

Perf-O Grip® Grating & Traction Tread™ Flooring

GSP0GTT-09

For Safe Walking-Working Surfaces


COOPER B-Line

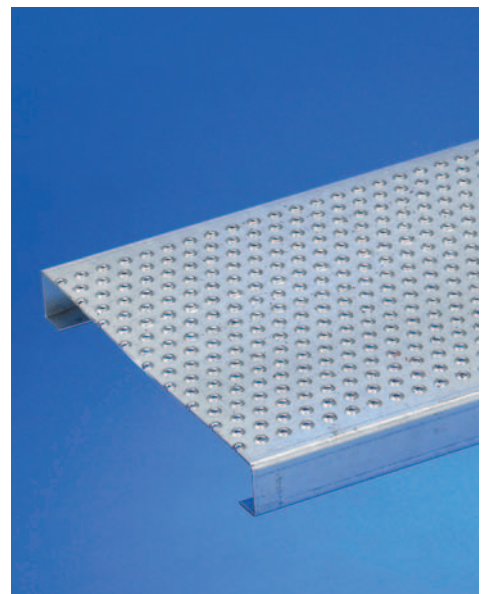
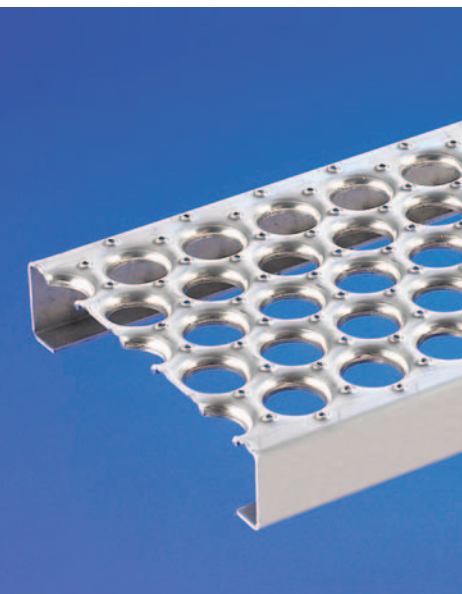
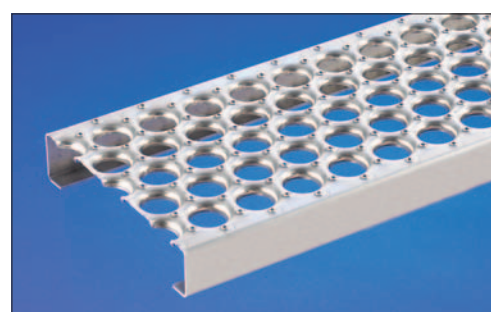
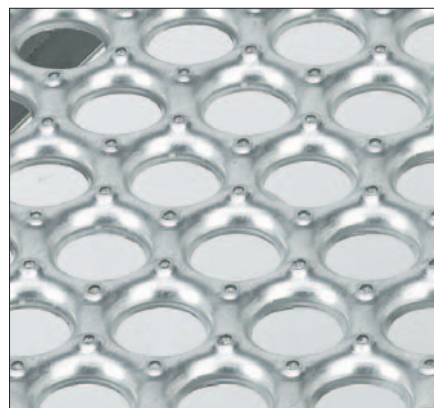


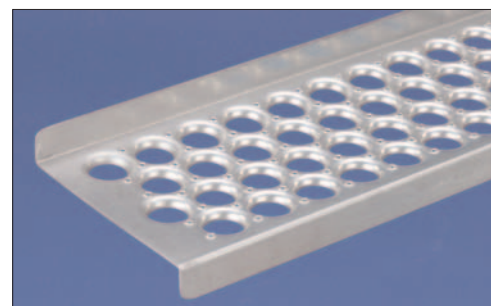
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Perf-O Grip® Pattern



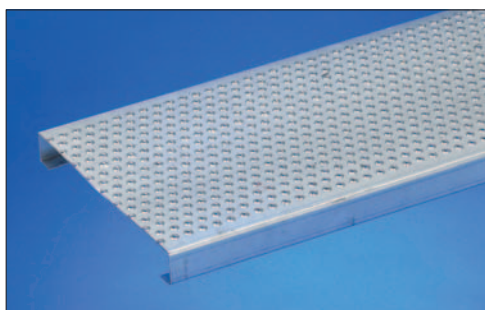
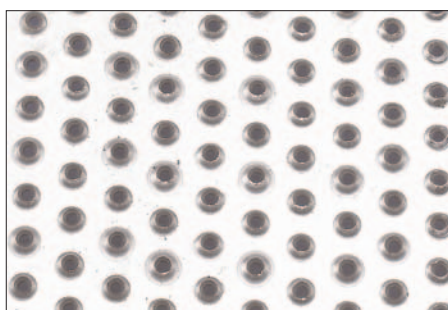
Perf-O Grip® Grating



Perf-O Grip® 2 Grating

Available up to 12" wide

Traction Tread™ Pattern



Traction Tread Plank

Perf-O Grip® General Information

Every year industrial accidents — falling, tripping over debris, slipping on wet or greasy surfaces — cost millions of dollars in lost man-hours and production. Insurance costs often are reduced when accident rates decline. Perf-O-Grip Grating and Traction Tread Flooring help cut accident rates by providing safer walking-working surfaces.

Perf-O-Grip Grating's unique surface of large debossed holes and perforated buttons provides maximum slip protection and performance under practically all conditions and in every direction.

The large debossed holes allow fluids, mud, chips and other accident-causing debris to drain away. With 5 inch high side channels, Perf-O-Grip Walkways meet OSHA requirements for toeboards on elevated structures. Canadian OH & S compliant designs are also available.

In addition to providing safety, the resilient surface of Perf-O-Grip Grating cushions the impact of footfalls thereby lessening worker fatigue and increasing efficiency. Perf-O-Grip Grating is your best safety buy. It cuts costs and helps improve plant productivity.

New Offering

Cooper B-Line now offers a new, second style of Perf-O-Grip Grating. Perf-O-Grip 2 Grating features 1¹⁵/₁₆" on center hole spacing (compared to 2" on the original style). In addition, Perf-O-Grip 2 Grating can be produced with safety end margins on its 2-hole (5" wide) through 6 hole (12" wide) plank and without end margins on its 10-hole (18" wide) through 16-hole (30" wide) plank. The original Perf-O-Grip is still available in 2-hole (5" wide) through 16-hole (30" wide) plank. This expanded offering gives Cooper B-Line a universally accepted addition to its premier safety grating product group.

Safe Surface

Grips soles securely — in all directions. Non-slip Perf-O-Grip Grating surfaces are ideal for inside or outside locations where mud, ice, snow, oil and detergents can create hazardous walking conditions.

Versatile In Application

A variety of standard widths and channel heights are available as well as numerous non-standard shapes and sizes to meet almost any requirement of strength, size, durability, weight, finish, appearance and application.

Perf-O-Grip Grating combines safety and durability with ease of fabrication and versatility. One-piece construction — no welds or rivets to fail — minimizes need for field fabrication. Special shapes and forming can be accomplished to suit unusual requirements.

All surfaces are accessible to brush or spray, making it simple and economical to apply finish coatings. Perf-O-Grip Grating may be hot dipped galvanized after fabrication, anodized, plated, plastic-coated or otherwise finished to suit job requirements. Standard Perf-O-Grip Plank is available in materials and sizes to meet most load/span requirements. May be used as is, or banded, cut, welded or notched to suit requirements.

Perf-O-Grip 2 Plank with its safety end margins is stocked in 5", 7" 10" and 12" widths and in 10'-0" (120¹/₈") and 12'-0" (144") lengths. Perf-O-Grip Plank is stocked in 18", 24" and 30" widths, in 10'-0" (120") and 12'-0" (144") lengths. 20'-0" and 24'-0" lengths are available on certain products. Consult factory. Other lengths can be manufactured per order requirements. Standard metals are 11 gauge and 13 gauge carbon steel (mill-galvanized), 16 gauge stainless steel (Type 316-2B to 12" wide), and .125" aluminum. Perf-O-Grip can also be manufactured in HRPO steel and 14 gauge stainless steel (Type 304-2B) on special order.

The circular openings (38% of surface area depending on product size) are small enough to catch most falling tools and other dangerous objects. But the self-cleaning open design permits quick drainage of fluids, chips, grease and mud while permitting ventilation and lighting flow. Ice accumulation shears easily under normal foot pressure. Open design allows convenient access for cleaning. Perf-O-Grip is easily cleaned with brush, liquid or air spray if desired.

Long Life

Perf-O-Grip Grating's high load capacity and long-life, high strength-to-weight performance is achieved through depth of section and structural design. Formed struts with integral side channels form a plank that can support loads with minimum transverse and longitudinal deflection. There are no rivets or pressure joints to break or loosen. This sturdy construction provides the advantages of heavy load-carrying capacity with minimal deflection; rugged durability with longer-lasting performance.

Fast Installation

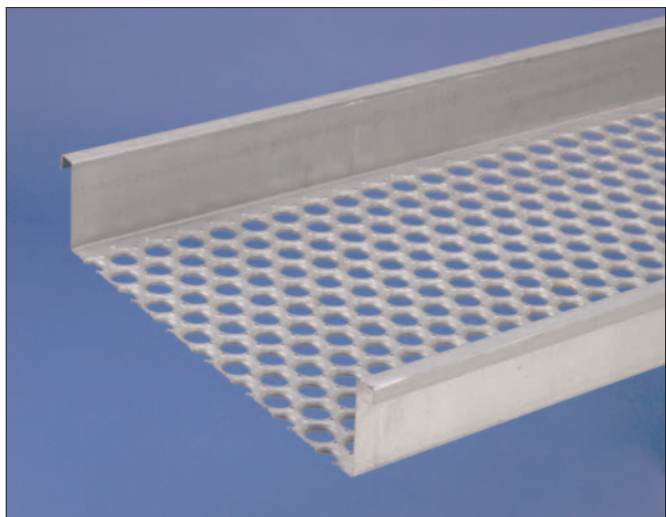
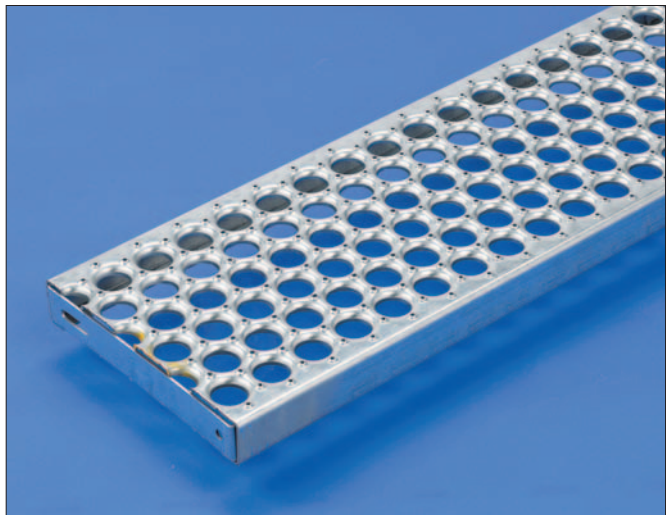
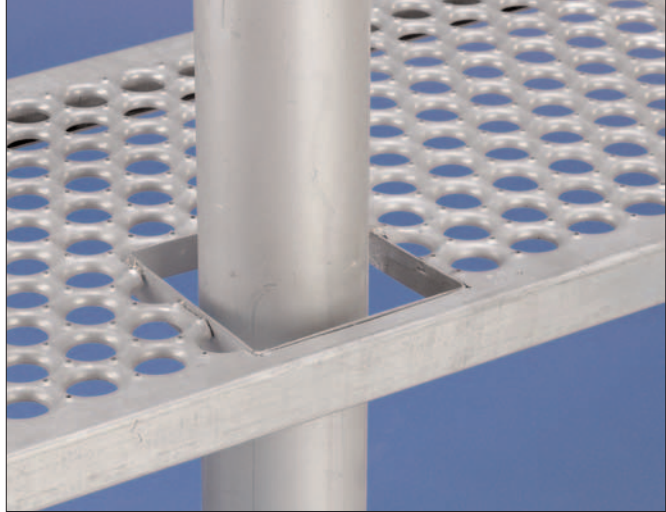
Light, easy-to-handle planks make installation simple and quick. They can be handled by one person. Most sections are rapidly bolted, clamped or welded into place, easily field cut at virtually any angle, or fabricated to adapt to field conditions.

Attachment devices permit fastening to most existing surfaces, allowing for fast installation and disassembly.

Economical To Install and Use

In addition to low material cost and nominal erection cost, Perf-O-Grip Grating also features long-lasting, rust-resistant materials and finishes. Standard mill-galvanized finish resists corrosion to provide lasting surfaces. High-strength aluminum, Type 316-2B and Type 304-2B stainless steels are available to provide maximum corrosion resistance. Plain unpainted steel (HRP&O) is available for those installations requiring paint. Lightweight but brawny panels permit substantial reduction in structural steel requirements.

Perf-O Grip® Applications



Perf-O Grip® Load Information

How To Read Load Tables

To select the proper size of Perf-O-Grip Grating, determine load, clear span and deflection requirements by first determining your loading requirements.

Example — Clear span of 4'-0" with a concentrated load requirement of 600 lbs. at 0.25" maximum deflection, for a 10'-0" wide plank; Refer to the 5-Hole Plank (10" Width), then locate the Clear Span subheading for 4'-0" to find the first occurrence of 600 lbs. (or greater) Concentrated Load (C). In this example, the 13 gauge, 2" depth product (part number P52013) carries a load of 648 lbs. with a 0.10" deflection. While this is one product which meets the minimum requirements, other options might be selected to carry greater loads. For economical selection, choose the greatest width that will support the load consistent with job requirements and choose deeper channels rather than heavier steel gauges.

How Load Tables Were Prepared

The values shown in the following tables are based on actual load tests. The tables have been prepared in accordance with the provisions of the AISI Specification for the Design of Cold-Formed Steel Structural Members, 1986 edition.

These load table values are based on consideration of side channel flexure only and do not consider grating surface performance. Side channel flexure occurs when the channels at midspan of the plank deflect relative to support points. To verify the performance of the side channels, samples were loaded with concentrated and uniform loads at different spans (See Figures 1 and 2). To approximate the most severe condition, there were no attachments between the channels and the supports.

Deflection values indicated in the tables are the midspan side channel deflection produced when the allowable uniform or allowable concentrated load is placed at midspan. Load data is based on yield strength of 33,000 psi for steel, 27,000 psi for aluminum, 35,000 psi for Type 304 stainless steel, and 30,000 psi for Type 316-2B stainless steel.

(U) = Allowable Uniform Load (lbs./ft.²)

(C) = Allowable Concentrated Load (lbs.) applied by 2" round bar across full width of grating

(D) = Vertical Deflection (inches) of side channels at mid span resulting from allowable load

Load/Deflection Conversion Formulas

In the elastic range, deflection is proportional to the applied load for both uniform and concentrated loads. This relationship can be used to determine the deflection that any load which is less than the allowable load will produce, as shown in Example

A. If desired, the load which will produce a specific deflection can also be determined if the load is in the elastic range as illustrated in Example B.

Example A

What deflection will a 300 lb. midspan concentrated load produce on a plank spanning 5'-0" (part number P133011 - page 11)?

$$C = 1517 \text{ lbs.} \quad D = 0.09"$$

$$D @ 300 \text{ lbs.} = 0.09" \times (300 \text{ lbs.} \div 1517 \text{ lbs.}) = 0.02 \text{ inches}$$

Example B

If a plank (part number P132011 - page 11) is spanning 7'-0", what midspan concentrated load will produce a .25" deflection?

$$C = 598 \text{ lbs.} \quad D = 0.27"$$

$$C @ .25" = 598 \text{ lbs.} \times (0.25" \div 0.27") = 554 \text{ lbs.}$$

Special Note On Planks

As width increases, grating surface performance becomes more critical. Thus, for Perf-O-Grip product widths greater than 12", use of the grating surface splice kit is recommended to mechanically join butt ends of plank sections.

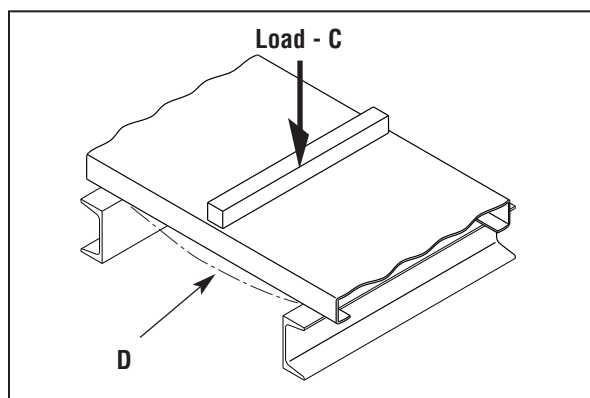


Figure 1. Concentrated Load

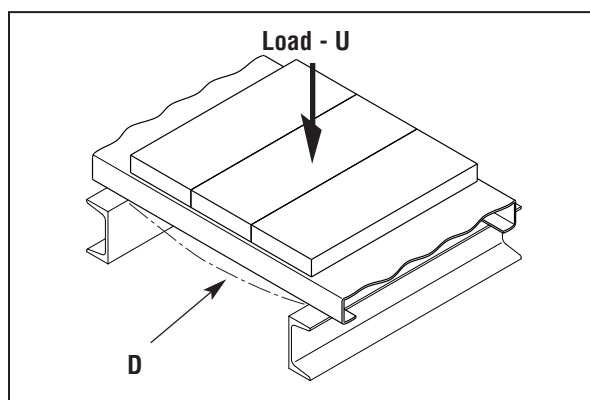
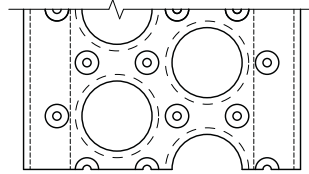
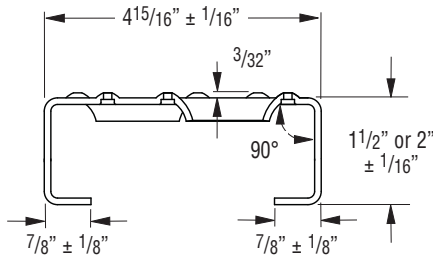


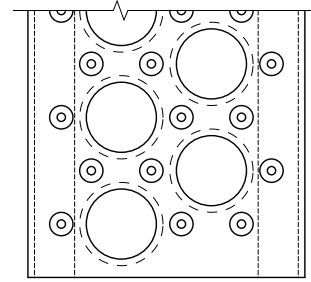
Figure 2. Uniform Load

Perf-O Grip® Grating Load Tables

Perf-O Grip — 2-Hole Plank — 5" Width



Perf-O-Grip



Perf-O-Grip 2

Plank Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

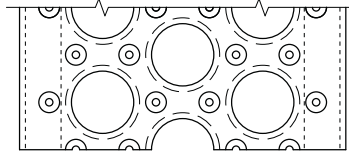
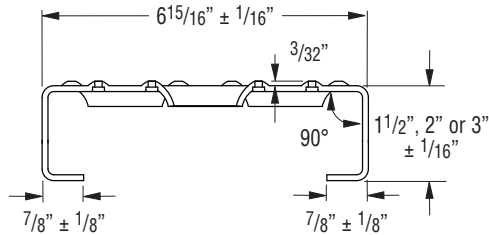
Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number		Span																
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
Steel 13 ga.	1 1/2" (38.1)	2.6 (3.8)	P21513*	U D	2008 .05	1287 .08	895 .11	659 .15	505 .20	400 .25	325 .31	269 .38	227 .45	194 .53	168 .62	146 .71	130 .82	103 1.04	85 1.30	70 1.57	60 1.90
			A21513	C D	836 .04	670 .06	559 .09	481 .12	421 .16	375 .20	338 .25	308 .30	284 .35	263 .43	244 .49	229 .57	216 .65	194 .83	176 1.04	162 1.27	150 1.52
	2" (50.8)	2.8 (4.1)	P22013*	U D	3035 .04	1944 .06	1352 .09	994 .12	762 .15	603 .19	490 .24	405 .29	341 .34	292 .41	253 .47	221 .54	194 .62	155 .79	126 .98	105 1.20	89 1.43
			A22013	C D	1228 .03	1003 .05	845 .07	725 .09	635 .12	566 .15	510 .19	465 .23	427 .28	395 .32	368 .38	344 .43	324 .50	290 .63	263 .79	240 .96	223 1.15
Alum. 0.125"	2" (50.8)	1.3 (1.9)	P220125*	U D	2910 .08	1863 .12	1294 .18	950 .24	728 .32	575 .40	466 .50	385 .60	323 .72	276 .84	237 .98	207 1.12	182 1.27	143 1.61	116 1.99	96 2.41	81 2.87
			A220125	C D	1213 .06	970 .10	809 .14	693 .20	606 .25	539 .32	485 .40	441 .48	404 .57	373 .67	346 .78	323 .90	303 1.02	270 1.29	243 1.60	221 1.93	202 2.29
Stainless Steel 16 ga.	2" (50.8)	2.1 (3.1)	P22016S*	U D	2781 .05	2049 .08	1422 .12	1046 .16	800 .21	632 .26	512 .32	424 .39	355 .46	303 .54	262 .63	227 .72	200 .82	159 1.04	128 1.28	106 1.56	89 1.85
			A22016S	C D	1334 .04	1066 .06	889 .09	761 .13	666 .16	593 .21	534 .26	485 .31	445 .37	410 .43	381 .50	355 .58	334 .66	296 .83	267 1.03	243 1.25	223 1.48
Stainless Steel 14 ga.	2" (50.8)	2.1 (3.1)	P22014S*	U D	3684 .06	2410 .08	1673 .13	1230 .17	942 .22	744 .27	602 .34	498 .41	418 .49	357 .57	307 .66	267 .77	235 .87	186 1.10	151 1.36	125 1.65	105 1.95
			A22014S	C D	1569 .05	1255 .07	1046 .10	896 .14	784 .17	697 .22	627 .27	570 .33	523 .39	482 .46	448 .54	418 .61	392 .70	349 .88	314 1.09	286 1.31	262 1.57

* **Perf-O Grip:** To order standard Perf-O Grip Grating use part number "Pxxxxx".

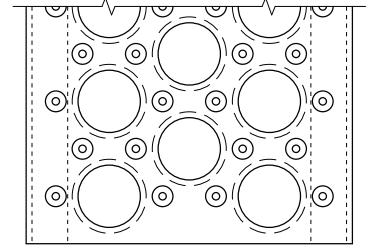
Perf-O Grip 2: To order New Perf-O Grip 2™ Grating use part number "Axxxxx". End margins are standard on new Perf-O Grip 2™ Grating 2-Hole through 6-Hole Plank only (5" through 12" widths). Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available on both Perf-O Grip and Perf-O Grip 2™. Consult factory.

Perf-O Grip® Grating Load Tables

Perf-O Grip — 3-Hole Plank — 7" Width



Perf-O-Grip



Perf-O-Grip 2

Plank Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

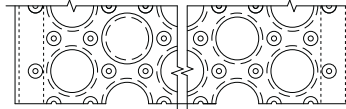
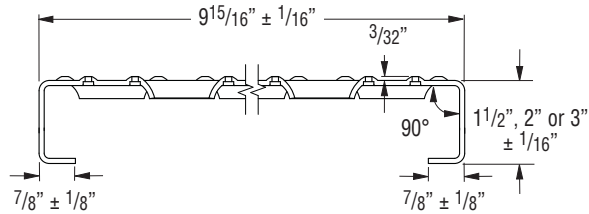
Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number		Span																	
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	
Steel 13 ga.	1 1/2" (38.1)	3.0 (4.4)	P31513* A31513	U D	1536 .05	984 .07	685 .11	504 .14	387 .19	306 .24	249 .29	206 .36	174 .43	149 .50	129 .58	112 .67	100 .77	79 .98	65 1.22	55 1.51	46 1.81	
				C D	914 .04	731 .06	609 .08	522 .12	457 .15	406 .19	366 .24	332 .29	305 .34	283 .40	263 .47	246 .54	232 .61	208 .78	190 .98	174 1.20	162 1.44	
	2" (50.8)	3.3 (4.9)	P32013* A32013	U D	1965 .03	1473 .06	1024 .08	754 .11	578 .14	458 .18	371 .23	307 .27	259 .33	222 .38	192 .44	167 .51	147 .58	118 .74	96 .92	80 1.13	68 1.36	
				C D	1369 .03	1096 .05	913 .07	783 .09	685 .12	609 .15	548 .18	498 .22	456 .26	421 .31	391 .35	366 .41	344 .47	308 .59	279 .74	257 .90	237 1.08	
	Steel 11 ga.	1 1/2" (38.1)	4.2 (6.2)	P31511* A31511	U D	1981 .05	1269 .07	883 .11	650 .15	498 .19	394 .24	320 .30	265 .36	224 .43	191 .51	165 .59	144 .68	128 .78	101 .98	83 1.22	69 1.50	59 1.81
					C D	1165 .04	932 .06	777 .09	666 .12	582 .15	518 .19	467 .24	426 .29	391 .34	362 .40	337 .47	316 .54	297 .62	266 .79	241 .98	222 1.20	205 1.44
2" (50.8)		4.5 (6.7)	P32011* A32011	U D	2899 .03	1978 .06	1375 .08	1012 .11	776 .15	614 .19	498 .23	411 .28	347 .34	302 .40	261 .47	228 .54	201 .62	160 .78	130 .97	108 1.18	92 1.42	
				C D	1762 .03	1410 .05	1175 .07	1032 .09	904 .12	805 .15	726 .19	661 .23	607 .27	573 .32	533 .37	499 .43	469 .49	420 .63	380 .78	348 .95	321 1.14	
3" (76.2)		4.8 (7.1)	P33011* A33011	U D	5806 .03	3716 .04	2581 .06	1898 .08	1454 .11	1150 .13	932 .17	771 .20	649 .24	554 .28	479 .33	417 .37	367 .43	291 .54	236 .67	196 .81	166 .98	
				C D	3188 .02	2550 .03	2125 .04	1822 .06	1594 .07	1417 .10	1275 .12	1159 .15	1132 .19	1050 .22	976 .26	913 .30	857 .34	764 .43	690 .54	630 .65	581 .78	
Alum. 0.125"	2" (50.8)	1.5 (2.2)	P320125* A320125	U D	2138 .07	1491 .14	1035 .20	761 .27	582 .35	460 .44	372 .54	308 .66	258 .78	221 .92	190 1.07	166 1.23	146 1.39	115 1.76	93 2.18	77 2.64	65 3.14	
				C D	1509 .07	1207 .11	1006 .16	862 .21	755 .28	671 .35	604 .44	549 .53	503 .63	464 .74	431 .85	402 .98	377 1.12	335 1.41	302 1.74	274 2.11	252 2.51	
Stainless Steel 16 ga.	2" (50.8)	2.4 (3.6)	P32016S* A32016S	U D	1419 .03	1399 .07	971 .10	714 .13	546 .17	432 .22	350 .27	289 .33	243 .39	207 .46	178 .53	155 .61	137 .70	107 .88	88 1.09	72 1.31	61 1.56	
				C D	1275 .03	1021 .05	850 .08	729 .11	638 .14	567 .18	510 .22	464 .26	425 .31	392 .37	365 .43	341 .49	319 .56	283 .70	255 .87	232 1.05	213 1.25	
Stainless Steel 14 ga.	2" (50.8)	2.8 (4.1)	P32014S* A32014S	U D	1879 .04	1571 .07	1091 .10	801 .14	614 .18	485 .22	393 .27	325 .33	273 .40	232 .47	200 .54	175 .62	153 .70	121 .89	98 1.10	81 1.33	69 1.59	
				C D	1432 .04	1145 .06	954 .08	818 .11	715 .14	637 .18	573 .22	521 .27	478 .32	440 .37	409 .43	382 .49	358 .56	318 .71	287 .88	261 1.06	239 1.27	

* **Perf-O Grip:** To order standard Perf-O Grip Grating use part number "Pxxxxx".

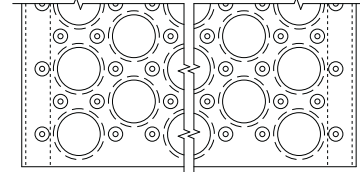
Perf-O Grip 2: To order New Perf-O Grip 2™ Grating use part number "Axxxxx". End margins are standard on new Perf-O Grip 2™ Grating 2-Hole through 6-Hole Plank only (5" through 12" widths). Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available on both Perf-O Grip and Perf-O Grip 2™. Consult factory.

Perf-O Grip® Grating Load Tables

Perf-O Grip — 5-Hole Plank — 10" Width



Perf-O-Grip



Perf-O-Grip 2

Plank Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

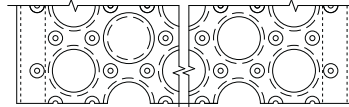
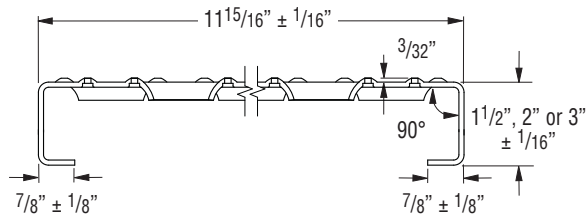
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					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"
Steel 13 ga.	1 1/2" (38.1)	3.5 (5.2)	P51513*	U	963	745	517	380	291	230	187	154	129	110	95	83	73	58
				D	.04	.08	.11	.15	.19	.24	.30	.36	.43	.51	.59	.67	.77	.98
			A51513	U	855	684	645	554	485	431	388	353	323	298	277	259	242	216
				D	.03	.05	.09	.12	.15	.19	.24	.29	.35	.41	.47	.54	.61	.78
	2" (50.8)	3.9 (5.8)	P52013*	U	1735	1110	771	568	435	344	281	232	196	167	144	126	110	88
				D	.04	.06	.08	.11	.15	.18	.23	.28	.33	.39	.45	.52	.59	.75
			A52013	U	1297	1038	865	741	648	645	584	532	489	453	422	392	368	327
				D	.02	.04	.05	.08	.10	.15	.18	.22	.26	.31	.36	.41	.47	.60
Steel 11 ga.	1 1/2" (38.1)	4.5 (6.7)	P51511*	U	1385	888	618	455	349	276	225	186	157	134	117	101	90	71
				D	.05	.07	.10	.14	.18	.23	.29	.35	.41	.49	.57	.65	.75	.95
			A51511	U	1086	888	772	663	582	518	467	426	392	363	338	318	299	268
				D	.03	.05	.08	.11	.15	.18	.23	.28	.33	.39	.45	.52	.60	.76
	2" (50.8)	5.1 (7.6)	P52011*	U	2261	1447	1005	739	567	449	364	300	253	216	186	162	142	112
				D	.04	.06	.08	.11	.15	.19	.23	.28	.33	.39	.45	.52	.59	.75
			A52011	U	1670	1336	1113	954	888	823	758	689	631	583	541	505	473	421
				D	.02	.04	.06	.08	.11	.14	.18	.22	.27	.31	.36	.42	.47	.60
	3" (76.2)	5.1 (7.6)	P53011*	U	4214	2697	1873	1376	1053	832	674	557	468	399	344	300	263	208
				D	.03	.04	.06	.08	.10	.13	.16	.19	.23	.27	.31	.35	.41	.52
			A53011	U	3095	2476	2064	1769	1548	1376	1238	1126	1032	952	927	902	878	781
				D	.02	.03	.04	.05	.07	.08	.11	.14	.16	.19	.24	.28	.33	.41
Alum. 0.125"	2" (50.8)	1.8 (2.7)	P520125*	U	1048	1022	710	522	400	316	256	212	178	153	131	115	101	80
				D	.05	.12	.18	.24	.31	.40	.49	.59	.71	.83	.96	1.10	1.26	1.59
			A520125	U	1431	1145	954	818	715	636	572	520	477	440	409	382	358	318
				D	.06	.09	.13	.19	.25	.32	.39	.47	.57	.66	.77	.88	1.00	1.27
Stainless Steel 16 ga.	2" (50.8)	2.7 (4.0)	P52016S*	U	1418	907	630	463	354	280	226	187	158	134	115	101	88	70
				D	.04	.07	.10	.13	.17	.21	.26	.32	.38	.44	.52	.59	.67	.85
			A52016S	U	1148	918	765	656	574	510	459	430	393	363	337	315	295	263
				D	.03	.05	.07	.10	.13	.17	.21	.26	.30	.36	.41	.48	.54	.69
Stainless Steel 14 ga.	2" (50.8)	3.2 (4.7)	P52014S*	U	1296	1037	864	741	648	576	530	485	445	410	381	355	334	296
				D	.04	.07	.10	.13	.17	.22	.27	.32	.38	.45	.52	.60	.68	.86
			A52014S	U	1296	1037	864	741	648	576	530	485	445	410	381	355	334	296
				D	.03	.05	.07	.10	.13	.17	.21	.26	.31	.36	.42	.48	.55	.69

* Perf-O Grip: To order standard Perf-O Grip Grating use part number "Pxxxxx".

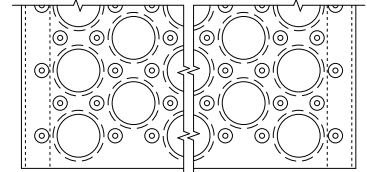
Perf-O Grip 2: To order New Perf-O Grip 2™ Grating use part number "Axxxxx". End margins are standard on new Perf-O Grip 2™ Grating 2-Hole through 6-Hole Plank only (5" through 12" widths). Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available on both Perf-O Grip and Perf-O Grip 2™. Consult factory.

Perf-O Grip® Grating Load Tables

Perf-O Grip — 6-Hole Plank — 12" Width



Perf-O Grip



Perf-O Grip 2

Plank Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

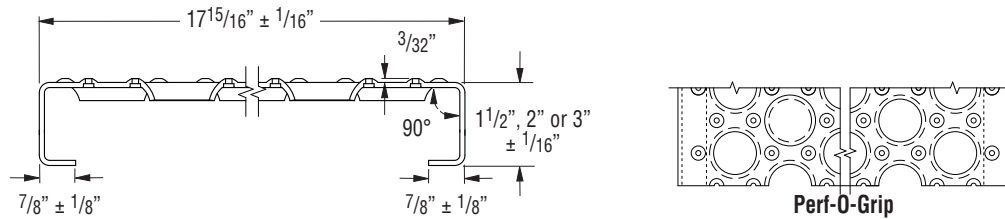
Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number		Span													
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"
Steel 13 ga.	1 1/2" (38.1)	4.3 (6.4)	P61513* A61513	U	669	655	456	336	258	204	166	138	117	100	87	76	67	54
				D	.03	.07	.10	.13	.17	.22	.27	.33	.40	.47	.55	.63	.72	.92
				C	960	819	684	588	516	460	416	380	349	325	303	285	268	241
	2" (50.8)	4.6 (6.8)	P62013* A62013	U	1510	966	671	493	378	299	243	201	170	145	126	110	97	77
				D	.03	.05	.07	.10	.13	.16	.20	.25	.29	.35	.40	.46	.53	.68
				C	1442	1154	961	862	756	673	608	555	509	472	440	413	388	349
Steel 11 ga.	1 1/2" (38.1)	5.3 (7.9)	P61511* A61511	U	986	739	515	378	291	230	188	156	131	112	97	85	75	60
				D	.03	.06	.09	.12	.16	.21	.25	.31	.37	.43	.50	.57	.65	.82
				C	1231	985	821	703	615	547	492	448	410	379	352	328	308	274
	2" (50.8)	5.5 (8.2)	P62011* A62011	U	1937	1240	861	633	486	385	312	259	218	186	161	140	124	99
				D	.03	.05	.07	.10	.13	.16	.20	.24	.29	.34	.40	.46	.52	.67
				C	1881	1505	1292	1109	971	865	781	712	654	604	563	527	496	444
	3" (76.2)	6.2 (9.2)	P63011* A63011	U	3828	2450	1701	1250	957	757	614	507	427	365	315	274	242	192
				D	.02	.04	.05	.07	.10	.12	.15	.18	.22	.25	.29	.34	.39	.49
				C	3448	2759	2299	1971	1724	1533	1405	1396	1282	1185	1102	1030	968	864
Alum. 0.125"	2" (50.8)	2.1 (3.1)	P620125* A620125	U	1463	936	650	478	366	290	235	194	163	140	120	104	93	73
				D	.08	.12	.17	.23	.30	.38	.47	.57	.68	.79	.92	1.05	1.20	1.52
				C	1612	1290	1075	921	806	716	645	586	537	496	461	430	403	358
	2" (50.8)	3.2 (4.7)	P62016S* A62016S	U	1289	825	573	421	322	255	206	170	143	122	105	91	80	64
				D	.04	.07	.10	.13	.17	.22	.27	.33	.39	.46	.53	.61	.69	.88
				C	1252	1002	835	715	626	556	501	469	430	397	368	343	322	286
Stainless Steel 16 ga.	2" (50.8)	3.8 (5.6)	P62014S* A62014S	U	1455	931	647	475	365	288	233	193	162	138	119	104	82	65
				D	.04	.07	.10	.13	.17	.21	.26	.32	.38	.44	.51	.59	.65	.83
				C	1416	1133	944	809	708	629	583	529	486	448	416	389	365	323
Stainless Steel 14 ga.	2" (50.8)	3.8 (5.6)	P62014S* A62014S	U	1455	931	647	475	365	288	233	193	162	138	119	104	82	65
				D	.04	.07	.10	.13	.17	.21	.26	.32	.38	.44	.51	.59	.65	.83
				C	1416	1133	944	809	708	629	583	529	486	448	416	389	365	323
	2" (50.8)	3.8 (5.6)	P62014S* A62014S	U	1455	931	647	475	365	288	233	193	162	138	119	104	82	65
				D	.04	.07	.10	.13	.17	.21	.26	.32	.38	.44	.51	.59	.65	.83
				C	1416	1133	944	809	708	629	583	529	486	448	416	389	365	323

* Perf-O Grip: To order standard Perf-O Grip Grating use part number "Pxxxxx".

Perf-O Grip 2: To order New Perf-O Grip 2™ Grating use part number "Axxxxx". End margins are standard on new Perf-O Grip 2™ Grating 2-Hole through 6-Hole Plank only (5" through 12" widths). Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available on both Perf-O Grip and Perf-O Grip 2™. Consult factory.

Perf-O Grip® Grating Load Tables

Perf-O Grip — 10-Hole Plank — 18" Width



Plank Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

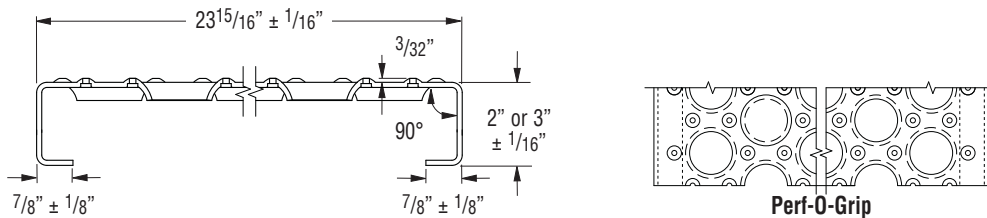
Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number		Span													
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"
					10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"
Steel 13 ga.	1 1/2" (38.1)	5.7 (8.5)	P101513	U	714	457	317	233	179	142	116	96	82	69	60	52	45	36
				D	.04	.07	.10	.13	.17	.21	.26	.32	.39	.45	.52	.60	.68	.86
				C	964	771	642	551	495	481	434	397	366	337	314	293	274	243
				D	.03	.04	.07	.09	.12	.17	.21	.26	.31	.36	.42	.48	.55	.69
	2" (50.8)	6.0 (8.9)	P102013	U	1072	686	476	350	268	212	173	143	121	103	90	78	69	55
				D	.03	.05	.07	.10	.13	.16	.20	.24	.29	.34	.40	.46	.53	.67
				C	1452	1162	968	830	726	645	581	528	509	489	470	439	411	366
				D	.02	.03	.05	.06	.09	.12	.14	.17	.22	.27	.32	.37	.42	.53
Steel 11 ga.	1 1/2" (38.1)	6.8 (10.1)	P101511	U	781	500	347	255	196	156	127	105	89	76	66	58	52	41
				D	.04	.06	.09	.12	.15	.19	.24	.29	.34	.40	.47	.53	.61	.77
				C	1257	1006	838	718	629	559	503	457	419	387	359	335	314	279
				D	.03	.05	.07	.09	.12	.15	.19	.23	.27	.32	.37	.43	.49	.62
	2" (50.8)	7.1 (10.5)	P102011	U	1250	800	555	408	314	249	201	167	141	121	104	91	80	64
				D	.03	.05	.07	.09	.12	.15	.18	.22	.26	.31	.35	.41	.46	.59
				C	1924	1539	1283	1099	962	855	770	700	641	592	550	514	484	434
				D	.02	.04	.05	.07	.09	.12	.14	.17	.21	.24	.28	.33	.37	.48
	3" (76.2)	7.9 (11.7)	P103011	U	2675	1712	1189	873	669	528	428	354	297	254	219	190	167	132
				D	.02	.04	.05	.07	.09	.11	.14	.17	.20	.24	.28	.31	.36	.45
				C	3531	2825	2354	2018	1766	1569	1412	1284	1177	1141	1106	1070	1003	892
				D	.01	.02	.03	.04	.06	.08	.10	.12	.14	.20	.23	.25	.29	.36
Alum. 0.125"	2" (50.8)	2.8 (4.1)	P1020125	U	992	635	441	324	248	196	158	131	110	94	81	70	62	49
				D	.07	.10	.16	.21	.28	.35	.44	.53	.63	.74	.86	.98	1.12	1.42
				C	1652	1322	1102	944	826	734	661	601	551	508	472	441	413	367
				D	.05	.08	.13	.17	.22	.28	.35	.42	.50	.59	.69	.79	.89	1.13

Perf-O Grip: To order standard Perf-O Grip Grating use part number "Pxxxxx".

Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available. Consult factory.

Perf-O Grip® Grating Load Tables

Perf-O Grip — 13-Hole Plank — 24" Width



Plank Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

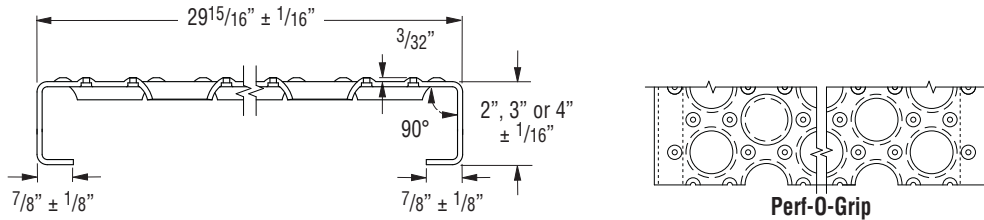
Material Gauge	Channel Depth in. (mm)	Weight lb./in. ft. (kg/m)	Catalog Number		Span													
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"
Steel 11 ga.	2" (50.8)	8.9 (13.2)	P132011	U	1094	700	486	357	273	216	175	145	123	105	91	79	70	56
				D	.03	.05	.06	.09	.12	.15	.18	.22	.26	.31	.36	.41	.47	.60
				C	2092	1674	1395	1196	1046	930	837	761	697	644	598	558	540	504
				D	.02	.03	.05	.06	.09	.11	.14	.17	.20	.23	.27	.31	.37	.49
	3" (76.2)	9.8 (8.914.5)	P133011	U	1971	1261	876	644	493	389	315	261	219	187	161	141	124	99
				D	.02	.03	.04	.06	.08	.10	.12	.15	.18	.21	.24	.28	.32	.40
				C	3792	3033	2528	2167	1896	1685	1517	1379	1264	1167	1083	1011	948	843
				D	.01	.02	.03	.04	.05	.07	.09	.10	.12	.15	.17	.19	.22	.30

Perf-O Grip: To order standard Perf-O Grip Grating use part number "Pxxxxx".

Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available. Consult factory.

Perf-O Grip® Grating Load Tables

Perf-O Grip — 16-Hole Plank — 30" Width



Plank Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

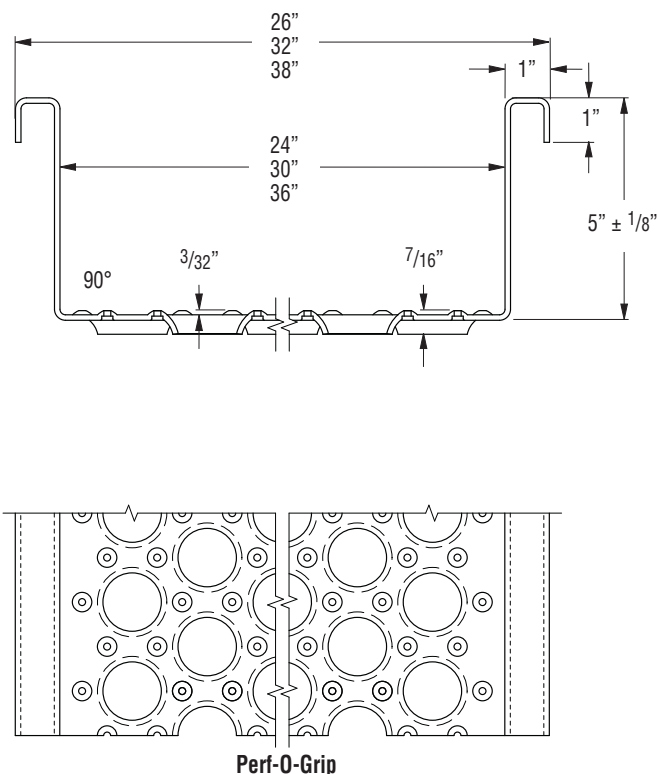
Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number		Span																
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
Steel 11 ga.	2" (50.8)	11.8 (17.5)	P162011	U	956	612	425	312	239	189	153	126	106	91	77	68	60	47	38	32	27
				D	.02	.03	.04	.05	.07	.09	.11	.13	.16	.18	.21	.24	.28	.35	.43	.52	.62
				C	2564	2051	1709	1465	1282	1140	1026	932	855	789	733	684	641	570	513	466	427
	3" (76.2)	12.7 (18.9)	P163011	D	.01	.02	.03	.04	.06	.07	.09	.10	.12	.15	.17	.20	.22	.28	.35	.42	.50
				U	1413	904	628	461	353	279	226	187	157	134	116	100	89	70	57	46	39
				D	.02	.03	.04	.06	.08	.10	.12	.14	.17	.20	.23	.26	.30	.38	.47	.57	.67
	4" (101.6)	13.5 (20.1)	P164011	C	3802	3041	2534	2172	1901	1690	1521	1382	1267	1170	1086	1014	950	845	760	691	634
				D	.01	.02	.03	.04	.05	.07	.09	.10	.12	.14	.17	.19	.22	.28	.34	.41	.53
				U	2240	1434	996	731	560	443	358	296	249	212	183	159	140	111	91	75	64
				D	.01	.02	.03	.04	.06	.07	.09	.11	.13	.15	.17	.20	.23	.29	.36	.44	.52
				C	5838	4670	3892	3336	2919	2595	2335	2123	1946	1796	1668	1557	1459	1297	1168	1061	973
				D	.01	.02	.02	.03	.04	.05	.07	.08	.09	.11	.13	.15	.17	.21	.26	.32	.38

Perf-O Grip: To order standard Perf-O Grip Grating use part number "Pxxxxx".

Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available. Consult factory.

Perf-O Grip® Walkway Load Tables

Perf-O Grip — Walkway — 24", 30" & 36" Widths



Walkway Selection/Design Tables (Note: Consult factory for data on 36" width)

Allowable Loads and Deflections: U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.) D=Deflection (in.)

Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number		Span																
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
Steel 11 ga.	5" (127.0)	11.8 (17.5)	P135011W	U	5751	3681	2556	1878	1438	1136	920	760	639	544	469	409	359	284	230	190	160
				D	.02	.02	.04	.05	.06	.08	.10	.12	.14	.16	.19	.22	.25	.31	.39	.47	.56
				C	9504	7603	6336	5431	4752	4224	3802	3456	3168	2924	2715	2534	2376	2112	1901	1728	1584
	5" (127.0)	13.6 (20.2)	P165011W	D	.01	.01	.02	.03	.04	.05	.06	.07	.08	.10	.11	.13	.15	.19	.23	.28	.34
				U	3868	2475	1719	1263	967	764	619	511	430	366	316	275	242	191	155	128	107
				D	.01	.02	.03	.04	.05	.06	.08	.10	.12	.13	.16	.18	.20	.26	.32	.39	.46
				C	9534	7627	6356	5448	4767	4237	3813	3467	3178	2933	2724	2542	2383	2119	1907	1733	1589
				D	.00	.01	.02	.03	.04	.05	.06	.07	.08	.10	.11	.13	.15	.19	.23	.28	.33

Perf-O Grip: To order standard Perf-O Grip Grating use part number "Pxxxxx".

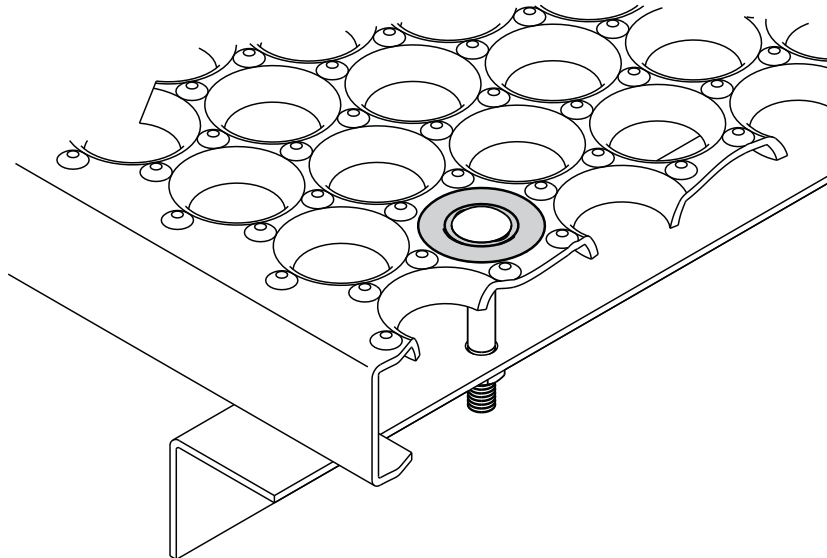
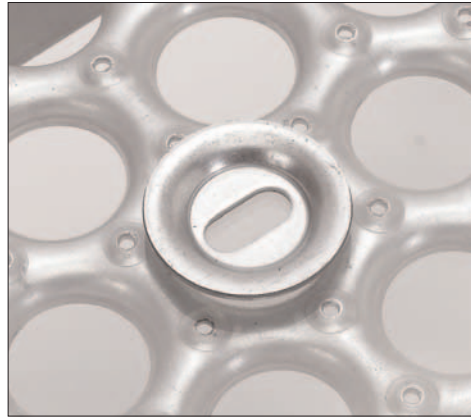
Standard lengths are 10'-0" and 12'-0". Longer lengths of 20'-0" and 24'-0" are available. Consult factory.

Perf-O Grip® Accessories

Bolt Seats

Perf-O-Grip Bolt Seats provide a secure anchor of the grating to structural supports. The standard bolt seat features oblong holes specifically designed to ensure a vertical anchor (with a $\frac{3}{8}$ " bolt) even if the hole is off concentrically by as much as $\frac{1}{4}$ ". Available in mill-galvanized steel, aluminum and stainless steel. Hardware is not provided.

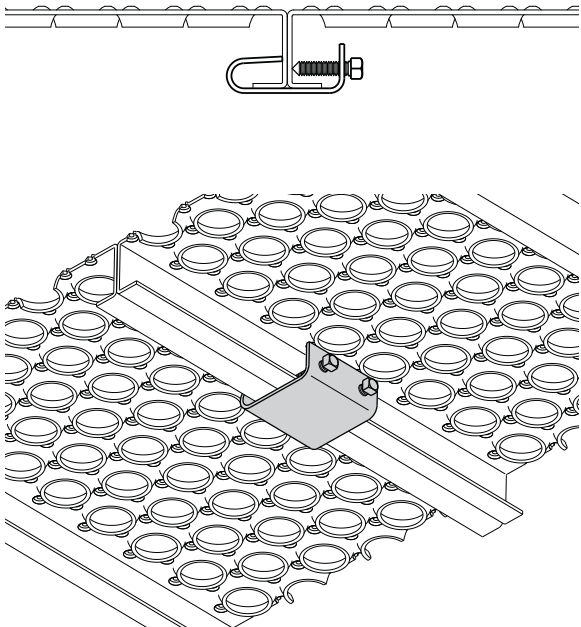
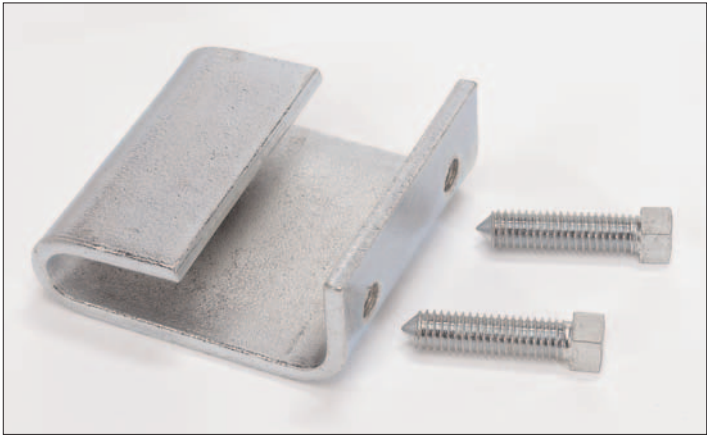
P-Bolt Seat (standard)



Grating Support Clips

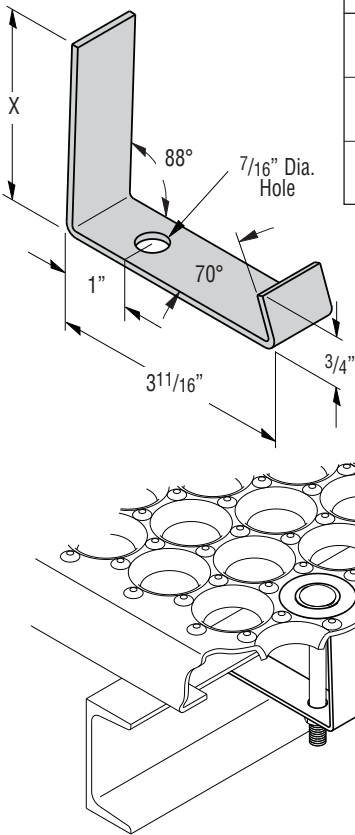
Mid-Clip

Perf-O-Grip Midsupport clips can be used at midspan to increase load carrying capacities of individual channels by fastening several planks together to form an integral section. Midsupport Clip is manufactured from galvanized steel and includes two bolts.



J-Clip

Perf-O-Grip J-Clips fasten the grating securely to the supporting steel without drilling holes. Standard finish is galvanized. Hardware is not provided.



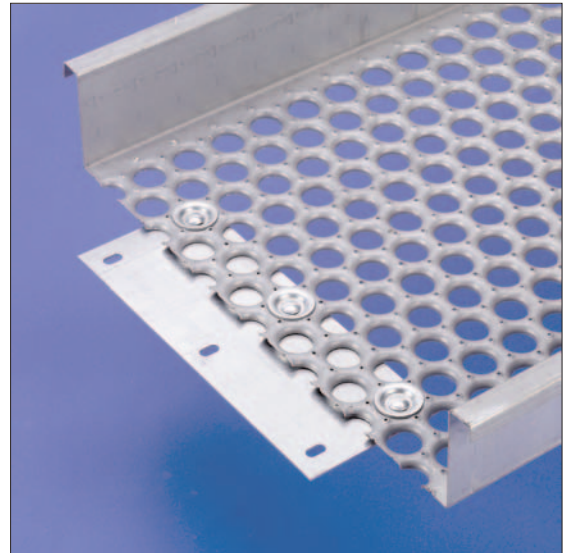
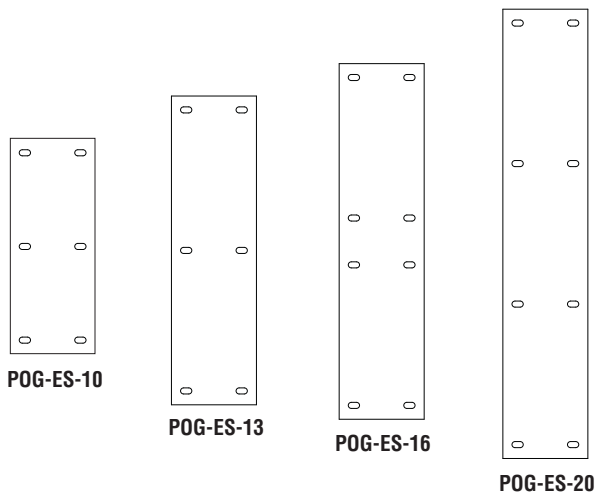
Grating Side Channel	Dimension X
1 1/2" (38mm)	2 3/16" (56mm)
2" (51mm)	2 11/16" (68mm)
3" (76mm)	2 11/16" (94mm)

Splice Plate Kits

Surface Splice Plate Kits

As width increases, grating surface performance becomes more critical. Thus, for Perf-O-Grip product widths greater than 12", use of the grating surface splice kit is recommended to mechanically join butt ends of plank sections.

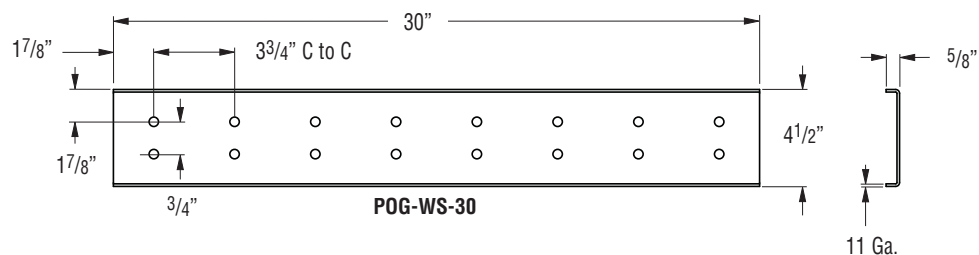
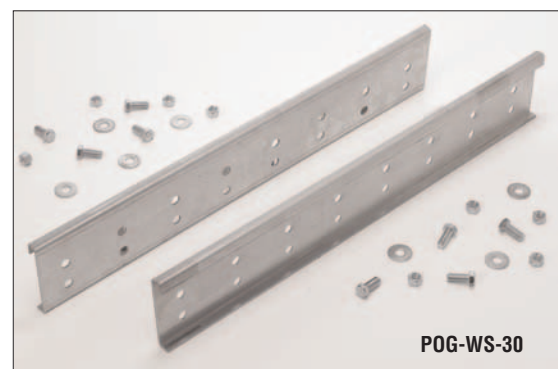
- **POG-ES-10** for 18" wide plank includes six (6) each of hardware shown below.
- **POG-ES-13** for 24" wide plank includes six (6) each of hardware shown below.
- **POG-ES-16** for 30" wide plank includes eight (8) each of hardware shown below.
- **POG-ES-20** for 36" wide plank includes eight (8) each of hardware shown below.
- **Hardware included:** $\frac{3}{8}$ " x 1" carriage bolts, $\frac{3}{8}$ " flat washers and bolt seats.



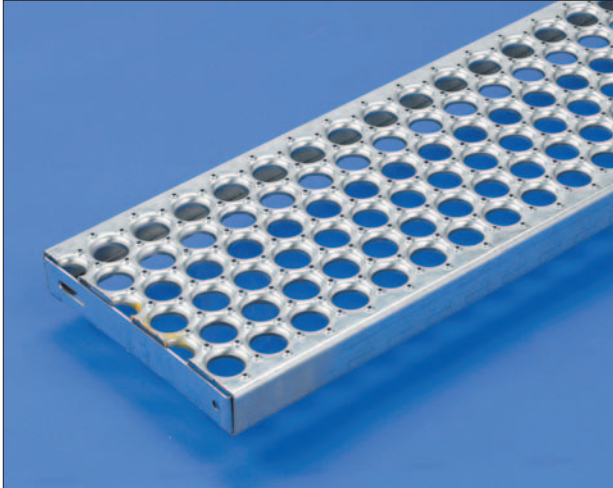
Walkway Splice Plate Kits

Walkway Splice Plates provide continuity when multiple lengths of Perf-O-Grip are desired. Connections are reinforced with the addition of splice plates attached to side channels.

- **POG-WS-30** for 24", 30" and 36" wide walkway.
- **Each Kit includes:** Two (2) splice plates and thirty-two (32) each of the following hardware: $\frac{1}{2}$ " x $1\frac{1}{4}$ " hex bolts, $\frac{1}{2}$ "-13 hex nuts and $\frac{1}{2}$ " flat washers.



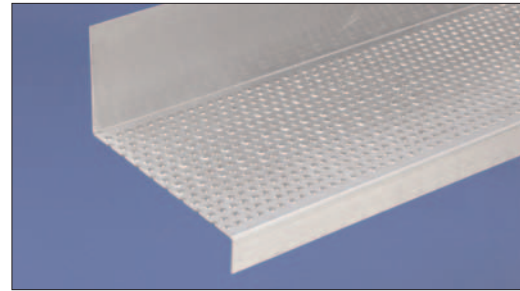
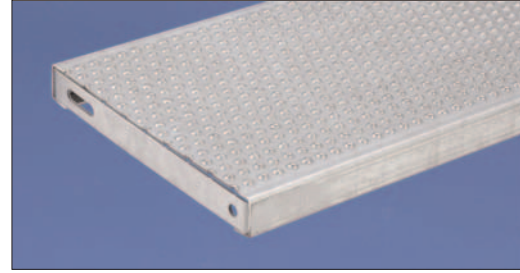
Stair Treads & Carrier Plates



Perf-O-Grip Stair Treads (standard)

Specify original Perf-O-Grip or Perf-O-Grip 2 Stair Treads. All treads have welded ends for attachment to stringers.

- Mill-galvanized steel: 11 ga and 13 ga.
- Hot rolled, pickled and oiled carbon steel: 11 ga. and 13 ga.
- 24", 30" and 36" lengths.
- 5", 7" 10" and 12" (nominal) widths.
- 1 1/2" and 2" channel heights.

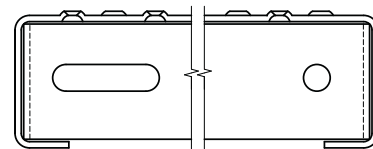


Stair Treads (custom)

Stair Treads are also available with Traction Tread™ and other options. Consult factory with design questions.

Carrier Plates

Carrier Plates allow you to create your own custom stair treads. They are sold by the pair (2 plates = one pair).



Traction Tread Carrier Plate

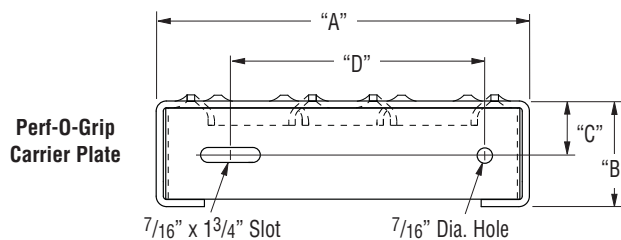


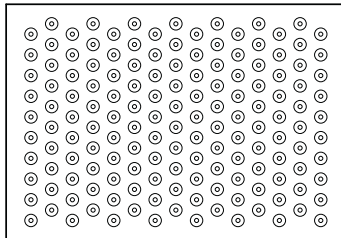
Table
for
Perf-O-Grip
Treads

Product	Nominal Width	"A"	"B"	"C"	"D"
2-Hole Tread	5" (127mm)	4 15/16" (125mm)	1 1/2" (38mm)	3/4" (19mm)	2" (51mm)
		4 15/16" (125mm)	2" (51mm)	1" (25mm)	2" (51mm)
3-Hole Tread	7" (178mm)	6 15/16" (176mm)	1 1/2" (38mm)	3/4" (19mm)	4" (102mm)
		6 15/16" (176mm)	2" (51mm)	1" (25mm)	4" (102mm)
5-Hole Tread	10" (254mm)	9 15/16" (254mm)	1 1/2" (38mm)	3/4" (19mm)	7" (178mm)
		9 15/16" (254mm)	2" (51mm)	1" (25mm)	7" (178mm)
6-Hole Tread	12" (305mm)	11 15/16" (303mm)	1 1/2" (38mm)	3/4" (19mm)	9" (227mm)
		11 15/16" (303mm)	2" (51mm)	1" (25mm)	9" (227mm)

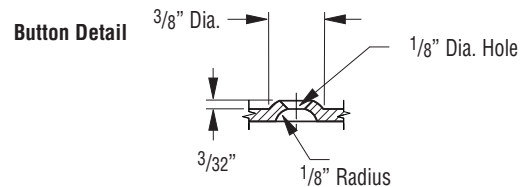
Traction Tread Flooring

Traction Tread™ Flooring feature a surface with hundreds of perforated buttons that provide slip-resistance in all directions making it a practical choice for industrial applications. Traction Tread is also appropriate for commercial applications where pedestrian traffic is a consideration, perfectly suited for ADA-compliant requirements.

Traction Tread is easily adapted for a multitude of applications, offering a safe walking-working surface for walkways, ramps, stair treads and equipment platforms. Traction Tread is ideal for the manufacture of special and fabricated products, and is often used as a reconditioning material over existing surfaces that do not provide slip-resistance.



Standard Pattern



Traction Tread™ flooring is readily available in stock sheets designed for secondary fabrication requirements:

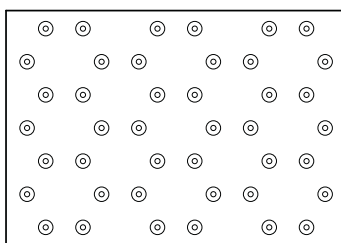
Material Options:

- Hot rolled, pickled and oiled carbon steel:
 - 11 gauge (5.0 lbs./sq. ft.)
 - 13 gauge (3.8 lbs./sq. ft.)
 - 16 gauge (2.5 lbs./sq. ft.)
- Aluminum alloy 5052-H32:
 - .125" (1.6 lbs./sq. ft.)
- Note: 14 ga. & 12 ga. carbon steel and 16 ga. 304 stainless steel are also available

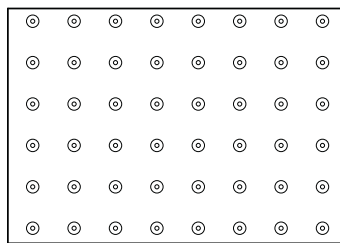
Sheet Size:

- Standard 36" x 120"
- Cut to order

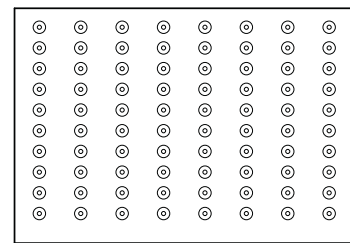
Traction Tread™ is available as shown above as a standard product, however, variations to the surface design can be produced according to your requirement (see examples illustrated below).



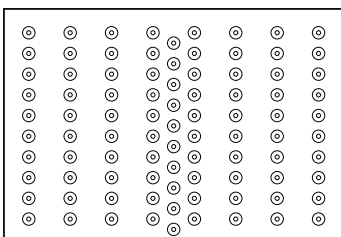
Star Pattern



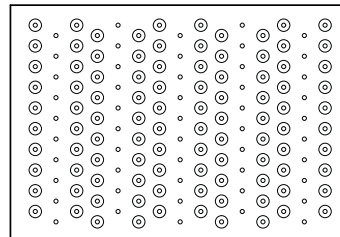
Square Pattern



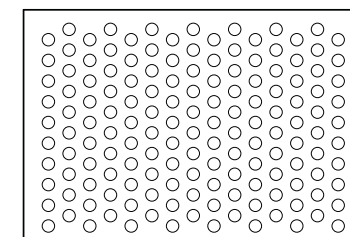
Rectangular Pattern



OEM Pattern



Drain Hole Pattern

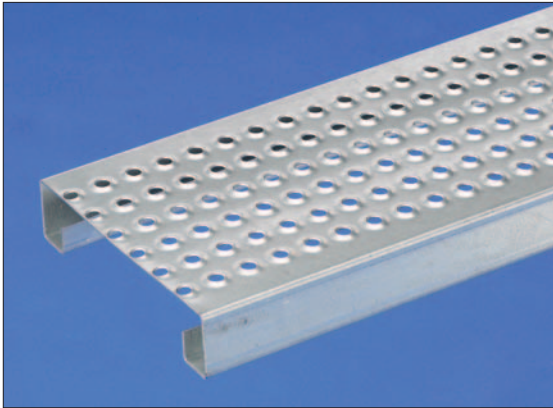


Non-Perforated Pattern

Traction Tread Planks

Traction Tread™ Planks feature a moderate slip-resistance surface designed for maximum versatility. Planks are kind to knees and hands in commercial applications, including scaffolding. Surface textures work well for cart and wheeled traffic.

Traction Tread Plank with LH Pattern

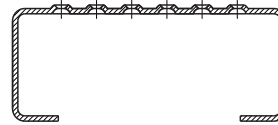


Material Options:

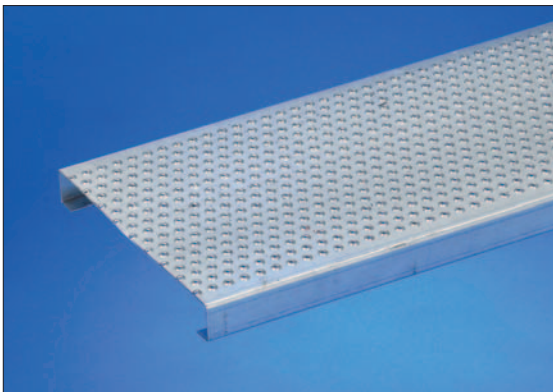
- Hot rolled, pickled and oiled carbon steel: 11 gauge and 13 gauge
- Mill-galvanized steel: 11 gauge and 13 gauge
- Aluminum alloy 5052-H32: .125"
- Hot dipped galvanized after fabrication (HDGAF)
- LH pattern

Plank Dimensions:

- 9" wide (nominal)
- 120" and 144" lengths (nominal)
- 1 1/2" minimum of 2" channel height



Traction Tread Plank



Material Options:

- Hot rolled, pickled and oiled carbon steel: 11 gauge and 13 gauge
- Mill-galvanized steel: 11 gauge and 13 gauge
- Aluminum alloy 5052-H32: .125"

Plank Dimensions:

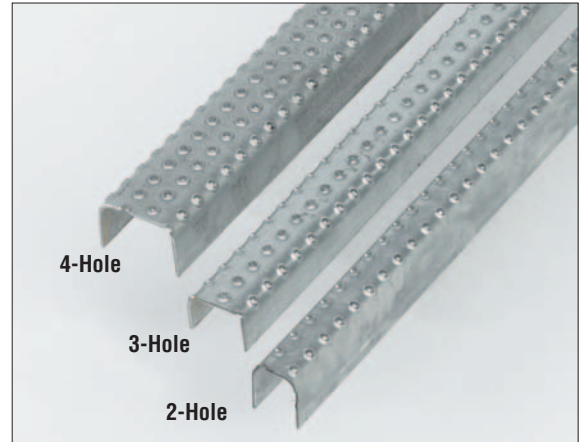
- 7", 10" and 12" widths (nominal)
- 20" and 144" lengths (nominal)
- 1 1/2" minimum of 2" channel height



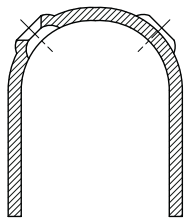
Product	"A"	"B"	"C"	Rows of Buttons
12" Wide	11 7/8" (301mm)	1 5/16" (24mm)	16" (406mm)	17
10" Wide	9 7/8" (251mm)	7/8" (22mm)	13" (330mm)	14
7" Wide	6 7/8" (174mm)	1 5/16" (24mm)	8" (203mm)	9

Traction Tread Ladder Rungs

Traction Tread™ Ladder Rungs feature a hand-over-hand friendly surface with moderate slip resistance. Products are sold in efficient lengths, well suited to fabricators of ladders. Vehicle applications are extensive.

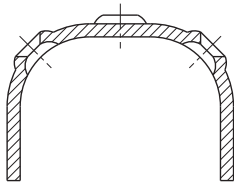


2-Hole Ladder Rung



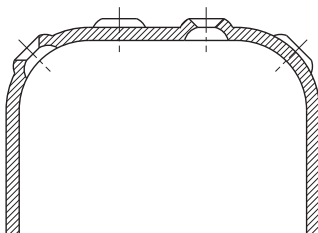
- Hot rolled, pickled and oiled carbon steel: 13 gauge (1.2 lbs./ft.)
- Aluminum alloy 5052-H32: .125" (0.5 lbs./ft.)
- 1 1/4" wide x 1 1/2" high x 48" or 60" long

3-Hole Ladder Rung



- Hot rolled, pickled and oiled carbon steel: 13 gauge (1.3 lbs./ft.)
- Aluminum alloy 5052-H32: .125" (0.5 lbs./ft.)
- 1 5/8" wide x 1 1/8" high x 48" or 60" long

4-Hole Ladder Rung



- Hot rolled, pickled and oiled carbon steel: 13 gauge (1.5 lbs./ft.)
- Aluminum alloy 5052-H32: .125" (0.7 lbs./ft.)
- 2 1/4" wide x 1 1/2" high x 48" or 60" long

Specifications shown are for standard products. Consult Cooper B-Line for other options.

Perf-O-Grip Specifications

Notes to architect

1. Perf-O-Grip and Perf-O-Grip 2 Gratings are intended for general purpose use in plants and process facilities by industry, commerce, and public utilities, and on air, water, and surface, for both mobile and stationary equipment.
2. Perf-O-Grip and Perf-O-Grip 2 Stair Treads are intended for utility stairs and fire escapes in commercial, public and private buildings where local code permits. They are not intended for staircases used regularly by the general public where flat closed surfaces are desired. For this type of application, see Traction Tread stair treads and sheets.
3. These specifications are presented as a general guide to the architect or structural engineer in preparing project specifications. Allowable loads, spans and other limiting conditions presented in this catalog offer product data for use in design and construction.
4. All supports should provide a smooth, level, 1 1/2" minimum bearing surface, free of burrs, bridging, welds or other irregularities.
5. Random cut ends and diagonal or circular cut exposed edges should be banded with a bar at least 1/8" thick and equal to the overall side channel depth of grating welded at contact points at the discretion of the design engineer.
6. Bolted connections, except stair or ladder tread attachment to stringer channels, may be replaced by welded connections that develop the same strength.

Part 1: General

1.1 Scope

The contractor shall furnish and install Perf-O-Grip and Perf-O-Grip 2 Gratings and Stair Treads, as specified and shown on the drawings.

1.2 Qualifications

Perf-O-Grip and Perf-O-Grip 2 Gratings, Stair Tread and accessories, unless otherwise indicated, shall be manufactured by Cooper B-Line, and shall be installed in accordance with its current printed directions. Safety surface shall be slip-resistant in all directions.

1.3 Submittals

The contractor shall furnish shop drawings of grating layout, framing and supports, unit dimensions and sections, type and location of fasteners and welds.

1.4 Storage and Handling

All materials shall be stored and handled to avoid damage. Damaged materials shall be removed from the premises.

Part 2: Products

2.1 Grating Materials

- a. **Type:** (Perf-O-Grip and Perf-O-Grip 2 Gratings) (Perf-O-Grip Walkways)
- b. **Metal and Finish:** Standard (mill-galvanized steel, ASTM A924) (stainless steel, alloy Types 304-2B/D) (aluminum, alloy 5052 H32); Special order (carbon steel — hot rolled, pickled and oiled, ASTM-A569) (stainless steel, alloy Type 316-2B/D)
- c. **Metal gauge:** (13-ga. steel) (11-ga. steel) (16-ga. stainless steel) (14-ga. stainless steel) (.125" aluminum)
- d. **Section width:** (5") (7") (10") (12") (18") (24") (30") plank; (24") (30") (36") walkway
- e. **Channel height:** Safety Grating (1 1/2") (2") (3") (4") plank; (5") Walkway Grating - OSHA compliant; Canadian OH & S Compliant
- f. **Standard lengths:** (10'-0") (12'-0") (20'-0") (24'-0")

2.2 Stair Tread Materials

- a. **Type:** (Perf-O-Grip and Perf-O-Grip 2 Stair Tread)
- b. **Metal and Finish:** Standard (mill-galvanized steel, ASTM A924) (stainless steel, alloy Types 304-2B/D) (aluminum, alloy 5052 H32); Special order (carbon steel — hot rolled, pickled and oiled, ASTM-A569) (stainless steel, alloy Type 316-2B/D)
- c. **Metal gauge:** (13-ga. steel) (11-ga. steel) (16-ga. stainless steel) (14-ga. stainless steel) (.125" aluminum)
- d. **Tread Depth:** Standard (10"); Special Order (5") (7") (12")
- e. **Channel height:** Standard (1 1/2"); Special Order (2")
- f. **Span or Width of Staircase:** (24") (30") (36")

2.3 Accessories

- a. **Bolt Seats:** Standard (mill-galvanized steel, ASTM A924); Special order (carbon steel — hot rolled, pickled and oiled, ASTM A569) (aluminum, alloy 5052-H32); (stainless steel, alloy Types 304-2B/D) (stainless steel, alloy Type 316-2B/D)
- b. **"J" Clip Attachment:** Standard (mill-galvanized steel, ASTM A924); Special order (carbon steel — hot rolled, pickled and oiled, ASTM A569) (aluminum, alloy 5052-H32); (stainless steel, alloy Types 304-2B/D) (stainless steel, alloy Type 316-2B/D)
- c. **Midsupport Clip:** Standard (mill-galvanized steel, ASTM A924); Special order (carbon steel — hot rolled, pickled and oiled, ASTM A569) (aluminum, alloy 5052-H32); (stainless steel, alloy Types 304-2B/D) (stainless steel, alloy Type 316-2B/D)

Perf-O-Grip Specifications

- d. Surface Splice Kit:** Standard (mill-galvanized steel, ASTM A924); Special order (carbon steel — hot rolled, pickled and oiled, ASTM A569) (aluminum, alloy 5052-H32); (stainless steel, alloy Types 304-2B/D) (stainless steel, alloy Type 316-2B/D)
- e. Walkway Splice Kit:** Standard (mill-galvanized steel, ASTM A924); Special order (carbon steel — hot rolled, pickled and oiled, ASTM A569) (aluminum, alloy 5052-H32); (stainless steel, alloy Types 304-2B/D) (stainless steel, alloy Type 316-2B/D)
- f. Universal Handrail Bracket for Walkways:** Eliminates unnecessary substructure for supporting handrail posts.

Part 3: Execution

3.1 Condition of surfaces

Prior to grating installation, contractor shall inspect supports for correct size, layout and alignment and verify that surfaces to receive grating are free of debris. The contractor shall report to the design or consulting engineer or owner's agent in writing any defects considered detrimental to proper application of grating so defects can be remedied before grating is applied.

3.2 Grating installation

Install grating in accordance with manufacturer's recommendations and shop drawings. Position grating sections flat and square with ends bearing min. 1 1/2" on supporting structure. Keep grating sections at least 1/4" away from vertical steel sections and 1/2" from concrete walls. Installation clearances are built into this product. Allow clearance at joints between sections of max. 1/4" at side channels and max. 3/8" at ends. When specified, band random cut ends and diagonal or circular cut exposed edges with a min. 1/8" thick bar welded at contact points.

3.3 Grating attachment

Attach grating to supports without warp or deflection as follows:

- a. Single plank application:** Secure plank ends to supporting members at every point of contact. Use (2) Perf-O-Grip Bolt Seats or "J" Clip Assemblies at each end or secure both side channels at each end to supports by fusion welding with 1/8" fillet welds, 1" long.
- b. Multiple plank application:** Secure perimeter plank to supporting members at every point of contact and intermediate grating sections with at least (1) attachment each end of plank, on alternate sides. For added rigidity when span exceeds (6'-0") (8'-0"), attach side channels of adjacent plank together (at mid-point of span) using mid support clip.
- c. Welded attachment:** Secure side channels to supports by fusion welding with 1/8" fillet welds, 1" long. Weld adjacent planks together with 1/8" fillet welds, 1" long, 24" o.c. staggered top and bottom.
- d. Clip attachment:** Secure intermediate planks to supports using Bolt Seat and "J" Clip Assembly. Use Bolt Seat with 3/8" carriage bolts and nuts for securing perimeter planks. Fasten adjacent side rails together with mid support clip or 3/8" machine bolts and nuts through locally drilled holes.

3.4 Stair Tread Installation

Install Perf-O-Grip and Perf-O-Grip 2 Stair Treads as shown on the drawings. Fasten treads to stair stringers with 3/8" x 1" machine bolts and nuts.

How To Order

Technical Assistance

For technical assistance not found in this catalog, contact your local Perf-O-Grip and Perf-O-Grip 2 Gratings Distributor, or contact Cooper B-Line Technical Service Department at 1-800-851-9341 (phone) or 1-618-357-3605 (fax).

Perf-O-Grip and Perf-O-Grip 2 Grating and Traction Tread Flooring are stocked in all major markets. For the finest in slip-resistant grating and stair treads, contact Cooper B-Line or go to www.cooperblineline.com to locate your local distributor. You will receive skilled consulting service on your specific requirements.

Fabrication Service

On large jobs, Cooper B-Line estimates, quotes, details and fabricates to your requirement. After receipt of order, layout drawings are prepared for easy installation.

Notice: We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claims shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Traction Tread Specification

Notes to architect

1. Traction Tread is intended for general purpose use in plants and process facilities by industry, commerce, and public facilities, for both mobile and stationary equipment.
2. Traction Tread Stair Treads are intended for utility stairs and fire escapes in commercial, public and private buildings where local code permits.
3. These specifications are presented as a general guide to the architect or structural engineer in preparing project specifications. Allowable loads, spans and other limiting conditions presented in this catalog offer product data for use in design and construction.
4. All supports should provide a smooth, level, 1 $\frac{1}{2}$ " minimum bearing surface, free of burrs, bridging, welds or other irregularities.
5. Random cut ends and diagonal or circular cut exposed edges should be banded with a bar at least $\frac{1}{8}$ " thick and equal to the overall side channel depth of grating welded at contact points at the discretion of the design engineer.
6. Bolted connections, except stair or ladder tread attachment to stringer channels, may be replaced by welded connections that develop the same strength.

Part 1: General

1.1 Scope

The contractor shall furnish and install Traction Tread as specified and shown on the drawings.

1.2 Qualifications

Traction Tread Sheets, Planks, Ladder Rungs, Stair Treads and accessories, unless otherwise indicated, shall be manufactured by Cooper B-Line, and shall be installed in accordance with its current printed directions. Safety surface shall be slip-resistant in all directions.

1.3 Submittals

The contractor shall furnish shop drawings of grating layout, framing and supports, unit dimensions and sections, type and location of fasteners and welds.

1.4 Storage and Handling

All materials shall be stored and handled to avoid damage. Damaged materials shall be removed from the premises.

Part 2: Products

2.1 Flooring Materials

- a. **Type:** Traction Tread Flooring
- b. **Metal and Finish:** (carbon steel — hot rolled, pickled and oiled, ASTM A569) (aluminum, alloy 5052-H32)
- c. **Metal gauge:** (14-ga. HRPO steel) (13-ga. HRPO steel) (12-ga. HRPO steel) (11-ga. HRPO steel) (16-ga. HRPO steel) (14-ga. stainless steel) (.125" aluminum)
- d. **Sheet Size:** (36" x 120")

2.2 Plank Grating

- a. **Type:** Traction Tread Plank
- b. **Metal Gauge and Type:** (11 and 13 gauge carbon steel — hot rolled, pickled and oiled, ASTM A569) (11 and 13 gauge mill-galvanized steel — ASTM A924), (.125" aluminum, alloy 5052-H32)

2.3 Ladder Rungs

- a. **Type:** Traction Tread Ladder Rungs
- b. **Metal Gauge and Type:** (13 gauge mill-galvanized steel, ASTM A924) (13 gauge carbon steel — hot rolled, pickled and oiled, ASTM A569) (.125" aluminum, alloy 5052-H32) (14 gauge stainless steel, alloy Types 304-2B/D)
- c. **Width:** (1 $\frac{1}{4}$ ") (1 $\frac{5}{8}$ ") (2 $\frac{1}{4}$ ")
- d. **Length:** (48") (60")

Part 3: Execution

3.1 Condition of surfaces

Prior to traction tread installation, contractor shall inspect supports for correct size, layout and alignment and verify that surfaces to receive grating are free of debris. The contractor shall report to the design or consulting engineer or owner's agent in writing any defects considered detrimental to proper application of traction tread so defects can be remedied before grating is applied.

3.2 Traction Tread installation

Install traction tread in accordance with manufacturer's recommendations and shop drawings. Sheet goods by their nature are intended to cover surface only. They require adequate support and hold down. Position traction tread planks flat and square with ends bearing min. 1 $\frac{1}{2}$ " on supporting structure. Keep traction tread sections at least $\frac{1}{4}$ " away from vertical steel sections and $\frac{1}{2}$ " from concrete walls. Installation clearances are built into this product. Allow clearance at joints between sections of max. $\frac{1}{4}$ " at side channels and max. $\frac{3}{8}$ " at ends. When specified, band random cut ends and diagonal or circular cut exposed edges with a min. $\frac{1}{8}$ " thick bar welded at contact points.

3.3 Stair Tread Installation

Install Traction Tread Stair Treads as shown on the drawings. Fasten treads to stair stringers with $\frac{3}{8}$ " x 1" machine bolts and nuts.