

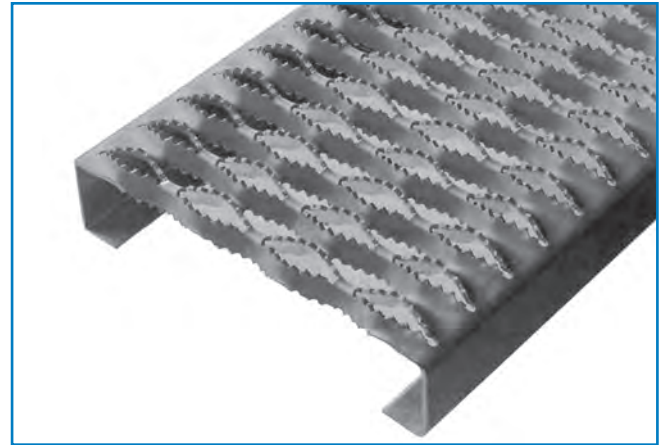
DIAMOND-GRIP®

PRODUCT DESCRIPTION

Diamond-Grip® 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.



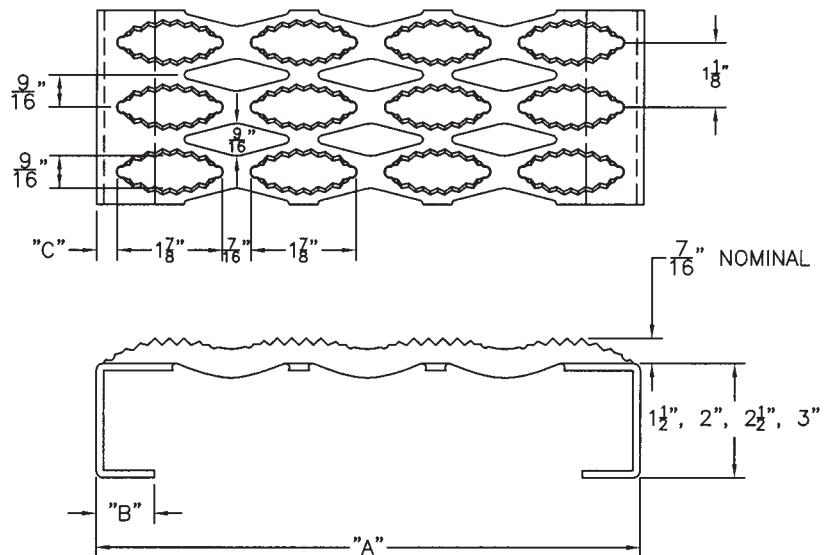
MATERIAL SPECIFICATIONS

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

SELECTIONS

- ASTM-A-653, G-90 (Z-275) Pre-galvanized 14 and 12 gauge steel.
- ASTM-A-1011, HRP&O 14 and 12 gauge steel.
- 5052-H32 Aluminum, .080" and .100" thick.
- Type 316L 2B Stainless Steel 14 gauge (up to 11-3/4" width).
- Type 304L 2B Stainless Steel 16 gauge (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 121 1/2" & 144".
- Tolerance on manufactured and cut lengths is $\pm 1/8$ ".
- When cutting Diamond-Grip®, Grating Systems recommends cutting to full or half diamond increments. Contact sales for actual dimensions.

LOAD & DEFLECTION TABLES

Explanation of Load Type

- U = uniform load (lb/ft²)
- 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.

4 3/4 Inch Wide - 2 Diamond

PRODUCT DETAILS

Type	Depth Weight	Ix IN. ⁴ Sx IN. ³	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"	.267	U	1516	970	674	495	379	299	243	200	168									
			D	0.09	0.13	0.19	0.25	0.32	0.41	0.51	0.61	0.73									
	2.3 lb/ft	.202	C	600	480	400	343	300	267	240	218	200									
			D	0.06	0.10	0.15	0.21	0.26	0.33	0.45	0.57	0.59									
	2"	.513	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			
	2.5 lb/ft	.298	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"	.125	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					
	3.0 lb/ft	.278	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"	.263	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	
	3.3 lb/ft	.211	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"	.223	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					
.93 lb/ft	.233	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"	.279	U	1794	1148	797	586	448	354	287	237	199	170	146	128	112					
			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					
	1.16 lb/ft	.291	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"	.339	U	1730	1109	772	568	436	346	281	233	196	168	146	127	113					
			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					
	2.5 lb/ft	.281	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					

Type 5052 H32

Type 5052 H32

Type 316

LOAD & DEFLECTION TABLES

Explanation of Load Type

- U = uniform load (lb/ft²)
- 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.

7 Inch Wide - 3 Diamond

PRODUCT DETAILS

Type	Depth Weight	Ix IN. ⁴ Sx IN. ³	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			
	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			
Steel 12 GA	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					
	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	
	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	
Alum .080"	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					

LOAD & DEFLECTION TABLES

Explanation of Load Type

- U = uniform load (lb/ft²)
- 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.

9 1/2 Inch Wide - 4 Diamond

PRODUCT DETAILS

Type	Depth Weight	Ix IN. ⁴ Sx IN. ³	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									
			D	0.09	0.12	0.19	0.26	0.33	0.41	0.52	0.62	0.74									
	3.5 lb/ft	.170	C	617	494	411	353	309	274	247	224	206									
			D	0.06	0.10	0.15	0.20	0.27	0.33	0.41	0.50	0.60									
	2"	.264	U	1063	681	474	349	268	213	173	144	121	104	90	79	70	56	46			
			D	0.05	0.08	0.12	0.16	0.21	0.26	0.33	0.40	0.47	0.56	0.65	0.75	0.86	1.10	1.38			
3.7 lb/ft	.224	C	841	674	563	484	425	379	342	312	288	267	249	234	221	199	181				
		D	0.04	0.06	0.09	0.13	0.17	0.21	0.26	0.32	0.38	0.45	0.52	0.60	0.69	0.88	1.10				
Steel 12 GA	1-1/2"	.172	U	988	634	441	325	249	198	161	133	113	96	84	73	65					
			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					
	4.8 lb/ft	.225	C	782	627	524	450	395	352	318	291	268	248	232	218	205					
			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					
	2"	.354	U	1382	886	616	453	348	276	224	186	157	134	116	101	90	72	59	49	42	
			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	
	5.1 lb/ft	.306	C	1094	876	732	628	551	491	443	404	372	345	321	301	284	255	232	213	198	
			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	
	3"	1.363	U	2270	1453	1009	741	567	548	444	367	308	263	226	197	173	137	111	92	77	
			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	
5.8 lb/ft	.605	C	1355	1355	1355	1255	1098	976	878	799	732	676	627	586	549	488	439	399	366		
		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		
Alum .080"	2"	.300	U	800	512	356	261	200	158	128	106	89	76	65	57	50					
			D	0.12	0.19	0.27	0.37	0.50	0.62	0.76	0.94	1.12	1.30	1.49	1.73	1.97					
1.4 lb/ft	.256	C	633	507	422	362	317	282	253	230	211	195	181	169	158						
		D	0.10	0.16	0.23	0.30	0.40	0.49	0.62	0.74	0.88	1.04	1.21	1.38	1.57						
Alum .100"	2"	.375	U	897	574	399	293	224	177	143	119	100	85	73	64	56					
			D	0.07	0.11	0.15	0.21	0.27	0.35	0.43	0.52	0.61	0.72	0.84	0.96	1.09					
	1.75 lb/ft	.32	C	710	568	473	406	355	316	284	258	237	218	203	189	178					
			D	0.06	0.09	0.13	0.17	0.22	0.28	0.34	0.42	0.49	0.58	0.67	0.77	0.88					
Stainless Steel 16 GA	2"	.143	U	750	480	330	240	186	147	120	99	82	70	58	47	39	27				
			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				
	3.2 lb/ft	.165	C	455	455	398	341	299	265	239	217	199	184	171	159	149	133				
			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				
			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				
	3.7 lb/ft	.287	C	915	915	816	700	614	548	494	451	415	384	358	336	316	284				
			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				

SAFETY GRATING

LOAD & DEFLECTION TABLES

Explanation of Load Type

- U = uniform load (lb/ft²)
- 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.

11 3/4 Inch Wide - 5 Diamond

PRODUCT DETAILS

Type	Depth Weight	Ix IN. ⁴ Sx IN. ³	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"	.146	U	543	349	243	179	138	110	89	74	63									
			D	0.06	0.10	0.15	0.20	0.26	0.33	0.41	0.50	0.60									
	4.1 lb/ft	.178	C	493	427	357	307	270	242	219	201	185									
			D	0.05	0.08	0.12	0.16	0.21	0.27	0.33	0.40	0.48									
	2"	.314	U	895	574	400	295	226	179	146	121	102	87	75	65	57	45				
			D	0.05	0.08	0.12	0.16	0.21	0.27	0.34	0.41	0.49	0.57	0.66	0.76	0.86	1.09				
4.5 lb/ft	.247	C	493	493	493	493	443	395	357	326	299	276	259	239	224	199					
		D	0.02	0.05	0.08	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	276	212	168	137	113	95	82	71	62	55					
			D	0.08	0.13	0.18	0.25	0.32	0.41	0.51	0.62	0.73	0.87	1.01	1.16	1.33					
	5.7 lb/ft	.244	C	815	661	552	474	415	370	334	305	280	260	242	227	214					
			D	0.06	0.10	0.14	0.20	0.26	0.33	0.41	0.49	0.59	0.69	0.81	0.93	1.06					
	2"	.419	U	1243	797	554	408	313	248	200	166	139	119	102	89	78	62	50	41		
			D	0.06	0.09	0.13	0.18	0.23	0.29	0.36	0.44	0.52	0.61	0.72	0.82	0.92	1.19	1.44	1.75		
	6.1 lb/ft	.338	C	815	815	814	699	613	545	491	446	409	378	351	327	307	273	245	223		
			D	0.03	0.06	0.10	0.14	0.19	0.24	0.29	0.35	0.41	0.49	0.57	0.65	0.75	0.94	1.15	1.41		
	3"	1.672	U	1666	1363	946	695	532	421	341	282	237	202	174	151	133	105	85	70	59	
			D	0.03	0.07	0.10	0.13	0.18	0.23	0.28	0.34	0.40	0.47	0.55	0.63	0.71	0.90	1.13	1.34	1.60	
	6.7 lb/ft	.702	C	815	815	815	815	815	815	815	758	695	642	596	556	521	463	417	379	347	
			D	0.01	0.03	0.05	0.07	0.11	0.16	0.22	0.27	0.32	0.38	0.43	0.50	0.57	0.73	0.89	1.07	1.29	
Alum .080"	2"	.355	U	715	457	319	233	179	141	114	94	79	68	58	51	45					
			D	0.15	0.23	0.33	0.45	0.58	0.74	0.90	1.10	1.32	1.54	1.77	2.07	2.38					
			C	362	362	362	362	350	311	280	254	233	215	200	187	175					
1.6 lb/ft	.283	D	0.06	0.12	0.21	0.32	0.46	0.60	0.74	0.88	1.05	1.23	1.44	1.65	1.88						
		Type 5052 H32																			
Alum .100"	1.5"	.207	U	493	316	219	161	123	97	79	65	55	47	40	35	31					
			D	0.08	0.13	0.19	0.25	0.33	0.42	0.52	0.62	0.74	0.87	1.01	1.16	1.32					
			C	483	386	322	276	241	215	193	176	161	149	138	129	121					
1.9 lb/ft	.254	D	0.07	0.11	0.15	0.21	0.27	0.34	0.42	0.50	0.60	0.70	0.81	0.93	1.06						
		Type 5052 H32																			
Alum .100"	2"	.444	U	725	464	322	237	181	143	116	96	81	69	59	52	45					
			D	0.06	0.09	0.13	0.18	0.23	0.29	0.36	0.44	0.52	0.61	0.71	0.81	0.92					
			C	710	568	473	406	355	316	284	258	237	218	203	189	178					
2.0 lb/ft	.354	D	0.05	0.07	0.11	0.14	0.19	0.24	0.29	0.35	0.42	0.49	0.57	0.65	0.74						
		Type 5052 H32																			
Stainless Steel 16 GA	2"	.143	U	606	426	296	218	167	132	107	88	74	63	54	48	41	29				
			D	0.05	0.08	0.11	0.16	0.21	0.26	0.32	0.38	0.46	0.53	0.63	0.73	0.80	0.90				
			C	376	376	376	376	333	296	266	242	222	205	190	178	166	148				
3.7 lb/ft	.165	D	0.02	0.04	0.07	0.10	0.16	0.21	0.25	0.31	0.37	0.43	0.50	0.57	0.65	0.82					
		Type 304																			
Stainless Steel 14 GA	2"	.427	U	1276	812	565	416	319	253	206	171	144	123	107	93	82	66				
			D	0.09	0.14	0.20	0.27	0.36	0.46	0.56	0.69	0.82	0.97	1.13	1.30	1.48	1.90				
			C	899	899	830	713	625	557	503	459	423	392	365	343	323	290				
4.5 lb/ft	.313	D	0.05	0.10	0.16	0.22	0.29	0.36	0.45	0.55	0.66	0.77	0.90	1.04	1.19	1.52					
		Type 316																			

SAFETY GRATING

LOAD & DEFLECTION TABLES

18 3/4 Inch Wide - 8 Diamond

PRODUCT DETAILS

Type	Depth Weight	Ix IN. ⁴ Sx IN. ³	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"	.178	U	411	263	182	134	103	81	66	54	46								
			D	0.08	0.11	0.18	0.24	0.31	0.39	0.49	0.58	0.70								
	5.9 lb/ft	.216	C	555	513	428	365	321	285	257	233	214								
			D	0.06	0.10	0.14	0.19	0.25	0.31	0.38	0.47	0.55								
	2"	.347	U	606	388	269	198	152	120	97	80	67	57	49	43	38				
			D	0.06	0.08	0.12	0.16	0.21	0.27	0.33	0.39	0.48	0.56	0.64	0.73	0.84				
6.1 lb/ft	.319	C	555	555	555	541	474	421	379	245	316	292	271	253	237					
		D	0.02	0.05	0.08	0.13	0.17	0.21	0.27	0.32	0.38	0.45	0.52	0.60	0.67					
Steel 12 GA	1-1/2"	.240	U	553	354	246	181	138	109	89	73	61	53	46	40					
			D	0.07	0.11	0.17	0.23	0.30	0.38	0.48	0.58	0.68	0.80	0.94	1.09					
	8.2 lb/ft	.291	C	818	691	576	494	432	384	346	314	288	267	250	235					
			D	0.06	0.09	0.14	0.19	0.25	0.31	0.38	0.46	0.54	0.64	0.75	0.87					
	2"	.473	U	825	528	367	269	206	163	132	109	92	78	67	59	52	41			
			D	0.06	0.09	0.12	0.17	0.23	0.29	0.35	0.43	0.51	0.59	0.68	0.79	0.90	1.14			
	8.5 lb/ft	.434	C	818	818	818	737	644	573	516	496	430	397	368	344	322	286			
			D	0.03	0.06	0.09	0.13	0.18	0.23	0.28	0.33	0.40	0.47	0.55	0.63	0.71	0.90			
	3"	1.245	U	1047	942	654	480	368	291	235	195	163	139	120	105	92	73	59	49	41
			D	0.03	0.06	0.10	0.13	0.18	0.22	0.27	0.33	0.39	0.45	0.53	0.61	0.69	0.88	1.07	1.31	1.55
	9.3 lb/ft	.774	C	818	818	818	818	818	818	818	818	766	707	657	613	575	511	460	418	383
			D	0.01	0.02	0.04	0.07	0.10	0.14	0.19	0.26	0.31	0.36	0.42	0.48	0.56	0.70	0.87	1.05	1.24
Alum .100"	2"	.573	U	514	329	229	168	129	102	83	69	58	49							
			D	0.16	0.25	0.36	0.48	0.61	0.79	0.97	1.18	1.40	1.65							
2.7 lb/ft	.525	C	537	537	537	460	402	353	323	299	269	249								
		D	0.09	0.15	0.28	0.39	0.50	0.63	0.78	0.93	1.12	1.31								

24 Inch Wide - 10 Diamond

PRODUCT DETAILS

Type	Depth Weight	Ix IN. ⁴ Sx IN. ³	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"	.221	U	367	235	163	120	92	72	59	49	41	35	30						
			D	0.09	0.14	0.20	0.27	0.34	0.44	0.56	0.66	0.79	2.70	3.11						
	7.3 lb/ft	.247	C	571	571	489	419	367	326	293	267	245	226	210						
			D	0.06	0.10	0.15	0.21	0.28	0.35	0.44	0.53	0.62	2.16	2.51						
	2"	.427	U	539	345	240	176	135	106	86	71	60	51.00	44	38	34	27			
			D	0.05	0.09	0.13	0.17	0.23	0.29	0.35	0.43	0.51	0.60	0.69	0.78	0.90	1.18			
7.6 lb/ft	.363	C	571	571	571	571	539	479	431	392	359	332	308	287	270	240				
		D	0.02	0.05	0.08	0.12	0.18	0.24	0.29	0.35	0.41	0.48	0.55	0.64	0.72	0.92				
Steel 12 GA	1-1/2"	.299	U	496	317	220	162	124	98	79	66	55	47							
			D	0.08	0.13	0.18	0.25	0.32	0.41	0.50	0.61	0.72	0.86							
	10.1 lb/ft	.334	C	861	794	661	567	496	441	397	361	332	305							
			D	0.05	0.10	0.14	0.20	0.26	0.33	0.41	0.49	0.58	0.68							
	2"	.584	U	738	472	328	241	185	146	118	98	82	70	60	52	46				
			D	0.06	0.09	0.14	0.18	0.23	0.30	0.36	0.45	0.54	0.63	0.72	0.82	1.22				
	10.8 lb/ft	.497	C	861	861	861	843	738	656	590	537	492	454	422	394	369				
			D	0.03	0.06	0.09	0.14	0.18	0.24	0.29	0.36	0.42	0.50	0.57	0.67	0.76				
	3"	1.513	U	861	835	580	426	326	258	209	173	145	124	107	93	82	64	52	43	36
			D	0.03	0.07	0.10	0.14	0.18	0.22	0.28	0.33	0.40	0.47	0.55	0.63	0.71	0.89	1.09	1.34	1.61
	11.3 lb/ft	.879	C	861	861	861	861	861	861	861	861	861	803	746	696	653	580	522	475	435
			D	0.01	0.02	0.04	0.06	0.09	0.13	0.18	0.24	0.31	0.37	0.44	0.50	0.57	0.72	0.88	1.08	1.28

Note:

- Strut deflection may become a limiting factor on 18" and 24" widths resulting in lower load values as indicated in tables.
- Web stiffeners can be supplied for ends and junctions of planks to even deflection if required.

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. Diamond openings are complete with radiused corners at the saddle and side channel location. The extended flanges support the load and provide a built in kickplate (toeboard).

FEATURES & BENEFITS

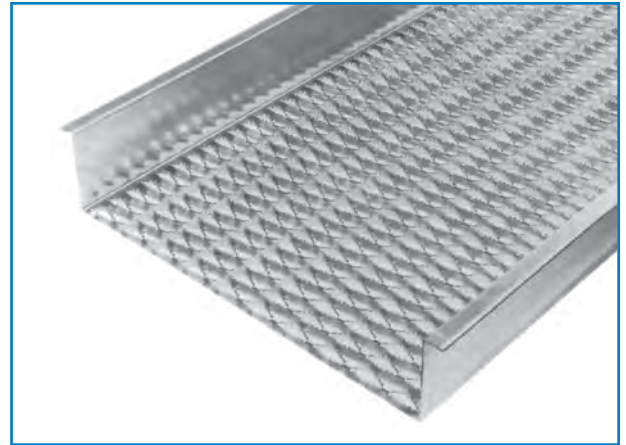
- Serrated edges around diamond shaped openings provide slip resistance under slippery conditions such as snow, ice, grease, oil, etc.
- Radiused corners reduce the possibility of stress cracks across saddles or at the side of channels under various loading conditions.
- Self-cleaning due to resilience of walking surface.
- 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 ‘Selections’ below**) and complete with an (4-1/2”, 5”) integral toeboard.

SELECTIONS

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



DIAMOND-GRIP® WALKWAY

PRODUCT DETAILS

Type	Depth Weight	Ix IN. ⁴ Sx IN. ³	CLEAR SPAN																	
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"	
24" Wide 14 GA	4-1/2"	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
	8.9 lb/ft	.776	C	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"	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
			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"	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
	9.6 lb/ft	.917	C	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"	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
			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

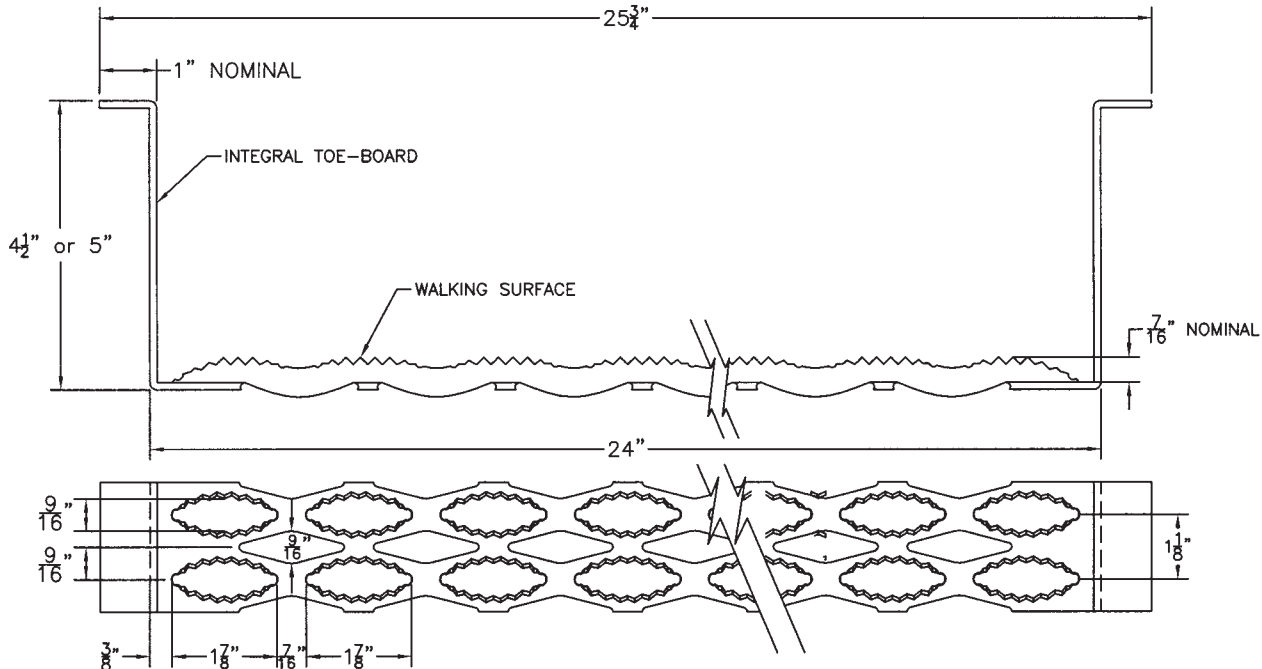
Explanation of Load Type

- U = uniform load (lb/ft²)
- 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.

TECHNICAL DETAILS



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®, Grating Systems recommends cutting to full or half diamond increments.
- Camber is an expected condition with sheet metal products. While ASTM allowance is generous, Grating Systems attempts to lessen the effects. Normal clearances should offset this phenomenon.