

Bar Grating Information

Designed to provide safe, secure footing for many applications, bar grating is a strong choice for projects ranging from trenches to decking.

STAIR TREAD

Constructed like other bar grating, with stair-specific additional reinforcement and extra safety adjustments. A nosing is attached to the leading edge for increased edge visibility and slip resistance. Nosings may be grooved or checker plate (also known as diamond plate).

DEFINITIONS

Anchors—Devices that attach grating to its supports.

Band—A flat bar welded to the end of a grating panel or along the line of a cutout. Extends neither above nor below the bearing bars. A load-carrying band transfers the load from unsupported bearing bars to supported bearing bars. A trim band carries no load; used to improve appearance.

Bearing Bar—Load-carrying bar that extends in the direction of the span.

Cross Bar—The connecting bar that intersects or curves between the bearing bars and is welded, forged, or mechanically locked to them.

Cutout—An area of grating removed to clear an obstruction or let pipes, ducts, or columns pass through.

Grating—Open grid assembly of metal bars with bearing bars running in one direction, spaced by rigid attachment to cross bars that run perpendicularly or by bent connecting bars that extend between them.

Length—The span of grating or distance between points of grating support.

Width—Measured perpendicular to the bearing bars and in the same direction as the cross bars to determine the overall dimension of a grating panel.

SURFACES

Serrated—Grips shoes tightly for high slip resistance. Offers good slip

protection in areas prone to oil or other hazardous materials.

Smooth—All-purpose slip-resistant design's texture is less harsh underfoot than serrated.

MATERIALS

Aluminum—Good where a lightweight, corrosion-resistant material is desired.

Steel—Strong material is good to use if the environment is not expressly corrosive.

304 Stainless Steel—Stronger than aluminum, stainless steel provides superior corrosion and oxidation resistance.

JOINING METHODS

Pressure Locked (Dovetail)—

Cross bars are mechanically locked to the bearing bars at their intersections. Permanent joints give long-lasting service under normal conditions.

Riveted—Straight bearing bars and bent connecting bars are riveted together at their contact points. Reliable and durable.

Swage Locked—A cost-effective and reliable pressure locking method.

Welded—Joined at the intersection of the bearing bars and cross bars. A versatile choice for light to moderate loads. The most common way aluminum bar grating is manufactured.

Bar Grating

■ Bearing bar spacing: 1.188"

■ Cross bar spacing: 4"

Note: Additional sizes are available; call 1-800-GRAINGER (472-4643).

			SMOOTH SURFACE			SERRATED SURFACE		
H	Span (Length)	Bearing Bar Thickness	24 in W Item No.	36 in W Item No.	48 in W Item No.	24 in W Item No.	36 in W Item No.	48 in W Item No.
Stainless Steel								
1 in	24 in	0.188 in	49N223	49N229	—	49N259	49N265	—
	36 in	0.188 in	49N224	49N230	—	49N260	49N266	—
	48 in	0.188 in	49N225	49N231	—	49N261	49N267	—
	72 in	0.188 in	49N226	49N232	—	49N262	49N268	—
	96 in	0.188 in	49N227	49N233	—	49N263	49N269	—
120 in	0.188 in	49N228	49N234	—	49N264	49N270	—	
Aluminum								
1 in	24 in	0.125 in	49N295	49N302	—	—	—	—
	36 in	0.125 in	49N296	49N303	—	—	—	—
	48 in	0.188 in	49N315	49N321	49N327	49N424	49N430	49N436
	72 in	0.125 in	49N298	49N305	49N328	49N425	49N431	49N437
	96 in	0.188 in	49N317	49N323	49N329	49N426	49N432	49N438
	120 in	0.125 in	49N299	49N306	—	—	—	—
	96 in	0.188 in	49N318	49N324	49N330	49N427	49N433	49N439
1 in	120 in	0.125 in	49N301	49N307	—	—	—	—
	120 in	0.188 in	49N319	49N325	49N331	49N428	—	49N440

Span H (Length)	Bearing Bar Thickness	BLACK PAINTED STEEL				GALVANIZED STEEL				CARBON STEEL			
		SERRATED 24" W Item No.	SMOOTH SURFACE 36" W Item No.	SMOOTH SURFACE 24" W Item No.	SMOOTH SURFACE 36" W Item No.	SERRATED 24" W Item No.	SMOOTH SURFACE 36" W Item No.	SMOOTH SURFACE 24" W Item No.	SMOOTH SURFACE 36" W Item No.	SERRATED 24" W Item No.	SMOOTH SURFACE 36" W Item No.		
Painted/Galvanized Steel													
1"	24 in	1/8 in	49N005	49N011	49M895	49M902	49N174	49N180	49N065	—	—	—	—
	24 in	3/16 in	—	—	49M908	—	—	—	49N077	—	—	—	—
	24 in	1/4 in	—	—	—	49M926	—	—	—	49N095	—	—	—
	36 in	1/8 in	49N006	—	49M896	49M903	49N175	49N181	49N066	49N072	38MF44	38MH65	—
	36 in	3/16 in	—	—	49M909	49M915	49N187	49N193	49N078	49N084	—	—	—
	36 in	1/4 in	—	—	—	49M927	—	—	—	49N096	—	—	—
	48 in	1/8 in	49N007	49N013	49M897	49M904	49N176	49N182	49N067	49N073	38ME16	38MD70	—
	48 in	3/16 in	49N019	49N025	49M910	49M916	49N188	49N194	49N079	—	—	—	—
	48 in	1/4 in	—	—	—	—	—	—	—	49N097	—	—	—
	72 in	1/8 in	49N008	49N014	49M898	49M905	49N177	49N183	49N068	—	38MJ39	38MG95	—
	72 in	3/16 in	—	—	49M911	49M917	—	—	49N080	49N086	—	—	—
	96 in	1/8 in	49N009	49N015	—	49M906	49N178	49N184	49N069	49N075	—	—	—
	96 in	3/16 in	—	—	49M912	—	—	—	49N081	49N087	—	—	—
	96 in	1/4 in	—	—	—	49M930	—	—	—	49N099	—	—	—
	120 in	1/8 in	49N010	49N016	49M901	49M907	49N179	49N185	49N070	—	38MG26	38MD48	—
	120 in	3/16 in	—	49N028	49M913	—	49N191	49N197	—	—	—	—	—
120 in	1/4 in	—	—	—	49M931	—	—	—	—	—	—	—	
144 in	1/8 in	—	—	—	38ML30	—	—	—	—	38MG75	—	—	
144 in	3/16 in	—	—	—	—	49N199	49N206	—	38MD05	—	—	—	
1.25"	36 in	3/16 in	—	—	—	—	49N203	49N209	—	—	—	—	—
	48 in	3/16 in	49N031	—	—	—	49N204	49N210	—	—	—	—	—
	96 in	3/16 in	—	—	—	—	—	—	—	—	—	—	—
	120 in	3/16 in	49N034	49N040	—	—	—	—	—	—	—	—	—
1.5"	24 in	3/16 in	49N041	—	—	—	—	—	—	—	38MF40	—	—
	36 in	3/16 in	49N042	—	—	—	—	—	—	—	38MK22	—	—
	48 in	3/16 in	—	49N049	—	—	49N219	—	—	—	—	38MJ68	—
	144 in	3/16 in	—	38ML81	—	—	38MC79	—	—	—	38MC62	—	—
2"	36 in	3/16 in	—	38MG21	—	—	38ML60	—	—	—	—	—	—
	120 in	3/16 in	38MF52	—	—	—	38MD53	38MG18	—	—	—	38MJ34	—



49N558

Bar Grating—Stair Tread

- End plates: 2.5"
- Bearing bar spacing: 1.188"
- Bearing bar thickness: 0.188"

Aluminum treads feature grooved nosing. Steel models have checker-plated nosing.

Note: Additional sizes are available; call 1-800-GRAINGER (472-4643).

No. of Bearing Bars	Tread Width	Tread Depth	Height	SMOOTH SURFACE Item No.	SERRATED SURFACE Item No.	No. of Bearing Bars	Tread Width	Tread Depth	Height	SMOOTH SURFACE	SERRATED SURFACE
										Item No.	Item No.
Aluminum, Grooved Nosing											
6	24 in	7 3/8 in	1.25 in		49N564	9	4 ft	10 1/8 in	1 1/4 in	49N525	49N547
	18 in	8 3/8 in	1.25 in	49N559	49N563		4 ft	10 1/8 in	1 1/4 in	49N537	49N557
	24 in	8 3/8 in	1.25 in	49N561	49N565		30 in	10 1/8 in	1 in	49N518	49N543
7	30 in	8 3/8 in	1.25 in	49N562	49N566		30 in	10 1/8 in	1 in	49N531	49N553
							36 in	9 3/4 in	1 1/4 in	49N534	—
						36 in	10 1/8 in	1 in	49N520	—	
Carbon Steel, Checker Plate Nosing	24 in	8 3/8 in	1 in	49N514	49N539	36 in	10 1/8 in	1 1/4 in	49N523	49N545	
	24 in	8 3/8 in	1 in	49N527	49N549	36 in	10 1/8 in	1 1/4 in	49N535	49N555	
	30 in	8 3/8 in	1 in	49N561	49N541	42 in	10 1/8 in	1 1/4 in	49N524	49N546	
	30 in	8 3/8 in	1 in	49N551	49N540	42 in	10 1/8 in	1 1/4 in	49N536	49N556	
						36 in	12 1/8 in	1 in	49N533	—	
7	24 in	8 3/8 in	1 in	49N514	49N539	36 in	12 1/8 in	1 in	49N521	—	
	24 in	8 3/8 in	1 in	49N527	49N549	36 in	12 1/8 in	1 1/4 in	49N526	49N548	
	30 in	8 3/8 in	1 in	49N516	49N541	36 in	12 1/8 in	1 1/4 in	49N538	49N558	
Galvanized Steel, Checker Plate Nosing											
8	24 in	9 3/8 in	1 in	49N515	49N540	8	24 in	9 3/8 in	1 in	—	49N550
	24 in	9 3/8 in	1 in	49N528	—	Stainless Steel, Checker Plate Nosing					
	30 in	9 3/8 in	1 in	49N517	49N542	8	36 in	9 3/8 in	1.25 in	49N568	—
	30 in	9 3/8 in	1 in	49N530	49N552	9	36 in	10 1/8 in	1.25 in	49N569	—
	36 in	9 3/8 in	1 in	49N519	—	9	36 in	12 1/8 in	1 in	49N567	—
8	36 in	9 3/8 in	1 1/4 in	49N522	49N554	10	36 in	12 1/8 in	1.25 in	49N570	—