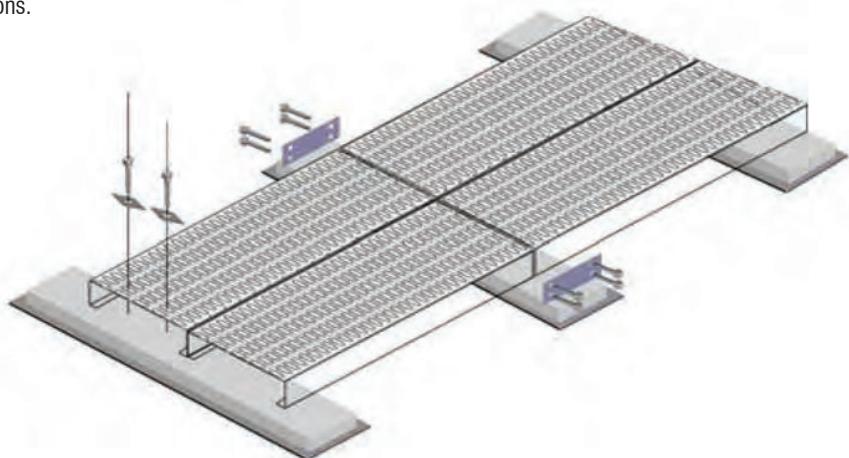


Reference specific product pages for Material Options.

Diamond-Grip® Channel is a one-piece metal plank grating with rough diamond shaped



36-inch wide Roof-Grip®  
on 2-in x 8-in pressure  
treated wood sleepers



AMICO ROOF-GRIP Walkway System allows for a safe, even and reliable walking surface while protecting roofs from damage by maintenance workers.

# SAFETY GRATING

## SAFETY-GRIP® TREAD FRICTION TEST REPORT

### PURPOSE

The purpose of this test is to determine the coefficient of friction of SAFETY-GRIP® grating treads.

### EQUIPMENT

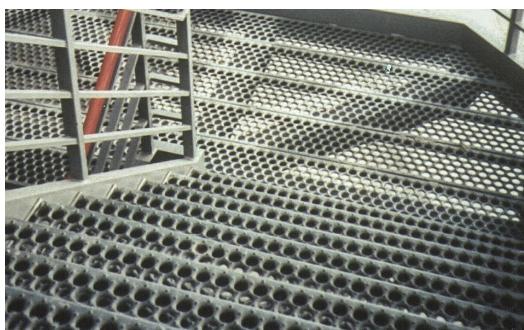
1. Two (2) SAFETY-GRIP® grating treads
2. Friction skid tester
3. 500lbs load
4. Load cell
5. Forklift



### PROCEDURE

The procedure for this test is as follows:

1. Anchor both grating treads
2. Place friction skid on treads (one shoe on each tread)
3. Lower 500lbs load on skid using forklift.
4. Attach straps and load cell to skid
5. Pull skid until maximum friction force is recorded
6. Repeat process with wetted surfaces



### RESULTS

Dry - F		Wet - F	
a.	618 lbf	e.	564 lbf
b.	649 lbf	f.	569 lbf
c.	588 lbf	g.	550 lbf
d.	626 lbf	h.	573 lbf

### CALCULATIONS

Weight of skid + load

Average coefficient of friction

- Dry  $\mu = 1.19$
- Wet  $\mu = 1.08$

The friction tests described in this report were conducted on May 19, 2011 under my supervision. The data presented herein has been reviewed and approved by me.

Lei Zhao, PE  
(Licensed in FL, GA, LA, MD, NY, and TX)

### CONCLUSION

The results of this test show that the coefficient of friction for AMICO Safety-Grip® safety grating exceeds anti-slip values as defined by OSHA and Federal Specification RR-G-1602D. FS RR-G-1602D is withdrawn though commonly referenced.

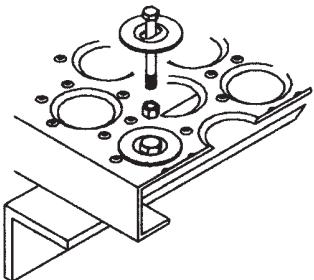
# SAFETY GRATING

## INSTALLATION ACCESSORIES

### SAFETY-GRIP® BOLT SEATS

Safety-Grip® planks can be mechanically fastened to a structural support by using specially designed Bolt Seats which seat within the large debossed holes, below the walking surface. Bolt Seats have an oblong hole to accommodate a 3/8" bolt, and are available in:

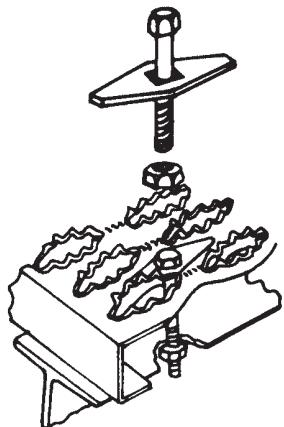
- 11GA, G90 Galvanized (H12264)
- .125" Aluminum (H12264A)
- 316L Stainless (H12264S)



### DIAMOND-GRIP® BOLT SEATS

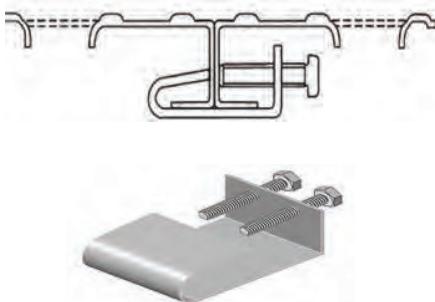
Diamond-Grip® planks can be mechanically fastened to a structural support by using specially designed Bolt Seats which seat in between the raised diamonds below the walking surface. Bolt Seats have a round hole to accommodate a 3/8" bolt, and are available in:

- 12GA, G90 Galvanized (H12262)
- .125" Aluminum (H12262A)
- Stainless (H12262S) by special request only.
- Optional square hole in bolt seat to accommodate 5/16" carriage bolt available by special request (H12262SQ)



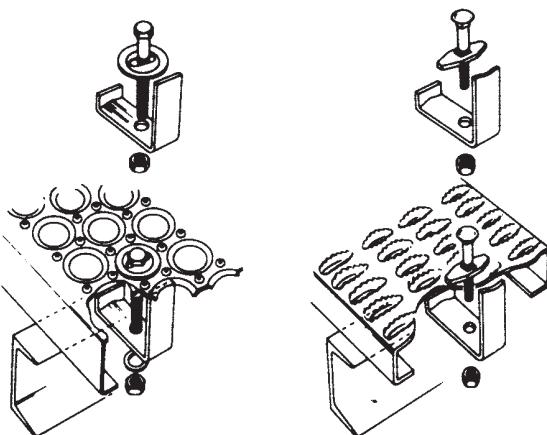
### MID-SUPPORT CLIP ASSEMBLY

Between structural supports it may be necessary to tie planks together to minimize relative deflection. This is accomplished by using a Mid-Support Clip which draws the plank's side channels together by applying pressure between the bolts and the clip edge (clip no. MSCL).



### "J" CLIP ASSEMBLIES

In order to alleviate the necessity of drilling a hole through a structural member, a Bolt Seat and "J" Clip assembly can be used. The friction connection is accomplished by wedging the grating between the Bolt Seat and structural support, by applying pressure to the underside of the flange of the supporting steel (clip no. H12296). Not recommended in areas subject to vibration.

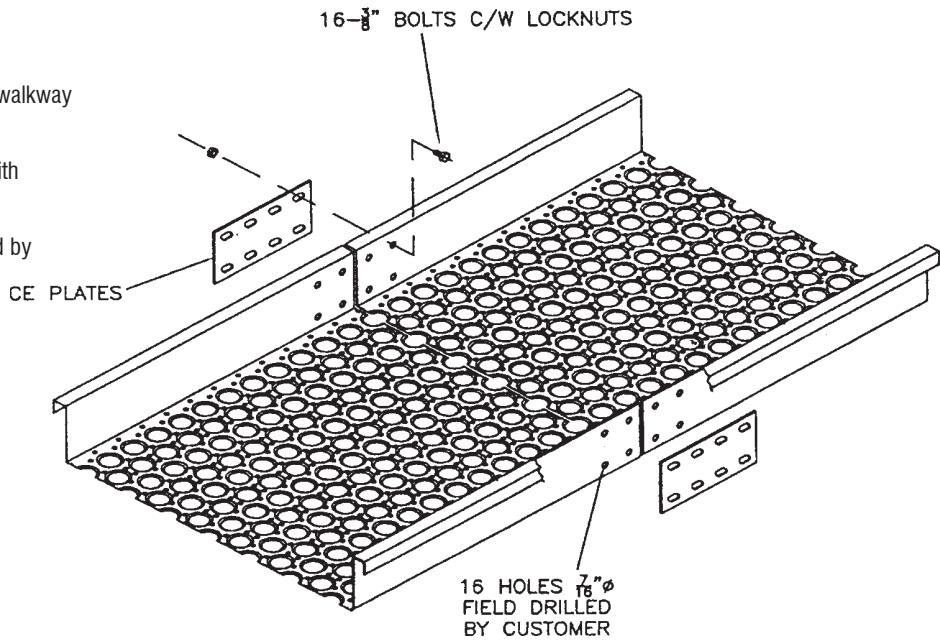


# SAFETY GRATING

## OVER SUPPORT—SPLICING PLATE KIT

### Notes:

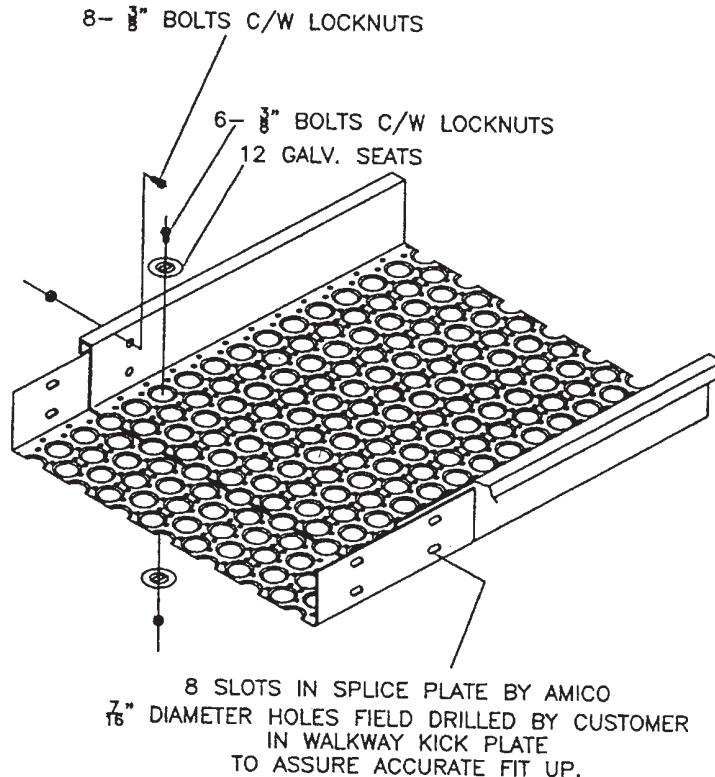
- This kit is intended to splice two sections of walkway together **OVER A SUPPORT ONLY**.
- The walkway kit includes two splice plates with slotted holes and 16 fastener sets.
- Holes in the grating walkway are not provided by AMICO and are to be field drilled.



## BETWEEN SUPPORT—SPLICING PLATE KIT

### Notes:

- This kit is intended to splice two sections of any width of walkway together between supports.
- The walkway kit includes one wrap around plate with fastening hardware for walking surface and side channel connection. The fastener points should be staggered evenly across the plank width on each side of the splice. The side channel (kick plate) connection utilizes four slots provided in the splice flange.
- Holes in the grating walkway are not provided by AMICO and are to be field drilled.



## NOTES

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## AMICO Locations

### UNITED STATES

Birmingham, AL  
Bourbonnais, IL  
San Bernadino, CA  
Lakeland, FL  
800-366-2642

### CANADA

BURLINGTON, ON  
800-663-4474

MONTREAL, QC  
800-463-3255

VANCOUVER, BC  
800-665-4474

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