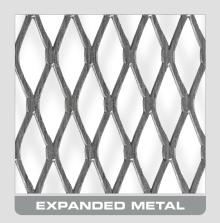
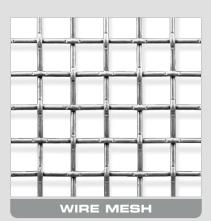
# McNICHOLS®

# MASTER CATALOG

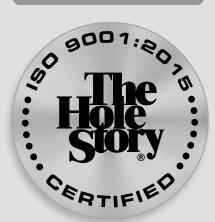








**GRIP STRUT® GRATING** 

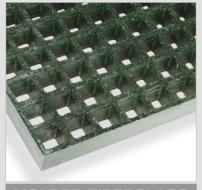




PERF-O GRIP® GRATING



**BAR GRATING** 



MOLDED FIBERGLASS











The sole survivor of a Boeing B-17 Flying Fortress shot down during World War II, Robert L. "Bob" McNichols pledged to lead his life and business according to Christian principles. He believed in the highest level of service, a dedication to his employees and an appreciation for the customers he had the privilege to serve.

Following discovery by a farmer, Bob was sent to prisoner-of-war camp Stalag Luft I, where he remained until his liberation on May 1, 1945. Seven years to the day after his release from Stalag Luft I, Bob and his wife, Phyllis, founded **McNICHOLS CO.** 



Bob McNichols, Founder (1922 - 1981)

When Bob started the business in 1952, he focused on selling products with "holes" such as Perforated and Expanded Metal. This focus led to the motto **The Hole Story**<sup>®</sup>, which symbolizes the Company's philosophy as well as its products. Bob trademarked **The Hole Story**<sup>®</sup> and advertised it in the 1975 **MCNICHOLS**<sup>®</sup> Master Catalog. This began the tradition of "hole" references such as "Hole Products" and "The Hole Team." After the unexpected loss of Bob in 1981, his son Gene took the reins. Gene carried on his father's legacy by growing the Company.

In 1990, Gene introduced the "Service, Quality and Performance" mission. The words embody the spirit of the organization—including its emphasis on customer service, high standards for quality (demonstrated by the ISO 9001:2015 certification) and dedication to performance.



**MCNICHOLS** has grown from a small family business into a national corporation with 19 locations across the country. The essence and spirit of the founder remain ever-present. Bob's faith gave him the courage to build **McNICHOLS** on a Christian foundation. "To God be the Glory!" was one of his favorite sayings.

As **MCNICHOLS** continues to grow beyond its 65th year in business, the third generation of the McNichols family—as well as members of The Hole Team—act as stewards of Bob's legacy.

Providing Hole Products Through Superior Service, Quality and Performance ... That's The Hole Story<sup>®</sup>!

Dear Hole Customer,

Since 1967, we have been mailing the **McNICHOLS**<sup>®</sup> Master Catalog to our customers each year. Being in business for more than 65 years, we are confident that our vast inventory selection, convenient locations and knowledgeable product experts are what make **McNICHOLS** your choice for Hole Products. We believe we can help you select the right product for your application.

Our Master Catalog represents our commitment to providing you with excellent customer service. We offer a wide selection of quality Hole Products in stock and ready to go! We trust you will find this book an essential tool and reference guide for your Hole Product needs. In addition, all of the information contained within is available at mcnichols.com.

My grandfather founded our Company on one core principle—providing unsurpassed customer service. It is our mission to continue to fulfill his vision of serving customers. We humbly ask that you allow us to serve you!

Inspired to Serve!"

Gott Alather

Scott M. McNichols President

To God Be The Glory!

# YOUR HOLE NETWORK

In business for more than 65 years, McNICHOLS CO. is North America's leading supplier of "Hole Products," including Perforated and Expanded Metals, Wire Mesh, Designer Metals, Gratings and Flooring Products. Our "Hole Network" of 19 Metals Service Centers are strategically located across the country and are outfitted with metal processing equipment to meet your fabrication and project needs. Customers repeatedly choose McNICHOLS because of our knowledgeable team, extensive product inventory, and superior customer service. Please allow us to serve you on your next project!



#### HEADQUARTERS

2502 N. Rocky Point Dr., Ste 750 Tampa, FL 33607

**ATLANTA** 1980 Shiloh Road NW Building 6, #300 Kennesaw, GA 30144

BALTIMORE 9070 Junction Drive, #M Annapolis Junction, MD 20701

BOSTON 33 High Street North Billerica, MA 01862

CHARLOTTE 2307 Distribution Ctr. Dr., #F Charlotte, NC 28269

CHICAGO 2200 Arthur Avenue Elk Grove Village, IL 6000

COLUMBUS 4740 Poth Road Whitehall, OH 43213

DALLAS 3540 W. Miller Road, #240 Garland, TX 75041

DENVER 10394 E. 48th Avenue Denver, CO 80238

#### HOUSTON

16405 Air Center Blvd., #100 Houston, TX 77032

**KANSAS CITY** 

15341 W. 100th Terrace Lenexa, KS 66219

LOS ANGELES 14108 Arbor Place Cerritos, CA 90703

#### MINNEAPOLIS

22 Fifth Avenue NW New Brighton, MN 55112

NJ/NYC AREA 2 Home News Row New Brunswick, NJ 08901

PHOENIX 5780 S. 40th Street. Ste. 3 Phoenix, AZ 85040

SALT LAKE CITY

271 W. 12800 South. Ste 210-211 Draper, UT 84020

#### SAN FRANCISCO

174 Lawrence Drive, Ste G Livermore, CA 94551

SEATTLE

3400-B Industry Drive East Fife, WA 98424

#### TAMPA

9401 Corporate Lake Drive Tampa, FL 33634

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Application photos reflected are typical of our types of products in use that can be supplied or have been supplied by MCNICHOLS CO. Some photos may depict uses designed, manufactured, fabricated or installed by others

(O)



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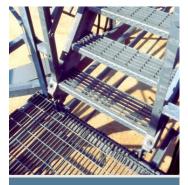
McNICHOLS® HOLE PRODUCTS ARE USED ACROSS MANY INDUSTRIES

Architectural 

Construction 
Distribution 
Energy 
Government 
Hospitality
Maintenance 
Metal Fabrication 
Manufacturing 
Marine 
Residential 
Utilities



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# McNICHOLS® VALUE-ADDED SERVICES

Drawing Takeoffs = Cut-to-Size = Notching = Edging = Welding = Infill Panels = Stair Treads = Metal Finishes

For more than 65 years, customers have made the repetitive choice to trust **McNICHOLS** with their Hole Product needs. Customers also look to us for Value-Added Services. Whether you need cutting, notching, welding or a particular metal finish for your product selections, **McNICHOLS** has you covered! We look forward to discussing how we can support and serve you!



# PERFORATED METAL

**MCNICHOLS** has the largest selection of Perforated Metal in North America, available in a variety of hole shapes, sizes, gauges, and material types. Perforated Metal is used for its versatility, high strength-to-weight ratio, and aesthetic appeal. It is a popular choice among designers and architects. Some uses include screening, ventilation, and security enclosures. The openings permit passage of light, air, sound, and liquid, and the product is lightweight and easy to fabricate and form.

PRODUCT SPECIFICATIONS					
HOLE TYPES					
	ROUND	SQUARE	SLOTTED	HEXAGONAL	DESIGNER
PRIMARY MATERIAL	Aluminum, Carbon Steel, Pre-Galvanized, Stainless Steel, PLASTIPERF™, PERF-PANL™, FLEX ANGLE <sup>®</sup>	Aluminum, Carbon Steel, Stainless Steel	Aluminum, Carbon Steel	Aluminum, Carbon Steel	Aluminum, Carbon Steel
GAUGE	0.020" to 3/8"	0.032" to 11	0.032" to 16	0.032" to 16	0.032" to 11
HOLE	0.027" to 1"	0.020" to 3/4"	W 1/8" to 0.200" L 0.637" to 1"	0.025" to 1/2"	Varies with Pattern
HOLE CENTER	0.050" to 1-1/4"	1/2" to 1"	Varies with Pattern	0.281"to 0.562"	Varies with Pattern
% OPEN AREA	5% to 63%	11% to 56%	41% to 74%	79% to 80%	35% to 68%
STANDARD SHEET SIZES	24" x 24" 36" x 40" 36" x 48" 48" x 30" 48" x 48" 36" x 24" 48" x 24" 36" x 96" 36" x 120" 48" x 120" 48" x 144" 60" x 144"	36" x 24" 36 x 48" 48" x 24" 36" x 96" 48" x 96" 48" x 120"	36" x 24" 36" x 40" 48" x 24" 36" x 96" 36" x 120"	24" x 24" 36" x 40" 36" x 24" 48" x 24" 48" x 48" 36" x 96" 48" x 96" 36" x 120" 48" x 120"	36" x 24" 48" x 24" 36" x 40" 36" x 48" 36" x 96" 36" x 120" 48" x 96" 48" x 120"

WE ARE READY AND INSPIRED TO SERVE® YOU AT 800.237.3820!



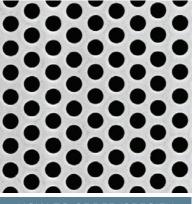
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McNICHOLS® Perforated Metal, Round Hole - Wall Cladding, Harley-Davidson Museum®, Milwaukee, WI

McNICHOLS® Perforated Metal, Square Hole - Infill Panels, Stair Risers, University of Maryland, College Park, MD





HOW TO ORDER/SPECIFY McNICHOLS® PERFORATED METAL

The information provided below is your guide for choosing the right **MCNICHOLS**® PERFORATED METAL product for your project. Please specify:

**APPLICATION** – Perforated Metal use

HOLE TYPE - Type of hole (Round, Square, Hexagonal or Slotted) or Designer pattern

**PRIMARY MATERIAL** – Type of material (Aluminum, Carbon Steel, Galvanized, Stainless Steel)

**MATERIAL FINISH** – Inventory is typically mill finish unless otherwise specified.

**GAUGE (THICKNESS)** – Material gauge number or thickness in inches (Table of Gauges & Weights on page 6 has additional information)

HOLE PATTERN – Hole size, shape, spacing and arrangement (staggered pattern, straight row, etc.) or Designer pattern

**OPEN AREA** – Percentage of open area

MARGINS/END PATTERN – Most inventory patterns (11 Gauge and lighter) have solid margins (length of sheet) with no end pattern (material is sheared through) unless otherwise specified.

**QUANTITY/SIZE(S)** – Number of sheets and/or sizes (including cut-to-size pieces)

**SPECIAL** – Requirements such as fabrication, edge treatments, solid margins, finishing, flatness, leveling, non-standard tolerances, etc.

**ACCESSORIES** – Angle, Flat Bar or U-Edging framing solutions.



HOLE DIAMETER

3/16" RD

1/4" RD

1/4" RD

5/16" RD

3/8" RD

3/8" RD

1/2" RD

3/4" RD

1/16" RD

1/16" RD 3/32" RD

1/8" RD

5/32" RD

3/16" RD

3/16" RD

1/4" RD

1/4" RD

1/16" RD

3/32" BD

1/8" RD

1" RD

HOLE

5/16" Stg.

5/16" Stg.

7/16" Stg.

1/2" Stg.

9/16" Stg.

11/16" Stg.

1-1/4" Stg.

3/32" Stg.

1/8" Stg.

3/16" Sta

3/16" Stg.

3/16" Stg.

1/4" Stg.

3/8" Stg.

5/16" Stg.

3/8" Stg.

3/32" Stg.

3/16" Stg.

3/16" Stg.

1" Stg.

STAINLESS

3/8" Stg.

16, 11

16

11

16, 14, 11

16, 11

22, 20

22

16

22

22, 20

22, 20, 18

24, 20, 18, 16

22, 20, 18, 16

22, 20, 18, 16

24, 20, 18, 16

16, 14, 11

11

22, 20, 18, 16

22, 20, 18, 16, 14, 11, 3/16

16, 14, 11, 3/16, 1/4

22, 20, 18, 16, 14, 12, 11

33%

58%

40%

46%

51%

40%

48%

51%

58%

41%

23%

22%

40%

63%

51%

23%

58%

40%

41%

23%

40%

### ROUND HOLE PERFORATED METAL

McNICHOLS® Round Hole Perforated Metal is an extremely versatile product offered in various diameters, gauges, materials, and sheet size options.



HOLE	HOLE		%	
DIAMETER	CENTER	GAUGE*	O/A	
ALUMINUM, ALLOY TYPE 3003-H1-				
0.033" RD	0.050" Str.	.032	34%	
1/16" RD	3/32" Stg.	.032, .063	41%	
1/16" RD	7/64" Stg.	.063	30%	
1/16" RD	1/8" Stg.	.032, .040	23%	
3/32" RD	5/32" Stg.	.032, .050, .080	33%	
3/32" RD	3/16" Stg.	.050	23%	
0.117" RD	5/32" Stg.	.032	51%	
1/8" RD	3/16" Stg.	.032, .050, .063, .125	40%	
5/32" RD	3/16" Stg.	.063	63%	
3/16" RD	1/4" Stg.	.032, .050, .063, .125	51%	
3/16" RD	5/16" Stg.	.063, .125	33%	
1/4" RD	5/16" Stg.	.063, .125	58%	
1/4" RD	3/8" Stg.	.040, .063, .125	40%	
1/4" RD	1/2" Stg.	.250	23%	
3/8" RD	9/16" Stg.	.063, .125	40%	
1/2" RD	11/16" Stg.	.063, .125, .250	48%	
3/4" RD	1" Stg.	.063, .125	51%	
1" RD	1-1/4" Stg.	.125	58%	
	NUM, A	LLOY TYPE 5052-I	-132	
3/16" RD	3/8" Stg.	.040	23%	
3/16" RD	1/4" Stg.	.032, .063	51%	
3/16" RD	5/16" Stg.	.063	32%	
1/4" RD	3/8" Stg.	.125	40%	
1/4" RD	5/16" Stg.	.032	58%	
1/2" RD	11/16" Stg.	.063, .125	48%	
CARBON STEEL				
0.027" RD	0.050" Str.	26	23%	
0.045" RD	0.066" Str.	24	36%	
0.045" RD	0.088" Stg.	24	24%	
1/16" RD	3/32" Stg.	24, 22, 20	41%	
1/16" RD	7/64" Stg.	16	30%	
1/16" RD	1/8" Stg.	22, 20, 18, 16	23%	
5/64" RD	7/64" Stg.	20	46%	
5/64" RD	1/8" Stg.	18, 16	36%	
3/32" RD	5/32" Stg.	24, 22, 18, 16, 14	33%	

#### ROUND HOLE STOCK LIST

DIAMETER	CENTER	GAUGE*	O/A		
	CARBON STEEL (CONT.)				
3/32" RD	5/32" Stg.	24, 22, 18, 16, 14	33%		
3/32" RD	3/16" Stg.	14	23%		
0.117" RD	5/32" Stg.	22	51%		
1/8" RD	3/16" Stg.	24, 22, 20, 18, 16, 14, 12, 11	40%		
1/8" RD	1/4" Stg.	20, 16	23%		
9/64" RD	3/16" Stg.	20, 18, 11	51%		
5/32" RD	3/16" Stg.	22, 20, 18, 16	63%		
3/16" RD	1/4" Stg.	22, 20, 18, 16, 14, 12, 11	51%		
3/16" RD	5/16" Stg.	18, 16, 11, 3/16	33%		
3/16" RD	3/8" Stg.	14	23%		
1/4" RD	5/16" Stg.	20, 18, 16, 14, 12	58%		
1/4" RD	3/8" Stg.	20, 18, 16, 14, 12, 11, 10, 3/16, 1/4	40%		
1/4" RD	1/2" Str.	20	20%		
1/4" RD	1/2" Stg.	20, 16, 14, 11	23%		
1/4" RD	1" Str.	20	5%		
5/16" RD	3/8" Stg.	16	63%		
5/16" RD	7/16" Stg.	11	46%		
3/8" RD	1/2" Stg.	11, 1/4	51%		
3/8" RD	9/16" Stg.	16, 12, 11, 3/16, 1/4	40%		
1/2" RD	11/16" Stg.	20, 16, 14, 11, 10, 3/16, 1/4, 3/8	48%		
3/4" RD	1" Stg.	16, 11, 3/16, 1/4	51%		
1" RD	1-1/4" Stg.	11, 1/4	58%		

STA	AINLESS	STEEL, TYPE 304	1
0.033" RD	0.055" Str.	26	28%
0.045" RD	0.066" Str.	26, 24	36%
1/16" RD	3/32" Stg.	22, 20	41%
1/16" RD	1/8" Stg.	22, 20, 18	23%
5/64" RD	7/64" Stg.	20	46%
3/32" RD	5/32" Stg.	22, 20, 18, 16	33%
3/32" RD	3/16" Stg.	22	22%
1/8" RD	3/16" Stg.	22, 20, 18, 16, 14, 12, 11	40%
5/32" RD	3/16" Stg.	24, 20, 18, 16	63%
3/16" RD	1/4" Stg.	22, 20, 18, 16	51%

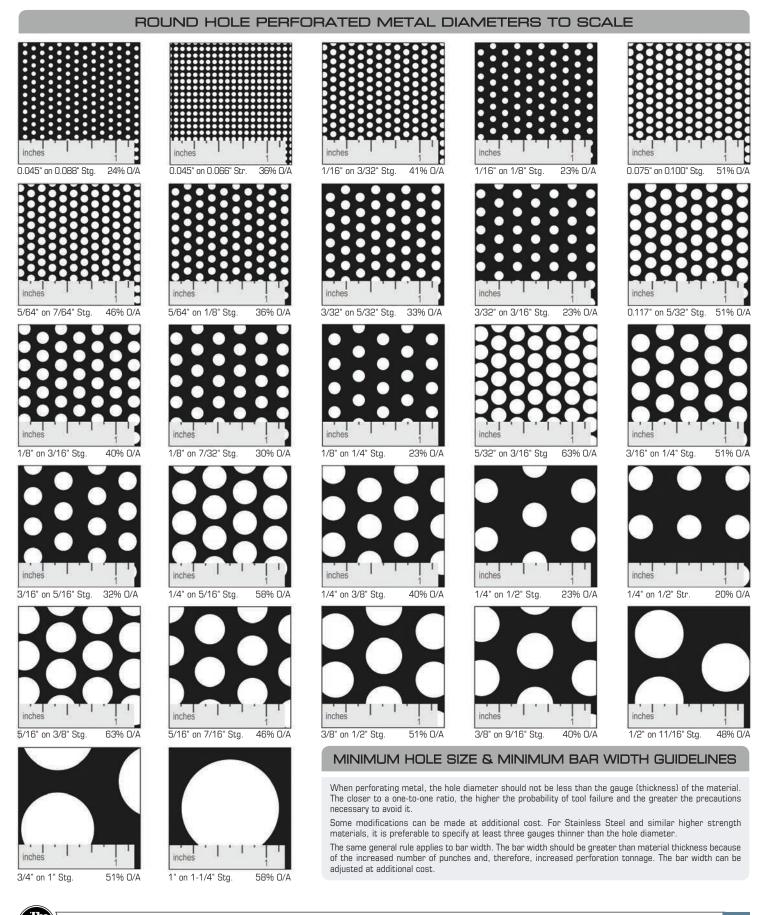
PLEASE NOTE: The most common sheet sizes for McNICHOLS® Round Hole Perforated Metal are 36" x 96", 48" x 96", 36" x 120" and 46" x 120". Small parts are stocked in many smaller sizes and include a variety of patterns, gauges and materials. Widths of 60" and lengths of 144" are also available from inventory. We value your business and want to ensure a positive ordering experience. Please note that stock items may not be available at each location and on-hand quantities are subject to change. Items that are made-to-order or cut-to-size cannot be returned. Pictures above are not to scale. For actual scale diagrams, please see page 5.

\*Please refer to the Table of Gauges & Weights on page 6.

5/32" RD	3/16" Stg.	22	63%
3/16" RD	1/4" Stg.	18, 16	51%
1/4" RD	5/16" Stg.	20	58%
1/2" RD	11/16" Stg.	18	48%
		OTHER	
0.033" RD	0.056" Str.	.020 (Brass/Alloy)	28%
1/8" PLASTIPERF™	3/16" Stg.	.063 (Plastic)	40%
3/16" Plastiperf™	5/16" Stg.	.125 (Plastic)	32%
1/4" PERF-PANL™	1" Str.	20 (Carbon Steel, Stainless Steel 304)	5%
1/4" PERF-PANL <sup>™</sup> Small Collar	1" Str.	20 (Stainless Steel 304)	5%

800.237.3820	mcnichols.com

# PERFORATED



# PERFORATED



### **PLASTIPERF**<sup>TM</sup>

MCNICHOLS PLASTIPERF<sup>™</sup> is made from Polypropylene Plastic that excels in damp or corrosive environments and is non-magnetic, anti-static, and lightweight. Not only does plastic reduce the weight of the material, it also controls the flow of air and light, as well as aids in visibility at a location.



#### APPLICATIONS

Signs - Filters - Baskets - Strainers - Sizing Screens - Ceiling Tiles Insulation Parts - Sunshades

# INDUSTRIES

Plating • Hatcheries • Food • Electronics

#### PLASTIPERF™ STOCK LIST

HOLE DIAMETER	HOLE CENTER	GAUGE	% 0/A	STANDARD SHEET SIZE
1/8" Round	3/16" Stg.	.063"	40%	48" x 96"
3/16" Round	5/16" Stg.	.125"	32%	48" x 96"

# McNICHOLS® HOLE PRODUCTS

### **PERF-PANL**<sup>™</sup>

MCNICHOLS PERF-PANL<sup>™</sup> has indented round holes and is typically used for displays, exhibits, and fixtures. Available from inventory in both Carbon Steel and Stainless Steel.

#### APPLICATIONS

Display Fixtures • Store Wall Panels • Custom Exhibits • Point-of-Purchase • Utility Dividers

McN

#### INDUSTRIES

Retail/Wholesale Stores - Automotive Tradeshows



# PERF-PANL™ STOCK LIST

MATERIAL	Hole dia.	HOLE CENTER	GAUGE	% O/A	STANDARD SHEET SIZE
Carbon Steel, Stainless Steel	1/4" RD	1" Str.	20	5%	48" x 96", 48" x 120"
Stainless Steel (Small Collar)	1/4" RD	1" Str.	20	5%	48" x 96"

FLEX AN	FLEX ANGLE® STOCK LIST											
MATERIAL	GAUGE	Angle Leg Size X Length										
Galvanized	14	1-1/2" x 1-1/2" x 120"										
Galvanized	14	1-1/2" x 1-1/2" x 144"										
Galvanized	14	1-1/2" x 2-1/4" x 120"										
Galvanized	12	1-1/2" x 3" x 144"										
Galvanized	14	1-1/2" x 2-1/4" x 144"										



FLEX ANGLE® Punch Strap

#### FLEX ANGLE®

MCNICHOLS FLEX ANGLE® is offered in a Perforated, zinc-coated, Pre-Galvanized material commonly used for storage racks, garage door brackets, and other purposes.

**CONSTRUCTION** Slotted angle holes are punched after material has been Galvanized.

MATERIAL Pre-Galvanized Steel with zinc coating thickness of at least .0010" SIZES 1-1/2" x 1-1/2", 2-1/4" or 3" (Product can be cut-to-size in the field.) PACKAGE 10 lengths of Angle, 75 Nuts, Bolts



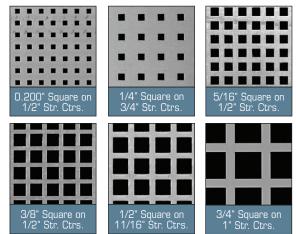
#### TABLE OF GAUGES & WEIGHTS

	ST	EEL	GALVANIZ	ED STEEL	STAI	NLESS S	TEEL	MO	NEL	BR	ASS	COF	PER	ALUM	INUM	ZII	NC	TI	N
	USS Gau	uge Rev.	USS (	Gauge	USS Gauge	Lbs. per	r Sq. Ft.	USS G	lauge	B&S (	Gauge	BW 0	Gauge	B&S (	Gauge	Zinc (	Gague	Tin Plat	e Guage
GAUGE	Decimal Thick	Lbs. per Sq. Ft.	Decimal Thick	Lbs. per Sq. Ft.	Decimal Thick	Chrome Alloy	Chrome Nickel	Decimal Thick	Lbs. per Sq. Ft.										
32	.1000	0.408	.0134	0.560	.009	0.371	0.378			.0800	0.353	.0080	0.371	.008	0.113			.0061	.2526
31	.0110	0.449	.0142	0.594	.010	0.412	0.420	.010	0.459	.0089	0.392	.0100	0.464	.009	0.127			.0066	.2755
30	.0120	0.490	.0157	0.656	.012	0.495	0.504	.012	0.551	.0100	0.441	.0108	0.500	.010	0.141			.0072	.2985
29	.0135	0.563	.0172	0.719	.013	0.536	0.546	.014	0.650	.0113	0.498	.0126	0.584	.011	0.155			.0077	.3214
28 27	.0149 .0164	0.625 0.688	.0187 .0202	0.781 0.844	.015 .016	0.599 0.660	0.610 0.672	.015	0.689	.0126 .0142	0.555 0.626	.0135 .0159	0.625 0.737	.012 .014	0.170 0.197	.500	18.60	.0083 .0088	.3444 .3673
27	.0164	0.688	.0202	0.844	.016	0.660	0.750	.018	0.827	.0142	0.626	.0169	0.750	.014	0.197	.375	14.00	.0088	.3673
25	.0209	0.875	.0247	1.031	.021	0.866	0.882	.021	0.965	.0179	0.789	.0189	0.875	.018	0.254	.250	9.30	.0034	.4133
24	.0239	1.000	.0276	1.156	.023	0.972	0.990	.025	1.148	.0201	0.886	.0201	0.932	.020	0.282	.125	4.70	.0105	.4362
23	.0269	1.125	.0306	1.281	.026	1.072	1.092	.028	1.286	.0226	0.996	.0216	1.000	.022	0.310	.100	3.75	.0110	.4592
22	.0299	1.250	.0336	1.406	.029	1.197	1.220	.031	1.424	.0254	1.115	.0226	1.050	.025	0.353	.090	3.37	.0118	.4913
21	.0329	1.375	.0366	1.531	.032	1.319	1.344	.034	1.562	.0285	1.256	.0243	1.125	.028	0.395	.080	3.00	.0123	.5143
20	.0359	1.500	.0396	1.656	.035	1.462	1.490	.037	1.700	.3020	1.410	.0253	1.170	.032	0.452	.070	2.62	.0130	.5418
19	.0418	1.750	.0456	1.906	.042	1.731	1.764	.043	1.975	.0359	1.582	.0270	1.250	.036	0.508	.060	2.25	.0141	.5878
18	.0478	2.000	.0516	2.156	.048	1.979	2.016	.050	2.297	.0403	1.776	.0285	1.320	.040	0.564	.055	2.06	.0149	.6199
17	.0538	2.250	.0575	2.406	.054	2.226	2.268	.056	2.572	.0453	1.996	.0320	1.480	.045	0.635	.050	1.87	.0153	.6383
16 15	.0598 .0673	2.500 2.812	.0635 .0710	2.656 2.969	.060 .067	2.454 2.762	2.500 2.814	.062 .070	2.848 3.216	.0508 .0571	2.238 2.516	.0323 .0350	1.500 1.625	.050 .056	0.706 0.790	.045 .040	1.68 1.50	.1630 .0171	.6795 .7117
10	.0673	3.125	.0785	3.281	.087	3.047	3.150	.070	3.583	.0641	2.825	.0359	1.660	.063	0.790	.040	1.35	.0171	.7714
14	.0897	3.750	.0934	3.906	.090	3.170	3.780	.093	4.272	.0720	3.173	.0377	1.750	.003	1.000	.032	1.20	.0193	.8036
12	.1046	4.375	.1084	4.531	.105	4.328	4.410	.109	5.007	.0808	3.560	.0431	2.000	.080	1.130	.028	1.05	.0198	.8265
11	.1196	5.000	.1233	5.156	.120	4.946	5.040	.125	5.742	.0907	3.997	.0485	2.250	.090	1.270	.024	0.90	.0207	.8633
10	.1345	5.625	.1382	5.781	.135	5.523	5.628	.140	6.431	.1019	4.490	.0508	2.360	.100	1.410	.020	0.75	.0215	.8954
9	.1495	6.250	.1532	6.406	.150	6.183	6.300	.156	7.166	.1144	5.041	.0512	2.375	.112	1.579	.018	0.67	.0229	.9551
8	.1644	6.875	.1681	7.031			6.930	.172	7.855	.1285	5.662	.0539	2.500	.125	1.760	.016	0.60	.0231	.9643
7	.1793	7.500			.165	6.801	7.854	.187	8.590	.1443	6.358	.0641	2.970	.140	1.980	.014	0.52	.0237	.9872
3/16"	.1875	7.660			.187	7.708	8.579							.187	2.713	PLEASE N	IOTE: To ca	Iculate we	eight per
1/4"	.2500	10.210				11.160	11.160								3.530	square f	oot of Pe	forated N	Aetal (a)
5/16" 3/8"	.3125 .3750	12.760 15.320				15.750 15.970	13.750 16.500								4.420 5.290		% open a		
1/2"	.5000	20.420				13.370	21.660								7.060		ne % mat		
5/8"	.6250	25.530					26.830								8.920		% material		
3/4"	.7500	30.630					32.120								10.580		er square f		
1"	1.0000	40.800					42.670								14.110	area % d	oes not incl	ude margin	s).



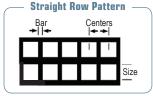
# SQUARE HOLE PERFORATED METAL

McNICHOLS<sup>®</sup> Square Hole Perforated Metal is an attractive alternative to Round Holes in many applications.



SQL	IARE H	OLE S	тоск	LIST
HOLE SIZE	HOLE CENTER	GAUGE	% 0/A	STANDARD SHEET SIZE
ALUMI	NUM, AL	LOY TY	PE 30(	D3-H14
5/16" SQ	1/2" Str.	.050	39%	48" x 96"
3/8" SQ	1/2" Str.	.032	56%	48" x 120"
1/2" SQ	11/16" Str.	.050, .063	53%	48" x 96" 48" x 120"
ALUMI	NUM, AL	LOY TY	′PE 50	52-H32
1/4" SQ	3/4" Str.	.032	11%	48" x 120"
	CARE	BON ST	EEL	
0.200" SQ	1/2" Str.	18	16%	36" x 120"
3/8" SQ	1/2" Str.	16	56%	36" x 96" 48" x 120"
1/2" SQ	11/16" Str.	16, 12	53%	48" x 120"
	1" Str.	16, 11	= = = = (	48" x 120"

# PERFORATED





McNICHOLS® Perforated Metal, Square Hole - Infill Panel

**Straight Row Pattern** 

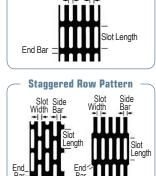
Slot Width Side Bar

# SLOTTED HOLE PERFORATED METAL

**MCNICHOLS**<sup>®</sup> Slotted Hole Perforated Metal has elongated holes with Round or Square ends in a straight row or side or end staggered pattern.



SLOTTED HOLE STOCK LIST											
SLOT SHAPE	SLOT SIZE	PATTERN	GAUGE	% 0/A	STANDARD SHEET SIZE						
ALUMINUM, ALLOY TYPE 3003-H14											
AIRLINE	1-1/2" x 1/4"	Straight Row	.040, .063	68%	36" x 96", 48" x 96" 48" x 120"						
		CARBON	STEE	L							
Square End	0.200" x 0.637"	Straight Row	22	74%	36" x 120"						
Round End	1/8" x 3/4"	Side Staggered	22	41%	36" x 96"						
Round End	1/8" x 1"	Side Staggered	16	43%	36" x 120"						
AIRLINE	1-1/2" x 1/4"	Straight Row	18, 16	68%	36" x 120", 36" x 96"						



Side Staggered End Staggered

# HEXAGONAL PERFORATED METAL

McNICHOLS<sup>®</sup> Hexagonal Perforated Metal offers substantial open area and can be used in industrial or architectural applications.

$\checkmark \rightarrow \rightarrow \rightarrow$	XXXX		HEXAG	Staggered Row Pattern			
$\prec \succ \checkmark$	$\mathcal{A}\mathcal{A}\mathcal{A}$	HOLE SIZE	PATTERN	GAUGE	% 0/A	STANDARD SHEET SIZE	
$\bowtie$	$\rightarrow \rightarrow $	ALI	JMINUM	I, ALLOY T	YPE 3	003-H14	Centers T
	$\times$ $\times$ $\times$ $\times$	1/4" Hexagonal	9/32" Stg.	.032	79%	36" x 120", 48" x 120"	
	$\rightarrow \rightarrow $		C	CARBON S	TEEL		Bart
1/2" Hexagonal on	1/4" Hexagonal on	1/4" Hexagonal	9/32" Stg.	22	79%	36" x 120"	
9/16" Stg. Ctrs.	9/32" Stg. Ctrs.	1/2" Hexagonal	9/16" Stg.	16	80%	36" x 96", 48" x 96", 48" x 120"	Centers

# PERFORATED METAL FRAMING SOLUTIONS







**MCNICHOLS** has several framing options to choose from including Angle, Flat Bar, and U-Edging. A U-shaped strip that is attached to the edge of the Perforated Metal sheet by a press-fit or weld, U-Edging covers the sharp edges and provides an attractive appearance. It is available in 120" or 144" lengths or can be cut-to-size.

MATERIAL	GAUGE	OPEN	SIZE		MATERIAL	SIZE		
Aluminum					Steel	2" x 2" x 1/4"		
Steel	14, 11	1/4"			Steel	1-3/4" x 1-3/4" x 1/4"		
Al					Steel	1-1/4" x 1-1/4" x 1/8"		
	14, 11	1/8"	1" x 120", 1" x 144"		Steel	1-1/4" x 1-1/4" x 1/4"		
00001					Steel	1" x 1" x 1/8"		
Aluminum, Steel	14, 11	1/16"	1" x 144"		Angle may b	e used to frame		
Steel	14, 11	3/8"	1" x 120"					
Aluminum	14, 11	1/2"	1" x 120"		flange of the Angle.			
	Aluminum, Steel Aluminum, Steel Aluminum, Steel Steel	Aluminum, Steel14, 11Aluminum, Steel14, 11Aluminum, Steel14, 11Steel14, 11	Aluminum, Steel14, 111/4"Aluminum, Steel14, 111/8"Aluminum, Steel14, 111/16"Steel14, 113/8"	Aluminum, Steel         14, 11         1/4"         1" x 120", 1-1/2" x 120" 3/4" x 144", 1" x 144"           Aluminum, Steel         14, 11         1/8"         1" x 120", 1" x 144"           Aluminum, Steel         14, 11         1/8"         1" x 120", 1" x 144"	Aluminum, Steel         14, 11         1/4"         1" x 120", 1-1/2" x 120" 3/4" x 144", 1" x 124"           Aluminum, Steel         14, 11         1/8"         1" x 120", 1" x 144"           Aluminum, Steel         14, 11         1/16"         1" x 144"           Steel         14, 11         1/16"         1" x 144"	Aluminum, Steel         14. 11         1/4"         1" x 120", 1-1/2" x 120"         Steel           Aluminum, Steel         14. 11         1/4"         1" x 120", 1-1/2" x 120"         Steel           Aluminum, Steel         14. 11         1/8"         1" x 120", 1" x 144"         Steel           Aluminum, Steel         14. 11         1/16"         1" x 144"         Steel           Steel         14. 11         3/8"         1" x 120"         Perforated product is	Aluminum, Steel         14. 11         1/4"         1" x 120". 1-1/2" x 120" 3/4" x 144". 1" x 120"         Steel         2" x 2" x 1/4"           Aluminum, Steel         14. 11         1/4"         3/4" x 144". 1" x 144"         Steel         1-3/4" x 1-3/4" x 1/4"           Aluminum, Steel         14. 11         1/6"         1" x 120". 1" x 144"         Steel         1-1/4" x 1-1/4" x 1/4"           Aluminum, Steel         14. 11         1/16"         1" x 144"         Steel         1" x 1" x 1/4"           Steel         14. 11         3/6"         1" x 120"         Perforated Metal when the product is welded to one	Aluminum, Steel         14, 11         1/4"         1" x 120", 1-1/2" x 120" 3/4" x 144", 1" x 120"         Steel         2" x 2" x 1/4"           Aluminum, Steel         14, 11         1/8"         1" x 120", 1" x 144"         Steel         1-3/4" x 1-3/4" x 1/4"           Aluminum, Steel         14, 11         1/8"         1" x 120", 1" x 144"         Steel         1-1/4" x 1-1/4" x 1/4"           Aluminum, Steel         14, 11         1/16"         1" x 144"         Steel         1-1/4" x 1-1/4" x 1/4"           Steel         14, 11         3/8"         1" x 120"         Perforated Metal when the product is welded to one

U-EDGING STOCK LIST ANGLE STOCK LIST

PLEASE NOTE: Pictures above are not to scale. We value your business and want to ensure a positive ordering experience. Please note that stock items may not be available at each location and on-hand quantities are subject to change. Items that are made-to-order or cut-to-size cannot be returned.



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.250" .250"

.125" .250"

125

# PERFORATED

# McNICHOLS® HOLE PRODUCTS

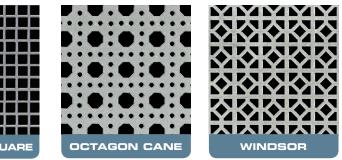
#### DESIGNER PERFORATED METAL

Architects, contractors and designers choose **McNICHOLS**<sup>®</sup> Designer Perforated Metals for their versatility and elegance. Designer patterns offer a high-end, artistic look with similar functionality as other Perforated Metal styles.







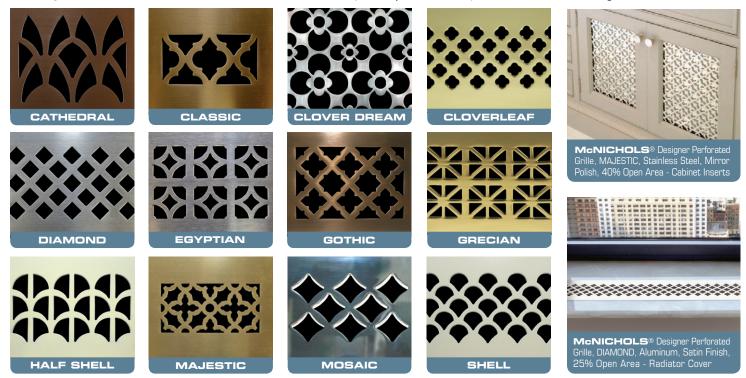




DESIGNER PERFORATED STOCK LIST												
SERIES NAME	DESCRIPTION	GAUGE	% 0/A	STANDARD SHEET SIZE								
ALUMINUM, ALLOY TYPE 3003-H14												
WINDSOR	/INDSOR Triangular and Diamond Holes .040 45%											
	CARBON STEEL											
FULL CLOVERLEAF	1/2" Staggered Clovers	20	51%	36" x 96"								
GRECIAN	Triangular Holes	24, 22	35%	36" x 96", 36" x 120"								
HANOVER SQUARE	2/10" Square on 1/4" Straight Rows	22, 20	64%	36" x 120"								
OCTAGON CANE	9/32" Octagons on 7/64" Straight Rows	22	36%	36" x 96"								
WINDSOR	Triangular and Diamond Holes	20	45%	36" x 96"								

# **DESIGNER PERFORATED METAL GRILLES**

McNICHOLS® Designer Perforated Metal Grilles are available in Aluminum, Brass, Bronze, Carbon Steel, and Stainless Steel. Finishes include Satin, Mirror Polish, Statuary Antique Bronze, and Primed, as well as Baked Enamel and powder coating colors. Add beautiful, jewelry-like elements to your surroundings with Designer Perforated Grilles. Our Architectural Products Team is ready and **Inspired to Serve®** you at **866.754.5144** or **designermetals@mcnichols.com**.



PLEASE NOTE: Pictures above are not to scale. We value your business and want to ensure a positive ordering experience. Please note that stock items may not be available at each location and on-hand quantities are subject to change. Items that are made-to-order or cut-to-size cannot be returned.



# EXPANDED METAL

**MCNICHOLS** has the largest selection of Expanded Metal in North America, stocked in a variety of styles and materials. Expanded Metal is a versatile and economical product that can be used for screening, ventilating, security enclosures, and more. The openings permit passage of light, air, and sound. Expanded Metal is a great choice for your next project!



	FLATTENED	STANDARD	GRATING	CATWALK	DESIGNER
PRIMARY MATERIAL	Aluminum, Carbon Steel, Hot Dipped Galvanized Steel, Stainless Steel	Aluminum, Carbon Steel, Hot Dipped Galvanized Steel, Stainless Steel	Aluminum, Carbon Steel, Hot Dipped Galvanized Steel, Steinless Steel	Carbon Steel	Aluminum, Carbon Steel
STYLE	3/16" to 1-1/2"	3/16" to 2"	3.00# to 6.25#	3.14#, 4.27#	1/16" to 3/16"
GAUGE	Aluminum: 0.050" to 0.125" Steel: 20 to 9	Aluminum: 0.032" to 0.125" Steel: 20 to 6	0.540" to 0.730" (Overall Thickness)	0.460" to 0.655" (Overall Thickness)	Aluminum: 0.051" Steel: 18
% OPEN AREA	35% to 83%	43% to 90%	45% to 77%	58%	38% to 66%
STANDARD SHEET SIZES	36" x 96" 48" x 96" 48" x 120" 60" x 120" 60" x 144" 72" x 120"	36" x 96" 48" x 48" 48" x 96" 48" x 120" 60" x 120" 72" x 96" 72" x 120"	48" x 96" 48" x 120" 72" x 120"	24" x 120" 36" x 120" (Others Available)	48" x 96"

WE ARE READY AND INSPIRED TO SERVE® YOU AT 800.237.3820!

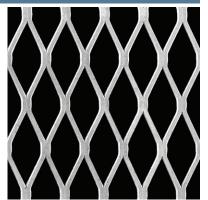


McNICHOLS® Expanded Metal, Flattened - Ceiling Tiles, Nationwide Restaurant Chain



McNICHOLS® Expanded Metal, Standard - Facade, Arizona State University, Scottsdale, AZ

# EXPANDED



#### HOW TO ORDER/SPECIFY McNICHOLS® EXPANDED METAL

The information provided below is your guide for choosing the right **MCNICHOLS**® EXPANDED METAL product for your project. Please specify:

**APPLICATION** – Expanded Metal use

**EXPANDED TYPE** – Type of Expanded (Flattened, Standard, Grating, Catwalk), or Designer pattern

**PRIMARY MATERIAL** – Type of material (Aluminum, Carbon Steel, Galvanized, Stainless Steel)

**MATERIAL FINISH** – Inventory is typically mill finish unless otherwise specified.

**STYLE & TYPE** – Short Way of Design (SWD) measurement in inches, material gauge number, or thickness in inches and Expanded type (i.e. 3/4 #9 Flattened); For Grating and Catwalk, Lbs. per Square Foot (i.e. 3.14# Grating)

**DESIGN DIRECTION** – Long Way of Design (LWD) runs parallel to the length of the sheet for most inventory items.

**OPEN AREA** – Percentage of open area

**QUANTITY/SIZE(S)** – Number of sheets and/or sizes (including cut-to-size pieces and shearing preference such as Bond or Random)

**SPECIAL** – Requirements such as fabrication, edge treatments, finishing, non-standard tolerances, etc.

**ACCESSORIES** – Angle, Flat Bar, or U-Edging framing solutions or Fasteners



2018

# FLATTENED EXPANDED METAL

McNICHOLS<sup>®</sup> Flattened Expanded Metal is Standard Expanded Metal (page 11) that has been flattened, producing an even surface. This versatile product is perfect for machine guarding, security enclosures, and more!

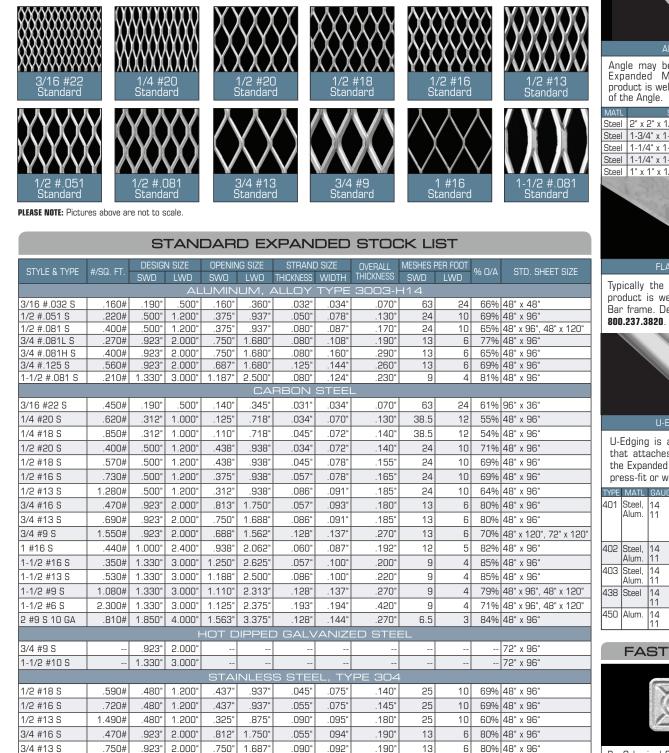
3/16 #22 Flattened			/4 #2 latten	20 ed 81		1/2 #2 Flattene			2 #18 attene			J/2 #16 FlattenedJ/2 #13 Flattened1/2 #16 Flattened1/2 #13 Flattened1/2 #13 Flattened1/2 #13 Flattened	Expanded Dimensions SWD: Short Way of Desi LWD: Long Way of Desi SWD
			FL	ATT	ENE	ED EX	XPA		c s	тос	ж	LIST	running the width (48" is mu common) and LWD running t length of the sheet.
STYLE & TYPE	#/SQ.	DESIG			NG SIZE	STRANE		OVERALL	MESHES		%	STANDARD SHEET SIZE	SWO: Short Way of Open
	FT.	SWD	LWD	SWO				THICKNESS	SWD E 3C	LWD	0/A 114		LWO: Long Way of Opening
1/2 #.051 F	.22#	.500"	1.32"	1	1.000"	.050"	.086"	.050"	24	9.8		48" x 96"	
1/2 #.081 F	.38#	.500"	1.32"	.312"	1.000"	.060"	.096"	.081"	24	9.6	62%	48" x 96"	
3/4 #.051 F	.13#	.923"	2.20"	.750"		.045"	.095"	.045"	13	5.9		48" x 96"	
3/4 #.081LF	.26#	.923"	2.20"	.687"	1.750"	.072"	.119"	.072"	13	5.9	74%	48" x 96"	SW0
3/4 #.081HF 3/4 #.125 F	.38# .53#	.923" .923"	2.20"	.687"	1.750"	.099" .113"	.176" .158"	.099" .113"	13 13	5.8 5.8	62% 66%	48" x 96" 48" x 96", 48" x 120"	
1-1/2 #.081 F	.21#	1.330"	3.30"	1.062"		.072"	.136"	.072"	9	3.9	79%	48" x 96"	
1-1/2 #.125 F	.40#	1.330"	3.30"	1.000"		.099"	.171"	.099"	9	3.9		48" x 96"	Y Y
						CA	RBO	N STEI	EL				
3/16 #22 F	.43#	.200"	.510"	.115"	.300"	.024"	.040"	.024"	60	23		96" x 36"	<b>Shearing Options</b>
1/4 #20 F	.62#	.312"	1.00"	.110"	.715"	.031"	.077"	.031"	38.5	12		48" x 96"	
1/4 #18 F	.85#	.312"	1.00"	.118"	.715"	.041"	.079"	.041"	38.5	12	49%	48" x 96"	
1/2 #20 F 1/2 #18 F	.40# .52#	.500"	1.25" 1.25"	.375"	1	.031"	.079" .083"	.031" .041"	24 24	10 9.5	68% 67%	48" x 96" 48" x 96", 48" x 120"	XXXXXXXXXXX
1/2 #16 F	.69#	.500"	1.25"	.312		.041	.086"	.041	24	9.5	66%	36" x 96", 48" x 96", 48" x 120"	
1/2 #13 F	1.22#	.500"	1.25"	.265"	1.000"	.077"	.100"	.077"	24	9.5	60%	36" x 96", 48" x 96", 60" x 96", 48" x 120", 60" x 120"	Standard Sheets - Bo
3/4 #16 F	.45#	.923"	2.10"	.750"	1.750"	.051"	.102"	.051"	13	5.9	78%	48" x 96", 48" x 120"	or machine run all sid (on flattened material so
3/4 #14 F	.63#	.923"	2.10"	.688"	1.813"	.061"	.105"	.061"	13	5.9	74%	48" x 96", 48" x 120"	patterns may result in o
3/4 #13 F	.67#	.923"	2.10"	.688"		.077"	.100"	.077"	13	5.9	78%	48" x 96", 48" x 120", 60" x 120"	random sheared LWD)
3/4 #9 F 10 GA	1.50#	.923"	2.10"	.563"	1.688"	.115"	.151"	.115"	13	5.9	67%	48" x 96", 48" x 120", 48" x 144", 60" x 120", 72" x 120"	
1 #16 F 1-1/2 #16 F	.41# .35#	1.000" 1.330"	2.50" 3.20"	.813"	-	.050" .051"	.098" .110"	.050" .051"	12 9	4.7 3.9	78% 83%	48" x 96" 48" x 96"	
1-1/2 #10 F	.53#	1.330	3.20	1.062	-	.077"	.110	.031	9	3.9	83%	48" x 96"	
1-1/2 #9 F 10 GA	1.08#	1.330"	3.20"			.115"	.151"	.115"	9	3.9		48" x 96", 48" x 120"	
				ŀ	нот і	DIPPEI	) GA	LVANI	ZED	STEE	EL		*****
1/2 #16 F		.500"	1.25"						24	9.5		48" x 96", 48" x 120"	Random Sheared SWD
1/2 #13 F		.500"	1.25"						24	9.5		48" x 96"	Bond Sheared LWD
3/4 #16 F 3/4 #13 F		.923" .932"	2.10" 2.10"						13 13	5.7 5.7		48" x 96", 60" x 120" 48" x 96"	
3/4 #131 3/4 #9 F		.923"	2.10						13	5.7		48" x 96", 48" x 120"	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
				STA		SS ST	EEL,	TYPE	304				
1/4 #18 F	.85#	.312"	1.02"	.080"	.660"	.040"	.079"	.040"	38.5	12	49%	48" x 96"	
1/2 #18 F	.56#	.480"	1.25"	1	1.000"	.040"	.083"	.040"	25	9.5		48" x 96"	Bond Sheared SWD
1/2 #16 F	.70#	.480"	1.25"	.312"	1	.050"	.083"	.050"	25	9.5		48" x 96"	Random Sheared LWD
1/2 #13 F	1.44#	.480"	1.25"	.240"	î.	.081"	.105" .118"	.081" .040"	25			48" x 96", 48" x 120"	
3/4 #18 F 3/4 #16 F	.46# .45#	.923" .923"	2.08" 2.08"	.750"	1.812"	.040"	.118	.040"	13 13	5.8 5.8		48" x 96" 48" x 96"	XXXXXXXXXXX
3/4 #10 F 3/4 #13 F	.73#	.923"	2.08		1.750"	.030	.103	.030	13	5.8		48" x 96"	
3/4 #9 F 10 GA	1.68#	.923"	2.08"		1.697"	.121"	.158"	.121"	13	5.6		48" x 96", 48" x 120"	XXXXXXXXXXX
1-1/2 #16 F		1.330"	3.12"		2.750"	.050"	.114"	.050"	9	3.8		48" x 96"	
									-				
1-1/2 #13 F	.57#	1.330"	3.12"	1.000"	2.625"	.081"	.114"	.081"	9	3.8	83%	48" x 96"	Random Sheared SWD Random Sheared LWD

PLEASE NOTE: Standard sheet sizes of MCNICHOLS<sup>®</sup> Flattened Expanded Metal include widths of 36", 48", 60", and 72", and lengths of 96", 120", and 144". All standard sizes are available with short lead times if not in inventory.

# EXPANDED

# STANDARD EXPANDED METAL

McNICHOLS® Standard Expanded Metal, also known as Raised Expanded Metal, has diamond-shaped openings with a slightly raised surface. This product comes in a wide variety of opening sizes, gauges, materials, and sheet sizes making it an ideal solution for many applications!



1-1/2 #9 S 10 GA 144" 1.210# 1.330 3.000" 1.125" 2.500 134" 9 4 78% 48" x 96 PLEASE NOTE: Standard sheet sizes for McNICHOLS® Standard Expanded Metal include widths of 36", 48", 60", and 72", and lengths of 96". 120", and 144". All standard sizes are available with short lead times if not in inventory.

134

090'



Angle may be used to frame Expanded Metal when the product is welded to one flange

MATL	SIZE	GAUGE
Steel	2" x 2" x 1/4"	.250"
Steel	1-3/4" x 1-3/4" x 1/4"	.250"
Steel	1-1/4" x 1-1/4" x 1/8"	.125"
Steel	1-1/4" x 1-1/4" x 1/4"	.250"
Steel	1" x 1" x 1/8"	.125"
1	and the second	



Typically the Expanded Metal product is welded to the Flat Bar frame. Details available at



U-Edging is a U-shaped strip that attaches to the edge of the Expanded Metal sheet by a press-fit or weld.

TYPE	ΜΑΤΙ	GALIGE	OPEN	SIZE
401	Steel, Alum.	14 11	1/4"	1" x 120" 1-1/2" x 120" 3/4" x 144" 1" x 144"
402	Steel, Alum.	14 11	1/8"	1" x 120" 1" x 144"
403	Steel, Alum.	14 11	1/16"	1" x 144"
438	Steel	14 11	3/8"	1" x 120"
450	Alum.	14 11	1/2"	1" x 120"

#### FASTENERS



Pre-Galvanized Steel Fasteners may be used to attach Expanded Metal to drywall applications where required. Hardware available separately.



144"

100

260"

210

250

13

9

6

4

69% 48" x 96", 60" x 96"

85% 48" x 96



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3/4 #9 S 10 GA

1-1/2 #13 S

1.760#

570#

923"

1.330

2.000

3.000

687

1.250"

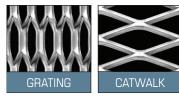
1.562

2.625

# EXPANDED

# McNICHOLS® HOLE PRODUCTS

### **EXPANDED METAL GRATING & CATWALK**



**MCNICHOLS**<sup>®</sup> Expanded Metal Grating and Catwalk are economical solutions for ramps, flooring, catwalks, platforms, walkways, treads, or other types of lightweight structural applications. Expanded Metal Catwalk is structurally stronger than Standard Expanded Grating because the long way of the design runs across a shorter span.

	EXPANDED GRATING & CATWALK STOCK LIST											
STYLE & TYPE	#/SQ. FT.	DESIGI SWD	N SIZE LWD	OPENIN SWO			id Size Width	OVERALL THICKNESS	MESHES, SWD	/SQ. FT. LWD	% O/A	STANDARD SHEET SIZE
				ALUN	1INUI	M, A	LLOY	TYPE	5052	-H32		
2.00# GTG	2.00#	1.33"	5.33"	.940"	3.44"	.250"	.387"	.730"	9.00	2.25	48%	48" x 96"
						CAR	BON	STEEL				
3.00# GTG	3.00#	1.33"	5.33"	.940"	3.44"	.183"	.264"	.540"	9.00	2.25	60%	48" x 96"
3.14# GTG	3.14#	2.00"	6.00"	1.625"	4.88"	.250"	.312"	.656"	6.00	2.00	69%	48' x 96', 48" x 120", 72" x 120
4.00# GTG	4.00#	1.33"	5.33"	.940"	3.44"	.215"	.300"	.618"	9.00	2.25	55%	48" x 96", 48" x 120"
4.27# CAT	4.27#	1.41"	4.00"	1.000"	2.88"	.250"	.300"	.625"	8.50	3.00	58%	120" x 36"
4.27# GTG	4.27#	1.41"	4.00"	1.000"	2.88"	.250"	.300"	.625"	8.50	3.00	58%	48" x 96", 48" x 120"
5.00# GTG	5.00#	1.33"	5.33"	.813"	3.38"	.250"	.331"	.655"	9.00	2.25	50%	48" x 96"
6.25# GTG	6.25#	1.41"	5.33"	.813"	3.38"	.312"	.350"	.715"	8.50	2.25	50%	48" x 96"
	STAINLESS STEEL, TYPE 304											
4.50# GTG	4.50#	1.41"	4.00"	1.00"	2.88"	.250"	.300"	.625"	8.50	3.00	58%	48" x 120"

PLEASE NOTE: All styles of MCNICHOLS® Expanded Grating are available in Catwalk format. Standard widths are 24", 36", and 48", and standard lengths are 96", 120", and 144". The long way of the diamond runs parallel to the width for Catwalk.



SELECTION CHART: EXPANDED STEEL GRATING & CATWALK								
LBS. PER			CL	EAR SP.	AN			
LINEAR FT.	23"	30"	35"	42"	47"	54"	60"	
50	3.00	3.00	3.00	3.00	3.00	4.00	5.00	
JU	3.14	3.14	3.14	3.14	3.14	4.27	6.25	
100	3.00	3.00	3.00	4.00	5.00			
100	3.14	3.14	3.14	4.27	6.25			
150	3.00	4.00	4.00	5.00	6.25			
150	3.14	4.27	4.27	6.25				
200	3.00	4.00	4.27	6.25				
200	3.14	4.27	5.00	Distanc		en supp		
250	4.00	5.00	5.00	measured from inside edge of on support to inside edge of next support				
250	4.27		6.25			0		
200	4.00	5.00	6.25			Concentra lection char		
300	4.27	6.25				ximum defle		
050	4.00	6.25			erally accep al pedestria	ited recomi	mendation	
350	4.27				ai pedesu 18			



McNICHOLS® Expanded Metal, Grating - Cell Tower Platform

#### LOAD TABLE: CATWALK FIXED SPAN

STYLE	MATL	LOAD	24"	36"	48"	
2.00#	Aluminum	С	250	100	50	
2.00#	Aluminum	D	.250	.250	.250	
		U	275	100		
3.00#	Steel	D	.250	.220		
0.00#	JLEEI	С	275	165	75	
		D	.250	.250	.250	
		U	375	150	50	
3.14#	Steel	D	.250	.240	.250	
0.14#	JLEEI	С	375	155	75	
		D	.250	.250	.250	
		U	350	150	50	
4.00#	Steel	D	.240	.245	.250	
4.00#	JLEEI	С	440	220	100	
		D	.250	.250	.250	
4.27#		U	500	165	60	
	Steel	D	.245	.245	.250	
		С	400	225	100	
		D	.250	.240	.250	
		U	600	175	100	
5.00#	Steel	D	.240	.240	.250	
0.00#		С	540	310	140	
		D	.245	.250	.250	
		U	800	300	115	
6.25#	Steel	D	.220	.250	.240	
0.20#	JLEEI	С	800	300	150	
		D	.220	.240	.240	
4 50#	Staiplaga	С	300	150	100	
4.50# Stainless D .217 .192 .212						
<ul> <li>Uniform Load - Lbs /Square Foot</li> <li>Deflection - in Inches</li> <li>Concentrated Load - Lbs /Square Foot of Width at Mid Span</li> </ul>						

#### DESIGNER EXPANDED METAL

MCNICHOLS<sup>®</sup> Designer Expanded Metal may be used for security partitions, sign panels, sunshades, room panels, cabinet inserts, and more. While enhancing appearance, the patterns can provide security and control light, heat, and airflow.







DESIGNER EXPANDED STOCK LIST								
STYLE & TYPE	MATERIAL	GAUGE	% 0/A	STANDARD SHEET SIZE				
LANCET™ 1/16 #18, F	Carbon Steel	18	44%	48" x 96"				
LANCET™ 3/16 #18, F and S	Carbon Steel	18	(F) 63% (S) 66%	48" x 96"				
LANCET™ 3/16 #.051, F	Aluminum	.051	60%	48" x 96"				



PLEASE NOTE: F - Flattened; S - Standard

# WIRE MESH

# WIRE MESH

**MCNICHOLS** has the largest selection of Wire Mesh in North America, stocked in various opening and mesh sizes, thicknesses and materials. Used as screens, partitions, and facades on parking garages and other buildings and structures, Wire Mesh is amazingly versatile and can be easily adapted to almost any application.

DUCT SPECIFICATIONS			
		MESH TYPES	MESH TYPES
RECTANGULAR DESIGNER ECO-MESH®	RECTANGULAR	SQUARE	
ven Available Modular Facade sect Screen), & Trellis System,	Rectangular: Woven (Insect Screen), Welded	HAL NOLLSquare Opening: Woven, Welded, Square Mesh: Woven, Welded, Hardware & Industrial, VINYLMESH™	CONSTRUCTION TYPE
vanized and Carbon Steel, Aluminum, Carbon	Aluminum, Carbon, Galvanized and Stainless Steel	Aluminum, Brass, Carbon Steel, Copper, Galvanized and Stainless Steel, Galvanized-PVC Coated	PRIMARY MATERIAL
	1/2" x 1", 2" x 1", 3" x 1-1/2"	Opening: 1/4" to 4" Mesh: 4" to 325 Woven, 1 to 6" Welded Har.& Ind.: 1 to 4 Mesh VINYLMESH™: 1"to 2" Mesh	OPENING SIZE / MESH SIZE
0.09", 0.011" 0.148" by Special	0.063" to 0.120" 0.009", 0.011" (Insect Screen)	E 0.0045" to 0.375"	WIRE DIAMETER
% to 93% 0% to 85% 82% (Stock), (Special Order Available)	66% to 93%	25% to 94%	% OPEN AREA
	36" x 96" 48" x 96"	Sheet: 36" x 96", 48" x 96", 48" x 120", 48" x 144", 60" x 120", 72" x 120", 72" x 144" Coil: 24", 36", 48", 60", 72" x 1200"; 36", 48" x 600"	STANDARD SIZES
Varies with Pattern48" x 96"' x 96"Varies with Pattern' x 96"(Special Order)	36" x 96"	Sheet: 36" x 96", 48" x 96", 48" x 120", 48" x 144", 60" x 120", 72" x 120", 72" x 144" Coil: 24", 36", 48", 60", 72" x 1200";	

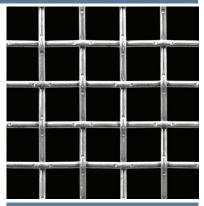
WE ARE READY AND INSPIRED TO SERVE® YOU AT 800.237.3820



MCNICHOLS® Wire Mesh, 2"x 4" Rectangular Mesh -Railing Infill Panels, Target Field - Twins Stadium, Minneapolis, MN



McNICHOLS® Designer Wire Mesh, AURA™ 8155 -Building Facade/Signage, Law Office, Ottowa, ON



HOW TO ORDER/SPECIFY McNICHOLS® WIRE MESH

The information provided below is your guide for choosing the right **McNICHOLS**<sup>®</sup> WIRE MESH product for your project. Please specify:

APPLICATION - Wire Mesh use

**MESH TYPE** – Type of opening (Square or Rectangular) or Designer pattern

**CONSTRUCTION TYPE** - Type of construction (Woven or Welded)

**PRIMARY MATERIAL** – Type of material (Aluminum, Bronze, Carbon Steel, Copper, Galvanized Steel, Stainless Steel)

**MATERIAL FINISH** – Inventory is typically mill finish unless otherwise specified

WEAVE / TRIM TYPE – Woven with type of weave (i.e. Carbon, Lockcrimp, Intercrimp), Welded (Trimmed or Untrimmed) or Designer Mesh pattern number (e.g. TECHNA™ 3155)

**OPENING SIZE** – Measured as the clear space between wires. For Rectangular opening, width and length measurements are required

**MESH SIZE** – Measured by the number of openings per lineal inch from the center of the wires

**WIRE DIAMETER** – Thickness (measured in decimals) or gauge equivalent (*Wire Diameters and Gauge Equivalents* chart on page 18 has additional information)

**OPEN AREA** – Percentage of open area

**QUANTITY/SIZE(S)** - Number of coils and/or sheets (including cut-to-size pieces and stub preference)

**SPECIAL** – Requirements such as fabrication, edge treatments, finishing, non-standard tolerances, etc.

**ACCESSORIES** – Angle, Flat Bar or U-Edging framing solutions



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# WIRE MESH

# McNICHOLS® HOLE PRODUCTS

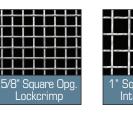
# SQUARE OPENING WIRE MESH

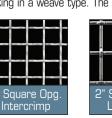
McNICHOLS<sup>®</sup> Square Opening Wire Mesh is known for its easy handling and solid construction. In either Woven or Welded, it can be used for both internal and external applications and is commonly used as screens, partitions, and facades on parking garages and other structures. Interior uses include cabinet inserts and partition screens in any functional space (commercial or residential).

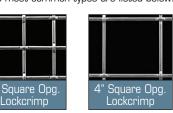
## **SQUARE OPENING - WOVEN**

MCNICHOLS<sup>®</sup> Square Opening Woven Wire Mesh is the most popular mesh MCNICHOLS offers. A series of wires are woven together resulting in a weave type. The most common types are listed below.

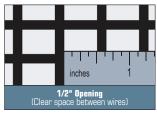












The opening is measured from the inside edge of one wire to the inside edge of the adjacent wire.

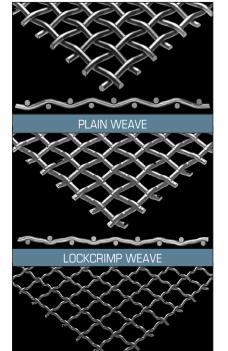
WEAVE TYPES



#### SQUARE OPENING - WOVEN STOCK LIST

OPENING	DIAMETER
GAL	VANIZED STEEL
4" Opening	.250
2" Opening	.250
1" Opening	.120
STAINLE	SS STEEL, TYPE 304
4" Opening	.250
2" Opening	.120, .192, .250
1-1/2" Opening	.120
1" Opening	.120
1/2" Opening	.063, .092, .120
3/8" Opening	.063
1/4" Opening	.120

Please specify **McNICHOLS** on your next project. *Thank You!* 



INTERCRIMP WEAVE

SQUARE OPENING - WELDED

**McNICHOLS**<sup>®</sup> Square Opening Welded Wire Mesh typically has larger openings than Woven Wire Mesh. Wire strands are welded at each intersection yielding an overall stronger construction.



#### SQUARE OPENING - WELDED STOCK LIST

OPENING	DIAMETER					
CARBON STEEL						
3" Opening	.250					
2" Opening	.250					
STA	STAINLESS STEEL, TYPE 304					
4" Opening	.250					
3" Opening	.250					
2" Opening	.188 (.120 in Stainless Steel, Type 316)					
1-1/2" Opening	.250					
1" Opening	.120					

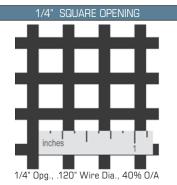
PLEASE NOTE: Pictures above are not to scale. For actual scale diagrams, please see page 15.

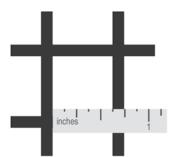


McNICHOLS® Wire Mesh, Welded, 2° Square Opening - Infill Panels, High School Stadium, Chalmette, LA



# WIRE MESH

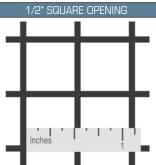




5/8" Opg., .120" Wire Dia., 70% O/A

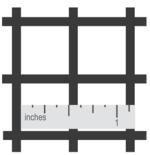


3/4" Opg., .250" Wire Dia., 56% O/A

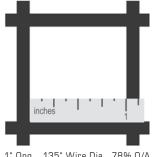


SQUARE OPENING SIZES TO SCALE

1/2" Opg., .063" Wire Dia., 79% O/A

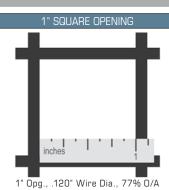


1/2" Opg., .092" Wire Dia., 71% O/A

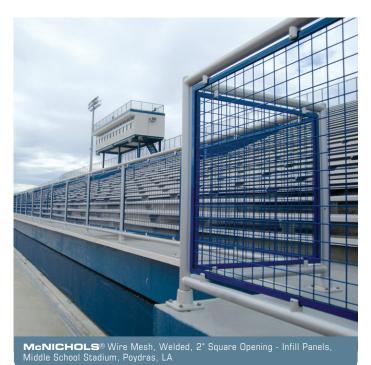




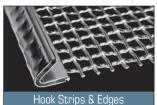




3/4" Opg., .120" Wire Dia., 74% O/A



#### **RIPS & EDGES** HOOK



#### How to Specify Hook Strips & Edges

- Select Hook Strip and Edge style
- Determine length of Hook Strip if not the same as wire screen length and specify required notching
- Standard degree of Hook bend is 135 degrees outside and 45 degrees inside
- Hook height is measured from top of Hook to inside of bend

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McNICHOLS® Hook Strips and Edges add a finishing touch by creating a clean look with a hook or edge on any Wire Mesh project. Typically, these products are used as shaker screens or to mount Wire Mesh to equipment as guards.

HOOK STRIPS & EDGES								
M-1 HOOKED EDGE WITHOUT REINFORCING	M-2 REGULAR HOOK STRIP	M-3 TWO-PIECE HOOK STRIP						
<u> </u>	Com	C						
M-3-C TWO-PIECE HOOK STRIP WITH CANVAS INSERT	M-4 BONDED PLATE WELDED INSERT	M-5 SQUARE WITH INSERTS						
	000							
M-6 BENT PLATE WELDED ON EDGE	M-7 KNUCKLED EDGE	M-8 WELDED EDGE WIRE						

HOOK STRIP/EDGE	WIRE DIA. OPTIONS
M-1, M-4, M-6	.312" Dia. and heavier
M-2, M-5	.063" to .250" Dia.
M-3, M-3-C	.054" Dia. and lighter
M-7	.192" Dia. and heavier
M-8	.148" Dia. and heavier

PLEASE NOTE: Screens for sizing and straining can be furnished with any style of edge preparation or Hook Strip, ready for installation into many equipment types.

Hooks are furnished Galvanized unless otherwise specified.



### SQUARE OPENING OPTIONS CHART

DIA.	% O/A #/SF	DIA.	% O/A #/SF	DIA. % O/A #/SF	DIA. % O/A #/SF	DIA. % O/A #/SF	DIA. % O/A #/SF	DIA. % O/A #/SF
4" 5	Q. OPENING	7/16	74.4 3.88	5/8 54.3 10.88	.135 81.5 .85	.283 52.7 5.15	.120 65.0 1.51	.148 39.4 3.76
1	64.0 13.06	3/8	77.4 2.90	1/2 60.5 7.29	.120 83.2 .68	.263 54.8 4.52	.105 68.3 1.18	.135 42.2 3.21
3/4	70.9 7.66	5/16	80.6 2.05	7/16 64.0 5.71	.105 85.1 .52	.250 56.3 4.12	.092 71.3 .93	.120 45.6 2.62
5/8	74.8 5.46	.283	82.2 1.70	3/8 67.8 4.30	3/4 36.0 20.68	.225 59.2 3.41	.080 74.3 .71	.105 49.6 2.07
1/2	79.0 3.58	.263	83.3 1.48	5/16 71.9 3.07	5/8 41.3 15.17	.207 61.4 2.93	.072 76.4 .58	.092 53.4 1.64
7/16	81.3 2.77	.250	84.0 1.34	.283 74.1 2.55	1/2 47.9 10.30	.192 63.4 2.56	.063 78.9 .45	.080 57.4 1.28
3/8	83.6 2.07	.225	85.4 1.09	.263 75.6 2.22	7/16 51.8 8.14	.177 65.5 2.20	1/2" SQ. OPENING	.072 60.3 1.06
5/16	86.0 1.45	.207	86.5 .93	.250 76.6 2.02	3/8 55.0 6.19	.162 67.6 1.87	3/8 29.0 12.20	.063 63.8 .83
.283	87.2 1.20	.192	87.4 .80	.225 78.5 1.65	5/16 61.0 4.45	.148 69.8 1.58	5/16 34.0 9.03	.054 67.6 .62
		.177	88.3 .69	.207 80.0 1.41	.283 63.8 3.71	.135 71.8 1.33	.283 36.9 7.64	.047 70.9 .48
.263	88.0 1.04	.162	89.2 .58	.192 81.2 1.22	.263 65.7 3.25		.263 39.0 6.75	3/16" SQ. OPENING
.250	88.6 .94					.120 74.3 1.07		
3-3/4	' SQ. OPENING	.148	90.0 .48	.177 82.5 1.04	.250 67.0 2.96	.105 76.9 .83	.250 40.5 6.19	.177 26.5 6.12
1	62.3 13.77	2-1/2"	SQ. OPENING	.162 83.8 .88	.225 69.6 2.43	.092 79.3 .65	.225 43.6 5.16	.162 28.8 5.30
3/4	69.4 8.11	1	51.0 19.02	.148 85.0 .74	.207 71.3 2.08	.080 81.7 .50	.207 46.0 4.47	.148 31.3 4.57
5/8	73.5 5.77	3/4	59.2 11.37	.135 86.2 .62	.192 73.0 1.81	3/4" SQ. OPENING	.192 48.3 3.92	.135 33.8 3.92
1/2	77.9 3.79	5/8	64.0 8.16	.120 87.6 .49	.177 74.7 1.55	1/2 30.9 15.57	.177 50.7 3.40	.120 37.2 3.22
7/16	80.2 2.94	1/2	69.4 5.41	1-1/2" SQ. OPENING	.162 76.4 1.32	7/16 34.6 12.47	.162 53.2 2.90	.105 41.1 2.56
	<u>i                                     </u>	7/16	72.4 4.22	1 36.0 27.57	.148 78.1 1.11	3/8 39.1 9.61	.148 55.8 2.47	.092 45.1 2.04
3/8	82.6 2.19	3/8	75.6 3.16	3/4 44.4 16.86	.135 79.7 .93		7/16" SQ. OPENING	.080 49.1 1.60
5/16	85.2 1.54							
.283	86.5 1.27	5/16	79.0 2.24	5/8 49.8 12.27	.120 81.7 .74	.283 47.4 5.91	.135 58.4 2.09	.072 52.2 1.33
.263	87.3 1.11	.283	80.7 1.85	1/2 56.3 8.25	.105 83.7 .58	.263 49.5 5.20	.120 61.5 1.69	.063 56.0 1.05
.250	87.9 1.00	.263	81.9 1.61	7/16 59.9 6.48	.092 85.5 .45	.250 51.0 4.76	.105 65.0 1.33	.054 60.3 .79
3-1/2	' SQ. OPENING	.250	82.6 1.46	3/8 64.0 4.90	1-1/8" SQ. OPENING	.225 54.0 3.94	.092 68.3 1.04	.047 63.9 .62
1	60.5 14.57	.225	84.2 1.19	5/16 68.5 3.50	3/4 32.6 22.38	.207 56.4 3.40	.080 71.5 .80	.041 67.3 .48
3/4	67.8 8.60	.207	85.3 1.02	.283 70.8 2.91	5/8 37.9 16.49	.192 58.5 2.97	.072 73.7 .66	5/32" Sq. opening
5/8	72.0 6.13	.192	86.2 .88	.263 72.4 2.54	1/2 44.4 11.25	.177 60.7 2.56	.063 76.4 .51	.120 32.2 3.64
	<u>i                                     </u>	.177	87.2 .75	.250 73.4 2.31	7/16 48.4 8.91	.162 63.1 2.18	3/8" SQ. OPENING	.105 36.9 2.95
1/2	76.6 4.03	.162	88.2 .63	.225 75.6 1.89	3/8 52.9 6.79	.148 65.4 1.85	5/16 29.7 9.99	.092 39.9 2.36
7/16	79.0 3.13							
3/8	81.6 2.33	.148	89.1 .53	.207 77.2 1.62	5/16 58.0 4.90	.135 67.6 1.56	.283 32.5 8.48	.080 43.5 1.86
5/16	84.3 1.65	2-1/4"	SQ. OPENING	.192 78.6 1.40	.283 60.8 4.09	.120 70.3 1.25	.263 34.5 7.51	.072 48.1 1.56
.283	85.6 1.36	1	47.9 20.61	.177 80.0 1.20	.263 62.7 3.58	.105 73.4 .98	.250 36.0 6.89	.063 51.2 1.23
.263	86.5 1.18	3/4	56.2 12.37	.162 81.5 1.02	.250 64.0 3.26	.092 76.0 .76	.225 39.0 5.77	.054 53.3 .94
.250	87.1 1.07	5/8	61.2 8.90	.148 82.8 .85	.225 66.6 2.69	.080 78.6 .58	.207 41.5 5.00	.047 58.5 .73
.225	88.3 .87	1/2	66.9 5.91	.135 84.2 .72	.207 68.6 2.31	.072 80.4 .48	.192 43.8 4.39	.041 63.2 .55
.207	89.1 .74	7/16	70.1 4.62	.120 85.7 .57	.192 70.4 2.01	.063 82.5 .37	.177 46.1 3.82	1/8" SQ. OPENING
	' SQ. OPENING	3/8	73.4 3.46	1-3/8" SQ. OPENING	.177 72.2 1.72	5/8" SQ. OPENING	.162 48.7 3.27	.120 26.0 4.19
1	58.5 15.47	5/16	77.1 2.46	3/4 41.9 17.97	.162 74.0 1.46	7/16 31.6 13.45	.148 51.4 2.79	.105 29.5 3.37
0/4		.283	78.9 2.04	5/8 47.3 13.10	.148 75.9 1.23	3/8 36.0 10.40	.135 54.1 2.37	.092 33.4 2.71
3/4			80.2 1.77		.135 77.6 1.04		.120 57.4 1.92	.080 37.2 2.15
5/8	70.3 6.54	.263				5/16 41.3 7.64		
1/2	75.0 4.31	.250	81.0 1.61	7/16 57.5 6.95	.120 79.7 .83	.283 44.2 6.44	.105 61.0 1.51	.072 40.2 1.79
7/16	77.6 3.35	.225	82.6 1.31	3/8 61.6 5.26	.105 81.9 .64	.263 46.4 5.67	.092 64.5 1.18	.063 44.2 1.43
3/8	80.4 2.50	.207	83.9 1.12	5/16 66.5 3.77	.092 83.9 .50	.250 47.9 5.19	.080 67.9 .91	.054 48.7 1.09
5/16	83.2 1.76	.192	84.9 .97	.283 68.8 3.14	.080 85.7 .38	.225 50.7 4.31	.072 70.4 .75	.047 52.8 .85
.283	84.6 1.46	.177	85.9 .83	.263 70.5 2.74	1" SQ. OPENING	.207 53.4 3.72	.063 73.3 .59	.041 56.7 .67
.263	85.6 1.26	.162	87.0 .70	.250 71.5 2.49	5/8 34.0 18.06	.192 55.0 3.26	.054 76.4 .44	.035 61.0 .50
.250	86.2 1.15	.148	88.0 .59	.225 73.9 2.04	1/2 40.5 12.38	.177 57.6 2.81	5/16" SQ. OPENING	3/32" SQ. OPENING
.225	87.5 .93	.135	89.0 .49	.207 75.6 1.75	7/16 44.4 9.84	.162 61.0 2.40	.263 29.5 8.46	.092 24.5 3.10
.207	88.4 .79	2" S	<u> </u>	.192 77.0 1.52	3/8 49.0 7.52	.148 62.7 2.04	.250 30.9 7.78	.080 29.6 2.48
3" 5		1	44.4 22.49	.177 78.5 1.30	5/16 54.3 5.44	.135 65.0 1.72	.225 33.8 6.53	.072 32.5 2.18
3 3		3/4	52.9 13.57	.162 80.0 1.10	.283 57.1 4.55	.120 67.9 1.38	.207 36.2 5.68	.063 35.0 1.66
1	56.3 16.50							
3/4	64.0 9.79	5/8	58.0 9.79	.148 81.5 .92	.263 59.1 3.99	.105 71.0 1.08	.192 38.4 5.00	.054 38.8 1.35
5/8	68.5 7.00	1/2	64.0 6.53	.135 82.9 .78	.250 60.5 3.64	.092 73.8 .85	.177 40.8 4.36	.047 45.2 1.05
1/2	73.5 4.62	7/16	67.3 5.11	.120 84.6 .62	.225 63.3 3.01	.080 76.6 .65	.162 43.4 3.74	.041 47.6 .83
7/16	76.2 3.59	3/8	70.9 3.84	1-1/4" SQ. OPENING	.207 65.3 2.58	.072 78.5 .53	.148 46.0 3.20	1/16" SQ. OPENING
3/8	79.0 2.68	5/16	74.8 2.73	3/4 39.1 19.22	.192 67.2 2.25	.063 80.9 .41	.135 48.8 2.72	.063 24.6 2.15
5/16	82.0 1.90	.283	76.7 2.26	5/8 44.4 14.06	.177 69.2 1.93	9/16" SQ. OPENING	.120 52.2 2.21	.054 29.6 1.67
.283	83.5 1.57	.263	78.1 1.97	1/2 51.0 9.51	.162 71.2 1.64	7/16 28.4 14.42	.105 56.0 1.74	.047 33.2 1.40
.263	84.5 1.36	.250	79.0 1.79	7/16 54.8 7.50	.148 73.5 1.38	3/8 32.7 11.19	.092 59.6 1.37	.041 37.0 1.11
.250	85.2 1.23	.225	80.8 1.46	3/8 59.2 5.69	.135 75.1 1.17	5/16 37.9 8.24	.080 63.4 1.07	.035 42.3 .83
		.207	82.1 1.25	5/16 64.0 4.08	.120 77.3 .93	.283 40.8 6.96	.072 66.1 .88	
.225	86.5 1.01		83.2 1.08	.283 66.5 3.40	.105 79.7 .72		.063 69.3 .69	PLEASE NOTE: Tables
.207	87.5 .86	.192				.263 42.9 6.14		list from 4" to 1/16"
.192	88.3 .74	.177	84.4 .92	.263 68.3 2.97	.092 81.9 .56	.250 44.4 5.62	.054 72.7 .51	square openings. Larger
.177	89.2 .63	.162	85.6 .78	.250 69.4 2.70	.080 83.9 .43	.225 47.5 4.68	1/4" SQ. OPENING	openings up to 8" are
.162	90.0 .53	.148	86.7 .65	.225 71.8 2.22	7/8" SQ. OPENING	.207 49.8 4.04	.250 25.0 8.90	available by special
2- <u>3/4</u>	' SQ. OPENING	.135	87.8 .55	.207 73.6 1.90	5/8 29.7 19.98	.192 52.2 3.54	.225 27.7 7.55	order. For information
1	53.7 17.67	.120	89.0 .44	.192 75.1 1.65	1/2 36.0 13.79	.177 54.5 3.06	.207 29.9 6.59	on less than 1/16"
3/4	61.7 10.52	1-3/4"	SQ. OPENING	.177 76.7 1.42	7/16 39.9 11.00	.162 57.1 2.61	.192 32.0 5.82	openings, we are available
5/8	66.4 7.54	1	40.5 24.76	.162 78.4 1.20	3/8 44.4 8.44	.148 59.5 2.22	.177 34.3 5.08	to assist you at
1/2	71.6 4.98	3/4	49.0 15.03	.148 79.9 1.01	5/16 49.8 6.13	.135 62.0 1.88	.162 36.8 4.38	800.237.3820.
176	/1.0  4.30		10.01 10.00					

# SQUARE MESH WIRE MESH

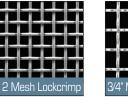
McNICHOLS<sup>®</sup> Square Mesh Wire Mesh is available in a wide range of meshes, weaves, and mesh sizes. Square Mesh is often used in applications such as infill panels, fan guards, enclosures, fencing, filtration, and more!

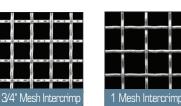
# SQUARE MESH - WOVEN

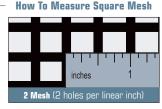
Square Mesh Woven Mesh is a flexible product depending on the gauge and weave type. It is available in a wide range of meshes, weaves and material types.











The number of openings per linear inch is determined by measuring from the center of wire to the center of wire.

MESH	DIAMETER	Μ
Д	LUMINUM, ALLOY	C
1	.120	14
2	.063	16
4	.047, .063	60
8	.028	
	BRASS	2
8	.028	4
16	.018	8
	CARBON STEEL	10
1	.120	16
2	.063, .080, .120, .135	40
3	.063, .105	10
3-1/2	.063	
4	.047, .080	8
6	.035, .047, .063	
8	.028, .032, .047, .063	
10	.025	3/
12	.023, .028	1

#### SQUARE MESH - WOVEN STOCK LIST

MESH	DIAMETER					
CAF	RBON STEEL (CC	INT.J				
14	.020					
16	.018					
60	.0075					
COPPER						
2 4	.063					
	.047					
8	.028					
10	.025					
16	.011					
40	.010					
100	.0045					
G	ALVANIZED STE	EL				
8	.017					
	TAINLESS STEE	L,				
	TYPE 304 & 316	3				
3/4"	.063, .105	304				
1	.080	Both				

DVEN STOCK LIST								
MESH	DIAMETER	TYPE						
STA	INLESS STEEL (C(	UNT.J						
1	.063, .120	304						
2	.047, .063, .120	Both						
2	.080, .105, .135	304						
3	.047, .063, .080	304						
3-1/2	.054	304						
4	.047, .063	Both						
4	.028, .032, .035, .080, .120	304						
5	.041	304						
6	.035	Both						
6	.047, .063	304						
8	.017, .025, .032, .047, .063	304						
10	.028	316						
10	.025, .035, .047	304						
12	.018, .023, .028, .035	304						
14	.020	304						
16	.018	Both						
16	.009, .028	304						
18	.009, .017	304						

MESH	DIAMETER	TYPE						
STA	STAINLESS STEEL (C							
20	.016	Both						
20	.014, .018, .023	304						
24	.014	304						
30	.012	Both						
40	.010	Both						
50	.009	304						
60	.0075	304						
80	.0055	304						
84	.0035	316						
100	.0045	Both						
105	.003	316						
150	.0026	304						
200	.0016	316						
200	.0021	304						
325	.0014	Both						

Please specify **McNICHOLS** on your next project.

FRAMING

FLAT BAR

For details on Wire Mesh framing options, please

refer to page 7 and 11 or we are happy to assist

you at 800.237.3820.

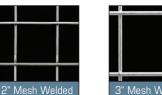
# SQUARE MESH - WELDED

**McNICHOLS**<sup>®</sup> Square Mesh Welded Wire Mesh typically has larger openings than Woven Wire Mesh. Welded Wire Mesh is capable of maintaining its shape when stressed.









3" Mesh Welded

	SQUARE MESH - WELDED STOCK LIST							
MESH	DIAMETER		MESH	DIAMETER		MESH	DIAMETER	TYPE
	CARBON STEEL		(	GALVANIZED STEEL		STA	INLESS STEEL, TYPE	E 304 & 31
1	.105, .120, .135		1	.063, .080, .118, .120		1	.080, .120	Both
1-1/2"	.135		2	.063		1	.063	304
-			<u>د</u>			2	.047	Both
2"	.097, .135, .156, .160, .185		4	.025		2	.063	304
3"	.135, .192		2"	.118, .135, .159, .160, .187, .188, .192		3	.047	304
4"	.225250		3"			4	.032	304
-			J	.135, .188, .192		2"	.120, .188	304
6"	.187		4"	.148		3"	.188	304

PLEASE NOTE: Pictures above are not to scale. For actual scale diagrams, please see pages 19-20.



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WIRE DIAMETERS &

# HARDWARE & INDUSTRIAL WIRE MESH

**McNICHOLS**<sup>®</sup> Hardware and Industrial Wire Mesh, made from a Galvanized wire available in woven and welded construction, is widely used in the farming industry and can be used in many other applications due to its corrosion resistance and lightweight characteristics.

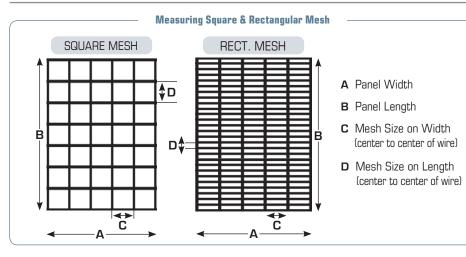
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Welded									
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HARDWARE & INDUSTRIAL STOCK LIST							
MESH	OPENING	DIAMETER	WIDTH	% 0/A			
1 Square - Welded	0.937" x 0.937"	.063	48"	87.8%			
1 Square - Welded	0.920" x 0.920"	.080	48"	84.6%			
2 Square - Welded	0.459" x 0.459"	.041	36", 48", 60"	84.3%			
2 Square - Welded	0.437" x 0.437"	.063	36", 48"	76.4%			
2 Square - Woven	0.420" x 0.420"	.080	48"	71.0%			
4 Square - Welded	0.255" x 0.255"	.025	36", 48"	81.0%			
4 Square - Woven	0.225" x 0.225"	.025	36"	81.0%			
4 Square - Woven	0.203" x 0.203"	.047	48"	65.9%			
8 Square - Woven	0.108" x 0.108"	.017	48"	74.6%			
2" x 1" Rectangular - Welded	1.900" x 0.920"	.080	48"	89.0%			
1" x 1/2" Rectangular - Welded	0.937" x 0.437"	.063	60"	80.0%			

# VINYLMESH

**MCNICHOLS** VINYLMESH<sup>™</sup>, is a welded, Galvanized and then Vinyl-Coated Wire Mesh offered in a variety of meshes, gauges, and widths. VINYLMESH<sup>™</sup> is easy to clean, as well as weather- and corrosion-resistant. Applications include animal cages, enclosures, screens, partitions, racking, and guards. VINYLMESH<sup>™</sup> is available in full 100' coils only.

		NYLMES	6H™ STC	DCK LIST	
	MESH	OPENING	DIAMETER	WIDTH	% 0/A
	2" Square - Welded	1.895" x 1.895"	.099	48"	90%
	2" Square - Welded	1.900" x 1.900"	.080	36"	92%
	1 Square - Welded	0.920" x 0.920"	.080	36", 48", 60"	85%
2" Mesh	1 Square - Welded	0.937" x 0.937"	.063	24"	88%
Welded	2 Square - Welded	0.437" x 0.437"	.063	48"	76%



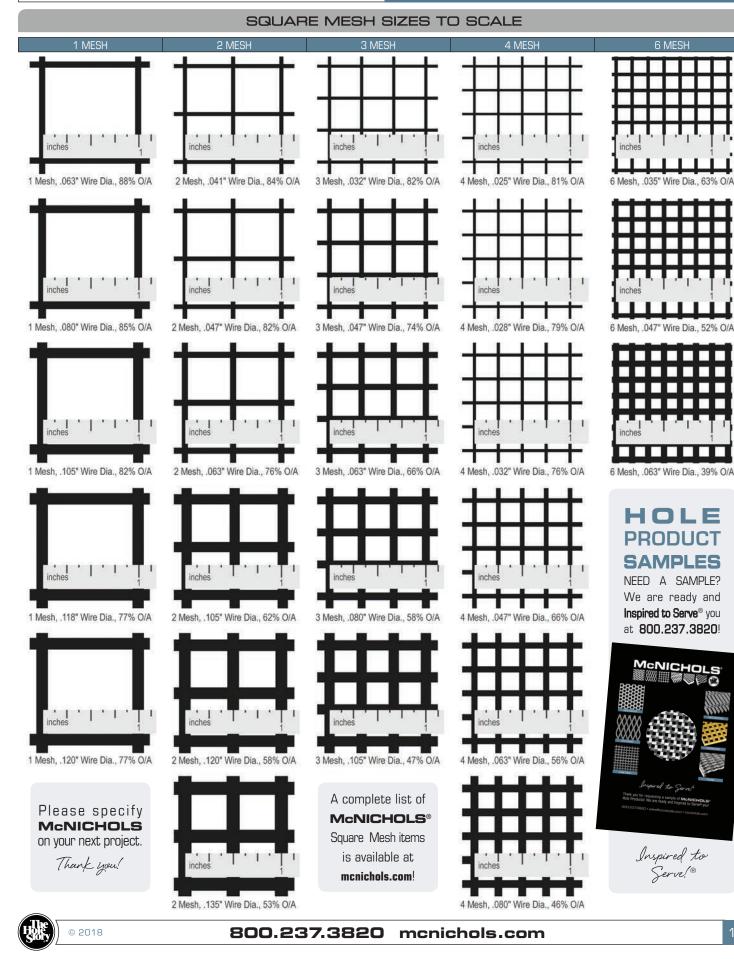


McNICHOLS® Wire Mesh, Welded, 1-1/2" Mesh -Infill Panels, Harley-Davidson® Museum, Milwaukee, WI

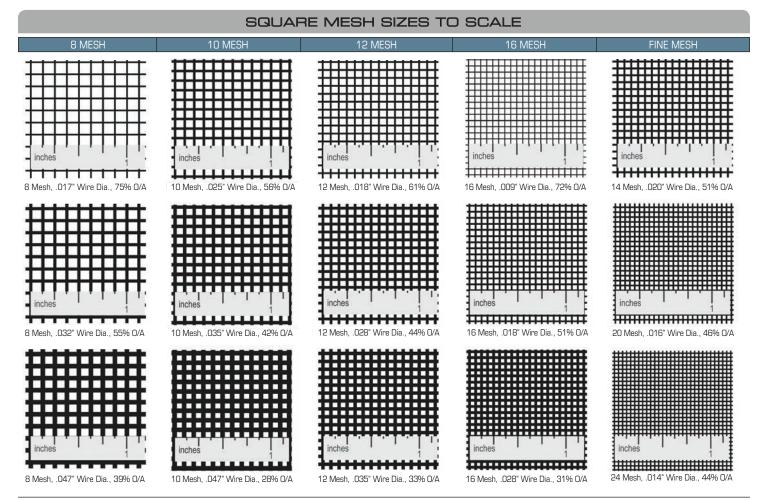


GAUGE EQUIVALENTS TO SCALE DIA. END & SIDE VIEW 5/0 .430 3/0 .362 .331 2/0 .283 1 GA 2 GA .263 .244 3 GA 4 GA .225 .207 5 GA 6 GA .192 7 GA .177 8 GA .162 .148 9 GA .135 10 GA .120 11 GA .105 12 GA 13 GA 092 14 GA .080 .072 15 GA .063 16 GA .054 17 GA 18 GA .047 .041 19 GA .035 20 GA .032 21 GA

# WIRE MESH



 $\mathbf{C}$ 



#### SQUARE MESH OPTIONS CHART

DIA.	OPENING	% 0/A	#/100 SF	DIA.	OPENING	% 0/A	#/100 SF	DIA.	OPENING	% 0/A	#/100 SF	DIA.	OPENING	% 0/A	#/100 SF	DIA.	OPENING	% 0/A	#/100 SF
1" ME	SH CENTE	R TO CE	NTER	.09	2 .6580	76.9	72.8	.192	.3080	37.9	505.5	.072	.3724	70.1	75.7	.092	.2413	52.3	168.7
.250	.7500	56.3	412.4	.08	0.6700	79.8	54.9	.177	.3230	41.7	425.4	.063	.3814	73.5	57.8	.080	.2533	57.6	126.4
.225	.7750	60.1	332.1	.07	2 .6780	81.7	44.5	.162	.3380	45.7	353.3	.054	.3904	77.0	42.3	.072	.2613	61.3	101.9
.207	.7930	62.9	280.1	.OE	3 .6870	83.9	34.0	.148	.3520	49.6	292.4	.047	.3974	79.8	32.0	.063	.2703	65.6	77.6
.192	.8080	65.3	240.3	.05	4 .6960	86.1	24.9	.135	.3650	53.3	241.7	.041	.4034	82.2	24.3	.054	.2793	70.1	56.7
.177	.8230	67.7	203.7	5/8"	MESH CEN	ITER TO C	ENTER	.120	.3800	57.8	189.6		2-1/2	MESH		.047	.2863	73.6	42.8
.162	.8380	70.2	170.2	.25	0.3750	36.0	689.4	.105	.3950	62.4	144.2	.192	.2080	27.0	654.4	.041	.2923	76.7	32.5
.148	.8520	72.6	141.7	.22	5.4000	41.0	551.0	.092	.4080	66.6	110.2	.177	.2230	31.1	548.2	.035	.2983	79.9	23.7
.135	.8650	74.8	117.7	.20	7 .4180	44.7	462.4	.080	.4200	70.6	83.0	.162	.2380	35.4	453.1	.032	.3013	81.5	19.7
.120	.8800	77.4	92.8	.19	2 .4330	48.0	395.0	.072	.4280	73.3	67.1	.148	.2520	39.7	373.7		3-1/2	MESH	
.105	.8950	80.1	71.0	.17	7 .4480	51.4	333.5	.063	.4370	76.4	51.2	.135	.2650	43.9	307.8	.135	.1507	27.9	429.0
.092	.9080	82.4	54.4	.1E	2 .4630	54.9	277.7	.054	.4460	79.6	37.6	.120	.2800	49.0	240.6	.120	.1657	33.8	349.9
.080	.9200	84.6	41.1	.14	8 .4770	58.3	230.5	.047	.4530	82.1	28.4	.105	.2950	54.4	182.4	.105	.1807	40.1	263.2
.072	.9280	86.1	33.3	.13	5 .4900	61.5	191.0	.041	.4590	84.3	21.6	.092	.3080	59.3	139.0	.092	.1937	46.1	199.3
.063	.9370	87.8	25.5	.12	0 .5050	65.3	150.2	.035	.4650	86.5	15.7	.080	.3200	64.0	104.4	.080	.2057	52.0	148.9
3/4" N	ESH CENT	ER TO C	ENTER	.10	5 .5200	69.2	114.5		2-1/4	MESH		.072	.3280	67.2	84.3	.072	.2137	56.1	119.8
.250	.5000	44.4	562.3	.05	2 .5330	72.7	87.9	.207	.2374	28.4	680.9	.063	.3370	71.0	64.3	.063	.2227	60.9	91.1
.225	.5250	49.0	451.0	.08	0 .5450	76.0	66.1	.192	.2524	32.2	578.4	.054	.3460	74.8	47.1	.054	.2317	65.9	66.5
.207	.5430	52.4	379.4	.07	2 .5530	78.3	53.5	.177	.2674	36.1	485.7	.047	.3530	77.9	35.6	.047	.2387	70.9	50.2
.192	.5580	55.3	324.8	.06	3 .5620	80.9	40.9	.162	.2824	40.3	402.3	.041	.3590	80.6	27.0	.041	.2447	73.5	38.1
.177	.5730	58.3	274.7	.05	4 .5710		30.0	.148	.2964	44.4	332.5		3 N			.035	.2507	77.2	27.6
.162	.5880	61.4	229.2	.04	7 .5780	85.5	22.7	.135	.3094	48.3	274.3	.162	.1713	26.3	560.4	.032	.2537	79.0	23.1
.148	.6020	64.4	190.5		2 N	1ESH		.120	.3244	53.1	214.8	.148	.1853	30.8	460.2		4 M	ESH	
.135	.6150	67.2	158.1	.25	-	-	894.6	.105	.3394	58.2	163.2	.135	.1983	35.3	377.6	.120	.1300	27.0	388.6
.120	.6300	70.5	124.4	.22	5 .2750	30.3	710.6	.092	.3524	62.7	124.5	.120	.2133	40.8	293.9	.105	.1450	33.6	306.2

PLEASE NOTE: Some meshes must be made to order and minimum quantities may apply. Chart continues on page 21.

34.3 593.8

.2930

.207

.105

.6450

73.9

95.0

67.1

93.7

105

.2283

46.8

222.0

.092

.1580

.3644

.080

39.9 231.0

# WIRE MESH

#/100 SF

#/1NN

.1000

.1020

.1050

.1070

.1080

.0571

.0641

.0701

.0761

.0791

.0831

.0861

.0881

.0911

.0530

.0590

.0650

.0680

.0720

.0750

.0770

.0800

12 N

.0423

.0483

.0513

.0553

.0583

.0603

0633

.0653

.0364

.0394

.0434

.0464

.0484

.0514

.0534

.0544

.0554

.0564

.0574

.0345

.0375

.0395

.0425

.0445

.0455

0465

.0475

.0485

.0490

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.0505

.0515

0525

.0530

.0306

.0326

.0356

.0376

.0386

.0396

64.0

66.6

70.6

73.3

74.6

26.3

33.2

39.7

46.8

50.6

55.8

59.9

62.7

67.1

28.1

34.8

42.3

46.2

51.8

56.3

59.3

64.0

25.4

33.2

37.5

43.6

48.4

51.8

57.2

60.8

25.4

29.8

36.2

41.5

45.2

51.0

55.1

57.2

59.3

61.5

63.7

30.5

36.0

39.9

46.2

50.7

53.0

554

57.8

60.2

61.5

62.7

65.3

67.9

70.6

71.9

30.3

34.4

41.1

45.8

48.3

50.8

177.4

138.2

103.2

148.4

116.3

136.7

102.

116.

100.5

# SQUARE MESH OPTIONS CHART (CONTINUED)

				5
DIA.	OPENING	% Π/Δ	#/100	DIA.
			SF	
	MESH (C			.025
.080	.1700 .1780	46.2	172.1	.023
.072		50.7	138.2	.020
.063	.1870	56.0	104.8	.018
.054	.1960	61.5	76.4	.017
.047	.2030	65.9	57.6	054
.041	.2090	69.9	43.6	.054
.035	.2150 .2180	74.0 76.0	31.7 26.4	.047
	.2220	78.9	20.4	.041
.028	.2250	81.0	16.1	.033
.025		MESH	10.1	.032
.105	.1172	27.7	333.7	.025
.092	.1302	34.2	263.9	.023
.032	.1422	40.8	195.9	.020
.000	.1502	45.6	157.0	.020
.063	.1592	51.2	118.9	.047
.003	.1682	57.2	86.4	.047
.034	.1752	62.0	65.0	.041
.041	.1732	66.3	49.2	.032
.035	.1872	70.8	35.7	.032
.032	.1902	73.1	29.8	.025
.002	5 M		20.0	.023
.092	.1080	29.2	283.4	.020
.080	.1200	36.0	220.6	.020
.072	.1280	41.0	176.4	.041
.063	.1370	46.9	133.2	.035
.054	.1460	53.3	96.7	.032
.047	.1530	58.5	72.6	.028
.041	.1590	63.2	54.9	.025
.035	.1650	68.1	39.8	.023
.032	.1680	70.6	33.2	.020
.028	.1720	74.0	25.3	.018
.025	.1750	76.6	20.2	
.023	.1770	78.3	17.0	.035
	6 M	ESH		.032
.092	.0747	20.2	352.8	.028
.080	.0867	27.2	259.1	.025
.072	.0947	32.5	216.9	.023
.063	.1037	38.9	163.0	.020
.054	.1127	46.0	117.7	.018
.047	.1197	51.8	88.2	.017
.041	.1257	57.2	66.5	.016
.035	.1317	62.7	48.1	.015
.032	.1347	65.6	40.0	.014
.028	.1387	69.6	30.5	
.025	.1417	72.6	24.3	.028
.023	.1437	74.7	20.5	.025
.020	.1467	77.8	15.5	.023
	7 M		1.5.1	.020
.063	.0799	31.4	184.7	.018
.054	.0889	38.8	139.7	.017
.047	.0959	45.2	104.2	.016
.041	.1019	51.0	78.4	.015
.035	.1079	57.2	56.5	.014
.032	.1109	60.4	47.0	.0135
.028	.1149	64.8	35.8	.013
.025	.1179	68.2	28.4	.012
.023	.1199	70.6	24.0	.011
.020	.1229	74.1	18.1	.010
.018	.1249	76.6	14.6	.0095
	8 M		160 7	005
.054	.0710	32.3 38.9	162.7 120.9	.025
.047	.0780 .0840	45.2	90.6	.023
.041	.0840	45.2 51.8	65.1	.020
.033	.0900	55.4	54.1	.018
.032	.0930	60.2	41.1	.017
.020	.0370	00.2	41.1	.010

/100 SF	DIA.	OPENING	% 0/A	#/100 SF	
32.6	.015	.0406	53.4	26.8	
27.5	.014	.0416	56.1	23.3	
20.7	.0135	.0421	57.4	21.6	
16.8	.013	.0426	58.8	20.0	
14.9	.012	.0436	61.6	17.0	
	.011	.0446	64.4	14.2	
177.4	.010	.0456	67.4	11.7	
138.2	.0095	.0460	68.9	10.5	
103.2	.009	.0466	70.4	9.5	
74.0		20 N			
61.4	.025	.0250	25.0	85.0	
46.6	.023	.0270	29.2	70.8	
36.9	.020	.0300	36.0	55.2	
31.1 23.4	.018	.0320	41.0	44.1	
23.4	.017	.0330	43.6	39.1	
148.4	.016	.0340	46.2	34.4	
	.015	.0350	49.0	30.1	
116.3 83.1	.014	.0360	51.8	26.1	
68.8	.0135	.0365	53.3	24.2	
52.1	.013	.0370	54.8	22.4	
41.2	.012	.0380	57.8	19.0	
34.7	.011	.0390	60.8	15.9	
26.1	.010	.0400	64.0	13.1	
20.1	.0095	.0405	65.6	11.8	
136.7	.009	.0410	67.2	10.5	
102.1		24 N	1ESH		
84.3	.020	.0217	27.1	64.8	
63.5	.018	.0237	32.4	51.5	
50.1	.017	.0247	35.1	48.0	
42.2	.016	.0257	38.0	42.1	
31.6	.015	.0267	41.1	36.7	
25.5	.014	.0277	44.2	31.8	
	.0135	.0282	45.8	29.4	
116.1	.013	.0287	47.4	27.2	
100.5	.012	.0297	50.8	23.0	
75.5	04.0	26 N		<b>FC C</b>	
59.3	.018	.0205	28.4	56.6	
49.8	.017 .016	.0215	31.2 34.2	52.6	
37.2	.015	.0225	37.3	46.1 40.2	
29.9	.013	.0235	40.6	34.7	
26.6	.0135	.0240	40.0	32.1	
23.5	.013	.0255	44.0	29.7	
20.6	.012	.0265	47.5	25.1	
17.9	.011	.0275	51.1	20.9	
00.0	.010	.0285	54.9	17.2	
83.6		30 M	1FSH		
68.9	.016	.0173	26.9	51.8	
57.7 43.0	.015	.0183	30.1	47.4	
34.5	.014	.0193	33.5	40.8	
30.7	.0135	.0198	35.3	37.8	
27.1	.013	.0203	37.1	34.8	
23.7	.012	.0213	40.8	29.4	
20.6	.011	.0223	44.8	24.5	
19.1	.010	.0233	48.9	20.0	
17.7	.0095	.0238	51.0	18.0	
15.0	.009	.0243	53.1	16.1	
12.6	.0085	.0248	55.4	14.3	
10.4		35 N			
9.4	.014	.0146	26.1	46.5	
	.0135	.0151	27.9	45.2	
75.0	.013	.0156	29.8	41.6	
66.0	.012	.0166	33.8	35.0	
49.0	.011	.0176	37.9	29.0	
39.2	.010	.0186	42.4	23.7	
34.8	.0095	.0191	44.7	21.3	
30.7	.009	.0196	47.1	19.0	

DIA.	OPENING	% 0/A	#/100 SF	DIA.	OPEN
	40 N	1ESH	01		1
.012	.0130	27.0	40.9	.0029	.00
.011	.0140	31.4	33.8		1
.010	.0150	36.0	27.6	.0026	.00
.0095	.0155	38.4	24.7		1
.009	.0160	41.0	22.0	.0025	.00
	45 N		_		1
.011	.0112	25.4	36.9	.0024	.00
.010	.0122	30.1	31.6		1
.0095	.0127	32.7	28.3	.0023	.00
.009	.0132	35.3	25.2		2
.0085	.0137	38.0	22.3	.0021	.00
.008	.0142	40.8	19.6		2
.0075	.0147	43.8	17.1	.0017	.00
	50 N	1ESH			2
.010	.0100	25.0	34.0	.0016	.00
.0095	.0105	27.6	32.0		3
.009	.0110	30.3	28.4	.0011	.00
.0085	.0115	33.1	25.1		4
.008	.0120	36.0	22.1	.0010	.00
.0075	.0125	39.1	19.2		TWIL
		1ESH			1
.008	.0087	27.2	27.3	.005	.00
.0075	.0092	30.5	23.7		1
.007	.0097	33.9	20.4	.0045	.00
.0065	.0102	37.5	17.4	100 10	1
.006	.0107	41.2	14.7	.0042	.00
		1ESH		.0040	.00
.007	.0073	26.1	23.3	100 10	1
.0065	.0078	29.8	20.8	.0038	.00
.006	.0083	33.8	17.5		1
	80 N			.0033	.00
.006	.0065	27.0	20.4		1
.0055	.0070	31.4	16.9	.0030	.00
.005	.0075	36.0	13.8		1
	90 N			.0028	.00
.006	.0051	21.1	22.4		1
.0055	.0056	25.4	18.4	.0026	.00
.005	.0061	30.1	15.8		1
	100 N	MESH		.0025	.00
.0045	.0055	30.3	14.2		2
.004	.0060	36.0	11.0	.0025	.00
.0035	.0065	42.3	8.3	.0023	.00
.003	.0070	49.0	6.0		2
.0022	.0078	60.8	3.2	.0016	.00
	120 1	MESH			2
.0037	.0046	30.7	13.0	.0016	.00
	130 1	MESH			3
.0034	.0043	31.1	11.9	.0015	.00
ET D' THE TREE	ALC: NO	1			Zanta
1	PALMAN N				
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130 24	Contraction of a	101		A CARE	

	140 10		
.0029	.0042	34.9	9.3
	150 M	IESH	
.0026	.0041	37.4	8.0
	160 M	IESH	
.0025	.0038	36.4	7.9
	170 M	IESH	
.0024	.0035	35.1	7.7
	180 M	IESH	
.0023	.0033	34.7	7.5
	200 M	IESH	
.0021	.0029	33.6	7.0
	220 N	IESH	
.0017	.0028	38.7	5.0
	250 M	IESH	
.0016	.0024	36.0	5.1
	325 M	IESH	
.0011	.0020	42.0	4.2
	400 M	IESH	
.0010	.0015	36.0	3.7
-	TWILLED	WEAVE	
	100 M	IESH	
.005	.0045	25.0	17.0
	110 M	IESH	
.0045	.0046	25.6	12.4
	120 N	IESH	
.0042	.0041	24.6	10.4
.0040	.0043	26.6	10.2
	130 M	IESH	
.0038	.0039	25.6	14.5
	140 M	IESH	
.0033	.0038	28.6	11.8
	150 M	IESH	
.0030	.0037	30.8	7.1
	160 M	IESH	
.0028	.0035	31.4	7.0
	170 N	IESH	
.0026	.0033	31.2	8.8
	180 M	IESH	
.0025	.0031	31.1	6.7
	200 M	IESH	
.0025	.0025	25.0	6.6
.0023	.0027	29.2	6.3
	250 N	IESH	
.0016	.0024	36.0	4.6
	270 M	IESH	
.0016	.0021	32.2	5.3
	300 M	IESH	
.0015	.0018	29.7	5.2
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McNICHOLS® Wire Mesh, Woven, 8 Mesh - Cabinet Infill Panels, Atlanta, GA

PLEASE NOTE: Some meshes listed are special order and minimum quantities may apply.



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# RECTANGULAR WIRE MESH

MCNICHOLS® Rectangular Wire Mesh has many of the same properties as Square Wire Mesh. The primary difference is the rectangular opening that is created when the mesh is constructed. MCNICHOLS stocks both Woven (often referred to as Insect Screen) and Welded in several patterns and materials.

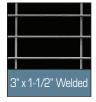
# **RECTANGULAR - WOVEN** (INSECT SCREEN)



McNICHOLS® Rectangular Woven Mesh, also referred to as Insect Screen, has a woven wire mesh construction. Small insects, such as no-see-ums, may pass through a typical insect screen (18 x 14 Mesh), but smaller meshes from 20 to 325 are available to slow down most bugs.

	RECTANGL			
MESH	MATERIAL	OPENING	DIAMETER	COIL WIDTH
18 x 14	Bronze	0.130" x 0.130"	.011	36"
18 x 14	Stainless Steel Type 304	0.090" x 0.090"	.009	36", 48"
18 x 14	Stainless Steel Type 304	0.130" x 0.130"	.011	36", 48"
18 x 14	Epoxy Coated	0.090" x 0.090"	.009	36", 48"
18 x 16	Aluminum	0.050" x 0.050"	.011	36", 48"

# **RECTANGULAR - WELDED**



McNICHOLS<sup>®</sup> Rectangular Welded Wire Mesh typically has larger openings than Woven Wire Mesh. With the wire strands welded at each intersection, Welded Wire Mesh is more capable of maintaining its shape when stressed. The product is a popular choice for railing infill panels.

# **RECTANGULAR - WELDED STOCK LIST**

MESH	MATERIAL	OPENING	DIAMETER	#/SF	WIDTH
1" x 1/2"	Galvanized	0.937" x 0.437"	.063	.40	60" Coil
2" x 1"	Carbon Steel	1.800" x 0.880"	.120	.70	48" x 96" Sheet
2" x 1"	Galvanized	1.920" x 0.920"	.080	.31	48" Coil
3" x 1-1/2"	Stainless Steel	2.880" x 1.380"	.120	.83	36" x 100" Sheet

#### WELDED WIRE MESH TRIM & STUB OPTIONS

#### TRIMMED (NO STUBS)

pi

Minimum on all four sides ap Tr

mmmum	un an	i iuui	JIUCJ
oproximate	ely 1/10	5" - 1/8	3" long.
rimmed	flush	(no	stubs)
eces can	be ide	ntical.	

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_		Lo
		Γ

UNTRIMMED BALANCED STUBS qual stubs on opposite sides

inly. Stubs will not exceed pening unless specified.



Untrimmed Random stubs vary on all four sides as a result of shearing a larger sheet. Pieces will not be identical.

UNTRIMMED RANDOM STUBS



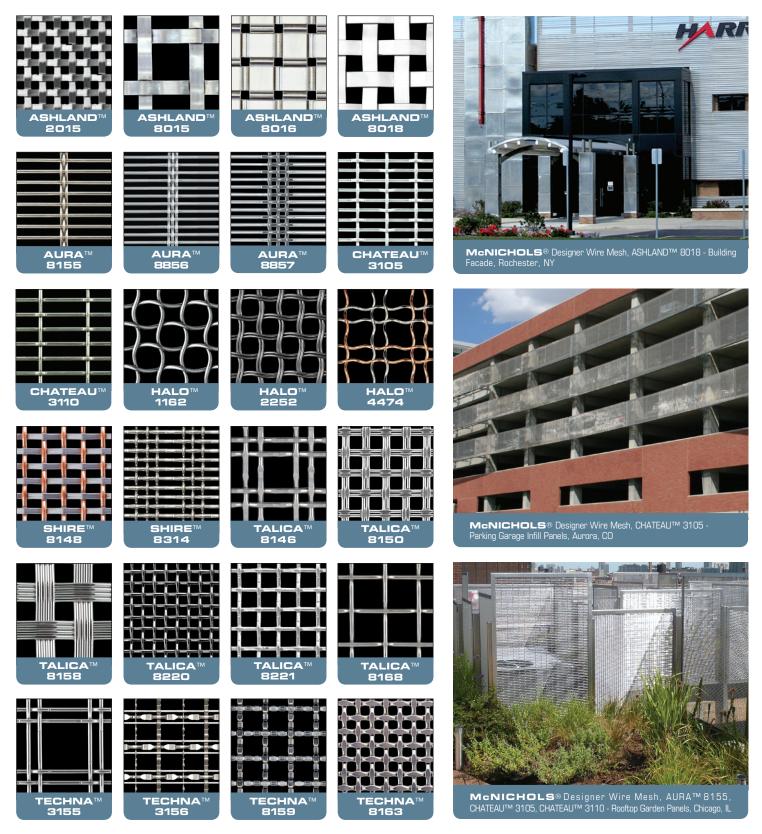
McNICHOLS® Wire Mesh, Welded, 3" x 1-1/2" Rectangular Mesh - Infill Panels



McNICHOLS® Wire Mesh, Welded, 2" x 4" Rectangular Mesh - Railing Infill Panels

# **DESIGNER WIRE MESH**

McNICHOLS<sup>®</sup> Designer Wire Mesh is constructed of wires that are woven into a variety of unique patterns. Designer Wire Mesh applications include ceilings, stairway infill panels, overlay surfaces, wall cladding, sunshades, partitions, store fixtures, cabinet infills, signage or sign backing, aesthetic accents, and more! We have several patterns and styles in stock. We are ready and **Inspired to Serve<sup>®</sup>** you at **866.754.5144** or **designermetals@mcnichols.com**.



# WIRE MESH

# McNICHOLS® HOLE PRODUCTS

# ECO-MESH® MODULAR FACADE & TRELLIS SYSTEMS

McNICHOLS ECO-MESH® Modular Facade & Trellis System offers architects and contractors many aesthetic, sustainable and functional green-build opportunities. ECO-MESH® panels are strong, durable, lightweight and are well-suited for both interior and exterior spaces. Modular applications include facades, partitions, canopies, arbors and more. ECO-MESH® panels promote vegetation growth within the panel grid system.

ECO-I	MESH® PRODUCT OPTIONS
PRIMARY MATERIAL	Galvannealed (most common) Aluminum, Carbon Steel or Stainless Steel
MATERIAL FINISH	Mill, Sandblasted, Eco-Friendly Powder Coatings with 13 Standard Colors
COLOR	Textured Black (in stock), Aged Copper, Brown, Forest Green, Gray, Light Gray, Jet Black, Moss Green, Red Brick, Red Orange, Reed Green, Rust, Tan
WEAVE TYPE	Woven - Intercrimp Weave is Standard; (Other Weave Types Available)
MESH SIZE	2" x 2" Square Mesh In Stock (Other Sizes Available)
WIRE DIAMETER	0.135" Thick (0.120", 0.148" Available)
BRIDGE WIRE	0.105" Thick, Spaced 18" on Center
CHANNEL SIZE	2" or 3" Channel Width with 1" Return, 16 Gauge (.0635" Thick)
PANEL WIDTH	48" (24" to 96" Available)
PANEL HEIGHT	96" (24" to 240" Available)
ACCESSORIES	Mounting Brackets & Hardware Available
WE ARE RE	ADY AND <b>INSPIRED TO SERVE®</b> YOU AT 800.237.3820!



# ECO-ROCK<sup>®</sup> GABION WALL CONTAINMENT SYSTEMS

MCNICHOLS ECO-ROCK® creates decorative boundaries with an eco-friendly twist. The gabion-style Wire Mesh wall containers hold natural rock, recycled concrete, glass and other materials. In indoor and outdoor settings ECO-ROCK<sup>®</sup> containers add a sustainable design element. Whether it is an outdoor partition or a vertical entryway, MCNICHOLS can craft a custom gabion-style design to meet your needs.

ECO-I	ROCK <sup>®</sup> PRODUCT OPTIONS	
PRIMARY MATERIAL	Galvannealed (most common), Carbon Steel or Stainless Steel	
MATERIAL FINISH	Mill, Sandblasted, Eco-Friendly Powder Coatings with 13 Standard Colors	
COLOR	Textured Black (in stock), Aged Copper, Brown, Forest Green, Gray, Light Gray, Jet Black, Moss Green, Red Brick, Red Orange, Reed Green, Rust, Tan	
WEAVE TYPE	Woven – Intercrimp Weave	
MESH SIZE	2" x 2" & 3" x 3" Square Mesh (Other Sizes Available)	
WIRE DIAMETER	0.148" Thick (9 Gauge) or 0.192" Thick (6 Gauge)	
BULDGE WIRE DIAMETER	0.105" Thick (12 Gauge) or 0.148" Thick (9 Gauge)	
BULDGE WIRE SPACING	12" on Center (Vertically), 18" on Center (Horizontally)	
CHANNEL/BENT PLATE ANGLE SIZE	Up to 12": 10 Gauge (.1345" Thick) Channel with 1" Return Greater than 12": 2" x 2" Bent Plate Angle, 10 Gauge (.1345" Thick)	
PANEL WIDTH	36" to 72"	
PANEL HEIGHT	36" to 96"	

WE ARE READY AND INSPIRED TO SERVE® YOU AT 800.237.3820!





#### HOW TO ORDER/SPECIFY McNICHOLS ECO-MESH®

The information provided below is your guide for choosing McNICHOLS ECO-MESH® for your project. Please specify:

APPLICATION - Wall-mounted or freestanding

**PRIMARY MATERIAL** - Type of material (Galvannealed, Aluminum, Carbon Steel, or Stainless Steel)

MATERIAL FINISH - Mill finish, sandblasted or eco-friendly powder coating (13 standard colors available)

MESH SIZE - 2" x 2" or 3" x 3" Square Mesh (measured by the number of openings per lineal inch from center to center of the wires) is standard

WIRE DIAMETER - Thickness (measured in decimals) or gauge equivalent (0.135" thick wire diameter is standard)

**BRIDGE WIRE** – Thickness (measured in decimals) or gauge equivalent (0.105" thick wire diameter is standard)

CHANNEL SIZE - 2" or 3" channel width with 1" return in 16 Gauge is standard (and available in stock)

**QUANTITY/SIZE(S)** - Number of panels and sizes (48" width x 96" length panel available in stock)

**SPECIAL** – ECO-MESH<sup>®</sup> panels are available in a variety of custom sizes and shapes

**ACCESSORIES** – Mounting Brackets and Hardware

# BAR GRATING

McNICHOLS<sup>®</sup> Bar Grating is the top choice for strength, safety and overall value! Bar Grating provides a load bearing surface that allows air, light, heat, sound, and fluid to pass through. Bar Grating is strong, durable, and virtually maintenance-free!

PRODUCT SPECIFICATIONS

	PF	RODUCT SPEC	FICATIONS	
CONSTRUCTION TYPES			FFFF	
	WELDED	HEAVY-DUTY WELDED	SWAGE-LOCKED	PRESS-LOCKED
SERIES NAME	GW, CMW (CLOSE MESH), SGW	GHB, PEDS & TREADS®	gal, gia, sft, TB-940 (safe-t-grid®)	gaa, gcm (close mesh)
PRODUCT SPACING	19-W-4, 19-W-2, 15-W-4, 15-W-2, 11-W-4,	19-W-4	19-S-4, 19-S-2, 19-SI-4, 15-SI-4, 15-SI-2,	19-P-4, 11-P-4, 8-P-4, 7-P-4,
PRIMARY MATERIAL	Carbon Steel, Carbon Steel (Powder Coated Black), Galvanized Steel, Stainless Steel	Carbon Steel, Galvanized Steel	Aluminum, Stainless Steel	Aluminum, Carbon Steel, Galvanized Steel, Stainless Steel
BAR HEIGHT	3/4" to 2-1/2"	1" to 3"	1" to 2-1/2"	1" to 2"
BAR THICKNESS	1/8", 3/16"	1/4" (5/16", 3/8" by Special Order)	1/8", 3/16", 1/4", 0.940" - TB-940 (SAFE-T-GRID®)	3/16"
PRODUCT SURFACE	Smooth, Serrated	Smooth, Serrated	Smooth, Serrated, Grooved	Smooth, Serrated
% OPEN AREA	68% to 83%	74.5%	20.6% to 83%	55%
STANDARD PANEL SIZES	24" x 240" 24" x 288" 36" x 240" 36" x 288"	24" x 240" 24" x 288" 36" x 240" 36" x 288"	24" x 288" 36" x 288"	36" x 144"

WE ARE READY AND INSPIRED TO SERVE® YOU AT 800.237.3820!

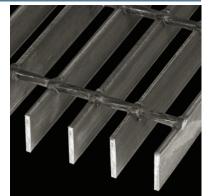


McNICHOLS® Bar Grating, Swage-Locked, GAL-100 Sunshade, Margarido House, Oakland, CA



McNICHOLS® Bar Grating, Press-Locked, GCM-CLOSE MESH - Display, Harley-Davidson® Museum, Milwaukee, WI

# BAR GRATING



#### HOW TO ORDER/SPECIFY McNICHOLS<sup>®</sup> BAR GRATING

The information provided below is your guide for choosing the right **MCNICHOLS**<sup>®</sup> BAR GRATING product for your project. Please specify:

**APPLICATION** – Bar Grating use and physical requirements (interior or exterior application; loading, span and support requirements; traffic requirements such as pedestrian, ADA, vehicular, hand cart, etc.)

CONSTRUCTION TYPE – Type of construction (Welded, Heavy-Duty Welded, Swage-Locked, Press-Locked, Clinched)

SERIES TYPE & NAME - Type of series (GW-100, GHB-150, GAL-125, etc.)

 $\label{eq:product spacing-19-W-4, 15-W-2, etc.} PRODUCT SPACING - 19-W-4, 15-W-2, etc.$ 

PRIMARY MATERIAL – Type of material (Aluminum, Carbon Steel, Carbon Steel – Powder Coated Black, Galvanized Steel, Stainless Steel)

MATERIAL FINISH – Inventory is typically mill finish for Aluminum, Carbon Steel and Stainless Steel. Hot-Dipped Galvanized, Powder Coated Black or Powder Coated Gray finishes available for many items

BAR SIZE – Bar height and thickness (e.g. 1-1/4" Height x 3/16" Thick)

BAR SHAPE – Rectangular (Aluminum, Steel, Stainless Steel), I-Bar or T-Bar (Aluminum only)

**BAR SPACING** – Bearing bar and cross bar spacing measured on center (e.g. 19-W-4 is equivalent to 1-3/16" (19/16) bearing bar spacing on center, welded construction, 4" cross bar spacing on center)

**PRODUCT SURFACE** – Smooth or serrated surface (Aluminum, Steel, Stainless Steel Rectangular Bar), grooved surface (Aluminum I-Bar and T-Bar)

**OPEN AREA** – Percentage of open area

**SPAN** – Direction of bearing bars (long span on stock panels runs parallel to the length dimension)

**QUANTITY/SIZE(S)** – Number of panels (width and length) and/or sizes (cut-to-size pieces, areas, treads) and cut types (random, uniform, equal stub). Areas exceeding standard panel widths provided in multiple pieces to width

**SPECIAL** – Requirements such as fabrication, banding (trim and/or load) notching, cut-outs, toeboards, stair treads (width, length or span and nosing type), non-standard tolerances, etc.

ACCESSORIES - Quantity and type of Clips or Fasteners/Hardware



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# McNICHOLS® HOLE PRODUCTS

### WELDED BAR GRATING

**McNICHOLS**<sup>®</sup> Welded Bar Grating is a suitable flooring application choice because of its strength, safety, and overall value. Welded Bar Grating has a rectangular-shaped bearing bar that is available in a variety of thicknesses, heights, spacings, and materials.

#### GW, CMW & SGW SERIES

McNICHOLS® GW Series Grating will handle most moderate loads and light wheel traffic with its standard bearing bar centers of 1-3/16". McNICHOLS® CMW Series CLOSE MESH Grating is suitable for wheelchair traffic and is ADA-compliant. McNICHOLS® SGW Series Grating will handle heavier loads than GW Series Grating.

#### PRODUCT OPTIONS

Material:	Carbon Steel, Carbon Steel (Powder Coated Black), Galvanized Steel, Stainless Steel
Bar Height:	
	1/8", 3/16" (Rectangular) Smooth, Serrated
	24" x 240", 24" x 288", 36" x 240", 36" x 288"

#### LOAD TABLE: GW, SGW (STEEL)

BEARING BAR	SPAN (1-3/16" CENTER TO CENTER BAR SPACING)	
SIZE		8'
	U 355 227 158 116 89 70 To determine load for SGW, SGW	1.2
3/4" x 1/8"	U .099 .100 .223 .304 .397 .503 multiply value at left by the lead facto	
0/4 / 1/0	6 300 284 237 203 178 108 1 27 Deflection under the factored lo	
	0 .079 .124 .179 .243 .318 .402 will be same as shown in the load table.	
	U 533 341 237 174 133 105 For Serrated Grating, use loading val	ues
3/4" x 3/16"	U .099 .100 .223 .304 .397 .503 1/4" less than your actual hearing	
	C 533 426 355 305 266 237 height selection	
	D .079 .124 .179 .243 .318 .402	
	U 632 404 281 206 158 125 101 84 70	
1" x 1/8"		
1" x 3/16"	D .074 .116 .168 .228 .298 .377 .466 .563 .670	
	D .060 .093 .134 .182 .238 .302 .372 .451 .536	
1-1/4" x 1/8"		
1-1/4" x 3/16"	D .060 .093 .134 .182 .238 .302 .372 .451 .536 .730 C 1480 1184 987 846 740 658 592 538 493 423	
		-
1-1/2" x 1/8"	D         .050         .078         .112         .152         .199         .251         .310         .376         .447         .608         .7           c         1421         1137         947         812         711         632         568         517         474         406         35	794
		536
		794
1-1/2" x 3/16"		
		636
		681
1-3/4" x 3/16"	C 2901 2321 1934 1658 1451 1289 1161 1055 967 829 72	
		545
	U 3789 2425 1684 1237 947 749 606 501 421 309 23	
		596
2" x 3/16"	C 3789 3032 2526 2165 1895 1684 1516 1378 1263 1083 94	
		477
0.4.(4) 0.(4.0)		530
2-1/4" x 3/16"		99
		424
2-1/2" x 3/16"	U 5921 3789 2632 1933 1480 1170 947 783 658 483 37	
		477
	C 5921 4737 3947 3383 2961 2632 2368 2153 1974 1692 14	180
		381
Unit Stress 18.000 psi: U -	Uniform Load - Lbs./Square Foot, D - Deflection - in Inches, C - Concentrated Load - Lbs./Square Foot of Width at Mid	span
Spans shaded in blue proc	duce a deflection of 1/4" or less under a uniform load of 100 lbs. per square foot. This deflection is recommended as	
	strian comfort. It can be exceeded at the discretion of the engineer.	
	iece of Grating subjected to a concentrated load over only a portion of its width is determined by the stiffness of both the be	
uars and une cross pars, and	d therefore varies with the type of Grating used. Please call us to determine carrying capacity of Gratings subject to such loading	,s.

tad's and une cruss tars, and une rours varies with the type of relating used. Presest can us to determine carrying topeauty of oreaning sought, to sourh usaning, This technical information provided is as a reference for evaluation by technically skilled persons only, with any use theread to be at their independent discretion and risk. MENICHOLS shall have no responsibility or liability for results obtained or damages resulting from improper evaluation or use of Grating.







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Welded Stair Treads page 32

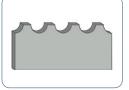
# BAR SPACING: GW, SGW

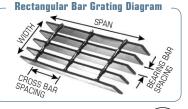
	GW (19-W-4) (		GW-2 (19-W-2)		SGW (15-W-4)		SGW-2 (15-W-2)	
BAR SPACING	4" + Cross Bar	1-3/16"  9 Bar	2" 2" Cross Bar Bearing	1-3/16" — Bar	4" + + + Cross Bar Bearing	15/16"  Bar	2" 2" 1 1 Cross Bar Bearing B	5/16" —
END VIEW (1/8" THICKNESS ALSO AVAILABLE)	3/16" Bearing Bar Cross Bar		3/16" Bearing Bar Cross Bar		3/16" Bearing Bar Cross Bar		3/16" Bearing B Cross Bar	Height Le
BEARING BAR SIZE	SERIES	#/SF	SERIES	#/SF	SERIES	#/SF	SERIES	#/SF
3/4" x 1/8"	GW-75-A	4.1	GW-75-A-2	5.0	SGW-75-A	5.0	SGW-75-A-2	5.9
3/4" x 3/16"	GW-75	5.8	GW-75-2	6.7	SGW-75	7.2	SGW-75-2	8.1
1" x 1/8"	GW-100-A	5.2	GW-100-A-2	6.1	SGW-100-A	6.4	SGW-100-A-2	7.3
1" x 3/16"	GW-100	7.5	GW-100-2	8.4	SGW-100	9.3	SGW-100-2	10.2
1-1/4" x 1/8"	GW-125-A	6.3	GW-125-A-2	7.2	SGW-125-A	7.9	SGW-125-A-2	8.8
1-1/4" x 3/16"	GW-125	9.1	GW-125-2	10.0	SGW-125	11.3	SGW-125-2	12.2
1-1/2" x 1/8"	GW-150-A	7.4	GW-150-A-2	8.3	SGW-150-A	9.3	SGW-150-A-2	10.2
1-1/2" x 3/16"	GW-150	10.8	GW-150-2	11.7	SGW-150	13.5	SGW-150-2	14.4
1-3/4" x 3/16"	GW-175	12.5	GW-175-2	13.4	SGW-175	15.6	SGW-175-2	16.5
2" x 3/16"	GW-200	14.1	GW-200-2	15.0	SGW-200	17.7	SGW-200-2	18.6
2-1/4" x 3/16"	GW-225	15.8	GW-225-2	16.7	SGW-225	19.8	SGW-225-2	20.7
2-1/2" x 3/16"	GW-250	17.4	GW-250-2	18.3	SGW-250	21.9	SGW-250-2	22.8

### PANEL WIDTHS: GW, SGW

# Bars	GW, GW-2	SGW, SGW-2	# Bars	GW, GW-2	SGW, SGW-2	# Bars	GW, GW-2	SGW, SGW-2	
2	1-3/8"	1-1/8"	17	19-3/16"	15-3/16"	32		29-1/4"	
3	2-9/16"	2-1/16"	18	20-3/8"	16-1/8"	33	PLEASE	30-3/16"	
4	3-3/4"	3"	19	21-9/16"	17-1/16"	34	NOTE:	31-1/8"	
5	4-15/16"	3-15/16"	20	22-3/4"	18"		Width		
6	6-1/8"	4-7/8"	21	23-15/16"	18-15/16"	35	and	32-1/16"	
7	7-5/16"	5-13/16"	22	25-1/8"	19-7/8"	36	length	33"	
8	8-1/2"	6-3/4"	23	26-5/16"	20-13/16"	37	tolerance	33-15/16"	
9	9-11/16"	7-11/16"	24	27-1/2"	21-3/4"	38		34-7/8"	
10	10-7/8"	8-5/8"	25	28-11/16"	22-11/16"		± 1/4"		
11	12-1/16"	9-9/16"	26	29-7/8"	23-5/8"	39		35-13/16"	
12	13-1/4"	10-1/2"	27	31-1/16"	24-9/16"		idth indicated.		
13	14-7/16"	11-7/16"	28	32-1/4"	25-1/2"		made in two or		
14	15-5/8"	12-3/8"	29	33-7/16"	26-7/16"	Panels are available up to 48" b special order. All other widths are cut-to-size. Deduct 1/16" from width			
15	16-13/16"	13-5/16"	30	34-5/8"	27-3/8"				
16	18"	14-1/4"	31	35-13/16"	28-5/16"	tor 1/8"	bearing bars.		

Serrated Surface





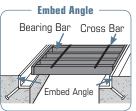
# **HEAVY-DUTY WELDED BAR GRATING**

McNICHOLS<sup>®</sup> Heavy-Duty Welded Bar Grating is your choice for applications requiring maximum load-bearing capability.



# GHB SERIES McNICHOLS® GHB

Series Grating can handle heavier load requirements with a bearing bar thickness of 1/4" and bar heights from 1" to 3". This Grating is ideal for bridge floors, highways, airport runways, or other high-load trench applications.



## **PRODUCT OPTIONS**

Material:	Carbon Steel, Carbon Steel (Powder Coated Black), Galvanized Steel
Bar Height:	1" to 3"
Bar Thickness:	1/4" - Rectangular (5/16" or 3/8" - Special Order)
Surface:	Smooth, Serrated
Standard Size:	24" x 240", 24" x 288", 36" x 240", 36" x 288"

#### LOAD TABLE: GHB, GHB-2 (STEEL)

BEARING BAR					SP	AN (1-	3/16" (	CENTE	R TO C	ENTER	BARS	6 PACIN	G)			
SIZE		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"
	U	5615	2495	1404	898	624	458	351	277	225	186	156	133	115	100	88
1" x 1/4"	D	.021	.047	.083	.129	.186	.253	.331	.419	.518	.627	.745	.875	1.018	1.166	1.329
1 X 1/4	С	2807	1872	1404	1123	936	802	702	624	561	510	468	432	401	374	351
	D	.016	.037	.066	.104	.149	.203	.265	.335	.414	.500	.596	.700	.811	.931	1.060
	U	8772	3899	2193	1404	975	716	548	433	351	290	244	208	179	156	137
1-1/4" x 1/4"	D	.017	.037	.066	.104	.149	.203	.265	.335	.414	.501	.597	.701	.811	.931	1.059
1 1/4 × 1/4	С	4386	2924	2193	1754	1462	1253	1097	975	877	797	731	675	627	585	548
	D	.013	.030	.053	.083	.119	.162	.212	.268	.331	.400	.477	.560	.649	.745	.847
	U	12632	5614	3158	2021	1404	1031	790	624	505	418	351	299	258	225	197
1-1/2" x 1/4"	D	.014	.031	.055	.086	.124	.169	.221	.279	.345	.418	.497	.583	.676	.777	.881
1 02 8 0 1	С	6316	4211	3158	2526	2105	1805	1579	1404	1263	1148	1053	972	902	842	790
	D	.011	.025	.044	.069	.099	.135	.177	.224	.276	.334	.397	.466	.541	.621	.707
	U	17193	7641	4298	2751	1910	1404	1075	849	688	568	478	407	351	306	269
1-3/4" x 1/4"	D	.012	.027	.047	.074	.106	.145	.189	.239	.296	.357	.426	.500	.580	.666	.758
	С	8597	5731	4298		2866	2456	2149	1910	1719	1563	1433	1323	1228	1146	1075
	D	.010	.021	.038	.059	.085	.116	.151	.192	.236	.286	.341	.400	.463	.532	.606
2" x 1/4"	U	22456	9980	5614	3593	2495	1833	1404	1109	898	742	624	532	458	399	351
2" x 1/4"	D	.010	.023	.041	.065	.093	.127	.166	.210	.259	.313	.373	.438	.507	.582	.662
	С	11228	7485	5614		3743	3208	2807	2495	2246	2041	1871	1727	1604	1497	1404
	D	.008	.019	.033	.052	.075	.101	.132	.168	.207	.250	.298	.350	.406	.466	.530
	U		15595	-			2864	2193	1733	1404	1160	975	830	716	624	548
2-1/2" x 1/4"	D	.008	.019	.033	.052	.075	.101	.132	.168	.207	.250	.298	.350	.406	.466	.529
	С		11696				5013	4386	3899	3509			2699	2506	2339	2193
	D	.007	.015	.027	.041	.060	.081	.106	.134	.166	.200	.238	.280	.324	.372	.424
	U		22456				4125	3158	2495	2021	1670	1404	1196	1031	898	789
3" x 1/4"	D	.007	.016	.028	.043	.062	.085	.110	.140	.172	.209	.248	.291	.338	.388	.441
	С				10105		7218	6316	5614	5053	4593	4211	3887	3609	3368	3158
	D	.006	.012	.022	.035	.050	.068	.088	.112	.138	.167	.199	.233	.270	.310	.353
	U		30565			7641	5614	4298	3396	2751	2273	1910	1628	1404	1223	1075
3-1/2" x 1/4"	D	.006	.013	.024	.037	.053	.072	.095	.120	.148	.179	.213	.250	.290	.333	.379
3" x 1/4" 3-1/2" x 1/4"	C	34386	-	17193		11462		8597	7641	6877	6252	5731	5290	4912	4585	4298
	D	.005	.011	.019	.030	.043	.058	.076	.096	.118	.143	.170	.200	.232	.266	.303
	U		39922			9981	7333	5614	4436	3593			2126	1833	1597	1404
4″ x 1/4″	D	.005	.012	.021	.032	.047	.063	.083	.105	.129	.156	.186	.219	.253	.291	.331
	C	44913		22456		-			9981	8983	8166	7485	6910	6416	5988	5614
	D	.004	.009	.017	.026	.037	.051	.066	.084	.104	.125	.149	.175	.203	.233	.265

U - Uniform Load - Lbs./Square Foot D - Deflection - in Inches C - Concentrated Load - Lbs./Square Foot of Width at Mid Span

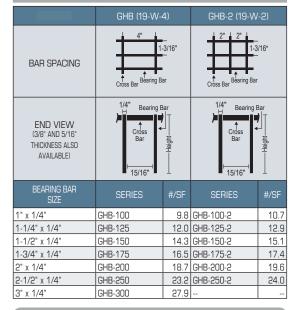
GHB and GHB-2 is welded. This Grating is not normally used for standard floor layouts but is usually selected by engineers for rolling or vehicular loads for narrow space work.

This technical information provided is as a reference for evaluation by technically skilled persons only, with any use thereof to be at their independent discretion and risk. McNICHOLS shall have no responsibility or liability for results obtained or damages resulting from improper evaluation or use of Grating.

Load Diagram Swage-Locked Cross Bars CONCENTRATED Lenath or UNIFORM Spar LOAD Length or Width Deflection Width



## BAR SPACING: GHB, GHB-2



#### PANEL WIDTHS: GHB, GHB-2

#	BEARIN	G BAR THI	CKNESS	#	BEARIN	G BAR THI	CKNESS
BARS	1/4"	5/16"	3/8"	BARS	1/4"	5/16"	3/8"
2	1-7/16"	1-1/2"	1-9/16"	17	19-1/4"	19-5/16"	19-3/8"
3	2-5/8"	2-11/16"	2-3/4"	18	20-7/16"	20-1/2"	20-9/16"
4	3-13/16"	3-7/8"	3-15/16"	19	21-5/8"	21-11/16"	21-3/4"
5	5"	5-1/16"	5-1/8"	20	22-13/16"	22-7/8"	22-15/16"
6	6-3/16"	6-1/4"	6-5/16"	21	24"	24-1/16"	24-1/8"
7	7-3/8"	7-7/16"	7-1/2"	22	25-3/16"	25-1/4"	25-5/16"
8	8-9/16"	8-5/8"	8-11/16"	23	26-3/8"	26-7/16"	26-1/2"
9	9-3/4"	9-13/16"	9-7/8"	24	27-9/16"	27-5/8"	27-11/16"
10	10-15/16"	11"	11-1/16"	25	28-3/4"	28-13/16"	28-7/8"
11	12-1/8"	12-3/16"	12-1/4"	26	29-15/16"	30"	30-1/16"
12	13-5/16"	13-3/8"	13-7/16"	27	31-1/8"	31-3/16"	31-1/4"
13	14-1/2"	14-9/16"	14-5/8"	28	32-5/16"	32-3/8"	32-7/16"
14	15-11/16"	15-3/4"	15-13/16"	29	33-1/2"	33-9/16"	33-5/8"
15	16-7/8"	16-15/16"	17"	30	34-11/16"	34-3/4"	34-13/16"
16	18-1/16"	18-1/8"	18-3/16"	31	35-7/8"	35-15/16"	36"

# PEDS & TREADS®



McNICHOLS PEDS & TREADS® Heavy-Duty Welded Steel Grating satisfies both ADA and AASHTO (American Association of State Hwy. and Trans. Officials) requirements. It is ideal for parking garages, sidewalks, and pedestrian accessible roadways where ventilation or drainage is required.



# McNICHOLS® HOLE PRODUCTS

# SWAGE-LOCKED BAR GRATING

McNICHOLS® Swage-Locked Bar Grating is manufactured using an exclusive swaging (or pinching) and forming process that prevents the cross bars from turning or twisting. These Aluminum-only panels are available in Rectangular Bar, Flush Top, I-Bar, and T-Bar styles in a variety of bar heights.



# **GAL SERIES**

McNICHOLS® GAL Series Grating is an economical solution for applications requiring high strength and rigidity. GAL Series is lightweight and corrosion-resistant.

GAL SERIES

#### **PRODUCT OPTIONS**

Material:	Aluminum
Bar Height:	1" to 2" (2-1/4" and 2-1/2" Special Order)
Bar Thickness:	1/8", 3/16" (Rectangular)
Surface:	Smooth, Serrated
Standard Size:	24" x 240", 24" x 288", 36" x 240", 36" x 288"

#### LOAD TABLE; GAL (ALUMINUM)

BEARING			5	SPAN (1	I-3/16"	CENTE	r to <u>c</u>	ENTER	BAR SI	PACING	)	
BAR SIZE		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	7'	8'
	U	421	269	187	137	105	83		form	ad Iba	/Caucho	Foot
1" x 1/8"	D	.144	.225	.324	.441	.576	.729			in Inche		FUUL
1 X 1/0	С	421	337	281	241	211	187				-	
	D	.115	.180	.259	.353	.461	.583			ed Load Ith at Mi		Juare
	U	632	404	281	206	158	125	1 10	50 01 4410		la opun	
1" x 3/16"	D	.144	.225	.324	.441	.576	.729					
1 X 3/10	С	632	505	421	361	316	281			ess tha ght selec		actual
	D	.115	.180	.259	.353	.461	.583	Dearini	y Dar Hei	ynt selet		
	U	658	421	292	215	164	130	105	87	73		
1-1/4" x 1/8"	D	.115	.180	.259	.353	.461	.583	.720	.871	1.037		
1-1/4 X 1/0	С	658	526	439	376	329	292	263	239	219		
	D	.092	.144	.207	.282	.369		.576	.697	.829		
	U	987	632	439	322	247	195	158	130	110	81	
1-1/4" x 3/16"	D	.115	.180	.259	.353	.461	.583	.720	.871	1.037	1.411	
1-1/4 X 3/10	С	987	789	658	564	493	439	395	359	329	282	
	D	.092	.144	.207	.282	.369	.467	.576	.697	.829	1.129	
	U	947	606	421	309	237	187	152	125	105	77	59
4 4 /0" 1/0"	D	.096	.150	.216	.294	.384	.486	.600	.726	.846	1.176	1.536
1-1/2" x 1/8" 1-1/2" x 3/16"	С	947	758	632	541	474	421	379	344	316	271	237
	D	.077	.120	.173	.235	.307	.389	.480	.581	.691	7' /Square s Lbs./Sc d Span , use lc s 1, your tion. 81 1,411 282 1,129 77 1,176 271 941 1,176 406 206 941 1,088 206 784 914 784 914 627 322 706	1.229
	U	1421	909	632	464	355	281	227	188	158	691 .941 8 116	89
1 1/0" v 2/16"	D	.096	.150	.216	.294	.384		.600	.726	.864	1.176	
1-1/2 X 3/10	С	1421	1137	947	812	711	632	568	517	474	406	355
	D	.077	.120	.173	.235	.307	.389	.480	.581	.691	.941	1.229
	U	1934	1238	860	632	484	382	309	256	215	158	121
1-3/4" x 3/16"	D	.082	.129	.185	.252	.329	.417	.514	.622	.741		
1-0/4 × 0/10	С	1934	1547	1289	1105	967	860	774	703	645		484
	D	.066	.103	.148	.202	.263		.411	.498	.592		
	U	2526	1617	1123	825	632	499	404	334	281	206	158
2" x 3/16"	D	.072	.113	.162	.221	.288	.365	.450	.545	.648		1.152
2 X 3/10	С	2526	2021	1684	1444	1263	1123	1011	919	842		632
	D	.058	.090	.130	.176	.230		.360	.436	.518		.922
	U	3197	2046	1421	1044	799	632	512	423	355	261	200
0.1// v.9/10	D	.064	.100	.144	.196	.256	.324	.400	.484	.576	.784	1.024
2-1/4" x 3/16"	С	3197	2558	2132	1827	1599	1421	1279	1163	1066	914	799
	D	.051	.080	.115	.157	.205	.259	.320	.387	.461	.627	.819
	U	3947	2526	1754	1289	987	780	632	522	439	322	247
0.4/0" , 0/4.0"	D	.058	.090	.130	.176	.230	.292	.360	.436	.518	.706	.922
2-1/2" x 3/16"	С	3947	3158	2632	2256	1974	1754	1579	1435	1316	1128	987
	D	.046	.072	.104	.141	.184	.233	.288	.348	.415	E04	.737

Spans shaded in blue produce a deflection of 1/4" or less under a uniform load of 100 lbs, per square foot. This deflection is recommended as the maximum to provide pedestrian comfort. It can be exceeded at the discretion of the engineer

This technical information provided is as a reference for evaluation by technically skilled persons only, with any use thereof to be at their independent discretion and risk. **MCNICHOLS** shall have no responsibility or liability for results obtained or damages resulting from improper evaluation or use of Grating. Not recommended for wheel traffic or barefoot pedestrians.



Swage-Locked Stair Treads page 32

WIDTHS: GAL

#### BAR SPACING: GAL

GAL (19-5	6-4)	GAL-2 (19-	5-2)	#	
4"	_	2" 2"	_	BARS	RE
	1-3/16"	Í	1-3/16"	2	1-
	-			3	2-
Cross Bar Bearing	Bar	Cross Bar Bearing E	Bar	4	3-
				5	4-
3/16" Beari	ng Bar	3/16" Bearir	ng Bar	6	6-
				7	7-
Bar	eight-	Bar	eight-	8	8-
	Ť		Ť	9	9-
⊢I''		⊢I"		10	10
SERIES	#/SF	SERIES	#/SF	11	12
				12	13
				13	14
	_			14	15
				15	16
				16	18
				17	19
					20
	4.3				-
GAL-200	4.9	GAL-200-2	5.0	19	21
	E 0	GAL-225-2	5.6	20	22
GAL-225	5.3	GAL-220-2	0.0	20	
	4" 4" 4" 4" 4" 4" 4" 4" 4" 4"	3/16"         Bearing Bar           3/16"         Bearing Bar           3/16"         Bearing Bar           SERIES         #/SF           GAL-100-A         1.8           GAL-125-A         2.1           GAL-125-A         2.5           GAL-150-A         2.6           GAL-150-A         2.5           GAL-150         3.8           GAL-175         4.3	4"         1-3/16"           1-3/16"         -2"           2"         2"           1-3/16"         -2"           1-3/16"         -2"           1-3/16"         -2"           2"         2"           1-3/16"         -2"           1-3/16"         -2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           2"         2"           3/16"         Bearing Bar           5         SERIES           6AL-100-A         1.8           6AL-100-A         1.8           6AL-100-2         6AL-100-2           6AL-125-A         2.1           6AL-125-A         2.5           6AL-125-A         2.5           6AL-150-A         2.5           6AL-150-3         3.8           6AL-150-2           6AL-175-2 <td>4"       1-3/16"       2"       2"       1-3/16"         Gross Bar, Bearing Bar       3/16"       Bearing Bar       1-3/16"         3/16"       Bearing Bar       3/16"       Bearing Bar         3/16"       Bearing Bar       3/16"       Bearing Bar         3/16"       Bearing Bar       1-3/16"       1-3/16"         SERIES       #/SF       SERIES       #/SF         GAL-100-A       1.8       GAL-100-A-2       2.0         GAL-125-A       2.1       GAL-125-A-2       2.4         GAL-125       3.2       GAL-125-A-2       2.8         GAL-125       3.2       GAL-125-A-2       2.8         GAL-150-A       2.5       GAL-125-A-2       2.8         GAL-150-A       2.5       GAL-125-A-2       3.5         GAL-150-A       2.5       GAL-125-A-2       3.9         GAL-150       3.8       GAL-150-A-2       2.8         GAL-175       4.3       GAL-175-2       4.4         GAL-200       4.9       GAL-200-2       5.0</td> <td>4*         2*         2*         2*         2*         2*         2*         2*         2*         2*         2*         3*         3*         4*         5*         3*         4*         5*         5*         5*         5*         5*         6*         7*         8*         9*         10*         11*         11*         11*         11*         11*         11*         11*         11*         11*         10*         10*         10*         10*         10*         10*         10*         10*         10*</td>	4"       1-3/16"       2"       2"       1-3/16"         Gross Bar, Bearing Bar       3/16"       Bearing Bar       1-3/16"         3/16"       Bearing Bar       3/16"       Bearing Bar         3/16"       Bearing Bar       3/16"       Bearing Bar         3/16"       Bearing Bar       1-3/16"       1-3/16"         SERIES       #/SF       SERIES       #/SF         GAL-100-A       1.8       GAL-100-A-2       2.0         GAL-125-A       2.1       GAL-125-A-2       2.4         GAL-125       3.2       GAL-125-A-2       2.8         GAL-125       3.2       GAL-125-A-2       2.8         GAL-150-A       2.5       GAL-125-A-2       2.8         GAL-150-A       2.5       GAL-125-A-2       3.5         GAL-150-A       2.5       GAL-125-A-2       3.9         GAL-150       3.8       GAL-150-A-2       2.8         GAL-175       4.3       GAL-175-2       4.4         GAL-200       4.9       GAL-200-2       5.0	4*         2*         2*         2*         2*         2*         2*         2*         2*         2*         2*         3*         3*         4*         5*         3*         4*         5*         5*         5*         5*         5*         6*         7*         8*         9*         10*         11*         11*         11*         11*         11*         11*         11*         11*         11*         10*         10*         10*         10*         10*         10*         10*         10*         10*

1-3/8"         22         25-1/8"           3         2-9/16"         23         26-5/16"           4         3-3/4"         24         27-1/2"           5         4-15/16"         25         28-11/16"           6         6-1/8"         26         29-7/8"           7         7-5/16"         27         31-1/16"           8         8-1/2"         28         32-1/4"           9         9-11/16"         29         33-7/16"           10         10-7/8"         30         34-5/8"           11         12-1/16"         31         35-13/16"           12         13-1/4"         32         34-5/8"           13         14-7/16"         33         34-5/8"           14         15-5/8"         34         56-13/16"           15         16-13/16"         35         56-11"           16         18"         36         34-11"           17         19-3/16"         37         36-11"           18         20-3/8"         38         36-11"           19         21-9/16"         39         36-31"           20         22-3/4"         40         36-31" <th># BARS</th> <th>gal Rectangular</th> <th># BARS</th> <th>gal Rectangular</th>	# BARS	gal Rectangular	# BARS	gal Rectangular
4         3-3/4"         24         27-1/2"           4         3-3/4"         24         27-1/2"           5         4-15/16"         25         28-11/16"           6         6-1/8"         26         29-7/8"           7         7-5/16"         27         31-1/16"           8         8-1/2"         28         32-1/4"           9         9-11/16"         29         33-7/16"           10         10-7/8"         30         34-5/8"           11         12-1/16"         31         35-13/16"           12         13-1/4"         32         34-5/8"           13         14-7/16"         33         34-5/8"           14         15-5/8"         34         54-5/8"           15         16-13/16"         35         0 ed u ct 1/16" more 1/8"           17         19-3/16"         37         18         20-3/8"         38           19         21-9/16"         39         21-9/16"         39           20         22-3/4"         40         40	2	1-3/8"	22	25-1/8"
1         1         1         1         1           5         4-15/16"         25         28-11/16"           6         6-1/8"         26         29-7/8"           7         7-5/16"         27         31-1/16"           8         8-1/2"         28         32-1/4"           9         9-11/16"         29         33-7/16"           10         10-7/8"         30         34-5/8"           11         12-1/16"         31         35-13/16"           12         13-1/4"         32         34-5/8"           11         12-1/16"         31         35-13/16"           12         13-1/4"         32         34-5/8"           13         14-7/16"         33         34-5/8"           14         15-5/8"         34         NOTE: D ed u ct 1/16" mm vi dt h s sh o w n for 1/8" for 1/8"           15         16-13/16"         37         38         34-0"           17         19-3/16"         37         38         39           19         21-9/16"         39         39         39           20         22-3/4"         40         40	3	2-9/16"	23	26-5/16"
6         6-1/8"         26         29-7/8"           7         7-5/16"         27         31-1/16"           8         8-1/2"         28         32-1/4"           9         9-11/16"         29         33-7/16"           10         10-7/8"         30         34-5/8"           11         12-1/16"         31         35-13/16"           12         13-1/4"         32         34-5/8"           13         14-7/16"         33         34-5/8"           14         15-5/8"         34         34-5/8"           15         16-13/16"         33         34-5/8"           15         16-13/16"         35         34-5/8"           15         16-3/16"         35         34-5/8"           16         18"         36         36-13/16"           17         19-3/16"         37         38           19         21-9/16"         39         39           20         22-3/4"         40         40	4	3-3/4"	24	27-1/2"
Image: strain of the	5	4-15/16"	25	28-11/16"
8         8-1/2"         28         32-1/4"           9         9-11/16"         29         33-7/16"           10         10-7/8"         30         34-5/8"           11         12-1/16"         31         35-13/16"           12         13.1/4"         32           13         14-7/16"         33           14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	6	6-1/8"	26	29-7/8"
9         9-11/16"         29         33-7/16"           10         10-7/8"         30         34-5/8"           11         12.1/16"         31         35-13/16"           12         13.1/4"         32           13         14-7/16"         33           14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	7	7-5/16"	27	31-1/16"
10         10-7/8"         30         34-5/8"           11         12-1/16"         31         35-13/16"           12         13.1/4"         32           13         14-7/16"         33           14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	8	8-1/2"	28	32-1/4"
11         12-1/16"         31         35-13/16"           12         13.1/4"         32           13         14.7/16"         33           14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	9	9-11/16"	29	33-7/16"
12         13-1/4"         32           13         14-7/16"         33           14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	10	10-7/8"	30	34-5/8"
13         14-7/16"         33           14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	11	12-1/16"	31	35-13/16"
14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	12	13-1/4"	32	
14         15-5/8"         34           15         16-13/16"         35           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	13	14-7/16"	33	
16         18         36           16         18"         36           17         19-3/16"         37           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	14	15-5/8"	34	
16         18"         36         widths           17         19-3/16"         37         shown           18         20-3/8"         38           19         21-9/16"         39           20         22-3/4"         40	15	16-13/16"	35	
1/         19:3/16"         3/           18         20:3/8"         38           19         21-9/16"         39           20         22:3/4"         40	16	18"	36	widths
10         10 <th10< th="">         10         10         10<!--</td--><td>17</td><td>19-3/16"</td><td>37</td><td></td></th10<>	17	19-3/16"	37	
19         21-9/16"         39           20         22-3/4"         40	18	20-3/8"	38	. v .
	19	21-9/16"	39	UGI 5.
21 23-15/16"	20	22-3/4"	40	
	21	23-15/16"		



SFT SERIES

McNICHOLS<sup>®</sup> SFT Series Grating has cross bars flush with the bearing bars along the top and is the product of choice where standing and walking comfort is a requirement.



page 32

# SWAGE-LOCKED BAR GRATING (CONTINUED)



### **GIA SERIES**

McNICHOLS® GIA Series I-Bar Grating has I-shaped bearing bars that are locked in place by swaging the cross bars. This Grating series is an economical solution for applications requiring high strength and rigidity and is ideal for light pedestrian traffic. Made of Aluminum, this series is also lightweight and corrosion-resistant.

#### **PRODUCT OPTIONS**

Material:	Aluminum
Bar Height:	1" to 2" (2-1/4", 2-1/2" Special Order)
Bar Thickness:	1/4" (I-Bar)
Surface:	Grooved
Standard Size:	24" x 240", 24" x 288", 36" x 240", 36" x 288"

#### LOAD TABLE: GIA, SGIA (ALUMINUM)

BEARING		SPAN (1-3/16" CENTER TO CENTER BAR SPACING)											
BAR SIZE		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	7'	8'	
	U	632	404	281	206	158	125	To de	termin	e load	for SG	IA or	
1" I-Bar	D	.144	.225	.324	.441	.576	.729	SGIA-	2, mult	iply val	ue at l 7. Defl	eft by	
	С	632	505	421	361	316	281	under	the fa	ctored	loads v	vill be	
	D	.115	.180	.259	.353	.461	.583	same	as show	wn in th	e load t	able.	
	U	987	632	439	322	247	195	158	130	110	81		
1-1/4" I-Bar	D	.115	.180	.259	.353	.461	.583	.720	.871	1.037	1.411		
1-1/4 I-Dai	С	987	789	658	564	493	439	395	359	329	282		
	D	.092	.144	.207	.282	.368	.467	.576	.697	597         .829           3         158           726         .864	1.129		
	U	1421	909	632	464	355	281	227	188	158	116	89	
1-1/2" I-Bar	D	.096	.150	.216	.294	.384	.486	.600	.726	.864	1.176	1.536	
1-1/2 I-Ddl	С	1421	1137	947	812	711	632	568	517	474	406	355	
	D	.077	.120	.173	.235	.307	.389	.480	.581	.691	.941	1.229	
	U	1934 1238 860 632 484	484	382	309	256	215	158	121				
1-3/4" I-Bar	D	.082	.129	.185	.252	.329	.417	.514	.622	.741	1.008	1.317	
	С	1934	1547	1289	1105	967	860	774	703	645	553	484	
	D	.066	.103	.148	.202	.263	.333	.411	.498	.592	.806	1.053	
	U	2526	1617	1123	825	632	499	404	334	281	206	158	
2" I-Bar	D	.072	.113	.162	.221	.288	.365	.450	.545	.648	.882	1.152	
	С	2526	2021	1684	1444	1263	1123	1011	919	842	722	632	
	D	.058	.090	.130	.176	.230	.292	.360	.436	.518	.706	.922	
	U	3197	2046	1421	1044	799	632	512	423	355	261	200	
2-1/4" I-Bar	D	.064	.100	.144	.196	.256	.324	.400	.484	.576	.784	1.024	
2-1/4 I-Bar	С	3197	2558	2132	1827	1599	1421	1279	1163	1066	914	799	
	D	.051	.080	.115	.157	.205	.259	.320	.387	.461	.627	.819	
	U	3947	2526	1754	1289	987	780	632	522	439	322	247	
0.4/0111.0	D	.058	.090	.130	.176	.230	.292	.360	.436	.518	.706	.922	
2-1/2" I-Bar	С	3947	3158	2632	2256	1974	1754	1579	1435	1316	1128	987	
	D	.046	.072	.104	.141	.184	.233	.288	.348	.415	.564	.737	

Spans shaded in blue produce a deflection of 1/4" or less under a uniform load of 100 lbs. per square foot. This deflection is recommended as the maximum to provide pedestrian comfort. It can be exceeded at the discretion of the engineer.

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# BAR SPACING: GIA, SGIA

	GIA (19-SI	-4)	GIA-2 (19-9	SI-2)	SGIA (15-S	1-4)	SGIA-2 (15	-SI-2)
BAR SPACING	4"	— 1-3/16" — Bar	2" 2" Cross Bar	– 1-3/16" – Bar	4" + Bearing Cross Bar	– 15/16" – Bar	2" 2" Cross Bar Bearin	15/16"
END VIEW	1/4" Bearing Cross Bar 15/16"	Bar Height	1/4" Bearing Cross Bar 15/16"	Bar Height	1/4" Bearing Cross Bar 11/16"	Bar Height	1/4" Bearin Cross Bar 11/16"	g Bar
BEARING BAR SIZE	SERIES	#/SF	SERIES	#/SF	SERIES	#/SF	SERIES	#/SF
1" x 1/4"	GIA-100	2.0	GIA-100-2	2.1	SGIA-100	2.3	SGIA-100-2	2.5
1-1/4" x 1/4"	GIA-125	2.3	GIA-125-2	2.5	SGIA-125	2.8	SGIA-125-2	2.9
1-1/2" x 1/4"	GIA-150	2.6	GIA-150-2	2.8	SGIA-150	3.2	SGIA-150-2	3.4
1-3/4" x 1/4"	GIA-175	3.0	GIA-175-2	3.3	SGIA-175	3.7	SGIA-175-2	3.9
2" x 1/4"	GIA-200	3.4	GIA-200-2	3.7	SGIA-200	4.2	SGIA-200-2	4.4
2-1/4" x 1/4"	GIA-225	3.8	GIA-225-2	4.0	SGIA-225	4.6	SGIA-225-2	4.9
2-1/2" x 1/4"	GIA-250	4.0	GIA-250-2	4.2	SGIA-250	4.9	SGIA-250-2	5.1

#### PANEL WIDTHS: GIA, SGIA BARS GIA, GIA-2 GIA, GIA-2 GIA, GIA-2 1 1-7/16" 1-3/16" 14 16-7/8" 13-3/8" 27 32-5/16" 25-9/16" 2 2-5/8" 2-1/8" 15 18-1/16" 14-5/16" 28 33-1/2" 26-1/2" 3 3-13/16" 3-1/16 16 19-1/4" 15-1/4" 29 34-11/16" 27-7/16" 20-7/16" 16-3/16" 4 4" 17 30 35-7/8" 28-3/8" 5" 21-5/8" 5 6-3/16" 4-15/16" 18 17-1/8" 31 29-5/16" 7-3/8" 5-7/8" 19 32 30-1/4" 6 22-13/16" 18-1/16" 7 6-13/16" 20 24" 33 31-3/16" 8-9/16" 19" 7-3/4" 21 25-3/16" 34 8 9-3/4" 19-15/16" 32-1/8" 22 20-7/8" 9 10-15/16" 8-11/16 26-3/8" 35 33-1/16" 10 12-1/8" 23 27-9/16" 21-13/16" 36 34" 9-5/8" 22-3/4" 11 13-5/16" 10-9/16 24 28-3/4" 37 34-15/16" 12 14-1/2" 11-1/2" 25 29-15/16" 23-11/16" 38 35-7/8"





13

15-11/16"

12-7/16

26

31-1/8"

24-5/8

# SWAGE-LOCKED BAR GRATING (CONTINUED)



# SAFE-T-GRID®

**MCNICHOLS** SAFE-T-GRID<sup>®</sup> Grating is configured with extruded T-shaped bearing bars and extruded cross bars that are locked together by swaging for a high strength and rigid construction. The large T-Bar surface makes it ideal for pedestrian traffic. TB-940 meets the spacing requirements of the Americans with Disabilities Act (ADA).



# **PRODUCT OPTIONS**

Material:	Aluminum
Bar Height:	1", 1-1/4", 1-1/2" (2" Special)
Surface:	Grooved (GRIP TIGHT® Available)
Standard Size:	36-1/4" x 288" TB-626 (Special Order)
	36-9/16" x 288" TB-940 (ADA Approved)

#### LOAD TABLE: SAFE-T-GRID® (ALUMINUM)

HEIGHT	TYPE		2'	2' 6"	3'	3' 6"	4'	4' 6"	5'	5' 6"	6'	6' 6"	7'	7' 6"	8'
		U	990	634	440	323	248	196	158	131	110	94	81	70	62
1"	TB-626	D	.136	.212	.305	.415	.544	.688	.846	1.027	1.221	1.437	1.666	1.897	2.175
I	10-020	С	990	792	660	566	495	440	396	360	330	305	283	264	248
		D	.109	.170	.244	.333	.434	.549	.678	.821	.977	1.148	1.330	1.526	1.740
		U	1051	673	467	343	263	208	168	139	117	100	86	75	66
1"		D	.125	.195	.281	.382	.500	.633	.779	.944	1.125	1.325	1.532	1.761	2.006
I	TB-940	С	1051	841	701	601	526	467	420	382	350	323	300	280	263
		D	.100	.156	.225	.306	.400	.505	.623	.755	.898	1.053	1.222	1.403	1.599
		U	1516	970	674	495	379	299	243	200	168	144	124	108	95
4 4 / 4 "		D	.108	.169	.243	.331	.432	.546	.676	.815	.969	1.145	1.326	1.522	1.733
1-1/4"	TB-626	С	1516	1213	1011	866	758	674	606	551	505	466	433	404	379
		D	.086	.135	.194	.265	.346	.438	.540	.653	.777	.912	1.058	1.214	1.382
		U	1738	1112	773	568	435	343	278	230	193	165	142	124	109
4 4 (4)	TD 040	D	.097	.151	.218	.297	.387	.489	.605	.732	.870	1.025	1.186	1.365	1.553
1-1/4"	TB-940	С	1738	1391	1159	993	869	773	695	632	579	535	497	464	435
	D	.077	.121	.174	.237	.310	.392	.484	.585	.696	.818	.949	1.090	1.240	
		U	2021	1293	898	660	505	399	323	267	225	191	165	144	126
4.4.0		D	.091	.142	.205	.279	.364	.461	.569	.689	.822	.961	1.117	1.284	1.455
1-1/2"	TB-626 -	С	2021	1617	1347	1155	1011	898	808	735	674	622	577	539	505
		D	.073	.114	.164	.223	.292	.369	.455	.551	.657	.770	.892	1.025	1.166
		U	2344	1500	1042	766	586	463	375	310	260	222	191	167	147
4.4.0	TD 040	D	.082	.128	.184	.251	.327	.414	.512	.619	.736	.865	1.001	1.153	1.314
1-1/2"	TB-940	С	2344	1876	1563	1340	1172	1042	938	853	781	721	670	625	586
		D	.065	.102	.147	.201	.262	.332	.410	.496	.589	.692	.803	.921	1.048
		U	3173	2031	1410	1036	793	627	508	420	353	300	259	226	198
0"		D	.069	.108	.156	.212	.277	.351	.434	.525	.625	.731	.849	.977	1.108
2"	TB-626	С	3173	2538	2115	1813	1587	1410	1269	1154	1058	976	907	846	793
		D	.055	.087	.125	.170	.222	.281	.347	.420	.499	.586	.680	.780	.887
		U	3719	2380	1653	1214	930	735	595	492	413	352	304	264	232
0"		D	.063	.098	.141	.192	.251	.318	.392	.475	.565	.663	.770	.881	1.003
2"	TB-940	С	3719	2975	2479	2125	1859	1653	1488	1352	1240	1144	1063	992	930
D .050 .078 .113 .154 .201 .254 .314 .380 .452 .530 .616 .707 .804															
is recom	Spans shaded in blue produce a deflection of 1/4" or less under a uniform load of 100 lbs. per square foot. This deflection is recommended as the maximum to provide pedestrian comfort. It can be exceeded at the discretion of the engineer. This technical information provided is as a reference for evaluation by technically skilled persons only, with any use thereof to														

This technical information provided is as a reference for evaluation by technically skilled persons only, with any use thereof to be at their independent discretion and risk. **MCNICHOLS** shall have no responsibility or liability for results obtained or damages resulting from improper evaluation or use of Grating. Not recommended for vehicular traffic or barefoot pedestrians.

# BAR SPACING: SAFE-T-GRID®

	1	B-626 (	19-S-4	4)	TB-940 (19-S-4)					
BAR SPACING	Height	Cross		← Bearing Bar	Height	Cross		← Bearing Bar		
END VIEW	Cros: Bar			earing ar	Cros Bar	s→2		l Paring Ir		
Bearing Bar Height	Bar Thickness	bar Spacing	#/SF	WIDTHS	bar Thickness	bar Spacing	#/SF	WIDTHS		
1"	0.626"	.5615"	2.6	36-1/4"	0.940"	.2475"	3.0	36-9/16"		
1-1/4"	0.626"	.5615"	3.1	36-1/4"	0.940"	.2475"	4.0	36-9/16"		
1-1/2"	0.626"	.5615"	3.3	36-1/4"	0.940"	.2475"	4.3	36-9/16"		
2"	0.626"	.5615"	3.8	36-1/4"	0.940"	.2475"	4.8	36-9/16"		



McNICHOLS SAFE-T-GRID® - Pedestrian Entryway Flooring



# PRESS-LOCKED BAR GRATING

McNICHOLS® Press-Locked Bar Grating cross bars and bearing bars are notched and pressed together through a high-pressure manufacturing process. The result is a bi-directional flush surface that assures a firm, rigid connection and is aesthetically appealing for architectural applications.

# GCM SERIES



GCM (CLOSE MESH) & GAA SERIES

MCNICHOLS® Press-Locked GCM Series CLOSE MESH Grating is formed by pressing the cross bars and bearing bars together through a high-pressure process. The GCM Series Grating offers bearing bar spacings that are ADA compliant. GCM-1 Grating, a good choice for ADA applications, is stocked in 1" x 3/16", 1-1/4" x 3/16" and 1-1/2" bearing bars in both Carbon Steel and Aluminum. Other sizes of the GCM-1 material available as Special Order items, including 1/8" and 3/16" bearing bar thicknesses. Other GCM Series and GAA Grating are also available as a Special Order.

McNICHOLS<sup>®</sup> Press-Locked GAA Series Grating is formed by pressing the cross bars into the bearing bars, flush top under tremendous pressure, laterally displacing 1/16" of cross bar material into the dovetail slot.

#### **PRODUCT OPTIONS**

Material: Bar Height:	Aluminum, Carbon Steel, Galvanized Steel, Stainless Steel 3/4" to 2-1/2" (1", 1-1/4" and 1-1/2" Stock; All other sizes available by Special Order)
Bar Thickness: Surface: Standard Size:	3/16" - Rectangular (1/8" Special Order) Smooth, Serrated

#### LOAD TABLE: GCM-1 (ALUMINUM)

BEARING						SPAN	(7/16"	CENTEF	r to ce	NTER E	BAR SP	ACING)				
BAR SIZE			1'6"	2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"		7'6"	8'
	U	3857	1714	964	617	429	315	241	190	154	127	107	91	79	69	60
3/4" x	D	.048	.108	.192	.300	.432	.588	.768	.970	1.198	1.446	1.726	2.022	2.360	2.717	3.058
3/16"	С	1928	1286	964	771	643	551	482	429	386	351	321	297	275	257	241
	D	.038	.086	.154	.240	.346	.470	.614	.778	.961	1.163	1.381	1.624	1.878	2.159	2.457
	U	6857	3047	1714	1097	762	560	429	339	274	227	190	162	140	122	107
1" x	D	.036	.081	.144	.225	.324	.441	.577	.730	.899		1.293		1.765	2.026	
3/16"	С	3428	2286	1714	1371	1143	980	857	762	686	623	571	527	490	457	429
	D	.029	.065	.115	.180	.259	.353	.461	.583	.720		1.036				
	U	10714	4762	2679	1714	1190	875	670	529	429	354	298	254	219	190	167
1-1/4", x	D	.029	.065	.115	.180	.259	.353	.461	.583	.721	.871	1.038	1.219	1.413	1.616	1.839
3/16	С	5357	3571	2679	2143	1786	1531	1339	1190			893	824	765	714	670
	D	.023	.052	.092	.144	.207	.282	.369		.576	.697	.830	.973	1.128	1.295	1.475
	U				2469	1714		964	762	617	510	429	365	315	274	241
1-1/2" <sub>"</sub> x	D	.024	.054	.096	.150	.216	.294	.384	.486	.600		.865		1.177	1.349	1.536
3/16	С	7714	5143	3857		2571	2204	1929	1714	1543	1403	1286	1187	1102	1029	964
	D	.019	.043		.120	.173	.235	.307	.389	.480		.691	.811	.941	1.080	
	U	21000			3360	2333	1714	1313	1037	840		583	497	429	373	328
1-3/4" x	D	.021	.046		.129	.185	.252	.329	.417	.514		.740	.869	1.009	1.156	1.316
3/16"	С								2333	2100	1909	1750	1615	1500	1400	1313
	D	.016		.066	.103	.148	.202	.263		.411	.498		.695			
	U						2239	1714	1355	1097	907		649		488	429
2" x	D	.018	.041	.072	.113	.162	.220	.288	.365	.450		.648	.760	.882		
3/16"		13714							3048	2743		2286	2110		1829	1714
	D	.014	.032	.058	.090	.130	.176	.230	.292	.360	.436	.518	.608	.706	.810	.921

#### LOAD TABLE: GCM-1 (STEEL)

BEARING						SPAN	(7/16 <u>"</u> (	CENTEF	r to ce	NTER E	BAR SP	ACING)				
BAR SIZE		1'	1'6"	2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8'
	U	5785	2571	1446	926	643	472	362	286	231	191	161	137	118	103	90
З/4" х	D	.025	.056	.099	.155		.304	.398	.503	.620		.895	1.049	1.216	1.399	1.582
3/16"	С	2893	1928	1446	1157	964	826	723	643	579	526	482	445	413	386	362
	D	.020	.045	.079	.124	.179	.243				.601	.715		.973	1.118	
	U	10285	4571	2571	1646	1143			508	411		286	243	210	183	161
1" x	D	.019	.042	.074	.116	.168	.228	.298	.377	.465	.563	.671	.785	.913	1.048	1.194
3/16"	С	5143	3428	2571	2057	1714	1469	1286	1143	1029	935	857	791	735	686	643
	D	.015	.034	.060	.093	.134	.182	.238	.302	.373	.451	.536	.629	.730	.838	.954
	U	16072	7143	4018	2571	1786	1312	1004	794	643	531	446	380	328	286	251
1-1/4" x	D	.015	.034	.060	.093	.134	.182			.372	.450	.536	.629	.730	.839	.953
3/16"	С	8036	5357	4018	3214	2679	2296	2009	1786	1607	1461	1339	1236	1148	1071	1004
	D	.012	.027	.048	.074	.107	.146	.191	.241	.298	.360	.429	.503	.584	.670	
	U	23143	10286	5786	3703	2571	1889	1446	1143	926	765	643	548	472	411	362
1-1/2" x	D	.012	.028	.050	.078	.112	.152	.199	.251	.310	.375	.447	.525	.608	.698	.795
3/16"	С	11572	7714	5786	4629	3857	3306	2893	2571	2314	2104	1929	1780	1653	1543	1446
	D	.010	.022	.040	.062	.089	.122	.159	.201	.248	.300	.358	.420	.487	.559	.635
	U	31500	14000	7875	5040	3500	2571	1969	1556	1260	1041	875	746	643	560	492
1-3/4"_x	D	.011	.024	.043	.067	.096	.130				.322	.383	.450	.521	.599	
3/16	С	15750	10500	7875	6300	5250	4500	3938	3500	3150	2864	2625	2423	2250	2100	1969
	D	.009	.019	.034	.053	.077	.104	.136	.172	.213	.258	.306	.360	.417	.479	.545
	U	41143	18286	10286	6583	4571	3359	2571	2032	1646	1360		974	840	731	643
2" x	D	.009	.021	.037	.058	.084	.114			.233	.282	.335	.393	.456		
3/16"	С	20572	13714	10286	8229	6857	5878	5143	4571	4114	3740	3429	3165	2939	2743	2571
	D	.007	.017	.030	.047	.067	.091	.119	.151	.186	.225	.268	.315	.365	.419	.477
<b>U</b> - Uniform	U - Uniform Load - Lbs./Sq. Ft. D - Deflection - in Inches C - Concentrated Load - Lbs./Sq. Ft. of Width at Mid Span are available upon request.															

	GCM-1 (7-1	P-4)	GCM-2 (8-F	9-4)	GCM-4 (11-	P-4)	gaa (19-f	9-4)
BAR SPACING	4" Bearin Cross Bar	7/16" I+J g Bar	4" A Bearing Cross Bar	1/2" ∏+J Bar	4" Bearing Cross Bar	11/16" ]↓ Bar		
END VIEW	3/16" Bearin H Bar SSU U H 1/4"	g Bar	3/16" Bearin H B S S S S S/16"	g Bar	3/16" Bearing	Bar Height	3/16" Beari	ng Bar tu bieH
BEARING BAR SIZE	SERIES	#/SF	SERIES	#/SF	SERIES	#/SF	SERIES	#/SF
3/4" x 1/8"			GCM-2-75-A	8.6			GAA-75-A	4.4
3/4" x 3/16"	GCM-1-75	13.7	GCM-2-75	12.3	GCM-4-75	9.0	GAA-75	5.7
1" x 1/8"			GCM-2-100-A	11.5			GAA-100-A	5.2
1" x 3/16"	GCM-1-100	18.1	GCM-2-100	16.5	GCM-4-100	11.9	GAA-100	7.5
1-1/4" x 1/8"			GCM-2-125-A	14.2			GAA-125-A	6.3
1-1/4" x 3/16"	GCM-1-125	22.6	GCM-2-125	20.7	GCM-4-125	14.8	GAA-125	9.1
1-1/2" x 1/8"			GCM-2-150-A	17.2			GAA-150-A	7.6
1-1/2" x 3/16"	GCM-1-150	27.2	GCM-2-150	25.0	GCM-4-150	17.8	GAA-150	11.0
1-3/4" x 3/16"	GCM-1-175	31.6	GCM-2-175	29.4	GCM-4-175	20.8	GAA-175	12.7
2" x 3/16"	GCM-1-200	36.2	GCM-2-200	33.2	GCM-4-200	23.8	GAA-200	14.3
2-1/4" x 3/16"	GCM-1-225	40.1	GCM-2-225	37.3	GCM-4-225	26.5	GAA-225	16.0
2-1/2" x 3/16"			GCM-2-250	41.4	GCM-4-250	29.3	GAA-250	17.7

BAR SPACING: GCM, GAA

#### PANEL WIDTHS: GCM, GAA

	GCM-1	GCM-2	GCM-4	GAA		GCM-1	GCM-2	GCM-4	GAA
2		NOTE: GO		1-3/8"	18	7-5/8"	8-11/16"	11-5/8"	20-3/8"
3	bars, GCI	VI-2 available	e in widths	2-91/6"	19	8-1/16"	9-3/16"	12-9/16"	21-9/16"
4		bars, GCM- up to 52 ba		3-3/4"	20	8-1/2"	9-11/16"	13-1/4"	22-3/4"
5		eas will be		4-15/16"	21	8-15/16"	10-3/16"	13-15/16"	23-15/16"
6	available	ore panels. I up to 48"	by special	6-1/8"	22	9-3/8"	10-11/16"	14-5/8"	25-1/8"
7	cut-to-siz	II other w e. Deduct 1	/16" from	7-5/16"	23	9-13/16"	11-3/16"	15-5/16"	26-15/16"
8		1/8" bearing	-	8-1/2"	24	10-1/4"	11-11/16"	16"	27-1/2"
9	± 1/4"	nd length	tolerance	9-11/16"	25	10-11/16"	12-3/16"	16-11/16"	28-11/16"
10	4-1/8"	4-11/16"	6-3/8"	10-7/8"	26	11-1/8"	12-11/16"	17-3/8"	29-7/8"
11	4-9/16"	5-3/16"	7-1/16"	12-11/16"	27	11-9/16"	13-3/16"	18-1/16"	31-1/16"
12	5"	5-11/16"	7-3/4"	13-1/4"	28	12"	13-11/16"	18-3/4"	32-1/4"
13	5-7/16"	6-3/16"	8-7/16"	14-7/16"	29	12-7/16"	14-3/16"	19-7/16"	33-7/16"
14	5-7/8"			15-5/8"	30	12-7/8"	14-11/16"	20-1/8"	34-5/8"
15	6-5/16"			16-3/16"	31	13-5/16"	15-3/16"	20-13/16"	35-13/16"
16	6-3/4" 7-11/16" 10-1/2"		18"	32	13-3/4"	15-11/16"	21-1/2"		
17	7-3/16" 8-3/16" 11-3/16"			19-3/16"					



# **BAR GRATING STAIR TREADS**

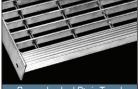
McNICHOLS® Bar Grating Stair Treads are a top choice for strength, safety, and long-term cost savings. Below are just some of the most popular selections. We also have many Stair Treads IN STOCK AND READY TO GO!



Welded Stair Tread Checkered Plate Nosing



Heavy-Duty Welded Stair Tread Cast Abrasive Nosing



Swage-Locked Stair Tread Corrugated Angle Nosing



I-Bar Stair Tread Corrugated Angle Nosing



SAFE-T-GRID® Stair Tread Corrugated Angle Nosing

# GW SERIES

McNICHOLS<sup>®</sup> Welded GW Series Grating Stair Treads will handle most moderate loads and light wheel traffic with standard bearing bar centers of 1-3/16". For more details on GW Series Grating, please see page 26.

# **GHB SERIES**

**MCNICHOLS**<sup>®</sup> Heavy-Duty Welded GHB Series Grating Stair Treads can handle heavier load requirements with a bearing bar thickness of 1/4" and bar heights from 1" to 3". For more details on GHB Series Grating, please see page 27.

# GAL SERIES

McNICHOLS® Swage-Locked GAL Series Grating Stair Treads are an economical solution for applications requiring high strength and rigidity. GAL Series is lightweight and corrosion-resistant. For more details on GAL Series Grating, please see page 28.

# **GIA SERIES**

McNICHOLS® Swage-Locked GIA Series I-Bar Grating Stair Treads are an economical solution for applications requiring high strength and rigidity. GIA Series Stair Treads are lightweight and corrosion-resistant. For more details on GIA Series Grating, please see page 29.

# SAFE-T-GRID®

**MCNICHOLS** Swage-Locked SAFE-T-GRID<sup>®</sup> Grating Stair Treads offer comfort and provide a corrosion-resistant walking surface ideal for waste water treatment plants applications, pedestrian bridges, and walkways. For more details on SAFE-T-GRID<sup>®</sup> Grating, please see page 30.

#### **PRODUCT OPTIONS**

Material:Carbon Steel, Carbon Steel (Powder Coated Black),<br/>Galvanized Steel, Stainless SteelBar Height:1", 1-1/4", 1-1/2"Bar Thickness:1/8", 3/16" (Rectangular)Surface:Smooth, SerratedWidth:8-9/16", 9-3/4", 10-15/16", 12-1/8"Length/Span:In stock or made to order fast!

#### PRODUCT OPTIONS

NA 1 1	
Material:	Carbon Steel, Carbon Steel (Powder Coated Black),
Bar Height:	1", 1-1/4", 1-1/2"
Bar Thickness:	1/4" (Rectangular)
Surface:	Smooth, Serrated
Width:	8-9/16", 9-3/4", 10-15/16", 12-1/8"
Length/Span:	In stock or made to order fast!

#### PRODUCT OPTIONS

Material:	Aluminum
Bar Height:	1", 1-1/4", 1-1/2", 1-3/4"
Bar Thickness:	3/16" (Rectangular)
Surface:	Smooth, Serrated
Width:	8-9/16", 9-3/4", 10-15/16", 12-1/8"
Length/Span:	In stock or made to order fast!

#### PRODUCT OPTIONS

Material:	Aluminum
Bar Height:	1", 1-1/4", 1-1/2", 1-3/4"
Bar Thickness:	1/4" (I-Bar)
Surface:	Grooved
Width:	8-5/8", 9-13/16", 11", 12-3/16"
Length/Span:	In stock or made to order fast!

#### **PRODUCT OPTIONS**

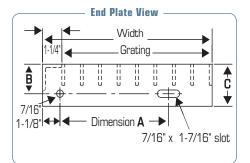
Material:	Aluminum
Bar Height:	1", 1-1/4", 1-1/2"
Bar Thickness:	Please see Bar Spacing chart on page 30.
Surface:	Grooved (GRIP TIGHT® Available)
Length/Span:	In stock or made to order fast! Lengths up to 42" for 1-1/2" height TB-940 only.

#### MAXIMUM STAIR TREAD SPANS

	RECTANGULAR	R BAR 1-3/	I-BAR 1-3/1	6" CTC BB			
	BEARING BAR SIZE	MAXIMUM PLAIN	TREAD SPAN SERRATED	BEARING BAR SIZE	MAX.TREAD SPAN		
N	1" x 3/16"	28"		1" x 1/4"	28"		
1	1-1/4" x 3/16"	34"	31"	1-1/4" x 1/4"	34"		
ALUMINUM	1-1/2" x 3/16"	42"	38"	1-1/2" x 1/4"	42"		
AL	1-3/4" x 3/16"	51"	46"	1-3/4" x 1/4"	51"		
	3/4" x 3/16"	28"		PLEASE NOT	E: Maximum		
	1" x 3/16"	41"	34"	tread length/span based on			
STEEL	1-1/4" x 3/16"	56"	50"	300 lb. concentrated load on front 5 inches of tread at center of tread length.			
	1-1/2" x 3/16"	66"	63"				

#### END PLATE DIMENSIONS

GW/GAL SERIES									
WIDTH	HEIGHT		В	С					
5", 6-3/16"	1" - 1-1/4"	2-1/2"	1-3/4"	2-1/2"					
5", 6-3/16"	1-1/2" - 2-1/2"	2-1/2"	2-1/4"	3"					
7-3/8", 8-9/16"	1" - 1-1/4"	4-1/2"	1-3/4"	2-1/2"					
7-3/8", 8-9/16"	1-1/2" - 2-1/2"	4-1/2"	2-1/4"	3"					
9-3/4", 10-15/16", 12-1/8"	1 - 1-1/4	7"	1-3/4"	2-1/2"					
9-3/4", 10-15/16", 12-1/8"	1-1/2" - 2-1/2"	7"	2-1/4"	3"					



# FIBERGLASS GRATING

**MCNICHOLS**<sup>®</sup> Fiberglass Grating offers a variety of styles, strengths, resins, and bearing bar colors. Molded and Pultruded Fiberglass Grating are lightweight, corrosion-resistant, fire-retardant and can be used like traditional Metal Grating but have the inherent benefits of Fiberglass. They are ideal alternatives to Steel Gratings in corrosive environments or when frequent Grating and Walkway replacement costs are prohibitive.

PRODUCT SPECIFICATIONS

CONSTRUCTION 1					
	SQUARE MOLDED	RECTANGULAR MOLDED	PULTRUDED I-BAR	PULTRUDED T-BAR/WIDE T-BAR	DECKING & FLOORING
SERIES TYPE & NAME	Square Grid: MS-S, MS-M	Rectangular Grid: MS-R, MS-T-R, MS-T-COVER	MS-I-6000 - DURGRID®, MS-I-4000 - DURAGRID®, MS-T-I-6015 - DURAGRID®, MS-I-6515 - DURADEK®	MS-T-5020 - DURAGRID®, MS-WT-1810 - DURAGRID®, MS-WT-1210 - DURAGRID®, MS-WT-3810 - DURAGRID®	SAFDECK®, SAFPLANK®, SAFPLATE®
RESIN	Polyester, Vinyl Ester	Polyester, Vinyl Ester	Polyester, Vinyl Ester, Phenolic	Polyester, Vinyl Ester	Polyester
HEIGHT	1", 1-1/2", 2"	1", 1-1/2"	1", 1-1/2"	1", 1-1/2", 2"	Deck: 1-1/8" Plank: 2" Plate: 1/4", 1/2"
PRODUCT SURFACE	Concave, Grit	Concave, Grit	Fine Grit, Medium Grit, Coarse Grit	Fine Grit, Medium Grit, Coarse Grit	Grit: Vented or Solid Smooth: Vented or Solid
% OPEN AREA	72% to 44%	69% to 65%	40% to 65%	12% to 18%	0% to 4%
STANDARD PANEL SIZES	36" x 120" 48" x 96" 48" x 120" 48" x 144" 60" x 120"	36" x 120" 36" x 144" 48" x 96" 48" x 144"	36" x 240" 48" x 240"	36" x 240" 48" x 240" 48-1/8" x 144"	Deck: 24" x 240", 24" x 288" Plank: 12" & 24" x 144", 240" & 288" Plate: 48" x 96"

#### WE ARE READY AND INSPIRED TO SERVE® YOU AT 800.237.3820!

			FIBE	RGLASS RESI
	8	SPF	Polyester	Fire Retardant, Clas
	RIST	SVF	Vinyl Ester	Fire Retardant, Class
	ACTEF	SGF	Polyester	Orthophthalic Polyes Flame Rating of 25 o
	CHAR/	SFF	Polyester	Food Grade, Fire Re ASTM E-84
	SIN	SPH	Phenolic	Fire Retardant, Clas Index 10, Smoke Dev
McNICHOLS® Fiberglass Grating, Molded - Flooring	H	NFR	Various	Non-Fire Retardant

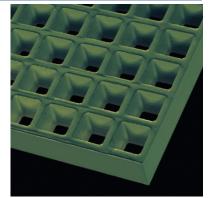
NICNICHULS® Fiberglass Graung, Molded - Flooring

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# RESIN TYPE DESCRIPTION SPF Polyester Fire Retardant, Class A Flame Rating of 25 or less per ASTM E-84 SVF Vinyl Ester Fire Retardant, Class A Flame Rating of 25 or less per ASTM E-84 SGF Polyester Orthophthalic Polyester Architectural Grade, Fire Retardant, Class A Flame Rating of 25 or less per ASTM E-84 SFF Polyester Free Retardant, Class A Flame Rating of 25 or less, Flame Rating of 30 or less per ASTM E-84 SFF Polyester Food Grade, Fire Retardant, Class A Flame Rating of 25 or less, Flame Spread Index 10, Smoke Developed Index 10, per ASTM E-84 NFR Various Various Non-Fire Retardant

N CHARACTERISTICS

# FIBERGLASS



#### HOW TO ORDER/SPECIFY McNICHOLS® FIBERGLASS GRATING

The information provided below is your guide for choosing the right **MCNICHOLS**<sup>®</sup> FIBERGLASS GRATING product for your project. Please specify:

**APPLICATION** – Fiberglass Grating use and physical requirements:

- Exposure to chemicals and/or extreme temperatures
- Fire retardant rating (*Resin* Characteristics table on this page has additional information)
- Loading, span and support requirements (product load tables in this section have additional information)

**CONSTRUCTION TYPE** – Molded (Square, Rectangular) or Pultruded (I-Bar, T-Bar, Wide T-Bar)

**RESIN & TYPE** – Type of Resin (SPF Polyester, SVF Vinyl Ester, SGF Polyester, SFF Polyester, SPH Phenolic)

**COLOR** – Choose Grating color (e.g. Yellow, Green, etc.)

**GRID HEIGHT, SIZE & SHAPE** – Molded grid height, grid pattern spacing (measured in inches) and shape (square or rectangular)

**BEARING BAR SIZE, SHAPE & SPACING** – Pultruded bearing bar height (measured in inches), shape (I-Bar, T-Bar, Wide T-Bar) and spacing (center to center of bearing bars, between bearing bar top flanges, and between bottom bearing bar bottom flanges)

**PRODUCT SURFACE** – Concave, grit (Molded) or fine, medium or coarse grit (Pultruded)

OPEN AREA - Percentage of open area

**SPAN** – Direction of Pultruded bearing bars or Molded grid (Rectangular pattern only)

**QUANTITY/SIZE(S)** – Number of panels and/or sizes (including cut-to-size pieces and stub/cut preferences)

**SPECIAL** – Requirements like fabrication, notching, cut-outs, stair treads, EXTREN® Structural Shapes and Plate, non-standard tolerances, etc.

**ACCESSORIES** – Quantity and type of Clips or Fasteners/Hardware

# SQUARE MOLDED FIBERGLASS GRATING

McNICHOLS® Square Molded Fiberglass Grating is the economical product of choice where corrosion resistance or fire retardancy is paramount and high impact resistance is desired. When compared to steel, this product is very lightweight but still maintains its ability to support heavy loads.



#### SQUARE GRID (MS-S)

McNICHOLS® Square Grid MS-S Molded Fiberglass Grating panels are corrosionresistant and fire-retardant. An optional grit surface provides additional slip-resistant properties. Square Grid Molded Grating has an open area range from 70% to 72%, depending on the grid size.

LOAD TABLE: MS-S-100											
SPAN	LOAD	50	100	150	200	250	300	400	500	SAFE LOAD	
12"	U	<0.010	<0.010	0.013	0.017	0.021	0.025	0.034	0.042	1360	
12	С	<0.010	0.014	0.020	0.027	0.034	0.041	0.054	0.068	680	
18"	U	0.021	0.041	0.062	0.082	0.103	0.123	0.164	0.205	666	
10	С	0.022	0.044	0.066	0.088	0.110	0.131	0.175	0.219	500	
24"	U	0.064	0.128	0.192	0.256	0.320	0.384	0.512	0.640	380	
24	С	0.051	0.102	0.154	0.205	0.256	0.307	0.409	0.512	380	
30"	U	0.155	0.309	0.464	0.619					240	
30	С	0.099	0.198	0.297	0.396	0.495	0.594			300	
36"	U	0.318	0.635			MS-S	-100 Squ		Size:	160	
30	С	0.169	0.339	0.508	0.677		1-1/2" >	(1-1/2"		240	

	LOAD TABLE: MS-S-150											
SPAN	LOAD	50	100	150	200	250	300	400	500	SAFE LOAD		
12"	U	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	0.014	0.018	3120		
12	С	<0.010	<0.010	<0.010	0.011	0.014	0.017	0.023	0.028	1560		
18"	U	<0.010	0.014	0.021	0.028	0.036	0.043	0.057	0.071	1386		
10	С	<0.010	0.015	0.023	0.030	0.038	0.046	0.061	0.076	1040		
24"	U	0.021	0.042	0.063	0.084	0.104	0.125	0.167	0.209	780		
24	С	0.017	0.033	0.050	0.067	0.084	0.100	0.134	0.167	780		
30"	U	0.047	0.094	0.141	0.188	0.235	0.283	0.377	0.471	496		
30	С	0.030	0.060	0.090	0.121	0.151	0.181	0.241	0.301	620		
36"	U	0.096	0.192	0.288	0.384	0.480	0.576			347		
30	С	0.051	0.102	0.154	0.205	0.256	0.307	0.410	0.512	520		
42"	U	0.175	0.350	0.525						251		
42	С	0.080	0.160	0.240	0.320	0.400	0.480	0.641	0.801	440		
48"	U	0.287	0.573							170		
40	С	0.115	0.229	0.344	0.459	0.573	0.688			340		
U - D	U - Deflection Under Uniform Load Safe Load 5:1 MS-S-150 Square Grid Size:1-1/2" x 1-1/2"											

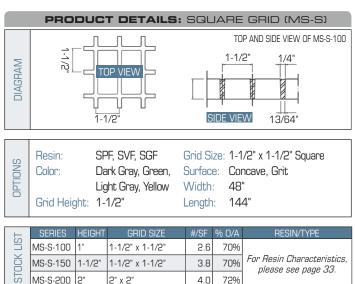
C - Deflection Under Concentrated Load Safety Factor



#### SQUARE GRID (MS-M)

McNICHOLS<sup>®</sup> Square Grid MS-M Molded Grating has a grid surface of 3/4" squares, while the bottom grid is made up of 1-1/2" squares. The small surface openings make it ideal for ADA applications with an open area of 44%.

LOAD TABLE: MS-M-150											
SPAN	LOAD	50	100	150	200	250	300	400	500	SAFE LOAD	
12"	U	<0.010	<0.010	0.011	0.014	0.017	0.021	0.028	0.035	3860	
12	С	< 0.010	0.011	0.017	0.022	0.028	0.034	0.045	0.056	1930	
18"	U	0.013	0.026	0.039	0.052	0.065	0.078	0.104	0.130	1776	
10	С	0.014	0.028	0.042	0.056	0.070	0.084	0.112	0.139	1332	
24"	U	0.025	0.050	0.075	0.100	0.126	0.151	0.201	0.251	1052	
24	С	0.020	0.040	0.060	0.080	0.101	0.121	0.161	0.201	1052	
30"	U	0.055	0.110	0.165	0.219	0.274	0.329	0.439	0.548	632	
30	С	0.035	0.070	0.105	0.140	0.176	0.211	0.281	0.351	790	
36"	U	0.087	0.173	0.260	0.346	0.433	0.520	0.692		456	
30	С	0.046	0.092	0.139	0.185	0.231	0.277	0.370	0.462	684	
42"	U	0.150	0.300	0.450	0.600					332	
42	С	0.069	0.138	0.207	0.276		MS-M-150 Square Grid Size			582	
48"	U	0.245	0.490	0.735				o Square I", Bottom		215	
40	С	0.098	0.196	0.294			10p. 3/4	F, DULLUII	1. 1-1/2	430	
U - Deflection Under Uniform Load Safe Load 5:1 C - Deflection Under Concentrated Load Safety Factor											



LOAD TABLE: MS-S-200											
SPAN	LOAD	50	100	150	200	250	300	400	500	SAFE LOAD	
12"	U	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	4000	
12	С	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	0.013	0.016	2000	
18"	U	<0.010	<0.010	0.012	0.016	0.020	0.024	0.032	0.040	1813	
10	С	<0.010	<0.010	0.013	0.017	0.021	0.026	0.034	0.043	1360	
24"	U	0.010	0.021	0.031	0.042	0.052	0.063	0.083	0.104	960	
24	С	<0.010	0.017	0.025	0.033	0.042	0.050	0.067	0.083	960	
30"	U	0.023	0.046	0.069	0.092	0.114	0.137	0.183	0.229	640	
30	С	0.015	0.029	0.044	0.059	0.073	0.088	0.117	0.146	800	
36"	U	0.044	0.089	0.133	0.177	0.222	0.266	0.355	0.444	453	
30	С	0.024	0.047	0.071	0.095	0.118	0.142	0.189	0.237	680	
42"	U	0.082	0.164	0.245	0.327	0.409	0.491	0.654		331	
42	С	0.037	0.075	0.112	0.150	0.187	0.224	0.299	0.374	580	
48"	U	0.135	0.270	0.405	0.541					260	
40	С	0.054	0.108	0.162	0.216	0.270	0.324	0.432	0.541	520	
54"	U	0.210	0.420	0.630						204	
-04	С	0.075	0.149	0.224	0.298	0.373	0.448	0.597		460	
U - Deflection Under Uniform Load Safe Load 5:1 MS-S-200 Square Grid Size: 2" x 2"											

4.0

72%

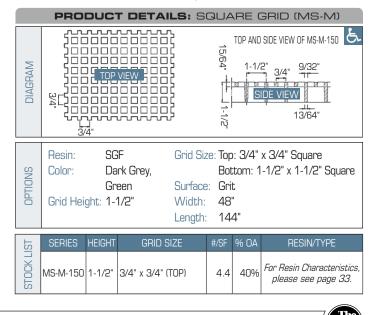
C - Deflection Under Concentrated Load

MS-S-200

יכן

2" x 2"

Safety Factor



# **RECTANGULAR MOLDED FIBERGLASS GRATING**

McNICHOLS<sup>®</sup> Rectangular Grid Molded Fiberglass Grating panels are corrosion-resistant and fire-retardant. The most popular grid is 1" x 4" with a 1" grid height (1-1/2" x 6" grid is also available). We offer a variety of panel colors, resin types, and sizes from stock!



**RECTANGULAR GRID McNICHOLS**<sup>®</sup> Rectangular Grid Molded Fiberglass Grating Panels have a 1" x 4" or 1-1/2" x 6" rectangular grid and are corrosion-resistant and fire-retardant. The panel surface is available with a concave top or with grit for added slip resistance.

Rectangular Grid has an open area range from 67% to 69% depending on the grid size.

			LOA		BLE:	MS-	R-1C			
SPAN	LOAD	50	100	150	200	250	300	400	500	SAFE LOAD
12"	U	<.010	<.010	<.010	.011	.014	.017	.022	.028	1960
12	С	<.010	<.010	.013	.018	.022	.027	.035	.044	980
18"	U	.012	.025	.037	.049	.062	.074	.099	.123	960
	С	.013	.026	.039	.053	.066	.079	.105	.131	720
24"	U	.037	.074	.112	.149	.186	.223	.298	.372	560
24	С	.030	.060	.089	.119	.149	.179	.238	.298	560
30"	U	.088	.176	.264	.352	.440	.528			336
30	С	.056	.113	.169	.225	.282	.338	.451	.563	420
00"	U	.176	.353	.529						240
36"	С	.094	.188	.282	.376	.470	.564			360
40"	U	.316	.632							183
42"	С	.144	.289	.433	.577					320
U - Deflec			iform Loa			Safe Loa		MS-R-100	Rectangular	r Grid Size:

C - Deflection Under Concentrated Load

Safety Factor

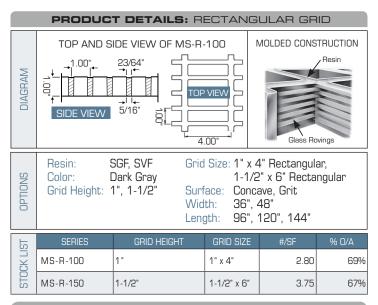
			LOA	DTA	BLE:	MS-	R-15			
SPAN	LOAD	50	100	150	200	250	300	400	500	SAFE LOAD
12"	U	<.010	<.010	<.010	<.010	.011	.014	.018	.023	4272
12	С	<.010	<.010	.011	.015	.018	.022	.029	.037	2136
18"	U	<.010	.018	.027	.035	.044	.053	.071	.089	1712
10	С	.010	.019	.028	.038	.047	.057	.076	.095	1284
0.4"	U	.019	.038	.056	.075	.094	.112	.150	.188	956
24"	С	.015	.030	.045	.060	.075	.090	.120	.150	956
30"	U	.039	.078	.117	.156	.195	.233	.311	.389	587
30	С	.025	.050	.075	.100	.125	.150	.200	.250	734
36"	U	.071	.143	.214	.285	.357	.428			385
30	С	.038	.076	.114	.152	.190	.228	.304	.381	578
42"	U	.126	.252	.378	.504	.630				370
42	С	.058	.115	.173	.230	.288	.346	.461		472
40"	U	.207	.414	.621				MS-R		184
48"	С	.083	.160	.248	.331	.414	.497	Rectangula 1-1/2		368
- Defle	ction L	Jnder Un	iform Loa	d					Safe L	.oad 5:'

Deflection Under Uniform Load
 Deflection Under Concentrated Load

Safety Factor

# HOLE PRODUCT SAMPLES

NEED A SAMPLE? We are ready and Inspired to Serve<sup>®</sup> you at 800.237.3820!



#### CLIPS & FASTENERS



A complete list of Clips and Fasteners is available on page 50.

	GLASS STAIR COVER/PANEL		GLASS MOLDED R TREAD/PANEL
	MS-T-C		MS-T-R-150
RESIN & TYPE	SGF Polyester	RESIN & TYPE	SGF Polyester
		COLOR	Gray, Green
COLOR	Black with Yellow Nosing	GRID HEIGHT	1-1/2"
THICKNESS	1/8"	GRID SIZE	1-1/2" x 6" Rectangular
THICKINESS	1/0	SURFACE	Grit
SURFACE	Grit	NOSING	Integral, both sides of panel
LIP	2" Yellow Radius Lip	SIZE	Stock: 22.5" width x 120" length; Nosing on 120" edges; Treads may be cut to size to width and length
WIDTH	Stock: 9",10" width; 8", 11", 12" width (Special Order)		desired; common sizes are 7-5/8", 9-1/8" and 10-5/8"
LENGTH	144" Panel	SPAN/ DEFLECTION	31" (1/8" or less deflection) 38" (1/4" or less deflection)



# PULTRUDED I-BAR FIBERGLASS GRATING

Combining corrosion resistance, long life, and a maintenance-free design, MCNICHOLS® MS-I-6000 Series DURAGRID® Pultruded I-Bar Fiberglass Grating has I-Bar shaped bearing bars with perpendicular cross bar rods placed every 6 inches. MS-I-6515 - DURADEK® has cross rods placed every 8 inches.



## MS-I-6010

McNICHOLS® MS-I-6010 - DURAGRID® I-Bar Fiberglass Grating is our most popular Pultruded product. Polyester resin panel bearing bars and cross bar colors may vary from each other. MS-I-6010 has a 1" height with an open area of 60%.

				LOA		ABI		VS-I	-60	10						
SPAN	LOAD	100	200	300	400	500	750	1000	2000	3000	4000	5000	SAFE LOAD			
12"	U	.002	.004	.005	.007	.009	.014	.018	.036	.054	.073	.091	10401			
12	С	.003	.006	.009	.012	.015	.022	.029	.058	.087	.116	.145	5200			
18"	U	.008	.017	.025	.033	.042	.063	.084	.167	.251	4954					
10	С	.009	.018	.027	.036	.045	.067	.089	.179	.179 .268 .357 .446						
24"	U	.025	.050	.075	.100	.124	.187	.249	.498	2900						
24	С	.020	.040	.060	.080	.100	.149	.199	.398	.597		2900				
30"	U	.058	.116	.174	.231	.289	.434	.579					1856			
30	С	.037	.074	.111	.148	.185	.278	.370	This t	echnica	inform	ation	2320			
36"	U	.115	.230	.345	.460	.575			provid	ed is a	referenc	e for	1289			
30	С	.061	.123	.184	.245	.307	.460	.614		ition by persons			1933			
40"	U	.211	.422	.633					use th	iereof to	be at	their	943			
42"	С	.096	.193	.289	.386	.482				ndent d			1649			
40"	U	.353	.705						have	ty or	719					
48"	С	.141	.282	.423	.564				liability or dar	1437						
E 41	U	.563							improp	566						
54"	С	.200	.400	.600					of Gra	1274						

U - Deflection Under Uniform Load

C - Deflection Under Concentrated Load

Safe Load 2:1 Safety Factor



# MS-I-6015

McNICHOLS® MS-I-6015 - DURAGRID® I-Bar Fiberglass Grating features an I-Bar shape that provides maximum flexibility in design. The polyester resin panel bearing bars and cross bar colors may vary from each other. MS-I-6015 - DURAGRID® has a 1-1/2" height with an open area of 60%.

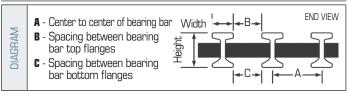
MS-I-6015

				_		<u> </u>	~														
SPAN	load	100	200	300	400	500	750	1000	2000	3000	4000	5000	6000	7000	SAFE LOAD						
12"	U	.001	.001	.002	.003	.003	.005	.006	.013	.019	.026	.032	.038	.045	17601						
12	С	.001	.002	.003	.004	.005	.008	.010	.020	.031	.041	.051	.061	.072	8800						
18"	U	.003	.006	.009	.012	.015	.023	.030	.061	.091	.121	.152	.182	.212	7823						
10	С	.003	.006	.010	.013	.016	.024	.032	.065	.097	.129	.162	.194	.226	5867						
24"	U	.009	.018	.027	.037	.046	.069	.091	.183	.274	.366	.457	.549	.640	4400						
24	С	.007	.015	.022	.029	.037	.055	.073	.146	.220	.293	.366	.439	.512	4400						
30"	U	.022	.043	.065	.086	.108	.161	.215	.430	.646					2773						
30	С	.014	.028	.041	.055	.069	.103	.138	.276	.413	.551				3467						
36"	U	.044	.087	.131	.175	.218	.327	.436							1896						
30	С	.023	.047	.070	.093	.116	.175	.233	.466						2845						
42"	U	.079	.159	.238	.317	.396	.595		This	techni	cal info	rmatio	n provid	led is	1361						
42	С	.036	.072	.109	.145	.181	.272	.362				luation			2381						
48"	U	.133	.266	.400	.533	.666						, with ar epender			1017						
40	С	.053	.107	.160	.213	.266	.400	.533													
54"	U	.211	.422	.633					obtained or damages resulting from												
54	С	.075	.150	.225	.300	.375	.563		improper evaluation or use of Grating. 17												

U - Deflection Under Uniform Load

C - Deflection Under Concentrated Load

Safe Load 2:1 Safety Factor



	Resin:	SPF
0	Color:	Gray, Yellow
OPTIONS	Bearing Bar Size:	1"x 0.600", 1-1/2" x 0.600"
ITT	Surface:	Medium Grit, Fine Grit
	Width:	36", 48"
	Length:	120", 144", 240"

	SERIES	BEARING BAR SIZE	#/SF	А	В	С	% 0/A
		MS-1-400	O SEI	RIES (F	PAGE 3	[7]	
ST	MS-I-4010	1" x 0.600"	3.4	1.000"	0.400"	0.400"	40%
OCK LIST	MS-I-4015	1-1/2" x 0.600"	4.2	1.000"	0.400"	0.400"	40%
		MS-I	-600(	) SERI	ES		
ST	MS-I-6010	1" x 0.600"	2.4	1.500"	0.900"	0.900"	60%
	MS-I-6015	1-1/2" x 0.600"	3.0	1.500"	0.900"	0.900"	60%
	MS-I-6515*	1-1/2" x 0.600"	2.7	1.710"	1.110"	1.110"	65%

\*Has 8" cross bar spacing



# **MS-I-6515**

McNICHOLS® MS-I-6515 - DURADEK® I-Bar Fiberglass Grating is economical and features the traditional I-Bar shape that gives maximum flexibility in design. The product has a 1-1/2" height with perpendicular cross bar rods placed every 8". Open area is 65%.

				LOA		ABL	<b>_E:</b> î	VIS-I	-65	15							
SPAN	load	100	200	300	400	500	750	1000	2000	3000	4000	5000	SAFE LOAD				
12"	U	.001	.001	.002	.003	.004	.005	.007	.015	.022	.029	.038	15439				
12	С	.001	.002	.004	.005	.006	.009-	.012	.023	.035	.047	.047 .058					
18"	U	.003	.007	.010	.014	.017	.026	.035	.069	.091	.104	.138	6862				
10	С	.004	.007	.011	.015	.018	.028	.037	.074	.111	.147	5146					
24"	U	.010	.021	.031	.042	.052	.078	.104	.209	.209 .313 .417 .522							
24	С	.008	.017	.025	.033	.042	.063	.083	.167	3860							
30"	U	.025	.049	.074	.098	.123	.184	.245	.491	2433							
30	С	.016	.031	.047	.063	.079	.118	.157	.314	3041							
36"	U	.050	.100	.149	.199	.249	.373	.498				1663					
30	С	.027	.053	.080	.106	.133	.199	.265	This t	echnica	l inform	nation	2495				
42"	U	.090	.181	.271	.361	.452	.678			ed is a			1194				
42	С	.041	.083	.124	.165	.207	.310	.413		ation by			2088				
48"	U	.152	.304	.456	.607					persons nereof ta			892				
40	С	.061	.121	.182	.243	.304	.456	.607		ndent d			1784				
54"	U	.241	.481							//cNl			681				
04	С	.086	.171	.257	.342	.428	.642			ave no re			1533				
60"	U	.364							liability for results obtained 533								
00	С	.117	.233	.350	.467	.583			improp	1333							
	U	.531							of Gra	425							
66"	С	.155	.309	.464	.618						1170						

U - Deflection Under Uniform Load C - Deflection Under Concentrated Load Safe Load 2:1 Safety Factor

# McNICHOLS® HOLE PRODUCTS



#### MS-I-4010 & MS-I-4015

McNICHOLS® MS-I-4000 - DURAGRID® Series Pultruded Grating is available from stock in 240" panels with choices of two bearing bar heights (1" or 1-1/2"), 36- or 48-inch widths and a variety of colors. Please note that the polyester resin panel bearing bars and cross bar colors may vary from each other. Most items have a fine grit surface, with optional medium and coarse grit surfaces. This Series has been approved for use in Virginia Graeme Baker Pool and Spa Safety Act (VGB) applications. MS-I-4000 - DURAGRID® Series is similar to MS-I-6000 - DURAGRID® Series but has an open area of 40%.

MS-I-4015

LOAD TABLE: MS-I-4010

SPAN	LOAD	100	200	300	400	500	750	1000	2000	2500	3000	4000	5000	6000	SAFE LOAD
12"	U	.001	.002	.004	.005	.006	.009	.012	.024	.030	.036	.048	.060	.073	15600
12	С	.002	.004	.006	.008	.010	.015	.019	.039	.048	.058	.077	.097	.116	7800
18"	U	.006	.011	.017	.022	.028	.042	.056	.112	.139	.167	.223	.279	.335	7431
10	С	.006	.012	.018	.024	.030	.045	.060	.119	.149	.179	.238	.298	.357	5573
24"	U	.017	.033	.050	.066	.083	.124	.166	.332	.415	.498	.664			4350
24	С	.013	.027	.040	.053	.066	.100	.133	.265	.332	.398	.531	.664		4350
30"	U	.039	.077	.116	.154	.193	.289	.386							2784
30	С	.025	.049	.074	.099	.123	.185	.247	.494	.617					3480
36"	U	.077	.153	.230	.307	.383	.575		This	technica	al inforn	nation p	provided	is a	1933
30	С	.041	.082	.123	.164	.205	.307	.409		ence fo d persor					2900
42"	U	.141	.281	.422	.563	.703				e at th					1414
42	С	.064	.129	.193	.257	.321	.482	.643		risk. M					2474
48"	U	.235	.470	.705					obtai	esponsit ned or			sulting		1078
40	С	.094	.188	.282	.376	.470			impro	oper eva	luation d	or use o	f Gratin	g.	2155
U - Deflection Under Uniform Load Safe Load 2												.oad 2:1			

C - Deflection Under Concentrated Load

FIBERGLASS

		AIR TREAD/PANEL
	RESIN & TYPE	SPF Polyester
	COLOR	Gray, Yellow
	BAR HEIGHT	1-1/2" I-Bar (MS-T-I-6015 - DURAGRID®)
	SURFACE	Grit
MS-T-I-6015	NOSING	Integral, one side of panel
Pultruded Construction ~		Stock panels are 11" width x 144" length for 11" wide Treads
Unidirectionally Thermoset	SIZE	Stock panels are 12-1/2" width x 144" length for 12-1/2" wide Treads
aligned glass fibers resin bonded with resin	JILL	Integral Nosing on one 144" edge
		Treads may be cut to size to width and length desired
A start	SPAN/	40" (1/8" or less deflection, based on 300 lb. load at mid span)
Multidirectional Veil glass mat	DEFLECTION	52"(1/4" or less deflection, based on 300 lb. load at mid span)

#### LOAD TABLE: MS-I-4015

SPAN	load	100	200	300	400	500	750	1000	2000	3000	4000	5000	6000	7000	8000	9000	SAFE LOAD
12"	U	.000	.001	.001	.002	.002	.003	.004	.009	.013	.017	.021	.026	.030	.034	.038	26400
12	С	.001	.001	.002	.003	.003	.005	.007	.014	.020	.027	.034	.041	.048	.055	.061	13200
18"	U	.002	.004	.006	.008	.010	.015	.020	.040	.061	.081	.101	.121	.141	.162	.182	11734
10	С	.002	.004	.006	.009	.011	.016	.022	.043	.065	.086	.108	.129	.151	.172	.194	8800
24"	U	.006	.012	.018	.024	.030	.046	.061	.122	.183	.244	.305	.366	.427	.488	.549	6600
24	С	.005	.010	.015	.020	.024	.037	.049	.098	.146	.195	.244	.293	.342	.390	.439	6600
30"	U	.014	.029	.043	.057	.072	.108	.143	.287	.430	.574	.717					4160
30	С	.009	.018	.028	.037	.046	.069	.092	.184	.276	.367	.459	.551	.643			5200
36"	U	.029	.058	.087	.116	.145	.218	.291	.582						n provide		2844
30	С	.016	.031	.047	.062	.078	.116	.155	.310	.466	.621				n by tech nanyuse		4267
42"	U	.053	.106	.159	.211	.264	.396	.528							dent dis		2041
42	С	.024	.048	.072	.097	.121	.181	.242	.483	.725					ICHC tv or liab		3571
48"	U	.089	.178	.266	.355	.444	.666								es resulti		1525
40	С	.036	.071	.107	.142	.178	.266	.355				imprope	r evaluatio	on ar use	ŀ	3050	
U - Deflection Under Uniform Load Safe Load 2 C - Deflection Under Concentrated Load Safety Fact																	

## PULTRUDED T-BAR FIBERGLASS GRATING



MS-T-5020

McNICHOLS® MS-T-5020 - DURAGRID® Pultruded T-Bar Fiberglass Grating is an alternative to Metal Grating if more surface area is desired. McNICHOLS® MS-T-5020 - DURAGRID® has a large open area of 50% with a 2" bar height.

MS-T-5020

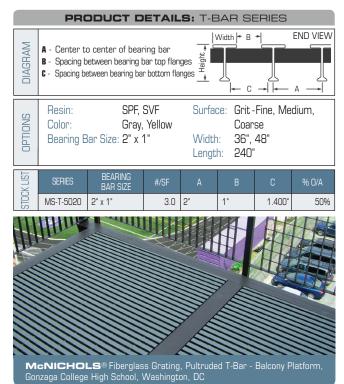
LOAD TABLE: MS-T-5020

SPAN	load	100	200	300	400	500	750	1000	2000	3000	4000	5000	6000	7000	8000	SAFE LOAD
12"	U	.000	.001	.001	.001	.002	.003	.004	.007	.011	.014	.018	.021	.025	.028	11333
12	С	.001	.001	.002	.002	.003	.004	.006	.011	.017	.023	.028	.034	.040	.045	5666
18"	U	.002	.003	.005	.007	.009	.013	.017	.035	.052	.070	.087	.104	.122	.139	7536
10	С	.002	.004	.006	.007	.009	.014	.019	.037	.056	.074	.093	.111	.130	.148	5666
24"	U	.005	.011	.016	.021	.027	.040	.054	.107	.161	.214	.268	.321	.375	.429	5666
24	С	.004	.009	.013	.017	.021	.032	.043	.086	.129	.171	.214	.257	.300	.343	5666
00"	U	.013	.026	.038	.051	.064	.096	.128	.256	.384	.512	.640				3626
30"	С	.008	.016	.025	.033	.041	.061	.082	.164	.246	.327	.409	.491	.573	.655	4534
00"	U	.026	.052	.078	104	.130	.195	.260	.520							2519
36"	С	.014	.028	.042	.055	.069	.104	.139	.277	.416	.555	.694				3778
40"	U	.047	.095	.142	.190	.237	.356	.474								1850
42"	С	.022	.043	.065	.087	.108	.163	.217	.433	.650						3238
4.01	U	.079	.158	.238	.317	.396	.594			Thin	toobnior	al inform	oction r	anovidor		1417
48"	С	.032	.063	.095	.127	.158	.238	.317	.634			r evalu				2834
E 41	U	.125	.250	.374	.499	.624				1 . 0.0.0		ns only,				1120
54"	С	.044	.089	.133	.178	.222	.333	.444				indepe				2519
0.01	U	.188	.375	.563	.751							ICH				907
60"	C	.060	.120	.180		.300	.450	.601				y or l				2267
0.01	U	.272	.544									damag				749
66"	C	.079	.158	.237	.316	.395	.593			impro	per eva	aluation	or use (	of Grati	ng.	2060

U - Deflection Under Uniform Load

C - Deflection Under Concentrated Load

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Safe Load 2:1

Safety Factor

Safety Factor

# McNICHOLS® HOLE PRODUCTS

# PULTRUDED WIDE T-BAR FIBERGLASS GRATING

MCNICHOLS DURAGRID® Pultruded Wide T-Bar Fiberglass Grating panels are corrosion- and slip-resistant and fire-retardant. This product has been tested and approved for Virginia Graeme Baker Act (VGB) compliance.



# MS-WT-1210

McNICHOLS® MS-WT-1210 - DURAGRID® Grating is available with a 1" bearing bar height in gray polyester resin with medium grit in a 144" length. This Grating has a tight bar spacing and a small open area of 12%, making it ideal for ADA applications.

MS-WT-1210



#### **MS-WT-1810**

McNICHOLS® MS-WT-1810 - DURAGRID® Grating is available with a 1" bearing bar height in gray or white polyester with a fine or medium grit surface. This Grating has a small open area of 18%, making it a great choice if your needs require ADA compliance.

MS-WT-1810



# **MS-WT-3810**

McNICHOLS® MS-WT-3810 - DURAGRID® Grating is available with a 1" bearing bar height in gray polyester resin with medium grit. This Grating has an open area of 38%.

#### MS-WT-3810

			L	.0A	ס דר	BLE	≣: M	S-W	T-12	210			
SPAN	LOAD	100	200	300	400	500	750	1000	2000	2500	3000	4000	SAFE LOAD
12"	U	.002	.004	.006	.008	.010	.016	.021	.042	.052	.062	.083	11546
12	С	.003	.007	.010	.013	.017	.025	.033	.067	.083	.100	.133	5773
18"	U	.010	.019	.029	.038	.048	.072	.096	.192	.240	.288	.383	5131
10	С	.010	.020	.031	.041	.051	.077	.102	.204	.256	.307	.409	3849
24"	U	.029	.057	.086	.114	.143	.215	.286	.572				2887
24	С	.023	.046	.069	.092	.114	.172	.229	.458	.572			2887
30"	U	.066	.133	.199	.266	.332	.498	.664					1830
30	С	.042	.085	.127	.170	.212	.319	.425					2288
36"	U	.134	.267	.401	.535	.668			chnical ii				1251
30	С	.071	.143	.214	.285	.356	.535		ence for e iersons o				1877
42"	U	.238	.476					to be a	t their ir	ndepend	ent disc	retion	901
42	С	.109	.217	.326	.435	.543		and risk. McNICHOLS shall responsibility or liability for r			1576		
48"	U	.398						obtaine	ed or dai	mages r	esultin	g from	676
48	С	.159	.319	.478	.637			improper evaluation or use of Grating.			Grating.	1351	

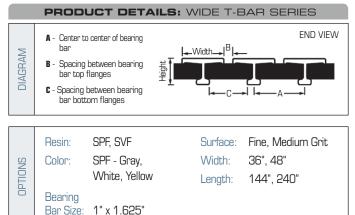
#### U - Deflection Under Uniform Load C - Deflection Under Concentrated Load

Safe Load 2:1 Safety Factor

	LOAD TABLE: MS-WT-1810												
SPAN	load	100	200	300	400	500	750	1000	2000	2500	3000	4000	SAFE LOAD
12"	U	.002	.004	.007	.009	.011	.017	.022	.045	.056	.067	.090	10680
12	С	.004	.007	.011	.014	.018	.027	.036	.072	.090	.108	.144	5340
18"	U	.010	.021	.031	.041	.052	.078	.104	.207	.259	.311	.415	4746
18	С	.011	.022	.033	.044	.055	.083	.111	.221	.277	.332	.442	3560
24"	U	.031	.062	.093	.124	.155	.232	.310	.619				2670
24	С	.025	.050	.074	.099	.124	.186	.248	.495	.619			2670
30"	U	.072	.144	.215	.287	.359	.539	.718					1693
130	С	.046	.092	.138	.184	.230	.345	.460					2116
36"	U	.145	.289	.434	.578	.723				iformatio			1157
30	С	.077	.154	.231	.308	.385	.578			valuation			1736
42"	U	.257	.514					skilled persons only, with any use thereof to be at their independent discretion					
42	С	.118	.235	.353	.470	.588		and risk. McNICHOLS shall have no responsibility or liability for results				1458	
48"	U	.431					obtained or damages resultin					625	
40	С	.172	.345	.517	.689			improper evaluation or use of Grating.					1250

U - Deflection Under Uniform Load

C - Deflection Under Concentrated Load



	SERIES	BEARING BAR SIZE	#/SF	А	В	С	% O/A
( LIST	MS-WT-1210	1" x 1.625"	2.79	1.850"	0.225"	1.350"	12%
TOCK	MS-WT-1810	1" x 1.625"	2.60	2.000"	0.375"	1.500"	18%
വ്	MS-WT-3810	1" x 1.625"	2.10	2.620"	0.995"	1.620"	38%





A complete list of Clips and Fasteners is available on page 50.

#### LOAD TABLE: MS-WT-3810

SPAN	LOAD	100	200	300	400	500	750	1000	2000	2500	3000	4000	SAFE LOAD
12"	U	.003	.006	.009	.012	.015	.022	.029	.059	.074	.088	.118	8137
12	С	.005	.009	.014	.019	.024	.035	.047	.094	.118	.141	.188	4069
18"	U	.014	.027	.041	.054	.068	.102	.136	.271	.339	.407	.542	3616
18	С	.014	.029	.043	.058	.072	.108	.145	.289	.362	.434	.579	2712
24"	U	.040	.081	.121	.162	.202	.304	.405					2034
24	С	.032	.065	.097	.130	.162	.243	.324	.648				2034
30"	U	.094	.188	.282	.376	.470							1290
30	С	.060	.120	.180	.240	.300	.451	.601					1612
36"	U	.189	.378	.567					inform				882
30	С	.101	.202	.302	.403	.504			revaluati nsonly,				1323
42"	U	.336	.673						at their				635
42	С	.154	.308	.461	.615		Slidii lidve liu resputsibility ur lidbility					1111	
48"	U	.563					for results obtained or damages resulting from improper evaluation or use of 						476
48	С	.225	.451	.676									952

U - Deflection Under Uniform Load

C - Deflection Under Concentrated Load

Safe Load 2:1

Safety Factor



Safe Load 2:1

Safety Factor

# FIBERGLASS

# FIBERGLASS DECKING & FLOORING

McNICHOLS® Fiberglass Decking and Flooring products are lightweight and corrosion-resistant. These products are used in a variety of applications, such as trench covers to contain vapors or fumes and to ensure footing on pedestrian bridge walkways.



# **SAFDECK®**

McNICHOLS SAFDECK<sup>®</sup> Overlapping Decking is a system of 24" wide Fiberglass panels designed to overlap for a continuous solid surface. It is an alternative to wood, Aluminum and Steel Decking in wet or corrosive environments. SAFDECK® is ADA-compliant.

# PRODUCT OPTIONS

Resin:	SPF Composite	Surface:	Grit: Solid or Vented
Color:	Slate Gray		Smooth: Solid or Vented
Height:	1-1/8"	Width:	24"
		Length:	240", 288"



## SAFPLANK<sup>®</sup>

McNICHOLS SAFPLANK<sup>®</sup> Interlocking Plank Flooring with a solid surface is an ADA-compliant, high-strength system of Interlocking Planks made from Fiberglass composite that is ideal for dry, wet, or certain chemical environments.

**SAFPLANK®** Side View

# 12" 3 83" -

# PRODUCT OPTIONS

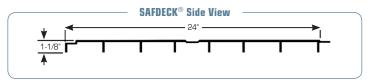
	SPF Composite Slate Gray	Surface:	Grit: Solid or Vented Smooth: Solid or Vented
Depth:	2"	Width:	12", 24"
		Length:	144", 240", 288"

	LOAD TABLE: SAFPLANK®									
	12" WIDTH									
SPAN	LOAD	50	100	200	300	500	1000			
24"	U	.006	.011	.023	.034	.057	.113			
24	С	<.005	.009	.018	.027	.045	.091			
36"	U	.022	.043	.087	.130	.217				
30	С	.012	.023	.046	.070	.116	.232			
40"	U	.062	.123	.247	.370					
48"	С	.025	.049	.099	.148	.247	.494			
CO"	U	.140	.281	.562						
60"	С	.045	.090	.180	.270	.450				
70"	U	.291	.583							
72"	С	.078	.155	.311	.466					
			24'	' WIDT						
24"	U		.015	.030	.045	.075	.151			
24	С		.012	.024	.036	.060	.121			
00"	U		.046	.092	.138	.231				
36"	С		.024	.049	.074	.123	.246			
40"	U		.133	.265	.398					
48"	С		.053	.106	.159	.265				
60"	U		.302	.605						
00	С		.097	.193	.290	.484				
72"	U		.627							
12	С		.167	.334	.501					

U - Deflection Under Uniform Load C - Deflection Under Concentrated Load

	LOAD TABLE: SAFDECK®									
	24" WIDTH									
SPAN	LOAD	25	50	60	75	100	200	300		
24"	U	.015	.030	.036	.044	.059	.119	.179		
24	С	.012	.023	.029	.036	.048	.096	.143		
36"	U	.063	.126	.151	.189	.252				
30	С	.032	.064	.081	.101	.134	.269			
48"	U	.215	.430							
48	С	.073	.147	.206	.257	.343				

U - Deflection Under Uniform Load C - Deflection Under Concentrated Load





# **SAFPLATE®**

McNICHOLS SAFPLATE® Plate Flooring is ideal for both wet and dry environments. This ADA-compliant plate is Pultruded Fiberglass with a textured, slip-resistant surface. SAFPLATE® is a tough, corrosion-resistant, lightweight, maintenance-free alternative to Steel plate.

SAFPLATE®

	PRODUCT OPTIONS									
Resin: Color: Thickness:	SPF Gray 1/8", 1/4", 1/2"	Surface: Width: Length:								

	LOAD TABLE: SAFPLATE®										
					SI	PAN					
THICK	LOAD	12"	18"	24"	30"	36"	42"	48"	54"	60"	
	U	167	34	11							
A /A"	U	.120	.125	.125			For al	lowable l	oads when	sheet is	
1/4"	С	104	32	14					rosswise o		
	С	.120	.125	.125			multiply table values by 0.550				
	U	562	167	55	23	11			0.700 for	all other	
0.01	U	.120	.180	.188	.188	.188	thickn	esses sh	iown here.		
3/8"	С	351	156	69	35	20					
	С	.120	.180	.188	.188	.188					
	U	1333	370	167	71	34	18	11			
1/2"	U	.120	.180	.240	.250	.250	.250	.250			
1/2	С	833	370	209	111	65	40	27			
	С	.120	.180	.240	.250	.250	.250	.250			
	U	2600	768	326	167	84	45	27	17	11	
5/8"	U	.120	.180	.240	.300	.312	.312	.312	.312	.312	
J/U	С	1622	723	407	260	157	99	66	47	34	
	С	.120	.180	.240	.300	.312	.312	.312	.312	.312	
	U	4499	1333	563	288	167	94	55	34	22	
3/4"	U	.120	.180	.240	.300	.360	.375	.375	.375	.375	
0/4	С	2804	1250	702	450	313	205	138	97	71	
	С	.120	.180	.240	.300	.360	.375	.375	.375	.375	
	U	10677	3158	1333	682	396	248	167	108	71	
1"	U	.120	.180	.240	.300	.360	.420	.480	.500	.500	
	С	6667	2956	1667	1068	740	544	416	305	222	
	С	.120	.180	.240	.300	.360	.420	.480	.500	.500	

U - Deflection Under Uniform Load C - Deflection Under Concentrated Load



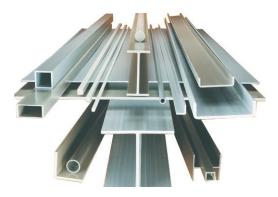
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# STRUCTURALS & FLOORING

McNICHOLS® HOLE PRODUCTS

# EXTREN® FIBERGLASS STRUCTURAL SHAPES & PLATES

McNICHOLS<sup>®</sup> Structural Shapes include a variety of components for your projects, such as EXTREN<sup>®</sup> Fiberglass Structurals along with Fiberglass Plate, Handrail System Components and Embed Angle. These non-corrosion components provide opportunities to replace unprotected steel and wood in a variety of structural applications.



- IMPACT RESISTANT
- LIGHTWEIGHT
- DIMENSIONAL STABILITY
- HIGH STRENGTH
- LOW MAINTENANCE
- LOW CONDUCTIVITY
- NON-MAGNETIC
- FASY FABRICATION

	FIBERGLASS RESIN CHARACTERISTICS										
	RESIN	TYPE	DESCRIPTION								
ស្ត	SPF	Polyester	Fire Retardant, Class A Flame Rating of 25 or less per ASTM E-84								
<b>IISTIC</b>	SVF	Vinyl Ester	Fire Retardant, Class A Flame Rating of 25 or less per ASTM E-84								
RESIN CHARACTERISTICS	SGF	Polyester	Orthophthalic Polyester Architectural Grade, Fire Retardant, Class A Flame Rating of 25 or less per ASTM E-84								
CHA	SFF	Polyester	Food Grade, Fire Retardant, Class B Flame Rating of 30 or less per ASTM E-84								
RESIN	SPH	Phenolic	Fire Retardant, Class A Flame Rating of 25 or less, Flame Spread Index 10, Smoke Developed Index 10, per ASTM E-84								
	NFR	Various Composites	Non-Fire Retardant								

# POLYCAST® TRENCH DRAIN SYSTEM

**Standard Chair Installation** McNICHOLS® Trench Drain System is **POLYCAST®** Diagram (Secure chair in bottom dimples on the channels.) Grating lock downs pre-sloped and designed to have flow rates equal 4" Min. (typical both sides) to or greater than most larger poured-in-place Optional Trench Drain Systems. Kit options available! Slab 🔺 Heavy depth ¥ Duty frame Smooth and radiused 4" Min. to be Initial pour interior developed by the Light to HD slab designer Moderate Hard Patented installation Nose Trench 14 alignment chair Alignment dimples for installation chair Drain Frame Min. excavation width (typical)

# METAL PLATE FLOORING

McNICHOLS® Metal Plate Flooring products provide secure, slip-resistant surfaces in industrial settings or places with heavy pedestrian traffic. Approved by the ADA, these products offer sure footing in slippery conditions.



#### **GRIP TIGHT® PLATE FLOORING**

In the patented McNICHOLS GRIP TIGHT® process, an Oxide grit coating is bonded to a metal base using a metal bonding agent. This metal and abrasive grit composite provides a spark-resistant, non-corrosive surface that results in sure footing under slippery conditions. ADA-approved.

#### PRODUCT OPTIONS

Material: Aluminum, Carbon Steel, Stainless Aluminum or Steel Oxide Grit Surface: Thickness: 3/16" to 1" 60" x 120", 60" x 144" Size:



Anchorina ribs

channel joints

Fongue & groove

# 6-1

# **TRACTION TREAD® PLATE FLOORING**

For slip resistance in all directions, the raised, dimpled, perforated-button surface of **McNICHOLS** TRACTION TREAD® Plate Flooring is a great choice for most industrial applications, especially when pedestrian traffic is a consideration. ADA-approved.

# **PRODUCT OPTIONS**

Material: Aluminum, Alloy Type 5052-H32; Carbon Steel; Stainless Steel, Type 304 (Chevron pattern) 16, 14, 11, 0.1250" Thick Aluminum Gauge: 36" x 120" Size:





#### DIAMONDBACK® INTERLOCKING FLOORING

McNICHOLS DIAMONDBACK® Extruded Interlocking Flooring has aggressive, serrated ridges that provide slip resistance superior to other skid-resistant Aluminum floor plates. The Flooring has legs that raise it off the floor, allowing for drainage and longitudinal stiffness. The edges have an interlocking channel running with the length. ADA-approved.

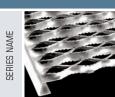
		'IONS

Material:	Aluminum, Alloy Type 6061-T6
Height:	0.360"
Surface:	Solid Serrated (Vented by Special Order)
Size:	12" x 144"

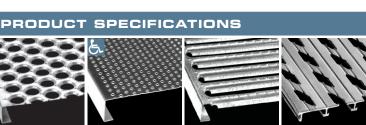
# PLANK

# PLANK GRATING

MCNICHOLS<sup>®</sup> Plank Grating includes a variety of channel configuration choices and walkway styles. Plank Grating is a one-piece construction product that is lightweight and has aggressive, highly slip-resistant surfaces for added safety. In addition to low material cost and nominal installation cost, Plank Grating provides long-term value with rust-resistant materials and finishes.







	<b>GRIP STRUT®</b>	PERF-0 GRIP®	TRACTION TREAD®	grate-lock®	DIAMONDBACK®
CONSTRUCTION TYPES	Plank, Heavy-Duty Plank, Walkway, Heavy-Duty Walkway	Plank, Walkway	Plank	Interlocking Plank with Slip-Resistant Surface, Interlocking Plank with Smooth Surface	Extruded Interlocking Plank with Solid Surface, Extruded Interlocking Plank with Vented Surface
PRIMARY MATERIAL	Aluminum, Carbon Steel, Galvanized Steel, Stainless Steel	Aluminum, Carbon Steel, Galvanized Steel	Aluminum, Galvanized Steel	Galvanized Steel	Aluminum
WIDTH	Plank: 4-3/4", 7", 9-1/2", 11-3/4", 18-3/4", 24" HD Plank: 9-1/4" Walkway: 24" HD Walkway: 30"	Plank: 5", 7", 10", 12", 18" Walkway: 24", 30", 36"	7", 10", 12", 18"	9", 12"	6", 12"
CHANNEL SIZE	Plank: 1-1/2", 2", 2-1/2", 3" Dpt. HD Plank: 2" Dpt. Walkway: 4-1/2" Ht. HD Walkway: 5" Ht.	Plank: 1-1/2", 2" Dpt. Walkway: 5" Ht.	1-1/2", 2" Dpt.	1-1/2", 2", 2-1/2", 3", 4" (Special Order) Dpt.	1", 1-1/2", 2" Dpt.
% OPEN AREA	34.2% to 47.8%	28.5% to 38.2%	3% to 34.7%	40.9% to 46.1%	0% to 12%
LENGTH	120", 144" (Longer by Special Order)	120", 144" (Longer by Special Order)	120", 144"	144" (1-1/2" Dpt.); 144", 240", 288" (2-1/2" Dpt.); 288" (3" Dpt.)	144"

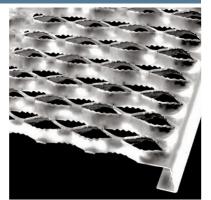
WE ARE READY AND INSPIRED TO SERVE® YOU AT 800.237.3820!



McNICHOLS® Plank Grating, GRIP STRUT® - Walking Surface, Tennessee Valley Authority, Ocoee, TN



McNICHOLS® Plank Grating, PERF-0 GRIP® - Farm Equipment Platform, Williamsburg, IA



#### HOW TO ORDER/SPECIFY McNICHOLS® PLANK GRATING

The information provided below is your guide for choosing the right MCNICHOLS® PLANK GRATING product for your project. Please specify:

**APPLICATION** - Plank Grating use and physical requirements

- Interior/exterior application
- Loading, span and support requirements
- Traffic requirements (hand cart, ADA. pedestrian. etc.)

SERIES NAME & CONSTRUCTION TYPE GRIP STRUT® (Plank, Walkway), Heavy-Duty GRIP STRUT® (Plank, Walkway), PERF-O GRIP® (Plank, Walkway), GRATE-LOCK® Interlocking Plank, TRACTION TREAD® Plank, DIAMONDBACK® Extruded Interlocking Plank, Heavy-Duty Extruded Plank

PRIMARY MATERIAL - Type of material (Aluminum, Carbon Steel, Pre-Galvanized Steel, Stainless Steel)

MATERIAL FINISH - Inventory is typically mill finish unless otherwise specified

**GAUGE (THICKNESS)** – Material gauge numbers or thickness in inches (specify as Extrusion for DIAMONDBACK® Extruded Interlocking Plank and Heavy-Duty Extruded Plank)

SURFACE PROFILE, WIDTH & CHANNEL **SIZE** – Number of openings to width. surface profile, width of Plank/ Walkway and channel size. Depth for Plank, height for Walkway. (e.g. 5-Diamond (11-3/4" Width), 2" channel depth)

**OPEN AREA** – Percentage of open area

**QUANTITY/SIZE(S)** – Number of panels and/or pieces (including cut-to-size)

**SPECIAL** - Requirements such as fabrication, notching, cut-outs, Stair Treads (size, and Nosing type if desired), non-standard tolerances, etc.

**ACCESSORIES** – Quantity and type of Clips or Fasteners/Hardware, Splice Plate Kit



0 2018

# PLANK

# McNICHOLS® HOLE PRODUCTS

# **GRIP STRUT® PLANK & WALKWAY**

MCNICHOLS GRIP STRUT® has a slip-resistant diamond surface that is ideal for safety applications where mud, ice, snow, oil, and detergents can create hazardous walking conditions. In addition to low material cost and nominal installation cost, GRIP STRUT® provides long-term value with rust-resistant materials and properties.



#### **GRIP STRUT® PLANK**

The surface of the planks have diamond-shaped openings with serrated edges, making them slip resistant in every direction under practically all conditions. McNICHOLS GRIP STRUT® is also available in Ladder Rungs and Stair Treads (pages 50 - 51).

**GRIP STRUT®** 

#### PRODUCT OPTIONS

Material:	Aluminum, Carbon Steel, Galvanized Steel, Stainless Steel
Gauge:	16, 14, 12 (Stainless Steel), .0800", .1000" (Alum)
Width:	4-3/4", 7", 9-1/2", 11-3/4", 18-3/4", 24"
Depth:	1-1/2", 2", 2-1/2", 3"
Length:	120", 144" Stock, Cut-to-Size Available

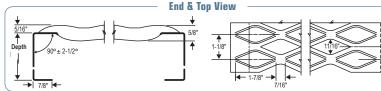
LOAD TABLE: 2-DIAMOND PLANK (4-3/4" WIDTH)



CLIPS & FASTENERS



**GRIP STRUT®** Stair Treads page 49



#### CI FAR SPAN 2'6" 3'3'6" 4'4'6" 5' 5'6" 6' 6'6" 7'6" 8' 9' 10' 11' 12 937 650 478 366 289 234 194 1463 162 138 119 Spans in blue shaded area .33 .13 .18 .25 .42 .52 .74 D .08 .63 .87 1.02 produce deflection of 1/4" .92 (50.8) С 579 463 386 331 290 257 232 211 192 177 165 or less under uniform load of 100 Lbs./Square Foot. D .20 .27 .34 .42 .51 .59 .69 .06 .10 .15 .80 1324 849 591 435 334 265 215 U 179 151 10' and 12' lengths available for most .32 .40 .49 .14 .20 .26 D .10 .58 .06 1-1/2" sizes. Galvanized available in 14 Gauge and 2.3 С 524 420 351 301 265 236 213 195 179 12 Gauge. Please visit mcnichols.com for more information D .39 .47 .05 .08 .11 .16 .20 .26 .32 2198 1409 980 721 553 438 356 295 248 212 184 161 142 113 93 D .06 .09 .17 .23 .29 .35 .43 .51 .60 .70 .81 .92 1.18 1.47 2" 2.6 С 870 697 582 499 438 390 352 321 295 273 255 239 225 201 183 .04 .07 .10 .14 .18 .23 .28 .34 .41 .48 .56 .65 .74 .94 1.18 D 1751 1123 782 576 443 351 286 237 200 172 149 131 U 116 U - Uniform Load D .07 .11 .21 .27 .35 .43 .52 .62 74 .86 .99 1.14 Lbs./Square Foot 1-1/2" (38.1) 3.2 D - Deflection - in Inches С 693 556 464 399 350 313 283 258 238 221 206 194 183 C - Concentrated Load D .05 .08 .12 .17 .22 .28 .34 .42 .50 .59 .69 .79 .91 181 145 119 99 27921790 1245 917 317 271 235 205 85 U 703 557 453 375 D .05 .08 .11 .16 .20 .26 .32 .39 .46 .55 .63 .73 .84 1.07 1.34 1.64 1.98 3.6 (5.36) (50.8) С 1105 886 739 635 557 496 448 409 376 348 325 305 287 258 235 216 201 .12 .21 .26 .31 .37 .44 .51 .59 .67 .86 1.07 1.31 N4 IAN LOAD TABLE: 3-DIAMOND PLANK (7" WIDTH) DEPTH 2'6" 3' 3'6" 4' 4'6" 5' 5'6" 6' 6'6" 7'6" 8' 9' 10' 11' 12 U 993 636 441 324 248 196 159 131 110 93 80 Spans in blue shaded area .33 .42 .52 .63 .74 .86 1.00 .08 .13 .18 .25 1.15 produce deflection of 1/4

100.81	10.70	С	579	463	386	331	290	257	232	211	192	177	165			under i _bs./So		Pin IOad
		D	.06	.10	.15	.20	.27	.34	.42	.51	.59	.69	.80	UI	1001		Juai c	1006.
						ST	EE	L,	14	GΑ	×U(	ΞE						
		U	899	577	402	269	227	180	147	122	103	1.0'	and '		atha	ovoile	abla	for most
1-1/2"	3.0	D	.06	.10	.14	.20	.26	.33	.40	.49	.59							Gauge and
(38.1)	(4.46)	С	524	421	351	302	265	237	214	196	180			. Plea rmatio		sit <b>mcn</b>	ichol	s.com for
		D	.05	.08	.11	.16	.21	.26	.32	.39	.47	THU		IIIdtii	JII.			
		U	1492	957	665	490	376	298	242	201	169	145	125	110	97	77	63	
2"	3.2	D	.06	.09	.13	.17	.23	.29	.35	.43	.51	.61	.71	.81	.93	1.19 '	1.49	
(50.8)	(4.76)	С	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	
						ST	EE	L,	12	GΑ	×U(	GE						
		U	1189	763	532	392	301	239	195	162	137	118	102	90	79	<b>u</b> -Ur	niform	Load -
1-1/2"	4.1	D	.07	.11	.15	.21	.27	.35	.43	.52	.63	.74	.87	1.00	1.15			iare Foot
(38.1)	(6.10)	С	694	556	465	400	352	314	284	260	240	223	208	196	185			ın - in Inches
		D	.05	.08	.12	.17	.22	.28	.34	.42	.50	.59	.69	.80	.92	<b>C</b> - Co	oncenti	rated Load

LOAD TABLE: 4-DIAMOND PLANK (9-1/2" WIDTH)

<b>DEDLH</b>	"#/ĻF、						41-	CLEAR SPAN 5' 5'6" 6' 6'6" 7' 7'6" 8' 9' 10' 11' 12'													
(mm)	(kg/m)		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8.	9' 10' 11' 12					
Α	LUN	11		<u>/</u> ], /			Y	YF	۲E -	50	52	2-H	32	<u>, .</u>	180	JO" THICK					
		U	499			163		98					Т	'his teo	hnical	information provided					
1-1/2"	1.28	D	.10	.15	.22	.31	.40	.51								ce for evaluation by					
(38.1)	(1.90)	С	395	316	263	226	197	175					D V	echnica vith anv	ally skilled persons only, ny use thereof to be at their						
		D	.08	.12	.18	.25	.32	.41					ir	ndepeni	dent (	discretion and risk.					
		U	732	468	325	239	183	145	117	97	81	69				IOLS shall have ibility or liability for					
2"	1.37	D	.08	.13	.18	.25	.33	.42	.52	.63	.74	.87	r	esults	obta	ained or damages					
(50.8)	(2.03)	С	568	463	386	331	290	257	232	211	192	177				improper evaluation					
		D	.06	.10	.15	.20	.27	.34	.42	.51	.59	.69	U	r use o	i Grau	ing.					
						S	TEE	EL,	12	4 G	AL	JG									
		U	663	426	296			134		90	77	10'	and	12' 10	nothe	available for most					
1-1/2"	3.6	D	.06	.10	.14	.20	.26	.33	.41	.50	.59	size	s. Ga	Ivanized	d availa	able in 14 Gauge and					
(38.1)	(5.36)	С	525	421	352	303	266	238	215	197	182					sit mcnichols.com for					
		D	.05	.08	.11	.16	.21	.26	.33	.40	.47	Inur	c 1110	rmatio	11.						
						S	TEE	ΞL,	12	2 G	AL	JGI									
		U	906	581	405		229	182	148	123	104	89	77	67	60	U - Uniform Load -					
1-1/2"	5.0	D	.07	.11	.16	.21	.28	.36	.44	.54	.64	.76	.89	1.02	1.17	Lbs./Square Foot					
	(7.44)	С	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	C - Concentrated Load					
		U	1398	896		460	353		228	189		137	119	104	92	74 61 51 4					
2"	5.4	D	.05	.08	.11	.16	.20	.26	.32	.39	.47	.55	.65	.75	.85						
	(8.04)	С	1107	887	741	637	559					353			292						
		D	.04	.06	.09	.12	.16	.21	.26	.31	.37	.44	.52		.68						
	9	ге 3 Т		JL E	55	 5 S			0	YPJ	/		1	16.	GA						
		U	720	462	322	238	183	145	118	98	83	71	59			n blue shaded area					
2"	3.2 (4.76)	D	.05	.08	.11	.16	.20	.26	.32	.39	.47	.55	.61	1 - 04		e deflection of 1/4"					
(50.8)	(4.76)	С	570	457			289						165		less	under uniform load					
		D	.04	.06	.09	.12	.16	.21	.26	.31	.38	.44	.49	.49 of 100 Lbs./Square Foot.							
Defle	Li ection (I						Defle	ction	000000	AD C		R		C. C		LOAD Cs Deflection					
to a (Ib./S stres strut to er by cli <b>DEFL</b>	re 1 <b>CORM Li all Grati</b> GFJ per as in s c, whicher time Gra- ear spar <b>LECTION</b> <b>S:</b> Deflec	ing: mitt ide ever ating 1) be	Maxii ted b rail c is low g area etween ) <b>in all</b>	mum ly fle: pr Gra rer, ap (full-v suppo walky	load xural ating plied vidth orts.	p si to a	Figure 2 CONCENTRATED LOAD (C) application to all walkways/ plemitsed by flexurel stress in side rail or Grating strut, whichever is lower, applied transversely to total widh of Grating at mid-span and assumed to be carried equally by hoth side rails									RATED LOAD (C <sub>2</sub> ) to Grating surface all walkways/planks: ad (ID./ft.) permittee tress in Grating strut, jitudinally to a 1 ft. ating at mid-width.					
to r perm side	naximun nitted b rail	n lı y fl or	oad (l exural Grati	J) or stres ng s	(C) s in trut,	DEFLECTION (D) in all walkways/ planks: Deflection (in) corresponding to maximum load (U) or (C) permitted permitted by flexural stress in Gra								ling to maximum d strut load (Cs),							

to maximum load (U) or (C) permitted by flexural stress in side rail or Grating strut, whichever is lower, applied. permitted by flexural stress in Grating surface strut, applied longitudinally to a 1 ft. length of Grating at mid-width.

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whichever is lower, applied as defined in figures 1 or 2 and 3.

# **GRIP STRUT® PLANK (CONTINUED)**

## LOAD TABLE: 5-DIAMOND PLANK (11-3/4" WIDTH)

DEPTH	#/LF		0'	0.0"	0'		41	4.0"	E'		EAR S	PAN	-71	7.0"		0'		441	4.01
	(kg/m)	1		20		30	4	4 b T V	DE			<u>ь</u> р Э-н	22	/ D	-8 NRC	9 "רור			12 <
		U	403	255	179	132	100		_					-, .\					
1 1/0"	1.49	D	.10	.15	.22	.31	.40												
1-1/2"	(2.22)	C	395	316	263	226	197						А	com	nplet	ce lis	st of		
		D	.08	.12	.18	.25	.32						Mc	:N	IC	нс		B®	
		U	592	379	263	193	148	117	95	78		PL	AN	k gf	RATI	NG i	tem	s is	
2" (50.8)	1.59 (2.36)	D	.08	.13	.18	.25	.33	.42	.52	.63		a	/ailal	hle a	t mc	nich	ols.co	nm	
(50.8)	(2.36)	С	466				290		232	211		u	ana			mone	515.00	,	
		D	.05	.10	.15	.20	.27	.34	.42	.51									
						3	TE	EL	, 1	40	<b>BAI</b>	JG	E						
		U	536	344	240	177	136	108	88	74	62	10'	and	10' 1	onath		lable i	fon m	oct
1-1/2"	4.2 (6.25)	D	.06	.10	.14	.20	.26	.33	.41	.50	.60	size	s. Gal	vanize			14 G		
100.11	10.201	D	525		353	304	267	239	216	198	_	12 (	Gauge						
		U	.05 890	.08 571	.12 397	.16	.21 225	.26 178		.40 120	.48 102	87	76	66	59	47	1		
01		D	.06	.09	.13	.17	.23	.29	.36	.43	.52	.61	.71	.83	.95	47			
2"	4.4	C.	707	699	584	502	440	393		324	299		259	243	230	207			
100.07		D	.04	.07	.10	.14	.18	.23	.29	.35	.42	.49	.57	.66	.76	.97			
		U	1021	655	456	336	258	204		138	116	100	.07	.00	.70	.57	44		
2.1/2"	4.7	D	.04	.06	.08	.11	.14	.18	.23	.28	.33	.39	.45	.52	.60	.77	.96		
2-1/2" (63.5)	(6.99)	С	707	707	669	575	505	450		371	342	317		278	262	236	216		
		D	.02	.04	.06	.09	.12	.15	.18	.22	.26	.31	.36	.42	.48	.62	.77		
						S	SΤΕ	EL	, 1	20	SAI	UG	E						
		U	710		318			144		98	83	71	62	55	49	U-L	Jniform I	- beo	
1-1/2"	5.9	D	.07	.11	.15	.21	.28	.35	.44	.53	.64	.76	.89		1.18		.bs./Squ		
(38.1)	(8.78)	С	695	558	467	402	354	317	287		244	227	213	201	190		Deflectio Concentr		
		D	.05	.08	.12	.17	.22	.28	.35	.43	.51	.60	.71	.82	.95				au
		U	1131	725	505	372			185		130	111	97	85	75	60	50	42	
2"	6.2 (9.23)	D	.05 1107	.08 888	.11 742	.16 638	.20 561	.26 501	.32	.39 414	.47 382	.56 355	.65	.75 312	.86 295	1.11 266	1.39 243	<u>1.70</u> 224	
1.30.01	13.201	П		888 06.	.09	.12	.16	.21	403	.31	.382	.44	.52	.60	.69	.89		1.36	
		U	.04 1691	1083	.09 753	554	425		.26 273	-	.38 151	.44 141	.52 123	.60 109	.69 87	.89	1.11 59	1.36	50
0.4/01		D	.04	.06	.09	.13	.17	.21	.26	.32	.38	.45	.52	.60	.68		1.09		1.60
2-1/2"	6.6 (9.82)	C	.04 1115	1115	1106	950		742		. <u>32</u> 610			.J2 484		426	382		319	295
		D	.02	.04	.07	.10	.13	.17	.21	.25	.30	.36	.41	.48	.55	.70	-	1.06	1.28
		S	TA		/ ES	S S	6. T E	/ EL	. <u>.</u> .	ΥE	E .	30,	4	16	GA		GE	1.00	1.20
		U	583	374	261	192	148	118	96	80	68	58	48	-					
2"	3.7	D	.05	.08	.11	.16	.20	.26	.32	.39	.47	.56	.61				shadeo tion of		r
2" (50.8)	(5.51)	С	464	458	323	330	290	259	235	215	199	185	165	İe	ss und	der Un	iform I	_oad o	
		D	.03	.06	.09	.12	.16	.21	.26	.32	.38	.45	.49	1		5./5qu	are Fo	υί.	

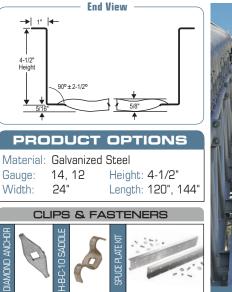
	LO	41	т с	AE	BLE	: 8	3-D		10		PL		JK (	18-	3/4" WIDTH)				
Depth											R SPA								
(mm)	(kg/m)		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7' <u>6"</u>	<u> </u>				
A	LUN			М,	AL	LO	Y	YF	Ŀ		92.	·Hʻz	32,	.08	300" I HICK				
		U	308	237	165	121	93	73	59	49									
2"	2.20 (3.27)	D	.54	.50	.44	.44	.47	.53	.61	.71					s available for most lable in 14 Gauge and				
(50.8)	(3.27)	С	290		193	166	145	129		106		2 Gaug		a aran					
		D	.32	.28	.27	.27	.28	.30	.32	.36									
						S	TE	EL,	12	1 G	AU	GE							
		U	540	358	250	184	142	113	92	76	65	55	48	42	Spans in shaded area				
2" (50.8)	6.3	D	.48	.37	.34	.32	.34	.38	.43	.50	.58	.66	.77	.87	produce deflection of 1/4" or less under				
(50.8)	(9.4)	С	437	349	292	251	220	198	179	164	152	141	132	124	Uniform Load of 100				
		D	.24	.21	.20	.19	.20	.21	.23	.26	.29	.32	.36	.40	Lbs./Square Foot.				
		_				S	TE	EL,	12	2 G	AU	GE							
		U	446	287	201	148	115	91	75	63	53	46	40						
1-1/2"	-1/2" 8.5 38.1) (12.6)	D	.27	.22	.22	.26	.32	.39	.47	.56	.67	.80	.92	U - Uniform Load - Lbs /Square F D - Deflection - in Inches					
(38.1)		С	359	280	235	203	179	161	146	135	125	117	110		oncentrated Load				
		D	.12	.12	.12	.14	.16	.19	.22	.26	.30	.35	.40						
		U	710	456	318	235	181	144	117	98	83	71	62	54	48				
2"	8.9	D	.31	.25	.23	.25	.28	.31	.37	.44	.51	.60	.68	.79	.90				
(50.8)	(13.2)	U	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				
	LC	Α	D.	ТА	BL	E:	10	-DI		101	JD	PL,		K (2	24" WIDTH)				
DEPTH											R SPA								
(mm)	(kg/m)		2'	2'6"	3'	3'6"	4'	4'6"		5'6"		6'6"	7'	7'6"	8' 9' 10' 11' 12'				
		_						=L,	12		AU								
		U	300	300			128	-	82	68	57	49	42						
2"	7.4	D	.46	.48	.42	.38	.38	.41	.44	.49	.55	.62	.70	10' a	and 12' lengths available for transformed to the sizes. Galvanized available				
(50.8)	55.8) (11.0)	С	400	400	343	294	257	229	206	187	172	158	147		Gauge and 12 Gauge.				
		D	.34	.35	.32	.30	.29	.29	.30	.31	.33	.35	.37						

GRIP STRUT®

#### **GRIP STRUT® WALKWAY**

McNICHOLS GRIP STRUT® Walkway offers the same high slip resistance as GRIP STRUT® Planks. In addition, GRIP STRUT® Walkway meets OSHA requirements for toeboards on elevated structures because of the inverted channels that are measured in terms of depth.

LOAD TABLE: 10-DIAMOND WALKWAY (24" WIDTH)																			
HT.	#/LF			CLEAR SPAN															
(mm)	(kg/m)		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8'	9'	10'	11'	12'
	STEEL, 14 GAUGE																		
		U	300	300	300	300	300	263	213	176	148	126	109	95	83	66	53	43	
4-1/2"	8.9	D	.41	.41	.42	.45	.48	.47	.42	.40	.40	.41	.43	.45	.47	.55	.64	.75	
4-1/2	8.9 (13.2)	С	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	
						S	TE	EL,	12	2 G,	ΔU	GE							
		U	475	475	475	475	475	420	340	281	236	201	173	151	133	105	85	70	59
4.4.0=	12.5	D	.37	.37	.38	.40	.43	.43	.39	.37	.37	.37	.39	.41	.44	.51	.59	.69	.80
4-1/2" 12.5 (18.6)	С	900	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



.34 .35 .32 .30

.40 .39 .33

.26 .22 .19

.38 .39 .42 .38 .36

U

D .34 .35 .33

3" 11.1 U (76.2) (16.5) C

.29 .29 .30

.31 .31 .34 .38

.20 .21 .22

.29 .27 .26 .26 .26

475 416 289 212 162 128 104

.20

U 475 475 475 392 300 237 192 159

900 900 800 686 600 534 480 437

.31 .33 .35 .37

86 72 62 53 46

.23 .25 .28 .31 .34

.34 .35 .37

.48 .56 .63 .71 174 186

133 114

400 369

.43

.39

.26 .27 .29 .30

98 85

.47 .52

343

A complete list of Clips and Fasteners is available on page 50.



Snans in blue shaded area produce deflection of 1/4" or less under

Uniform Load of 100 Lbs./Square Foot.

75 59 48

.58 .70 .85

.32 .36 .41

320 300 267 240



# PLANK

# McNICHOLS® HOLE PRODUCTS

# HEAVY-DUTY GRIP STRUT® PLANK

LOAD TABLE: 2-DIAMOND HD PLANK (9-1/4" WIDTH)

LOAD TABLE: 3-DIAMOND HD PLANK (13-3/4" WIDTH)

HEAVY-DUTY GRIP STRUT® STAIR TREADS

629

929

3'6"

876

.15

893

1026

1240

Depth: 2"

Length: 24" to 48'

.14 .18

.11

.09 .12

U 2681 1716 1141

.08

.06

2733 1794 1214

1544

1487

Material: Galvanized Steel 10 GA

.07 .10

.05

.04

.05

.04 .06

(50.8) (11.0)

EPTH mml

U

С

#/LF:

Width:

2-1/2" 10.0

2412

1860

7.4

9-1/4"

CLEAR SPAN

c 2067 1653 1378 1181 1033 919 827 752 689 636 590 551 517 459 413 376 344

CLEAR SPAN

3133 2507 2089 1790 1567 1393 1253 1139 1044 964 895 836 783 696 627 570 522

2'6" 3' 3'6" 4' 4'6" 5' 5'6" 6' 6'6" 7' 7'6" 8' 9' 10' 11' 12'

**MCNICHOLS** Heavy-Duty GRIP STRUT<sup>®</sup> Planks are designed for heavier loads and longer spans with their 10 Gauge thickness. Diamond openings are larger than openings on standard size planks. These features provide exceptional slip resistance in areas that may be exposed to snow, ice, mud, oils, and other slippery substances.

HD GRIP STRUT®

 PRODUCT OPTIONS

 Material:
 Galvanized Steel

 Gauge:
 10

 Width:
 9-1/4", 13-3/4", 23-1/4", 36" (Stock)

 Depth:
 2" (Stock), 2-1/2", 3", 4"

 Length:
 144"

4'6" 5' 5'6" 6' 6'6" 7' 7'6" 8' 9' 10' 11' 12'

.19 .24 .30 .35 .41 .47 .54 .62 .69 .85 1.04 1.24 1.45

90 74

.96 1.16

92 76

<sup>2"</sup> F

699 529 428 354 300 253 218 191 167 132 109

.15 .19 .24 .28 .33 .38 .44 .49 .55 .68 .81

683 539 437 361 304 259 223 194 170 136 110

.08 .11 .14 .18 .22 .25 .29 .34 .39 .44 .50 .63 .76 91 1.08

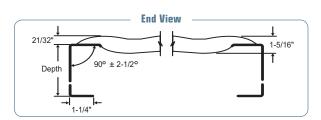
7/16" x 1-3/4" Slo

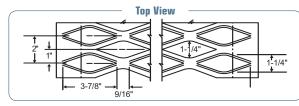
.23 .27 .32 .36 .42 .49 .55 .62 .79 .96 1.15 1.35

**Side View** 

5-7/8

7/16" Dia, Hole





L	<b>.OA</b>	E	) Т/	ABL	.E:	5-0			ND	H	DF		Z	< (2	23-1	1/4"	VVIE	ЭΤΗ	)
DEPTH	#/LF								CL	EAR	SPAN								
(mm)	(kg/m)		2'	2'6"	3'	3' 6"	4'	4' 6"	5'	5' 6"	6'	6' 6"	7'	7'6"	8'	9'	10'	11'	12'
		_				S	TEE	L, ´	10	GΑ	JU:	GE							
		U	1034	661	459	337	258	204	165	136	116	97	84	73	65	51	42	34	29
2"	14.4	D	.04	.06	.08	.11	.14	.18	.22	.25	.29	.34	.39	.44	.50	.63	.76	.91	1.08
(50.8)	(21.4)	С	2067	1653	1378	1181	1033	919	827	752	689	636	590	551	517	459	413	376	344
		D	.04	.06	.09	.12	.15	.19	.24	.28	.33	.38	.44	.49	.55	.68	.81	.96	1.16
		U	1617	1034	718	528	404	319	259	214	180	153	132	115	101	81	65	54	45
2-1/2"	14.8	D	.05	.07	.10	.14	.18	.23	.27	.32	.36	.42	.49	.55	.62	.79	.96	1.15	1.35
(63.5)	(22.0)	С	3133	2507	2089	1790	1567	1393	1253	1139	1044	964	895	836	783	696	627	570	522
		D	.03	.05	.07	.09	.11	.12	.17	.21	.24	.28	.31	.35	.39	.47	.55	.64	.76

		D	.03	.05	.07	.09	.11	.12	.17	.21	.24	.28	.31	.35	.39	.47	.55	.64	.76
	LO	Δ	<u>.</u> D	TAE	BLE	: 8	-DI4				HD	PI	_A	ЛK	(36	5" V	/IDT	Ή)	
DEPTH	#/LF								CL	EAR	SPAN								
	(kg/m)		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8'	9'	10'	11'	12'
							TEE			GΑ	ίΠc	GE							
		U	689	441	306	225	172	136	110	91	77	65	56	49	43	34	28	23	19
2"	19.9	D	.05	.08	.11	.15	.19	.24	.30	.35	.41	.47	.54	.62	.69	.85	1.04	1.24	1.45
(50.8)	(29.6)	С	2067	1653	1378	1181	1033	919	827	752	689	636	590	551	517	459	413	376	344
		D	.04	.06	.09	.12	.15	.19	.24	.28	.33	.38	.44	.49	.55	.68	.81	.98	1.16

U - Uniform Load - Lbs./Square Foot D - Deflection - in Inches C - Concentrated Load

# HEAVY-DUTY GRIP STRUT® WALKWAY



McNICHOLS Heavy-Duty GRIP STRUT<sup>®</sup> Walkway meets OSHA toeboard requirements for elevated structures with upturned, 5" high integral side channels (referred to as height). Heavy-Duty GRIP STRUT<sup>®</sup> Walkway is commonly used in process plants, refineries, conveyor walkways, and grain elevators.

**End View** PRODUCT OPTIONS 1-1/4 Walkway Width Material: Galvanized Steel 5" Height 10 Gauge: Width: 24", 30", 36" 900 + 2-1/29 5" Height: 1-5/16 1 21/32 Length: 120", 144"

LOAD .	TABLE: 6	& 8-DIA.HD	WALKWAY	(30" & 36" WIDTH)
--------	----------	------------	---------	-------------------

HT.	#/LF	WIDTH									CLEA	.R SPA	N							
(mm)	(kg/m)			4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	18'	20'	22'	24'
							ST	ΈE	L, ´		GAl	JG								
			U	916	586	407	299	229	182	146	121	102	87	75	65	57	45	36	30	25
5"	19.9 (29.6)	30"	D	.37	.43	.40	.40	.46	.42	.41	.41	.49	.57	.66	.75	.86	1.09	1.33	1.62	1.92
(127)	(29.6)	30	С	4584	3666	3056	2619	2291	2037	1834	1667	1528	1410	1309	1222	1146	1019	916	834	763
			D	.30	.34	.32	.32	.37	.34	.33	.33	.39	.45	.53	.61	.69	.87	1.08	1.30	1.55
			U	556	356	247	181	139	110	89	73	62	53	45	39	35	27	22	18	15
5"	22.7 (33.8)	36"	D	.39	.39	.33	.32	.33	.36	.39	.42	.51	.60	.69	.79	.91	1.15	1.40	1.67	1.98
(127)	(33.8)	30	С	3330	2667	2222	1905	1667	1481	1333	1212	1111	1026	952	889	833	741	667	606	556
			D	.31	.31	.26	.26	.26	.29	.31	.34	.41	.46	.55	.64	.72	.92	1.13	1.37	1.63



© 2018

9' 10' 11'

73 .92 1.20 1.52 1.88 2.27 2.70

60 49 41

.96 1.22 1.50 1.82 2.16

.92 1.16 1.43

317 291 270

80 67 57

349

.54 .67

99

37 31

.91 1.11 1.32

1.03

.82 .99

1.01 1.22

389 341

.81 .98

1.68

.25

54 44

# McNICHOLS® HOLE PRODUCTS

# PERF-O GRIP® PLANK & WALKWAY

MCNICHOLS PERF-O GRIP® is made up of large debossed holes and perforated buttons that provide slip resistance and performance in every direction. Fluids, mud, chips, snow, and other debris fall easily through the product's numerous openings.



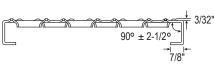
# **PERF-O GRIP® PLANK**

McNICHOLS PERF-O GRIP® Plank offers a high load capacity, long life, and high strength-to-weight performance. The aggressive grip surface enhances safety. Applications include walkways, ramps, catwalks, and more!

PERF-O GRIP®

fers a weight nances walks,	PERF-0 GRIP® Stair Treads page 49
End View	Top View

PF	RODUCT OPTIONS
Material:	Aluminum, Carbon Steel, Galvanized Steel
Gauge:	13, 11, .1250" Thick (Aluminum)
Width:	5", 7", 10", 12", 18"
Depth:	1-1/2", 2"
Length:	120", 144"



Depth #/lf

2" 2.1

1-1/2" 4.3

2" 4.6

2" 55 2'6" 3'

936 650 478 366 290 235 194 163 120 93

.12 .17

655 456 336 258

966 671 493 378 299

.05 .07 .10

1240 861

961

C 1612 1290 1075

J 1463

U 669

U 1510

Π

D

D

D

.08

.06 .09 .14 .18 .24 .30

.03 .07 .10

960 819 684 588 516 460 416 380

.03 .05 .08 .11 .14 .18 .22 .26 .32 44 .58 .74

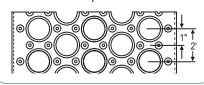
.03

.02 .04 .06 .08 .10 .13 .16 .20 .23 .32

.03 .05 .07 .10 .13

U 1937

C 1442 1154



LOAD TABLE: 2-HOLE PLANK (5" WIDTH)

DEDTU	#/LF								CLE	AR SP/	٩N						
DEPIR	#/LF		2	2'6"	3	3'6"	4'	4'6"	5'	5'6"	6'		8	ġ	10'	11'	12'
						STE	EL		3 G		IGE						
		U	2008	1287	895	659	505	400	325	269	227	168	130	103	85	70	60
4 4 10"		D	.05	.08	.11	.15	.20	.25	.31	.38	.45	.62	.82	1.04	1.30	1.57	1.90
1-1/2"	2.6	С	836	670	559	481	421	375	338	308	284	244	216	194	176	162	150
		D	.04	.06	.09	.12	.16	.20	.25	.30	.35	.49	.65	.83	1.04	1.27	1.52

LOAD TABLE: 3-HOLE PLANK (7" WIDTH)

DEPTH	<i>шл</i> г								CLE	AR SP/	٩N						
DEPTH	#/LF		2'	2'6"	3	3' 6"	4'	4'6"	5'	5'6"	6'		8'	9'	10'	11'	12'
						STE	EL	, 1	3 C	βAL	JGE						
		U	1536	984	685	504	387	306	249	206	174	129	100	79	65	55	46
4 4 10"		D	.05	.07	.11	.14	.19	.24	.29	.36	.43	.58	.77	.98	1.22	1.51	1.81
1-1/2"	3.0	С	914	731	609	522	457	406	366	332	305	263	232	208	190	174	162
		D	.04	.06	.08	.12	.15	.19	.24	.29	.34	.47	.61	.78	.98	1.20	1.44
		U	1965	1473	1024	754	578	458	371	307	259	192	147	118	96	80	68
2"		D	.03	.06	.08	.11	.14	.18	.23	.27	.33	.44	.58	.74	.92	1.13	1.36
2	3.3	С	1369	1096	913	783	685	609	548	498	456	391	344	308	279	257	237
		D	.03	.05	.07	.09	.12	.15	.18	.22	.26	.35	.47	.59	.74	.90	1.08

UPPH         #/LF         2         2'6'         3         3'6'         4'4'6'         4'6'         5'7           ALUMINUM, ALLOY TYPE         U         1048         1022         710         522         400         316         2           2''         1.8         U         1048         1022         710         522         400         316         2           0         1043         1022         710         522         400         316         2           1.8         U         1048         1022         710         522         400         316         2           0         1.043         1145         954         818         715         636         5           0         0.06         .09         13         .19         .25         .32										11 < 1	10						
DEDTU	#A F								CLE	AR SP	AN						
DEPTH	#/LF		2'	2'6"	3	3'6"	4'	4'6"	5'	5'6"	6'	7'	8'	9'	10'	11'	12'
	LUI	$\sim$	INU	Μ, /	ALL	OY.	ΤY	ΈE	50	)52	2-H	32	, .12	250	)" TH		К
		U	1048	1022	710	522	400	316	256	212	178	131	101	80	65	54	46
0.	4.0	D	.05	.12	.18	.24	.31	.40	.49	.59	.71	.96	1.26	1.59	1.96	2.37	2.83
2	1.8	С	1431	1145	954	818	715	636	572	520	477	409	358	318	286	260	238
		D	.06	.09	.13	.19	.25	.32	.39	.47	.57	.77	1.00	1.27	1.57	1.90	2.26
						STE	EL	., 1	3 G		JGE						
		U	963	745	517	380	291	230	187	154	129	95	73	58	46	38	32
4 4 10"	0.5	D	.04	.08	.11	.15	.19	.24	.30	.36	.43	.59	.77	.98	1.20	1.44	1.71
1-1/2	3.5	С	855	684	645	554	485	431	388	353	323	277	242	216	191	176	162
		D	.03	.05	.09	.12	.15	.19	.24	.29	.35	.47	.61	.78	.95	1.16	1.39
		U	1735	1110	771	568	435	344	281	232	196	144	110	88	70	60	50
2" 3		D	.04	.06	.08	.11	.15	.18	.23	.28	.33	.45	.59	.75	.91	1.14	1.34
	3.9	С	1297	1038	865	741	648	645	584	532	489	422	368	327	297	267	245
		D	.02	.04	.05	.08	.10	.15	.18	.22	.26	.36	.47	.60	.79	.89	1.06





.16 C 1881 1505 971 865 781 712 654 563 1292 1109 496 444 403 .04 .54 .02 .06 .08 .10 .13 .16 .20 .23 .32 .42 .67

.20 .24 .29 .40 .52 .67 .83

LOAD TABLE: 6-HOLE PLANK (12" WIDTH)

3'6" 4' 4'6"

23 .30 38 47

.13

862

633 486 385 312

.17

.13

5'6" 6'

.57

.45

243 201 170 126

.25 29 .40 .53 .68 .85

259

.38

.27 33 .40

.22

.16 .20

756 673 608 555

204 166 138 117

.68

921 806 716 645 586 537 461 403 358 322 293 269

.54 .74

349 303

509 440

218 161 124

87 67

.55

.72

268 241 218 198 182

97 77 63 53 45

388

.42

LOAD TABLE: 10-HOLE PLANK (18" WIDTH)

	ALUMINUM.         ALLOY TYF           2*         2.8         U         992         635         441         324         248         1           0         0.7         .10         .16         .21         .28         .           C         1652         1322         1102         944         826         7           D         .05         .08         .13         .17         .28         .           1/2'         5.7         U         714         457         317         233         179         1           1/2'         5.7         U         714         457         317         233         179         1           1/2'         5.7         U         964         .71         642         551         495         4           D         .03         .04         .07         .09         .12         .         .           2'         6.0         D         .03         .05         .07         .00         .12         .								CLEA	R SPA	N						
DEPTH	#/LF		2'	2'6"	3,	3'6"	4'	4'6"	5'	5'6"	6'	7'	8'	9'	10'	11'	12'
A	LU	IN	1INL	JM,	ALL	_OY	ΤY	′ΡE	50	)52	-H3	32,	.12	250	ד "נ	HIC	К
		U	992	635	441	324	248	196	158	131	110	81	62	49	40	33	27
0.		D	.07	.10	.16	.21	.28	.35	.44	.53	.63	.86	1.12	1.42	1.75	2.11	2.52
2	2.8	С	1652	1322	1102	944	826	734	661	601	551	472	413	367	330	300	275
		D	.05	.08	.13	.17	.22	.28	.35	.42	.50	.69	.89	1.13	1.40	1.69	2.01
						ST	EEL	_, 10	) G	iΑU	IGE						
		U	714	457	317	233	179	142	116	96	82	60	45	36	29	24	21
4 4 10"		D	.04	.07	.10	.13	.17	.21	.26	.32	.39	.52	.68	.86	1.05	1.27	1.56
1-1/2	0./	С	964	771	642	551	495	481	434	397	366	314	274	243	220	199	183
		D	.03	.04	.07	.09	.12	.17	.21	.26	.31	.42	.55	.69	.85	1.03	1.23
		U	1072	686	476	350	268	212	173	143	121	90	69	55	44	36	31
0.		D	.03	.05	.07	.10	.13	.16	.20	.24	.29	.40	.53	.67	.82	.98	1.19
2	0.0	С	1452	1162	968	830	726	645	581	528	509	470	411	366	329	299	274
		D	.02	.03	.05	.06	.09	.12	.14	.17	.22	.32	.42	.53	.65	.79	.94





# McNICHOLS® HOLE PRODUCTS

# PERF-O GRIP® WALKWAY



McNICHOLS PERF-0 GRIP® Walkway surface can help lessen worker fatigue and has a high load capacity, long life, and a high strength-to-weight performance. With 5-inch inverted (referred to as height) side channels, PERF-O GRIP® Walkway meets OSHA requirements for toeboards on elevated structures. The large open area (38% of surface area depending on product size) permits free flow of air, heat, and light.

#### **PRODUCT OPTIONS**

Material: Gauge:	Carbon Steel, Galvanized Steel 13. 11
Width:	24", 30", 36"
Height:	5"
Length:	120"



A complete list of Clips and Fasteners is available on page 50.

			LO	AD	TAE	BLE:	13-	HOL	e w	ALK\	NAY	<pre>(22)</pre>	1" VVI	DTH	-1)		
HT.	#/LF								CLE	AR SPA	N						
	#/LI		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	7'	8'	9'	10'	11'	12'
							STE	EL, ´	11 G	AUG	ε						
		U	5751	3681	2556	1878	1438	1136	920	760	639	469	359	284	230	190	160
<b>F</b> "		D	.02	.02	.04	.05	.06	.08	.10	.12	.14	.19	.25	.31	.39	.47	.56
5"	11.8	С	9504	7603	6336	5431	4752	4224	3802	3456	3168	2715	2376	2112	1901	1728	1584
		D	.01	.01	.02	.03	.04	.05	.06	.07	.08	.11	.15	.19	.23	.28	.34

			LO	AD	TAB	LE:	16-	HOL	E W	ALK\	NAY	130	)" VVI	DTH	H)		
HT.	щаг								CLE	AR SPA	N						
п.	#/LF		2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	7'	8'	9'	10'	11'	12'
							STE	EL, ´	11 G	iaug	ε						
		U	3868	2475	1719	1263	967	764	619	511	430	316	242	191	155	128	107
5"	100	D	.01	.02	.03	.04	.05	.06	.08	.10	.12	.16	.20	.26	.32	.39	.46
5	13.6	С	9534	7627	6356	5448	4767	4237	3813	3467	3178	2724	2383	2119	1907	1733	1589
		D	.01	.01	.02	.03	.04	.05	.06	.07	.08	.11	.15	.19	.23	.28	.30

PLEASE NOTE: PERF-O GRIP® Walkway is also available in 36" width. Loading information is available at 800.237.3820.

# **TRACTION TREAD® PLANK**

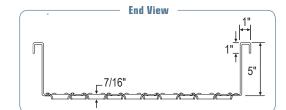
McNICHOLS TRACTION TREAD® Plank features a surface of raised perforated buttons with debossed holes that provide slip resistance in all directions. Planks are well suited for ADA-compliant applications.

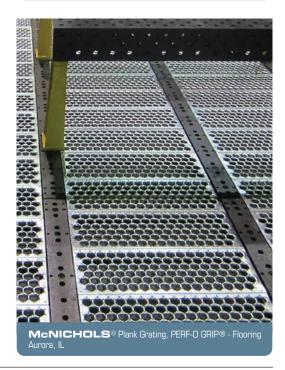


# **PRODUCT OPTIONS** Material: Aluminum, Galvanized Steel

13, 11, .1250" Thick (Aluminum) Gauge: Width: 7", 10", 12" 1-1/2", 2" Depth: 120", 144" Length:







	L	<b>_C</b>	DAC	) та	BL	.E:	9-R		/ PL		κc	7" V		тн	J	
DEPTH	<i>щ</i> л г			CLEAR SPAN												
DEPIR	#/LF	.F	2	2'6"	ڊي ا	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8'	9'
			C	GAL		JIZE	DS	STE	EL,	13	GA	UG	E			
2"	07	U	1642	1345	973	700	513	400	315	287	253	184	137	104	80	50
2	3.7	D	.02	.04	.06	.08	.10	.13	.15	.20	.25	.25	.25	.25	.25	.25
	L	עכ	40	ΤΑΙ	BLE	1:1	4-R		/ PL		Κſ	10"	VVI		-1)	
NEPTH	EDTH #// E CLEAR SPAN															

	DEPIH #/LF															
DEPT			2'	2'6"	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8'	
AL	_UI∿	111	JUN	1, A	LLC	Τ Υί	ΥP	E 50	052	-H3	2, .	125	50" '	THIC	CK	
2"		U	560	469	332	239	175	137	107	98	86	63	47	35	27	
2	2.2	D	.02	.04	.06	.08	.10	.13	.15	.20	.25	.25	.25	.25	.25	
			C	GAL		IIZE	DS	TEE	EL, 1	130	SAL	IGE				
2"	4.0	U	1267	1038	751	540	396	309	243	221	195	142	106	80	62	
2	4.6	D	.02	.04	.06	.08	.10	.13	.15	.20	.25	.25	.25	.25	.25	

#### LOAD TABLE: 17-ROW PLANK (12" WIDTH)

пепти	depth #/lf			CLEAR SPAN													
DEPTH	#/LF		2'	2'6"	3	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8'		
AL	.UN	11		1, A	LLC	T YC	ΥP	E 50	052	-H3	2, .	125	50"	THIC	CK		
2"	0 5	U	487	399	288	207	152	119	93	85	75	55	41	31	24		
2	2.5	D	.02	.04	.06	.08	.10	.13	.15	.20	.25	.25	.25	.25	.25		
			0	GAL	VAN	JIZE	DS	STE	EL 1	30	3AU	GE					
0.	E 0	U	1101	902	652	469	344	268	211	192	170	123	92	70	54		
2"	5.2	D	.02	.04	.06	.08	.10	.13	.15	.20	.25	.25	.25	.25	.25		
			C	GAL		IIZE	DS	TEE	EL, ´	11 C	3AL	JGE					
4.4.0		U	682	559	404	291	213	166	131	119	105	76	57		-		
1-1/2"	6.9	D	.02	.04	.06	.08	.10	.13	.15	.20	.25	.25	.25				
01		U	1395	1143	827	595	436	340	268	244	215	156	116	88	68		
2"	7.3	D	.02	.04	.06	.08	.10	.13	.15	.20	.25	.25	.25	.25	.25		

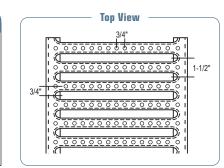
# **GRATE-LOCK® INTERLOCKING PLANK**



McNICHOLS GRATE-LOCK<sup>®</sup> Interlocking Plank Grating is an easy-to-install system of interlocking grating planks, treads and accessories. GRATE-LOCK<sup>®</sup> provides safe, sturdy footing for mezzanine floors, platforms, walkways and other applications where non-slip performance is required. Increased load performance can be realized through this unique design of interlocking, ventilated planks. The Planks' surface of long, round end slots provides an impressive open area of up to 45% that permits passage of water from ceiling sprinklers, air and light. Planks are easy to install with side channels (flanges) that interlock.

#### **PRODUCT OPTIONS**

Material:	Galvanized Steel
Gauge:	18, 14
Width:	9", 12"
Depth:	1-1/2", 2-1/2", 3", 4" (Special Order)
Length:	120", 240", 288" (2-1/2" Depth),
	144" (1-1/2" Depth), 288" (3" Depth)
Flange:	Male/Male, Female/Female, Female/Male





PLANK

McNICHOLS® Plank Grating, GRATE-LOCK® Interlocking Plank - Overhead Walkway

#### PLEASE NOTE: Only 2-1/2" channels may be punched.

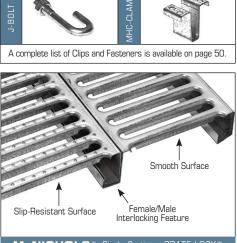
LOAD TABLE: GRATE-LOCK® INTERLOCKING PLANK

GAUGE	WIDTH	% 0/A	#/LF							AR SPAN (LF)											
GAOOL		0/A			2'	3'	3'6"	4'	4'6"	5'	5'6"	6'	6'6"	7'	7'6"	8'	8'6"	9'	10'	11'	12'
				U	591	263	193	147	116	94	78	65	56	48	42	37	32	29	23	19	16
	9"	43%	2.3	D	.10	.14	.18	.22	.27	.33	.40	.48	.56	.65	.74	.84	.95	1.06	1.31	1.59	1.89
18		10/0		С	440	293	251	220	195	176	160	146	135	125	117	110	103	97	88	80	73
				D	.04	.10	.13	.17	.21	.26	.32	.38	.45	.52	.60	.68	.77	.86	1.06	1.28	1.54
	12"	45%	2.9	U	443	196	144	110	87	70	58	49	41	36	31	27	24	21	17	14	12
		-070	L.0	D	.10	.14	.18	.22	.27	.33	.40	.48	.56	.65	.74	.84	.95	1.06	1.31	1.59	1.89
				U	891	396	291	222	176	142	117	99	84	72	63	55	49	44	35	29	24
	9"	38%	3.5	D	.10	.14	.18	.22	.27	.33	.40	.48	.56	.65	.74	.84	.95	1.06	1.31	1.59	1.89
14	J	00/0	0.0	С	663	442	379	331	295	265	241	221	204	189	177	165	156	147	132	120	110
14				D	.04	.10	.13	.17	.21	.26	.32	.38	.45	.52	.60	.68	.77	.86	1.06	1.28	1.54
	12"	40%	4.2	U	667	296	217	166	131	106	88	74	63	54	47	41	36	32	26	22	18
	12	40%	4.2	D	.10	.14	.18	.22	.27	.33	.40	.48	.56	.65	.74	.84	.95	1.06	1.31	1.59	1.89
GAUGE	WIDTH	% 0/A	#/LF								/2" CH			_		Pan (lf					
		U/A			2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'
				U	1552	691	390	251	175	129	100	79	65	54	46	40	35	30	27	24	21
	9"	43%	3.0	D	.05	.10	.18	.28	.41	.56	.74	.95	1.18	1.44	1.73		2.41	2.80	3.22		4.01
				C	705	705	585	470	394	339		268	243	223	207	193	181	171	163	153	145
18				D	.02	.07	.14	.23	.33	.45	.59	.76	.94	1.15	1.38		1.93	2.24	2.58	2.91	3.27
				U	1057	552	312	200	140	103	80	64	52	43	36	31	27	23	20	18	16
	12"	45%	3.5	D	.03	.10	.17	.27	.39	.54	.71	.90	1.13	1.38	1.61	1.91	2.23	2.47	2.83		3.60
				С	529	529	529	501	420	362		286	260	239	217	207	194	184	175	167	160
				D	.01	.05	.12	.22	.31	.43	.57	.72	.90	1.09	1.33	1.57	1.85	2.15	2.48		3.24
				U	2357	1050	593	381	266	196	151	121	98	82	70	58	50	45	40	36	32
	9"	38%	8% 4.4	D	.04	.10	.18	.28	.41	.56	.74	.94	1.17	1.43	1.72	1.88	2.21	2.57	2.96	3.39	
				С	974	974	889	714	598	516	454	407	369	339	314	282	265	250	238	227	218
14				D	.02	.07	.14	.23	.33	.45	.59	.75	.94	1.14	1.38	1.50	1.77	2.05	2.37		3.08
				U	1276	783	442	284	199	147	113	90	74	62	52	44	38	35	29	28	25
	12"	40%	5.2	D	.03	.10	.17	.27	.39	.54	.71	.91	1.13	1.38	1.63	1.94	2.20	2.70	2.92		4.08
	12" 40%		С	730	730	730	711	596	514	454	407	370	338	310	286	266	248	233	219	207	
				D	.01	.05	.12	.22	.31	.43	.57	.72	.90	1.09	1.31	1.53	1.77	2.04	2.33	2.63	2.96

This technical information provided is a reference for evaluation by technically skilled persons only, with any use thereof to be at their independent discretion and risk. **MCNICHOLS** shall have no responsibility or liability for results obtained or damages resulting from improper evaluation or use of Grating.

ALLOWABLE LOADS AND DEFLECTIONS: U - Uniform Load - Lbs./Square Foot D - Deflection - in Inches C - Concentrated Load

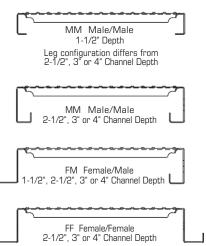
These tables are prepared based on test conducted in accordance with the 1980 edition, section 6.2 of the American Iron and Steel Institute specification for the design of cold-rolled steel structural members with results checked and adjusted where required by calculations in accordance with section 2 of the same specification. (IIII) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe Allowable Loads with deflections equal to or less than L/120 III) Safe



CLIPS & FASTENERS

McNICHOLS® Plank Grating, GRATE-LOCK® Interlocking Plank - Slip-Resistant or Smooth Surface



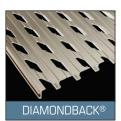




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# DIAMONDBACK<sup>®</sup> INTERLOCKING PLANK

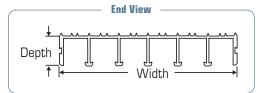
McNICHOLS DIAMONDBACK® Interlocking Plank offers excellent strength and stability for walkways, platforms, mezzanines, catwalks, and other unsupported structures. The ventilated design prevents the build-up of debris like dirt, grease, and snow. When slip resistance is critical, this serrated surface Plank is the answer! DIAMONDBACK® Interlocking Plank is ADA-compliant when you choose our solid surface option.



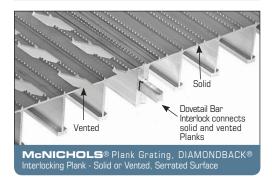
McNICHOLS DIAMONDBACK® Interlocking Plank is made using an Aluminum extrusion process. The Plank has a solid surface profile or is vented with angled openings. Both options have lines of raised serrations running parallel to the Plank length. The sides of the Plank channel have dovetail interlocking slots. Dovetail Bar Interlocks slide into the slots in the channel to connect or lock adjacent panels. McNICHOLS also carries a DIAMONDBACK® Stair Tread/Plank panel without the dovetail interlocking slots in the side channels.

LOA		BLE	D			BAC	K® E	XTRI	JDED	d INTE	ERLC	ICKIN	IG PL	ANK	(ALU	MINL		
DEPTH	мипти	#/LF								ç	SPAN							
DLFIII	VVIDTT	#/LI		2'	2' 6"	3'	3' 6"		4' 6"		5' 6"	6'	6' 6"		7' 6"	8'	8'6"	
	6"	1.45	U	1328	850	590	433	332	262	212	175	147	<b>U</b> - U	niform Lo	ad - Lbs.,	/Square F	oot	
1"	6 1.45	1.40	D	.199	.312	.448	.610	.797	1.008	1.299	1.502	1.787	D - Deflection - in Inches					
1	12"	3.06	С	1328	1062	885	759	664	590	531	483	442		oncentrat			uare	
	12"	2.68	D	.182	.249	.359	.489	.638	.807	.996	1.206	1.433	Fo	oot of Wid	dth at Mi	d Span		
			U	2612	1671	1161	853	653	516	418	345	290	247	213	185	163		
1-1/2"	12"	3.67	D	.184	.214	.318	.485	.547	.692	.855	1.033	1.230	1.443	1.673	1.915	2.184		
1-1/2	12	3.07	С	2612	2089	1741	1492	1306	1161	1044	949	870	803	746	696	653		
			D	.109	.171	.246	.335	.438	.554	.683	.827	.984	1.154	1.340	1.537	1.750		
		1 20	U	4193	2683	1863	1369	1048	828	671	554	466	397	342	298	262	232	
2"	1.0"	4.30		D	.187	.197	.251	.320	.418	.529	.653	.789	.940	1.104	1.279	1.468	1.671	1.886
2	12	12"	С	4193	3354	2795	2396	2096	1863	1677	1524	1397	1290	1198	1118	1048	986	
		0.91	D	.084	.131	.188	.256	.334	.423	.522	.632	.752	.883	1.024	1.181	1.337	1.509	

Loads and deflections in this table are theoretical and based on blending stress of 19,000 PSI. The specifier is responsible for verifying conformance of this product with applicable codes associated with its intended use. Spans in the blue shaded area will give deflection less than 1/4" for a Uniform Load of 100 Lbs./Square Foot.







# HEAVY-DUTY EXTRUDED PLANK



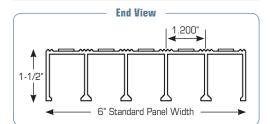
An alternative to Bar Grating, McNICHOLS® Heavy-Duty Extruded Plank is made using an extrusion process that yields a structurally sound and cosmetically attractive product. The interconnecting webs offer a flush top walking surface. The surface on standard Heavy-Duty Plank is vented with a square or rectangular-shaped upset pattern and long raised grooves running parallel to the plank length. Short raised grooves run perpendicular to the slot width.

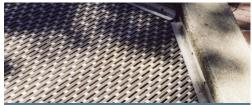
|--|

	LOAD TABLE: HEAVY-DUTY EXTRUDED PLANK (ALUMINUM)																	
DOT		PED							SPA	N								
DPT.	#/LF	SPAN IN.			2' 6"		3' 6"	4'	4' 6"	5'	5' 6"		6' 6"					
			U	435	278	193	142	108	85	69	Theoretica	l values bas	ed on unit s	tress of 12	,000 PSI.			
3/4"	1.8	39"	D	.121	.237	.342	.465	.608	.770	.950			s./Square Fo	oot				
0/4	1.0		С	435	348	290	248	217	193	174		eflection - in Inches Incentrated Load - Lbs./Square Foot of Width						
			D	.121	.190	.273	.371	.485	.614	.760	at Mid							
			U	833	533	370	272	208	164	133	110	92						
1"	2.2	49"	D	.124	.193	.279	.380	.496	.628	.775	.938	1.117						
		49	49	49	49	С	833	666	555	476	416	370	333	302	277			
			D	.099	.155	.223	.304	.396	.502	.620	.748	.891						
		67" (	U	2167	1387	963	707	541	428	346	286	240	205	176	135			
1-1/2"	3.4		67"	67"	D	.090	.141	.203	.277	.362	.458	.566	.684	.815	.956	1.109	1.449	
1-1/2	3.4		С	2167	1734	1445	1238	1083	963	867	788	722	666	619	541			
			D	.072	.113	.163	.221	.289	.366	.452	.547	.651	.764	.887	1.157			

#### **PRODUCT OPTIONS**

Material:	Aluminum Alloy Type 6063-T6
Width:	6"
Depth:	3/4", 1", 1-1/2", 2"
Length:	240"





McNICHOLS® Heavy-Duty Extruded Plank - Drain Cover, Boston, MA

# PLANK GRATING STAIR TREADS

McNICHOLS<sup>®</sup> Plank Grating Stair Treads are one-piece construction from formed and punched sheet metal. Most Plank Grating Treads are lightweight and offer significantly higher slip resistance than Bar Grating Treads. Plank Treads have a variety of surface openings that have diamond, slotted or round shapes. They are available in Aluminum, Carbon Steel, Galvanized Steel, or Stainless Steel in a variety of depths, widths, and lengths.

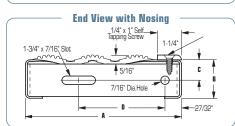
# **GRIP STRUT® STAIR TREADS**



**MCNICHOLS** GRIP STRUT<sup>®</sup> Stair Treads offer one of the most slip-resistant surfaces in the industry. The tread's surface has diamond-shaped openings with serrated edges, making it slip resistant in every direction. Planks have a high strength-to-weight performance that offers a high load capacity and long life. For details on GRIP STRUT<sup>®</sup> Plank Grating, please refer to page 42.

PRC	DOUCT OPTIONS
Material:	Aluminum, Carbon Steel,
	Galvanized Steel, Stainless Steel
Gauge:	16 (Stainless), 14, 12, .0800" Thick (Alum.)
Width:	4-3/4" to 11-3/4"
Depth:	1-1/2". 2"
	Up to 36" Alum. or SS; up to 48" Steel

# Standard End View



#### GRIP STRUT® STAIR TREAD DATA

	STAN	DARD		CAST ABRASIVE NOSING						
A	В	С	D	A	В	С	D			
4-3/4"W	1-1/2"	3/4"	2-5/8"							
(2-Dia.)	2"	1"	2-5/8"							
7" W	1-1/2"	3/4"	3-3/8"	8-1/8"	1-1/2"	3/4"	4-1/2"			
(3-Dia.)	2"	1"	3-3/8"	(3-Dia.)	2"	1"	4-1/2"			
9-1/2"W	1-1/2"	3/4"	5-7/8"	10-1/2"	1-1/2"	3/4"	6-7/8"			
(4-Dia.)	2"	1"	5-7/8"	(4-Dia.)	2"	1"	6-7/8"			
11-3/4"W	1-1/2"	3/4"	8-1/8"							
(5-Dia.)	(5-Dia.) 2" 1" 8-1/8"									
	Above data for Aluminum, Steel and Stainless Steel. Stainless Steel is not available in 2- and 3-Diamond widths. Standard manufacturing tolerances apply.									

STANDARD SIZE & SPAN								
SPAN	DPT.	STANDARD CAST ABRASIVE NUSING						
		LUMINUM A 1052-H32, .0	ALLOY, D800" THICK					
		2-Dia 4-3/4"						
UP	2"	3-Dia 7"	3-Dia 8-1/8"					
to 36"	2	4-Dia 9-1/2"	4-Dia 10-1/2"					
		5-Dia 11-3/4"						
	<u> </u>	TEEL, 14 G	AUGE					
		2-Dia 4-3/4"						
UP to	1-1/2"	3-Dia 7"	3-Dia 8-1/8"					
48"	1-1/⊂	4-Dia 9-1/2"	4-Dia 10-1/2"					
		5-Dia 11-3/4"						
		2-Dia 4-3/4"						
UP	2"	3-Dia 7"	3-Dia 8-1/8"					
to 48"	2	4-Dia 9-1/2"	4-Dia 10-1/2"					
		5-Dia 11-3/4"						
STA	INLES	65 STEEL,TYF	PE 304 (16 GA)					
UP	0"	4-Dia 9-1/2"						
to 36"	2"	5-Dia 11-3/4"						

Please specify **McNICHOLS** on your next project. Thank you!

# PERF-O GRIP® STAIR TREADS

**MCNICHOLS** PERF-0 GRIP<sup>®</sup> Stair Treads can help prevent injuries by providing a slip-resistant surface of large debossed holes and smaller embossed button holes. The Treads have a high load capacity, long life, and high strength-to-weight performance.

For details on PERF-O GRIP® Plank Grating, please refer to page 45.



# **TRACTION TREAD® STAIR TREADS**

**MCNICHOLS** TRACTION TREAD<sup>®</sup> Stair Treads feature a surface of hundreds of raised perforated buttons with debossed holes that provide slip resistance in all directions. The Treads are perfectly suited for ADA-compliant applications.

For details on TRACTION TREAD® Plank Grating, please refer to page 46.

# LOAD TABLE: TREADS (STEEL)

		2-DIAMOND		3-DIAMOND		4-DIAI	MOND	5-DIAMOND		
GAI	GAUGE		14		14		14		14	
SPAN	DPT.	U	С	U	С	U	С	U	С	
2'0"	1-1/2"	1191	472	761	443	549	435	434	425	
20	2"	1978	783	1262	737	911	604	721	573	
2'6"	1-1/2"	764	378	488	356	355	349	278	342	
20	2"	1268	611	810	590	584	578	463	566	
3'0"	1-1/2"	532	315	340	300	245	300	194	300	
30	2"	882	524	563	492	407	483	322	473	
4'0" *	2"	498	394	318	372	230	364	182	356	

#### LOAD TABLE: TREADS (ALUMINUM & STAINLESS STEEL)

		2-DIA.		3 -DIA.		4-DIA.			5-DIA.				
MATL		ALUM.		ALUM.		ALUM.		SS 304		ALUM.		SS 304	
GAUGE		.0800"		.0800"		.0800"		16		.0800"		16	
SPAN	DPT.	U	С	U	С	U	С	U	С	U	С	U	С
2'	2"	1328	526	862	503	607	481	610	483	396	388	394	386
2'	2"	850	420	551	402	388	392	390	387	253	388	252	381
3'	2"	590	350	383	335	270	327	271	323	176	321	175	319
4'	2"	332	263	215	252	152	245	152	244	99	241	98	241
4'         2"         332         263         215         252         152         245         152         244         99         241         98           * Intermediate stringer is recommended for spans over 4'.										2			

Load table data above takes eccentric loads into consideration. Although load values include allowances for normal impact conditions and usual pedestrian traffic, be sure to make provisions in the structural design for special uses and load involving unusual impact forces or vibratory forces. Load-carrying capacity of

Stair Treads increases as side channel height and gauge of material increases.

#### PRODUCT OPTIONS

Material:	Aluminum, Carbon Steel, Galvanized Steel
Gauge:	13, 11, .1250" Thick (Aluminum)
Width:	5", 7", 10", 12"
Depth:	1-1/2", 2"
Length/Span:	24", 30", 36"

#### **PRODUCT OPTIONS**

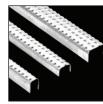
Material:	Aluminum, Galvanized Steel				
Gauge:	13, 11, .1250" Thick (Aluminum)				
Width:	7", 10", 12"				
Depth:	1-1/2", 2"				
Length/Span:	24", 30", 36", 48"				

# RUNGS & FASTENERS

# McNICHOLS® HOLE PRODUCTS

# LADDER RUNGS

When strength, safety, and weight are considerations, **McNICHOLS**<sup>®</sup> Ladder Rungs are the product of choice. All product types have varying degrees of slip resistance to help provide dependable footing. Ladder Rungs can be cut to your size requirements.



# **TRACTION TREAD® RUNGS**

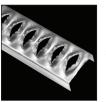
**MCNICHOLS** TRACTION TREAD® Ladder Rungs are available in Aluminum, Carbon Steel, Galvanized, or Stainless Steel. They are available in 1-1/4" to 2-1/4" widths, 48-3/4" and 60" lengths, and range from 1-1/8" to 1-1/2" in depth. Ladder Rungs come in 2-, 3-, or 4-button rows.



# **DIAMONDBACK® RUNGS**

**MCNICHOLS** DIAMONDBACK<sup>®</sup> Ladder Rungs are available with a solid or vented surface. The Rungs have 1-3/4" width with a 1.390" depth and are available in 144" lengths or cut-to-size. Radius end cut Rungs are available by special order. Solid serrated surface is also available.





# **GRIP STRUT® RUNGS**

**MCNICHOLS** GRIP STRUT<sup>®</sup> Ladder Rungs have channels of diamonds that provide high traction footing in all directions. These aggressive Rungs come in Carbon Steel or Galvanized Steel and have a 1-1/8" depth. Standard size width is 2-1/2" and 120" in length. Diamonds can run the opposite direction by special order.

# **GRIP TIGHT® RUNG COVERS**

**MCNICHOLS** GRIP TIGHT<sup>®</sup> Ladder Rung Covers are constructed with a slip-resistant Aluminum Oxide grit surface coating over 16 Gauge Pre-Galvanized Steel. The  $3/4^{"}$  wide Cover has a  $3/4^{"}$  depth, and our 1" wide Cover option has a 1" depth. Covers come in 120" lengths or can be cut-to-size.

BAR	Type CB	Saddle Clip placed over two bearing bars, fastens to support Material: Aluminum, Galvanized Steel, Stainless Steel Product: Bar Grating (Welded, Press-Locked, Swage-Locked) Fit: 1-3/16" bearing bar spacing (Type CA for 15/16" bearing bar spacing) Hardware: Available Separately	Type GFS	Saddle Clip with cast malleable iron body, and one offset wing, fastens to support Material: Galvanized Steel Body, Stainless Steel Bracket Product: Bar Grating Fit: Fits 5/8" to 1-3/8" bearing bar spacing; Adjusts up to 1-3/4" bearing bar height Hardware: Integral with Saddle Clip	Type GG	Hold-Down Clip attaches Grating to Structural Shape in a horizontal plane Material: Galvanized Steel, Stainless Steel Product: Bar Grating Fit: 15/16* to 1-1/16* bearing bar spacing Hardware: Integral with Hold-Down Clip
	Type Z	Hold-Down Clip secures panel to support frame Material: Stainless Steel Product: Most rectangular Bar Grating Fit: 1*, 1-1/2* bearing bar height Hardware: Available Separately	Type J	Hold-Down Clip secures panel to support frame Material: Stainless Steel Product: Most rectangular Bar Grating Fit: 1*, 1-1/2* bearing bar height Hardware: Integral with Hold-Down Clip	Type RSSGC1C	Hold-Down Clip fastens to horizontal flange on Structural Shape Material: Stainless Steel Product: Bar Grating (Press-Locked - CLOSE MESH), Fiberglass Grating Fit: 3/8" bearing bar spacing Hardware: Integral with Hold-Down Clip
FIBERGLASS	Type F	Hold-Down Clip joins panels together at adjacent bars Material: Stainless Steel Product: Molded Grating Fit: 1", 1-1/2", 2" grid height Hardware: Integral with Hold-Down Clip	Type Z	Hold-Down Clip secures panel to support frame         Material:         Stainless Steel         Product:       Molded Grating         Fit:       1", 1-1/2" grid height         Hardware:       Available Separately	Type J	Hold-Down Clip secures panel to support frame Material: Stainless Steel Product: Molded Grating Fit: 1°, 1-1/2° grid height Hardware: Integral with Hold-Down Clip
	Type M	Hold-Down Saddle Clip placed over two bars, fastens to support Material: Stainless Steel Product: Molded Grating Fit: 1°, 1-1/2°, 2° grid height Hardware: With or Without	Type MI/MT	Saddle Clip placed over two I-Bars (MI) or two T-Bars (MT), fastens to support Material: Stainless Steel Product: Pultruded I-Bar and T-Bar Grating Fit: 1", 1-1/2", 2" bearing bar height Hardware: With or Without	Type RI/RT	Insert slides between two I-Bars (RI) or two T-Bars (RT), holding bottom flange to support Material: Stainless Steel Product: Pultruded I-Bar and T-Bar Grating Fit: Any height Hardware: Integral with Insert
PLANK	DIAMOND ANCHOR	Device fits in opening, fastens to support Material: Galvanized Steel, Stainless Steel Product: GRIP STRUT® Fit: Plank and Walkway Hardware: Available Separately	H-B-C-10 SADDLE	Saddle Clip slides into opening, fastens to support Material: Galvanized Steel, Stainless Steel Product: Heavy-Duty GRIP STRUT® Fit: All Plank and Walkway Hardware: Available Separately	ACA	Anchor and Clamp Assembly, hold Planks together, clamps to support Material: Galvanized Steel Product: GRIP STRUT® Fit: 1-1/2" & 2" Channel Depth Hardware: Integral with Assembly
	J-BOLT	Fastener holds Grating channel to support         Material:       Galvanized Steel         Product:       GRATE-LOCK®         Fit:       2-1/2" Channel Depth         Hardware:       Integral with J-Bolt	MHC CLAMP	Hold-Down Clamp slides into Grating slot, fastens to support Material: Galvanized Steel Product: GRATE-LOCK® Fit: 2-1/2" Channel Depth Hardware: Available Separately	BOLT SEAT	Fastener slid into round opening, fastens to support Material: Galvanized Steel Product: PERF-O GRIP® Fit: All Plank and Walkway Hardware: Available Separately
	MID- SUPPORT CLIP	Clip used at mid-span, fastening Plank side channels together to improve loading Material: Galvanized Steel Product: GRIP-STRUT®, PERF-O GRIP®, TRACTION TREAD® Fit: All Plank Hardware: Integral with Mid-Support Clip	SPLICE PLATE KIT	Splice Plate Kit joins continuous Planks in a run over supports Material: Galvanized Steel Product: GRIP-STRUT® Walkway Fit: Connects Walkway ends together Hardware: Integral with Splice Plate Kit	and Faste	<b>CHOLS</b> carries more Clips eners than shown. Our full stock ailable at <b>mcnichols.com</b> !

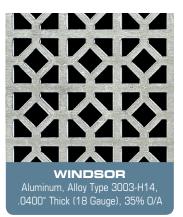
# BAR, FIBERGLASS & PLANK GRATING STAIR TREADS

When strength, safety, and load bearing capability are required, **McNICHOLS**<sup>®</sup> Stair Treads are the product of choice. Bar or formed Plank style Stair Treads suit a variety of stairway applications. Treads are available from stock in materials such as Aluminum, Carbon Steel, Carbon Steel (Powder Coated Black), Fiberglass, Galvanized Steel, and Stainless Steel. Bar styles are available with several Nosing options (shown below).

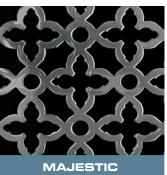


# McNICHOLS® DESIGNER METALS

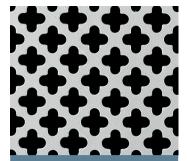
Architects, contractors, and designers choose **McNICHOLS**<sup>®</sup> Designer Metals for their versatility and elegance. Selections include **McNICHOLS**<sup>®</sup> Perforated and Expanded Metals, Wire Mesh, and Textured Metals, all available in a myriad of materials, patterns, and styles. Our Architectural Products Team understands how product facets like configuration, material type, gauge, open area, recycled content, and finish may influence your design. We offer years of product and application experience and are ready and **Inspired to Serve**<sup>®</sup> you!







Carbon Steel, Cold Rolled, 20 Gauge (.0359" Thick), 40% O/A



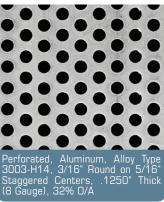
FULL CLOVERLEAF Aluminum, Alloy Type 3003-H14, .0320" Thick (20 Gauge), 51% 0/A

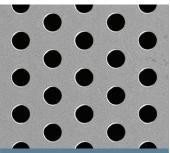
We welcome you to explore the pages of the **McNICHOLS**<sup>®</sup> Designer Metals Catalog. This comprehensive resource will guide you through Designer Metal patterns that will make your project unforgettable. Digital versions of this and other industry-leading product catalogs are ready for your preview at mcnichols.com, or one of our product experts would be pleased to forward you hardcopies. We are ready and **Inspired to Serve**<sup>®</sup> you at **866.754.5144** or **designermetals@mcnichols.com**.





The architectural design team for The Summit, an adult recreational activity center, Grand Prairie, TX, chose two patterns of **McNICHOLS**® Perforated Metal to achieve their vision of an energy-efficient facility and to enhance the structure's design.





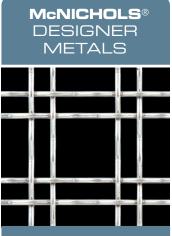
Perforated, Aluminum, Alloy Type 3003-H14, 1/4" Round on 1/2" Staggered Centers, .2500" Thick (1/4" Gauge), 23% O/A

# ELEGANT, VERSATILE, AVAILABLE ... UNFORGETTABLE.

McNICHOLS® Designer Wire Mesh is constructed of wires that are woven into a variety of unique patterns. Wire Mesh applications include ceilings tiles, infill panels, decorative overlay surfaces, wall cladding, sunshades, partitions, guard rails, view screens around equipment or service areas, and signage/sign backing. Our full collection of Designer Wire Mesh is available at mcnichols.com.



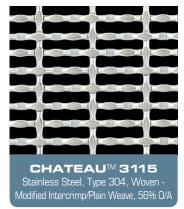
McNICHOLS<sup>®</sup> Wire Mesh, Designer Mesh, TECHNA<sup>™</sup> 3150, Stainless Steel, Type 304, Woven - Double Wire Intercrimp Weave, 74% O/A, railing infill panels transform this stairway at a Walsh University dormitory.



TECHNA™ 3150 Stainless Steel, Type 304, Woven -Double Wire Intercrimp Weave, 74% 0/A

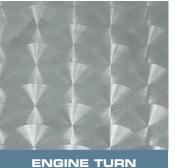






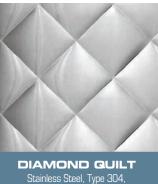


McNICHOLS® Designer Textured Metals are especially popular in high traffic areas, disguising imperfections while providing beautiful appeal and dimension. Textured Metal surfaces can hide small dings, scratches, and even fingerprints that disrupt flat, polished metals. Our Architectural Products Team is ready to assist you with your selection at **866.754.5144** or **designermetals@mcnichols.com**.

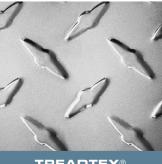


ENGINE TURN Stainless Steel, Type 304, Bright Annealed Finish, 22 Gauge (.0291" Thick)

© 2018



Stainless Steel, Type 304, Satin #4 Finish, 22 Gauge (.0291" Thick)



**TREADTEX®** Aluminum, Alloy Type 3003-H14, 2-B Finish, .0630" Thick (14 Gauge)



LEATHER GRAIN Stainless Steel, Type 304, Satin #4 Finish, 20 Gauge (.0355" Thick)



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