



PLANK GRATING

McNICHOLS® Quality Plank Grating includes a variety of channel configuration choices and walkway styles.

Plank Grating is a one-piece construction product that is lightweight and offers significantly high slip resistance surfaces. In addition to low material cost and nominal installation cost, Plank Grating also provides long-term value with rust-resistant materials and finishes.

PRODUCT OPTIONS

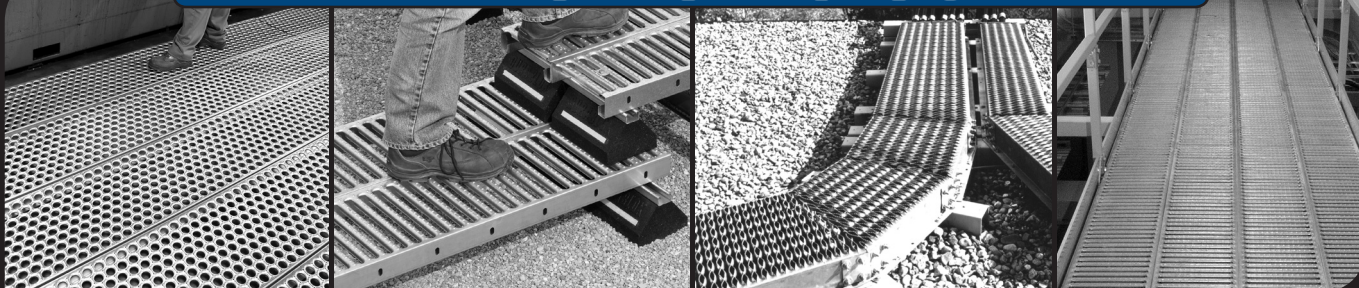
	GRIP STRUT®	PERF-O GRIP®	GRATE-LOCK®	DIAMONDBACK®	HEAVY-DUTY PLANK
Pattern Types					
	pg. 34 / webcode: GPS1	pg. 37 / webcode: GPP3	pg. 39 / webcode: GPL1	pg. 40 / webcode: GPB1	pg. 40 / webcode: GPR1

PRODUCT SPECIFICATIONS

Styles	GRIP STRUT® Plank & Walkway, Heavy-Duty Plank & Walkway	PERF-O GRIP® Plank & Walkway, TRACTION TREAD™ Planks	GRATE-LOCK® Plank with Grip or Smooth Surface	DIAMONDBACK® Solid or Vented	HD Series Plank Grooved or Smooth Surface
Materials	Plain, Galvanized and Stainless Steel, Aluminum	Plain and Galvanized Steel, Aluminum	Galvanized Steel	Aluminum 6061-T6	Aluminum
Heights/Depths	Plank: 1-1/2", 2", 2-1/2", 3" Walkway: 4-1/2" HD Plank: 2" HD Walkway: 5"	Plank: 1-1/2", 2" Walkway: 5"	1-1/2", 2-1/2", 3" (4" special order)	1", 1-1/2", 2"	3/4", 1", 1-1/2"
Widths	Plank: 4-3/4", 7", 9-1/2", 11", 18-3/4", 24" Walkway: 24" HD Plank: 9-1/4" HD Walkway: 30"	Plank: 5", 7", 10", 12", 18" Walkway: 24, 30", 36"	9", 12"	6", 12"	6"
Lengths	10' or 12' (longer by special order)	10', 12' (longer by special order)	12', 20', 24' (2-1/2" Ht.), 12' (1-1/2" Ht.), 24' (3" Ht.)	12'	20', 26'
QR Code (Scan using a QR Reader on your smart phone)					

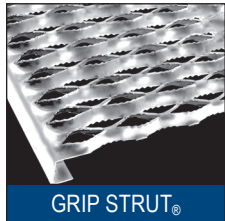
Not all product combinations are available. See mcnichols.com for availability.

PLANK GRATING APPLICATIONS



GRIP STRUT® PLANK & WALKWAY

GRIP STRUT® has a non-slip 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-resisting materials and choices.

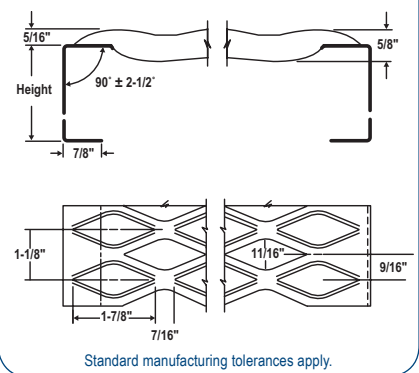


GRIP STRUT® PLANK

WEB CODE: GPS1

The surface of the planks have diamond-shaped openings with serrated edges, making them slip resistant in every direction under practically all conditions. GRIP STRUT® is also available in stair treads and ladder rungs. See page 42 for more details on our ladder rungs.

End & Top Views



PRODUCT OPTIONS

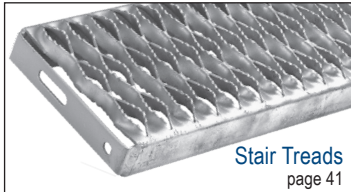
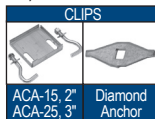
Materials: Plain Steel, Galvanized Steel, Stainless Steel, Aluminum

Gauges: 12, 14, 16 (Stainless), .080, .100 (Alum.)

Heights: 1-1/2", 2", 2-1/2", 3"

Widths: 4-3/4", 7", 9-1/2", 11-3/4", 18-3/4", 24"

Lengths: 10' or 12' stock, cut-to-size



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

Table with columns for Item Number, Ht. (mm), #/LF (kg/m), Clear Span (2'-12'), and load ratings (U, D, C) for Steel 14 Gauge, Steel 12 Gauge, and Aluminum Alloy 5052 12 Gauge .080".

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

Table with columns for Item Number, Ht. (mm), #/LF (kg/m), Clear Span (2'-12'), and load ratings (U, D, C) for Steel 14 Gauge, Steel 12 Gauge, Stainless Steel 304 16 Gauge, and Aluminum Alloy 5052 12 Gauge .080".

LOAD TABLE: 3-DIAMOND PLANK (7" Width)

Table with columns for Item Number, Ht. (mm), #/LF (kg/m), Clear Span (2'-12'), and load ratings (U, D, C) for Steel 14 Gauge, Steel 12 Gauge, and Aluminum Alloy 5052 12 Gauge .080".

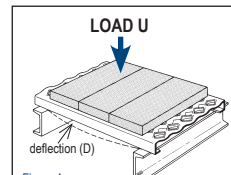


Figure 1 UNIFORM LOAD (U) application to all grating: Maximum load (lb/SF) permitted by flexural stress in side rail or grating strut, whichever is lower, applied to entire grating area (full-width by clear span) between supports.

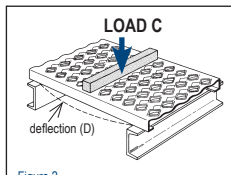


Figure 2 CONCENTRATED LOAD (C) application to all walkways/planks: Maximum load (lb) permitted by flexural stress in side rail or grating strut, whichever is lower, applied transversely to total width of grating at mid-span and assumed to be carried equally by both side rails.

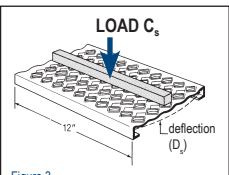


Figure 3 CONCENTRATED LOAD (Cs) application to grating surface struts of all walkways/planks: Maximum load (lb/ft.) permitted by flexural stress in grating strut, applied longitudinally to a 1 ft. length of grating at mid-width.

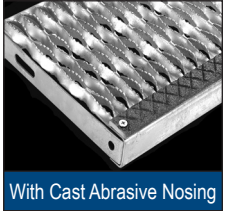
DEFLECTION (D) in all walkways/planks: Deflection (in) corresponding to maximum load (U) or (C) permitted by flexural stress in side rail or grating strut, whichever is lower, applied as defined in Figs. 1 or 2, and 3.

DEFLECTION (D) in all walkways/planks: Deflection (in) corresponding to maximum load (U) or (C) permitted by flexural stress in side rail or grating strut, whichever is lower, applied.



PLANK STAIR TREADS

McNICHOLS® Plank Grating Treads are a one-piece construction from formed and punched sheet metal. Most plank grating treads are lightweight and offer significantly higher slip resistance surfaces than bar grating treads. Plank treads have a variety of surface openings that are diamond, slotted or round shaped. They are available in plain steel, galvanized steel, stainless steel or aluminum in a variety of heights, widths and lengths.

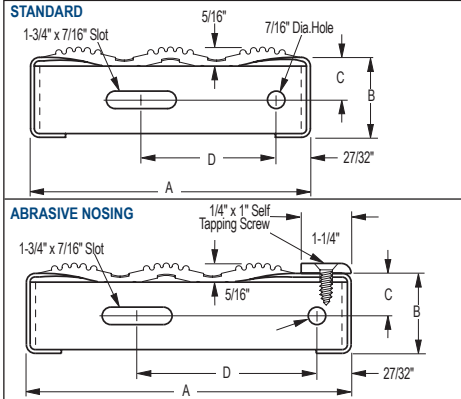


With Cast Abrasive Nosing

GRIP STRUT® WEB CODE: ST01

GRIP STRUT® Plank Grating 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 them slip resistant in every direction. Planks have a high strength-to-weight performance that offers a high load capacity and long life.

For more details on **GRIP STRUT®** Plank Grating please see page 34.



GRIP STRUT® Stair Treads Product Data

STANDARD				WITH ABRASIVE NOSING			
A	B	C	D	A	B	C	D
4-3/4"	1-1/2"	3/4"	2-5/8"	--	--	--	--
(2-Dia.)	2"	1"	2-5/8"	--	--	--	--
7"	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"	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"	1-1/2"	3/4"	8-1/8"	--	--	--	--
(5-Dia.)	2"	1"	8-1/8"	--	--	--	--

Above data for Steel, Aluminum and Stainless Steel. Stainless steel is not available in 2- and 3-Diamond widths. Standard manufacturing tolerances apply.

STANDARD SIZES & RECOMMENDED SPANS

SPAN	HEIGHT	STANDARD - WIDTH	WITH ABRASIVE NOSING - WIDTH
STEEL 14 Ga.			
UP to 48"	1-1/2"	2-Diamond - 4-3/4"	--
		3-Diamond - 7"	3-Diamond - 8-1/8"
		4-Diamond - 9-1/2"	4-Diamond - 10-1/2"
UP to 48"	2"	2-Diamond - 4-3/4"	--
		3-Diamond - 7"	3-Diamond - 8-1/8"
		4-Diamond - 9-1/2"	4-Diamond - 10-1/2"
ALUMINUM .080"			
UP to 36"	2"	2-Diamond - 4-3/4"	--
		3-Diamond - 7"	3-Diamond - 8-1/8"
		4-Diamond - 9-1/2"	4-Diamond - 10-1/2"
STAINLESS STEEL Type 304 16 ga.			
UP to 36"	2"	4-Diamond - 9-1/2"	--
		5-Diamond - 11-3/4"	--

PRODUCT OPTIONS

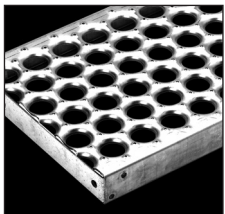
Materials: Plain Steel, Galvanized Steel, Aluminum or Stainless Steel
Gauges: 12, 14, .080 (Aluminum), 16 (Stainless)
Heights: 1-1/2", 2"
Widths: 4-3/4" to 11-3/4"
Lengths/Span: Up to 48" steel; up to 36" alum or SS

LOAD TABLE: GRIP STRUT® TREADS

Load table data below 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.

Steel Gauge	Span	Ht.	2-DIAMOND		3-DIAMOND		4-DIAMOND		5-DIAMOND	
			14	14	14	14	14	14		
Material	Gauge	.080"	.080"	.080"	.080"	304	.080"	304	304	
Span	Ht.	U	C	U	C	U	C	U	C	
20"	1-1/2"	1191	472	761	443	549	435	434	425	
	2"	1978	783	1262	737	911	604	721	573	
26"	1-1/2"	764	378	488	356	355	349	278	342	
	2"	1268	611	810	590	584	578	463	566	
30"	1-1/2"	532	315	340	300	245	300	194	300	
	2"	882	524	563	492	407	483	322	473	
40"*	2"	498	394	318	372	230	364	182	356	

* Intermediate stringer is recommended for spans over 4'.



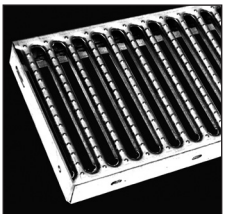
PERF-O GRIP® WEB CODE: ST01

PERF-O GRIP® Plank Grating Stair Treads can help prevent injuries by providing a slip resistant surface of large debossed holes and smaller embossed button holes. The tread's surface has a high load capacity, long life and high strength-to-weight performance.

For more details on **PERF-O GRIP®** Plank Grating please see page 37.

PRODUCT OPTIONS

Materials: Plain Steel, Galvanized Steel, Aluminum
Gauges: 13
Heights: 1-1/2", 2"
Widths: 5", 7", 10", 12"
Lengths/Span: 24", 30", 36"



GRATE-LOCK® WEB CODE: ST01

GRATE-LOCK® Plank Grating Stair Treads have a surface of long, round-end slots that run across the tread width that results in an impressive open area. The large opening permits air and light to pass through and has drainage properties.

For more details on **GRATE-LOCK®** Plank Grating please see page 39.

PRODUCT OPTIONS

Materials: Galvanized Steel
Gauges: 14, 18
Surfaces: Non-skid or Smooth
Heights: 1-1/2", 2-1/2"
Widths: 9"
Lengths/Span: 24", 30", 36", 48"



TRACTION TREAD™ WEB CODE: ST01

TRACTION TREAD™ Plank 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.

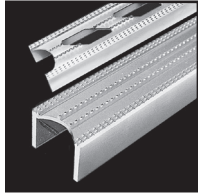
For more details on **TRACTION TREAD™** Plank Grating please see page 38.

PRODUCT OPTIONS

Materials: Galvanized Steel or Aluminum
Gauges: 11, 13, .125 (Aluminum)
Heights: 2", 1-1/2"
Widths: 7", 10", 12"
Lengths/Span: 24", 30", 36", 48"

LADDER RUNGS

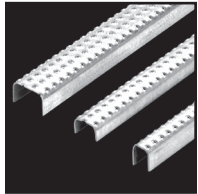
When strength, safety and weight are considerations McNICHOLS® Ladder Rungs are the product of choice. All styles have varying degrees of slip resistance to help provide dependable footing indoors and out. [WEB CODE: LR01](#)



DIAMONDBACK® RUNGS

DIAMONDBACK® Ladder Rungs are offered in .109" aluminum, available in solid or vented. Ladder Rungs are 1.39" high x 1.75" wide and available in 144" lengths or cut-to-size. Radius end cut available by special order. Solid serrated surface also available.

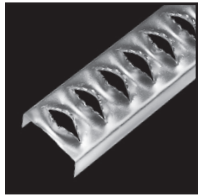
PRODUCT OPTIONS			
Material:	6061-T6 Aluminum	Widths:	1.75"
Gauges:	.109	Lengths:	144"
Height:	1.39"	Item Number:	T7LR517012 - Diamondback Solid



TRACTION TREAD™ RUNGS

TRACTION TREAD™ Ladder Rungs are available in plain steel, stainless steel, galvanized steel or aluminum. They are available in 1.25" to 2.25" widths, 48.75" or 60" lengths, and range from 1.125" to 1.50" high. **TRACTION TREAD™** Ladder Rungs come in 2, 3 or 4 button rows.

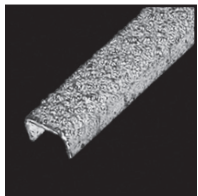
PRODUCT OPTIONS			
Materials:	Plain Steel, Galvanized Steel, Aluminum, Stainless Steel	Widths:	1.25", 1.625", 2.25"
Gauges:	11, 13 - Steel 14, 16 - Stainless Steel .125 - Aluminum	Lengths:	48.75", 60"
Item Numbers:	M6L6ST2460 - 2 Row, 11 Ga. Plain Steel M6LRST3860 - 3 Row, 11 Ga. Plain Steel		
Heights:	1.125", 1.50"		



GRIP STRUT® RUNGS

GRIP STRUT® Ladder Rungs have channels of diamonds that provide high traction footing in all directions. These aggressively treated rungs come in plain steel or galvanized and are 1.125" high. Standard lengths 120" or cut-to-size, standard width is 2.50". Diamonds can run the opposite direction by special order.

PRODUCT OPTIONS			
Materials:	Pre-Galvanized, Plain Steel	Widths:	2.50"
Gauge:	14	Lengths:	120"
Height:	1.25"	Item Number:	2601101410 - 1 Diamond Plain Steel



LADDER RUNG COVERS

GRIP TIGHT® Rung Covers are constructed with slip resistant aluminum oxide grit over 16 gauge pre-galvanized metal. Where open area is not a concern, **GRIP TIGHT®** Covers are a great option. These rungs are stocked in .75" or 1" heights, in 120" lengths or cut-to-size.

PRODUCT OPTIONS			
Material:	Aluminum Grit on Galvanized Steel	Widths:	.75", 1"
Gauge:	16	Lengths:	120"
Heights:	.75", 1"	Item Number:	6MLR347010 - .75" x .75" x 120"

CLIPS & FASTENERS

Shown below is partial listing of our clips and fasteners. Please see mcnichols.com/products/accessories/clips-anchors-etc/ for the complete selection.



TYPE FSSGF - Stainless Steel fastener has specially formed G-Clip bottom with a flat, bearing pad area facing up to Fiberglass structural members, protecting surfaces.
TYPE Z/J - Stainless 316 or 304 (1", 1-1/2" or 2") Molded Fiberglass; secures planks to support frames. No hardware. For fastener and hardware specify Type J.
TYPE F - Stainless 316 (1", 1-1/2" or 2") For Molded Fiberglass end planks to join side bars that are butted end to end.
TYPE MT - Stainless Steel 316 (1", 1-1/2", or 2") Pultruded Fiberglass T-Bar Grating; to secure planks to support frame using two adjacent bars for support. Specify bar spacing, height.
TYPE GM - Galvanized Carbon Steel. For mounting other devices to grating surface. 1/2" x 3" stud with patented base includes 1/2" nut and plate which sits above the grating and is tightened down. Available in Stainless 316.
TYPE CB - Galvanized Steel, Aluminum, or Stainless Steel (specify). Saddle Clip is a positive fastener for welded, press-locked, locked by swaging gratings with bearing bar spacing of 15/16" (CA) or 1-3/16" (CB). U-shaped fastener is placed over two main bearing bars and screwed to grating support. (Screw, nut, washer, etc. NOT included.)
TYPE GG - Galvanized, Stainless Steel or Aluminum (for 1" to 5" bar height; 1/4" to 6" flange or structural member thickness—specify). Hold Down Fastener attaches grating to structural shape in a horizontal plane. Standard GG fasteners are for grating with 7/8" to 1" gap between bearing bars (inquire for closer spacing).



TYPE SSGC - Stainless Steel 316 grating fastener used to fasten close-mesh bar grating to structural shapes, where the structural flange is in a horizontal plane. Unique narrow width accommodates very narrow (3/8") grating slots. (Special order.)
TYPE M - Stainless 316 (1", 1-1/2" or 2") Molded Fiberglass; secures planks to support frame using two adjacent bars for support.
TYPE RT/RI - Stainless Steel 316 (any height) hold down fastener for Pultruded Fiberglass T-Bar or I-Bar that slides between two bars and holds the bottom flange down to support frame. Fastener is below walking surface. Specify bar spacing, type.
TYPE GN - Narrow Galvanized Carbon Steel fastens 15/16" spacing bar grating to structural shapes where structural flange is in a horizontal plane. (Special order.)
TYPE GC - Galvanized or Stainless Steel. Hold Down Fastener for smaller openings between two adjacent bars or plate to existing structure/frame. (Cap screw not included.)
TYPE GFSS-1 Has stainless steel investment casting body. Bracket of 14 gauge 304 Stainless. One offset wing fits spacing between bars 5/8" to 1-3/8". 302 Stainless screw accommodates up to 1-3/4" of grating depth.
TYPE GFS (Not shown) Cast malleable iron body galvanized. Designed to fit bearing bar thicknesses 1/4", 3/16", and 1/8" at 1-3/16" centers. Stepped tail allows fastener to fit various bearing bar heights to 2-1/4" and beam flanges from 1/8"-3/4". (Screw included.)