

# PRODUCT GUIDE

800-472-8464



brown-campbell.com

**In-House  
Engineering**

**Custom  
Fabrication**

**BROWN-CAMPBELL  
C O M P A N Y**

**Specialty Steel & Fiberglass  
Distributor and Manufacturer**

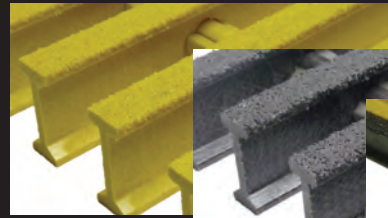
**Same Day  
Services**

**ISO 9001:2008  
Certified**

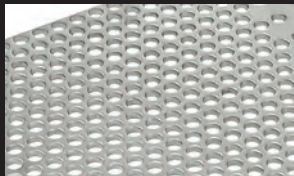
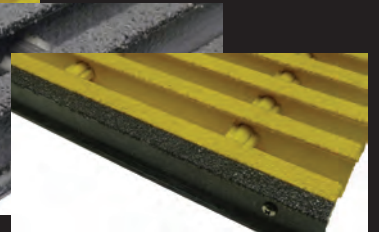
**Molded p.3**



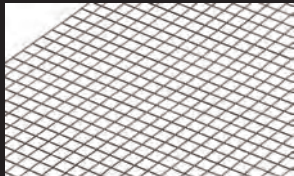
**Fiberglass p.3**



**Pultruded p.4**



**Perforated p.13**



**Wire Cloth p.17**

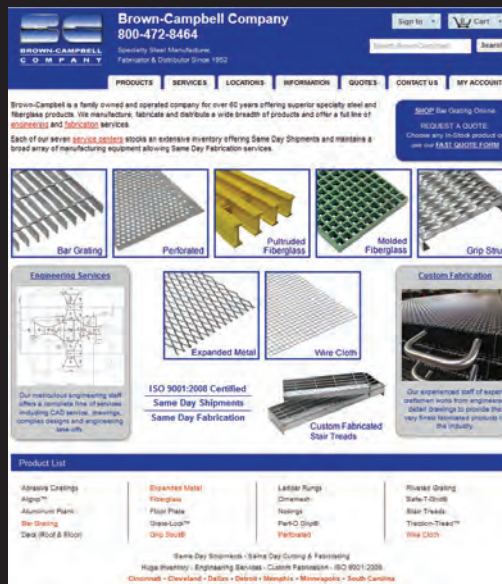


**Roof Deck p.23**



**Traction-Tread™ p.34**

## NEW WEBSITE!

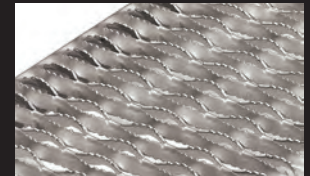


**DETAILED PRODUCT INFORMATION  
NUMEROUS LOAD TABLES**

- **PURCHASE ONLINE**
- **REQUEST A QUOTE FROM OUR  
EXTENSIVE INVENTORY LIST**
- **SUBMIT A FASTQUOTE**



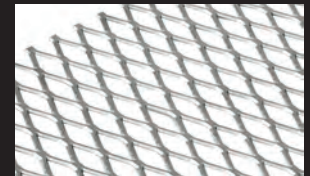
**Bar Grating p.7**



**Grip Strut® p.25**



**Perf-O Grip® p.32**



**Expanded Metal p.20**

**Spectacular SALES Team  
Excellent ENGINEERING  
Fabulous FABRICATION**

**Tremendous INVENTORY  
COMPETITIVE Pricing  
SAME DAY Services**





**Fiberglass**  
PAGE 3



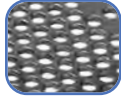
**Bar Grating**  
PAGE 7



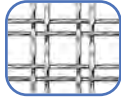
**Stair Treads**  
PAGE 11



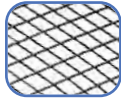
**Slip Resistance**  
PAGE 12



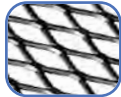
**Perforated**  
PAGE 13



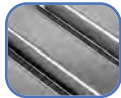
**Architectural Wire** PAGE 16



**Wire Cloth**  
PAGE 17



**Expanded**  
PAGE 20



**Deck**  
PAGE 23



**Grip Strut®**  
PAGE 25



**Perf-O Grip®**  
PAGE 32



**Grate-Lock™**  
PAGE 33



**Traction-Tread™**  
PAGE 34

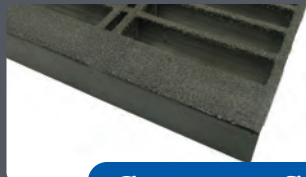


**BROWN-CAMPBELL  
C O M P A N Y**

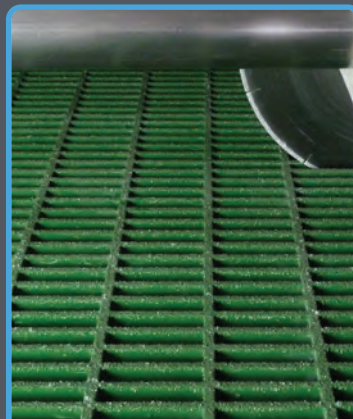
Family Owned & Operated  
Specialty Steel & Fiberglass  
Distributor & Manufacturer  
Since 1952!

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

## TREMENDOUS FIBERGLASS INVENTORY



### CUSTOM STAIR TREADS



### MADE TO YOUR SPECIFICATIONS

### ENGINEERING SERVICES...

- CAD Service
- Full Size Drawings
- Bill of Material Preparation
- Layout Drawings for Field Installation
- Detailed Drawings for Shop Fabrication

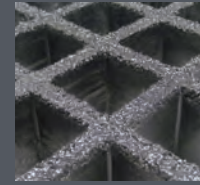
### CUSTOM FABRICATION...

Cutting • Sawing • Circles • Shearing  
Notching • Cutouts • Burning  
Blanking • Banding • Welding  
Galvanizing • Painting • Stair Treads

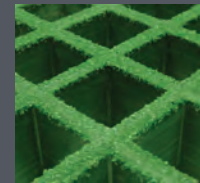
## MANY FIBERGLASS COLORS IN-STOCK!

-Additional colors  
available upon request

### MOLDED



**GRAY**  
-MOST  
POPULAR



**GREEN**



**YELLOW**

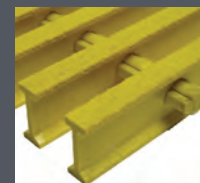


**ORANGE**



**LIGHT  
GRAY**

### PULTRUDED



**YELLOW**



**GRAY**

All Brown-Campbell  
Fiberglass Products  
have UV INHIBITORS

**ISO 9001:2008 Certified**

## Brown-Campbell Fiberglass Products

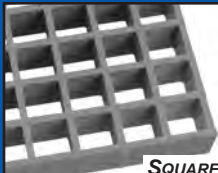
Designed for applications requiring maximum corrosion resistance and greater strength than plastic products. A variety of fiberglass products are available including molded gratings, pultruded gratings, stair treads, platforms, handrails, ladders, floor plate, and structural systems.

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

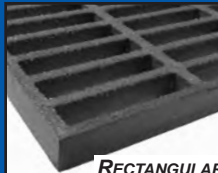
- CORROSION RESISTANCE TO HARSH INDUSTRIAL CHEMICALS •LIGHTWEIGHT •LONGEVITY
- FIRE RETARDANCE •ABILITY TO WITHSTAND HEAVY IMPACTS •INSULATION AGAINST ELECTRICAL SHOCK
- LOW THERMAL CONDUCTIVITY •EASE OF FABRICATION •ELECTROMAGNETIC TRANSPARENCY
- WIDE RANGE OF PERMANENT COLORS •RESILIENCE •MAINTENANCE-FREE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

### IN-STOCK FIBERGLASS PRODUCTS

**Molded**

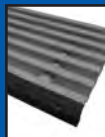


**SQUARE**




**RECTANGULAR**

**Stair Treads**

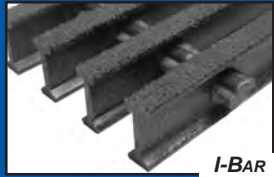


**PULTRUDED**




**MOLDED**

**Pultruded**

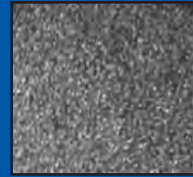


**I-BAR**




**T-BAR**

**Floor Panels**



**Structural Shapes**



*In many applications fiberglass lasts much longer than metal alternatives, thereby offering a lower product life cycle cost -- a primary reason for it's 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:

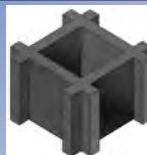
1. Application or use of product (including environment) 2. Physical reqmts

#### PLEASE SPECIFY:

- Brown-Campbell "Fiberglass Grating"
- Type: Rectangular or Square Molded and mesh size; I-Bar or T-Bar Pultruded, Stair Treads, etc.
- Resin & 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.

## STOCK LIST

Description	Resin/Type	Color	Surface	Item No.	Stock Size
MOLDED: Rectangular					
1 x 1 x 4	C-Polyester	Green	Grit	FCNG114	120" x 36" 96" x 48" 144" x 48"
	C-Polyester	Gray	Concave	FCG114	
	C-Polyester	Gray	Grit	FCGG114	
	C-Polyester	Yellow	Grit	FCYG114	
MOLDED: Square					
1 x 1.5 x 1.5	C-Polyester	Green	Concave	FCN11515	36" x 120" 36" x 144" 48" x 96" 48" x 144" 60" x 120"
	C-Polyester	Green	Grit	FCNG11515	
	C-Polyester	Gray	Concave	FCG11515	
	C-Polyester	Gray	Grit	FCGG11515	
	C-Polyester	Yellow	Concave	FCY11515	
	C-Polyester	Yellow	Grit	FCYG11515	
1.5 X 1.5 X 1.5	C-Polyester	Green	Concave	FCN151515	
	C-Polyester	Green	Grit	FCNG151515	
	C-Polyester	Gray	Concave	FCG151515	
	C-Polyester	Gray	Grit	FCGG151515	
	C-Polyester	Light Gray	Concave	FCL151515	
	C-Polyester	Light Gray	Grit	FCLG151515	
	C-Polyester	Yellow	Grit	FCYG151515	
	V-Vinyl Ester	Gray	Grit	FVGG151515	
	V-Vinyl Ester	Orange	Grit	FVOG151515	
	2 x 2 x 2	C-Polyester	Green	Grit	
C-Polyester		Gray	Grit	FCGG222	
MOLDED: Stair Treads					
1.5 x 1.5 x 6	C-Polyester	Green	Grit	FCNG15156	22.5" x 120"
	C-Polyester	Gray	Grit	FCGG15156	
	V-Vinyl Ester	Gray	Grit	FVGG15156	
	C-Polyester	Light Gray	Grit	FCLG15156	
MOLDED: Covered					
1.625 x 1.5 x 1.5	I-Polyester	Green	Grit	FING16251515	48" x 144"
FLOOR PANELS					
1/4	C-Polyester	Gray	Smooth	FCG1/4	48" x 144"
3/8	F-Polyester	Light Gray	Grit	FFLG3/8	48" x 96"
PULTRUDED: I-Bar					
I-4010	P-Polyester	Gray	Grit	FPGG40106	36" x 144" 36" x 240" 48" x 144" 48" x 240"
I-4015	P-Polyester	Gray	Grit	FPGG40156	
	P-Polyester	Yellow	Grit	FPYG40156	
I-6010	P-Polyester	Gray	Grit	FPGG60106	
	P-Polyester	Yellow	Grit	FPYG60106	
I-6015	V-Vinyl Ester	Yellow	Grit	FVYG60106	
	P-Polyester	Gray	Grit	FPGG60156	
	P-Polyester	Yellow	Grit	FPYG60156	
PULTRUDED: T-Bar					
T-5020	P-Polyester	Gray	Grit	FPGG50206	36" x 240" 48" x 144"
PULTRUDED: Concrete Embedment FRP Angles					
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	

### 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	lbs/sq. ft.	Load Bar Spacing CC (In)	Load/ Span	18"	24"	30"	36"	42"	48"	54"	60"	Load/ Span	18"	24"	30"	36"	42"	48"	54"	60"			
1 x 4 Rect. Mesh	1	69%	2.5#	1	50	.01	.04	.08	.16	.33				200	.05	.12	.22	.34	.60						
					100	.02	.07	.17	.32	.66				300	.07	.18	.32	.52	.90						
					200	.04	.15	.34	.65	1.32				500	.12	.30	.54	.86	1.51						
					FL*	1902	1070	685	476	349				FL*	1427	1070	856	713	613						
1-1/2 x 1-1/2 Square Mesh	1	70%	2.5#	1-1/2	50	.02	.06	.14	.31	.49				200	.08	.20	.35	.66	.90						
					100	.04	.12	.27	.62	.98				300	.12	.30	.53	.99	1.35						
					200	.08	.25	.55	1.24	1.97				500	.20	.49	.88	1.65	—						
					FL*	1268	713	456	317	233				FL*	951	713	571	476	408						
1-1/2 x 1-1/2 Square Mesh	1-1/2	70%	3.7#	1-1/2	50	<.01	.02	.05	.10	.17	.28	.42		200	.03	.07	.12	.21	.32	.45	.60				
					100	.01	.04	.09	.20	.34	.56	.84		300	.05	.10	.18	.32	.47	.68	.90				
					200	.03	.06	.18	.40	.69	1.13	1.68		500	.08	.17	.29	.53	.79	1.13	1.50				
					FL*	2779	1600	1024	711	522	400	316		FL*	2133	1600	1280	1067	914	800	711				
2 x 2 Square Mesh	2	72%	4.0#	2	50	<.01	.01	.02	.04	.08	.14	.21	.37	200	.02	.03	.06	.09	.14	.22	.30	.47			
					100	.01	.02	.05	.09	.16	.28	.42	.73	300	.03	.05	.09	.14	.22	.33	.45	.70			
					200	.02	.04	.09	.18	.32	.56	.84	1.46	500	.05	.08	.14	.23	.36	.56	.75	1.17			
					FL*	2566	1925	1338	929	682	522	413	334	FL*	2787	2090	1672	1393	1194	1045	929	836			

\*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.

#### 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.

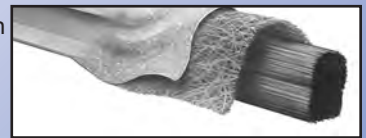
**RECTANGULAR MESH** offers one-direction span strength in the width of the grating panel

and is often used for walkways and trench covers.



## PULTRUDED GRATING

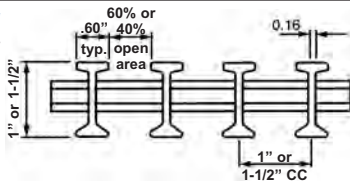
Manufactured with a high percentage of glass within the laminate, providing durability, extremely high unidirectional strength and stiffness. Due to its exceptional stiffness, pultruded grating can be used in applications requiring wide support spans, rarely needing additional support. To form a pultruded 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\"/>

### Other Pultruded I-Bar Styles Available

Style	Height (in)	Open Area	lbs/sq. ft.	Load Bar Spacing CC (in)
I-4010	1	40%	3.3#	1"
I-4015	1-1/2	40%	4.2#	1"

## Pultruded I-BAR Fiberglass Grating Load Table

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

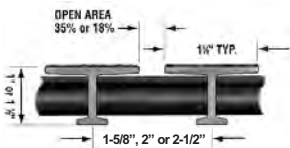
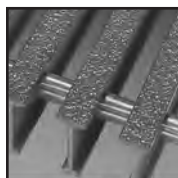
Uniform Load: lbs/sq. ft.; Deflection: in.															Concentrated Load: lbs/ft. of width; Deflection: in.											
Style	Height (In)	Open Area	lbs/sq. ft.	Load Bar Spacing CC (In)	Load/ Span	24"	30"	36"	42"	48"	54"	60"	66"	72"	Load/ Span	24"	30"	36"	42"	48"	54"	60"	66"	72"		
I-6010	1	60%	2.2#	1-1/2	50	.01	.03	.05	.10	.17	.27	.40			200	.04	.07	.12	.18	.27	.38	.52				
					100	.02	.06	.11	.20	.33					300	.06	.11	.17	.27	.40						
					200	.05	.11	.22							500	.09	.18	.29								
					FL*	2320	1485	1031	754	575	453	362			FL*	2320	1856	1546	1319	1149	1019	906				
					50	.01	.01	.02	.04	.06	.10	.15	.22	.31	200	.01	.03	.04	.07	.10	.14	.19	.26	.33		
I-6015	1-1/2	60%	2.8#	1-1/2	100	.01	.02	.04	.08	.13	.20	.30	.44		300	.02	.04	.07	.10	.15	.21	.29	.39	.50		
					200	.02	.04	.08	.15	.25	.40				500	.04	.07	.11	.17	.25	.36	.49				
					FL*	3520	2218	1517	1088	813	621	486	388	312	FL*	3520	2797	2275	1904	1626	1398	1216	1066	937		

\*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

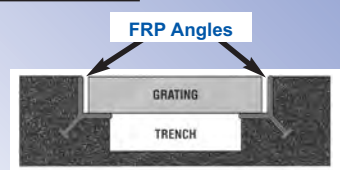
### 1" & 1-1/2" Pultruded T-Bar Grating Availability

Style	Height (in)	Open Area	lbs/sq. ft.	Load Bar Spacing CC (in)
T-3510	1	35%	3.3#	2-1/2"
T-3515	1-1/2	35%	2.7#	2-1/2"
T-1810	1	18%	2.8#	2"
T-1815	1-1/2	18%	3.3#	2"
T-0010	1	0%	4.0#	1-5/8"
T-0015	1-1/2	0%	4.0#	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.



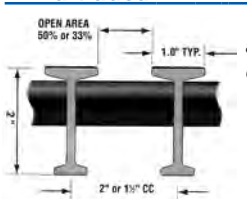
### FRP Angles

Angle Size	Weight Per Foot (lbs)
2" x 1-1/2" x 1/4"	1.2#
1" x 1-1/2" x 1/4"	1.0#

**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



**Color:** Standard - dark gray or yellow  
**Surface:** Furnished standard with gritted, skid resistant top surface  
**Cross bar spacings:** 6" on center

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

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

Style	Height (in)	Open Area	lbs/sq. ft.	Load Bar Spacing CC (in)
T-3320	2	33%	3.7#	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-5020	2	50%	2.8#	2	50	.01	.03	.04	.07	.10	.14	.20	.28	.37	200	.03	.05	.07	.10	.13	.17	.22	.27	.34
					100	.03	.05	.08	.13	.20	.29	.41	.55	300	.04	.07	.10	.14	.19	.25	.32	.41	.51	
					200	.06	.10	.17	.27	.40				500	.07	.12	.17	.24	.32	.42	.54			
					FL*	1791	1316	1007	796	645	533	447	381	329	FL*	2687	2303	2015	1791	1612	1465	1343	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" Gray: Length may be any size up to 10'-0" Light Gray: Length may be any size up to 12'-0"
7-3/4"	
9-1/4"	
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"	
18-1/4"	Additional support is required for treads exceeding 42" in length.
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.

1-800-472-8464

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

Span	Load (lbs)	
	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"	C	Green	FCNG15156
						Gray	FCGG15156
				22.5" x 144"	C	Gray	FVGG15156
						Light Gray	FCLG15156

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

### PULTRUDED Stair Treads



Pultruded stair treads offer greater strength and span capacity.

### PULTRUDED Stair Tread Load Table

Approx. Deflection - 300 lb. conc. load midspan front 5" +/- Tread

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

### PULTRUDED I-6010 & I-6015 Stair Treads

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

## 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 CONCEALMENT, CAGED / FIXED LADDERS, DECK SUPPORT, FRAMING, STAIR STRUCTURES, WALKWAYS

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



### 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, Sludge Flight, U-Trough, Square Tube with Round Hole, Door Frame, T-Sections
	Epoxy Kits
	EPDM Rubber Spray Coating Sealant

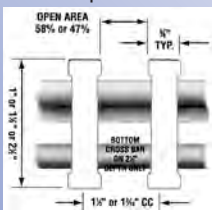
Over 20 structural shapes available - each in a variety of sizes. Our sales personnel are ready to help you with your fiberglass needs!

1-800-472-8464

## 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.

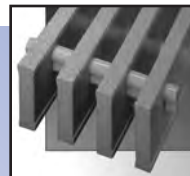
For turning wheel loads, covered heavy duty pultruded I-Bar grating with 1/8" plate is available, please contact a Brown-Campbell sales representative today for assistance.



**Color:** Standard yellow

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

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



### 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.
I-4710	1"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20', 24'	5.5#
I-4715	1-1/2"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20', 24'	8.0#
I-4720	2"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20', 24'	10.9#
I-4725	2-1/2"	5/8"	9/16"	47%	1-3/16"	23.75", 35.63"	20', 24'	12.3#
I-5815	1-1/2"	5/8"	7/8"	58%	1-1/2"	3', 4'	20', 24'	6.5#
I-5820	2"	5/8"	7/8"	58%	1-1/2"	3', 4'	20', 24'	8.7#
I-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

1-800-472-8464

brown-campbell.com



## 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

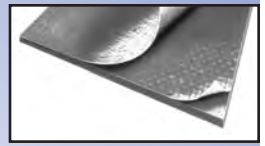
Constructed using a compression-molding process that combines heat and pressure to produce a high-density high-strength panel - weighing 1/3 as much as steel. Ideal as a trench cover and in applications where a solid plate is necessary to contain vapors.



- 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

## FIBERGLASS FLOOR PANELS

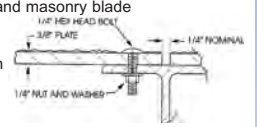
Usually installed over existing grating to provide a solid walkway or to extend the life of high traffic areas. Floor panels can also be bolted directly to structural beams and used as wall panels that are resistant to corrosive splash when ordered with an ungritted surface.



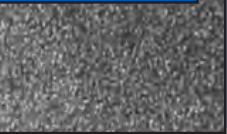
Comprised of multiple layers of fiberglass reinforcement and specially formulated resins, resulting in a solid composite panel offering bi-directional strength and corrosion resistance.

### 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



## FLOOR PLATE



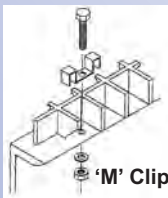
Installed over existing grating to provide a solid walkway or to extend the life of high traffic areas. Can also be bolted directly to structural beams or used as wall panels that are resistant to corrosive splash when ordered with an ungritted surface.

- 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.

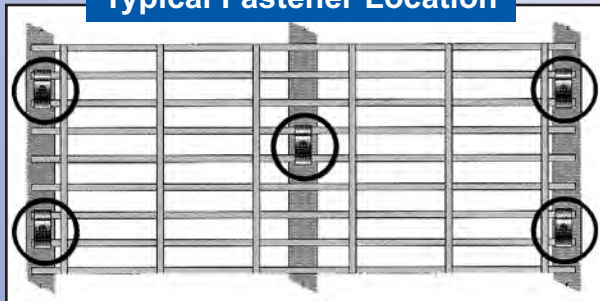
These clips are available for fastening panels together and securing them to other structures. All types are made of 316 stainless steel. Install clips at a minimum of 4 clips per piece and 4 clips for every 24 square feet (example: at least eight clips per 4' x 12' panel).

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

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

\*Note: Bolt Assemblies include a bolt, washer and nut. Clips are sold separately.

### Typical Fastener Location



## OTHER BROWN-CAMPBELL FIBERGLASS PRODUCTS

Covered  
Molded



FenceMesh™



Grate-Mat™



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

GuardMesh™



Ladder  
Systems



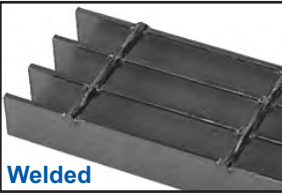
Handrail  
Systems



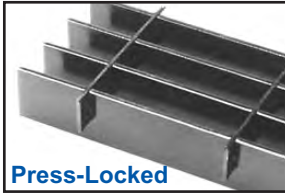
For product information on these items, please call  
**1-800-GRATING**

## 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.



Welded



Press-Locked



Swaged

## STOCK LIST

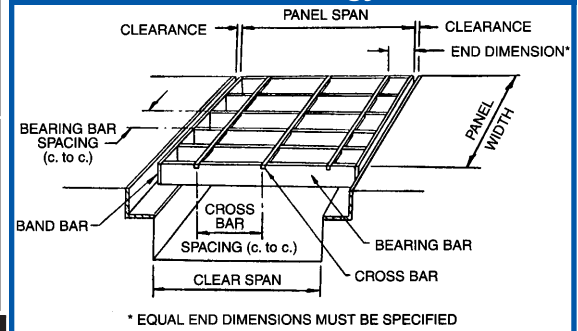
Bearing Bar Size (In)	Surface	Type
<b>Carbon Steel-Welded (Mill Finish/Galvanized/Painted Black)</b>		
3/4 x 1/8	Smooth	19W4
3/4 x 3/16	Smooth	15W2, 19W4
3/4 x 3/16	Serrated	19W4
1 x 1/8	Smooth	15W4, 19W4
1 x 1/8	Serrated	19W4
1 x 3/16	Smooth	11W4, 15W2, 15W4, 19W2, 19W4
1 x 3/16	Serrated	15W2, 15W4, 19W2, 19W4
1 x 1/4	Smooth	19W4
1 x 1/4	Serrated	19W4
1-1/4 x 1/8	Smooth	19W4
1-1/4 x 1/8	Serrated	19W4
1-1/4 x 3/16	Smooth	11W4, 15W2, 15W4, 19W2, 19W4
1-1/4 x 3/16	Serrated	11W4, 15W2, 15W4, 19W2, 19W4
1-1/4 x 1/4	Smooth	19W4
1-1/2 x 1/8	Smooth	19W4
1-1/2 x 1/8	Serrated	19W4
1-1/2 x 3/16	Smooth	11W4, 15W2, 15W4, 19W2, 19W4
1-1/2 x 3/16	Serrated	19W4
1-1/2 x 1/4	Smooth	19W4
1-3/4 x 3/16	Smooth	15W2, 19W4
1-3/4 x 3/16	Serrated	19W4
1-3/4 x 1/4	Smooth	19W4
2 x 3/16	Smooth	15W2, 15W4, 19W2, 19W4
2 x 3/16	Serrated	19W2, 19W4
2 x 1/4	Smooth	19W4
2 x 1/4	Serrated	19W4
2-1/4 x 3/16	Smooth	15W4, 19W4
2-1/4 x 3/16	Serrated	11W2
2-1/4 x 1/4	Smooth	19W4
2-1/2 x 3/16	Smooth	19W4
2-1/2 x 1/4	Smooth	19W4
3 x 1/4	Smooth	19W4
3-1/2 x 1/4	Smooth	19W4

Bearing Bar Size (In)	Surface	Type
<b>Aluminum - Swaged / I-Bar</b>		
1 x 1/8	Smooth	19AS4
1 x 3/16	Smooth	19AS4
1 x 3/16	Serrated	19AS4
1 x 1/4	I-BAR	19A4
1-1/4 x 3/16	Smooth	19AS4
1-1/4 x 3/16	Serrated	19AS4
1-1/4 x 1/4	I-BAR	19A4
1-1/2 x 3/16	Smooth	19AS4
1-1/2 x 3/16	Serrated	19AS4
1-1/2 x 1/4	I-BAR	19A4
1-3/4 x 3/16	Smooth	19AS4
1-3/4 x 3/16	Serrated	19AS4
1-3/4 x 1/4	I-BAR	19A4
2 x 3/16	Smooth	19AS4
2 x 1/4	I-BAR	19A4
<b>Stainless Steel Type 304-Welded</b>		
1 x 1/8	Smooth	19SW4
1 x 3/16	Smooth	19SW4
1 x 3/16	Serrated	19SW4
1-1/4 x 3/16	Smooth	19SW4
1-1/4 x 3/16	Serrated	19SW4
1-1/2 x 3/16	Smooth	19SW4
<b>Stair Treads-Welded (Mill Finish/Galvanized/Painted Black)</b>		
1 x 3/16	Smooth	19W4
1 x 3/16	Serrated	19W4
1-1/4 x 3/16	Smooth	19W4
1-1/4 x 3/16	Serrated	19W4

New items are added daily.  
If the product you are looking for is not listed please inquire: 1-800-GRATING

**SAME DAY FABRICATION**

## Terminology



## 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:

- **Brown-Campbell "Bar Grating"**
- **Quantity:** Number of cut pieces or full panels
- **Panel Size:** stocked sizes include 2' x 20', 2' x 24', 3' x 20', 3' x 24'
- **Width (x) Length:** overall width & length for cut pieces. Mill tolerances will be supplied unless otherwise specified.
- **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 & Fabrication" capabilities include...**

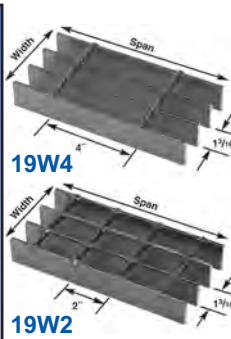
**Blueprint Take Offs ~ Drawings  
Notching ~ Banding ~ Stair Treads  
Sawing ~ Cutouts ~ Circles**

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><b>19-4(2)</b></p> <p>Light Duty: 19W4(2), 19P4(2), 19S4(2) Heavy Duty: 19W4(2) Alum: 19AP4(2), 19AS4(2), 19AF4(2), 19AI4(2) Stainless: 19SW4(2), 19SP4(2), 19SS4(2)</p>	<p><b>11-4(2)</b></p> <p>Light Duty: 11W4(2), 11P4(2), 11S4(2) Alum: 11AP4(2), 11AS4(2), 11AF4(2), 11AI4(2) Stainless: 11SW4(2), 11SP4(2), 11SS4(2)</p> <p>* 3/16" bearing bar widths only</p>	<p><b>7-4(2)</b></p> <p>Light Duty: 7P4(2), 7S4(2) Alum: 7AP4(2), 7AS4(2), 7AF4(2), 7AI4(2) Stainless: 7SP4(2), 7SS4(2)</p>	<p><b>22W4(2)</b></p> <p>Heavy Duty: 22W4(2)</p>
<p><b>15-4(2)</b></p> <p>Light Duty: 15W4(2), 15P4(2), 15S4(2) Heavy Duty: 15W4(2) Alum: 15AP4(2), 15AS4(2), 15AF4(2), 15AI4(2) Stainless: 15SW4(2), 15SP4(2), 15SS4(2)</p>	<p><b>10-4(2)</b></p> <p>Light Duty: 10W4(2), 10P4(2) Alum: 10AP4(2)</p> <p>* 3/16" bearing bar widths only</p>	<p><b>38W4(2)</b></p> <p>Heavy Duty: 38W4(2)</p>	<p><b>12W4 / 8W4</b></p> <p>Heavy Duty: 12W4 Heavy Duty: 8W4</p>
<p><b>13-4(2)</b></p> <p>Light Duty: 13W4(2), 13P4(2) Alum: 13AP4(2)</p>	<p><b>8-4(2)</b></p> <p>Light Duty: 8W4(2), 8P4(2) Alum: 8AP4(2), 8AS4(2)</p>	<p><b>30W4(2)</b></p> <p>Heavy Duty: 30W4(2)</p>	<p><b>23WF4/15WF4</b></p> <p>Heavy Duty with Filler Panels: 23WF4 Heavy Duty with Filler Panels: 15WF4</p>





**Load Factors for Other Light Duty Steel**  
Multiply load factors below by values in 19-4/19-2 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

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

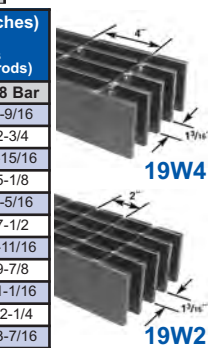
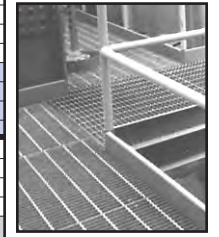
Bar Size (in)	Symbol/ Approx. Weight*** Lbs/Sq. Ft.	Ped. Span	Clear Span															
			2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"			
3/4 x 1/8	19W4 3.9# 19S4 3.8#	41"	U 355 227 158 116 89 70	<b>U=Safe uniform load, lb/sq ft</b> <b>C=Safe concentrated load, lb/ft of grating width, at mid-span</b> <b>D=Deflection in inches</b> <b>Data is theoretical and based on 18,000 psi.</b> <b>Install Cross Rods on Top.</b>														
	D .099 .155 .223 .304 .397 .503																	
	C 355 284 223 203 178 158																	
3/4 x 3/16	19W4 5.6# 19S4 5.5#	46"	U 533 341 237 174 133 105															
	D .099 .155 .223 .304 .397 .503																	
	C 533 426 355 305 266 237																	
1 x 1/8	19W4 5.0# 19S4 4.9#	51"	U 632 404 281 206 158 125	101 84 70	<b>Deflection:</b> To ensure safe pedestrian comfort, maximum deflection (D) should be limited to 1/4" for uniform load of 100 psf (denoted by values to the left of heavy line in table), however, this can be exceeded for non-pedestrian loading conditions at engineer's discretion.													
	D .074 .116 .168 .228 .298 .377		466 .563 .670															
	C 632 505 421 361 316 281		253 230 211															
1 x 3/16	19W4 7.2# 19S4 7.0#	57"	U 947 606 421 309 237 187	152 125 105														
	D .074 .116 .168 .228 .298 .377		466 .563 .670															
	C 947 758 632 541 474 421		379 344 316															
1-1/4 x 1/8	19W4 6.1# 19S4 6.0#	61"	U 987 632 439 322 247 195	158 130 110	93 81	<b>Serrated:</b> The depth of grating required for a specified load is 1/4" greater than shown in this table.												
	D .060 .093 .134 .182 .238 .302		372 .451 .536	629 .730														
	C 987 789 658 564 493 439		395 359 329 304	282 254														
1-1/4 x 3/16	19W4 8.9# 19S4 8.7#	67"	U 1480 947 658 483 370 292	237 196 164 140 121														
	D .060 .093 .134 .182 .238 .302		372 .451 .536	629 730														
	C 1480 1184 987 846 740 658		592 538 493 455 423															
1-1/2 x 1/8	19W4 7.2# 19S4 7.0#	70"	U 1421 909 632 464 355 281	227 188 158 135 116	89 70													
	D .050 .078 .112 .152 .199 .251		310 376 447 .524 .608	.794 1.006														
	C 1421 1137 947 812 711 632		568 517 474 437 406	355 316														
1-1/2 x 3/16	19W4 10.5# 19S4 10.3#	77"	U 2132 1364 947 696 533 421	341 282 237 202 174 133	105													
	D .050 .078 .112 .152 .199 .251		310 376 447 .524 .608	.794 1.006														
	C 2132 1705 1421 1218 1066		947 853 775 711 656	609 533 474														
1-3/4 x 1/8	19W4 12.2# 19S4 11.9#	87"	U 2901 1857 1289 947 725 573	464 384 322 275 237 181	143													
	D .043 .067 .096 .130 .170 .215		266 322 .383 .450 .521 .681	.862														
	C 2901 2321 1934 1658 1451		1289 1161 1055 967 893	829 725 645														
2 x 3/16	19W4 13.9# 19S4 13.6#	96"	U 3789 2425 1684 1237 947 749	606 501 421 359 309 237 187														
	D .037 .058 .084 .114 .149 .189		233 282 .335 .393 .456 .596	.754														
	C 3789 3032 2526 2165 1895		1684 1516 1378 1263 1166	1083 947 842														
2-1/4 x 3/16	19W4 15.5# 19S4 15.2#	105"	U 4796 3069 2132 1566 1199	947 767 634 533 454 392 300 237														
	D .033 .052 .074 .101 .132 .168 .207		250 .298 .350 .406 .530 .670															
	C 4796 3837 3197 2741 2398		2132 1918 1744 1599 1476 1370 1199	1066														
2-1/2 x 3/16	19W4 17.2# 19S4 16.8#	113"	U 5921 3789 2632 1933 1480	1170 947 783 658 561 483 370 292														
	D .030 .047 .067 .091 .119 .151 .186		225 .268 .315 .365 .477 .603															
	C 5921 4737 3947 3383 2961		2632 2368 2153 1974 1822 1692 1480 1316															
***Note: Weight depends on panel width, cross bar selection, mill tolerance and manufacturing tolerance.																		

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

## PANEL WIDTH CHART (in inches)

Dimensions shown are out-to-out of bearing bars (Add 1/4" for extended cross rods)

No. of Bars	1/8 Bar	3/16 Bar
2	1-5/16	1-3/8
3	2-1/2	2-9/16
4	3-11/16	3-3/4
5	4-7/8	4-15/16
6	6-1/16	6-1/8
7	7-1/4	7-5/16
8	8-7/16	8-1/2
9	9-5/8	9-11/16
10	10-13/16	10-7/8
11	12	12-1/16
12	13-3/16	13-1/4
13	14-3/8	14-7/16
14	15-9/16	15-5/8
15	16-3/4	16-13/16
16	17-15/16	18
17	19-1/8	19-3/16
18	20-5/16	20-3/8
19	21-1/2	21-9/16
20	22-11/16	22-3/4
21	23-7/8	23-1/8
22	25-1/16	25-5/16
23	26-1/4	26-5/16
24	27-7/16	27-1/2
25	28-5/8	28-11/16
26	29-13/16	29-7/8
27	31	31-1/16
28	32-3/16	32-1/4
29	33-3/8	33-7/16
30	34-9/16	34-5/8
31	35-3/4	35-13/16



**Load Factors for other Heavy Duty Styles on next page.**








## Heavy Duty 19W4/19W2 Load Table

Bar Size (In)	Style #/sf		Clear Span <span>Data is theoretical and based on 20,000 psi</span>															
			1'-0"	1'-6"	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"	
1 x 1/4	19W4 9.4#	U	5615	2495	1404	898	624	458	351	277	225	186	156	133	115	100	88	
	19W2 10.0#	D	.020	.046	.082	.129	.186	.253	.331	.418	.518	.627	.745	.875	1.017	1.166	1.328	
	19W2 10.0#	D	.016	.037	.066	.103	.149	.202	.264	.335	.413	.500	.596	.699	.811	.930	1.059	
1-1/4 x 1/4	19W4 11.6#	U	8772	3899	2193	1404	975	716	548	433	351	290	244	208	179	156	137	
	19W2 12.2#	C	.016	.037	.066	.103	.149	.202	.264	.335	.413	.500	.596	.700	.810	.931	1.058	
	19W2 12.2#	D	.4386	.2924	.2193	.1754	.1462	.1253	.1097	.975	.877	.797	.731	.675	.627	.585	.548	
1-1/2 x 1/4	19W4 13.8#	U	.013	.029	.052	.082	.119	.162	.211	.268	.330	.400	.476	.559	.649	.745	.847	
	19W2 14.3#	U	12632	5614	3158	2021	1404	1031	790	624	505	418	351	299	258	225	197	
	19W2 14.3#	D	.013	.031	.055	.086	.124	.168	.220	.279	.344	.417	.496	.582	.676	.777	.881	
1-3/4 x 1/4	19W4 16.0#	C	6316	4211	3158	2526	2105	1805	1579	1404	1263	1148	1053	972	902	842	790	
	19W2 16.6#	D	.011	.024	.044	.068	.099	.135	.176	.223	.275	.333	.397	.466	.540	.620	.706	
	19W4 16.0#	U	17193	7641	4298	2751	1910	1404	1075	849	688	568	478	407	351	306	269	
2 x 1/4	19W2 16.6#	D	.011	.026	.047	.073	.106	.144	.189	.239	.295	.357	.425	.499	.579	.665	.757	
	19W2 16.6#	C	8597	5731	4298	3439	2866	2456	2149	1910	1719	1563	1433	1323	1228	1146	1075	
	19W2 16.6#	D	.009	.021	.037	.059	.085	.115	.151	.191	.236	.286	.340	.399	.463	.531	.605	
2 x 1/4	19W4 18.2#	U	22456	9980	5614	3593	2495	1833	1404	1109	898	742	624	532	458	399	351	
	19W2 18.8#	D	.010	.023	.041	.064	.093	.126	.165	.209	.258	.312	.372	.437	.506	.581	.662	
	19W2 18.8#	C	11228	7485	5614	4491	3743	3208	2807	2495	2246	2041	1871	1727	1604	1497	1404	
2-1/2 x 1/4	19W4 22.6#	D	.008	.018	.033	.051	.074	.101	.132	.167	.206	.250	.297	.349	.405	.465	.529	
	19W2 23.3#	U	35088	15595	8772	5614	3899	2864	2193	1733	1404	1160	975	830	716	624	548	
	19W2 23.3#	C	.008	.018	.033	.051	.074	.101	.132	.167	.206	.250	.298	.349	.405	.465	.529	
3 x 1/4	19W4 27.9#	C	17544	11696	8772	7018	5848	5013	4386	3899	3509	3190	2924	2699	2506	2339	2193	
	19W2 29.4#	D	.006	.014	.026	.041	.059	.081	.105	.134	.165	.200	.238	.279	.324	.372	.423	
	19W2 29.4#	U	50527	22456	12632	8084	5614	4125	3158	2495	2021	1670	1404	1196	1031	898	789	
3-1/2 x 1/4	19W4 32.4#	D	.006	.015	.027	.043	.062	.084	.110	.139	.172	.208	.248	.291	.337	.387	.441	
	19W2 33.9#	C	25263	16842	12632	10105	8421	7218	6316	5614	5053	4593	4211	3887	3609	3368	3158	
	19W2 33.9#	D	.005	.012	.022	.034	.049	.067	.088	.111	.137	.166	.198	.233	.270	.310	.353	
4 x 1/4	19W4 36.8#	U	68772	30565	17193	11004	7641	5614	4298	3396	2751	2273	1910	1628	1404	1223	1075	
	19W2 38.3#	D	.005	.013	.023	.036	.053	.072	.094	.119	.147	.178	.212	.249	.289	.332	.378	
	19W2 38.3#	C	34386	22924	17193	13754	11462	9825	8597	7641	6877	6252	5731	5290	4912	4585	4298	
4 x 1/4	19W4 36.8#	D	.004	.010	.018	.029	.042	.057	.075	.095	.118	.143	.170	.199	.231	.266	.302	
	19W2 38.3#	U	89825	39922	22456	14372	9981	7333	5614	4436	3593	2969	2495	2126	1833	1597	1404	
	19W2 38.3#	D	.005	.011	.020	.032	.046	.063	.082	.104	.129	.156	.186	.218	.253	.290	.331	
4 x 1/4	19W2 38.3#	C	44913	29942	22456	17965	14971	12832	11228	9981	8983	8166	7485	6910	6416	5988	5614	
	19W2 38.3#	D	.004	.009	.016	.025	.037	.050	.066	.083	.103	.125	.148	.174	.202	.232	.264	



## Heavy Duty Steel

Maximum Traffic Conditions	Wheel Load (lbs.) (1/2 of Axle Load + 30% Impact)	Loading	Load Distribution**	
			a	b
Truck Traffic 32,000 Lb. Axle Load Dual Wheels		20,800	H-20	20" 20" + (2s)
Truck Traffic 24,000 Lb. Axle Load Dual Wheels		15,600	H-15	15" 15" + (2s)
10,000 Lb. Capacity Lift Truck 14,400 Lb. Vehicle 24,400 Lb. Total Load 85% Drive Axle Load	 (Rubber Tires)	13,480	5 Ton	11" 11" + (2s)
6,000 Lb. Capacity Lift Truck 9,800 Lb. Vehicle 15,800 Lb. Total Load 85% Drive Axle Load	 (Rubber Tires)	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	 (Rubber Tires)	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 those 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
15W4/15W2	1.266

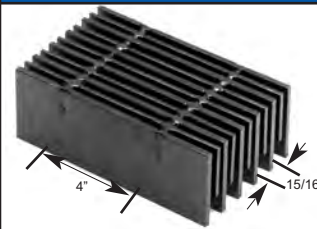
## Heavy Duty 19W4/19W2

Bar Size (in)	Cross Bar Size (dia. in inches)	Maximum Safe Clear Span Partially Distributed Load			
		1 Ton	3 Ton	5 Ton	H-15/H-20
1 x 1/4	3/8	7"	6"	7"	9"
1-1/4 x 1/4	3/8	10"	8"	9"	12"
1-1/2 x 1/4	3/8	13"	10"	11"	14"
1-3/4 x 1/4	3/8	17"	12"	14"	17"
2 x 1/4	3/8	22"	15"	16"	20"
2-1/4 x 1/4	3/8	28"	18"	19"	23"
2-1/2 x 1/4	3/8	34"	22"	22"	27"
3 x 1/4	3/8	49"	30"	30"	35"
3-1/2 x 1/4	3/8	66"	40"	39"	45"
4 x 1/4	3/8	*85"	51"	50"	57"
4-1/2 x 1/4	3/8	96"	64"	61"	70"
5 x 1/4	3/8	96"	78"	75"	85"
6 x 1/4	1/2	96"	96"	96"	96"

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



## 15WF4 - Heavy Duty Welded with Filler Bars



**15WF4**  
 15/16" Ctr to Ctr of Bearing Bars  
 (7 1/2" WF4-Walking Surface)



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" cross bar centers.

**Note: 23WF4 also available**  
 1-7/16" Ctr to Ctr of Bearing Bars  
 (11 1/2" WF4-Walking Surface)

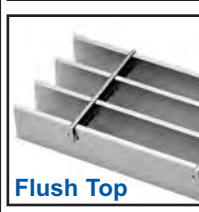
## Aluminum



**Press-Locked**



**Swaged w/ Serrated Surface**



**Flush Top**



**I-Bar**

**Load Factors for Other Aluminum**  
 Multiply load factors below by values in 19-4/19-2 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	1.900
8-4/8-2	2.377
7-4/7-2	2.716

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

Bar Size (in)	Symbol/Approx. Weight*** Lbs/Sq. Ft.	Ped. Span	Clear Span									
			2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"
3/4 x 1/8	19AP4 1.5# 19AS2 1.8# 19AF2 1.8#	n/a	31"	U 237	152	105	77					
				D 192	300	432	588					
				C 237	189	158	135					
				D 154	240	346	470					
3/4 x 3/16	19AP4 2.3# 19AS2 2.8# 19AF2 2.8#	n/a	35"	U 355	227	158	116					
				D 192	300	432	588					
				C 355	284	237	203					
				D 154	240	346	470					
1 x 1/8	19AP4 1.9# 19AS2 2.2# 19AF2 2.2#	n/a	39"	U 421	269	187	137	105				
				D 144	225	324	441	576				
				C 421	337	281	241	211				
				D 115	180	259	353	461				
1 x 3/16	19AP4 2.8# 19AS2 3.0# 19AF2 3.0#	n/a	43"	U 632	404	281	206	158	125			
				D 144	225	324	441	576	729			
				C 632	505	421	361	316	281			
				D 115	180	259	353	461	583			
1-1/4 x 1/8	19AP4 2.4# 19AS2 2.6# 19AF2 2.6#	n/a	46"	U 658	421	292	215	164	130			
				D 115	180	259	353	461	583			
				C 658	526	439	376	329	292			
				D 092	144	207	282	369	467			
1-1/4 x 3/16	19AP4 3.6# 19AS2 4.3# 19AF2 4.3#	n/a	51"	U 987	632	439	322	247	195	158		
				D 115	180	259	353	461	583	729		
				C 987	789	658	564	493	439	395		
				D 092	144	207	282	369	467	576		
1-1/2 x 1/8	19AP4 2.8# 19AS2 3.2# 19AF2 3.2#	n/a	53"	U 947	606	421	309	237	187	152		
				D 096	150	216	294	384	486	600		
				C 947	758	632	541	474	421	379		
				D 077	120	173	235	307	389	480		
1-1/2 x 3/16	19AP4 4.2# 19AS2 4.8# 19AF2 4.8#	n/a	59"	U 1421	909	632	464	355	281	227	188	
				D 096	150	216	294	384	486	600	726	
				C 1421	1137	947	812	711	632	568	517	
				D 077	120	173	235	307	389	480	581	
1-3/4 x 3/16	19AP4 4.6# 19AS2 5.4# 19AF2 5.4#	n/a	66"	U 1934	1238	860	632	484	382	309	256	183
				D 082	129	185	252	329	417	514	622	741
				C 1934	1547	1289	1105	967	860	774	703	645
				D 066	103	148	202	263	333	411	498	592
2 x 3/16	19AP4 5.3# 19AS2 6.0# 19AF2 6.0#	n/a	73"	U 2526	1617	1123	825	632	499	404	334	281
				D 072	113	162	221	288	365	450	545	648
				C 2526	2021	1684	1444	1263	1123	1011	919	842
				D 058	090	130	176	230	292	360	436	518
2-1/4 x 3/16	19AP4 5.9# 19AS2 6.6# 19AF2 6.6#	n/a	80"	U 3197	2046	1421	1044	799	632	512	423	355
				D 064	100	144	196	256	324	400	484	576
				C 3197	2558	2132	1827	1599	1421	1279	1163	1066
				D 051	080	115	157	205	259	320	387	461
2-1/2 x 3/16	19AP4 6.5# 19AS2 7.2# 19AF2 7.2#	n/a	87"	U 3947	2526	1754	1289	987	780	632	522	439
				D 058	090	130	176	230	292	360	436	518
				C 3947	3158	2632	2256	1974	1754	1579	1435	1316
				D 046	072	104	141	184	233	288	348	415

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



**Serrated and Slip Resistant Surfaces Available**

## PANEL WIDTH CHART (in inches)

Dimensions shown are out-to-out of bearing bars (Add 1/4" for extended cross rods)

No. of Bars	1/8 Bar	3/16 Bar
2	1-5/16	1-3/8
3	2-1/2	2-9/16
4	3-11/16	3-3/4
5	4-7/8	4-15/16
6	6-1/16	6-1/8
7	7-1/4	7-5/16
8	8-7/16	8-1/2
9	9-5/8	9-11/16
10	10-13/16	10-7/8
11	12	12-1/16
12	13-3/16	13-1/4
13	14-3/8	14-7/16
14	15-9/16	15-5/8
15	16-3/4	16-13/16
16	17-15/16	18
17	19-1/8	19-3/16
18	20-5/16	20-3/8
19	21-1/2	21-9/16
20	22-11/16	22-3/4
21	23-7/8	23-15/16
22	25-1/16	25-1/8
23	26-1/4	26-5/16
24	27-7/16	27-1/2
25	28-5/8	28-11/16
26	29-13/16	29-7/8
27	31	31-1/16
28	32-3/16	32-1/4
29	33-3/8	33-7/16
30	34-9/16	34-5/8
31	35-3/4	35-13/16

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.

**ADA Compliant: 11/16" and 5/8" in 3/16" width and 1/2" and 7/16" in 1/8" and 3/16".**

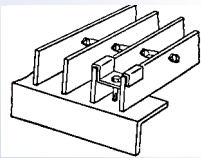
## ANCHORING DEVICES

### H-3 Saddle Anchor

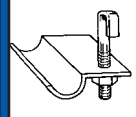
**MOST ECONOMICALLY PRICED**

**Available In: Galvanized Steel, Aluminum and Stainless Steel**

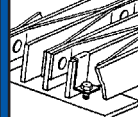
Saddle plate bridges two bearing bars and is attached with 1/4" weld stud or 1/4" bolt and nut when hole is drilled through supporting flange. Available for 15/16", 1-3/16", and 1-3/8" bearing bar spacings (15, 19, and 22 space). Fasteners not included.



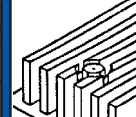
**Grate-Fast™ Clamp**



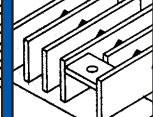
**H-1 Anchor Clip with J Bolt**



**Z Clip**

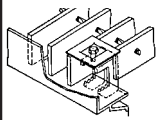


**Countersunk Land**



**Anchor Block**

### G-Clip



Available G-Clips					
Grating Thickness	Structural Member Flange Thickness				
	1/4" - 3/4"	3/4" - 1-1/4"	1-1/4" - 1-3/4"	1-3/4" - 2-1/4"	
1" = A	GG-1A*	GG-2A	GG-3A	GG-4A	
1-1/4" = 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	

\*Dark blue boxes represent most common styles

**Galvanized, Aluminum, 316 Stainless Steel, CuNi**

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 supporting flange. 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 1-1/4" grating, 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" or 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™



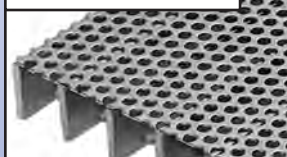
### Underside view of Expanded-Grate™



### Floor Plate-Grate™



### Perforated-Grate™



### Traction-Tread-Grate™

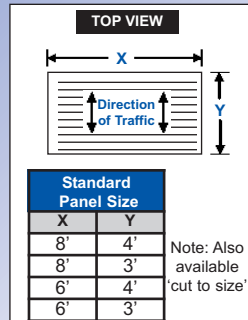


## GRATING MATS

**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



**Material:** Type 304 Stainless Steel\*

**Slot Openings:** 1/8"

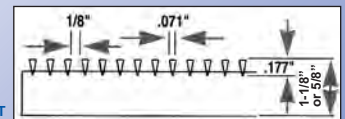
**Tread Surface:** .071" x .177"

**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 & 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



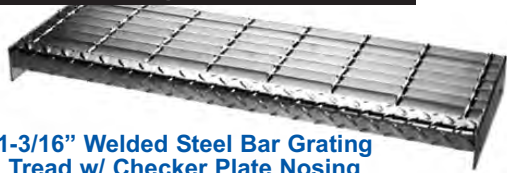
**Brown-Campbell fabricated bar grating installed at major factory in California.**



**Over 6 decades of family owned & operated service to our customers!**  
**Brown-Campbell takes pride in providing the Best Service in the Industry teamed with Top Quality & Competitive Pricing!**



## Bar Grating Stair Treads



**1-3/16" Welded Steel Bar Grating Tread w/ Checker Plate Nosing**

### Stair Tread Nosings



**Checker Plate   Grooved Nose   Cast Aluminum   Abrasive Coated**

Bar Grating Material	Construction	Nosing	Surface	Qualities
Steel	Welded (W) Press-Locked (P) Swaged (S)	Checker Plate* Abrasive Coated Cast Aluminum	Plain Serrated	Most common due to strength, ease of installation, and lowest cost.
Aluminum Rectangular Bar	Press-Locked (P) Swaged (S) Flush Top (F)	Grooved Nose* Abrasive Coated Cast Aluminum	Plain Serrated	Higher strength, higher stiffness to weight ratio.
Aluminum I-Bar	Swaged I-Bar (I)	Grooved Nose* Abrasive Coated Cast Aluminum	Plain	Higher strength, less weight, lower cost than Aluminum Rectangular Bar.
Stainless Steel	Welded (W) Press-Locked (P) Swaged (S)	Checker Plate* Cast Aluminum	Plain Serrated	Ideal for highly corrosive environments.

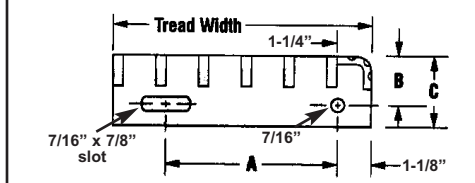
\*Standard Nosing

### 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

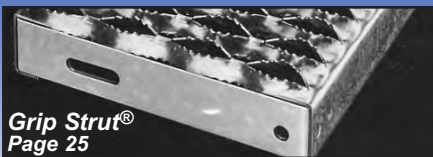
No. of Bearing Bars	Steel & Stainless Steel		Aluminum Rect. Bar	Aluminum I-Bar	Dimension "A" Bolt Hole Spacing
	Bearing Bar Depth 1/8"	3/16"	Bearing Bar Depth 3/16"	Bearing Bar Depth 1/4"	
	Tread Width	Tread Width	Tread Width	Tread Width	
5	6-1/8"	6-3/16"	6-3/16"	6-1/4"	2-1/2"
6	7-5/16"	7-3/8"	7-3/8"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

### Maximum Tread Length

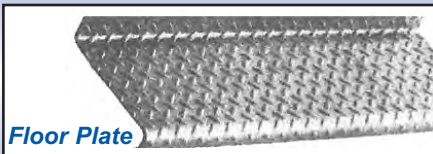
Steel & Stainless Steel			Aluminum Rectangular Bar			Aluminum I-Bar	
Bearing Bar Size	Plain	Serrated	Bearing Bar Size	Plain	Serrated	Bearing Bar Size	Plain
3/4" x 3/16"	2'-4"	1'-11"	1" x 3/16"	2'-4"	2'-2"	1" x 1/4"	2'-4"
1" x 3/16"	3'-5"	2'-10"	1-1/4" x 3/16"	2'-10"	2'-7"	1-1/4" x 1/4"	2'-10"
1-1/4"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

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.

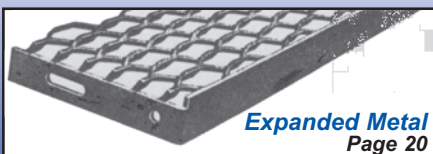
## Other B-C Stair Tread Products



**Grip Strut®**  
Page 25



**Floor Plate**



**Expanded Metal**  
Page 20

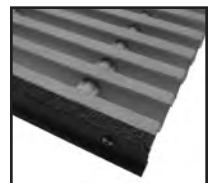


**Grate-Lock™**  
Page 33



**Perf-O Grip®**  
Page 32

### Fiberglass Page 3



**Safe-T-Grid®**

**Brown-Campbell stair treads are extremely versatile & available in most of the metal and fiberglass products we offer.**

**1-800-472-8464**

**1-800-472-8464**

**brown-campbell.com**

## Safe-T-Grid® Aluminum Grating

*Ideal for High Pedestrian Traffic Areas!*

Based on bearing bars that are specially designed and manufactured T-Bar aluminum extrusions. This is a highly efficient structural shape that yields exceptionally high load bearing ability for the amount of aluminum used - resulting in a product that is high strength, lightweight, and economical.

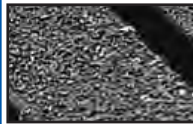


### How To Order

- Safe-T-Grid® Aluminum Grating
  - Item No.: TB-626 or TB-940
  - Quantity: number of pieces required
  - Material: Aluminum, 6063-T6
  - Width: 36"
  - Height: 1", 1-1/4", 1-1/2", 2"
  - Length: 10', 12', 20' or cut to size
  - Surface: Plain with fluted pattern, Abrasive Coated
  - Finish: mill (standard), anodized, duranodic
  - Accessories: fasteners
- \*Openings of Type TB-940 are less than 1/4" wide, making it ADA compliant and making it safe for high heels, yet sufficient to allow the free passage of air and water.

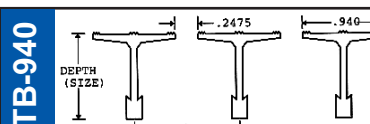
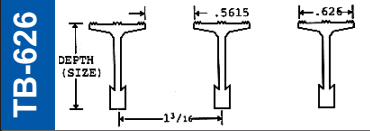


Plain Surface with Fluted Pattern

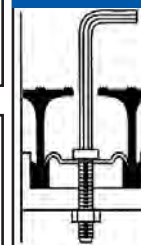


Abrasive Coated Surface

*Perfect for walkways, trench grates, and entrances*



### Fastener - Type 50



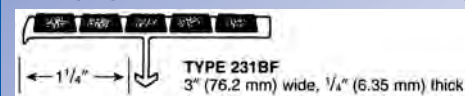
Fastener is hidden, does not protrude above surface and therefore presents no tripping hazards.

## Nosings & Safety Treads

Supergrit®

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 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

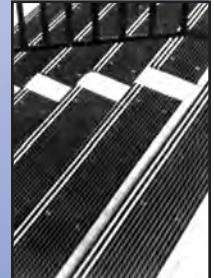
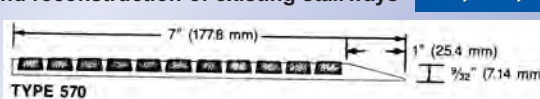
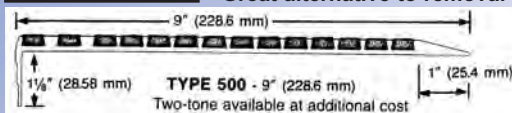


Designed for the modernization and restoration of all types of stairs, while providing excellent anti-slip protection for pedestrians.

- 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.

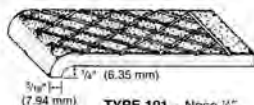
Also available:  
181, 182, 511,  
500SN, 511SN,  
540, 630, 660, 6100



Abrasive Cast

### POURED CONCRETE

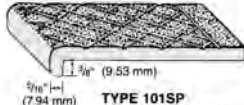
Generally installed full step length less approx. 3" (76.2 mm) clearance at each end.



**TYPE 101** - Nose 1/4" (6.35 mm) lip.  
Chief use: as nosings in concrete stairs. Tread installed flush all around.

### STEEL PAN

Generally installed full step length to stringer length, less 1/8" (3.05 mm) clearance.



**TYPE 101SP** - Nose 1/4" (6.35 mm) lip.  
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.

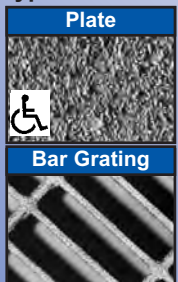
Other styles available...

- 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 or Aluminum Base with Stainless Steel coating, etc.

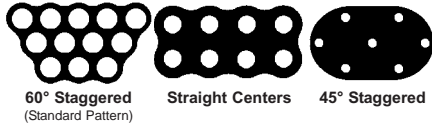


## Brown-Campbell Perforated Products

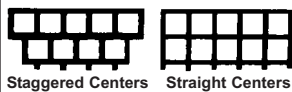
Perforated products versatility can be demonstrated by their use for sound suppression, microwave and radio containment, filtration and purification of air, smoke, water, and gases of every description.

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.

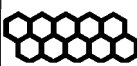
### Round Hole Patterns



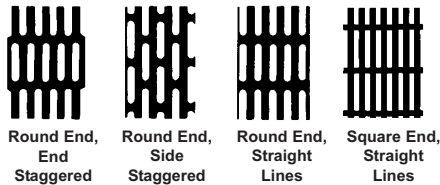
### Square Hole Patterns



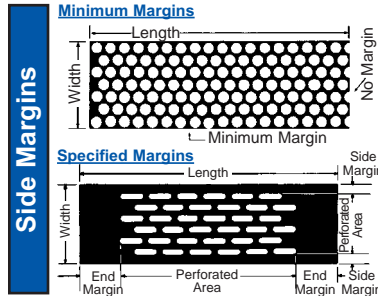
### Hexagon Pattern



### 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.*

## 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:

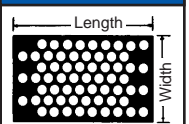
- **Brown-Campbell "Perforated Metal"**
- **Quantity:** number of cut pieces or full sheets
- **Material:** type of material desired - carbon, stainless steel, aluminum, etc.
- **Thickness:** for steel or stainless steel specify gauge or thickness in inches. All other metals specify in inches only.
- **Width (x) Length:** overall width & length. Mill tolerances will be supplied unless otherwise specified.
- **Perforation Size, Shape, and Arrangement:** refer to perforated patterns and tooling lists. 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:** "finished" or "unfinished" end pattern (see below)
- **Special Requirements:** special shearing, leveling, finish or heat treating

## STOCK LIST

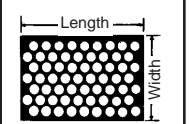
RSTG=Round Staggered; RS=Round Straight; SS=Square Straight

Hole Size	Ctrs	Shape	Open Area	Gauge	Hole Size	Ctrs	Shape	Open Area	Gauge	Hole Size	Ctrs	Shape	Open Area	Gauge
<b>Carbon Steel - Round</b>					<b>Carbon Steel - Other</b>					<b>Stainless Steel - Type 304 (con't)</b>				
.045"	.066"	RS	37%	24	.200	1/4"	SS	64%	22, 20 (Hanover)	3/8"	9/16"	RSTG	40%	16, 14, 11
.045"	.088"	RSTG	24%	24	3/8"	1/2"	SS	56%	16	1/2"	11/16"	RSTG	48%	16, 14, 11, 3/16"
1/16"	3/32"	RSTG	41%	24, 22, 20	3/8"	1"	SS	14%	16	3/4"	1"	RSTG	51%	16, 11
1/16"	7/64"	RSTG	30%	20, 16	1/2"	11/16"	SS	53%	16, 12 (Lattice)	1"	1-1/4"	RSTG	58%	11
1/16"	1/8"	RSTG	23%	22, 20, 18, 16	3/4"	1"	SS	56%	16, 12, 11	<b>Stainless Steel - Type 316L</b>				
.075"	.100"	RSTG	51%	24, 20	Honeycomb 1/4" Hex			79%	22, 20	1/16"	3/32"	RSTG	41%	22
5/64"	7/64"	RSTG	46%	22, 20, 18	Windsor			45%	20	3/32"	3/16"	RSTG	23%	22
5/64"	1/8"	RSTG	35%	18, 16	Grecian			35%	22	1/8"	3/16"	RSTG	40%	16, 14
3/32"	5/32"	RSTG	33%	22, 18, 16, 14	Octagon Cane			36%	22	3/16"	3/8"	RSTG	23%	16
3/32"	3/16"	RSTG	23%	22, 14	Full Cloverleaf			51%	20	1/4"	5/16"	RSTG	58%	16
1/8"	3/16"	RSTG	40%	24, 22, 20, 18, 16, 14, 12, 11	1/4" Peg-Board 1" Ctrs			5%	20	1/4"	3/8"	RSTG	40%	14
1/8"	1/4"	RSTG	23%	16	<b>Don't see the pattern you are looking for? Call us at 1-800-472-8464.</b>					1/2"	11/16"	RSTG	48%	16
9/64"	3/16"	RSTG	51%	16	<b>Galvanized</b>					1/16"	3/32"	RSTG	41%	22
5/32"	3/16"	RSTG	63%	24, 22, 20, 18, 16	1/16"	3/32"	RSTG	41%	22	3/32"	9/64"	RSTG	40%	18
5/32"	7/32"	RSTG	46%	10	3/32"	3/16"	RSTG	23%	22	3/32"	3/16"	RSTG	23%	22
3/16"	1/4"	RSTG	50%	22, 20, 18, 16, 14, 11	1/8"	3/16"	RSTG	40%	22, 20, 18, 16	1/8"	3/16"	RSTG	23%	22
3/16"	5/16"	RSTG	33%	16, 12, 11, 10, 3/16"	5/32"	3/16"	RSTG	63%	22	3/16"	1/4"	RSTG	50%	18
3/16"	3/8"	RSTG	23%	14	3/16"	1/4"	RSTG	50%	18	1/4"	5/16"	RSTG	58%	20
1/4"	5/16"	RSTG	58%	20, 18, 16, 14	1/4"	5/16"	RSTG	58%	20	1/4"	3/8"	RSTG	40%	16
1/4"	3/8"	RSTG	40%	20, 18, 16, 14, 12, 11, 10, 8, 7, 3/16", 1/4"	1/2"	11/16"	RSTG	48%	18	<b>Stainless Steel - Type 304</b>				
1/4"	1/2"	RSTG	23%	11, 1/4"	1/16"	3/32"	RSTG	41%	22, 20	1/16"	3/32"	RSTG	41%	22, 20
5/16"	3/8"	RSTG	63%	16	1/16"	1/8"	RSTG	23%	22, 20, 18	1/16"	1/8"	RSTG	23%	22, 20, 18
5/16"	7/16"	RSTG	46%	11, 3/16"	3/32"	5/32"	RSTG	33%	22, 18, 16	3/32"	5/32"	RSTG	33%	22, 18, 16
3/8"	1/2"	RSTG	51%	16, 14, 11	1/8"	3/16"	RSTG	40%	22, 20, 18, 16, 14, 11	1/8"	3/16"	RSTG	40%	22, 20, 18, 16, 14, 11
3/8"	9/16"	RSTG	40%	16, 14, 12, 11, 7, 3/16", 1/4"	5/32"	3/16"	RSTG	63%	24, 22, 20, 18, 16	5/32"	3/16"	RSTG	63%	24, 22, 20, 18, 16
1/2"	11/16"	RSTG	48%	20, 16, 14, 11, 10, 7, 3/16", 1/4"	5/32"	1/4"	RSTG	35%	12	5/32"	1/4"	RSTG	35%	12
1/2"	3/4"	RSTG	40%	3/8"	3/16"	1/4"	RSTG	50%	22, 20, 18, 16	3/16"	1/4"	RSTG	50%	22, 20, 18, 16
5/8"	7/8"	RSTG	46%	7	3/16"	5/16"	RSTG	33%	16, 11	3/16"	5/16"	RSTG	33%	16, 11
3/4"	1"	RSTG	51%	16, 11, 7, 3/16", 1/4"	3/16"	3/8"	RSTG	23%	14	3/16"	3/8"	RSTG	23%	14
1"	1-1/4"	RSTG	58%	11, 1/4"	1/4"	5/16"	RSTG	58%	22, 20, 18, 16	1/4"	5/16"	RSTG	58%	22, 20, 18, 16
<b>1-800-GRATING (1-800-472-8464)</b>					1/4"	3/8"	RSTG	40%	20, 18, 16, 14, 11, 3/16"	1/4"	3/8"	RSTG	40%	20, 18, 16, 14, 11, 3/16"

### End Patterns



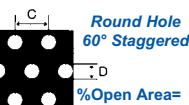
**Standard Unfinished End Pattern**



**Optional Finished End Pattern**

### % Open Area

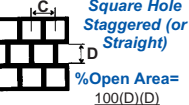
HPSI=Holes per sq. in.  
D= Diameter of hole or size of square hole  
C=Centers (distance between centers)



**Round Hole 60° Staggered**



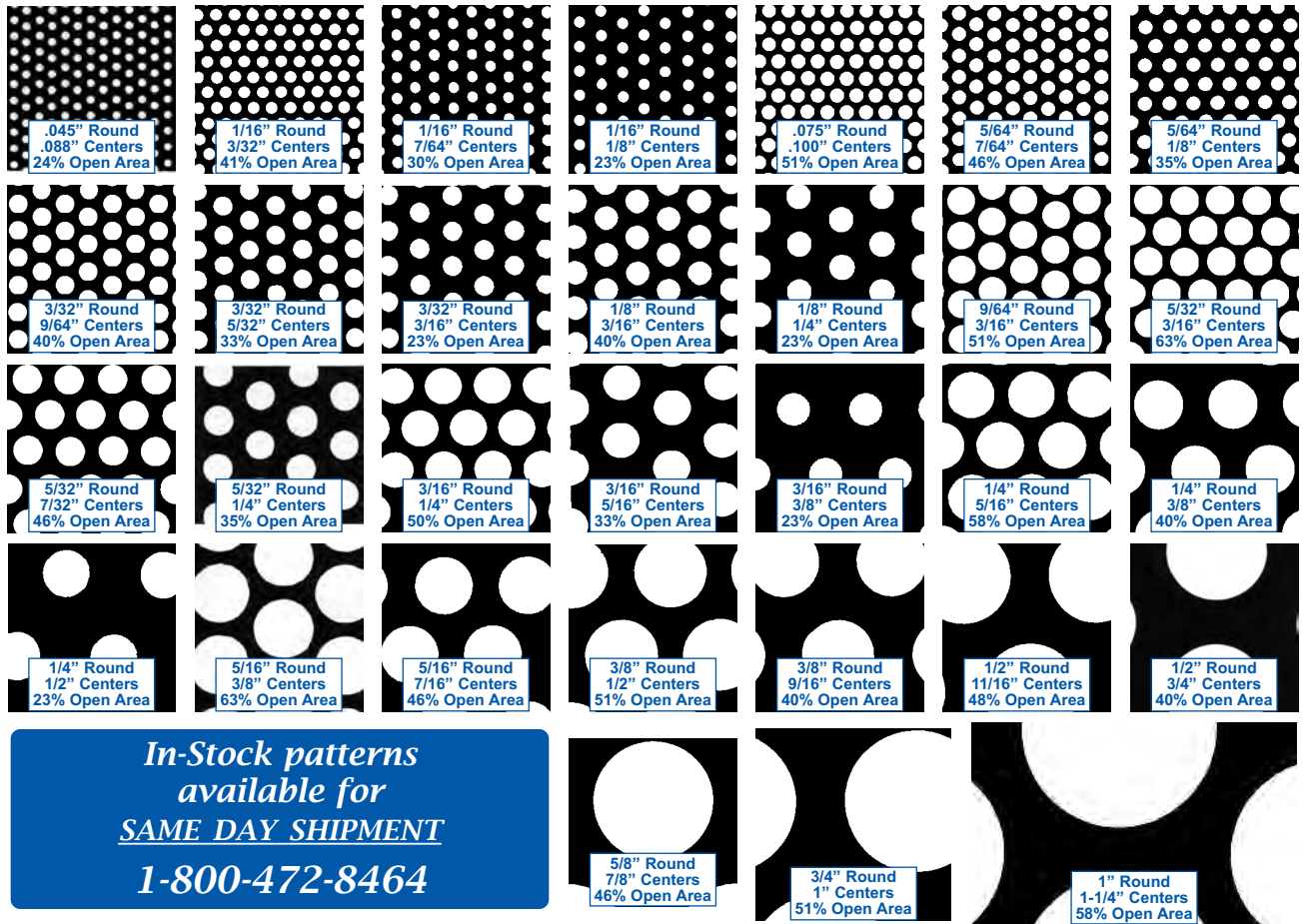
**Round Hole Straight**



**Square Hole Staggered (or Straight)**

# ROUND Perforated Patterns

In-Stock Patterns Shown (others available)

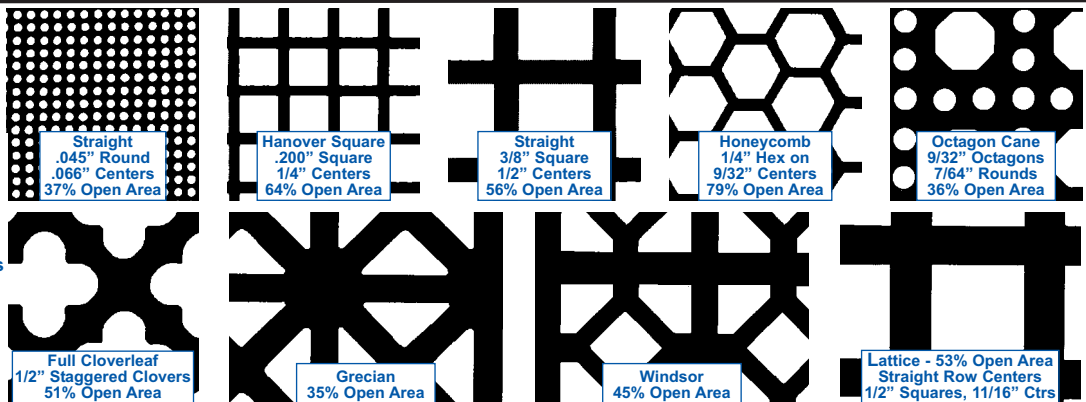


# OTHER Perforated Patterns

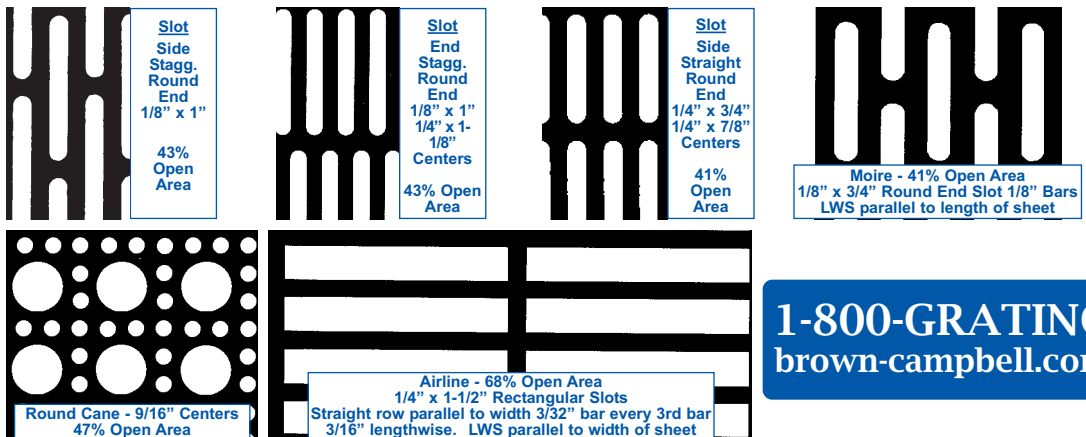
## In-Stock Patterns

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"	.066"	.021"	37%	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
9/64"	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"	1/16"	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.

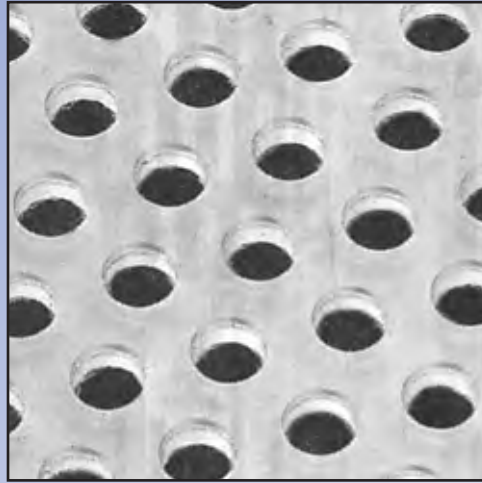
Please contact us for further information.

[brown-campbell.com](http://brown-campbell.com)  
1-800-472-8464

1-800-472-8464

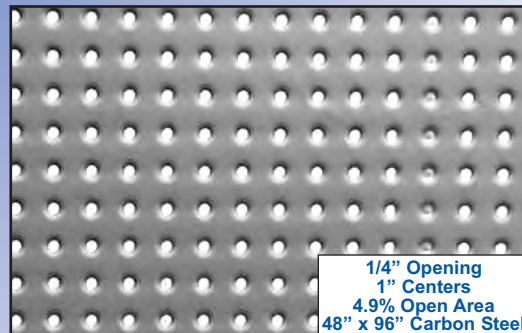
## PERFORATED PLASTIC

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

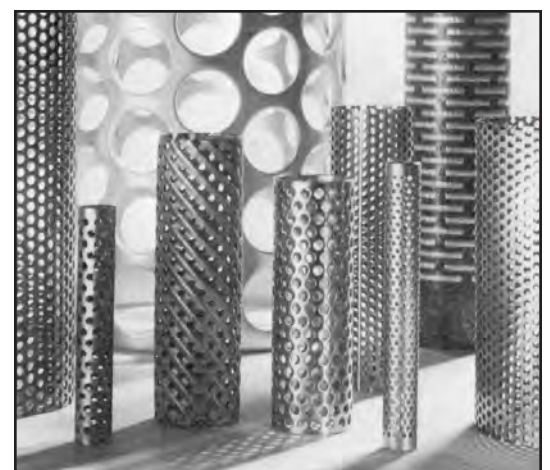
## PEG-BOARD



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.)

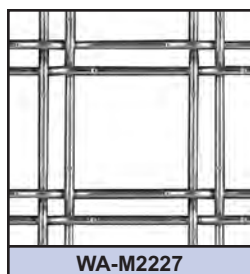


[brown-campbell.com](http://brown-campbell.com)

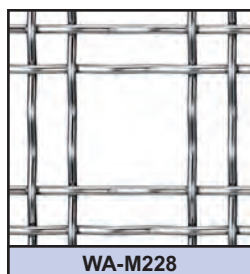
*Facades or Panels: Imagination is the only limit - Discover the possibilities!*



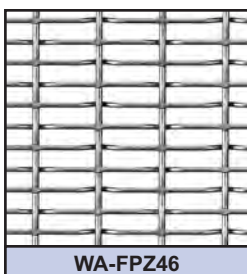
- Railings & Stairways
- Balcony Railings
- Ceiling Panels
- Laser Cut Grills
- Elevator & Wall Cladding
- Area Divider Screens
- Interior Wall Screens
- Room Dividers
- Display Flooring
- Light Fixtures
- Parking Garage Panels
- Walkway Canopies
- Custom Cabinet Inserts



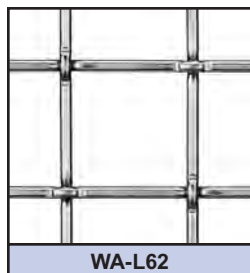
WA-M2227



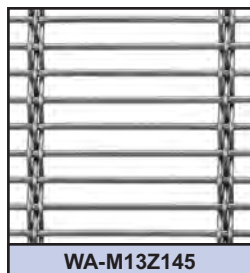
WA-M228



WA-FPZ46



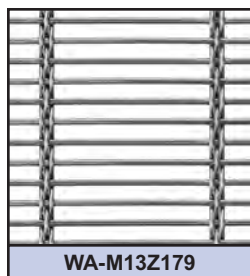
WA-L62



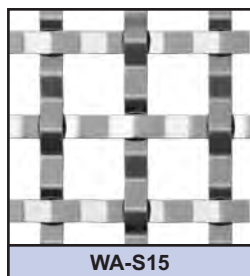
WA-M13Z145



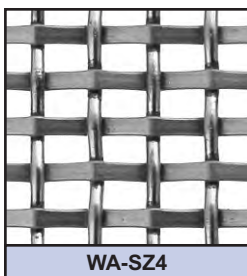
WA-FPZ16



WA-M13Z179

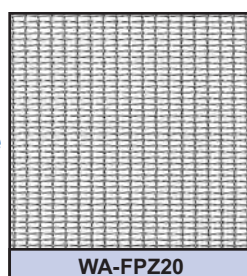


WA-S15

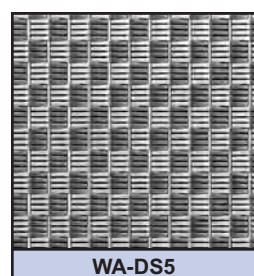


WA-SZ4

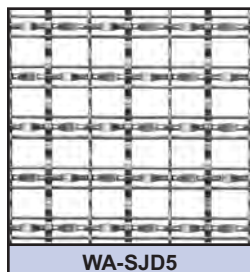
Choose from an unlimited variety of wire patterns, weaves, materials, combinations and colors to meet your building facade or panel requirements.



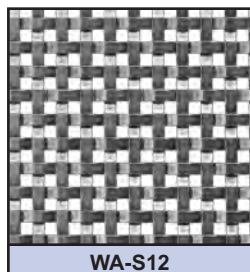
WA-FPZ20



WA-DS5



WA-SJD5



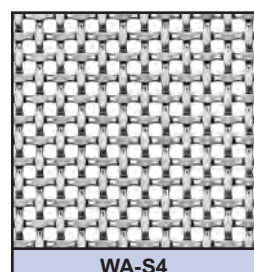
WA-S12



WA-DF1



WA-DS2



WA-S4

## Alloys

- Carbon Steel
- Stainless Steel
- Pre-Galvanized
- Aluminum
- Copper
- Bronze
- Brass
- Combination of any Two

## Colors & Finishes

- Powder Coating
- Anodizing
- Plating

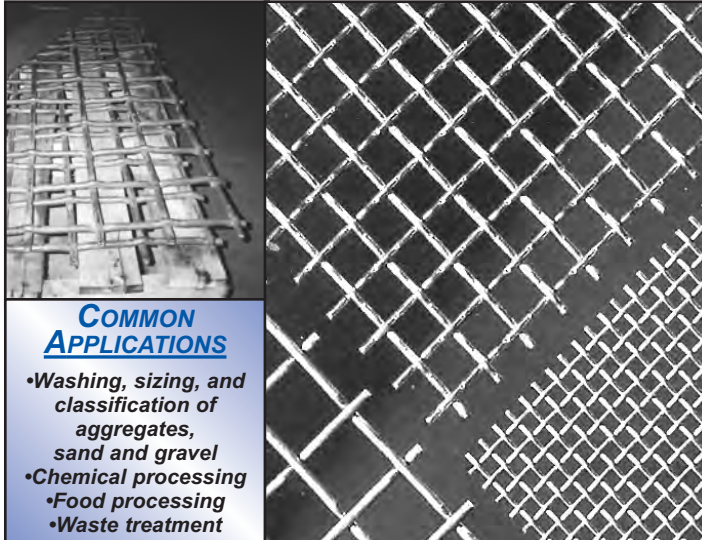
## Crimps

- Plain
- Intercrimp
- Lockcrimp
- Flat Top
- Twill
- Faux Cable
- Helix
- Triple Shoot



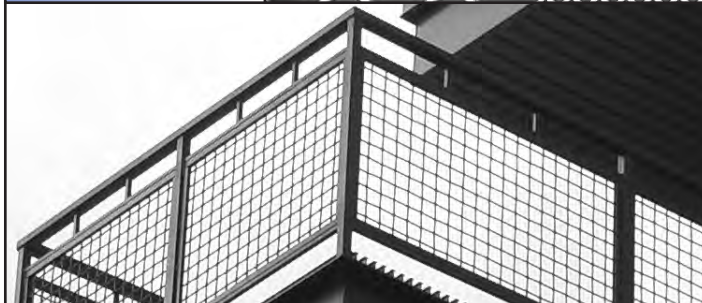
## Brown-Campbell Wire Cloth Products

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.



### COMMON APPLICATIONS

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



**Brown-Campbell offers a full line of fabrication services!**

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

## 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/(O+D))<sup>2</sup> x 100 or (1 - MD)<sup>2</sup> x 100

## STOCK LIST

### WOVEN WIRE

WOVEN WIRE

Opening/ Mesh	Wire Diameter	Opening/ Mesh	Wire Diameter
Carbon - Plain Steel		Stainless Steel - Type 304	
4" Opening	.250	4" Opening	.250
3" Opening	.250	3" Opening	.192
2" Opening	.120, .135, .162, .192, .250, .375	2" Opening	.120, .135, .192, .250
1-3/4" Opening	.250	1-1/2" Opening	.120
1-1/2" Opening	.192, .250	1" Opening	.120, .250
1-1/2" Centers	.135	3/4" Opening	.120
1" Opening	.120, .135, .162, .192, .250	3/4" Centers	.120
1" Ctr (1 Mesh)	.120	1/2" Opening	.120
5/8" Opening	.120	2 Mesh	.047, .063, .080, .105, .120
1/2" Opening	.120, .250	3 Mesh	.047, .063, .080
2 Mesh	.063, .080, .120, .135	4 Mesh	.028, .035, .047, .063, .080
3 Mesh	.063	5 Mesh	.041
4 Mesh	.047, .063, .080, .120	6 Mesh	.035, .047, .063
6 Mesh	.035, .047	8 Mesh	.028, .047
8 Mesh	.028, .047	10 Mesh	.025, .035, .047
10 Mesh	.025	12 Mesh	.018, .023, .028
12 Mesh	.028	14 Mesh	.020
Pre- Galvanized - Steel		16 Mesh	.018
2" Opening	.120	18 Mesh	.009, .017
1" Opening	.120	20 Mesh	.016, .020, .023
2 Mesh	.080	24 Mesh	.0075, .014
14 Mesh	.017	30 Mesh	.012
18 x 14 Mesh	.009	40 Mesh	.010
Galvanized After - Steel		50 Mesh	.009
8 Mesh	.017	60 Mesh	.0075
Aluminum		80 Mesh	.0055
2" Opening	.250	100 Mesh	.0045
2 Mesh	.063, .080	150 Mesh	.0026
Copper		200 Mesh	.0021
2 Mesh	.063	Stainless Steel - Type 316	
4 Mesh	.047	2 Mesh	.063
16 Mesh	.011	20 Mesh	.016

### WELDED WIRE

WELDED WIRE

Opening/ Mesh	Wire Diameter	Opening/ Mesh	Wire Diameter
Carbon - Plain Steel		Galvanized After - Steel	
4" Centers	.250	3" Centers	.189
3" Centers	.162	3" x 1" Centers	.122
3" x 1" Centers	.118	3" x 1/2" Centers	.101, .122
3" x 5/8" Centers	.118	2" Centers	.101, .122, .159, .189
2" Centers	.105, .118, .135, .155, .187, .250	2" x 1" Centers	.122
2" x 1" Centers	.118	1" Ctr (1 Mesh)	.063, .101, .122
1-1/2" Centers	.118, .135	1/2" x 1" Centers	.063
1" Ctr (1 Mesh)	.105, .118	2 Mesh	.041, .063
2 Mesh	.063	4 Mesh	.025
Pre- Galvanized - Steel		Stainless Steel - Type 304	
2" Opening	.063, .120	1 Mesh	.080
2" Centers	.063	2 Mesh	.047, .063
1" Ctr (1 Mesh)	.063, .080, .120	4 Mesh	.032

**PVC Coated Wire also available, please inquire.**

## 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 (opening size, percent of open area - send sample of wire cloth currently being used if possible)

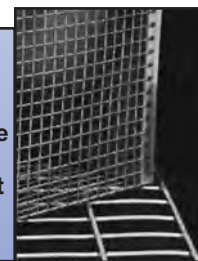
### PLEASE SPECIFY:

- 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 lineal 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.

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

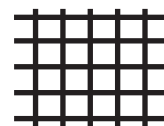
### Galvanized After:

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.

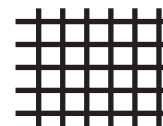
### Pre-Galvanized:

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

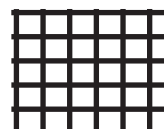
## WELDED WIRE EDGE TYPES



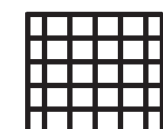
**Untrimmed**  
"Balanced Stubs"  
Opposite side stubs equal. Stub length will not exceed opening size unless specified.



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

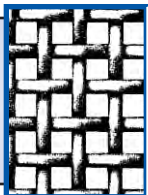


**Trimmed**  
Stubs trimmed flush with approximately 1/16" - 1/8" minimum on all sides.



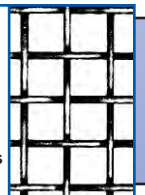
**With Edge Wire**  
"Balanced Stubs"  
Opposite side stubs equal with welded edge wire.

**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.

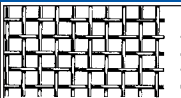


## Common Alloys

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



## WOVEN WIRE CRIMPS & 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 alternately over and under fill wires at right angles, both directions.



### Intercrip/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 weaved 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.

### 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.

**Other Crimps & Weaves Available, Please Inquire**



**Wire Cloth also available PVC Coated**

**CALL US TODAY TOLL FREE: 1-800-GRATING**

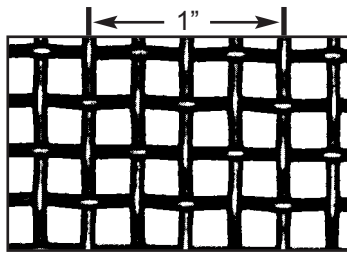
**SAME DAY SHIPMENTS**



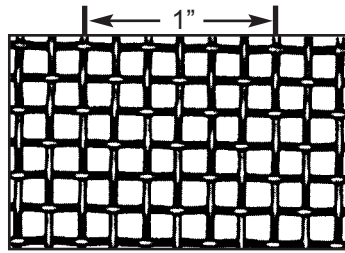
**Brown-Campbell stocks WOVEN & WELDED WIRE CLOTH** in carbon steel, pre-galvanized, galvanized after and stainless steel. A large range of opening/mesh sizes are in-stock in a variety of wire diameters. All ready for same day shipment.

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

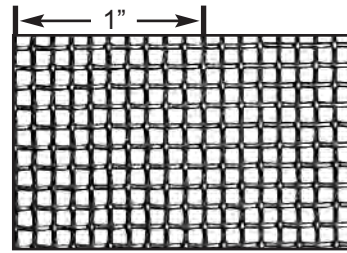




4 Mesh



6 Mesh



10 Mesh

# WIRE CLOTH STOCK LIST-- PAGE 17

## Woven Wire Tables In-Stock Items Shown (Others Available)

Mesh/ Opening	Wire Dia. (in)	% Open Area	lbs/ sq ft (steel)	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	79.0%	1.79	
1-3/4" Opening	.250	76.6%	2.02	1.75
1-1/2" Opening	.120	85.7%	.57	1.50
	.192	78.6%	1.40	
1-1/2" Centers	.250	73.4%	2.31	1.365
	.135	82.8%	.72	
1" Opening	.120	79.7%	.83	1
	.135	77.6%	1.04	
	.162	74.0%	1.46	
	.192	70.4%	2.01	
	.250	64.0%	3.26	
1" Ctr (1 Mesh)	.120	77.4%	.93	.88
3/4" Opening	.120	74.3%	1.07	.75
3/4" Centers	.120	71.0%	1.24	.63
5/8" Opening	.120	70.3%	1.25	.625
1/2" Opening	.120	65.0%	1.51	.50
	.250	44.4%	5.62	
2 Mesh	.047	82.1%	.28	.453
	.063	76.4%	.51	
	.080	70.6%	.83	
	.105	62.4%	1.44	
	.120	57.8%	1.89	
3 Mesh	.135	53.3%	2.41	2.41
	.047	73.6%	.42	
	.063	65.6%	.77	
	.080	57.6%	1.26	.253

**ISO 9001:2008  
CERTIFIED**

For a complete listing of wire  
tables please contact us.



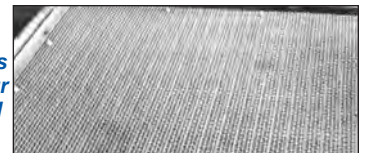
## Vinylmesh

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

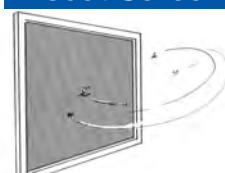
## Welded Wire Tables In-Stock Items Shown (Others Available)

Mesh/ Opening	Wire Dia. (in)	% Open Area	lbs/ sq. ft. (steel)	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
	.118	84.7%	.66	2.882
3" x 1" Centers	.122	84.2%	.69	2.878
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
	.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
	.155	85.1%	.81	1.845
	.159	84.7%	.84	1.841
	.187	82.2%	1.13	1.813
2" Centers	.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	lbs/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.

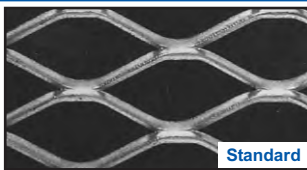


Opening/ Mesh	Wire Dia.	Width (in)
<b>Woven Pre-Galvanized</b>		
1/2" Opng	.080	48"
1" Opening	.120	48"
2" Opening	.120	48"
<b>Woven Galvanized After</b>		
3/4" Opng	.105	36", 48"
2 Mesh	.041	24", 36", 48"
2 Mesh	.047	18"
2 Mesh	.080	48"
3 Mesh	.032	36", 48"
4 Mesh	.025	24", 36", 48"
8 Mesh	.017	36", 48"
<b>Other products available, please inquire at brown-campbell.com or 1-800-GRATING.</b>		
<b>Welded Pre-Galvanized</b>		
4" x 2"	.080	48"
2"	.099	60"
1"	.063	48"
1"	.080	36", 48", 60"
1" x 2"	.080	48"
1/2" x 1"	.063	24", 30", 36", 48"
<b>Welded Galvanized After</b>		
2" x 1"	.080	34", 48"
1"	.063	48"
1"	.080	72"
1/2" x 1"	.063	24", 36", 48", 60"
2 Mesh	.041	24", 36", 48", 60"
2 Mesh	.063	48", 60", 72"
4 Mesh	.025	36"

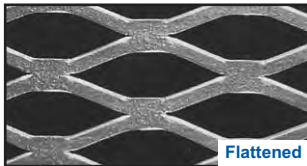
## Brown-Campbell Expanded Metal Products

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: 2.0# Grating**

2.0# = 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

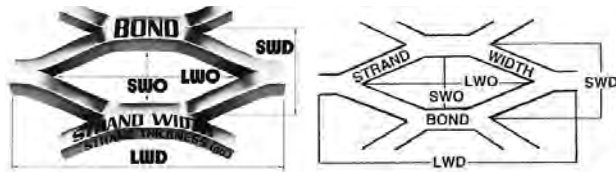
•Finish and Special Treatments: mill finish, galvanized, etc.

•Stair Tread Size: (if applicable)

•Accessories: U-Edging, Stair Treads

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

## Design Details & 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

### STYLE DESIGNATION

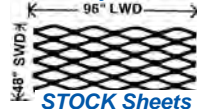
Expanded metal products are designated by a series of numbers which identify a given style.

**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.

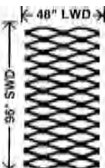
**Grating products:** Designated by weight per square foot of the finished product.

**Example 1: 1/2" #18 carbon steel standard, 48" SWD by 96" LWD**



STOCK Sheets

**Example 2: 1/2" .051 aluminum standard, 96" SWD by 48" LWD**

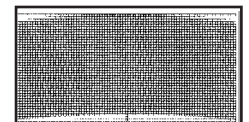


These illustrations demonstrate the importance of ALWAYS providing the SWD dimension BEFORE the LWD dimension.

### 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" 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: 3/32" per ft of length



Camber

**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 LWD".

**LWO - 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.

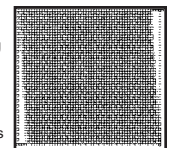
**Strands** - Individual slit metal strips, or sides of an expanded metal pattern

**Thickness** - Standard: Gauge or thickness of the sheet or coil from which the expanded metal was produced; Flattened: Overall thickness of the finished sheet.

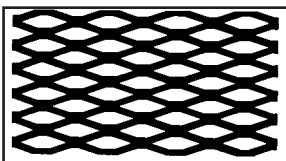
**Width** - Standard: Amount of metal fed into the expanding machine, which is slit & stretched with each stroke of the upper die; Flattened: Width of the strand.

**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".

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

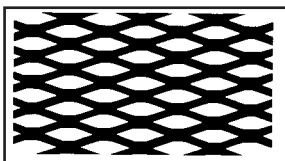


Out of Square

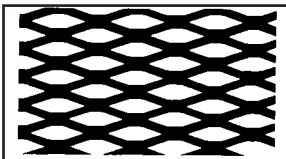


Standard Sheets

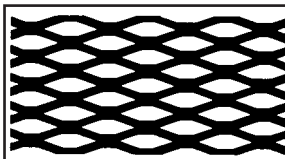
Bond or machine run all sides (Some flattened metal patterns may result in one random sheared LWD)



Random Sheared SWD & LWD



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



Bond 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.

### 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-galvanizing** - Zinc finish applied to sheets to provide weather resistance.

**Deburring** - Remove burrs and sharp edges by wire brushing 9"-72" SWD, 50"-150" LWD. Not all styles will be deburred.

**Leveling** - A plane of the sheet leveled without flattening strands or bonds.

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

STANDARD TOLERANCES FOR STOCK SIZE OR MACHINE RUN SHEETS	Std. Tolerances		Standard		Flattened		Grating/Catwalk	
	Material		Carbon/Alum	Stainless	Carbon/Alum	Stainless	Carbon/Alum	Stainless
	SWD per ft of width		+3/8" -0"	+1/2" -0"	+3/8" -0"	+1/2" -0"	+3/8" -0"	+1/2" -0"
	LWD overall		+1/2" -0"		+3/4" -0"		+1/2" -0"	



**STOCK & AVAILABILITY LIST (list 1 of 3)**

Style	Stock Size (Ft)		Pounds/ 100 sq. ft.		Design Sizes (In)		Opening Sizes (In)		Strand Size (In)		Overall Thickness (In)	Designs Per sq. ft		% Open Area
	Width SWD	Lgth LWD	Plain	Galv	SWD	LWD	SWO	LWO	Width	Thick		SWD	LWD	
Carbon and Hot Dipped Galvanized* Steel / <i>FLATTENED</i>														
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	11.60	35%
1/4" - #18	3,4	8	108	135	.250	1.050	.118	.715	.080	.040	.040	48	11.60	35%
1/2" - #40 (18ga)	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 4	8 10	66	83	.500	1.250	.312	1.000	.097	.039	.039	24	9.500	60%
1/2" - #16	3,4,5 4	8,10 12	82	98	.500	1.250	.312	1.000	.096	.050	.050	24	9.500	63%
1/2" - #13	3,4,6 3,4,5	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	.923	2.100	.750	1.750	.111	.048	.048	13	5.700	74%
3/4" - #14	3,4	8,10	63	74	.923	2.100	.688	1.813	.105	.061	.061	13	5.700	74%
3/4" - #13	3,4 3,4,5	8 10	75	88	.923	2.100	.688	1.781	.106	.078	.078	13	5.700	74%
3/4" - #10 (13ga)	special order		114	128	.923	2.100	.637	1.755	.160	.078	.078	13	5.700	68%
3/4" - #9 (10ga)	3,4,6 3 3,4,5,6 4	8 9 10 12	171	188	.923	2.100	.563	1.688	.165	.120	.120	13	5.700	63%
1" - #16	4	8	41	50	1.000	2.500	.813	2.250	.098	.050	.050	12	4.680	78%
1-1/2" - #16 (lt)	4	8	29	n/a	1.330	3.200	1.175	2.620	.093	.050	.050	9	3.750	83%
1-1/2" - #16	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 3,4	8 10	57	66	1.330	3.200	1.062	2.750	.116	.078	.078	9	3.750	80%
1-1/2" - #9 (10ga)	3,4 3,4,5	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	83%

\*Galvanized available where lbs/100 sq. ft. provided.

Above material conforms to Military Specification MIL-M-17194D Type II Class 1 &amp; ASTM 1267 Type II Class 1.

**Stainless Steel - Type 304 & 316\*\* / FLATTENED**

1/4" - #18	4	8	143	n/a	.250	1.200	.080	.660	.090	.047	.047	48	11.600	28%	
1/2" - #18	3,4**	8	69	n/a	.500	1.260	.312	1.000	.098	.040	.040	24	9.500	60%	
1/2" - #16	3,4**	8	86	n/a	.500	1.260	.312	1.000	.099	.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" - #18	3,4**	8	46	n/a	.923	2.100	.750	1.812	.118	.040	.040	13	5.700	75%	
3/4" - #16	3,4**	8	57	n/a	.923	2.100	.750	1.812	.118	.050	.050	13	5.700	75%	
3/4" - #13	3,4**	8	86	n/a	.923	2.100	.625	1.750	.120	.080	.080	13	5.700	75%	
3/4" - #9 (10ga)	3,4**	8	195	n/a	.923	2.100	.562	1.697	.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	.165	.119	.119	9	3.800	75%	

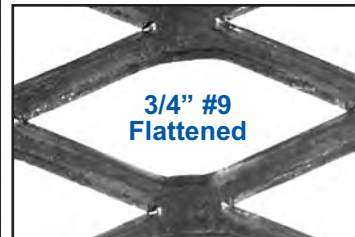
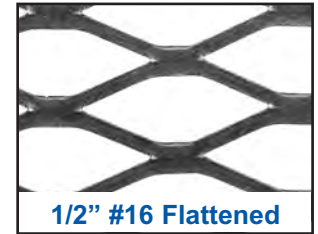
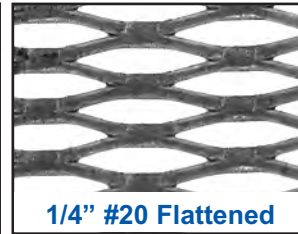
\*\*Type 316 available in 4x8 sheets only.

Above material conforms to Military Specification MIL-M-17194D Type I Class 3 &amp; ASTM 1267 Type I Class 3.

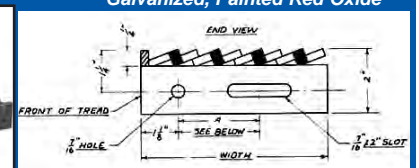
**Aluminum / FLATTENED**

1/2" - .051 (16ga)	3,4	8	27	n/a	.500	1.270	.312	1.000	.104	.040	.040	24	9.500	61%	
1/2" - .081 (12ga)	3,4	8	42	n/a	.500	1.270	.312	1.000	.105	.060	.060	24	9.500	58%	
3/4" - .051 (16ga)	3,4	8	16	n/a	.923	2.125	.750	1.812	.122	.040	.040	13	5.660	72%	
3/4" - .081lt (12ga)	3,4	8	30	n/a	.923	2.125	.687	1.750	.143	.070	.070	13	5.660	70%	
3/4" - .081hvy (12ga)	3,4	8	39	n/a	.923	2.125	.687	1.750	.181	.070	.070	13	5.660	63%	
3/4" - .125 (8ga)	3,4	8	62	n/a	.923	2.125	.625	1.750	.187	.095	.095	13	5.660	62%	
1-1/2" - .081 (12ga)	3,4	8	21	n/a	1.330	3.150	1.062	2.750	.143	.060	.060	9	3.800	77%	
1-1/2" - .125 (8ga)	3,4	8	43	n/a	1.330	3.150	1.000	2.750	.181	.080	.080	9	3.800	70%	

Above material conforms to Military Specification MIL-M-17999B 3003-H14 (MR) Class 2.

**SAME DAY SHIPMENTS****FABRICATION TO ORDER****Stair Treads**

Available In: Plain Steel, Galvanized, Painted Red Oxide

**Stair Tread Product Details**

Style	Size	"A"	Weight (lbs)	Overall Thickness	Safe Load (lbs)
<b>Unitread®</b>					
#4	8-1/2" x 24"	4-1/2"	10.7	2"	1000
#4	8-1/2" x 30"	4-1/2"	12.9	2"	925
#5	9-3/4" x 30"	7"	16.2	2"	925
<b>Heavy Duty (Special Order)</b>					
#4	8-1/2" x 24"	4-1/2"	12.8	2-1/2"	1650
#4	8-1/2" x 30"	4-1/2"	15.6	2-7/16"	1100
#5	9-3/4" x 30"	6"	18.6	2-5/8"	1025

\*Safe load with 1/4" Deflection

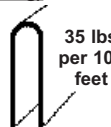
Available in lengths 16" to 48" inclusive in 1/2" increments.

Treads can be fabricated with standard bar grating end plates - see page 11 for details.

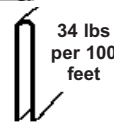
Special anti-skid nosings, i.e. abrasive cast, available. Please see page 12 or inquire at 1-800-GRATING.

**U-Edging Accessories****1" U-Edging 12' (18 ga. 5/16" opening)**

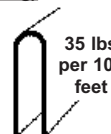
Carbon: Standard fits all but 3/4" #9, 1-1/2" #9, 1-1/2" #6, 2" #10, 2" #9  
 Flattened fits all  
 \*Aluminum: Standard fits all; Flattened fits all  
 \*Stainless: Standard fits all; Flattened fits all

**1" U-Edging 12' (18 ga. 1/8" opening)**

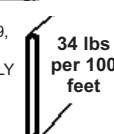
Carbon: Standard fits ONLY 1/4" #20, 1/4" #18  
 Flattened fits all  
 \*Aluminum: Standard fits NONE; Flattened fits all  
 \*Stainless: Standard fits NONE; Flattened fits all

**1" U-Edging 12' (18 ga. 1/4" opening)**

Carbon: Standard fits all but 3/4" #10, 3/4" #9, 1-1/2" #9, 1-1/2" #6, 2" #10, 2" #9  
 Flattened fits all  
 \*Aluminum: Standard fits all but 3/4" .081hvy, 3/4" .125, 1-1/2" .125; Flattened fits all  
 \*Stainless: Standard fits all but 3/4" #9, 1-1/2" #9  
 Flattened fits all

**1" U-Edging 12' (18 ga. 1/16" opening)**

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 ONLY 1/2" .051, 3/4" .051, 1-1/2" .081  
 \*Stainless: Standard fits NONE; Flattened fits all  
 BUT 3/4" #13, 3/4" #9, 1-1/2" #13, 1-1/2" #9



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

**1-800-472-8464****brown-campbell.com****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 & AVAILABILITY LIST** (list 2 of 3)

Style	Stock Size (Ft)		Pounds/ 100 sq. ft.		Design Sizes (In)		Opening Sizes (In)		Strand Size (In)		Overall Thickness (In)	Designs Per sq. ft.		% Open Area
	Width SWD	Lgth LWD	Plain	Galv	SWD	LWD	SWO	LWO	Width	Thick		SWD	LWD	
Carbon and Hot Dipped Galvanized* Steel / STANDARD														
3/32" - #24	4	2	57	n/a	.140	.240	.062	.135	.040	.024	.065	86	50	40%
3/16" - #22	4 8	4 3	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	.036	.135	48	12	45%
1/4" - #18	4	8	114	143	.250	1.000	.110	.718	.072	.048	.147	48	12	43%
1/2" - #40 (18ga)	special order		40	n/a	.500	1.200	.440	.938	.051	.048	.110	24	10	82%
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	88	.500	1.200	.438	.938	.088	.048	.172	24	10	72%
1/2" - #16	4 4,6	8 10	86	104	.500	1.200	.375	.938	.087	.060	.175	24	10	65%
1/2" - #13	4,6	8,10	147	174	.500	1.200	.312	.938	.096	.092	.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	.090	.205	13	6	76%
3/4" - #10 (13ga)	4,6 6	8 10	120	134	.923	2.000	.750	1.625	.144	.090	.290	13	6	72%
3/4" - #9 (10ga)	4,6 4,5 6	8,10 10 12	180	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 6	8 10	60	68	1.330	3.000	1.188	2.500	.105	.090	.242	9	4	85%
1-1/2" - #10 (13ga)	4,6	8,10	79	90	1.330	3.000	1.188	2.500	.138	.090	.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" - #6 (6ga)	4 6	8,10 10,12	250	275	1.330	3.000	1.110	2.313	.203	.194	.433	9	4	69%
2" - #10 (13ga)	special order		68	77	1.850	4.000	1.630	3.438	.164	.092	.327	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 lbs/100 sq. ft. provided.

Above material conforms to Military Specification MIL-M-17194D Type II Class 1 &amp; ASTM 1267 Type II Class 1.

**Stainless Steel - Type 304 & 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	.325	.875	.119	.093	.225	24	10	52%	
3/4" - #18	3, 4**	8	48	n/a	.923	2.000	.812	1.750	.106	.050	.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	.093	.202	13	6	80%	
3/4" - #9 (10ga)	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	2.750	.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	.093	.222	9	4	83%	
1-1/2" - #9 (10ga)	3, 4**	8	137	n/a	1.330	3.000	1.125	2.500	.155	.140	.280	9	4	77%	

\*\*Type 316 available in 4x8 sheets only.

Above material conforms to Military Specification MIL-M-17194D Type I Class 3 &amp; ASTM 1267 Type I Class 3.

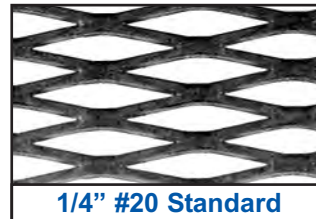
**Aluminum / STANDARD**

3/16" - .032	4	4	16	n/a	.190	.500	.160	.360	.034	.032	.070	63	24	66%	
1/2" - .051(16ga)	3, 4	8	27	n/a	.500	1.200	.375	.937	.093	.051	.158	24	10	65%	
1/2" - .081 (12ga)	3, 4, 5	8, 10	44	n/a	.500	1.200	.375	.937	.096	.081	.186	24	10	60%	
3/4" - .051 (16ga)	3, 4	8	17	n/a	.923	2.000	.812	1.750	.109	.051	.200	13	6	78%	
3/4" - .081lt (12ga)	3, 4	8	32	n/a	.923	2.000	.750	1.680	.129	.081	.220	13	6	76%	
3/4" - .081hy (12ga)	3, 4	8	41	n/a	.923	2.000	.750	1.680	.165	.081	.300	13	6	69%	
3/4" - .125 (8ga)	3, 4	8	65	n/a	.923	2.000	.687	1.680	.169	.125	.305	13	6	68%	
1-1/2" - .081 (12ga)	3, 4	8	22	n/a	1.330	3.000	1.187	2.500	.128	.081	.240	9	4	85%	
1-1/2" - .125 (8ga)	3, 4	8	43	n/a	1.330	3.000	1.187	2.500	.162	.125	.300	9	4	79%	

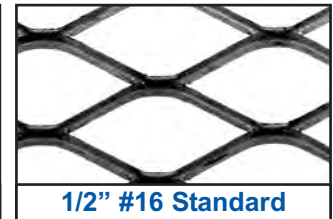
Above material conforms to Military Specification MIL-M-17999B 3003-H14 (MR) Class 2.

**STOCK & AVAILABILITY LIST** (list 3 of 3)

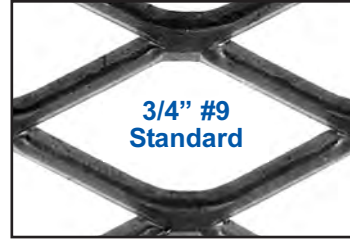
Carbon and Hot Dipped Galv. Steel / STANDARD Grating & Catwalk															Carbon and Hot Dipped Galvanized Steel / FLATTENED Grating														
Aluminum / STANDARD Grating															Stainless Steel - Type 304 / STANDARD Grating														
*Also available in Catwalk: 10' wide x multiple lengths of 2', 2-1/2', 3', 6', 7-1/2' & 8'																													



1/4" #20 Standard



1/2" #16 Standard



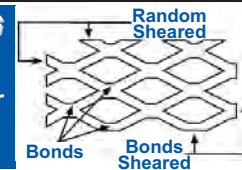
3/4" #9 Standard



1-1/2" #9 Standard

4.27# CATWALK GRATING  
Same configuration for 3.14# CARBON and 3.3# 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**

#/SF	24"	36"	48"
<b>Carbon Steel</b>			
3.0 lbs	U 275	100	n/a
	D 250	.220	n/a
	C 275	165	75
	D 275	.250	.250
	U 375	150	50
3.14 lbs	D 250	.240	.250
	C 375	155	75
	D 250	.250	.250
	U 350	150	50
4.0 lbs	D 240	.245	.250
	C 440	220	100
	D 250	.250	.250
	U 500	165	60
4.27 lbs	D 245	.245	.250
	C 400	225	100
	D 250	.240	.250
	U 600	175	100
5.0 lbs	D 240	.240	.250
	C 540	310	140
	D 245	.250	.250
	U 800	300	115
6.25 lbs	D 220	.250	.240
	C 800	300	150
	D 220	.240	.240
	U 800	400	165
7.0 lbs	D 210	.250	.240
	C 800	350	175
	D 220	.240	.250

**Aluminum**

2.0	C 250	100	50
	D 250	.250	.250

**Stainless Steel**

3.3	C n/a	150	50
	D n/a	.197	.135
4.5	C 300	150	100
	D 217	.192	.212

U- Uniform Load (lb/sq. ft.)  
C-Concentrated Load (lb/sq. ft.)  
D- Deflection (in)



## Brown-Campbell Deck Products

Brown-Campbell is an acknowledged leader in the construction products industry and offers an extensive product line of quality steel roof and floor decks 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

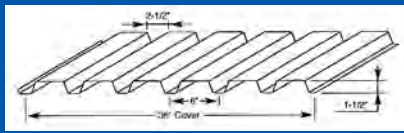
Ideal for many non-Residential roofing needs. Designed for PITCHED, FLAT, AND ARCHED CONSTRUCTION ROOFS and ideal for many applications including arenas, auditoriums, malls, schools and supermarkets. Diaphragm design with proper attachment patterns can provide lateral stability, reducing the need for 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	1.8#	1.7#		
20	2.2#	2.1#		
18	2.9#	2.8#		
16	3.6#	3.5#		

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

Number of Spans	Gauge	Span - Feet & Inches									
		5'-0"	5'-6"	6'-0"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
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
	16	206	157	123	99	81	68	58	50	44	39
2 Span	22	100	82	69	59	51	45	39	35	31	
	20	122	101	85	73	63	55	48	43	38	34
	18	163	135	113	97	84	73	64	57	51	45
	16	205	170	143	122	105	92	81	72	64	57
3 Span	22	124	103	86	74	64	56	49	43	39	35
	20	152	126	106	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

1-800-472-8464

## STOCK LIST

Profile	Type	Gauge	Finish
<b>Roof Deck</b>			
	1-1/2" Type B	18, 20, 22	Painted, Galvanized
	1-1/2" Type B-White Bottom	20	Painted
	1-1/2" Type F	20	Galvanized
		22	Painted
	3" Type N	18, 20	Galvanized
<b>Composite Floor Deck</b>			
	1-1/2" - Not Interlocking	18, 20	Galvanized
	2" - Interlocking	18, 20	Galvanized
	3" - Interlocking	16, 18, 20	Galvanized
<b>Form Deck</b>			
	Type S	24, 28	Galvanized
	Type HD	22	Galvanized

Stock sizes vary by product, please inquire.

### Other Deck Products Available

<b>Roof Deck</b>	
	1-1/2" Type A
	4-1/2" Type D
	1-1/2" Type L
	3" Type L
<b>Form Deck</b>	
	Type EH
	Type SD
	Type FM



### 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.com

## BROWN-CAMPBELL COMPOSITE FLOOR DECK

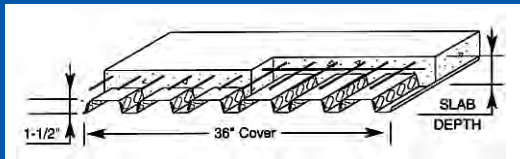
Designed for non-residential applications in **LOW-RISE, HIGH-RISE, AND MANUFACTURING** sectors. Offers the dual purpose of 1) acting as a working platform before and during concrete placement, thereby eliminating the costly effort of utilizing wood forms, and 2) acting as a positive reinforcement for 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 from steel conforming to ASTM A611 and galvanized floor deck is manufactured from 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-60, 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



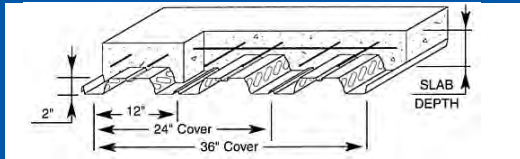
Gauge	psf
22	1.7#
20	2.0#
18	2.7#
16	3.4#



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

Total Slab Depth D	Gauge	Maximum Unshored Clear Spans			Composite Properties		Superimposed Live Loads - psf (no studs) Span - Feet & Inches													
		Single Span	Double Span	Triple Span	lavg in/ft	Sc in/ft														
		Span	Span	Span																
Wt. Conc.	Area Conc.	4"	22	5'-10"	7'-9"	7'-11"	3.573	.887	400	343	292	251	217	189	166	146	129	114	101	90
36.3 psf 20.6 in <sup>2</sup>		18	20	6'-9"	9'-0"	9'-2"	3.854	1.052	400	400	352	303	262	229	201	178	158	140	125	111
		16	18	7'-2"	9'-5"	9'-8"	4.333	1.345	400	400	360	310	269	235	206	182	161	142	128	115
		16	18	8'-4"	10'-6"	10'-11"	4.782	1.638	400	400	360	310	269	235	206	182	161	142	128	115
4-1/2" 42.4 psf 24.8 in <sup>2</sup>		22	22	5'-6"	7'-5"	7'-6"	5.107	1.087	400	400	360	309	268	233	205	180	160	142	126	113
		20	18	6'-4"	8'-7"	8'-8"	5.496	1.291	400	400	400	373	324	283	249	220	195	174	156	140
		18	16	6'-9"	8'-11"	9'-3"	6.160	1.653	400	400	400	383	332	290	255	226	200	179	160	143
5" 48.4 psf 29.3 in <sup>2</sup>		22	22	5'-3"	7'-1"	7'-2"	7.022	1.293	400	400	400	370	320	279	245	216	191	170	152	136
		20	18	6'-1"	8'-2"	8'-4"	7.544	1.538	400	400	400	400	388	339	298	264	235	209	187	168
		18	16	6'-5"	8'-6"	8'-9"	8.431	1.972	400	400	400	400	398	348	307	271	241	215	193	173
5-1/2" 54.4 psf 34.1 in <sup>2</sup>		22	22	5'-0"	6'-9"	6'-10"	9.360	1.503	400	400	400	400	374	326	287	253	224	199	178	159
		20	18	5'-10"	7'-10"	7'-11"	10.036	1.791	400	400	400	400	400	397	349	309	275	245	220	197
		18	16	6'-2"	8'-2"	8'-5"	11.187	2.301	400	400	400	400	400	400	360	318	283	253	227	204
6" 60.5 psf 39.4 in <sup>2</sup>		22	22	4'-10"	6'-6"	6'-7"	12.298	2.824	400	400	400	400	400	400	360	318	283	253	227	204
		20	18	5'-7"	7'-6"	7'-8"	13.012	2.048	400	400	400	400	400	400	400	355	316	282	253	227
		18	16	5'-11"	7'-10"	8'-1"	14.468	2.636	400	400	400	400	400	400	400	366	326	291	261	235
		16	18	6'-10"	8'-9"	9'-1"	15.883	3.242	400	400	400	400	400	400	400	366	326	291	261	235

### 2" Interlocking Composite Floor Deck

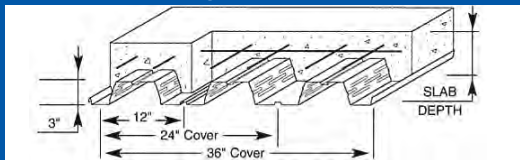


Gauge	psf
22	2.0#
20	2.3#
18	3.0#
16	3.7#

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

Total Slab Depth D		Maximum Unshored Clear Spans		Composite Properties		Superimposed Live Loads - psf (no studs)													
						Span - Feet & Inches													
Wt. Conc.		Single Span	Double Span	Triple Span	lavg in/ft	Sc in/ft	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	
Area Conc.	Gauge																		
4-1/2" 42.3 psf 29.6 in <sup>2</sup>	22	7'-1"	9'-1"	9'-4"	5.519	1.081	358	308	266	232	204	179	159	141	125	112	100	90	
	20	8'-3"	10'-4"	10'-9"	5.917	1.288	400	372	323	283	248	220	195	174	155	139	125	113	
	18	9'-3"	11'-5"	11'-10"	6.586	1.653	400	383	332	290	255	226	200	179	160	143	129	116	
5" 48.3 psf 33.8 in <sup>2</sup>	16	10'-9"	12'-11"	13'-0"	7.219	2.020	400	383	332	290	255	226	200	179	160	143	129	116	
	22	6'-9"	8'-7"	8'-11"	7.481	1.277	400	365	316	276	242	213	189	168	149	134	120	107	
	20	7'-10"	9'-11"	10'-3"	8.006	1.522	400	400	383	335	295	261	232	207	185	166	149	135	
5-1/2" 54.4 psf 38.1 in <sup>2</sup>	18	8'-9"	10'-11"	11'-3"	8.889	1.954	400	400	394	345	304	269	239	213	191	171	154	139	
	16	10'-2"	12'-4"	12'-8"	9.733	2.394	400	400	394	345	304	269	239	213	191	171	154	139	
	22	6'-5"	8'-3"	8'-7"	9.863	1.478	400	400	367	320	281	248	220	195	174	156	140	126	
6" 60.4 psf 42.7 in <sup>2</sup>	20	7'-5"	9'-6"	9'-10"	10.536	1.763	400	400	400	390	343	304	270	241	216	194	175	158	
	18	8'-4"	10'-5"	10'-9"	11.674	2.268	400	400	400	400	354	313	279	249	223	200	180	163	
	16	9'-8"	11'-10"	12'-3"	12.769	2.784	400	400	400	400	354	313	279	249	223	200	180	163	
6-1/2" 66.5 psf 47.4 in <sup>2</sup>	22	6'-2"	7'-11"	8'-2"	12.702	1.684	400	400	400	366	322	284	252	224	200	179	161	144	
	20	7'-2"	9'-1"	9'-5"	13.548	2.010	400	400	400	400	393	348	309	276	247	222	200	181	
	18	8'-0"	10'-0"	10'-4"	14.981	2.589	400	400	400	400	400	359	320	285	256	230	207	187	
6-3/4" 72.5 psf 50.0 in <sup>2</sup>	16	9'-3"	11'-4"	11'-9"	16.369	3.184	400	400	400	400	400	359	320	285	256	230	207	187	
	22	6'-0"	7'-7"	7'-11"	16.039	1.893	400	400	400	400	363	320	284	253	226	202	182	164	
	20	7'-0"	8'-9"	9'-1"	17.081	2.262	400	400	400	400	400	393	349	312	280	252	227	205	
6-7/8" 78.5 psf 54.0 in <sup>2</sup>	18	7'-10"	9'-8"	10'-0"	18.850	2.917	400	400	400	400	400	400	361	323	290	261	235	213	
	16	9'-0"	10'-11"	11'-4"	20.575	3.594	400	400	400	400	400	400	361	323	290	261	235	213	

### 3" Interlocking Composite Floor Deck



Gauge	psf
22	2.1#
20	2.5#
18	3.3#
16	4.1#



Forming  
Type B  
Roof Deck

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

Total Slab Depth D	Gauge	Maximum Unshored Clear Spans		Composite Properties		Superimposed Live Loads - psf (no studs) Span - Feet & Inches														
		Single Span	Double Span	Triple Span	lavg in/ft	Sc in/ft														
							9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"		
Wt. Conc.	Area Conc.	5-1/2"	22	9'-1"	10'-1"	10'-5"	9.373	1.331	253	224	198	176	157	141	126	113	102	92	83	75
48.3 psf 35.4 in <sup>2</sup>	20	10'-6"	12'-8"	13'-2"	10.014	1.589	310	274	244	217	195	175	158	142	129	117	106	96		
	18	11'-7"	13'-10"	14'-3"	11.089	2.042	319	282	251	224	201	180	162	147	133	120	109	99		
6"	16	13'-3"	15'-6"	15'-7"	12.125	2.502	319	282	251	224	201	180	162	147	133	120	109	99		
	22	8'-4"	9'-3"	9'-7"	12.034	1.534	293	259	230	204	182	163	147	132	119	107	97	87		
	20	10'-0"	12'-2"	12'-7"	12.835	1.832	358	317	282	252	226	203	183	165	150	136	123	112		
	18	11'-0"	13'-2"	13'-8"	14.181	2.354	369	327	290	259	233	209	189	170	154	140	127	116		
54.4 psf 39.5 in <sup>2</sup>	16	12'-7"	14'-10"	15'-2"	15.483	2.886	369	327	290	259	233	209	189	170	154	140	127	116		
	22	7'-9"	8'-6"	8'-11"	15.164	1.745	335	296	262	234	209	187	168	151	136	123	111	100		
6-1/2"	20	9'-7"	11'-8"	11'-11"	16.149	2.084	400	362	322	288	258	232	209	189	171	156	141	129		
	18	10'-6"	12'-8"	13'-2"	17.811	2.679	400	373	332	297	266	240	216	195	177	161	146	133		
	16	12'-0"	14'-4"	14'-10"	19.426	3.290	400	373	332	297	266	240	216	195	177	161	146	133		
7"	22	7'-2"	8'-0"	8'-8"	11.981	1.963	378	334	296	264	236	212	190	171	154	140	126	114		
	20	9'-4"	11'-0"	11'-2"	19.997	2.344	400	400	364	325	292	262	237	214	194	176	160	146		
	18	10'-3"	12'-3"	12'-8"	22.021	3.016	400	400	375	336	301	271	245	222	201	182	166	151		
	16	11'-8"	13'-9"	14'-3"	23.995	3.708	400	400	375	336	301	271	245	222	201	182	166	151		
7-1/2"	22	6'-9"	7'-6"	7'-9"	22.985	2.185	400	373	331	295	264	237	213	192	173	157	142	128		
	20	9'-0"	10'-4"	10'-5"	24.419	2.610	400	400	400	363	326	294	265	240	218	198	180	164		
	18	10'-0"	11'-10"	12'-3"	26.850	3.363	400	400	400	376	337	304	274	248	225	205	187	170		
	16	11'-5"	13'-4"	13'-9"	29.231	4.139	400	400	400	376	337	304	274	248	225	205	187	170		



## Grip Strut® Safety Grating

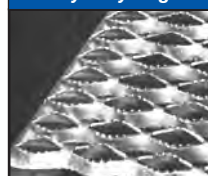
Helps reduce accident rates by providing a safer walking and working surface than any other available grating product. Its serrated surface gives maximum slip protection and performance under practically all conditions and in every direction. Every year industrial accidents- falls, tripping over debris, 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**

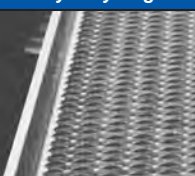
### Plank

Regular - Pgs. 26-29  
Heavy Duty - Pg. 30



### Walkway

Regular - Pgs. 26-29  
Heavy Duty - Pg. 30



### Stair Treads

Regular - Pg. 29  
Heavy Duty - Pg. 30



**Rooftop Walkway Systems**  
Pg. 29




**Work Platforms**  
Pg. 29



**Accessories**  
Pg. 31

## STOCK & AVAILABILITY LIST

Catalog No.	Diamond	Width (In)	Channel Height (In)	Catalog No.	Diamond	Width (In)	Channel Height (In)
<b>PRE-GALVANIZED- 14 Ga. Serrated</b>				<b>HEAVY DUTY PRE-GALV. - 10 Ga. Serrated</b>			
11014 Rung	1	2-1/2	1-1/8	H-32510	3	13-3/4	2-1/2
21514	2	4-3/4	1-1/2	H-52010	5	23-1/4	2
22014	2	4-3/4	2	H-55010 U-Walkway	5	24	5
22514	2	4-3/4	2-1/2	H-62010	6	27-3/4	2
31514	3	7	1-1/2	H-65010 U-Walkway	6	30	5
32014	3	7	2	H-82010	8	36	2
32514	3	7	2-1/2	H-82510	8	36	2-1/2
41514	4	9-1/2	1-1/2	H-85010 U-Walkway	8	36	5
42014	4	9-1/2	2	<b>Additional Heavy Duty Widths and Lengths Available</b>			
42514	4	9-1/2	2-1/2	<b>5052 ALUMINUM-.080" Ga. Serrated (except*)</b>			
51514	5	11-3/4	1-1/2	22012-A	2	4-3/4	2
52014	5	11-3/4	2	31512-A	3	7	1-1/2
52514	5	11-3/4	2-1/2	32012-A	3	7	2
81514	8	18-3/4	1-1/2	41512-A	4	9-1/2	1-1/2
82014	8	18-3/4	2	42012-A	4	9-1/2	2
82514	8	18-3/4	2-1/2	42010-A (*.100" ga.)	4	9-1/2	2
102014	10	24	2	51512-A	5	11-3/4	1-1/2
103014	10	24	3	52012-A	5	11-3/4	2
104514 U-Walkway	10	24	4-1/2	81512-A	8	18-3/4	1-1/2
<b>PRE-GALVANIZED- 12 Ga. Serrated</b>				82012-A	8	18-3/4	2
21512	2	4-3/4	1-1/2	<b>304 STAINLESS STEEL- 16 Ga. Serrated</b>			
22012	2	4-3/4	2	22016-S	2	4-3/4	2
22512	2	4-3/4	2-1/2	42016-S	4	9-1/2	2
31512	3	7	1-1/2	52016-S	5	11-3/4	2
32012	3	7	2	<b>Stainless Steel also available in Type 316L</b>			
32512	3	7	2-1/2				
33012	3	7	3				
41512	4	9-1/2	1-1/2	<b>CATALOG NO. DENOTATION</b>			
42012	4	9-1/2	2	<b>1st No.:</b> # of diamonds to width or plank			
42512	4	9-1/2	2-1/2	<b>2nd &amp; 3rd Nos.:</b> Height (plank) or depth (walkway)			
43012	4	9-1/2	3	<b>4th &amp; 5th Nos.:</b> Gauge			
51512	5	11-3/4	1-1/2	<b>After Hyphen:</b> Type of Material (no hyphen denotes Pre-Galvanized Steel)			
52012	5	11-3/4	2	<b>Example 1: 21514</b>			
52512	5	11-3/4	2-1/2	<b>Example 2: 21514-B</b>			
53012	5	11-3/4	3	2: 2 Diamonds			
81512	8	18-3/4	1-1/2	15: 1-1/2" height			
82012	8	18-3/4	2	14: 14 gauge			
82512	8	18-3/4	2-1/2	none: Pre-Galvanized			
83012	8	18-3/4	3	-B: Black (Plain) Steel			
101512	10	24	1-1/2				
102012	10	24	2				
103012	10	24	3				
104512 U-Walkway	10	24	4-1/2				

Items above also available in Black (HRP&O plain Stl)

### 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.

### 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:

- **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.

### 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 .18" 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:

1) **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.

2) **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 lbs., (D) for corresponding deflection in inches.





## Load Table

## 3-Diamond - 7" width


	Channel Height In (mm)	Wgt lb/lin ft (kg/m)	Catalog No.	Clear Span																	
Material				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	
Steel 14 ga.	1-1/2 (38.1)	3.0 (4.46)	31514	U 899	577	402	269	227	180	147	122	103	*Available by special order. Allowable loads and deflections: U- uniform load (lb/sq ft); C- concentrated load (lb); D-defl. (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.								
				D .06	.10	.14	.20	.26	.33	.40	.49	.59									
				C 524	421	351	302	265	237	214	196	180									
				D .05	.08	.11	.16	.21	.26	.32	.39	.47									
	2 (50.8)	3.2 (4.76)	32014	U 1492	957	665	490	376	298	242	201	169	145	125	110	97	77	63			
				D .06	.09	.13	.17	.23	.29	.35	.43	.51	.61	.71	.81	.93	1.19	1.49			
				C 871	697	582	500	439	391	353	322	296	275	256	240	226	203	185			
				D .04	.07	.10	.14	.18	.23	.28	.34	.41	.48	.56	.65	.74	.95	1.19			
	2-1/2 (63.5)	3.5 (5.21)	32514	U 1712	1097	763	562	431	342	277	230	194	166	144	126	111	89	73	61	52	
				D .04	.06	.08	.11	.14	.18	.23	.27	.33	.39	.45	.52	.59	.76	.94	1.16	1.40	
				C 999	800	668	574	503	448	405	369	340	315	293	275	259	233	212	195	181	
				D .03	.04	.06	.09	.11	.15	.18	.22	.26	.31	.36	.41	.47	.61	.76	.93	1.12	
Steel 12 ga.	1-1/2 (38.1)	4.1 (6.10)	31512	U 1189	763	532	392	301	239	195	162	137	118	102	90	79					
				D .07	.11	.15	.21	.27	.35	.43	.52	.63	.74	.87	1.00	1.15					
				C 694	556	465	400	352	314	284	260	240	223	208	196	185					
				D .05	.08	.12	.17	.22	.28	.34	.42	.50	.59	.69	.80	.92					
	2 (50.8)	4.5 (6.70)	32012	U 1896	1216	846	623	478	379	308	256	216	185	160	140	124	99	82	68	58	
				D .05	.08	.11	.16	.20	.26	.32	.39	.47	.55	.64	.74	.85	1.08	1.36	1.67	2.01	
				C 1106	886	740	636	558	498	450	410	378	350	327	307	289	260	238	219	203	
				D .04	.06	.09	.12	.16	.21	.26	.31	.37	.44	.51	.59	.68	.87	1.09	1.33	1.61	
	2-1/2 (63.5)	4.9 (7.29)	32512	U 2836	1817	1263	929	712	564	457	379	319	272	235	206	181	144	118	98	83	
				D .04	.06	.09	.13	.17	.21	.26	.32	.38	.44	.52	.59	.68	.86	1.07	1.31	1.57	
				C 1654	1325	1105	948	831	740	667	608	558	516	481	450	423	378	343	314	290	
				D .03	.05	.07	.10	.13	.17	.21	.25	.30	.35	.41	.47	.54	.69	.86	1.05	1.25	
3 (76.2)	5.2 (7.74)	33012	U 3587	2298	1597	1174	900	712	578	478	403	344	297	259	228	181	148	123	104		
			D .04	.06	.08	.11	.14	.18	.22	.27	.32	.38	.44	.51	.58	.74	.92	1.12	1.34		
			C 1868	1675	1397	1199	1050	935	843	767	705	652	606	567	533	476	431	395	364		
			D .03	.04	.06	.09	.11	.14	.18	.22	.26	.30	.35	.41	.46	.59	.73	.89	1.07		
Aluminum Alloy 5052 12 ga. .080"	1-1/2* (38.1)	1.06 (1.58)	31512-A	U 667	443	301	221	168	133	108											
				D .10	.15	.22	.31	.40	.51	.63											
				C 395	316	263	226	197	175	157											
				D .08	.12	.18	.25	.32	.41	.50											
	2 (50.8)	1.15 (1.71)	32012-A	U 993	636	441	324	248	196	159	131	110	93	80							
				D .08	.13	.18	.25	.33	.42	.52	.63	.74	.86	1.00							
				C 579	463	386	331	290	257	232	211	192	177	165							
				D .06	.10	.15	.20	.27	.34	.42	.51	.59	.69	.80							
	2-1/2* (63.5)	1.24 (1.85)	32512-A	U 1492	955	663	487	373	295	239	197	166	141	122	106	93					
				D .07	.10	.15	.21	.28	.35	.43	.53	.63	.74	.85	.98	1.12					
				C 812	696	580	497	435	387	348	316	290	268	249	232	218					
				D .05	.08	.12	.17	.22	.28	.35	.42	.50	.59	.68	.78	.89					
3* (76.2)	1.33 (1.98)	33012-A	U 1833	1173	815	598	458	362	293	242	204	174	150	130	115						
			D .06	.09	.14	.19	.25	.31	.39	.47	.56	.66	.77	.88	1.00						
			C 846	846	713	611	535	475	428	389	356	329	305	285	267						
			D .03	.07	.11	.15	.20	.25	.31	.38	.45	.53	.61	.70	.80						

## Load Table

## 4-Diamond - 9-1/2" width

Material	Channel Height (mm)	Wgt lb/lin ft (kg/m)	Catalog No.	Clear Span																		
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"		
Steel 14 ga.	1-1/2 (38.1)	3.6 (5.36)	41514	U 663	426	296	219	168	134	109	90	77	*Available by special order. Allowable loads and deflections: U- uniform load (lb/sq ft); C- concentrated load (lb); D-defl. (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.									
				D .06	.10	.14	.20	.26	.33	.41	.50	.59										
				C 525	421	352	303	266	238	215	197	182										
				D .05	.08	.11	.16	.21	.26	.33	.40	.47										
	2 (50.8)	3.8 (5.65)	42014	U 1100	705	491	362	278	220	179	148	125	107	93	81	72	58	47				
				D .06	.09	.13	.17	.23	.29	.36	.43	.52	.61	.71	.82	.94	1.20	1.51				
				C 730	698	583	501	440	392	354	323	298	276	258	242	228	205	187				
				D .04	.07	.10	.14	.18	.23	.28	.35	.41	.49	.57	.66	.75	.96	1.20				
	2-1/2 (63.5)	4.1 (6.10)	42514	U 1262	809	563	415	318	252	205	170	144	123	106	93	82	66	54	45			
				D .04	.06	.08	.11	.14	.18	.23	.28	.33	.39	.45	.52	.60	.76	.95	1.17			
				C 730	730	669	574	504	449	406	370	341	316	295	277	261	235	214	197			
				D .02	.04	.06	.09	.12	.15	.18	.22	.26	.31	.36	.42	.48	.61	.76	.94			
Steel 12 ga.	1-1/2 (38.1)	5.0 (7.44)	41512	U 906	581	405	298	229	182	148	123	104	89	77	67	60						
				D .07	.11	.16	.21	.28	.36	.44	.54	.64	.76	.89	1.02	1.17						
				C 718	575	481	413	363	324	292	267	246	228	213	200	189						
				D .06	.09	.13	.17	.23	.29	.35	.43	.52	.61	.71	.82	.94						
	2 (50.8)	5.4 (8.04)	42012	U 1398	896	624	460	353	280	228	189	160	137	119	104	92	74	61	51	43		
				D .05	.08	.11	.16	.20	.26	.32	.39	.47	.55	.65	.75	.85	1.10	1.38	1.69	2.03		
				C 1107	887	741	637	559	499	451	412	380	353	329	309	292	264	241	222	206		
				D .04	.06	.09	.12	.16	.21	.26	.31	.37	.44	.52	.60	.68	.88	1.10	1.35	1.63		
	2-1/2 (63.5)	5.7 (8.48)	42512	U 2090	1339	931	685	525	416	338	280	236	201	174	152	134	107	87	73	62		
				D .04	.06	.09	.13	.17	.21	.26	.32	.38	.44	.52	.60	.68	.87	1.08	1.32	1.58		
				C 1400	1325	1106	949	832	741	668	609	559	518	482	452	425	380	345	316	293		
				D .03	.05	.07	.10	.13	.17	.21	.25	.30	.36	.41	.48	.54	.69	.86	1.05	1.27		
3 (76.2)	6.1 (9.08)	43012	U 2644	1694	1177	866	664	525	426	353	297	254	219	192	169	134	110	91	77			
			D .04	.06	.08	.11	.14	.18	.22	.27	.32	.38	.44	.51	.58	.74	.92	1.12	1.35			
			C 1400	1400	1398	1200	1051	936	844	769	706	653	608	569	535	478	434	397	367			
			D .02	.04	.06	.09	.11	.15	.18	.22	.26	.31	.35	.41	.47	.59	.74	.90	1.08			
Aluminum Alloy 5052 12 ga. .080"	1-1/2" (38.1)	1.28 (1.90)	41512-A	U 499	319	222	163	124	98													
				D .10	.15	.22	.31	.40	.51													
				C 395	316	263	226	197	175													
				D .08	.12	.18	.25	.32	.41													
	2 (50.8)	1.37 (2.03)	42012-A	U 732	468	325	239	183	145	117	97	81	69									
				D .08	.13	.18	.25	.33	.42	.52	.63	.74	.87									
				C 568	463	386	331	290	257	232	211	192	177									
				D .06	.10	.15	.20	.27	.34	.42	.51	.59	.69									
	2-1/2" (63.5)	1.46 (2.17)	42512-A	U 1099	704	489	359	275	217	176	145	122	104	90	78	69						
				D .07	.10	.15	.21	.28	.35	.43	.53	.63	.74	.85	.98	1.12						
				C 568	568	568	497	435	387	348	316	290	268	249	232	218						
				D .03	.07	.12	.17	.22	.28	.35	.42	.50	.59	.68	.78	.89						
3" (76.2)	1.55 (2.30)	43012-A	U 1350	864	600	441	338	267	216	179	150	128	110	96	84							
			D .06	.09	.14	.19	.25	.31	.39	.47	.56	.66	.77	.88	1.00							
			C 568	568	568	568	535	475	428	389	356	329	305	285	267							
			D .02	.05	.09	.14	.20	.25	.31	.38	.45	.53	.61	.70	.80							
Stainless Type 304 16 ga.	2 (50.8)	3.2 (4.76)	42016-S	U 720	462	322	238	183	145	118	98	83	71	59								
				D .05	.08	.11	.16	.20	.26	.32	.39	.47	.55	.61								
				C 570	457	382	329	289	258	234	214	197	184	165								
				D .04	.06	.09	.12	.16	.21	.26	.31	.38	.44	.49								
Stainless Type 316L 16 ga.	2 (50.8)	3.2 (4.76)	42016-SL	U 626	400	278	204	156	123	100	82	69	59	51								
				D .04	.06	.10	.13	.17	.22	.27	.32	.39	.45	.53								
				C 492	397	330	283	248	220	198	180	165	152	141								
				D .03	.05	.08	.10	.14	.17	.22	.26	.31	.36	.42								

SAME DAY CUTTING & FABRICATION



## Load Table

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

	Channel Height In (mm)	Wgt lb/lin ft (kg/m)	Catalog No.	Clear Span																				
Material				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"				
Steel 14 ga.	1-1/2 (38.1)	4.2 (6.25)	51514	U	536	344	240	177	136	108	88	74	62	*Available by special order. Allowable loads and deflections: U- uniform load (lb/sq ft); C- concentrated load (lb); D-defl. (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.										
				D	.06	.10	.14	.20	.26	.33	.41	.50	.60											
				C	525	422	353	304	267	239	216	198	183											
				D	.05	.08	.12	.16	.21	.26	.33	.40	.48											
	2 (50.8)	4.4 (6.55)	52014	U	890	571	397	293	225	178	145	120	102	87	76	66	59	47						
				D	.06	.09	.13	.17	.23	.29	.36	.43	.52	.61	.71	.83	.95	1.21						
				C	707	699	584	502	440	393	355	324	299	277	259	243	230	207						
				D	.04	.07	.10	.14	.18	.23	.29	.35	.42	.49	.57	.66	.76	.97						
	2-1/2 (63.5)	4.7 (6.99)	52514	U	1021	655	456	336	258	204	166	138	116	100	86	76	67	54	44					
				D	.04	.06	.08	.11	.14	.18	.23	.28	.33	.39	.45	.52	.60	.77	.96					
				C	707	707	669	575	505	450	407	371	342	317	296	278	262	236	216					
				D	.02	.04	.06	.09	.12	.15	.18	.22	.26	.31	.36	.42	.48	.62	.77					
Steel 12 ga.	1-1/2 (38.1)	5.9 (8.78)	51512	U	710	456	318	235	181	144	117	98	83	71	62	55	49							
				D	.07	.11	.15	.21	.28	.35	.44	.53	.64	.76	.89	1.03	1.18							
				C	695	558	467	402	354	317	287	263	244	227	213	201	190							
				D	.05	.08	.12	.17	.22	.28	.35	.43	.51	.60	.71	.82	.95							
	2 (50.8)	6.2 (9.23)	52012	U	1131	725	505	372	286	227	185	154	130	111	97	85	75	60	50	42				
				D	.05	.08	.11	.16	.20	.26	.32	.39	.47	.56	.65	.75	.86	1.11	1.39	1.70				
				C	1107	888	742	638	561	501	453	414	382	355	332	312	295	266	243	224				
				D	.04	.06	.09	.12	.16	.21	.26	.31	.38	.44	.52	.60	.69	.89	1.11	1.36				
	2-1/2 (63.5)	6.6 (9.82)	52512	U	1691	1083	753	554	425	337	273	226	151	141	123	109	87	71	59	50				
				D	.04	.06	.09	.13	.17	.21	.26	.32	.38	.45	.52	.60	.68	.87	1.09	1.33	1.60			
				C	1115	1115	1106	950	833	742	669	610	561	519	484	453	426	382	347	319	295			
				D	.02	.04	.07	.10	.13	.17	.21	.25	.30	.36	.41	.48	.55	.70	.87	1.06	1.28			
	3 (76.2)	7.0 (10.4)	53012	U	2138	1370	952	701	537	425	345	286	241	206	178	155	137	109	89	74	63			
				D	.04	.06	.08	.11	.14	.18	.22	.27	.32	.38	.44	.51	.58	.74	.93	1.13	1.36			
				C	1115	1115	1115	1115	1052	937	845	770	707	654	609	570	537	480	436	399	369			
				D	.02	.03	.05	.08	.11	.15	.18	.22	.26	.31	.36	.41	.47	.60	.74	.90	1.09			
Aluminum Alloy 5052 12 ga. .080"	1-1/2* (38.1)	1.49 (2.22)	51512-A	U	403	255	179	132	100															
				D	.10	.15	.22	.31	.40															
				C	395	316	263	226	197															
				D	.08	.12	.18	.25	.32															
	2 (50.8)	1.59 (2.36)	52012-A	U	592	379	263	193	148	117	95	78												
				D	.08	.13	.18	.25	.33	.42	.52	.63												
				C	466	466	386	331	290	257	232	211												
				D	.05	.10	.15	.20	.27	.34	.42	.51												
	2-1/2* (63.5)	1.67 (2.48)	52512-A	U	889	569	395	290	222	176	142	118	99	84	73	63								
				D	.07	.10	.15	.21	.28	.35	.43	.53	.63	.74	.85	.98								
				C	466	466	466	466	435	387	348	316	290	268	249	232								
				D	.02	.05	.10	.16	.22	.28	.35	.42	.50	.59	.68	.78								
3* (76.2)	1.75 (2.60)	53012-A	U	951	699	485	357	273	216	175	144	121	103	89	78	68								
			D	.05	.09	.14	.19	.25	.31	.39	.47	.56	.66	.77	.88	1.00								
			C	466	466	466	466	466	466	428	389	356	329	305	285	267								
			D	.02	.04	.07	.11	.17	.24	.31	.38	.45	.53	.61	.70	.80								
Stainless Type 304 16 ga.	2 (50.8)	3.7 (5.51)	52016-S	U	583	374	261	192	148	118	96	80	68	58	48									
				D	.05	.08	.11	.16	.20	.26	.32	.39	.47	.56	.61									
				C	464	458	323	330	290	259	235	215	199	185	165									
				D	.03	.06	.09	.12	.16	.21	.26	.32	.38	.45	.49									
Stainless Type 316L 16 ga.	2 (50.8)	3.7 (5.51)	52016-SL	U	406	324	225	165	126	100	81	66	56	47										
				D	.04	.06	.10	.13	.17	.22	.27	.32	.39	.45										
				C	398	397	330	283	248	220	198	180	165	152										
				D	.03	.05	.08	.10	.14	.17	.22	.26	.31	.36										

## Load Table

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

Material	Channel Height In (mm)	Wgt lb/lin ft (kg/m)	Catalog No.	Clear Span																			
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"			
Steel 14 ga.	1-1/2 (38.1)	6.1 (9.1)	81514	U	337	217	151	112	86	69	56	47	*Available by special order. Allowable loads and deflections: U- uniform load (lb/sq ft); C- concentrated load (lb); D-defl. (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.										
				D	.33	.27	.26	.29	.33	.38	.45	.55											
				C	263	211	178	153	135	121	110	101											
				D	.16	.15	.15	.16	.17	.19	.22	.25											
	2 (50.8)	6.3 (9.4)	82014	U	540	358	250	184	142	113	92	76	65	55	48	42							
				D	.48	.37	.34	.32	.34	.38	.43	.50	.58	.66	.77	.87							
				C	437	349	292	251	220	198	179	164	152	141	132	124							
				D	.24	.21	.20	.19	.20	.21	.23	.26	.29	.32	.36	.40							
	2-1/2 (63.5)	6.6 (9.8)	82514	U	540	411	286	211	162	129	105	87	74	63	55	48	43						
				D	.46	.39	.35	.28	.27	.28	.31	.35	.39	.44	.50	.57	.64						
				C	450	402	335	287	252	225	205	188	173	161	151	142	134						
				D	.24	.22	.20	.19	.19	.19	.20	.21	.23	.24	.27	.29	.32						
Steel 12 ga.	1-1/2 (38.1)	8.5 (12.6)	81512	U	446	287	201	148	115	91	75	63	53	46	40								
				D	.27	.22	.22	.26	.32	.39	.47	.56	.67	.80	.92								
				C	359	280	235	203	179	161	146	135	125	117	110								
				D	.12	.12	.12	.14	.16	.19	.22	.26	.30	.35	.40								
	2 (50.8)	8.9 (13.2)	82012	U	710	456	318	235	181	144	117	98	83	71	62	54	48						
				D	.31	.25	.23	.25	.28	.31	.37	.44	.51	.60	.68	.79	.90						
				C	554	444	371	319	282	253	229	210	194	181	169	160	151						
				D	.17	.15	.14	.15	.16	.17	.19	.22	.25	.28	.32	.36	.40						
	2-1/2 (63.5)	9.2 (13.7)	82512	U	810	680	473	348	267	212	172	143	120	103	89	78	69	55	45				
				D	.33	.31	.27	.26	.27	.29	.32	.37	.42	.49	.55	.63	.72	.90	1.12				
				C	800	663	553	475	416	371	334	307	282	262	244	229	216	194	177				
				D	.23	.20	.18	.18	.18	.18	.19	.21	.23	.25	.28	.31	.34	.41	.50				
3 (76.2)	9.6 (14.3)	83012	U	810	810	598	440	337	267	217	180	152	130	112	98	87	69	57	47	40			
			D	.32	.35	.30	.27	.26	.28	.31	.34	.39	.43	.49	.56	.62	.78	.96	1.17	1.40			
			C	800	800	699	600	526	468	422	385	353	327	307	288	271	243	221	203	189			
			D	.22	.23	.22	.20	.20	.20	.20	.21	.22	.24	.26	.28	.31	.37	.44	.52	.61			
Aluminum Alloy 5052 12 ga. .080"	1-1/2* (38.1)	2.11 (3.13)	81512-A	U	253	162	112	83															
				D	.49	.40	.39	.44															
				C	198	158	132	113															
				D	.24	.22	.22	.24															
	2 (50.8)	2.20 (3.27)	82012-A	U	308	237	165	121	93	73	59	49											
				D	.54	.50	.44	.44	.47	.53	.61	.71											
				C	290	232	193	166	145	129	116	106											
				D	.32	.28	.27	.27	.28	.30	.32	.36											
	2-1/2* (63.5)	2.29 (3.40)	82512-A	U	308	308	248	182	139	110	89	74	62	53									
				D	.51	.57	.54	.49	.50	.52	.57	.65	.73	.83									
				C	350	348	290	249	218	194	174	158	145	134									
				D	.37	.39	.35	.33	.33	.34	.35	.37	.40	.43									
3* (76.2)	2.39 (3.55)	83012-A	U	308	308	308	223	171	135	109	90	76	65	56	49								
			D	.50	.54	.62	.54	.52	.52	.56	.61	.68	.76	.86	.96								
			C	350	350	350	306	268	238	214	195	178	165	153	143								
			D	.37	.38	.41	.38	.37	.37	.37	.39	.40	.43	.46	.50								



## 10-Diamond Plank - 24" width

## Load Table

Material	Channel Height In (mm)	Wgt lb/lin ft (kg/m)	Catalog No.		Clear Span															
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"
Steel 14 ga.	2 (50.8)	7.4 (11.0)	102014	U	300	300	228	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					
				D	.34	.35	.32	.30	.29	.29	.30	.31	.33	.35	.37					
	3 (76.2)	7.9 (11.8)	103014	U	300	300	300	264	202	160	130	107	90	77	66	58	51	40		
				D	.42	.43	.46	.44	.39	.36	.35	.36	.39	.44	.45	.49	.54	.65		
				C	400	400	400	400	400	360	324	295	270	249	232	219	203	180		
				D	.33	.33	.34	.35	.37	.35	.33	.33	.32	.32	.33	.34	.35	.38		
Steel 12 ga.	2 (50.8)	10.4 (15.5)	102012	U	475	416	289	212	162	128	104	86	72	62	53	46				
				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				
	3 (76.2)	11.1 (16.5)	103012	U	475	475	475	392	300	237	192	159	133	114	98	85	75	59	48	
				D	.38	.39	.42	.38	.36	.34	.35	.37	.39	.43	.47	.52	.58	.70	.85	
				C	900	900	800	686	600	534	480	437	400	369	343	320	300	267	240	
				D	.34	.35	.33	.29	.27	.26	.26	.26	.26	.27	.29	.30	.32	.36	.41	

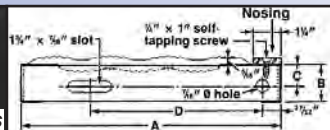
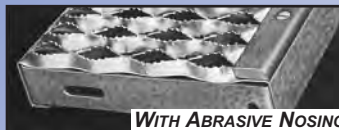
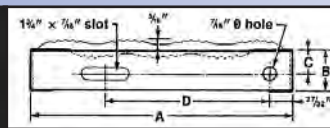
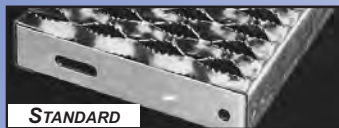
## 10-Diamond Walkway - 24" width

## Load Table

Steel 14 ga.	4.5	8.9 (13.2)	104514-U	U	300	300	300	300	300	263	213	176	148	126	109	95	83	66	53	43		
				D	.41	.41	.42	.45	.48	.47	.42	.40	.40	.41	.43	.45	.47	.55	.64	.75		
				C	400	400	400	400	400	400	400	400	400	400	380	355	333	296	266	242		
				D	.32	.33	.33	.33	.34	.35	.36	.38	.39	.41	.42	.41	.41	.42	.44	.47		
				U	475	475	475	475	475	420	340	281	236	201	173	151	133	105	85	70	59	
				D	.37	.37	.38	.40	.43	.43	.39	.37	.37	.39	.41	.44	.51	.59	.69	.80		
Steel 12 ga.	4.5	12.5 (18.6)	104512-U	C	900	900	900	900	900	850	773	709	654	607	567	531	472	425	387	354		
				D	.34	.34	.35	.35	.36	.37	.37	.35	.34	.33	.33	.33	.33	.35	.37	.40	.44	

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

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"
7"	1-1/2"	3/4"	3-3/8"	8-1/8"	1-1/2"	3/4"	4-1/2"
3 Diam	2"	1"	3-3/8"	3 Diam	2"	1"	4-1/2"
9-1/2"	1-1/2"	3/4"	5-7/8"	10-1/2"	1-1/2"	3/4"	6-7/8"
4 Diam	2"	1"	5-7/8"	4 Diam	2"	1"	6-7/8"
11-3/4"	1-1/2"	3/4"	8-1/8"	12-3/4"	1-1/2"	3/4"	9-1/8"
5 Diam	2"	1"	8-1/8"	5 Diam	2"	1"	9-1/8"

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



Heavy Duty  
Stair Treads  
...Page 30

## Regular Stair Treads

			Standard (No Nosing)		With Abrasive Nosing	
Span	Ga.	Channel Depth	Catalog No.*	Size	Catalog No.*	Size
STEEL						
Up to 42"	14 12	1-1/2"	T-21514	2 Diam: 4-3/4"	T-21514-N**	2 Diam: 5-3/4"
			T-31514	3 Diam: 7"	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"
Up to 48"	14 12	2"	T-22014	2 Diam: 4-3/4"	T-22014-N**	2 Diam: 5-3/4"
			T-32014	3 Diam: 7"	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"
ALUMINUM						
Up to 42"	.080"	2"	T-22012-A	2 Diam: 4-3/4"	T-22012-A-N**	2 Diam: 5-3/4"
			T-32012-A	3 Diam: 7"	T-32012-A-N	3 Diam: 8-1/8"
			T-42012-A	4 Diam: 9-1/2"	T-42012-A-N	4 Diam: 10-1/2"
			T-52012-A	5 Diam: 11-3/4"	T-52012-A-N**	5 Diam: 12-3/4"
STAINLESS STEEL						
Up to 30"	316L 16 ga	2"	T-42016-SL	4 Diam: 9-1/2"	n/a	n/a
			T-52016-SL	5 Diam: 11-3/4"	n/a	n/a
Up to 36"	304 16 ga	2"	T-42016-S	4 Diam: 9-1/2"	n/a	n/a
			T-52016-S	5 Diam: 11-3/4"	n/a	n/a

\*Catalog No. provided for 14 ga. - substitute last digit with a '2' for 12 ga.

\*\*Special Order

Above recommendations based on approx. min. loads of 300 lb. 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



## Custom Fabrication

## 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



## HEAVY DUTY GRIP STRUT® - PLANK & 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.

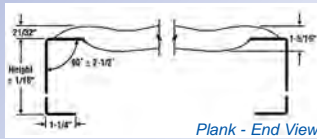
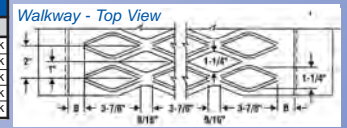
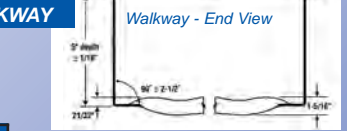


- HIGH LOAD CAPACITY**
- LONG LIFE**
- VERSATILE: MULTIPLE CONFIGURATIONS AVAILABLE**
- FAST INSTALLATION**
- ECONOMICAL TO INSTALL & USE**

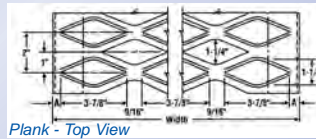


**HEAVY DUTY WALKWAY**

Heavy Duty Walkway			
Style	Width	'B'	Material
5 Diam.	24"	1-3/16"	Galv & Black
6 Diam.	30"	1-31/32"	Galv & Black
8 Diam.	36"	17/32"	Galv & Black



Plank - End View



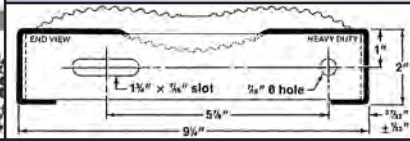
Plank - Top View

Heavy Duty Plank			
Style	Width	'A'	Material
2 Diam.	9-1/4"	15/32"	Galv & Black
3 Diam.	13-3/4"	1/2"	Galv & Black
5 Diam.	23-1/4"	13/16"	Galv & Black
6 Diam.	27-3/4"	27/32"	Galv & Black
8 Diam.	36"	17/32"	Galv & Black

## 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					Load Table			
Material	Thick-ness	Depth	Wgt (lb/ft)	Catalog No.	Clear Span			
					2'-0"	2'-6"	3'-0"	4'-0"
Steel	10 ga.	2"	7.4#	HT-22010	U 2412	1544	1026	629
					C 1860	1487	1240	929

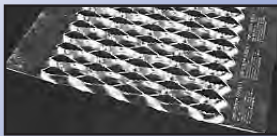
Table depicts maximum allowable tread loads.

## 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 ea. 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"
8 Diam	2-3/8" to 5-5/8"
10 Diam	3-1/4" to 7-5/8"

\*Can be mfg. 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

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

- SAWING
- NOTCHING
- CIRCLES
- CUTOUTS
- WELDING
- BANDING
- BLANKING
- BURNING
- SHEARING
- PAINTING
- GALVANIZING



1-800-GRATING



**INSTALLATION / ACCESSORIES****Anchor Plate Assembly (side to side installation)**

See catalog No. table (right). Select ACA's 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.

<b>3/8" J- Bolts</b>	
Channel Depth	Catalog No.
1-1/2"	ACA-15
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**

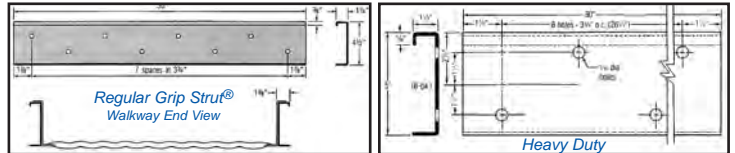
Catalog #12262 is shaped to fit in diamond opening. Punched to receive 5/16" carriage head bolt with square shank.

**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 9001:2008 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**

Note: May be supplied with or without end margins.

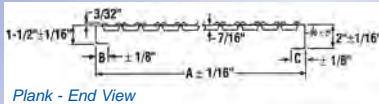
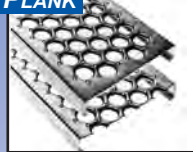


Perf-O Grip® Rooftop Walkway Systems also available



### PERF-O GRIP® - PLANK & WALKWAY

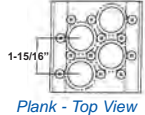
#### PLANK



Plank - End View

Note: May be supplied with or without end margins.

#### Perf-O Grip®

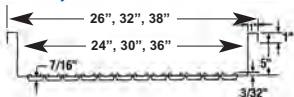


Plank - Top View

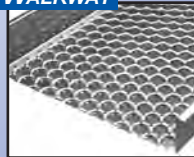
#### Plank Details

	Plank Width				
	5"	7"	10"	12"	18"
A	4-7/8"	6-7/8"	9-7/8"	11-7/8"	17-7/8"
B	15/16"	1-9/32"	1-7/16"	1-5/16"	1-7/32"
C	15/16"	25/32"	15/16"	13/16"	23/32"
D	1-19/32"	1-3/4"	1-9/16"	1-23/32"	1-11/32"

#### Walkway - End View



#### WALKWAY



## 1-800-GRATING

[brown-campbell.com](http://brown-campbell.com)



### 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:

- **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.**

## STOCK & AVAILABILITY

Catalog No.	Hole	Width (in)	Depth (in)
<b>PRE-GALVANIZED- 13 Ga. Steel</b>			
OGS1513	2	5	1-1/2
OGS2013	2	5	2
OG71513	3	7	1-1/2
OG72013	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

<b>PRE-GALVANIZED- 11 Ga. Steel</b>			
OG71511	3	7	1-1/2
OG72011	3	7	2
OG73011	3	7	3
OG101511	5	10	1-1/2
OG102011	5	10	2
OG103011	5	10	3
OG121511	6	12	1-1/2
OG122011	6	12	2
OG123011	6	12	3
OG181511	10	18	1-1/2
OG182011	10	18	2
OG183011	10	18	3
OG242011	13	24	2
OG243011	13	24	3
OG302011	16	30	2
OG303011	16	30	3
OG304011	16	30	4

<b>WALKWAYS- PRE-GALV. 11 GA. STEEL</b>			
OG245011W	13	24	5
OG305011W	16	30	5
OG365011W	20	36	5

<b>ALUMINUM- .125" GA.</b>			
OGA520125	2	5	2
OGA720125	3	7	2
OGA1020125	5	10	2
OGA1220125	6	12	2
OGA1820125	10	18	2

<b>304 STAINLESS STEEL- 16 GA.</b>			
OGS52016	2	5	2
OGS72016	3	7	2
OGS102016	5	10	2
OGS122016	6	12	2

<b>316 STAINLESS STEEL- 14 GA. -Available by Special Order-</b>			
OGS52014	2	5	2
OGS72014	3	7	2
OGS102014	5	10	2
OGS122014	6	12	2

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

### ACCESSORIES

#### J-Clip

Fasten grating securely to the supporting steel without drilling. Standard Finish: Galvanized.

#### 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 concentrically 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.

#### 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"-13 hex nuts and 1/2" flat washers

## 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





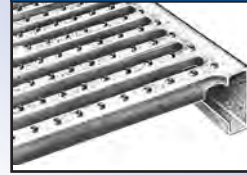
## Grate-Lock™ Grating Products

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.

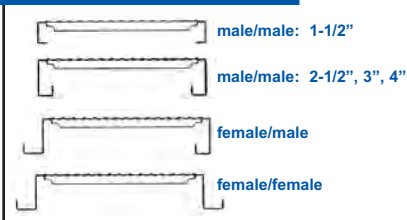
#### THINK ABOUT:

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

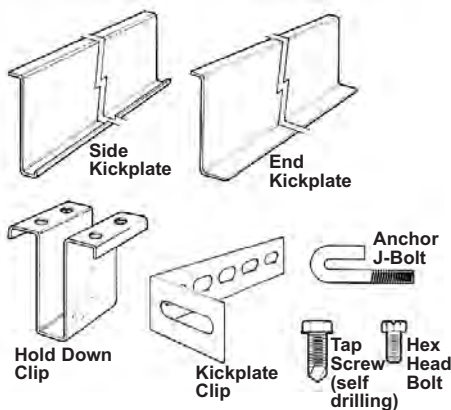
#### PLEASE SPECIFY:

- **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-2514	6-1/2
	M-SK-3014	7
	M-SK-4014	8
End Kickplate (14 Ga.) 12 ft. lengths	M-EK-2514	6-1/2
	M-EK-3014	7
	M-EK-4014	8
Kickplate Clip	M-KC	n/a
Hold Down Clip - Select by height of grating. (Self tapping screws sold separate.)	M-HC-15	1-1/2
	M-HC-25	2-1/2
	M-HC-30	3
	M-HC-40	4
Anchor J-Bolt (Washer & Nut not included)	M-250J	2-13/16
Hold Down Clamp (Bolt, nut, washer not included)	RTM-SW	Side Channel +1
Tap Screw - self drilling	M-SDST-25	1
3/8" Hex Head Bolt with nut and washer	M-100-B	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. Kickplates and plank sections are prepunched. For additional ease, planks can be straight, curved or angle cut with hand tools.



### 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.

### STOCK & AVAILABILITY

Catalog No.	Width (in)	Channel Height (in)	Open Area	Lbs./Lin. Ft.
<b>PRE-GALVANIZED- 18 Ga. Steel</b>				
GL121518	12	1-1/2	45%	2.9#
GL91518	9	1-1/2	43%	2.3#
GL61518	6	1-1/2	39%	1.9#
GL122518	12	2-1/2	45%	3.7#
GL92518	9	2-1/2	43%	3.2#
GL62518	6	2-1/2	39%	2.6#
GL32518	3	2-1/2	solid filler pnl	1.9#
GL123018	12	3	45%	3.9#
GL93018	9	3	43%	3.3#
GL63018	6	3	39%	2.8#
GL33018	3	3	solid filler pnl	2.1#
GL124018	12	4	45%	4.2#
GL94018	9	4	43%	3.7#
GL64018	6	4	39%	3.2#
GL34018	3	4	solid filler pnl	2.4#
<b>PRE-GALVANIZED- 16 Ga. Steel</b>				
GL121516	12	1-1/2	43%	3.5#
GL91516	9	1-1/2	41%	2.9#
GL61516	6	1-1/2	37%	2.3#
GL122516	12	2-1/2	43%	4.6#
GL92516	9	2-1/2	41%	3.9#
GL62516	6	2-1/2	37%	3.2#
GL32516	3	2-1/2	solid filler pnl	2.3#
GL123016	12	3	43%	4.8#
GL93016	9	3	41%	4.1#
GL63016	6	3	37%	3.4#
GL33016	3	3	solid filler pnl	2.5#
GL124016	12	4	43%	5.2#
GL94016	9	4	41%	4.6#
GL64016	6	4	37%	3.9#
GL34016	3	4	solid filler pnl	2.9#
<b>PRE-GALVANIZED- 14 Ga. Steel</b>				
GL121514	12	1-1/2	40%	4.2#
GL91514	9	1-1/2	38%	3.5#
GL61514	6	1-1/2	35%	2.7#
GL122514	12	2-1/2	40%	5.6#
GL92514	9	2-1/2	38%	4.8#
GL62514	6	2-1/2	35%	4.0#
GL32514	3	2-1/2	solid filler pnl	2.8#
GL123014	12	3	40%	5.9#
GL93014	9	3	38%	5.1#
GL63014	6	3	35%	4.3#
GL33014	3	3	solid filler pnl	3.1#
GL124014	12	4	40%	6.5#
GL94014	9	4	38%	5.6#
GL64014	6	4	35%	4.8#
GL34014	3	4	solid filler pnl	3.6#

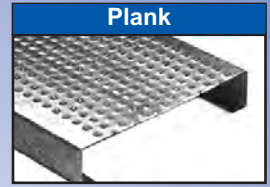
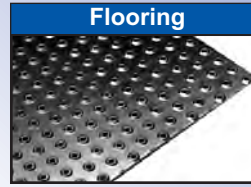
## Traction-Tread™ Flooring & Planks

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**

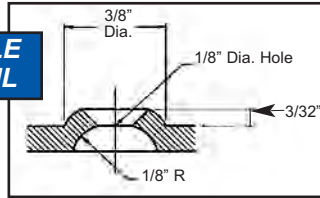


Note: May be supplied with or without end margins, see details below.

## STOCK & AVAILABILITY

Material Type/Finish	Gauge	Material Type/Finish	Gauge
<b>FLOORING</b> Standard Pattern		<b>PLANKS</b> 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> Star -with or without drainage		<b>PLANKS</b> Star/Square -no drainage	
HRP&O Plain Steel	11, 13	HRP&O Plain Steel	11, 13
Pre-Galvanized	13	Pre-Galvanized	11, 13
Aluminum	.125"	Aluminum	.125"
<b>FLOORING</b> Square -with or without drainage		<b>PLANKS</b> 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.*

## 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:

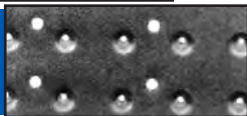
1. Application or use of product (including environment)
2. Physical requirements: loading, open area, slip resistance

### PLEASE SPECIFY:

- **Traction-Tread™ Grating**
- **Quantity:** # of pieces or planks required
- **Material:** See Product List for availability
- **Width:** Planks: 7", 10", or 12"  
Flooring: 36" or cut to size
- **Length:** Planks: 10', 12', or cut to size up to 24'  
Flooring: 10' or cut to size
- **Height:** Steel Plank: 1-1/2" or 2"  
Aluminum Plank: 2"
- **Accessories:** Carriage Bolts

## SPECIAL PATTERNS

Square Pattern with drainage



Star Pattern with drainage

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

### Flooring Details

May be supplied with or without end margins.



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

### Traction-Tread™ Flooring Pounds/Square Foot

Standard Pattern Flooring	
11 ga. HRP&O	5.0#
12 ga. HRP&O	4.4#
13 ga. HRP&O	3.8#
14 ga. HRP&O	3.1#
16 ga. HRP&O	2.5#
11 ga. Pre-Galvanized	5.0#
13 ga. Pre-Galvanized	3.8#
.125 ga. Aluminum	1.6#
16 ga. 304 Stainless Steel	2.4#
Square Pattern (Special Pattern)	
	Without Drainage
11 ga. HRP&O	5.0#
13 ga. HRP&O	3.8#
16 ga. HRP&O	2.5#
13 ga. Pre-Galvanized	3.8#
.125 ga. Aluminum	1.6#
	With Drainage
11 ga. HRP&O	4.7#
13 ga. HRP&O	3.5#
16 ga. HRP&O	2.3#
13 ga. Pre-Galvanized	3.5#
.125 ga. Aluminum	1.6#

## ACCESSORIES

### Carriage Bolt

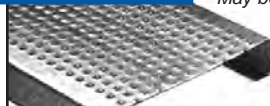


Available in various sizes. Hardware not included.

ISO  
9001:2008  
Certified

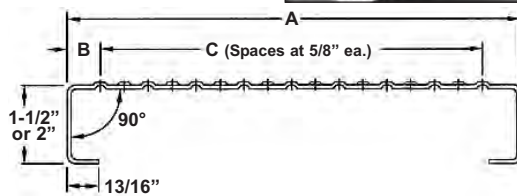
### Plank Details

May be supplied with or without end margins.



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

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

## Ladder Rungs



# of Rows	Width	Height	Steel #/lf	Length
2	1-1/4"	1-1/2"	1.2#	48-3/4" or 60"
3	1-5/8"	1-1/8"	1.3#	
4	2-1/4"	1-1/2"	1.5#	

Ladder Rungs also available with Abrasive Coated Surface (page 12) and in Grip Strut® constructions.

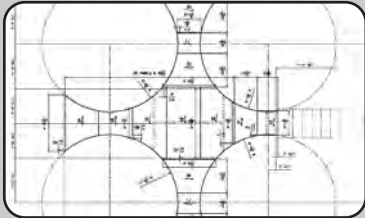
Please contact us for more information at 1-800-472-8464.



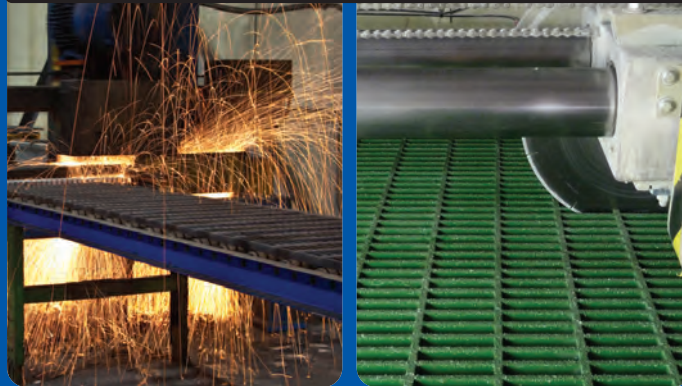
Quick & Easy Quote Requests  
online at **brown-campbell.com**

## IN-HOUSE ENGINEERING

-CAD Service  
-Drawings  
-Bill of Material Prep



## CUSTOM FABRICATION



Currently in our 3rd generation and having started in a modest 2,500 square foot building in Detroit, Michigan - Brown-Campbell facilities now exceed 300,000 square feet with warehouses in Cincinnati, Cleveland, Dallas, Detroit, Memphis, Minneapolis & South Carolina and sales offices in California, Chicago, North Carolina & Philadelphia.

Other 'grate'  
products  
highlighted in  
this Product  
Guide:

Grate-Lock™ p.33



Traction-Tread™ p.34

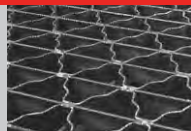


Stair Treads p.11



Visit our website or request a catalog for  
these 'grate' products!

Riveted Grating



Nosings

Safety Treads



Ladder Rungs



Floor Plate



Ladder Rung Covers

TREMENDOUS INVENTORY

SAME DAY SERVICES

EXCELLENT ENGINEERING

FABULOUS FABRICATION

FAST & COURTEOUS SERVICE

**800-472-8464**

Call one number  
and be instantly routed  
to the B-C service  
center closest to you.

### CINCINNATI

555 Quality Boulevard  
Fairfield, OH 45014  
Fax: 513-489-0119

### CLEVELAND

14400 Industrial Ave. South  
Maple Heights, OH 44137  
Fax: 216-332-0303

### DALLAS

2825 W. Kingsley Road  
Garland, TX 75041  
Fax: 972-926-4496

### DETROIT

11800 Investment Drive  
Shelby Township, MI 48315  
Fax: 586-739-8739

### MEMPHIS

2175 Filmore Avenue  
Memphis, TN 38114  
Fax: 901-743-3756

### MINNEAPOLIS

2907 Portland Avenue  
Minneapolis, MN 55407  
Fax: 612-822-4915

### SOUTH CAROLINA

52 Cypress Ridge Court  
Ridgeland, SC 29936  
Fax: 770-795-7789

### HEADQUARTERS

11800 Investment Drive  
Shelby Township, MI 48315  
Phone: 586-884-2180  
Fax: 586-884-2181



**BROWN-CAMPBELL  
C O M P A N Y**

Family Owned & Operated  
Specialty Steel & Fiberglass  
Distributor & Manufacturer  
Since 1952!

**800-GRATING**  
**brown-campbell.com**



**BROWN-CAMPBELL  
C O M P A N Y**

**Family Owned & Operated  
Since 1952!**

**Brown-Campbell Company**  
11800 Investment Drive  
Shelby Township, MI 48315

PRST STD  
U.S. POSTAGE  
**PAID**  
RIPON PRINTERS

Cat. #: 14A

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

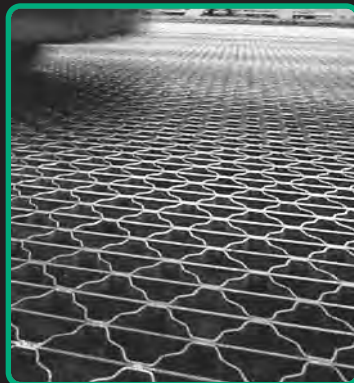


***CUSTOM FABRICATION AND ENGINEERING  
AVAILABLE FOR ALL OF OUR PRODUCT LINES!***

**Bar Grating • Perforated  
Fiberglass • Expanded Metal  
Wire Cloth • Grip Strut®  
• Riveted Grating • Custom Stair Treads**



**SAME DAY  
SERVICES**



**ISO  
9001:2008  
CERTIFIED**

SERVICE CENTERS

**Cincinnati • Cleveland • Dallas • Detroit • Memphis • Minneapolis • South Carolina**  
SALES OFFICES: **California • Chicago • North Carolina • Philadelphia**