

Almost 70 years of experience! Best pricing in the industry!  
Knowledgeable engineering, sales, manufacturing & fabrication teams!

**Trust your BAR GRATING needs to BROWN-CAMPBELL COMPANY!**

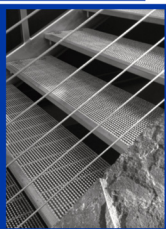
**Bar grating** used on a boat ramp and an outdoor deck at a popular vacation destination.

B-C supplied 10,000 sq ft of light & heavy duty galvanized welded bar grating, 19 spacing, for project construction. Amphibious vehicles roll up and down the B-C fabricated grating ramps to exit the water.



**Bar grating** stair treads manufactured by B-C. Serrated aluminum grating with corrugated nosings, 7 spacing.

B-C worked extensively with our customer to pinpoint exactly the look and feel they had envisioned for this entry staircase focal point installed at a mountain resort.



**Bar grating** panels custom manufactured by B-C for customer to use in school fence. Galvanized welded carbon steel bar grating, 38 spacing.



B-C offered this product as an economical alternative to our customers original inquiry.

**Bar grating** at food processing plant. Three truckloads of B-C custom fabricated pieces per customer drawings from 1-1/2" x 1/8" galvanized welded carbon steel bar grating, 19 spacing, were delivered including 1-1/4" x 3/16" galvanized stair treads custom fabricated with end plates and checker plate nosings.



## BROWN-CAMPBELL BAR GRATING PRODUCTS

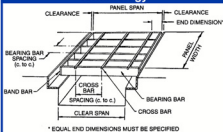
Available in a large array of bar sizes and spacings, in a full range of materials including carbon, aluminum and stainless steel. Light duty constructions include welded, press-locked, swaged, I-Bar, and Flush Top. Heavy duty welded bar grating is available for heavy vehicular applications.



## STOCK LIST

Bar Size (in)	Surface	Type	Bar Size (in)	Surface	Type
<b>Carbon Steel-Welded</b> <small>Alk Finish/Galvanized/Painted Black</small>			<b>Aluminum Swaged / I-Bar</b>		
3/4 x 1/8	Smooth	19W4	1 x 1/8	Smooth	19A4
3/4 x 3/16	Smooth	15W2, 19W4	1 x 3/16	Smooth	19A4
3/4 x 3/16	Serrated	19W4	1 x 3/16	Serrated	19A4
1 x 1/8	Smooth	15W4, 19W4	1 x 1/4	I-Bar	19A4
1 x 1/8	Serrated	19W4	1/4 x 1/8	Smooth	19A5A
1 x 3/16	Smooth	11W4, 15W2, 15W4, 19W2, 19W4	1/4 x 3/16	Smooth	19A5A
1 x 3/16	Serrated	15W2, 15W4, 19W2, 19W4	1/4 x 3/16	Serrated	19A5A
1 x 1/4	Smooth	19W4	1/4 x 1/4	I-Bar	19A4
1-1/4 x 1/8	Smooth	19W4	1-1/2 x 1/8	Smooth	19A5A
1-1/4 x 1/8	Serrated	19W4	1-1/2 x 3/16	Smooth	19A5A
1-1/4 x 3/16	Smooth	11W4, 15W2, 15W4, 19W2, 19W4	1-1/2 x 3/16	Serrated	19A5A
1-1/4 x 3/16	Serrated	11W4, 15W2, 15W4, 19W2, 19W4	1-1/2 x 1/4	I-Bar	19A4
1-1/4 x 1/4	Smooth	19W4, 19W4	1-3/4 x 3/16	Smooth	19A5A
1-1/4 x 1/4	Serrated	19W4	1-3/4 x 3/16	Serrated	19A5A
1-1/2 x 1/8	Smooth	19W4	1-3/4 x 1/4	I-Bar	19A4
1-1/2 x 1/8	Serrated	19W4	2 x 3/16	Smooth	19A5A
1-1/2 x 3/16	Smooth	11W4, 15W2, 15W4, 19W2, 19W4	2 x 3/16	Serrated	19A5A
1-1/2 x 3/16	Serrated	11W4, 15W4, 19W4	2 x 1/4	I-Bar	19A4
1-1/2 x 1/4	Smooth	19W4	2-1/4 x 3/16	Smooth	19A5A
1-1/2 x 1/4	Serrated	19W4	2-1/4 x 3/16	Serrated	19A5A
1-3/4 x 3/16	Smooth	15W2, 19W4	<b>Stainless Steel Type 304-Welded</b>		
1-3/4 x 3/16	Serrated	19W4	1 x 1/8	Smooth	10S4
1-3/4 x 1/4	Smooth	19W4	1 x 3/16	Smooth	10S4
2 x 3/16	Smooth	15W2, 15W4, 19W4	1 x 3/16	Serrated	10S4
2 x 3/16	Serrated	19W2, 19W4	1/4 x 3/16	Smooth	10S4
2 x 1/4	Smooth	19W4	1/4 x 3/16	Serrated	10S4
2 x 1/4	Serrated	19W4	1/2 x 1/8	Smooth	10S4
2-1/4 x 3/16	Smooth	15W4, 19W4	1/2 x 3/16	Serrated	10S4
2-1/4 x 3/16	Serrated	19W4	<b>Stair Treads-Welded</b> <small>Alk Finish/Galvanized/Painted Black</small>		
2-1/4 x 1/4	Smooth	19W4	1 x 3/16	Smooth	19W4
2-1/2 x 1/4	Smooth	19W4	1 x 3/16	Serrated	19W4
2-1/2 x 1/4	Serrated	19W4	1-1/4 x 3/16	Smooth	19W4
2-1/2 x 1/4	Serrated	19W4	1-1/4 x 3/16	Serrated	19W4
3 x 1/4	Smooth	19W4			
3 x 3/8	Smooth	19W4			

## Terminology



\* EQUAL END DIMENSIONS MUST BE SPECIFIED

## Ordering from Brown-Campbell

Call 1-800-472-8464 and the Brown-Campbell Service center closest to you will immediately assist you with your requirements. Your order will be expedited more quickly if you have the following details available when calling.

## THINK ABOUT:

1. Application or use of product (including environment)
2. Physical requirements (pedestrian span, strength, weight, etc.)

## PLEASE SPECIFY:

- **Material:** Type of material desired - carbon, stainless steel, aluminum, etc.
- **Construction:** Welded, Press-Locked, Swaged, I-Bar, Flush Top, Hvy Duty
- **Bearing Bar Spacing:** i.e. 1-3/16"
- **Cross Rod Spacing:** 2" or 4"
- **Bearing Bar Size:** i.e. 1" x 3/16"
- **Surface:** Plain, Serrated or Slip Resistant
- **Span:** Bearing bar direction
- **Method of Support**
- **Anchoring Devices**
- **Finish**
- **Shipping instructions**

## Commonly Stocked Grating Panel Sizes:

2'x20', 2'x24', 3'x20', 3'x24'

## Our "Custom Engineering &amp; Fabrication" capabilities include...

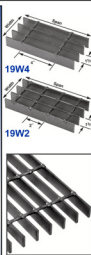
Blueprint Take Offs ~ Drawings  
Notching ~ Banding ~ Stair Treads  
Sawing ~ Cutouts ~ Circles

Bar Grating having a 1/2" maximum opening conforms with the Americans With Disabilities Act Guidelines (ADA) when installed with the elongated opening perpendicular to the dominant direction of travel.

## BAR GRATING AVAILABILITY (W=Welded, P=Press-Locked, S=Swaged, F=Flush Top, I=I-Bar)

<p>Light Duty: 19W4(2), 19P4(2), 19S4(2) Heavy Duty: 19W4(2) Alum: 19P4(2), 19S4(2), 19F4(2), 19A4(2) Stainless: 19W4(2), 19P4(2), 19S4(2)</p>	<p>Light Duty: 11W4(2), 11P4(2), 11S4(2) Alum: 11P4(2), 11S4(2), 11F4(2), 11A4(2) Stainless: 11W4(2), 11P4(2), 11S4(2)</p>	<p>Light Duty: 7P4(2), 7S4(2) Alum: 7P4(2), 7S4(2), 7F4(2), 7A4(2) Stainless: 7P4(2), 7S4(2)</p>	<p>Heavy Duty: 22W4(2)</p>
<p>Light Duty: 15W4(2), 15P4(2), 15S4(2) Heavy Duty: 15W4(2) Alum: 15P4(2), 15S4(2), 15F4(2), 15A4(2) Stainless: 15W4(2), 15P4(2), 15S4(2)</p>	<p>Light Duty: 10W4(2), 10P4(2) Alum: 10P4(2)</p>	<p>Heavy Duty: 38W4(2)</p>	<p>Heavy Duty: 12W4 Heavy Duty: 8W4</p>
<p>Light Duty: 13W4(2), 13P4(2) Alum: 13P4(2)</p>	<p>Light Duty: 8W4(2), 8P4(2) Alum: 8P4(2), 8S4(2)</p>	<p>Heavy Duty: 30W4(2)</p>	<p>Heavy Duty with Filter Panels: 23WF4 Heavy Duty with Filter Panels: 15WF4</p>

## Light Duty Steel



**Load Factors for Other Light Duty Steel**  
Multiply load values below by factors in 19-14/19-2 load table (right) to determine loads for different spacings.

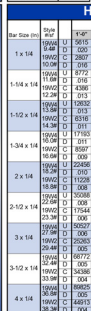
Spacing	Load Factor
15-4/15-2	1.268
13-4/13-2	1.462
11-4/11-2	1.727
10-4/10-2	1.900
8-4/8-2	2.377
7-4/7-2	2.716

## 19-14/19-2: 1-3/16" Center to Center of Bearing Bar Load Table

Bar Size (in)	Symbol/Approx. Loading (in)	End Span	2"-5"	2'-4"	3'-0"	3'-4"	4'-0"	4'-4"	5'-0"	5'-4"	6'-0"	7'-0"	8'-0"	9'-0"
3/4 x 1/8	19W4	41"	505	227	156	116	89	70	54	43	35	28	22	18
3/4 x 3/16	19W2	46"	696	315	223	164	125	100	79	64	52	42	34	28
1 x 1/8	19W4	51"	832	404	281	206	159	125	101	84	70	56	45	37
1 x 3/16	19W2	57"	1178	568	404	296	223	175	140	116	96	79	64	52
1-1/4 x 1/8	19W4	61"	1260	630	444	324	243	191	154	128	106	87	71	58
1-1/4 x 3/16	19W2	67"	1788	918	644	464	352	273	218	182	150	124	102	84
1-1/2 x 1/8	19W4	70"	1852	926	656	476	356	276	221	184	152	126	104	86
1-1/2 x 3/16	19W2	77"	2592	1296	928	664	500	380	300	248	204	168	136	112
1-3/4 x 1/8	19W4	87"	2804	1402	1004	724	544	412	324	260	212	172	140	116
2 x 3/16	19W2	96"	3880	1940	1384	1004	752	576	448	360	292	236	192	156
2-1/4 x 3/16	19W2	105"	4280	2140	1528	1104	832	624	496	396	320	256	208	168
2-1/2 x 3/16	19W2	113"	4680	2340	1672	1204	904	688	544	432	352	284	224	180

\*Note: Weight depends on panel width, cross bar selection, mill tolerance and manufacturing tolerance.

## Heavy Duty Steel



## Heavy Duty 19W4/19W2 Load Table

Bar Size (in)	Style	1'-4"	1'-6"	2'-0"	2'-4"	3'-0"	3'-4"	4'-0"	4'-4"	5'-0"	5'-4"	6'-0"	7'-0"	8'-0"	9'-0"
1 x 1/4	19W4	505	246	164	122	96	80	64	52	43	35	28	22	18	15
1 x 1/4	19W2	696	315	223	164	125	100	79	64	52	42	34	28	22	18
1-1/4 x 1/4	19W4	832	404	281	206	159	125	101	84	70	56	45	37	30	24
1-1/4 x 1/4	19W2	1178	568	404	296	223	175	140	116	96	79	64	52	42	34
1-1/2 x 1/4	19W4	1260	630	444	324	243	191	154	128	106	87	71	58	47	38
1-1/2 x 1/4	19W2	1788	918	644	464	352	273	218	182	150	124	102	84	68	54
1-3/4 x 1/4	19W4	1852	926	656	476	356	276	221	184	152	126	104	86	70	56
1-3/4 x 1/4	19W2	2592	1296	928	664	500	380	300	248	204	168	136	112	90	72
2 x 1/4	19W4	2804	1402	1004	724	544	412	324	260	212	172	140	116	94	76
2 x 1/4	19W2	3880	1940	1384	1004	752	576	448	360	292	236	192	156	124	100
2-1/2 x 1/4	19W4	4280	2140	1528	1104	832	624	496	396	320	256	208	168	136	112
2-1/2 x 1/4	19W2	4680	2340	1672	1204	904	688	544	432	352	284	224	180	144	116
3 x 1/4	19W4	505	246	164	122	96	80	64	52	43	35	28	22	18	15
3 x 1/4	19W2	696	315	223	164	125	100	79	64	52	42	34	28	22	18
3-1/2 x 1/4	19W4	832	404	281	206	159	125	101	84	70	56	45	37	30	24
3-1/2 x 1/4	19W2	1178	568	404	296	223	175	140	116	96	79	64	52	42	34
4 x 1/4	19W4	1260	630	444	324	243	191	154	128	106	87	71	58	47	38
4 x 1/4	19W2	1788	918	644	464	352	273	218	182	150	124	102	84	68	54

## PANEL WIDTH CHART (inches)

Bar Size (in)	Style	1'-4"	1'-6"	2'-0"	2'-4"	3'-0"	3'-4"	4'-0"	4'-4"	5'-0"	5'-4"	6'-0"	7'-0"	8'-0"	9'-0"
1 x 1/4	19W4	505	246	164	122	96	80	64	52	43	35	28	22	18	15
1 x 1/4	19W2	696	315	223	164	125	100	79	64	52	42	34	28	22	18
1-1/4 x 1/4	19W4	832	404	281	206	159	125	101	84	70	56	45	37	30	24
1-1/4 x 1/4	19W2	1178	568	404	296	223	175	140	116	96	79	64	52	42	34
1-1/2 x 1/4	19W4	1260	630	444	324	243	191	154	128	106	87	71	58	47	38
1-1/2 x 1/4	19W2	1788	918	644	464	352	273	218	182	150	124	102	84	68	54
1-3/4 x 1/4	19W4	1852	926	656	476	356	276	221	184	152	126	104	86	70	56
1-3/4 x 1/4	19W2	2592	1296	928	664	500	380	300	248	204	168	136	112	90	72
2 x 1/4	19W4	2804	1402	1004	724	544	412	324	260	212	172	140	116	94	76
2 x 1/4	19W2	3880	1940	1384	1004	752	576	448	360	292	236	192	156	124	100
2-1/2 x 1/4	19W4	4280	2140	1528	1104	832	624	496	396	320	256	208	168	136	112
2-1/2 x 1/4	19W2	4680	2340	1672	1204	904	688	544	432	352	284	224	180	144	116
3 x 1/4	19W4	505	246	164	122	96	80	64	52	43	35	28	22	18	15
3 x 1/4	19W2	696	315	223	164	125	100	79	64	52	42	34	28	22	18
3-1/2 x 1/4	19W4	832	404	281	206	159	125	101	84	70	56	45	37	30	24
3-1/2 x 1/4	19W2	1178	568	404	296	223	175	140	116	96	79	64	52	42	34
4 x 1/4	19W4	1260	630	444	324	243	191	154	128	106	87	71	58	47	38
4 x 1/4	19W2	1788	918	644	464	352	273	218	182	150	124	102	84	68	54






## PANEL WIDTH CHART (inches)

Bar Size (in)	Style	1'-4"	1'-6"	2'-0"	2'-4"	3'-0"	3'-4"	4'-0"	4'-4"	5'-0"	5'-4"	6'-0"	7'-0"	8'-0"	9'-0"
1 x 1/4	19W4	505	246	164	122	96	80	64	52	43	35	28	22	18	15
1 x 1/4	19W2	696	315	223	164	125	100	79	64	52	42	34	28	22	18
1-1/4 x 1/4	19W4	832	404	281	206	159	125	101	84	70	56	45	37	30	24
1-1/4 x 1/4	19W2	1178	568	404	296	223	175	140	116	96	79	64	52	42	34
1-1/2 x 1/4	19W4	1260	630	444	324	243	191	154	128	106	87	71	58	47	38
1-1/2 x 1/4	19W2	1788	918	644	464	352	273	218	182	150	124	102	84	68	54
1-3/4 x 1/4	19W4	1852	926	656	476	356	276	221	184	152	126	104	86	70	56
1-3/4 x 1/4	19W2	2592	1296	928	664	500	380	300	248	204	168	136	112	90	72
2 x 1/4	19W4	2804	1402	1004	724	544	412	324	260	212	172	140	116	94	76
2 x 1/4	19W2	3880	1940	1384	1004	752	576	448	360	292	236	192	156	124	100
2-1/2 x 1/4	19W4	4280	2140	1528	1104	832	624	496	396	320	256	208	168	136	112
2-1/2 x 1/4	19W2	4680	2340	1672	1204	904	688	544	432	352	284	224	180	144	116
3 x 1/4	19W4	505	246	164	122	96	80	64	52	43	35	28	22	18	15
3 x 1/4	19W2	696	315	223	164	125	100	79	64	52	42	34	28	22	18
3-1/2 x 1/4	19W4	832	404	281	206	159	125	101	84	70	56	45	37	30	24
3-1/2 x 1/4	19W2	1178	568	404	296	223	175	140	116	96	79	64	52	42	34
4 x 1/4	19W4	1260	630	444	324	243	191	154	128	106	87	71	58	47	38
4 x 1/4	19W2	1788	918	644	464	352	273	218	182	150	124	102	84	68	54

## PANEL WIDTH CHART (inches)

for other Heavy  
Duty Styles on  
next page.

## Heavy Duty Steel

Maximum Traffic Conditions		Wheel Load (lbs.) (1/2 of Axle Load = 30% Impact)	Load Distribution**	
			a	b
Truck Traffic 32,000 Lb. Axle Load Dual Wheels		15,000	H-20	20" 20" + (2s)
Truck Traffic 24,000 Lb. Axle Load Dual Wheels		12,000	H-15	15" 15" + (2s)
10,000 Lb. Capacity Lift Truck 14,400 Lb. Vehicle 24,400 Lb. Total Load 85% Drive Axle Load		13,480	5 Ton	11" 11" + (2s)
6,000 Lb. Capacity Lift Truck 15,800 Lb. Total Load 85% Drive Axle Load		8,730	3 Ton	7" 7" + (2s)
2,000 Lb. Capacity Lift Truck 4,200 Lb. Vehicle 6,200 Lb. Total Load 85% Drive Axle Load		3,425	1 Ton	4" 4" + (2s)

\*For continuous spans, use continuity factor = .80

\*\*This distribution results in larger grating sizes for lighter trucks on shorter spans. If H-20 loading is specified the worst condition should be used as the design criteria. The fork lift wheel loads and load distribution patterns depicted above, generally, and only partially, represent the broad range of rubber-tired lift trucks available. For these applications falling outside of these examples, please contact Brown-Campbell. Wheeled vehicles with urethane tires should NEVER be used in conjunction with open grid bar grating.

All grating products are manufactured to NAAMM tolerances and specifications.

**Load Factors for Other Heavy Duty Steel Spacings**  
Multiply load factors below by values in Heavy Duty 19W4/19W2 load table (previous page) to determine loads for different Heavy Duty spacings.

Spacing	Load Factor
38W4/38W2	.501
30W4/30W2	.634
22W4/22W2	.865
19W4/19W2	1.266

## Heavy Duty 19W4/19W2

Bar Size (in)	Cross Bar Spacing (in)	Maximum Safe Clear Span Partially Distributed Load					
		1 Ton	3 Ton	5 Ton	H-15/H-20		
1 x 14	3/8	7	6	7	9		
1 x 14 1/4	3/8	10	8	9	12		
1 x 12 x 1/4	3/8	13	10	11	14		
1 x 14 x 1/4	3/8	17	12	14	17		
2 x 14	3/8	22	15	16	20		
2 x 14 x 1/4	3/8	28	18	19	23		
2 x 12 x 1/4	3/8	34	22	22	27		
3 x 14	3/8	40	30	30	35		
3 x 12 x 1/4	3/8	48	40	40	45		
5 x 14	3/8	58	51	50	57		
5 x 12 x 1/4	3/8	68	58	58	67		
5 x 14	3/8	68	78	75	85		
6 x 14	1/2	90	90	90	96		

\*Span limited to 1/400 of span = Deflection



## 15WF4 - Heavy Duty Welded with Filler Bars



Meets ADA requirements when installed with the elongated opening perpendicular to the dominant direction of travel.

Note: 15WF4 with Filler Bars is available in plain or serrated surfaces. Only available in 4" or cross bar centers.

Note: 23WF4 also available  
1-7/16" Ctr to Ctr of Bearing Bars  
(115WF4-Walking Surface)

## 19-4/19-2: 1-3/16" Center to Center of Bearing Bar Load Table



## Press-Locked



## Swaged w Serrated Surface



## Flush Top



## I-Bar

Load Factors for Other Aluminum	
Multiply load factors below by values in 19-19-2 load table (right) to determine loads for different aluminum spacings.	
Spacing	Factor
15-4/15-2	1.268
13-4/13-2	1.462
11-4/11-2	1.727
10-4/10-2	1.990
8-4/8-2	2.377
7-4/7-2	2.716



## ANCHORING DEVICES

## H-3 Saddle Anchor

## Most Economically Priced

Available In: Galvanized Steel, Aluminum and Stainless Steel Saddle plate bridges two bearing bars and is attached with 1/4" weld stud or 1/4" bolt and nut when hole is drilled through supporting frame. Available for 15/16", 1-3/16", and 1-3/8" bearing bar spacings (15, 19, and 22 space). Fasteners not included.

Grate-Fast™  
ClampH-1 Anchor Clip  
with J Bolt

Z Clip



Countersunk Land



Anchor Block

## G-Clip



Grating Thickness	Available G-Clips			
	Structural Member Flange Thickness			
1" = A	GG-1A	GG-2A	GG-3A	GG-4A
1-1/8" = B	GG-1B	GG-2B	GG-3B	GG-4B
1-1/2" = C	GG-1C	GG-2C	GG-3C	GG-4C
1-3/4" = D	GG-1D	GG-2D	GG-3D	GG-4D
2" = E	GG-1E	GG-2E	GG-3E	GG-4E

Only two G-clips represent most common styles.

Galvanized, Aluminum, 316 Stainless Steel, Cu/Ni Low cost, fast and dependable way to fasten grating materials to structural members. No drilling necessary, applied with simple hand tools.

**Galvanized**  
3/8" Capscrew (2-1/4" & 3-1/4" lengths). Fits 1-3/16" centers with 1/8", 3/16" and 1/4" bearing bar widths. Fits flat or sloping beam flanges. Stepped tail fits beam flanges from 1/8" to 3/4".

**Carbon**  
A flat-head J-bolt secures a pre-formed plate to underside of steel bearing bars and structural support. J-bolt is 1/4" x 2-1/2" for grating up to 2-1/4" deep and 1/4" x 3-1/2" for 2-1/2" to 3-1/2" deep.

**Stainless Steel**  
Versatile clip anchor available in 1" for 1" and 1-1/2" for 1-1/2" and 1-3/4" grating and 2" for 2-1/4" and 2-1/2" grating. (Screw not included.)

**For Aluminum Grating Only**  
May be drilled by the grating manufacturer for use with a 1/4" diameter TEK screw. For 7/16" or 11/16" aluminum grating only.

**Carbon, Aluminum**  
Anchor Blocks are shop welded (must be specified at time of order). 1/4" for use with 3/16" for use with 7/16", 11/16", and 15/16" bearing bar spacings. (Fastener not included.)

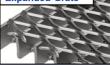
## COVERED GRATES

Brown-Campbell Covered Grates are constructed of sturdy Brown-Campbell bar grating covered with a variety of worker friendly walking surfaces.

This unique product offers...

- Reduced open areas at a fraction of the cost of close mesh grating
- Combination of bar grating strength with reduced openings of expanded metal, perforated metal or Traction-Tread™
- Prevention of tools and debris from falling through to areas below
- Strength and rigidity of floor plate

## Expanded-Grate™



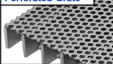
## Underside view of Expanded-Grate™



## Floor Plate-Grate™



## Perforated-Grate™

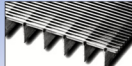


## Traction-Tread-Grate™



## GRATING MATS

Stainless steel grating mats are a great alternative to aluminum or vinyl entrance mats, offering a much longer life and lower maintenance.



**Applications Include:** ENTRANCE MATS, AIR GRILLES, LIGHT DIFFUSERS, REVOLVING DOORS, CEILINGS AND WALLS, SWIMMING POOL GRATES



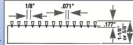
Standard Panel Size	
X	Y
8'	3'
8'	4'
6'	4'
6'	3'

Note: Also available cut to size\*

Material: Type 304 Stainless Steel\*  
Slot Openings: 1/8"  
Tread Surface: .071" x .177"  
Bearing Bars: 1-1/8" or 5/8" high, 1" on center  
Weight: 1-1/8": 7#/sq ft; 5/8": 5#/sq ft



ADA COMPLIANT



\*Similar products also available in aluminum and bronze or with carpet or vinyl inserts, please inquire.

## Brown-Campbell offers a full line of Fabrication &amp; Engineering Services

## ENGINEERING

~Detailing of Jobs

~CAD Design

~Full-Size Drawing Printouts

## FABRICATION

Sawing ~ Notching

Cutouts ~ Welding

Banding ~ Blanking

Burning ~ Shearing

Painting ~ Galvanizing

Stair Treads ~ Nosings



Brown-Campbell fabricated bar grating installed at major factory in California.



Approaching 7 decades of family owned & operated service to our customers!

Brown-Campbell takes pride in providing the best service in the industry teamed with exceptional quality & competitive pricing!

## STAIR TREADS - BAR GRATING

1/4" x 3/16" Welded Steel Bar Grating  
Tread w/ Checker Plate Nosing

## Stair Tread Nosings



Checker Plate Grooved Nose Cast Aluminum Abrasive Coated

## IN-STOCK (w/ Checker Plate Nosing)

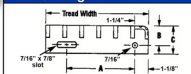
1" x 3/16" 19W4 Smooth & Serrated  
1-1/4" x 3/16" 19W4 Smooth & Serrated

## Ordering Stair Treads

## PLEASE SPECIFY:

1. Type of grating
2. Depth and thickness of bearing bars
3. Length of tread
4. Width of tread (see table below)
5. Type of nosing
6. Plain, Serrated, or Slip Resistant Surface
7. Size and spacing of holes, if to be bolted to stringers will be punched per table below, unless otherwise specified
8. Finish - mill, shop coat of paint, or galvanized
9. Number of treads required
10. Shipping instructions
11. Mounting bolts and nuts furnished by others

## Bar Grating Tread End View



## End Plate Dimensions

	Steel & Stainless Steel	Aluminum
Grating Depth	Up to 1-1/4" 1-1/2" to 1-3/4"	Up to 1-3/4"
Dimension "A"	see Tread Width Chart	
Dimension "B"	1-3/4" 2-1/4"	2-1/4"
Dimension "C"	2-1/2" 3"	3"



## Tread Width - Including Nosing

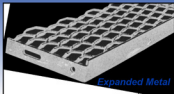
No. of Bearing Bars	Steel & Stainless Steel		Aluminum Rect. Bar	Aluminum I-Bar	Dimension "A" Bolt Hole Spacing
	Bearing Bar Depth 1/8"	3/16"	Bearing Bar Depth 3/16"	Bearing Bar Depth 1/4"	
	Tread Width	Tread Width	Tread Width	Tread Width	
5	6-1/8"	6-3/16"	6-3/16"	6-1/4"	2-1/2"
6	7-5/16"	7-3/8"	7-3/8"	7-7/16"	4-1/2"
7	8-1/2"	8-9/16"	8-9/16"	8-5/8"	4-1/2"
8	9-11/16"	9-3/4"	9-3/4"	9-13/16"	7"
9	10-7/8"	10-15/16"	10-15/16"	11"	7"
10	12-1/16"	12-1/8"	12-1/8"	12-3/16"	7"

## ALMOST 70 YEARS OF GRATING EXPERIENCE!

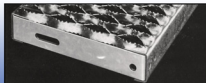
## Maximum Tread Length

Steel & Stainless Steel		Aluminum Rectangular Bar		Aluminum I-Bar	
Bearing Bar Size	Plain	Serrated	Bearing Bar Size	Plain	Serrated
3/4" x 3/16"	2-4"	1-11"	1" x 3/16"	2-4"	2-2"
1" x 3/16"	3-5"	2-10"	1-1/4" x 3/16"	2-10"	2-7"
1-1/4" x 3/16"	4-8"	4-2"	1-1/2" x 3/16"	3-6"	3-2"
1-1/2" x 3/16"	5-6"	5-3"	1-3/4" x 3/16"	4-3"	3-10"

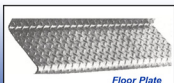
Maximum tread length based on 300 lb. concentrated load on front 5 in. of tread at center of tread length and deflection limitation of 1/240 of length.

Other B-C Stair  
Tread ProductsFiberglass  
Page 7Perf-O Grip®  
Page 18

Expanded Metal



Grip Stru® Page 11

Grate-Lock™  
Page 19Floor Plate  
Master Catalog

## BROWN-CAMPBELL FIBERGLASS PRODUCTS

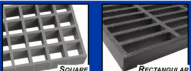
Designed for applications requiring maximum corrosion resistance and greater strength than plastic products. A variety of fiberglass products are available including molded gratings, pultruded gratings, stair treads, platforms, handrails, ladders, floor plate, and structural systems.

*Fiberglass products offer unique properties for many industrial applications, including:*

- CORROSION RESISTANCE TO HARSH INDUSTRIAL CHEMICALS •LIGHTWEIGHT •LONGEVITY
- FIRE RESISTANCE •ABILITY TO WITHSTAND HEAVY IMPACTS •INSULATION AGAINST ELECTRICAL SHOCK
- LOW THERMAL CONDUCTIVITY •EASE OF FABRICATION •ELECTROMAGNETIC TRANSPARENT
- WIDE RANGE OF PERMANENT COLORS •RESILIENCE •MAINTENANCE-FREE •AESTHETICALLY APPEALING

## IN-STOCK FIBERGLASS PRODUCTS

Molded



SQUARE

RECTANGULAR

Pultruded



I-BAR

T-BAR

Structural Shapes



Stair Treads



Floor Panels



In many applications fiberglass lasts much longer than metal alternatives, thereby offering a lower product life cycle cost - a primary reason for its increasing popularity in many industrial applications.

## Ordering from Brown-Campbell

Call 1-800-472-8464 and the Brown-Campbell service center closest to you will immediately assist you with your requirements.

## THINK ABOUT:

- 1. Application or use of product (including environment)
- 2. Physical requests PLEASE SPECIFY:
  - Type: Rectangular or Square Molded and mesh size, I-Bar or T-Bar
  - Pultruded, Stair Treads, etc.
  - Finish & Color
  - Quantity: number of panels, areas, or treads
  - Height: Molded: panel height; Pultruded: bar height
  - Width & Length
  - Surface: concave (no grit) or grit
  - Bearing & Cross Bar Spacing: Pultruded I-Bar & T-Bar Planks only
  - Span: Req'd for rectangular molded & pultruded panels
  - Accessories
  - Special Requirements: cut-outs, etc.

All Brown-Campbell Fiberglass Products have UV INHIBITORS

## MOLDED GRATING



Combines fiberglass rovings with thermosetting resin to form a strong one-piece molded panel. Consisting of 65% resin by weight, molded grating offers superior corrosion resistance. Additionally, outstanding slip resistance for worker safety is provided by the standard concave (meniscus) surface or with optional surfaces of Quartz or Aluminum Oxide Grit.

## MOLDED Fiberglass Grating Load Table

Uniform Load: lbs/sq. ft.; Deflection: in.													Concentrated Load: lbs/ft. of width; Deflection: in.												
Style (in)	Height (in)	Open Area (%)	Rebar Size (in)	Load Span (ft.)	Load Span (ft.)	18"	24"	30"	36"	42"	48"	54"	60"	Load Span (ft.)	18"	24"	30"	36"	42"	48"	54"	60"			
1 x 4 Rect. Mesh	1	69%	2.5#	1	100	01	04	08	16	33				200	05	12	22	34	60						
					100	02	07	17	32	62	96			300	07	18	32	52	90						
					FL*	1902	1070	685	476	349				500	12	30	54	86	151						
					50	02	06	14	27	49				200	08	20	35	48	60						
1-1/2 x 1-1/2 Square Mesh	1	70%	2.5#	1-1/2	100	04	12	27	62	96			300	12	30	63	96	135							
					200	08	25	58	124	197			500	20	49	88	165								
					FL*	1268	713	456	317	233			FL*	951	713	571	476	408							
					50	01	02	05	10	17	26	42	200	03	07	12	21	32	45	60					
1-1/2 x 1-1/2 Square Mesh	1-1/2	70%	3.7#	1-1/2	100	01	04	09	20	34	56	84	300	05	10	18	32	47	68	90					
					200	03	06	18	40	69	113	168	500	08	17	29	53	79	113	150					
					FL*	2779	1600	1024	711	522	400	316	FL*	2133	1600	1280	1067	914	800	711					
					50	01	01	02	04	08	14	21	200	02	03	06	09	14	22	30	47				
2 x 2 Square Mesh	2	72%	4.0#	2	100	01	04	09	20	34	56	84	300	05	10	18	32	47	68	90					
					200	02	02	04	09	18	32	56	84	500	05	08	14	23	36	56	79				
					FL*	2566	1025	1338	820	682	522	413	334	FL*	2787	2080	1672	1365	1134	945	820				
					50	01	01	02	04	08	14	21	200	02	03	06	09	14	22	30	47				

\*FL: Failure Load. Determined by applying a 2.5 Factor of Safety to the Ultimate Capacity of the grating.

Definition for uniform loads is limited to L/20 with L representing clear span length in inches. For typical pedestrian traffic, uniform load of 50 psf is recommended with deflection not to exceed .375".

Definition for concentrated loads are shown for the same span conditions as for uniform loads.

Definition limits can be higher for fiberglass gratings as they are more resilient than metal materials.

Italicized, bolded values indicate deflection greater than .375" or L/120. For these conditions, sustained loads or data not shown, please contact Brown-Campbell.

## STOCK LIST

Description	Resin/Type	Color	Surface	Item No.	Stock Size
<b>MOLDED: Rectangular</b>					
1 x 4 x 4	C-Polyester	Green	Grit	FCNG1114	120" x 36"
	C-Polyester	Gray	Concave	FCG1114	96" x 48"
	C-Polyester	Gray	Grit	FCG21114	144" x 48"
	C-Polyester	Yellow	Grit	FCY1114	
<b>MOLDED: Square</b>					
1 x 1.5 x 1.5	C-Polyester	Green	Grit	FCN11515	36" x 96"
	C-Polyester	Gray	Concave	FCG11515	36" x 120"
	C-Polyester	Gray	Grit	FCG211515	36" x 144"
	C-Polyester	Yellow	Grit	FCY11515	48" x 96"
1.5 x 1.5 x 1.5	C-Polyester	Green	Concave	FCN151515	48" x 144"
	C-Polyester	Gray	Concave	FCG151515	48" x 168"
	C-Polyester	Gray	Grit	FCG2151515	48" x 192"
	C-Polyester	Light Gray	Grit	FCLG151515	
2 x 2 x 2	C-Polyester	Green	Grit	FCN22222	48" x 144"
	C-Polyester	Gray	Grit	FCG22222	
<b>MOLDED: Stair Treads</b>					
1.5 x 1.5 x .6	C-Polyester	Green	Grit	FCN315156	22.5" x 120"
	C-Polyester	Gray	Grit	FCG315156	22.5" x 144"
	C-Polyester	Light Gray	Grit	FCG315156	
	V-Vinyl Ester	Gray	Grit	FCV315156	
<b>MOLDED: Covered</b>					
1.025 x 1.5 x 1.5	I-Polyester	Green	Grit	FIN10251515	48" x 144"
<b>FLOOR PANELS</b>					
1/4"	C-Polyester	Gray	Smooth	FCG1/4	48" x 144"
3/8"	T-Polyester	Light Gray	Grit	FTL3/8	48" x 96"
<b>PULTRUDED: I-Bar</b>					
I-4010	P-Polyester	Gray	Grit	FPYG40106	
	P-Polyester	Yellow	Grit	FPY40106	
	P-Polyester	Yellow	Grit	FPYG40106	
	P-Polyester	Yellow	Grit	FPY40106	
I-4015	P-Polyester	Gray	Grit	FPYG40156	36" x 144"
	P-Polyester	Yellow	Grit	FPY40156	36" x 240"
	P-Polyester	Yellow	Grit	FPYG40156	48" x 144"
	P-Polyester	Yellow	Grit	FPY40156	48" x 240"
I-6010	P-Polyester	Gray	Grit	FPYG60106	
	P-Polyester	Yellow	Grit	FPY60106	
	P-Polyester	Yellow	Grit	FPYG60106	
	P-Polyester	Yellow	Grit	FPY60106	
I-6015	P-Polyester	Gray	Grit	FPYG60156	
	P-Polyester	Yellow	Grit	FPY60156	
	P-Polyester	Yellow	Grit	FPYG60156	
	P-Polyester	Yellow	Grit	FPY60156	
I-60175	P-Polyester	Gray	Grit	FPYG601756	
	P-Polyester	Yellow	Grit	FPY601756	
	P-Polyester	Yellow	Grit	FPYG601756	
	P-Polyester	Yellow	Grit	FPY601756	
<b>PULTRUDED: T-Bar</b>					
T-1810	P-Polyester	Gray	Grit	FPYG18106	48" x 144"
T-5000	P-Polyester	Gray	Grit	FPYG50006	36" x 240"
T-5000	P-Polyester	Yellow	Grit	FPY50006	48" x 144"
<b>PULTRUDED: Concrete Embedment FRP Angles</b>					
1 x 1.5 x .25	V-Vinyl Ester	Gray	n/a	FAVG11525	240"
2 x 1.5 x .25	V-Vinyl Ester	Gray	n/a	FAVG21525	

## SQUARE MESH

pattern allows for easy on-site cutting of panels, so a variety of flooring layouts can be easily accommodated with minimal waste. The need for additional supports is eliminated in many cases due to this product's bi-directional strength.

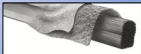
## RECTANGULAR MESH offers one-direction span strength in the width of the grating panel

and is often used for walkways and trench covers.

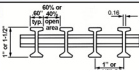
**PULTRUDED GRATING**

Manufactured with a high percentage of glass within the laminate, providing durability, extremely high unidirectional strength and stiffness. Due to its exceptional stiffness, pultruded grating can be used in applications requiring wide support spans, rarely needing additional support. To form a pultruded element, continuous fiber rovings and mat are mechanically drawn through a resin bath and shaped through a series of forming guides, then pulled through a heated die. Pultruded grating exceeds the requirements for grating used in chemical, water and wastewater, electronics, food and beverage, pulp and paper, petroleum processing, and marine applications.

**CORROSION RESISTANT • LONG LIFE • MAINTENANCE-FREE • LIGHTWEIGHT • EASY TO FABRICATE • EASIER TO INSTALL**  
**SLIP-RESISTANT • NON-CONDUCTIVE • FIRE RETARDANT**

**Pultruded I-Bar Fiberglass Grating**

Offers a superior and economical walking surface with high strength and corrosion protection. Open areas are available in 60% or 40% making this product an excellent option for work platforms.



**Color:** Standard - dark gray or yellow

**Surface:** Furnished standard with gritted, skid resistant top surface.

**Cross bar spacings:** 6\" or 12\" on center

**Other Pultruded I-Bar Styles Available**

Style	Height (in)	Open Area (%)	Load Bar Spacing (in)	Load Bar Spacing (in)
I-4010	1	40%	1.38	1
I-4015	1-1/2	40%	4.28	1

**Pultruded I-Bar Fiberglass Grating Load Table**

~Other Styles Available: I-4010 & I-4015 - see chart above~

		Uniform Load: lbs/sq. ft. Deflection: in.												Concentrated Load: lbs/ft. of width Deflection: in.												
Style	Height (ft)	Open Area (%)	Load Bar Spacing (in)	Load Span (in)	24"	36"	48"	60"	72"	84"	96"	108"	120"	Load Span (in)	24"	36"	48"	60"	72"	84"	96"	108"	120"	132"		
I-6010	1	60%	2.28	1-1/2	50	01	03	05	10	17	27	40	54	200	04	07	12	18	27	38	52	66	82	97	112	
					100	02	06	11	20	33	50	70	94	200	06	11	17	27	40	54	70	88	108	128	148	
					200	05	11	22	40	66	100	140	184	500	09	16	26	39	54	70	88	108	128	148	168	188
I-6015	1-1/2	60%	2.88	1-1/2	FL*	2320	1485	1031	754	575	453	362	287	FL*	2320	1850	1546	1319	1149	1019	900	800	710	630		
					50	01	01	02	04	06	10	15	22	31	200	01	03	04	07	10	14	19	26	33	40	48
					100	01	02	04	08	13	20	30	44	500	02	04	07	10	15	21	29	39	50	60	72	84
					200	02	04	08	15	25	40	60	84	500	04	07	11	17	25	36	49	64	82	100		
					FL*	3520	2218	1517	1088	813	621	486	388	312	FL*	3520	2797	2275	1904	1628	1368	1218	1066	937	812	700

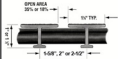
**\*FL: Failure Load.** Determined by applying a 2.5 Factor of Safety to the Ultimate Capacity of the grating.  
 ~Deflection for uniform loads is limited to L/120 with L representing clear span length in inches. For typical pedestrian traffic, uniform load of 50 psf is recommended with deflection not to exceed .375".  
 ~Deflection for concentrated loads are shown for the same span conditions as for uniform loads.  
 ~Deflection limits can be higher for fiberglass gratings as they are more resilient than metal materials.  
 ~Italicized, bolded values indicate deflection greater than .375" or L/120. For these conditions, sustained loads or data not shown, please contact Brown-Campbell.



**All Brown-Campbell Fiberglass Products have UV INHIBITORS**

**1" & 1-1/2" Pultruded T-Bar Fiberglass Grating**

Ideal when the most comfortable walking surface is desired. Provides maximum surface area underfoot, excellent for high foot traffic and roller trucks and carts. Available in 35% and 18% open areas or solid deck surface.



**Color:** Standard - dark gray or yellow

**Surface:** Furnished standard with gritted, skid resistant top surface

**Cross bar spacings:** 12\" on center

**1" & 1-1/2" Pultruded T-Bar Grating Availability**

Style	Height (in)	Open Area (%)	Load Bar Spacing (in)	Load Bar Spacing (in)
T-3510	1	35%	3.39	2-1/2"
T-3515	1-1/2	35%	2.79	2-1/2"
T-1810	1	18%	2.88	2"
T-1815	1-1/2	18%	3.39	2"
T-4010	1	0%	4.06	1-5/8"
T-4015	1-1/2	0%	4.06	1-5/8"

**CONCRETE EMBEDMENT FRP ANGLES**

Concrete Embedment FRP Angles provide a flat and straight seat for grating to prevent rocking and rattling. Constructed of gray vinyl ester material, offering high corrosion resistance and concrete compatibility.

Provided in 20 foot lengths for easy field cutting and installation.

**FRP Angles**

Angle Size	Weight Per Foot (lbs)
2" x 1-1/2" x 1/4"	1.29
1" x 1-1/2" x 1/4"	1.08

**Fiberglass products are ideal solutions for use in many unique environments including....**

- Food & Beverage
- Manufacturing
- Metals & Mining
- Microelectronics •Pulp & Paper
- Water & Wastewater •Oil & Gas
- Pharmaceutical •Transportation
- Telecommunications •Power

**2" Pultruded T-Bar Fiberglass Grating**

Offers the highest strength to weight ratio of all fiberglass grating and provides the greatest economy in relation to longer spans.



**Color:** Standard - dark gray or yellow

**Surface:** Furnished standard with gritted, skid resistant top surface

**Cross bar spacings:** 6\" on center

**Other Pultruded 2" T-Bar Styles Available**

Style	Height (in)	Open Area (%)	Load Bar Spacing (in)	Load Bar Spacing (in)
T-3520	2	35%	3.76	1-1/2"

**Pultruded 2" T-Bar Fiberglass Grating Load Table**

Uniform Load: lbs/sq. ft. Deflection: in.														Concentrated Load: lbs/ft. of width Deflection: in.													
Style	Height (in)	Open Area	lbs./sq. ft.	Load Bar Spacing CC (in)	Load Span	36"	42"	48"	54"	60"	66"	72"	78"	84"	Load Span	36"	42"	48"	54"	60"	66"	72"	78"	84"			
T-5000	2	50%	2.88	2	50	01	03	04	07	10	14	20	26	37	200	03	05	07	10	13	17	22	27	34			
					100	03	05	08	13	20	28	41	55	500	04	07	10	14	18	24	32	41	51				
					200	08	10	17	27	40	57	84	112	500	07	12	17	24	32	42	54	68	84				
					FL*	1791	1316	1007	796	645	533	447	381	329	FL*	2687	2303	2015	1791	1612	1465	1345	1240	1151			

**\*FL: Failure Load.** Determined by applying a 2.5 Factor of Safety to the Ultimate Capacity of the grating.  
 ~Deflection for uniform loads is limited to L/120 with L representing clear span length in inches. For typical pedestrian traffic, uniform load of 50 psf is recommended with deflection not to exceed .375".  
 ~Deflection for concentrated loads are shown for the same span conditions as for uniform loads.  
 ~Deflection limits can be higher for fiberglass gratings as they are more resilient than metal materials.  
 ~Italicized, bolded values indicate deflection greater than .375" or L/120. For these conditions, sustained loads or data not shown, please contact Brown-Campbell.

## FIBERGLASS STAIR TREADS

Brown-Campbell fiberglass stair treads deliver safety and long lasting durability. All exceed tough OSHA standards for safety, strength, durability and corrosion resistance. Brown-Campbell can cut the treads to size in 24 hours or if necessary the treads can be cut in the field with a circular saw using a masonry or carbide tip blade. Treads may be attached to stringers using fiberglass or steel support angle or wooden ledge, two standard hold down clips bolt stair tread to angle at each end.

Available in the same high performance resin formulations as our fiberglass grating.

## MOLDED Stair Treads



- Exceeds OSHA requirements
- Non-conductivity
- Low flame spread
- Outstanding protection against corrosion

## MOLDED 1.5" x 1.5" x 6" Stair Treads

Tread Width (Depth) (Including Nosing)	Length
4-3/4"	Green: Length may be any size up to 10'-0"
7-3/4"	Gray: Length may be any size up to 10'-0"
9-1/4"	Light Gray: Length may be any size up to 12'-0"
10-3/4"	
12-1/4"	Lengths in 6" intervals (18", 24", 30", 36", 42", 48", etc.) will ensure that the treads are terminated with closed ends.
13-3/4"	
15-1/4"	
16-3/4"	Additional support is required for treads exceeding 42" in length.
18-1/4"	
19-3/4"	

Notes:  
1) Widths stated above include nosing and result in a cut that is flush with the bearing bar.  
2) Treads can be manufactured to any width (depth) up to 19-3/4", however please note that any variation from the widths listed above will result in a nub on the back side of the tread.

800-472-8464



## 1.5" x 1.5" x 6" MOLDED Typical Deflection Properties

Span	250	500
18"	.03	.06
24"	.05	.10
36"	.16	.32
48"	.41	1.24

Properties based on concentrated load deflection applied at the midpoint of the tread, centered on the nosing to simulate the landing of a foot. This information is provided as a guide to the use and application of fiberglass stair treads and is not or does not represent a specific warranty of the product or its performance. The designer or user must determine the suitability of this product for a specific application.

## Also Available: MOLDED Stair Tread Panels

If the exact size of the treads are not known you may use 1.5" x 1.5" x 6" molded fiberglass stair tread panels and cut the exact size in the field with a circular saw using a masonry or carbide tip blade.

## MOLDED Fiberglass Stair Tread Panels

Depth/Mesh	Open Area %	lbs.	Surface	Panel Size	Resin Type	Color	Item #
1.5" x 1.5" x 6"	67%	60#	Grit	22.5" x 120"	V	Green	FCNG15156
				22.5" x 144"	C	Gray	FCGG15156
					C	Light Gray	FCGL15156

Note: 1-1/2" wide gridded strip is molded in on both sides of the panel lengthwise, allowing treads to be cut on both sides.

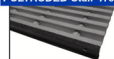
## FIBERGLASS STRUCTURAL SHAPES

When traditional building materials such as wood, steel, and aluminum fail to solve your design problems, let Brown-Campbell's knowledgeable employees assist you by offering the only practical alternative, high performance fiberglass structural shapes.

APPLICATIONS: COOLING TOWERS, PLATFORMS, HANDRAILS, ROOFTOP CONDENSIMENTS, CAGES / FIXED LADDERS, FLAME RETARDANT, FRAMING, STAIR STRUCTURES, WALKWAYS.

BENEFITS: LIGHTWEIGHT / HIGH STRENGTH, FLAME DETRIMENT, ELECTRICALLY NON-CONDUCTIVE, EASY TO INSTALL / FABRICATE, DOES NOT RUST, ROT OR BOW, LOWER LIFE CYCLE COST, NON-LEACHING, LOW WATER ABSORPTION, HIGH IMPACT STRENGTH, DIMENSIONALLY STABLE, NON-CORROSIVE.

## PULTRUDED Stair Treads



Pultruded stair treads offer greater strength and span capacity.

## PULTRUDED 1-6010 &amp; 1-6015 Stair Treads

Tread Width (Depth) (Including Nosing)	Length
5-3/4"	
7-1/4"	
8-3/4"	
10-1/4"	
11-3/4"	Length may be any size up to 20'-0"
13-1/4"	
14-3/4"	
16-1/4"	
17-3/4"	
19-1/4"	

Note: Pultruded treads must be made to the width (depth) stated above.

PULTRUDED Stair Tread Load Table  
Approx. Deflection - 300 lb. conc. load  
midspan front 5" +/- Tread

Style	Height	24"	30"	36"	42"	48"	54"
1-6010	1"	.062	.114	.187	.284	n/a	n/a
1-6015	1-1/2"	.036	.058	.112	.172	.249	.345

## HEAVY DUTY PULTRUDED I-BAR

High strength pultruded grating designed specifically for heavy loading. The I-4700 Series has the highest load capacity of any fiberglass grating available today. Sections are engineered to support vehicular traffic including transport trucks up to H-20 unidirectional loading.

For turning wheel loads, covered heavy duty pultruded I-Bar grating with 1/8" plate is available, please contact a Brown-Campbell sales representative today for assistance.



## Heavy Duty Pultruded I-Bar Grating Availability

Style	Height	Surface Width	Open Space	Open Area	Load Bar Spacing	CC	Std Width*	Std Length*	lbs/sq. ft.
1-4710	1"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20", 24"	5.5#	
1-4715	1-1/2"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20", 24"	8.0#	
1-4720	2"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20", 24"	10.5#	
1-4725	2-1/2"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20", 24"	12.5#	
1-5815	1-1/2"	5/8"	7/8"	58%	1-1/2"	3, 4	20", 24"	6.5#	
1-5820	2"	5/8"	7/8"	58%	1-1/2"	3, 4	20", 24"	8.7#	
1-5825	2-1/2"	5/8"	7/8"	58%	1-1/2"	3, 4	20", 24"	10.0#	

\*Standard Widths and Lengths shown - Brown-Campbell can cut any fiberglass panel to customer size specifications.

## STRUCTURAL SHAPES

Description	
Equal Leg Angle	
Unequal Leg Angle	
Rectangular Box Beam	
Channel	
I-Beam	
Wide Flange Beam	
Flat Sheet	
Round Tube	
Square Tube	
Rectangular Tube	
Flat Strip	
Solid Round Rod	
Solid Square Bar	
Fasteners: Studs, Nuts	
Special Shapes: Toe Plate, Curb Angle, Gate Guide, Sledge Flight, U-Trough, Square Tube with Round Hole, Over Frame, T-Sections	
Epoxy Kits	
EPDM Rubber Spray Coating Sealant	

**DIAMOND PLATE FLOORING**

This product features a slip-resistant, molded-in diamond pattern for improved footing.

- VERY HIGH STRENGTH-TO-WEIGHT RATIO
- OUTSTANDING CORROSION RESISTANCE

Constructed using a compression-molding process that combines heat and pressure to produce a high-density high-strength panel - weighing 1/3 as much as steel. Ideal as a trench cover and in applications where a solid plate is necessary to contain vapors.



- Panel Size: 4' x 8'
- Thickness: 1/4", 3/8", 1/2", 3/4"
- Resin: Vinyl Ester, Polyester
- Color: Gray, Yellow
- Weight per sq. ft.: 1/4": 2.3 lbs, 3/8": 3.4 lbs, 1/2": 4.6 lbs, 3/4": 6.8 lbs

**FLOOR PLATE**

Installed over existing grating to provide a solid walkway or to extend the life of high traffic areas. Can also be bolted directly to structural beams or used as wall panels that are resistant to corrosive splash when ordered with an ungritted surface.

- HIGH DURABILITY • MAINTENANCE FREE • NON-CONDUCTIVE • NON-POROUS
- STANDARD MOLDED-IN GRIT-TOP SURFACE FOR IMPROVED FOOTING

Manufactured by building up multiple layers of fiberglass reinforcement and specially formulated resins, therefore resulting in a solid composite panel offering bi-directional strength and corrosion resistance.

**'M' HOLD DOWN CLIP****Fiberglass Grating - 'M' Hold Down Clip**

Secure panels to support frames using two adjacent grating bars for a secure fit.

These clips are available for fastening panels together and securing them to other structures. All types are made of 316 stainless steel. Install clips at a minimum of 4 clips per piece and 4 clips for every 24 square feet (example: at least eight clips per 4' x 12' panel).

**FIBERGLASS FLOOR PANELS**

Usually installed over existing grating to provide a solid walkway or to extend the life of high traffic areas. Floor panels can also be bolted directly to structural beams and used as wall panels that are resistant to corrosive splash when ordered with an ungritted surface.



Comprised of multiple layers of fiberglass reinforcement and specially formulated resins, resulting in a solid composite panel offering bi-directional strength and corrosion resistance.

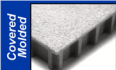
**Installation**

- Install using ordinary hand tools and masonry blade
- Fastener assembly kits may be ordered
- Elastomeric caulk may be used in the gap between plates
- It is recommended that cut edges and holes be sealed

**Recommended 'M' Clips, Bolts and TEK Screws**

	Grating Style	Clip Only (316 Stainless Steel)	Bolt Assembly <sup>1</sup> (Stainless Steel 18-8)	TEK Screws (410 Stainless Steel)
Molded	1" x 1" x 4"	M1	B1	
	1" x 1-1/2" x 1-1/2"	M2	B5	
	1-1/2" x 1-1/2" x 1-1/2"	M2	B2	2TEK3SS
	1-1/2" x 1-1/2" x 6"	M2	B2	
	2" x 2" x 2"	M4	B4	3TEK3SS
Pultruded	I-4010	M40	B8	
	I-4015	M40	B1	
	I-6010	M60	B6	2TEK3SS
	I-6015	M60	B7	
	T-5020	M50	B2	

<sup>1</sup>Note: Bolt Assemblies include a bolt, washer and nut. Clips are sold separately.

**Typical Fastener Location****OTHER BROWN-CAMPBELL FIBERGLASS PRODUCTS**

- Lightweight, easy to move and store
- 7 lbs, 10-1/2" x 22-3/4"
- Easy to clean

For product information on these items, please call  
**1-800-GRATING**



## GRIP STRUT® SAFETY GRATING

Helps reduce accident rates by providing a safer walking and working surface than any other available grating product. Its serrated surface gives maximum slip protection and performance under practically all conditions and in every direction. Every year industrial accidents- falls, tripping over debris, slipping on wet or greasy surfaces- cost millions of dollars in lost manhours and production. By reducing accidents, insurance costs can frequently be decreased.

The serrated surface is designed in an open diamond pattern, allowing drainage of fluids, mud, chips, and other accident-causing debris. With 4-1/2" inch high side channels, Grip Strut® Safety Grating Walkways meet OSHA requirements for toeboards on elevated surfaces.

- SAFER, SERRATED SURFACE
- MAINTENANCE-FREE OPEN DESIGN
- HIGH LOAD CAPACITY, LONG LIFE
- FAST INSTALLATION
- ECONOMICAL TO INSTALL & USE
- VERSATILE IN APPLICATION

## STOCK &amp; AVAILABILITY LIST

Catalog No.	Diamond	Width (in.)	Channel Height (in.)
<b>PRE-GALVANIZED- 14 Ga. Serrated</b>			
11014 HUNG	1	2-1/2	1-1/8
21514	2	4-3/4	1-1/2
22514	2	4-3/4	2
22514	2	4-3/4	2-1/2
31514	3	7	1-1/2
32014	3	7	2
32514	3	7	2-1/2
41514	4	9-1/2	1-1/2
42014	4	9-1/2	2
42514	4	9-1/2	2-1/2
51514	5	11-3/4	1-1/2
52014	5	11-3/4	2
52514	5	11-3/4	2-1/2
81514	8	18-3/4	1-1/2
82014	8	18-3/4	2
82514	8	18-3/4	2-1/2
102014	10	24	2
103014	10	24	3
104514 U-Walkway	10	24	4-1/2
<b>PRE-GALVANIZED- 12 Ga. Serrated</b>			
21512	2	4-3/4	1-1/2
22012	2	4-3/4	2
22512	2	4-3/4	2-1/2
31512	3	7	1-1/2
32012	3	7	2
32512	3	7	2-1/2
33012	3	7	3
41512	4	9-1/2	1-1/2
42012	4	9-1/2	2
42512	4	9-1/2	2-1/2
43012	4	9-1/2	3
51512	5	11-3/4	1-1/2
52012	5	11-3/4	2
52512	5	11-3/4	2-1/2
53012	5	11-3/4	3
81512	8	18-3/4	1-1/2
82012	8	18-3/4	2
82512	8	18-3/4	2-1/2
83012	8	18-3/4	3
101512	10	24	1-1/2
102012	10	24	2
103012	10	24	3
104512 U-Walkway	10	24	4-1/2
<b>Alme above also available in Black (HSP-60 plain S)</b>			
Catalog No.	Diamond	Width (in.)	Channel Height (in.)
<b>HEAVY DUTY PRE-GALV.- 10 Ga. Serrated</b>			
H-25510	3	13-3/4	2-1/2
H-32510	5	23-1/4	2
H-55910 U-Walkway	5	24	5
H-82010	8	27-3/4	2
H-85910 U-Walkway	8	30	5
H-82510	8	36	2
H-82510	8	36	2-1/2
H-85910 U-Walkway	8	36	5
<b>Additional Heavy Duty Widths and Lengths Available</b>			
<b>5052 ALUMINUM- .080" Ga. Serrated</b>			
22012-A	2	4-3/4	2
31512-A	3	7	1-1/2
32012-A	3	7	2
41512-A	4	9-1/2	1-1/2
42012-A	4	9-1/2	2
43012-A	4	9-1/2	3
51512-A	5	11-3/4	1-1/2
52012-A	5	11-3/4	2
81512-A	8	18-3/4	1-1/2
82012-A	8	18-3/4	2
<b>5052 ALUMINUM- .100" Ga. Serrated</b>			
22010-A	2	4-3/4	2
31510-A	3	7	1-1/2
41510-A	4	9-1/2	1-1/2
42010-A	4	9-1/2	2
<b>304 STAINLESS STEEL- 16 Ga. Serrated</b>			
22016-S	2	4-3/4	2
31516-S	3	7	1-1/2
41516-S	4	9-1/2	1-1/2
42016-S	4	9-1/2	2
51516-S	5	11-3/4	1-1/2
52016-S	5	11-3/4	2
<b>Stainless Steel also available in Type 316L</b>			
CATALOG NO. DENOTATION			
1st No.	# of diamonds to width or plank height (inches) or depth (inches)	2nd & 3rd Nos.	Gauge
4th & 5th Nos.	Type of Material (non-hyphen denotes Pre-Galvanized Steel)	6th No.	Finish
Example 1: 21514			
2	2 Diamonds	15	1-1/2" height
15	1-1/2" height	15	1-1/2" height
14	14 gauge	14	14 gauge
10	Pre-Galvanized	10	Black (Plain) Steel
Example 2: 21512-B			
2	2 Diamonds	15	1-1/2" height
15	1-1/2" height	15	1-1/2" height
14	14 gauge	14	14 gauge
10	Pre-Galvanized	10	Black (Plain) Steel

## Proof of Performance

Tested by an independent laboratory for slip resistance according to standards and methods established by Federal Specification for slip resistance - Grip Strut® Safety Grating proved its superiority by exceeding all requirements of this specification.

Grip Strut® Safety Grating tested 10% to 180% more slip-resistant than similar materials, depending on shoe materials and surface conditions. Grip Strut® Safety Grating substantially reduces accidents caused by falls. In addition, the hazard of falling objects is minimized by the 1-7/8" x 11/16" shape and size of the surface openings.

<b>Plank</b> Regular - Pgs. 12-15 Heavy Duty - Pg. 16	<b>Walkway</b> Regular - Pgs. 12-15 Heavy Duty - Pg. 16	<b>Stair Treads</b> Regular - Pg. 15 Heavy Duty - Pg. 16
<b>Rooftop Walkway Systems</b> Pg. 15	<b>Work Platforms</b> Pg. 15	<b>Accessories</b> Pg. 17

## USING GRIP STRUT® LOAD TABLES

In order to select the size of Grip Strut® Safety Grating, first determine load, clear span and deflection requirements. Having this information select from the appropriate load tables to find the appropriate product to meet your specific requirements.

For example, your job requirements are:  
 Clear Span: 4'0" Concentrated Load: 300 lb. Max. Deflection: 1/4" Type: Regular  
 You will find that 8-Diamond Grip Strut®, 18-3/4" wide, 2-1/2" channel height, 12 ga. steel carries a load of 416 lbs. at a 1/8" deflection. This would clearly meet the job requirements specified in the example. Additionally, other sizes will carry more load if necessary. For a more economical selection, choose the greatest width that will support the load consistent with job requirements and choose deeper channels rather than heavier steel gauges.

Grip Strut® Safety Grating will generally carry the same concentrated load, tabulated in lb. at mid-span, for a given span, material gauge and channel height, regardless of width. The uniform load tables are tabulated in lb./sq. ft., which accounts for the difference in load capacity shown for various widths. Deflection is in inches.

To ensure the safety of the tabulated loads, two aspects of Grip Strut® Grating strength must be considered:

- Transverse Bending or Strut Flexure** of the grating. This occurs when the grating is loaded with either a uniform load or a mid-width concentrated load, and the "struts" (grating surface) deflect relative to the side channels. To determine the allowable strut loads, samples of each grating material and thickness were tested with each plank width. The data resulting from these tests was used to prepare "strut loading" tables, which give allowable loads and deflections considering strut flexure only. These allowable strut loads are available by calling Brown-Campbell.
- Channel Flexure** of the grating. This occurs when the channels at mid-span 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. To approximate the most severe condition, there were no attachments between the channels and the supports. In cases where spans are shorter, channels deeper, and planks wider, strut flexure becomes more critical.

With the exception of 8 and 10-Diamond regular Grip Strut®, it can be assumed that both side channels and all widths effectively support the concentrated load, and the grating surface deflection is negligible.

All load tables show maximum loads, based upon actual load tests. Loads are designated: (U) for uniform load in lb./sq. ft., (C) for concentrated load in lb., (D) for corresponding deflection in inches.

## Ordering from Brown-Campbell

Call 1-800-472-8464 and the Brown-Campbell service center closest to you will immediately assist you with your requirements. Your order will be expedited more quickly if you have the following details available when calling.

## TALK ABOUT

- Application or use of product (including environment)
- Physical requirements: loading, open area, slip resistance

## PLEASE SPECIFY:

- Grip Strut® Safety Grating
- Type: Regular, Heavy Duty
- Catalog No.: see denotation example at bottom of stock list
- Quantity: # of pieces or planks required
- Material:

- Pre-Galvanized 14 or 12 ga.
- Plain Black 14 or 12 ga.
- Heavy Duty Pre-Galv. 10 ga. (Hvy Duty 9 or 11 ga. by special order)
- Aluminum .080" or .100" ga.
- Stainless Steel Type 304 or 316L

- Width & Channel Height
- Length: 10', 12', or cut to size up to 24'
- Surface: Serrated (standard), Non-serrated (special order)
- Special Requirements or Fabrication: Flat stock, forming, reconditioned material, etc.
- Accessories: Clamps, splice plates, etc.



## Load Table

## 3-Diamond - 7" width

Material	Channel Height (in) (mm)	Wgt (lb/ft) (kg/m)	Catalog No.		Clear Span																	
					2'-0"	2'-4"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	10'-0"	11'-0"	12'-0"
*Available by special order. Allowable loads and deflections: (U) - Uniform load (lb/ft) (kg/m). (C) - Concentrated load (lb) (kg). (D) - Deflection (in) (mm). Spans to left of heavy line produce a deflection of 1/4" or less Under a uniform load of 500 lbs per sq. ft.																						
Steel 14 ga.	1-1/2 (38.1)	3.0 (4.46)	3151A	U	800	577	402	260	227	180	147	122	103	87	74	61	51	43	36	30	25	21
	(50.8)	4.2 (7.2)	3201A	C	524	421	301	302	265	207	214	196	180	165	150	135	120	105	90	75	60	48
				D	142	567	605	490	378	298	242	201	169	145	125	110	97	77	63	51	41	33
				D	06	09	13	17	23	29	35	43	51	61	71	81	93	109	149	189	239	299
Steel 12 ga.	1-1/2 (38.1)	4.1 (6.10)	3151D	C	811	607	393	300	339	291	223	208	275	256	240	223	206	185	164	143	122	101
	(50.8)	4.7 (8.70)	3201D	C	694	556	405	400	352	314	284	260	240	223	208	196	185	165	144	123	102	81
				D	05	08	12	17	22	28	34	40	48	58	68	79	91	104	118	141	174	207
				D	06	12	16	22	28	34	40	48	58	68	79	91	104	118	141	174	207	240
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	31	37	44	51	59	68	87	107	131	157	183
				D	05	08	11	15	19	23	28	33	39	46	54	63	74	85	98	113	134	155
				D	06	12	16	22	28	34	40	48	56	65	75	86	98	113	134	155	176	
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
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	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
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				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
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	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120	141	162
				D	06	12	16	20	24	29	34	40	48	56	65	75	86	98	113	134	155	176
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.56 (1.06)	3151A-A	U	2636	1817	1263	929	712	564	457	379	319	272	236	200	181	144	118	96	83	70
	(50.8)	1.71 (1.21)	3201A-A	D	04	06	09	13	17	21	26	32	38	44	52	59	68	80	107	131	157	183
				D	05	08	11	15	19	23	28	34	40	48	56	65	75	86	100	120		

## Load Table

## 5-Diamond - 11-3/4" width

## 8-Diamond - 18-3/4" width

Material	Channel Height (in.)	Wgt. Allow. (kg.)	Catalog No.	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"	8'-6"	9'-0"	10'-0"	11'-0"	12'-0"
Steel 14 ga.	1-1/2 (38.1)	4.2 (9.25)	S1514	U	336	344	240	177	143	88	74	62	54	48	42	36	30	24	18	12	6
				D	525	422	353	304	267	238	216	196	183	168	153	138	123	108	93	78	63
				C	05	06	12	16	21	26	31	36	41	46	51	56	61	66	71	76	81
	2 (50.8)	4.4 (5.5)	S2014	U	595	571	307	233	195	145	120	102	87	76	66	56	47	38	30	22	14
				D	706	600	513	437	373	320	276	242	214	191	171	151	133	116	100	84	68
				C	07	07	10	14	18	22	26	30	34	38	42	46	50	54	58	62	66
	2-1/2 (63.5)	4.7 (6.99)	S2514	U	1021	955	456	338	258	204	166	138	116	100	86	76	67	58	50	42	34
				D	1242	1046	888	742	624	532	456	392	336	288	246	210	180	156	132	108	84
				C	04	06	08	11	14	18	22	26	30	34	38	42	46	50	54	58	62
Steel 12 ga.	1-1/2 (38.1)	5.9 (8.78)	S1512	U	710	656	318	235	191	144	117	98	83	71	62	55	49	43	37	31	25
				D	1023	857	715	576	480	407	341	288	246	210	180	156	132	108	93	78	63
				C	06	08	10	12	15	18	22	26	30	34	38	42	46	50	54	58	62
	2 (50.8)	6.2 (3.2)	S2012	U	1137	1068	508	372	286	227	185	154	130	111	97	85	75	66	57	48	40
				D	1351	1155	988	812	688	591	501	423	357	302	254	213	180	150	126	102	78
				C	08	10	12	14	17	21	25	29	33	37	41	45	49	53	57	61	65
	2-1/2 (63.5)	6.6 (8.82)	S2512	U	1601	1483	753	554	426	331	271	221	181	151	131	113	97	83	71	60	50
				D	1915	1715	1106	950	833	742	660	610	561	519	484	453	426	382	347	319	295
				C	10	12	14	16	20	24	28	32	36	40	44	48	52	56	60	64	68
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	1.49 (2.22)	S1512-A	U	403	255	179	132	100	80	68	58	50	44	38	32	26	20	14	9	4
				D	592	379	263	193	148	117	95	78	66	56	48	41	34	28	22	16	10
				C	06	13	18	25	32	40	48	56	64	73	83	93	103	113	123	133	143
	2 (50.8)	1.58 (2.36)	S2012-A	U	688	569	385	290	222	178	142	118	100	86	74	64	55	46	38	30	22
				D	888	688	466	353	267	216	176	146	124	108	94	82	72	62	52	43	34
				C	07	10	15	21	27	33	40	48	56	64	74	84	94	104	114	124	134
	2-1/2 (63.5)	1.67 (2.48)	S2512-A	U	1061	890	466	357	273	216	175	144	121	103	89	78	68	58	48	39	30
				D	1305	1061	688	513	392	302	242	196	164	142	124	108	94	82	72	62	52
				C	08	10	14	19	25	31	39	47	56	66	77	88	99	110	121	132	143
	3 (76.2)	2.0 (2.6)	S3012-A	U	1601	1303	753	554	426	331	271	221	181	151	131	113	97	83	71	60	50
				D	1915	1715	1106	950	833	742	660	610	561	519	484	453	426	382	347	319	295
				C	10	12	14	16	20	24	28	32	36	40	44	48	52	56	60	64	68

Material	Channel Height (in.)	Wgt. Allow. (kg.)	Catalog No.	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"	8'-6"	9'-0"	10'-0"	11'-0"	12'-0"
Steel 14 ga.	1-1/2 (38.1)	6.1 (9.1)	S1514	U	337	217	151	112	86	69	56	47	40	34	28	22	16	10	6	3	0
				D	525	422	353	304	267	238	216	196	183	168	153	138	123	108	93	78	63
				C	10	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	2 (50.8)	6.3 (4.3)	S2014	U	540	358	250	184	142	113	92	76	65	55	48	42	36	30	24	18	12
				D	740	540	410	310	240	190	150	120	100	86	74	64	55	46	38	30	22
				C	14	21	20	19	20	21	23	26	29	32	36	40	44	48	52	56	60
	2-1/2 (63.5)	6.6 (9.8)	S2514	U	1021	857	456	338	258	204	166	138	116	100	86	76	67	58	50	42	34
				D	1242	1046	888	742	624	532	456	392	336	288	246	210	180	156	132	108	84
				C	04	06	08	11	14	18	22	26	30	34	38	42	46	50	54	58	62
Steel 12 ga.	1-1/2 (38.1)	8.5 (12.6)	S1512	U	448	287	201	148	115	91	74	62	53	45	38	32	26	20	14	9	4
				D	688	513	385	290	222	178	142	118	100	86	74	64	55	46	38	30	22
				C	08	10	12	14	17	21	25	29	33	37	41	45	49	53	57	61	65
	2 (50.8)	8.9 (13.2)	S2012	U	710	656	318	235	191	144	117	98	83	71	62	55	49	43	37	31	25
				D	1023	857	715	576	480	407	341	288	246	210	180	156	132	108	93	78	63
				C	06	08	10	12	15	18	22	26	30	34	38	42	46	50	54	58	62
	2-1/2 (63.5)	9.2 (13.7)	S2512	U	1137	1068	508	372	286	227	185	154	130	111	97	85	75	66	57	48	40
				D	1351	1155	988	812	688	591	501	423	357	302	254	213	180	150	126	102	78
				C	08	10	12	14	17	21	25	29	33	37	41	45	49	53	57	61	65
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	2.11 (3.13)	S1512-A	U	403	255	179	132	100	80	68	58	50	44	38	32	26	20	14	9	4
				D	592	379	263	193	148	117	95	78	66	56	48	41	34	28	22	16	10
				C	06	13	18	25	32	40	48	56	64	73	83	93	103	113	123	133	143
	2 (50.8)	2.20 (3.26)	S2012-A	U	688	569	385	290	222	178	142	118	100	86	74	64	55	46	38	30	22
				D	888	688	466	353	267	216	176	146	124	108	94	82	72	62	52	43	34
				C	07	10	15	21	27	33	40	48	56	64	74	84	94	104	114	124	134
	2-1/2 (63.5)	2.29 (3.46)	S2512-A	U	1061	890	466	357	273	216	175	144	121	103	89	78	68	58	48	39	30
				D	1305	1061	688	513	392	302	242	196	164	142	124	108	94	82	72	62	52
				C	08	10	14	19	25	31	39	47	56	66	77	88	99	110	121	132	143
Aluminum Alloy 5052 12 ga. .080"	1-1/2 (38.1)	2.38 (3.58)	S3012-A	U	1601	1303	753	554	426	331	271	221	181	151	131	113	97	83	71	60	50
				D	1915	1715	1106	950	833	742	660	610	561	519	484	453	426	382	347	319	295
				C	10	12	14	16	20	24	28	32	36	40	44	48	52	56	60	64	68

Be sure to check out the entire Brown-Campbell Grip Strut® product line:

•Regular Plank

•Regular Walkway

•Heavy Duty Plank

•Heavy Duty Walkway

•Rooftop Walkway Systems

•Work Platforms

•Regular Stair Treads

•Heavy Duty Stair Treads

•Anchors, Clamps, Clips, Splice Plates

## 10-Diamond Plank - 24" width

## Load Table

Material	Channel Height (in mm)	Wt (lb/in ft) (kg/m)	Catalog No.	Clear Span											
				2'-0"	2'-4"	3'-0"	3'-4"	4'-0"	4'-4"	5'-0"	5'-4"	6'-0"	7'-0"	7'-4"	8'-0"
Steel 14 ga.	2 (50.8)	7.4 (11.0)	102014	U 300	300	328	168	128	102	82	68	57	49	42	
				D 46	48	42	38	38	41	44	49	55	62	70	
				C 400	400	343	294	257	229	206	187	172	158	147	
	3 (76.2)	7.9 (11.8)	103014	D 34	35	32	30	29	26	30	31	35	35	37	
				U 300	300	300	264	202	160	130	107	90	77	68	58
				D 42	43	46	44	39	36	35	30	39	44	45	51
Steel 12 ga.	2 (50.8)	10.4 (15.5)	102012	C 400	400	400	400	400	360	324	265	270	249	232	219
				D 33	33	34	35	37	35	33	32	32	33	34	35
				U 475	416	289	212	162	128	104	86	72	62	53	46
	3 (76.2)	11.1 (16.5)	103012	D 40	39	33	31	31	34	38	44	48	56	63	71
				C 650	520	434	372	325	289	260	237	217	200	186	174
				D 26	22	19	20	20	21	22	23	25	28	31	34

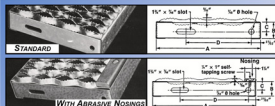
## 10-Diamond Walkway - 24" width

## Load Table

Material	Channel Height (in mm)	Wt (lb/in ft) (kg/m)	Catalog No.	Clear Span											
				2'-0"	2'-4"	3'-0"	3'-4"	4'-0"	4'-4"	5'-0"	5'-4"	6'-0"	7'-0"	7'-4"	8'-0"
Steel 14 ga.	4.5	8.9 (13.2)	104514-U	U 300	300	300	300	300	263	213	176	148	126	109	95
				D 41	41	42	45	48	47	42	40	40	41	43	45
				C 400	400	400	400	400	400	400	400	400	380	355	333
Steel 12 ga.	4.5	12.5 (18.6)	104512-U	D 32	33	33	33	34	35	36	38	39	41	42	41
				U 475	475	475	475	475	475	475	475	475	475	475	475
				D 37	37	38	40	43	43	43	37	37	37	39	41

Allowable loads and deflections: U-uniform load (lb/sq ft), C-concentrated load (lb), D-deflection (in).  
Spans to left of heavy line produce a deflection of 1/4" or less under a uniform load of 100 lbs per sq. ft.

## GRIP STRUT® STAIR TREADS



## Regular Stair Treads

Span	Ga.	Channel Depth	Standard (No Nosing)		With Abrasive Nosing	
			Catalog No.	Size	Catalog No.	Size
Up to 42"	14	1-1/2"	<b>STEEL</b>			
			T-21514	2 Diam: 4-3/4"	T-21514-N"	2 Diam: 5-3/4"
			T-31514	3 Diam: 7-1/2"	T-31514-N"	3 Diam: 8-1/8"
			T-41514	4 Diam: 9-1/2"	T-41514-N"	4 Diam: 10-1/2"
			T-51514	5 Diam: 11-3/4"	T-51514-N"	5 Diam: 12-3/4"
			T-22014	2 Diam: 4-3/4"	T-22014-N"	2 Diam: 5-3/4"
Up to 48"	14	2"	<b>ALUMINUM</b>			
			T-32014	3 Diam: 7-1/2"	T-32014-N"	3 Diam: 8-1/8"
			T-42014	4 Diam: 9-1/2"	T-42014-N"	4 Diam: 10-1/2"
			T-52014	5 Diam: 11-3/4"	T-52014-N"	5 Diam: 12-3/4"
			T-22012-A	2 Diam: 4-3/4"	T-22012-A-N"	2 Diam: 5-3/4"
			T-32012-A	3 Diam: 7-1/2"	T-32012-A-N"	3 Diam: 8-1/8"
Up to 42"	16	2"	<b>STAINLESS STEEL</b>			
			T-42016-S	4 Diam: 9-1/2"	n/a	n/a
			T-52016-S	5 Diam: 11-3/4"	n/a	n/a
			T-42016-S	4 Diam: 9-1/2"	n/a	n/a
			T-52016-S	5 Diam: 11-3/4"	n/a	n/a
			T-62016-S	6 Diam: 13-1/4"	n/a	n/a

\*Catalog No. provided for 14 ga.  
\*Special Order  
Above recommendations based on approx. min. loads of 300 lb./sq. concentrated, 100 lb. uniform.  
Specific performance criteria may vary by municipality/building code body and should be locally checked prior to finalizing specifications.

## WORK PLATFORMS

Cantilever, Overhanging Walkway  
Available in 14 or 12 ga. steel

Please Inquire at  
1-800-472-8464

Stair Tread Carrier Plates  
Steel, Aluminum & Stainless Steel

Standard (No Nosing)				With Abrasive Nosing			
A	B	C	D	A	B	C	D
4-3/4"	1-1/2"	3/4"	2-5/8"	5-3/4"	1-1/2"	3/4"	3-5/8"
2 Diam	2"	1"	2-5/8"	2 Diam	2"	1"	3-5/8"
2"	1-1/2"	3/4"	3-3/8"	3 Diam	1-1/2"	3/4"	4-1/2"
3 Diam	2"	1"	3-3/8"	3 Diam	2"	1"	4-1/2"
4-1/2"	1-1/2"	3/4"	3-7/8"	4-1/2"	1-1/2"	3/4"	5-7/8"
4 Diam	2"	1"	3-7/8"	4 Diam	2"	1"	5-7/8"
11-3/4"	1-1/2"	3/4"	8-1/8"	12-3/4"	1-1/2"	3/4"	8-1/8"
9 Diam	2"	1"	8-1/8"	9 Diam	2"	1"	8-1/8"

\*Special Order  
Note: Stainless Steel not available in 2 & 3 Diamond Widths.



Heavy Duty  
Stair Treads  
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## ROOFTOP WALKWAY SYSTEMS

- Optimizes Roof Performance, Protects Membrane  
Saves roof from walking and equipment abuse
- Versatile - Designed for all roofing systems: Built-up, Single-ply, Inverted, and Spray-on
- Flexible - Innovative design easily adapts to changing traffic patterns, accommodates level and roof slope changes
- Traffic Control - Raised level discourages "shortcuts"
- Safe, Year-Round Use - Raised level stays above snowfalls, drains snow, stays slip-resistant in 3 directions
- Easy Installation - Goes down fast without fasteners, stays where you want it
- Economical - Long life, low maintenance on roof and walkway



Custom Fabrication

## HEAVY DUTY GRIP STRUT® - PLANK &amp; WALKWAY



HEAVY DUTY PLANK

Heavy Duty Grip Strut® products offer the same advantages as Regular Grip Strut® Safety Grating but are designed for applications requiring greater load and/or longer span. The basic design is the same, but diamond openings are larger and the metal is thicker.

## Available Configurations:

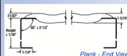
- Material: 10 ga. Pre-Galvanized and Black (9 & 11 ga. by special order)  
150 ga. Aluminum (special order)
- Widths: Plank: 9-1/4", 13-3/4", 23-1/4", 27-3/4", 36"  
Walkway: 24", 30", 36"
- Heights: Plank: 2", 2-1/2", 3", 4"  
Walkway: 5" (depth)
- Lengths: 10', 12', or cut to size. Walkways up to 24' by special order.



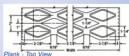
- HIGH LOAD CAPACITY
- LONG LIFE
- VERSATILE: MULTIPLE CONFIGURATIONS AVAILABLE
- FAST INSTALLATION
- ECONOMICAL TO INSTALL & USE



Heavy Duty Walkway			
Style	Width	H	Material
5 Diam.	24"	1-3/8"	Galv & Black
6 Diam.	30"	1-3/8"	Galv & Black
8 Diam.	36"	1-3/8"	Galv & Black



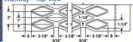
Plank - End View



Plank - Top View

Heavy Duty Plank			
Style	Width	H	Material
2 Diam.	9-1/4"	1-3/8"	Galv & Black
3 Diam.	13-3/4"	1-3/8"	Galv & Black
5 Diam.	23-1/4"	1-3/8"	Galv & Black
6 Diam.	27-3/4"	1-3/8"	Galv & Black
8 Diam.	36"	1-3/8"	Galv & Black

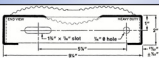
Walkway - Top View



## HEAVY DUTY GRIP STRUT® STAIR TREADS



Offer many advantages including multi-directional scraping action of tiny-toothed surfaces keeping shoes clean, open design keeping surface free of debris, and edges easily seen as each step is taken - reducing dangerous accidents.



- Material: 10 ga. Pre-Galvanized and Black  
150 ga. Aluminum
- Width: 9-1/4"
- Depth: 2"
- Nosing: standard

Heavy Duty Stair Treads			
Material	Thickness	Depth	Weight (lb/ft)
Steel	10 ga.	2"	7.4#

Load Table

Clear Span			
2'-0"	2'-6"	3'-0"	4'-0"
2'-0"	2'-6"	3'-0"	4'-0"
2'-0"	2'-6"	3'-0"	4'-0"

Table depicts maximum allowable tread loads.

Brown-Campbell offers a full line of **Fabrication Services** including:



SAWING  
NOTCHING  
CIRCLES  
CUTOOTS  
WELDING  
BANDING  
BLANKING  
BURNING  
SHEARING  
PAINTING  
GALVANIZING

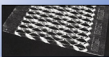
## FLAT STOCK GRIP STRUT®

Flat Stock Grip Strut® is available by special order in all standard materials and sizes listed throughout this catalog. Please reference table (right) for approximate dimensions of flat metal available on each side. The open matrix is symmetrical across the flat plane. Flat stock can also be manufactured to customer specified flat metal dimensions on one or both sides.

## Flat Stock Grip Strut®

# of Diam.	Flat Metal on one side*
2 Diam.	2-1/4" to 7-1/2"
3 Diam.	2-3/8" to 6-1/2"
4 Diam.	2-3/8" to 7-5/8"
5 Diam.	2-3/8" to 6-1/2"
6 Diam.	2-3/8" to 5-5/8"
10 Diam.	2-3/8" to 7-5/8"

\*Can be req. to customer specifications on one or both sides.



## RECONDITIONING MATERIAL

Ideal for re-furbishing worn and unsafe floors and stairs. Manufactured with down-turned edges to allow grating to lie flat and secure over existing flooring. Grip Strut® Reconditioning Material (RM) provides 500 teeth per square foot assuring safe footing wall-to-wall. RM products available by special order in standard Grip Strut® materials and sizes.



Reconditioning Material (RM) - End View



1-800-GRATING



## INSTALLATION / ACCESSORIES

## Anchor Plate Assembly (side to side installation)



See catalog No. table (right). Select ACAs by height of plank grating. Clamp prevents grating from shifting on supports. Holds pieces together with or without clearance between panels. All bolts are below top surface of grating and no holes are drilled in supporting members.

3/8" J- Bolts	
Channel	Catalog No.
1-1/2"	ACA-19
2"	ACA-20
2-1/2"	ACA-25
3"	ACA-30

Assembly consists of (1) anchor plate, (2) 3/8" J-bolts, (2) 3/8" hex nuts, and (2) 3/8" flat washers all electro zinc plated with standard finish hot dip mill-galvanized before fabrication. Special Order: anchoring device can be cadmium plated.

## Heavy Duty Butterfly Clip



Catalog No. H-BC-10. For Stainless Steel use with 3/8" square-shank carriage bolts, nuts and washers obtained locally.

## General Installation Recommendations

**Recommended Clearance**  
STEEL: 1/4" minimum is recommended at perimeter and 3/8" maximum at end joints. Maximum between panels is 1/4"; 1/8" is generally used.  
CONCRETE: Concrete form deflection calls for slightly greater perimeter clearance. 1/2" is recommended. (Max. between panels 1/4")

**Bearing Surfaces**  
Recommended minimum bearing 1-1/2". Surfaces supporting Grip Strut® Grating must be smooth and level to insure that adjoining sections provide a safe, even walking surface.

**Permanent Installation**  
Grip Strut® Safety Grating is easily welded to supports for permanent installations. Channels are quickly welded together between supports to provide uniform deflection in adjacent panels.

For 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.

Install Grip Strut® Safety Grating according to details as shown on individual job drawings, or as follows:  
(1) Single width applications - Utilizing the anchoring device or weldings, attach Grip Strut® Grating plank at every point of contact with supporting structure around perimeter of plank.  
(2) Multiple width applications - Utilizing the Grip Strut® Safety Grating anchoring device or welded as recommended by A.I.S.I., attach grating plank around the perimeter at each point of contact with supporting structure. In field of platform, attach plank to supporting structure with a minimum of one attachment at each end of plank on alternate sides. When span exceeds 8 ft., weld or bolt side channels of adjacent planks together at midpoint of span. (Consider similar treatment for spans exceeding 6 ft.)

## Diamond Washer



Catalog #12262 is shaped to fit in diamond opening. Punched to receive 5/16" carriage head bolt with square shank.

**Bolt and nut must be ordered separately:**  
Plank Carriage Bolt: 5/16" x (Side Channel height + 1")  
Walkway Carriage Bolt: 5/16" x 2"  
Hex Nut: 5/16"

## Walkway Splice Kits



## Splice Plate Kit - 30 in. - Catalog #SP-10DU-30

Package includes: Grip Strut® Grating cut to length if required, four 9/16" dia. holes staggered in each corner of up-turned kickplate, two 8-hole 12 ga. 4-1/2" x 30" C-channel splice plates with 16 ea. 1/2" x 1-1/4" hex head cap screws (galv. S.A.E. Grade 5, lightly oiled), washers and hex nuts. Kit joins continuous sections together in run over clear spans to act as one continuous unit. Any combination of 12 and 10 ft. planks can be joined with splice plate package. Recommended bolt torque: 72 ft/lb min.

## Splice Plate Kit - 7 in. - Catalog #SP-10DU-7

Package includes: Grip Strut® Grating cut to length if required, four 1/2" dia. holes in each corner of up-turned kickplate, two 8-hole 10 ga. 4" x 7" splice plates with 16 ea. 7/16" x 1-1/4" bolts, washers, and hex nuts. Kit joins continuous sections together in a run only over supports. Recommended bolt torque: 55 ft/lb min.

## Heavy Duty Splice Plate Kit - Catalog #P-H-SP-U

Formed from 9 ga. mill-galvanized steel, pre-punched and supplied with 1/2" hex bolts, nuts and washers. Recommended bolt torque: 40 ft/lb min.

**Heavy Duty Handrail Brackets also available - please inquire**

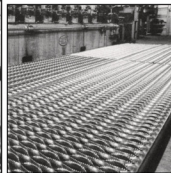


**Be sure to check out all of our SAFETY GRATING PRODUCTS. If you are unsure which product best suits your needs, our sales personnel are extremely knowledgeable and ready to help.**

**CALL US TODAY AT 1-800-472-8464 - WE MAKE IT EASY!**



**ISO 9001:2015 Certified**



## PERF-O GRIP® GRATING PRODUCTS

Offer a unique surface of large debossed holes and perforated buttons providing maximum slip protection and performance under practically all conditions and in every direction.

- **HIGH STRENGTH-TO-WEIGHT RATIO**
- **RESILIENT SURFACE LESSENS WORKER FATIGUE**
- **LARGE OPEN AREA ALLOWS DEBRIS TO DRAIN AWAY**
- **LIGHT, EASY TO HANDLE PLANKS MAKE INSTALLATION EASY**
- **WALKWAYS MEET OSHA REQUIREMENTS FOR TOEBOARDS ON ELEVATED STRUCTURES**
- **VERSATILITY: MULTIPLE FINISH OPTIONS AND A VARIETY OF STANDARD CONFIGURATIONS**



Plank



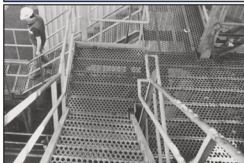
Walkway



Stair Treads

Note: May be supplied with or without end margins

Perf-O Grip® Rooftop Walkway Systems also available



1-800-GRATING

brown-campbell.com

STOCK &amp; AVAILABILITY

Catalog No. Hole Width (in.) Depth (in.)

## PRE-GALVANIZED- 13 Ga. Steel

OG1513	2	5	1-1/2
OG2013	2	5	2
OG1513	3	7	1-1/2
OG2013	3	7	2
OG101513	5	10	1-1/2
OG102013	5	10	2
OG121513	6	12	1-1/2
OG122013	6	12	2
OG181513	10	18	1-1/2
OG182013	10	18	2

## PRE-GALVANIZED- 11 Ga. Steel

OG1111	3	7	1-1/2
OG2011	3	7	2
OG2011	3	7	3
OG10111	5	10	1-1/2
OG102011	5	10	2
OG10311	5	10	3
OG12111	6	12	1-1/2
OG122011	6	12	2
OG123011	6	12	3
OG18111	10	18	1-1/2
OG182011	10	18	2
OG183011	10	18	3
OG243011	13	24	3
OG303011	16	30	2
OG303011	16	30	3
OG304011	16	30	4

## WALKWAYS- PRE-GALV. 11 GA. STEEL

OG45011W	13	24	5
OG45011W	16	30	5
OG45011W	20	36	5

## ALUMINUM- .125" GA.

OGA20125	2	5	2
OGA20125	3	7	2
OGA1020125	5	10	2
OGA1220125	6	12	2
OGA1820125	10	18	2

## 304 STAINLESS STEEL- 16 GA.

OGSS2016	2	5	2
OGSS2016	3	7	2
OGSS102016	5	10	2
OGSS122016	6	12	2

## 316 STAINLESS STEEL- 14 GA.

OGSS2014	2	5	2
OGSS2014	3	7	2
OGSS102014	5	10	2
OGSS122014	6	12	2

Note: 13 & 11 Ga. Steel also available in Black (NPS): Change OG to OGH in Catalog No.

## PERF-O GRIP® - PLANK &amp; WALKWAY

## Ordering from Brown-Campbell

Call 1-800-472-8464 and the Brown-Campbell service center closest to you will immediately assist you with your requirements. Your order will be expedited more quickly if you have the following details available when calling.

1. Application or use of product (including environment)
2. Physical requirements: loading, open area, slip resistance

## PLEASE SPECIFY:

- **Perf-O Grip® Grating**
- **Catalog No.:** see stock list
- **Quantity:** # of pieces or planks required
- **Material:**

- Pre-Galvanized 13 or 11 ga.
- Plain Black 13 or 11 ga.
- Aluminum .125" ga.
- Stainless Steel Type 304 or 316

- **Width**
- **Depth**
- **Length:** 10', 12' or cut to size
- **Accessories:** Bolts, clips, splice kits, etc.

FOR MORE PRODUCT INFORMATION  
PLEASE CONTACT OUR SALES STAFF  
AT 1-800-472-8464.

## PLANK



Plank - End View

Note: May be supplied with or without end margins.



Plank - Top View

## Plank Details

	5'	10'	12'	18'
A 4'-0"	6'-0"	8'-0"	11'-0"	17'-0"
B 1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
C 1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
D 1'-0"	1'-0"	1'-0"	1'-0"	1'-0"

## Walkway - End View



## WALKWAY



## ACCESSORIES

## J-Clip



## Splice Plate Kits

**Surface Kits:** As width increases, grating surface performance becomes more critical. For product widths greater than 12" it is recommended to use surface splice kits to mechanically join butt ends of plank sections.

**Walkway Kits:** Provide continuity when multiple lengths of Perf-O Grip® are desired. Connections are reinforced with the addition of splice plates attached to side channels.



## Surface Splice Plate Kits

- POG-ES-10 for 18" plank (incl. 6 sets of hardware)
- POG-ES-13 for 24" plank (incl. 6 sets of hardware)
- POG-ES-16 for 30" plank (incl. 8 sets of hardware)

Hardware: 3/8" x 1" carriage bolts, 3/8" flat washers and bolt seats

## Walkway Splice Plate Kits

POG-WS-30 for 24" & 30" walkways (includes 2 splice plates and 32 sets of hardware)

Hardware: 1/2" x 1-1/4" hex bolts, 1/2" x 1/2" hex nuts and 1/2" flat washers

## Standard P-Bolt Washer Seat



Provides secure anchor of the grating to structural supports. Standard bolt seat features oblong holes designed to ensure a vertical anchor (3/8" bolt) even if hole is off concentricity by as much as 1/4". (Double bolt seat also available.)

## Mid-Clip



Can be used at mid-span to increase load carrying capacities of individual channels by fastening several planks together. Std Finish: Galvanized.

## PERF-O GRIP® STAIR TREADS



- **Material:** 11 & 13 ga. Pre-Galv & Plain Steel
- **Length:** 24", 30", 36"
- **Width:** 5", 7", 10", 12"
- **Height:** 1-1/2", 2"

Also Available with Traction-Tread® leading edge nosing

## CARRIER PLATES



## GRATE-LOCK™ GRATING PRODUCTS

Easy to install system of interlocking grating planks, treads and accessories that provide safe, sturdy footing for mezzanine floors, platforms, walkways and other applications where non-slip performance is required.

- FAST ASSEMBLY
- MANY DESIGN OPTIONS
- SUPERIOR FINISH FOR LOW MAINTENANCE
- INTERLOCKING PLANKS FOR GREAT STRENGTH
- LARGE VARIETY OF SIZE AND GAUGE ALTERNATIVES

Grate-LOCK™  
Rooftop Walkway  
Systems also  
available

Traction Grip Surface



Smooth



## Ordering from Brown-Campbell

Call 1-800-472-8464 and the Brown-Campbell service center closest to you will immediately assist you with your requirements. Your order will be expedited more quickly if you have the following details available when calling.

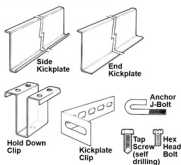
## THINK ABOUT:

1. Application or use of product (including environment)
  2. Physical requirements: loading, open area, slip resistance
- PLEASE SPECIFY:**
- Grate-LOCK™ Grating
  - Catalog No.: see stock list
  - Quantity: # of pieces or planks required
  - Material:
    - Pre-Galvanized 14 or 18 ga. (16 ga. special order)
    - Plain Black 14, 16 or 18 ga. (all special order)
  - Width: 12", 9", 6", or 3" filler panel
  - Height: 1-1/2" (maximum length 12'), 2-1/2", 3" & 4" special order (4" supplied F/M flange only)
  - Length: 12' (max for 1-1/2" height), 20', 24' or cut to size
  - Flange Options: female/male, male/male, female/female see flange option detail below
  - Accessories: Kickplates, clamps, bolts, screws, etc.

## Flange Options - End View



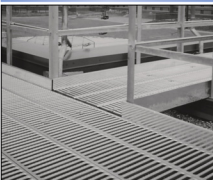
## ACCESSORIES



Accessories		
Item	Catalog No.	Height (in.)
Side Kickplate (14 ga.) 12 ft. lengths	M-SK-3114	6-1/2
	M-SK-3014	7
	M-SK-4014	8
	M-SK-2514	7
End Kickplate (14 ga.) 12 ft. lengths	M-EK-4014	8
	M-EK-4014	8
Kickplate Clip	M-KC	n/a
Hold Down Clip - Select by height of grating (Self tapping screws sold separately)	M-HC-15	2-1/2
	M-HC-20	3
	M-HC-40	4
	M-2551	2-1/2
Anchor J-Bolt (Washer & Nut not included)	M-AC	2-1/2
Hold Down Clamp (Bolt, nut, washer not included)	M-HDC	2-1/2
Tap Screw - self drilling	M-TS	1
3/8" Hex Head Bolt with nut and washer	M-HB	1

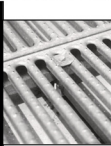
## GREAT LOADING PERFORMANCE WITH COST SAVING DESIGN

The unique design of Grate-LOCK™ offers increased load performance at a lower cost than other grating systems. Interlocking planks, stronger rung design and an expanded selection of leg heights and material gauges offer more design options. Grate-LOCK™ lets you specify lighter gauge steel for the same job amounting in substantial material savings.



## Fast Bolt-Together Assembly

Save time in the field with Grate-LOCK™ bolt-together slotted assemblies. Klotted and plank sections are pre-punched. For additional ease, planks can be straight, curved or angle cut with hand tools.



## STOCK &amp; AVAILABILITY

Catalog No.	Width (in.)	Channel Height (in.)	Open Area	Ins./Lin. Ft.
PRE-GALVANIZED - 18 Ga. Steel				
GL121518	12	1-1/2	45%	2.98
GL91518	9	1-1/2	43%	2.34
GL61518	6	1-1/2	39%	1.98
GL122518	12	2-1/2	45%	3.74
GL92518	9	2-1/2	43%	3.28
GL62518	6	2-1/2	39%	2.68
GL32518	3	2-1/2	sold filler grt	1.98
GL123018	12	3	45%	3.98
GL93018	9	3	43%	3.34
GL63018	6	3	39%	2.98
GL33018	3	3	sold filler grt	2.18
GL124018	12	4	45%	4.28
GL94018	9	4	43%	3.78
GL64018	6	4	39%	3.28
GL34018	3	4	sold filler grt	2.48
PRE-GALVANIZED - 16 Ga. Steel				
GL121516	12	1-1/2	43%	3.58
GL91516	9	1-1/2	41%	2.98
GL61516	6	1-1/2	37%	2.34
GL122516	12	2-1/2	43%	4.08
GL92516	9	2-1/2	41%	3.58
GL62516	6	2-1/2	37%	3.28
GL32516	3	2-1/2	sold filler grt	2.34
GL123016	12	3	43%	4.08
GL93016	9	3	41%	3.58
GL63016	6	3	37%	3.08
GL33016	3	3	sold filler grt	2.58
GL124016	12	4	43%	4.58
GL94016	9	4	41%	4.08
GL64016	6	4	37%	3.58
GL34016	3	4	sold filler grt	2.68
PRE-GALVANIZED - 14 Ga. Steel				
GL121514	12	1-1/2	40%	4.28
GL91514	9	1-1/2	38%	3.58
GL61514	6	1-1/2	35%	2.78
GL122514	12	2-1/2	40%	5.08
GL92514	9	2-1/2	38%	4.58
GL62514	6	2-1/2	35%	4.08
GL32514	3	2-1/2	sold filler grt	2.68
GL123014	12	3	40%	5.08
GL93014	9	3	38%	4.58
GL63014	6	3	35%	4.08
GL33014	3	3	sold filler grt	3.18
GL124014	12	4	40%	5.58
GL94014	9	4	38%	5.08
GL64014	6	4	35%	4.58
GL34014	3	4	sold filler grt	3.68

## ASSEMBLY INFORMATION

## Grating Installation

Install grating in accordance with manufacturer's recommendations and shop drawings. Position grating sections flat and square with ends bearing minimum 1-1/2" on supporting structure. Keep grating sections at least 1/4" away from vertical steel sections and 1/2" from concrete walls. Allow clearance at joints between sections of maximum 1/4" at side channels and maximum 3/8" at ends. Band random cut ends and diagonal or circular cut exposed edges with a minimum 1/8" thick bar welded at contact points.

## Grating Attachment

Attach grating to supports without warp or deflection as follows:

- 1) **Single Plank Attachment** - Secure plank ends to supporting members at every point of contact. Use Grate-LOCK™ accessories.
- 2) **Multiple Plank Application** - Secure plank ends to supporting members at every point of contact and intermediate grating sections with at least one attachment at each end of plank on alternate sides. For added rigidity, attach side channels of adjacent plank together (at mid-point of span).
- 3) **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.
- 4) **Clamp and Bolt Attachment** - Secure intermediate planks to supports using proper length hold-down clamps.

## TRACTION-TREAD™ FLOORING &amp; PLANKS

Feature a surface with hundreds of perforated buttons that provide slip-resistance in all directions making it a practical choice for industrial and commercial applications especially where pedestrian traffic is a consideration.



- ADA COMPLIANT
- FLEXIBLE SURFACE DESIGN
- HIGH SLIP RESISTANCE IN ALL DIRECTIONS

Traction-Tread™ Rooftop Walkway Systems also available

## Flooring



## Plank



Note: May be supplied with or without end margins, see details below.

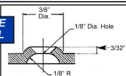
## STOCK &amp; AVAILABILITY

Material Type/Finish	Gauge	Material Type/Finish	Gauge
<b>FLOORING</b>		<b>PLANKS</b>	
Standard Pattern		Standard Pattern	

HRP&O Plain Steel	11, 13, 16	HRP&O Plain Steel	11, 13
Pre-Galvanized	11, 13	Pre-Galvanized	11, 13
Aluminum	125"	Aluminum	125"
304 Stainless Steel	16		

<b>FLOORING</b>		<b>PLANKS</b>	
Star with or without drainage		Star/Square with drainage	
HRP&O Plain Steel	11, 13, 16	HRP&O Plain Steel	11, 13
Pre-Galvanized	13	Pre-Galvanized	11, 13
Aluminum	125"	Aluminum	125"

<b>FLOORING</b>		<b>PLANKS</b>	
Square with or without drainage		Star/Square with drainage	
HRP&O Plain Steel	11, 13, 16	HRP&O Plain Steel	11, 13
Pre-Galvanized	13	Pre-Galvanized	13
Aluminum	125"	Aluminum	125"

DIMPLE  
DETAIL

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

## SPECIAL PATTERNS



Above shown with drainage holes, both patterns available with or without drainage holes

## Flooring Details



Width: 36"  
Length: 10"  
Flooring width and length can be cut to size

May be supplied with or without end margins.

Traction-Tread™ Flooring  
Pounds/Square Foot

Standard Pattern Flooring	
11 ga. HRP&O	5.08
12 ga. HRP&O	4.48
13 ga. HRP&O	3.88
14 ga. HRP&O	3.18
16 ga. HRP&O	2.58
11 ga. Pre-Galvanized	5.08
13 ga. Pre-Galvanized	3.88
125 ga. Aluminum	1.68
16 ga. 304 Stainless Steel	2.48

Square Pattern (Special Pattern)	Without Drainage	With Drainage
11 ga. HRP&O	5.08	4.78
13 ga. HRP&O	3.88	3.58
16 ga. HRP&O	2.58	2.38
13 ga. Pre-Galvanized	3.88	3.58
125 ga. Aluminum	1.68	1.58

## ACCESSORIES

## Carriage Bolt

Available in various sizes. Hardware not included.



ISO  
9001:2015  
Certified

## Ladder Rungs



# of Rows	Width	Height	Steel #11	Length
2	1-1/4"	1-1/2"	1.28	48-3/4" or 60"
4	2-1/4"	1-1/2"	1.58	

Ladder Rungs also available with Abrasive Coated Surface (page 23) and in Grip Stru® constructions.

Please contact us for more information at 1-800-472-8464.

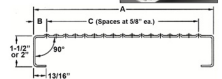
## Plank Details



Heights: 1-1/2", 2"  
Widths: 7", 10", 12"  
Lengths: 10', 12', or cut to size

May be supplied with or without end margins.

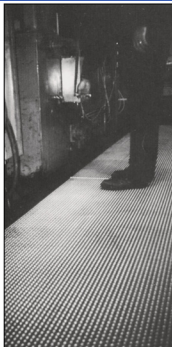
Width	A	B	C
7"	6-1/8"	15-1/8"	8"
10"	9-1/8"	18-1/8"	13"
12"	11-1/8"	19-1/8"	16"



## ROOFTOP WALKWAY SYSTEMS

Metal roofs meet a wide variety of design and performance needs. As a result, the square footage and building varieties covered by metal standing seam roofs have increased rapidly. These thin gauged roofing systems are engineering wonders, but they are not made to absorb foot and maintenance traffic. Safety grating rooftop walkway systems are an ideal solution to this situation and for safer footing.

- **Optimizes Roof Performance:** Saves roof from walking and equipment abuse, maximizes direct, free-flow drainage through elevated planks and open support.
- **Versatile:** Designed for most metal roof systems
- **Flexible:** Innovative design easily adapts to changing traffic patterns, accommodates level and roof slope changes, allows multiple piece consolidation to accommodate wider walkways
- **Traffic Control:** Raised level discourages "shortcuts"
- **Safe, Year-Round Use:** Raised level stays above snowfalls, drains snow, stays slip-resistant in three directions
- **Easy Installation:** Goes down fast, stays where you want it
- **Economical:** Long life, low maintenance on roof and walkway



## BROWN-CAMPBELL DECK PRODUCTS

Brown-Campbell is an acknowledged leader in the construction products industry and we offer an extensive product line of quality steel roof, floor and form deck to satisfy a wide range of projects and structural designs. All Brown-Campbell deck products combine the properties of steel with an efficient profile design to provide a high strength-to-weight ratio.

**ROOF DECKS** are available in both fluted and cellular configurations, 1-1/2, 3, and 4-1/2 inch depths, 6 or 8 inch rib. Selected coatings and colors, up to 1.0 mil thick, permit innovation and flexibility for special aesthetic or performance conditions. Most sections are also available as acoustical decks to assist the designer in achieving the required noise control.

**COMPOSITE FLOOR DECKS** are available in composite slab construction and can be used with composite beams to provide an efficient structural floor system. Floor decks are engineered for composite beam design and full value shear connectors can be used.

**FORM DECK SYSTEMS** are routinely specified for schools, warehouses and low and high-rise buildings. These systems offer fast, easy, and economical installation providing strong, secure, stay-in-place form for poured concrete applications.



## BROWN-CAMPBELL ROOF DECK

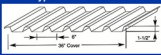
Ideal for many non-Residential roofing needs. Designed for PITCHED, FLAT, and ARCHED CONSTRUCTION ROOFS and ideal for many applications including arenas, auditoriums, malls, schools and supermarkets. Diaphragm design with proper attachment patterns can provide lateral stability, reducing the need for structural bracing.

## LIGHTWEIGHT, STRONG, ECONOMICAL AND EASY TO INSTALL

Three primary types: **STANDARD, ACOUSTICAL, and CELLULAR**. Acoustical roof deck is produced from standard roof deck amended to include perforations along the webs of the ribs. On the job site, rolls of sound absorbing fiberglass are placed between the perforated ribs. NRC ratings of .85 to .95 are possible, depending on the insulating product and the panel type utilized. Cellular acoustical roof deck has a perforated bottom plate. Sound absorbing fiberglass elements are placed in the cells for NRC ratings of .65 to .90.

Available in two finishes: **PAINTED and GALVANIZED**. Painted roof deck is manufactured from steel conforming to ASTM A611 (top & bottom not intended to be exposed to weather) and galvanized roof deck is manufactured from steel conforming to ASTM A653, both finishes at a minimum 33 ksi yield. Galvanized roof deck is manufactured with a standard coating of G-60, additionally a coating weight of G-90 is available upon request.

## 1-1/2" Type B - Wide Rib Roof Deck



Weight (Pounds per Sq. Ft.)	
Gauge	Galv. Painted
22	1.88 1.79
20	2.08 2.18
18	2.58 2.59
16	3.08 3.58

## 1-1/2" Type B - Allowable Uniform Total Loads - psf

		Span - Feet & Inches									
Number of Spans	Gauge	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"
1 Span	22	92	72	58	47	40	34	30			
	20	116	90	72	58	49	42	36	32		
	18	162	125	98	79	66	55	47	41	36	32
2 Span	16	206	157	123	99	81	68	58	50	44	39
	22	100	82	69	58	51	45	39	35	31	
	20	122	101	85	73	63	55	48	43	38	34
3 Span	18	163	135	113	97	84	73	64	57	51	45
	16	205	170	143	122	105	92	81	72	64	57
	22	124	103	86	74	64	56	49	43	39	35
3 Span	20	152	126	108	91	78	68	60	53	46	41
	18	202	168	141	121	104	91	80	69	60	52
	16	255	211	178	152	131	115	101	85	74	64

## BROWN-CAMPBELL FORM DECK

Designed for non-residential applications in LOW and HIGH-RISE OFFICE BUILDINGS, SCHOOLS, and WAREHOUSES. **INSTALLATION IS EASY AND ECONOMICAL** since the need for wood framing is eliminated and the sides and ends of the product are designed to overlap with a close, snug fit which reduces welding time. Additionally, this system provides a safe working surface for workers before and during concrete placement.

Designed to serve as a permanent steel base for poured reinforced concrete floor slabs, form deck is available with or without slots to accelerate concrete drying time. Form deck with slots is used primarily as a roof deck with lightweight insulating concrete fills. This product has a built-in side lap vent which eliminates the necessity of using separate vent clips. With or without slots, this product provides a strong, efficient section for forming slabs, while giving lateral stability to structural members. Form deck is made from high strength, full hard steel that conforms to ASTM A653 SS Grade 80. It is galvanized in accordance with ASTM A924 Class G-60 and G-90. Form deck without slots is available uncoated conforming to ASTM A611 Grade E for applications where permanence is not essential, however, this product should always be galvanized when used as a structural support for lightweight insulating concrete fill. **DIAPHRAGM DESIGN** - Form deck can be utilized in diaphragm design with lateral loading. The deck can be used in floor systems composed of structural normal weight or lightweight concrete slabs (2-1/2" min. cover), roof systems composed of lightweight insulating concretes (2-1/2" min. cover) or insulating concrete used in combination with expanded polystyrene insulation board.

## BROWN-CAMPBELL COMPOSITE FLOOR DECK

Designed for non-residential applications in LOW-RISE, HIGH-RISE, AND MANUFACTURING sectors. Offers the dual purpose of 1) acting as a working platform before and during concrete placement, thereby eliminating the costly effort of utilizing wood forms, and 2) acting as a positive reinforcement for the concrete slabs, thereby eliminating the need for rebar in most cases. In most projects, the only additional reinforcement necessary is welded wire fabric for controlling temperature and shrinkage cracks. Composite floor deck is comprised of a ribbed profile deck with special rolled-in embossments designed to interlock with the concrete slab. This construction maximizes the efficiency of both the steel and the concrete components. Composite beam design utilizing composite floor deck and shear studs provides a tremendous cost savings opportunity through reduction in the size and cost of steel beams by as much as 30 percent.

Available in two finishes, painted and galvanized. Painted floor deck is manufactured according to ASTM A653 and galvanized floor deck is manufactured under steel conforming to ASTM A653. Painted composite floor deck is the most cost effective alternative for use in enclosed environments, the painted bottom side of the floor deck is high heat baked on thermal setting primer. The end use and exposure to weather and other elements determine the selection of finish. Galvanized roof deck is manufactured with a standard coating of G-90, additionally a coating weight of G-90 is available upon request.

**DIAPHRAGM DESIGN** - Composite deck slabs can be utilized in diaphragm design with lateral loading. This type of diaphragm is composed of composite steel floor deck and structural, normal or lightweight concrete fill. The concrete fill must have a cover of 2-1/2 inches and attain a minimum compressive strength of 3,000 psi and WWF temperature reinforcing meeting SDI requirements.

**Fireproofing** - If required by the U.L. Design Assembly requirements or specifying engineer, fireproofing can be sprayed to the underside of the deck. Fireproofing requirements, including surface preparations, are the responsibility of and shall be provided by other trades/suppliers. Brown-Campbell Company shall not be responsible for cleaning the underside of the metal deck to ensure bond of fireproofing nor adhesion or adhesive ability of the fireproofing.

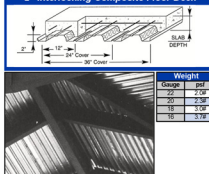
## 1-1/2" Not Interlocking Composite Floor Deck



## 1-1/2" Composite Floor Deck - 145 pcf Normal Weight Concrete

Total Slab Depth in Wt. Conc.		Maximum Unshored Clear Spans		Composite Properties		Superimposed Live Loads - psf (no studs)											
						Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches	
Area Conc.	Gauge	Single Span		Double Span		I <sub>xx</sub> in <sup>4</sup>		I <sub>yy</sub> in <sup>4</sup>		S <sub>x</sub> in <sup>3</sup>		S <sub>y</sub> in <sup>3</sup>		J <sub>x</sub> in <sup>4</sup>		J <sub>y</sub> in <sup>4</sup>	
		Span	Span	Span	Span	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>
4-1/2" 38.3 pcf 6"	22	10'-0"	7'-0"	7'-11"	3,573	867	400	343	282	251	217	186	166	146	126	114	101
	18	7'-2"	6'-5"	9'-2"	4,333	1,052	400	360	302	262	229	201	178	158	140	125	111
	16	8'-4"	10'-0"	10'-11"	4,782	1,638	400	380	310	270	235	206	182	161	142	126	115
6-1/2" 42.4 pcf 24.8 in	22	9'-0"	7'-5"	7'-8"	5,107	1,087	400	360	305	268	233	205	180	160	142	126	113
	18	6'-4"	8'-7"	8'-8"	5,046	1,291	400	400	373	324	283	240	220	195	174	156	140
	16	8'-0"	9'-11"	9'-3"	6,180	1,853	400	400	383	332	290	255	226	200	179	160	143
8-1/2" 46.3 pcf 29.3 in	22	10'-0"	10'-0"	10'-4"	6,786	1,400	400	400	383	332	290	255	226	200	179	160	143
	18	8'-0"	7'-11"	7'-7"	7,022	1,529	400	400	370	320	279	245	216	191	170	152	136
	16	6'-1"	8'-2"	8'-4"	7,544	1,538	400	400	400	388	338	298	264	235	209	187	168
5" 48.4 pcf 29.3 in	22	7'-0"	6'-8"	6'-8"	8,451	1,972	400	400	400	388	348	307	271	241	215	193	173
	18	6'-0"	6'-0"	6'-0"	9,380	2,415	400	400	400	400	400	400	400	400	400	400	400
5-1/2" 54.2 pcf 34.1 in	22	9'-0"	8'-0"	8'-10"	10,360	1,903	400	400	400	374	326	287	253	224	196	176	159
	18	6'-0"	7'-10"	7'-11"	10,036	1,791	400	400	400	387	340	300	275	245	220	197	176
	16	8'-0"	8'-2"	8'-5"	11,187	2,361	400	400	400	400	400	400	400	400	400	400	400
6" 60.5 pcf 39.4 in	22	7'-2"	7'-2"	7'-2"	12,588	2,824	400	400	400	400	400	400	400	400	400	400	400
	18	6'-0"	6'-0"	6'-7"	12,157	1,717	400	400	400	400	400	400	400	400	400	400	400
	16	5'-7"	7'-6"	7'-8"	13,012	2,048	400	400	400	400	400	400	400	400	400	400	400
	18	5'-11"	7'-5"	8'-11"	14,468	2,636	400	400	400	400	400	400	400	400	400	400	400
	16	6'-0"	8'-0"	8'-11"	15,883	3,242	400	400	400	400	400	400	400	400	400	400	400

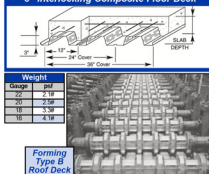
## 2" Interlocking Composite Floor Deck



## 2" Composite Floor Deck - 145 pcf Normal Weight Concrete

Total Slab Depth in Wt. Conc.		Maximum Unshored Clear Spans		Composite Properties		Superimposed Live Loads - psf (no studs)											
						Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches	
Area Conc.	Gauge	Single Span		Double Span		I <sub>xx</sub> in <sup>4</sup>		I <sub>yy</sub> in <sup>4</sup>		S <sub>x</sub> in <sup>3</sup>		S <sub>y</sub> in <sup>3</sup>		J <sub>x</sub> in <sup>4</sup>		J <sub>y</sub> in <sup>4</sup>	
		Span	Span	Span	Span	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>
4-1/2" 38.3 pcf 6"	22	10'-0"	7'-0"	7'-11"	3,573	867	400	358	286	232	204	179	159	141	125	112	100
	18	7'-0"	6'-0"	9'-0"	5,917	1,286	400	372	323	283	248	220	195	174	155	138	125
	16	8'-0"	10'-0"	10'-11"	6,286	1,853	400	383	332	290	255	226	200	179	160	143	126
6-1/2" 42.4 pcf 24.8 in	22	10'-0"	11'-0"	11'-0"	6,286	1,853	400	383	332	290	255	226	200	179	160	143	126
	18	7'-0"	11'-0"	11'-0"	6,286	1,853	400	383	332	290	255	226	200	179	160	143	126
	16	8'-0"	11'-0"	11'-0"	6,286	1,853	400	383	332	290	255	226	200	179	160	143	126
8-1/2" 46.3 pcf 29.3 in	22	10'-0"	11'-0"	11'-0"	6,286	1,853	400	383	332	290	255	226	200	179	160	143	126
	18	7'-0"	11'-0"	11'-0"	6,286	1,853	400	383	332	290	255	226	200	179	160	143	126
	16	8'-0"	11'-0"	11'-0"	6,286	1,853	400	383	332	290	255	226	200	179	160	143	126
5-1/2" 54.2 pcf 34.1 in	22	7'-0"	7'-0"	7'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	18	6'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	16	8'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
6" 60.5 pcf 39.4 in	22	7'-0"	7'-0"	7'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	18	6'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	16	8'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
5-1/2" 54.4 pcf 38.1 in	22	7'-0"	7'-0"	7'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	18	6'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	16	8'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
6-1/2" 60.5 pcf 47.4 in	22	7'-0"	7'-0"	7'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	18	6'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149
	16	8'-0"	10'-0"	11'-0"	8,006	1,522	400	400	383	335	295	261	232	207	185	166	149

## 3" Interlocking Composite Floor Deck



## 3" Composite Floor Deck - 145 pcf Normal Weight Concrete

3" Composite Floor Deck - 145 pcf Normal Weight Concrete																		
Total Slab Depth in Wt. Conc. Area Conc.		Maximum Unshored Clear Spans		Composite Properties		Superimposed Live Loads - psf (no studs)												
						Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		Span - Feet & Inches		
Gauge	Area	Single Span		Double Span		I <sub>xx</sub> in <sup>4</sup>		I <sub>yy</sub> in <sup>4</sup>		S <sub>x</sub> in <sup>3</sup>		S <sub>y</sub> in <sup>3</sup>		J <sub>x</sub> in <sup>4</sup>		J <sub>y</sub> in <sup>4</sup>		
		Span	Span	Span	Span	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>3</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	in <sup>4</sup>	
5-1/2" 48.3 pcf 35.4 in	22	10'-0"	10'-0"	10'-0"	3,133	1,331	253	224	198	178	157	141	123	113	102	92	83	
	18	10'-0"	12'-0"	12'-0"	10,014	1,589	310	224	244	217	195	175	158	142	126	117	106	
	16	11'-0"	13'-0"	14'-3"	11,083	2,024	319	282	251	224	201	180	162	147	133	120	109	
6" 54.4 pcf 39.5 in	22	10'-0"	10'-0"	10'-0"	4,134	1,534	293	258	230	204	182	163	147	133	119	107	97	
	18	10'-0"	12'-0"	12'-0"	12,855	1,802	358	317	282	252	226	203	182	165	150	136	123	
	16	11'-0"	13'-0"	13'-8"	14,181	2,344	369	327	290	258	233	209	180	174	154	140	127	
6-1/2" 60.4 pcf 43.8 in	22	7'-0"	8'-0"	8'-10"	1,515	550	206	262	234	209	186	161	138	126	111	100	91	
	18	10'-0"	12'-0"	14'-0"	2,084	400	368	328	292	258	233	209	180	174	154	140	127	
	16	10'-8"	12'-8"	13'-2"	17,811	2,679	400	373	332	297	266	240	216	195	177	161	146	
7" 66.5 pcf 49.2 in	22	7'-0"	8'-0"	8'-10"	1,515	550	206	262	234	209	186	161	138	126	111	100	91	
	18	10'-0"	12'-0"	14'-0"	2,084	400	368	328	292	258	233	209	180	174	154	140	127	
	16	11'-0"	13'-0"	14'-3"	22,961	3,260	400	400	375	338	301	271	245	222	201	182	166	
7-1/2" 72.5 pcf	22	6'-0"	7'-0"	7'-9"	2,685	3,165	400	373	331	295	264	231	213	192	173	157	142	
	18	10'-0"	11'-10"	12'-3"	29,890	2,363	400	400	375	338	304	274	248	225	205	187	170	



**NOSINGS & SAFETY TREADS****Supergrip®**

Ideal for heavy pedestrian traffic areas. Offers excellent indoor or outdoor safety protection at a low cost. Applicable for new construction or renovation applications. Types 231BF & 131 shown below.

- Dual purpose: new concrete stairs or steel pan
- Available in 11 colors

**TYPE 231BF**

3" (76.2 mm) wide, 1/4" (6.35 mm) thick

**TYPE 131**3" (76.2 mm) wide  
1/4" (6.35 mm) thick  
nose 1/4" (6.35 mm) underside**Types 141 and 238  
also available****Stairmaster®  
Renovation**

Designed for the modernization and restoration of all types of stairs, while providing excellent anti-slip protection for pedestrians.

- ADA Compliant • All types 9/32" thick • 11 Color Choices
- Two-tone treads with contrasting color available
- Great alternative to removal and reconstruction of existing stairways

**Types 500 & 570  
shown.**

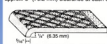
**Also available:**  
181, 182, 511,  
500SN, 511SN,  
540, 630, 660, 6100

**TYPE 500 - 9"**

Two-tone available at additional cost

**TYPE 570****Abrasive Cast****POURED CONCRETE**

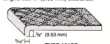
Generally installed full step length less approx. 3" (76.2 mm) clearance at each end.

**TYPE 101 - Nose 1 1/2"**

Chief use: as nosings in concrete stairs.  
Tread installed flush all around.

**STEEL PAN**

Generally installed full stringer to stringer length, less 1/2" (12.7 mm) clearance.

**TYPE 101SP**

Chief use: as nosings on steel-pan concrete-filled stairs or superimposed on existing steps.

Offer the best alternative for use in the most difficult environments. This type of safety tread/nosing offers maximum durability in rough use and resistance to unusually corrosive environments.

- ADA Compliant • Indoor or outdoor use • New construction or renovation

**Types 101 & 101SP shown.****Other styles available...**

- Poured Concrete: Type 116
- Existing Stair Repair: Type 116A
- Concrete Curbs: Types 150 & 250
- Steel Pan: Types 102 & 103
- Miscellaneous Use: Types 100, 110, 120
- Ladder Rung: Type 950

**ABRASIVE COATINGS****APPLY TO: Floors • Nosings • Stair Treads • Ladder Rung Covers**

Abrasive Coatings can be applied to specialty metal products to offer superior slip resistance to ensure a safe working environment. Abrasive Coatings offer a safe, rugged, non-skid surface even in wet, oily and high traffic conditions. Three types of coating surfaces are available: fine, medium and coarse, depending on your specific application needs.



- **Longevity:** File-Hard toughness up to 62 on the Rockwell "C" Scale

- **Maximum Surface Attachment through Plasma Stream Disposition:** Bond Strength to Plate exceeding 4,500 psi

- **Weldable:** Needs no Surface Preparation

- **Exceeds OSHA/UL requirements for Slip-Resistance**

**SAFETY FIRST!****Coatings available:**

Steel, Stainless Steel & Aluminum that can be applied to Steel, Stainless Steel or Aluminum base

**9 Combinations Available:**

for example: Steel Base with Aluminum coating, Aluminum Base with Stainless Steel coating, etc.

Brown-Campbell manufactures our own bar grating which creates 'grate' benefits for our customers! Our tremendous manufacturing capacity results in **FASTER LEAD TIMES!**

Our facility runs 24 hours a day, Monday through Friday, with 3 shifts. Our current bar grating capacity includes:

Carbon Steel, Stainless Steel and Aluminum  
Smooth, Serrated and I-Bar

Bearing bar thicknesses from 1/8" to 3/8"

Bearing bar height from 3/4" to 5"

Bearing bar spacing of 11, 15, 19, 22, 30 & 38

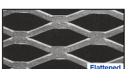
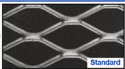


## BROWN-CAMPBELL EXPANDED METAL PRODUCTS

Available in standard and flattened surfaces, Brown-Campbell Expanded Metals are widely accepted and most often used for enclosure, protection and support in architecture, product design, manufacturing plants and as grating.

**Standard Expanded Metal:** Expanded Metal as it comes off the machine is referred to as "standard". The strands and bonds are set at a uniform angle to the plane of the sheet. This adds strength and rigidity, allows air circulation, distributes the load of the metal to the supporting frames, as well as making a skid resistant surface.

**Flattened Expanded Metal:** Standard Expanded Metal sheets are passed through a cold roll reducing mill parallel to the diamond pattern (LWD) to form flattened expanded metal. By flattening the sheet, the bonds and strands are turned down to produce a smooth and flat surface, reducing the overall thickness and elongating the diamond pattern. Cross roll flattening is done by passing the expanded metal sheet through a cold roll reducing mill parallel to the SWD. The result is the same except the diamond pattern SWD is elongated. Material thickness may vary +/- 10% from the published dimensions.



## Ordering from Brown-Campbell

Call 1-800-472-8464 and the Brown-Campbell service center closest to you will immediately assist you with your requirements. Your order will be expedited more quickly if you have the following details available when calling.

## THINK ABOUT:

1. Application or use of product (including environment)
2. Physical requirements (including percent of open area, opening size, thickness)

## PLEASE SPECIFY:

"Brown-Campbell Superior" "Expanded Metal"

•Quantity: number of full sheets or cut pieces

•Material/Finish Type: carbon, stainless steel, etc.

•Style Designation:

Example: 1/2" #18

1/2" = short way of diamond (SWD) dimension

#18 = gauge

Example: 2.08 Grating

2.08 = weight per square foot of grating (or catwalk)

•Type: standard, flattened, grating

•Piece Size: Width (SWD) x Length (LWD)

•Shearing:

–Type: random or bond

–Direction: LWD to run

–Tolerances

•Finish and Special Treatments: mill finish, galvanized, etc.

•Stair Tread Size: (if applicable)

•Accessories: U-Edging, Stair Treads

•Special Requirements: circle shearing, cut outs, etc.

## Design Details &amp; Terminology



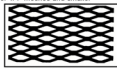
## SHEARING

**Random Shearing:** Results in open diamond design and angle, leaving jagged edges and prongs in most cases.

Tolerances: LWD or SWD +/- 1/16" on standard or flattened expanded metal; +/- 1/4" on grating and catwalk

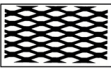
**Bond Shearing:** Results in closed diamond design and angle, eliminating jagged edges and prongs. Shearing cuts through expanded metal at center of bond, where strands intersect. Standard expanded metal should not be bond sheared SWD.

Tolerances: LWD or SWD +/- 1/2" design size - special bond tolerances for 1/4" meshes and smaller

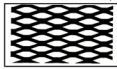
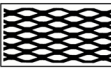


Standard Sheets

Bond or machine run on all sides (Some flattened material patterns may result in one random sheared LWD)



Random Sheared SWD &amp; LWD

LWD - 1 side Bond, 1 side Random  
SWD - 1 side Bond, 1 side RandomBond Sheared SWD  
Random Sheared LWD

**Balance Shearing:** LWD only - expanded to SWD dimension. Provides matching sections for continuous catwalk and flooring applications. Closed diamonds SWD, cut with either open or closed diamonds to obtain ordered length LWD.

**Centerline Shearing:** Finished piece symmetrical, around a row of diamonds at center of piece. Open diamonds both SWD and LWD.

Brown-Campbell can supply any special fabrication including circle shearing, cutouts and bonded edges.

## STYLE DESIGNATION

First number: designates nominal diamond pitch Short Way of Design (SWD).

Second number: used in conjunction with the first number MAY specify the gauge of metal, weight per hundred square feet, or may have some other significance. Therefore, the word "gauge" should never be added to the style designation.

Grating products: Designated by weight per square foot of the finished product.

Example 1: 1/2" #18 carbon steel

standard, 48" SWD by 96" LWD

Example 2: 1/2" .051 aluminum

standard, 96" SWD

by 48" LWD

STOCK SHEETS

These illustrations demonstrate the importance of ALWAYS providing the SWD dimension BEFORE the LWD dimension.

Expanded metal products are designated by a series of numbers which identify a given style.

## TERMINOLOGY

**Bond** - Intersection of two strands. Always equal to the width of two strands.

**Camber** - Bow in Sheet. Measured by placing a straight edge along the concave side of the sheet parallel to LWD, touching both ends of the sheet. The maximum distance between the edge of the expanded metal and the straight edge is the camber. Note: A sheet may have a width tolerance of +/- 0.015" and still have a camber. See diagram at right. Tolerances: SWD 1/16" per ft of length; LWD Standard 1/16" per ft of length; Flat: .332" per ft of length.

**Flattening** - Limited to 72" maximum one dimension. Flattened sheet thickness will be +/- 10% of published thickness.

**LWD - Long Way of Design** - Distance from a point on a bond to a corresponding point on the following bond measured across the Long Way of Design. Also referred to as "pitch SWD".

**LWD - Long Way of Opening** - Distance measured from the inside of the bond across to the inside of the bond LWD.

**Manufactured to Size** - Closed diamonds on all sides. Size tolerances same as stock size sheets.

**Unless otherwise specified**, material will be produced to plus side of tolerance.

**Out of Square** - Expanded Metal sheets are not perfectly square as manufactured. Measured using 90 degree angle. Tolerances: SWD: 1/16" per ft of width; LWD: 1/16" per ft of length. Note: Sheet must be re-squared by shearing on all sides for squareness. See diagram at right.

**Overall Thickness** - Actual measurement of the thickness of the mesh measured at the bond.

**Strands** - Individual slit metal strips, or sides of an expanded metal pattern.

**Thickness** - Standard Gauge or thickness of the sheet or coil from which the expanded metal was produced.

**Width** - Standard Amount of metal fed into the expanding machine, which is slit & stretched with each stroke of the upper die. Flattened Width of the strand.

**SWD - Short Way of Design** - Distance from a point on a bond to a corresponding point on the following bond measured across the SWD. Also referred to as "pitch SWD".

**SWD - Short Way of Opening** - Distance measured from the inside of the bond across to the inside of the bond SWD.

## FINISHES AND SPECIAL TREATMENTS

**Mill Finish** - Carbon Steel - expanded metal is lightly oiled and requires cleaning before final finish using acid or solvent bath with a water rinse. Aluminum: Clean with a non-etching chemical or detergent, then rinse and dry thoroughly. A wax or non-wax base cleaner can be used.

**Hot Dip Galvanizing** - Protective coating of zinc; may have a rough uneven appearance. N/A for patterns smaller than 1/4".

**Electro-galvanized** - Zinc finish applied to sheets to provide weather resistance.

**Deburring** - Remove burrs and sharp edges by wire brushing 17-22° SWD, 50°-150° LWD. Not all styles will be deburred.

**Levelling** - A plane of the sheet levelled without flattening strands or bonds.

Anodized, coated, painted and plated expanded metal also available.

STANDARD TOLERANCES FOR STOCK SIZE ON MACHINE RUN SHEETS	Std. Tolerances		Standard		Flattened		Grating/Catwalk	
	Material	SWD per ft of width	Carbon/Alum	Stainless	Carbon/Alum	Stainless	Carbon/Alum	Stainless
		LWD overall	+3/8" -0"	+1/2" -0"	+3/8" -0"	+1/2" -0"	+3/8" -0"	+1/2" -0"

## STOCK &amp; AVAILABILITY (LIST 1 OF 3)

Style	Stock Size (in)		Pounds/100 sq. ft.		Design Sizes (in)		Opening Sizes (in)		Standard Size (in)		Overall Thickness (in)		Designs Per sq. ft.		% Open Area
	Width BWD	Length LWD	Plain	Galv	BWD	LWD	BWD	LWD	Width	Thick	BWD	LWD	BWD	LWD	
Carbon and Hot Dipped Galvanized Steel / FLATTENED															
3/16" - #22	8	3	43	n/a	200	510	115	300	040	024	024	60	23	55%	
1/4" - #20	4	8	82	103	250	1,050	110	715	079	030	030	48	11	30%	
1/4" - #18	3.4	8	108	135	250	1,050	118	715	080	040	040	48	11	30%	
1/2" - #20 (10ga)	4	8	38	n/a	500	1,250	380	1,000	056	040	040	24	9,500	77%	
1/2" - #20	3.4	8	40	51	500	1,250	375	1,000	079	029	029	24	9,500	65%	
1/2" - #18	3.4	8	66	83	500	1,250	312	1,000	067	039	039	24	9,500	60%	
1/2" - #16	3.4, 8, 10	12	82	98	500	1,250	312	1,000	096	050	050	24	9,500	63%	
1/2" - #13	3.4, 8, 10	140	161	500	1,250	265	1,000	107	078	078	24	9,500	52%		
3/4" - #16	3.4	8, 10	51	57	523	2,100	750	1,750	111	048	048	13	5,700	74%	
3/4" - #14	3.4	8, 10	63	74	523	2,100	688	1,813	105	061	061	13	5,700	74%	
3/4" - #13	3.4	8, 10	75	86	523	2,100	688	1,781	106	078	078	13	5,700	74%	
3/4" - #10 (13ga)	special order	114	128	523	2,100	637	1,755	160	078	078	13	5,700	68%		
3/4" - #9 (10ga)	3.4, 8, 10	171	188	523	2,100	503	1,688	165	120	120	13	5,700	63%		
1" - #10	4	8	41	50	1,000	2,500	813	2,250	068	050	050	12	4,680	78%	
1-1/2" - #10 (8)	4	8	29	n/a	1,330	3,200	1,175	2,620	050	050	050	9	3,750	83%	
1-1/2" - #10	3.4	8	38	46	1,330	3,200	1,062	2,750	119	048	048	9	3,750	83%	
1-1/2" - #14	3.4	8	46	54	1,330	3,200	1,062	2,750	116	060	060	9	3,750	80%	
1-1/2" - #13	4	8	57	66	1,330	3,200	1,062	2,750	116	078	078	9	3,750	80%	
1-1/2" - #9 (10ga)	3.4, 8, 10	114	125	1,330	3,200	1,000	2,563	158	110	110	9	3,750	75%		
2" - #9 (10ga)	special order	80	88	1,825	4,355	1,445	3,700	170	110	110	6.5	3,750	63%		

\*Galvanized available where lbs/100 sq. ft. is provided. Above material available with Military Specification MIL-M-117940 Type II Class 1 & ASTM F-1267-91 Type II Class 1 Carbon/Class 2-Galv. with special order.

## Stainless Steel - Type 304 &amp; 316 / FLATTENED

1/4" - #18	4	8	143	n/a	250	1,200	080	660	090	047	047	48	11,600	26%	
1/2" - #18	3.4"	8	69	n/a	500	1,260	312	1,000	096	040	040	24	9,500	60%	
1/2" - #16	3.4"	8	80	n/a	500	1,260	312	1,000	096	050	050	24	9,500	60%	
1/2" - #13	3.4"	8	178	n/a	500	1,260	240	915	132	080	080	24	9,500	45%	
3/4" - #16	3.4"	8	46	n/a	523	2,100	750	1,812	118	040	040	13	5,700	75%	
3/4" - #16	3.4"	8	57	n/a	523	2,100	750	1,812	118	050	050	13	5,700	75%	
3/4" - #13	3.4"	8	86	n/a	523	2,100	625	1,750	120	080	080	13	5,700	75%	
3/4" - #9 (10ga)	3.4"	8	195	n/a	523	2,100	562	1,667	165	119	119	13	5,700	61%	
1-1/2" - #16	3.4"	8	43	n/a	1,330	3,150	1,062	2,750	128	050	050	9	3,800	80%	
1-1/2" - #13	3.4"	8	65	n/a	1,330	3,150	1,000	2,625	130	080	080	9	3,800	80%	
1-1/2" - #9 (10ga)	3.4"	8	137	n/a	1,330	3,150	937	2,625	105	119	119	9	3,800	75%	

\*Type 316 available in 48" sheets only. Above material available with Military Specification MIL-M-117940 Type II Class 3 & ASTM F-1267-91 Type II Class 3 with special order.

## Aluminum / FLATTENED

1/2" - #51 (10ga)	3.4	8	22	n/a	500	1,250	327	913	080	040	040	24	9,500	60%	
1/2" - #81 (12ga)	3.4	8	38	n/a	500	1,250	290	861	090	060	060	24	9,500	61%	
3/4" - #51 (10ga)	3.4	8	13	n/a	523	2,100	741	1,729	095	040	040	13	5,600	80%	
3/4" - #81 (12ga)	3.4	8	26	n/a	523	2,100	695	1,687	119	070	070	13	5,600	74%	
3/4" - #61 (12ga)	3.4	8	38	n/a	523	2,100	698	1,695	176	070	070	13	5,600	61%	
3/4" - #125 (9ga)	3.4	8	53	n/a	523	2,100	644	1,614	158	095	095	13	5,600	66%	
1-1/2" - #81 (10ga)	3.4	8	21	n/a	1,330	3,200	1,000	2,620	136	060	060	9	3,800	79%	
1-1/2" - #125 (9ga)	3.4	8	40	n/a	1,330	3,200	953	2,613	171	094	094	9	3,800	74%	

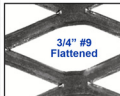
Above material available with Military Specification MIL-M-117990 Class 2 special order.



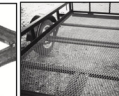
1/4" #20 Flattened



1/2" #16 Flattened



3/4" #9 Flattened



1-1/2" #9 Flattened

**SAME DAY SHIPMENTS**  
FABRICATION TO ORDER

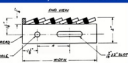


## Stair Treads

Available in: Plain Steel, Galvanized, Painted Red Oxide



Unitread®



## Stair Tread Product Details

Style	Size	"A"	Weight (lbs)	Overall Thickness	Load (lbs)
<b>Unitread®</b>					
#4	8-1/2" x 24"	1-1/2"	10.7	2"	1000
#5	8-1/2" x 30"	1-1/2"	12.9	2"	925

<b>Heavy Duty (Special Order)</b>					
#4	8-1/2" x 24"	1-1/2"	22.3	2-1/2"	1850
#5	8-1/2" x 30"	1-1/2"	15.8	2-7/16"	1100
#6	9-3/4" x 30"	6"	18.6	2-5/8"	1025

\*Safe load with 1/4" Deflection

## Heavy Duty

Available in lengths 16" to 48" inclusive in 1/2" increments.

Treads can be fabricated with standard bar grating end plates - see page 6 for details.

Special anti-skid nosings, i.e. abrasive cast, available. Please see page 23 or inquire at 1-800-GRATING.

## U-Edging Accessories

<b>1" U-Edging 12" (18 ga. 5/16" opening)</b>	
Carbon:	Standard fits all but 3/4" #9, 1-1/2" #9, 1-1/2" #6, 2" #10, 2" #9
*Aluminum:	Standard fits all
*Stainless:	Standard fits all, Flattened fits all

35 lbs per 100 feet

<b>1" U-Edging 12" (18 ga. 1/8" opening)</b>	
Carbon:	Standard fits ONLY 1/4" #20, 1/4" #18
*Aluminum:	Standard fits NONE; Flattened fits all
*Stainless:	Standard fits NONE; Flattened fits all

34 lbs per 100 feet

<b>1" U-Edging 12" (18 ga. 1/4" opening)</b>	
Carbon:	Standard fits all but 3/4" #9, 1-1/2" #9, 1-1/2" #6, 2" #10, 2" #9
*Aluminum:	Standard fits all but 3/4" #9, 1-1/2" #9, 1-1/2" #6, 2" #10, 2" #9
*Stainless:	Standard fits all but 3/4" #9, 1-1/2" #9, 1-1/2" #6, 2" #10, 2" #9

35 lbs per 100 feet

<b>1" U-Edging 12" (18 ga. 1/16" opening)</b>	
Carbon:	Standard fits NONE; Flattened fits all BUT 1/2" #13, 3/4" #14, 3/4" #13, 3/4" #9, 1-1/2" #14, 1-1/2" #13, 1-1/2" #9
*Aluminum:	Standard fits NONE; Flattened fits all
*Stainless:	Standard fits NONE; Flattened fits all BUT 3/4" #13, 3/4" #9, 1-1/2" #13, 1-1/2" #9

34 lbs per 100 feet

\*Aluminum and Stainless by special order, Carbon Steel In-Stock.

## Applications

- Partitions •Enclosures
- Platforms •Walkways
- Stair Treads •Filter Screens
- Door & Window Guards
- Highway Dividers
- Outdoor Signs •Grills
- Guards •Cages
- Racks •Louvers
- Sound Equip. Grills
- Dog Kennels
- Tool Room Enclosures
- Chemical Storage
- Storeroom Floors

## STOCK &amp; AVAILABILITY (LIST 2 OF 3)

Style	Stock Size (in)		Pounds/ 100 sq. ft.	Design Size (in)		Opening Size (in)		Strand Size (in)		Overall Thickness (in)		Designs Per sq. ft.		% Open Area
	Width SWD	Length LWD		Plan Galv	SWD LWD	SWD LWD	SWD LWD	Width	Thick	SWD LWD	SWD LWD	SWD LWD		
Carbon and Hot Dipped Galvanized Steel / STANDARD														
3/32" - #24	4	2	57	n/a	140	240	062	135	040	024	005	86	50	40%
3/16" - #22	4	4	45	n/a	190	500	140	345	034	031	070	63	24	61%
1/4" - #20	4	8	86	108	250	1,000	125	718	072	038	135	48	12	45%
1/4" - #18	4	8	114	143	250	1,000	110	718	072	048	147	48	12	43%
1/2" - #16 (16ga)	special order	40	n/a	500	1,200	440	906	051	048	110	24	10	42	52%
1/2" - #20	4	8	43	54	500	1,200	438	938	072	036	140	24	10	80%
1/2" - #18	4.6	8	70	86	500	1,200	438	938	088	048	172	24	10	72%
1/2" - #16	4.6	8	86	104	500	1,200	375	938	087	060	175	24	10	60%
1/2" - #13	4.6	8.10	147	174	500	1,200	312	938	096	062	204	24	10	57%
3/4" - #16	4.6	8	54	61	923	2,000	813	1,750	101	060	210	13	6	78%
3/4" - #13 (16ga)	4.6	8.10	80	94	923	2,000	750	1,688	096	060	205	13	6	76%
3/4" - #10 (13ga)	4.6	8	120	134	923	2,000	750	1,625	144	060	290	13	6	72%
3/4" - #9 (10ga)	4.6	8.10	188	198	923	2,000	688	1,562	150	134	312	13	6	68%
1" - #16	4	8	44	51	1,000	2,400	938	2,062	087	060	192	12	5	82%
1-1/2" - #18	4	8	20	n/a	1,330	3,000	1,313	2,625	068	048	140	9	4	90%
1-1/2" - #16	4	8	40	48	1,330	3,000	1,250	2,625	108	060	230	9	4	85%
1-1/2" - #13	4.6	8	60	68	1,330	3,000	1,188	2,500	105	060	242	9	4	85%
1-1/2" - #10 (13ga)	4.6	8.10	79	90	1,330	3,000	1,188	2,500	138	060	284	9	4	80%
1-1/2" - #9 (10ga)	4.6	8.10	120	131	1,330	3,000	1,125	2,375	144	134	312	9	4	76%
1-1/2" - #8 (9ga)	4	8.10	250	275	1,330	3,000	1,110	2,313	203	194	433	9	4	69%
2" - #10 (13ga)	special order	66	77	1,850	4,000	1,630	3,436	164	052	312	6.5	3	83%	
2" - #9 (10ga)	4	8	90	99	1,850	4,000	1,563	3,375	149	134	312	6.5	3	84%

\*Galvanized available where 100 sq. ft. provided. Above material available with Military Specification MIL-M-177940 Type I Class 3 & ASTM F-1027-91 Type I Class 1 - Carbon/Class 2-Galv. with special order.

## Stainless Steel - Type 304 &amp; 316\*\* / STANDARD

1/4" - #18	4	8	146	n/a	250	1,000	120	620	087	050	150	48	12	30%
1/2" - #18	3.4**	8	73	n/a	500	1,200	437	937	087	050	164	24	10	70%
1/2" - #16	3.4**	8	91	n/a	500	1,200	437	937	087	062	164	24	10	70%
1/2" - #13	3.4**	8	187	n/a	500	1,200	335	875	119	063	225	24	10	52%
3/4" - #18	3.4**	8	48	n/a	923	2,000	812	1,750	106	052	202	13	6	85%
3/4" - #16	3.4**	8	60	n/a	923	2,000	812	1,750	106	062	202	13	6	83%
3/4" - #13	3.4**	8	91	n/a	923	2,000	750	1,687	107	063	202	13	6	80%
3/4" - #10 (13ga)	3.4**	8	205	n/a	923	2,000	687	1,562	160	140	300	13	6	67%
1-1/2" - #16	3.4**	8	45	n/a	1,330	3,000	1,250	2,700	115	062	222	9	4	85%
1-1/2" - #13	3.4**	8	68	n/a	1,330	3,000	1,250	2,625	115	063	222	9	4	83%
1-1/2" - #10 (13ga)	3.4**	8	137	n/a	1,330	3,000	1,125	2,500	155	140	280	9	4	77%

\*\*Type 316 available in 48 inch sizes only. Above material available with Military Specification MIL-M-177940 Type I Class 3 & ASTM F-1027-91 Type I Class 3 with special order.

## Aluminum / STANDARD

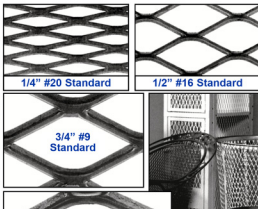
3/16" - .032	4	4	16	n/a	190	500	180	300	034	032	010	63	24	66%
1/2" - .051 (16ga)	3.4	8	26	n/a	500	1,200	410	890	078	050	130	24	10	66%
1/2" - .081 (12ga)	3.4, 5	4	10	40	500	1,200	362	827	087	080	170	24	10	65%
3/4" - .051 (16ga)	3.4	8	16	n/a	923	2,000	866	1,682	087	050	160	13	6	81%
3/4" - .061 (12ga)	3.4	8	28	n/a	923	2,000	836	1,547	114	080	190	13	6	76%
3/4" - .081 (12ga)	3.4	8	40	n/a	923	2,000	718	1,551	154	080	290	13	6	65%
3/4" - .125 (9ga)	3.4	8	57	n/a	923	2,000	685	1,508	144	125	260	13	6	60%
1-1/2" - .081 (12ga)	3.4	8	22	n/a	1,330	3,000	1,234	2,516	124	080	230	9	4	81%
1-1/2" - .125 (9ga)	3.4	8	42	n/a	1,330	3,000	1,172	2,396	156	125	285	9	4	76%

Above material available with Military Specification MIL-M-177940 Type I Class 1 with special order.

## STOCK &amp; AVAILABILITY (LIST 3 OF 3)

Style	Stock Size (in)		Pounds/100 sq. ft.	Design Size (in)		Opening Size (in)		Strand Size (in)		Overall Thickness (in)	Designs Per sq. ft.		% Open Area	Style	
	Width SWD	Length LWD		Plan Galv	SWD LWD	SWD LWD	SWD LWD	Width	Thick		SWD LWD	SWD LWD			
Carbon and Hot Dipped Galv. Steel / STANDARD Grating & Catwalk															
2" 0	special order	200	210	1.25	5.33	1.00	3.60	230	135	.460	10	2.25	77%	2.8	
3" 0	4.6	8.10	304	315	1.33	5.33	3.40	344	264	.183	540	9	2.25	60%	3.05
3" 14	4.6	8.10	314	330	2.00	6.00	1.625	4.88	312	.250	656	6	2	69%	2.95
4" 0	4.6	8.10	400	418	1.33	5.33	3.40	344	300	.215	618	9	2.25	55%	3.15
4" 27	4.6	8.10	427	446	1.41	4.00	1.00	2.88	300	.250	625	8.5	3	58%	2.0
5" 0	4.6	8.10	500	520	1.33	5.33	3.33	331	250	.855	9	2.25	30%	3.2	
6" 25	4.6	8.12	625	647	1.41	5.33	3.33	338	350	.312	715	8.5	2.25	50%	3.25
7" 0	4	8	700	725	1.41	5.33	3.33	361	312	.740	8.5	2.25	45%	3.3	

\*Also available in Catwalk: 10" wide x multiple lengths of 2", 2'-0 1/2", 3", 6", 7'-0 1/2" & 8'



1/4" #20 Standard

1/2" #16 Standard

3/4" #9 Standard

1-1/2" #9 Standard

4.27# CATWALK GRATING  
Same configuration for 3.14# CARBON and 3.28# STAINLESS GRATING7# CATWALK GRATING  
Same configuration for 3# 4# 5# 6# 25# CARBON and 2# ALUMINUM GRATINGS

**SHEARING**  
Available - FAST!  
Call, fax or visit  
our website to  
inquire.

Catwalk Fixed  
Span Load Table

Size	Carbon Steel		
	24"	36"	48"
3.0 lbs	U 275 100 n/a	D 250 220 n/a	C 275 165 75
3.14 lbs	U 375 150 50	D 375 150 50	C 375 150 50
4.0 lbs	U 250 240 250	D 250 240 250	C 250 240 250
4.27 lbs	U 250 240 250	D 250 240 250	C 250 240 250
5.0 lbs	U 600 175 100	D 600 175 100	C 600 175 100
6.25 lbs	U 245 245 250	D 245 245 250	C 245 245 250
7.0 lbs	U 800 300 150	D 800 300 150	C 800 300 150
7.25 lbs	U 220 250 240	D 220 250 240	C 220 250 240
8.0 lbs	U 800 400 165	D 800 400 165	C 800 400 165
10 lbs	U 210 250 240	D 210 250 240	C 210 250 240
12 lbs	U 350 350 175	D 350 350 175	C 350 350 175
2.0 lbs	U 250 100 50	D 250 100 50	C 250 100 50

Aluminum

Stainless Steel

3.3 lbs

3.4 lbs

4.5 lbs

4.6 lbs

5.0 lbs

6.25 lbs

7.0 lbs

7.25 lbs

8.0 lbs

10 lbs

12 lbs

14 lbs

16 lbs

18 lbs

20 lbs

22 lbs

24 lbs

26 lbs

28 lbs

30 lbs

32 lbs

34 lbs

36 lbs

## BROWN-CAMPBELL PERFORATED PRODUCTS

Perforated products versatility can be demonstrated by their use for sound suppression, microwave and radio containment, filtration and purification of air, smoke, water, and gases of every description. Available in a variety of patterns and in a range of metals including carbon, stainless steel, galvanized steel, aluminum and special alloys. Perforated plastic - constructed of polypropylene or PVC is also available for corrosive environments and applications requiring lower weight.

## Round Hole Patterns



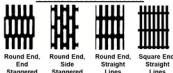
## Square Hole Patterns



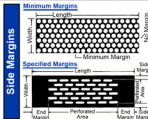
## Hexagon Pattern



## Slotted Hole Patterns



Typical Stock Size Sheets:  
3'x8', 3'x10', 4'x8', 4'x10'



## Minimum Hole Size

The rule of thumb for perforating carbon steel and aluminum is that the hole diameter should not be less than the thickness of the material. The closer this 1-to-1 relationship is approached, the higher will be the probability for tool failure, and the greater the precautions necessary to avoid it. For stainless steel and other higher strength materials, it is best to drop at least one thickness gauge thinner than hole diameter.

## Minimum Bar Width

The material left between perforations is called the bar width. The same rule of thumb of the 1-to-1 relationship to thickness applies to bar width as in hole diameter. Keep the bar width greater than the thickness of the material to avoid problems. As the 1-to-1 relationship is approached, the increasing number of punches required sharply escalates the process tonnage needed to perforate the pattern, thus creating potential for problems.

In some cases, variations to these recommendations can be accommodated but with additional production costs.

## STOCK LIST

RSTG=Round Staggered, RS=Round Straight, SS=Square Straight

Carbon Steel - Round				Carbon Steel - Other				Stainless Steel - Type 304 (cont'd)			
Hole Size	Ctrs	Shape	Open Area	Hole Size	Ctrs	Shape	Open Area	Hole Size	Ctrs	Shape	Open Area
0.045"	0.086"	RS	31% 24	2.00	1/4"	SS	64% 22, 20 (flavorer)	1/2"	11/16"	RSTG	48% 19, 14, 11, 3/16"
0.045"	0.086"	RSTG	24% 24	3/8"	1/2"	SS	56% 16	3/4"	1"	RSTG	51% 16, 11
1/16"	3/32"	RSTG	41% 24, 22, 20	3/8"	1"	SS	14% 16	1"	1-1/4"	RSTG	58% 11
1/16"	7/64"	RSTG	30% 20, 16	1/2"	11/16"	SS	50% 16, 12 (Lattice)	1/16"	3/32"	RSTG	41% 22
1/16"	1/8"	RSTG	23% 22, 20, 18, 16	3/4"	1"	SS	56% 16, 11	3/32"	3/16"	RSTG	23% 22
0.075"	1/10"	RSTG	51% 24, 20	Honeycomb 1/4" Hex			79% 22, 20	1/8"	3/16"	RSTG	40% 16, 14
5/64"	7/64"	RSTG	46% 22, 20, 18	Windsor			45% 20	3/16"	3/8"	RSTG	23% 22
5/64"	1/8"	RSTG	35% 18, 16	Greenco			35% 22	1/4"	5/16"	RSTG	58% 16
3/32"	5/32"	RSTG	32% 22, 18, 16, 14	Octagon Cane			36% 22	1/4"	3/8"	RSTG	40% 16, 14
3/32"	3/16"	RSTG	23% 22, 14	Full Cloverleaf			51% 20	1/2"	11/16"	RSTG	48% 19, 14
1/8"	3/16"	RSTG	46% 24, 22, 20, 18, 16, 14, 12, 11	1/4" Reg Round 1 Ctr			58% 20	1/2"	11/16"	RSTG	48% 19, 14
1/8"	1/4"	RSTG	23% 16								
9/64"	3/16"	RSTG	51% 16								
5/32"	3/16"	RSTG	63% 22, 20, 18, 16								
3/32"	7/32"	RSTG	46% 10								
3/16"	1/4"	RSTG	50% 22, 20, 18, 16, 14, 11								
3/16"	5/16"	RSTG	33% 16, 12, 11, 10, 3/16"								
3/16"	3/8"	RSTG	23% 14								
1/4"	5/16"	RSTG	58% 20, 18, 16, 14								
1/4"	3/8"	RSTG	40% 20, 18, 16, 14, 12, 11, 10, 3/16", 1/4"								
1/4"	1/2"	RSTG	23% 11, 1/4"								
5/16"	3/8"	RSTG	63% 16								
5/16"	7/16"	RSTG	40% 11, 3/16"								
5/16"	1/2"	RSTG	35% 7								
3/8"	1/2"	RSTG	51% 16, 14, 11								
3/8"	9/16"	RSTG	40% 16, 14, 12, 11, 7, 3/16", 1/4"								
1/2"	11/16"	RSTG	48% 20, 16, 14, 12, 11, 10, 7, 3/16", 1/4"								
1/2"	3/4"	RSTG	40% 3/8"								
5/8"	7/8"	RSTG	40% 7								
3/4"	1"	RSTG	51% 16, 11, 7, 3/16", 1/4"								
1"	1-1/4"	RSTG	58% 11, 1/4"								

**1-800-GRATING**  
(1-800-472-8464)

## Ordering from Brown-Campbell

Call 1-800-472-8464 and the Brown-Campbell service center closest to you will immediately assist you with your requirements. Your order will be expedited more quickly if you have the following details available when calling.

## THINK ABOUT:

1. Application or use of product (including environment)
2. Physical requirements (open area, strength, etc.)

## PLEASE SPECIFY:

- "Brown-Campbell" Perforated Metal
- Quantity: number of cut pieces or full sheets
- Material: type of material desired - carbon, stainless steel, aluminum, etc.
- Thickness: for steel or stainless steel specify gauge or thickness in inches. All other metals specify in inches only.
- Width (x) Length: overall width & length. Mill tolerances will be supplied unless otherwise specified.
- Perforation Size, Shape, and Arrangement: refer to perforated patterns and listing tables. Staggered arrangement (60° pattern) is standard.
- Hole or Bar Centers: (metal between perforations) Center to center measures width of bar at point where perforations are closest.
- Blank Margins: dimensions of blank margins, parallel width and length (+/- tolerance). Cost increases when blank margins are required.
- Flatness: requirements for flatness
- End Pattern: "Embossed" or "unfinshed" end pattern (see below)
- Special Requirements: special shearing, leveling, finish or heat treating

## End Patterns



Standard Unfinished End Pattern



Optional Finished End Pattern

## % Open Area

HPSI=holes per sq. in.  
D= Diameter of hole or size of square hole  
C= Centers (distance between centers)

Round Hole  
60° Staggered

%Open Area =  $\frac{0.7854(D)^2}{C^2}$

HPSI =  $\frac{1}{C^2}$

%Open Area =  $\frac{78.54(D)^2}{C^2}$

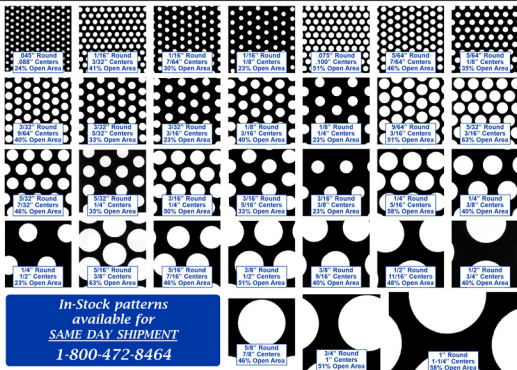
Square Hole  
Staggered (or Straight)

%Open Area =  $\frac{100(D)^2}{C^2}$

**brown-campbell.com**

## ROUND Perforated Patterns

In-Stock Patterns Shown (others available)

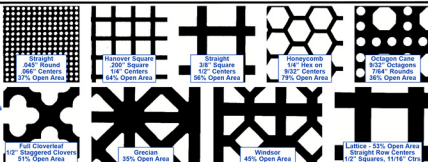


## OTHER Perforated Patterns

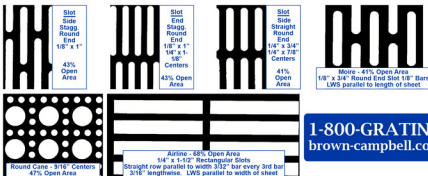
## In-Stock Patterns

In-Stock Square Straight patterns not pictured:

- 1/4" Square, 3/4" Centers 11% Open Area
- 5/16" Square, 1/2" Centers 39% Open Area
- 3/8" Square, 1" Centers 14% Open Area
- 3/4" Square, 1" Centers 56% Open Area



Also Available

1-800-GRATING  
brown-campbell.com



### Tooling Chart (In-Stock Items Shown, Others Available)

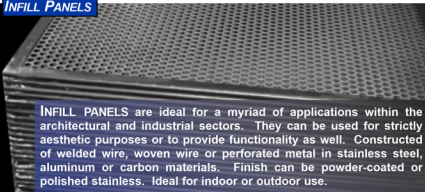
Hole Size	Ctrs	Bar Width	Open Area	Holes Per Sq. Inch
<b>Round Hole, Straight Centers (RS)</b>				
.045"	.006"	.021"	3.1%	229.5
<b>Round Hole, Staggered Ctrs (RSTG)</b>				
.045"	.088"	.043"	24%	149.0
1/16"	3/32"	1/32"	41%	131.4
1/16"	7/64"	3/64"	30%	96.5
1/16"	1/8"	1/16"	23%	74.0
.075"	.100"	.025"	51%	115.4
5/64"	7/64"	1/32"	46%	96.6
5/64"	1/8"	3/64"	35%	73.8
3/32"	9/64"	3/64"	40%	58.4
3/32"	5/32"	1/16"	33%	47.2
3/32"	3/16"	3/32"	23%	32.9
1/8"	3/16"	1/16"	40%	32.8
1/8"	1/4"	1/8"	23%	18.5
5/64"	3/16"	3/64"	51%	32.8
5/32"	3/16"	1/32"	63%	32.9
5/32"	7/32"	1/16"	46%	24.1
5/32"	1/4"	3/32"	35%	18.5
3/16"	1/4"	1/16"	50%	18.5
3/16"	5/16"	1/8"	33%	11.8
3/16"	3/8"	3/16"	23%	8.2
1/4"	5/16"	1/8"	58%	11.8
1/4"	3/8"	1/8"	40%	8.2
1/4"	1/2"	1/4"	23%	4.6
5/16"	3/8"	1/16"	63%	8.2
5/16"	7/16"	1/8"	46%	6.0
3/8"	1/2"	1/8"	51%	4.6
3/8"	9/16"	3/16"	40%	3.6
1/2"	11/16"	3/16"	48%	2.4
1/2"	3/4"	1/4"	40%	2.1
5/8"	7/8"	1/4"	46%	1.5
3/4"	1"	1/4"	51%	1.2
1"	1-1/4"	1/4"	58%	0.7
<b>Square Hole, Straight Centers (SS)</b>				
.200"	1/4"	.05"	64%	16.0
1/4"	3/4"	1/2"	11%	1.8
5/16"	1/2"	3/16"	39%	4.0
3/8"	1/2"	1/8"	56%	4.0
3/8"	1"	5/8"	14%	1.0
1/2"	11/16"	3/16"	53%	2.1
3/4"	1"	1/4"	56%	1.0

## PRODUCT TOOLING CHARTS

available for  
many additional  
perforated  
patterns.

*Please contact  
us for further  
information.*

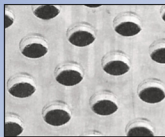
### INFILL PANELS



INFILL PANELS are ideal for a myriad of applications within the architectural and industrial sectors. They can be used for strictly aesthetic purposes or to provide functionality as well. Constructed of welded wire, woven wire or perforated metal in stainless steel, aluminum or carbon materials. Finish can be powder-coated or polished stainless. Ideal for indoor or outdoor use.

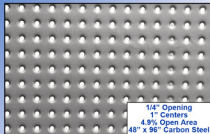
### PERFORATED PLASTIC

Perforated plastic offers a lower cost alternative for applications typically requiring stainless steel due to highly corrosive environments. In addition, perforated plastic is an ideal alternative where minimizing weight is important.



Polypropylene	
Standard Thickness	.063", .125"
Standard Sheet Size	48" x 96"
Color	Natural White - Semi Clear
Paint Adhesion	Poor
Finish	Smooth
Forms & Fabricates	Hot - Fair Cold - Poor Weldable
UV Stability	Fair
Chemical Resistance	Excellent

### PEG-BOARD



1/4" Opening  
1" Centers  
4.9% Open Area  
48" x 96" Carbon Steel

Perforated metal display and storage panels. Ideal for trade show exhibits, show room displays, toolroom storage...unlimited applications where organization and aesthetically pleasing displays are desired.

(Note: Product also occasionally referred to as Mushroom Perf.)



**brown-campbell.com 1-800-472-8464**

**BROWN-CAMPBELL WIRE CLOTH PRODUCTS**

Wire Cloth is a versatile product available in woven or welded construction. Woven wire is formed by a weave pattern of wires. Welded wire is formed by wires being electrowelded at each wire intersection. Each type has a variety of applications making it extremely versatile. Much of the terminology can be applied to both types, woven and welded.

**HOW TO MEASURE**

**4 Mesh**  
Number of openings per inch



**1" Opening**  
Clear space between wires

Wire Spacing = Wire Diameter + Opening Size  
Opening Size (O) = Wire Spacing - Wire Diameter  
Wire Diameter (D) = Wire Spacing - Opening Size

MESH COUNT (M) = 1 / (O+D)

Opening (O) = (1-DM) / M

OPEN AREA % = (OM)<sup>2</sup> x 100 or [(O+D)<sup>2</sup> x 100 or (1 - MD)<sup>2</sup> x 100

**INFILL PANELS**

**INFILL PANELS** are ideal for a myriad of applications within the architectural and industrial sectors. They can be used for strictly aesthetic purposes or to provide functionality as well. Constructed of welded wire, woven wire or perforated metal in stainless steel, aluminum or carbon materials. Finish can be powder-coated or polished stainless. Ideal for indoor or outdoor use.

**PERFECT FOR...**

- Schools
- Breweries
- Airports
- Balconies
- Entryways
- Guard Rails

**STOCK LIST****WOVEN WIRE**

Opening/Mesh	Wire Diameter
<b>Carbon - Plain Steel</b>	
4" Opening	.250
3" Opening	.250
2" Opening	.120, .135, .162, .192, .250, .375
1-3/4" Opening	.250
1-1/2" Opening	.120, .135, .162, .250
1-1/2" Centers	.135
1" Opening	.120, .135, .162, .192, .250
1" Ctr (1 Mesh)	.120
3/4" Opening	.120, .250
5/8" Opening	.120
1/2" Opening	.120, .250
2 Mesh	.063, .080, .120, .135
3 Mesh	.083
4 Mesh	.047, .063, .080, .120
6 Mesh	.035, .047
8 Mesh	.028, .047
10 Mesh	.025
12 Mesh	.028
<b>Pre-Galvanized - Steel</b>	
1" Opening	.120
2 Mesh	.080
14 Mesh	.017
18 x 14 Mesh	.009
<b>Galvanized After - Steel</b>	
8 Mesh	.017
<b>Aluminum</b>	
4" Opening	.250
2" Opening	.250
1-1/2" Opening	.120
1" Opening	.120
2 Mesh	.063, .080
<b>Copper</b>	
2 Mesh	.063
4 Mesh	.047
16 Mesh	.011

Opening/Mesh	Wire Diameter
<b>Stainless Steel - Type 304</b>	
4" Opening	.250
3" Opening	.192
2" Opening	.120, .162, .250
1-1/2" Opening	.120
1" Opening	.120, .250
1 Mesh	.120
3/4" Centers	.120
1/2" Centers	.120
2 Mesh	.047, .063, .080, .105, .120
3 Mesh	.047, .063, .080
4 Mesh	.028, .035, .047, .063, .080
5 Mesh	.041
8 Mesh	.035, .047, .063
8 Mesh	.028, .047
10 Mesh	.025, .035, .047
12 Mesh	.018, .023, .028
14 Mesh	.020
16 Mesh	.018
18 Mesh	.009, .017
20 Mesh	.016, .023
24 Mesh	.0075, .014
30 Mesh	.012
40 Mesh	.010
50 Mesh	.009
60 Mesh	.0075
80 Mesh	.0055
100 Mesh	.0045
150 Mesh	.0038
200 Mesh	.0021
<b>Stainless Steel - Type 316</b>	
2 Mesh	.063
14 Mesh	.020
20 Mesh	.016

**B-C ARCHITECTURAL WIRE** - please see inside back cover

**WELDED WIRE**

Opening/Mesh	Wire Diameter
<b>Carbon - Plain Steel</b>	
4" Centers	.250
3" Opening	.250
3" Centers	.162, .192
3" x 1" Centers	.120
3" x 5/8" Centers	.120
2" Centers	.105, .120, .135, .156, .187, .250, .290
2" x 1" Centers	.120
1-1/2" Centers	.120, .135
1" Ctr (1 Mesh)	.105, .120, .135
<b>Pre-Galvanized - Steel</b>	
2" Centers	.105
1 Mesh	.063, .080, .120
<b>Galvanized After - Steel</b>	
3" Centers	.188
2" Centers	.107, .122, .150, .188
1 Mesh	.063, .077, .122
1" x 1/2" Centers	.063
2 Mesh	.041, .063
4 Mesh	.025
<b>Stainless Steel - Type 304</b>	
3" Opening	.250
3" Centers	.188
2" Opening	.188
2" Centers	.120
1" Opening	.120
1 Mesh	.080, .120
2 Mesh	.047, .063
3 Mesh	.047
4 Mesh	.032
<b>Stainless Steel - Type 316</b>	
2" Opening	.120

**PVC COATED WIRE** also available, inquire today.

**COMMON APPLICATIONS**

- Washing, sizing, and classification of aggregates, sand and gravel
- Chemical processing
- Food processing
- Waste treatment

**ARCHITECTURAL WIRE****STOCK LIST**

Opening/Mesh	Wire Diameter
<b>Carbon - Plain Steel</b>	
WA-M2227	.162
WA-M2228	.192
<b>Stainless Steel - Type 304</b>	
WA-M13227	.120
WA-M132719	.120
WA-M132145	.162 x .120



**Architectural Wire details - See Inside Back Cover**

1-800-472-8464

**Ordering from Brown-Campbell**

Call 1-800-472-8464 and the Brown-Campbell service center closest to you will immediately assist you with your requirements. Your order will be expedited more quickly if you have the following details available when calling:

**PLEASE SPECIFY:**

1. Application or use of product (including environment)
  2. Physical requirements (opening size, percent of open area - send sample of wire cloth currently being used if possible)
- PLEASE SPECIFY:**
- Brown-Campbell superior "Wire Cloth"
  - Quantity: number of cut pieces, rolls or screens
  - Material/Finish Type: 304 stainless steel, carbon, etc.
  - Piece Size: width and length
  - Wire Diameter: in decimals, thousands of an inch
  - Wire Opening: provide mesh count per linear inch or width of opening (clear opening between wires) in inches. Also state if square, rectangular or other type of opening shape.
  - Construction: woven or welded. If woven specify type of weave; if welded specify edge wire
  - Crimp Style: if required
  - Special Fabrication: submit drawing for special requirements such as notching, bolt holes, special shape, bending, forming, calendaring, etc.

ISO 9001:2015 CERTIFIED

Same Day Services

Wire Size Diameters  
(Gauge Equivalents)

Diameter (Decimal)	Gauge/ Wire No.	Actual Wire Sizes
.307	0	
.283	1	
.263	2	
.244	3	
.225	4	
.207	5	
.192	6	
.177	7	
.162	8	
.148	9	
.135	10	
.120	11	
.105	12	
.092	13	
.080	14	
.072	15	
.063	16	
.054	17	
.047	18	
.041	19	
.035	20	
.032	21	

Note: Dimensions are approximate

**WELDED WIRE** offers greater strength and versatility over woven wire. It is a grid formed by wires that are fused together at their intersections. Welded wire is produced by automatic welding looms that spot weld the intersections with the short wires over the long wires instead of weaving the wires over and under as in woven wire. The welding process results in a finished product that is ready for fabrication into anything imaginable since welded wire can be simply slit, cut or shaped to fit all of your applications.

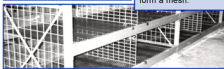


## APPLICATIONS

- Machine Guards
- Cages & Parts •Fan Guards
- Catwalk Guards
- Security Guards •Screens
- Scaffold Guards •Fencing
- Stairway Guards
- Racking/Shelving
- Safety Barriers •Pallets/Bins
- Lockers •Containers •Grills
- Suspended Ceilings
- Partitions •Trays •Racks

## BENEFITS

- Extremely Strong
- Smooth Surface
- Excellent Aesthetic Appearance
- Stable and Rigid
- Will not Fray or Ravel
- Large Range of Open Areas
- Variety of Materials

Galvanizing  
Welded Wire

## Galvanized After:

After the grid is formed as described above, the mesh is passed through a hot galvanizing bath which produces a highly resistant coating as well as bonding the wire together at the joints. Galvanized after welded wire results in a strong rigid material.

## Pre-Galvanized:

Plain strands of wire are passed through a bath of zinc, before the wires are spot welded together to form a mesh.

## WELDED WIRE EDGE TYPES



Untrimmed

"Balanced Stub" Opposite stubs equal. Stub length will not exceed opening size unless specified.



Untrimmed

"Random Stub" Stubs will vary on all four sides. Multiple pieces will not be identical.



Trimmed

Stubs trimmed flush with approximately 1/16" - 1/8" minimum on all sides.



With Edge Wire "Balanced Stub" Opposite side stubs equal with welded edge wire.

**WOVEN WIRE** is offered in a wide range of alloys with mesh counts up to 1" in most alloys and as fine as 635 mesh in some alloys. It is also available in a large array of configurations.



## Common Alloys

- Plain Steel
- Galvanized Steel
- Stainless Steel - 7 types
- Aluminum •Brass
- Bronze •Copper
- High Temperature Alloys
- Nickel



## WOVEN WIRE CRIMPS &amp; WEAVES



## Plain/Double

Standard type of weave for wire cloth resulting in square openings with wire sizes the same in both directions. Each warp wire passes alternate over and under fill wires at right angles, both directions.



## Intercrimp/Intermediate

Similar to Plain Crimp however, only odd intersections are used. (i.e.: 3rd, 5th, 7th crimp or pocket)



## Lockcrimp

A more modern and versatile crimp style, lockcrimp is formed by a straight section of wire woven with distinct crimp or pockets at wire intersections. Yields a truly tight, dimensionally stable mesh. Designers find the visual look of lockcrimp aesthetically pleasing.



## Flat Top Smooth Top

Top surface of wires all lie in same plane, results in irregular crimped surface on underside. Flat surface improves flow of materials over screen panels by reducing friction.

Other Crimps & Weaves Available, Please Inquire

## Twilled Weave

Each warp wire and fill wire pass successively over two and under the next adjacent pair of wires, resulting in a more pliable weave. Commonly used for filtration of fine particles.

Wire Cloth also available PVC Coated

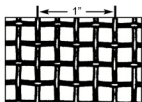
CALL US TODAY  
TOLL FREE:  
1-800-GRATING

**SAME DAY SHIPMENTS**

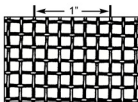


Brown-Campbell stocks **WOVEN & WELDED WIRE CLOTH** in carbon steel, pre-galvanized, galvanized after and stainless steel. A large range of opening/mesh sizes are in-stock in a variety of wire diameters. All ready for same day shipment.

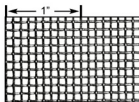
Call Today:  
**1-800-GRATING**



4 Mesh



6 Mesh



10 Mesh

**WIRE  
CLOTH  
STOCK  
LIST--  
PAGE 30**

### Woven Wire Tables

In-Stock Items Shown (Others Available)

Mesh/Opening	Wire Dia. (in.)	% Open Area	Ibs./sq.ft. (net)	Width of Opening (inches)
4" Opening	.250	88.6%	.94	4
3" Opening	.250	85.2%	1.23	3
2" Opening	.120	89.0%	.44	2
	.135	88.7%	.55	
	.162	85.6%	.78	
	.192	83.2%	1.08	
	.250	76.0%	1.79	
1-3/4" Opening	.250	76.6%	2.02	1.75
1-1/2" Opening	.120	85.7%	.57	1.50
	.192	78.4%	1.40	
1-1/2" Centers	.135	73.4%	2.31	
1" Opening	.120	82.8%	.72	1.365
	.120	79.7%	.83	
	.135	77.6%	1.04	
	.162	74.0%	1.46	
	.192	70.4%	2.01	
1" Ctr (1 Mesh)	.250	64.4%	3.26	
3/4" Opening	.120	74.3%	1.07	.75
3/4" Centers	.120	71.0%	1.24	.83
5/8" Opening	.120	70.3%	1.25	.625
1/2" Opening	.120	65.0%	1.51	.50
	.250	44.4%	5.62	
	.047	82.1%	.28	.453
	.063	76.4%	.51	.437
	.080	70.6%	.83	.420
2 Mesh	.105	62.4%	1.44	.395
	.120	57.8%	1.89	.380
	.135	53.3%	2.41	.241
	.047	73.6%	.42	.286
	.063	65.6%	.77	.270
3 Mesh	.080	57.6%	1.26	.253
	.100	50.0%	1.56	.200
	.120	44.4%	2.00	.167
	.150	37.0%	2.50	.133
	.200	27.8%	3.33	.100

**ISO 9001:2015  
CERTIFIED**

For a complete listing of wire tables please contact us.



### Vinylmesh

Wire is vinyl coated after galvanizing. Available in various welded wire constructions, call us today at **1-800-472-8464**.

### Welded Wire Tables

In-Stock Items Shown (Others Available)

Mesh/Opening	Wire Dia. (in.)	% Open Area	Ibs./sq.ft. (net)	Width of Opening (inches)
4" Centers	.250	87.9%	1.03	3.750
3" Centers	.162	89.5%	.58	2.838
	.189	88.0%	.80	2.811
3" x 1" Centers	.118	84.7%	.60	2.882
3" x 5/8" Centers	.118	77.9%	.91	2.882
3" x 1/2" Centers	.101	77.1%	.75	2.899
	.122	72.5%	1.19	2.878
2" Opening	.120	89.0%	.44	2.000
	.063	93.8%	.13	1.937
2" Centers	.101	90.2%	.34	1.899
	.105	89.8%	.36	1.895
	.118	88.5%	.50	1.882
	.122	88.2%	.52	1.878
	.135	87.0%	.60	1.865
1" Centers	.155	85.1%	.81	1.845
	.159	84.7%	.84	1.841
	.187	82.2%	1.13	1.813
	.189	82.0%	1.16	1.811
	.250	76.6%	2.02	1.750

### Vibrating Screens

Available with hook strips and edge styles to fit your equipment for sizing and straining applications.



### Insect Screen



Mesh	Wire Dia.	Width	Ibs./sq.ft.	Material
16 x 16	.011	36", 48"	.14	Copper
18 x 16	.011	36", 48"	.05	Aluminum
18 x 14	.011	36", 48"	.14	Bronze
18 x 14	.009	36", 48"	.09	Stainless Type 304
18 x 14	.011	36", 48"	.13	Stainless Type 304
18 x 14	.009	36", 48"	.09	Epoxy Coated

### Hardware & Industrial Cloth

Industry, farm and home applications including air filters, baskets, cages, feeders, and racks.



Opening/ Mesh	Wire Dia.	Width (in.)
<b>Woven Pre-Galvanized</b>		
1/2" Opring	.080	48"
1" Opening	.120	48"
2" Opening	.120	48"
<b>Woven Galvanized After</b>		
3/4" Opring	.105	36", 48"
2 Mesh	.041	24", 36", 48"
2 Mesh	.047	18"
2 Mesh	.080	48"
3 Mesh	.032	36", 48"
4 Mesh	.025	24", 36", 48"
8 Mesh	.017	36", 48"
<b>Welded Galvanized After</b>		
1/2" x 1"	.063	24", 36", 48", 60"
2 Mesh	.063	48", 60", 72"
2 Mesh	.025	36"

Other products available, please inquire at **brown-campbell.com** or **1-800-GRATING**.