



MANUFACTURING AND FABRICATING EXCELLENCE

Interstate Gratings offers a wide range of grating products



PRODUCTS & SERVICES

www.interstategratings.com



At Interstate Gratings, we care about our clients, our employees, and our quality craftsmanship.

Founded in 2007, we sought to bridge the gap between corporate necessity and the realities of the work itself. With that guiding principle, we've built an employee-centered, full-service grating company that's driven by strong client connections and high-quality products.

At Interstate Gratings, we're committed to manufacturing and fabricating high-caliber products and providing clients with an exceptional customer experience. Staffed by grating experts, our team has years of experience working on the front lines of manufacturing. Our knowledgeable sales staff has first-hand experience in grating manufacturing and fabrication and they're ready to answer any question you may have.

We're prepared to take on projects of any scope or schedule. Our team of experts works directly with manufacturers to build specially designed machinery and equipment utilizing the latest technology and best practices. Our in-house detailing team specializes in value engineering and cost saving design services, and their expert CAD knowledge allows for easy-to-read shop and erection drawings, and loading calculations for grating capabilities. With our focus on quality, our inspections include: in-house raw material testing and traceability, galvanizing testing, paint testing, cross rod strength testing, job specification conformance, and more.

By utilizing advanced software programs, we provide live project management for clients, and have created a sustainable workplace. Our digital environment links sales, engineering, production planning, shop floor, shipping, and quality control without generating a single piece of paper. Not only does this help us remain environmentally conscious and responsible, but this technology allows us to better track project progress, eliminate mistakes, and meet project deadlines.

As a proud American manufacturer located in the hub of the West, we're committed to doing business according to our higher standards. Interstate Gratings began in an attempt to connect the two sides of our business, and we've continued to create connection between our company, our employees, and our clients. We happily invite you to contact our team of experts for any of your grating needs.

Capabilities

Our innovative, state-of-the-art manufacturing and fabrication facility allows us to produce a complete range of products. We merge the latest technology with advanced material handling techniques to assure consistent and quality production.

We maintain significant raw material inventories, which are processed in-house into finished product. This allows for rapid response to requests for cost saving customized panels.

The unparalleled flexibility of our manufacturing equipment eliminates the need for extended production schedules and allows us to produce a full range of products in a timely and cost-effective manner.

Combining these assets with an experienced team dedicated to manufacturing and fabricating excellence, we stand prepared to partner with each customer for the prompt completion of projects of any scope or schedule.

Sales/Estimating

- Complete takeoff / proposal capabilities
- Value engineering and design assistance
- Quick turnaround time for proposals
- Assist with product design and problem solving

Detailing/Project Management

- Custom detailing software using the AutoCAD platform*
- All projects are reviewed for value engineering opportunities
- Accurate and easy-to-read drawings
- Live project management
- 3D DXF layouts for model importation

Manufacturing

- Specially-designed forge welders
- Full line of press-lock gratings
- Extensive line of heavy-duty products
- Large inventory of high-end prime material
- Wide band coil to fabricated & finished product, all processed in-house
- Custom nesting software for cost savings and reduction of waste
- Domestic material sourced
- 400 Ton per week capacity

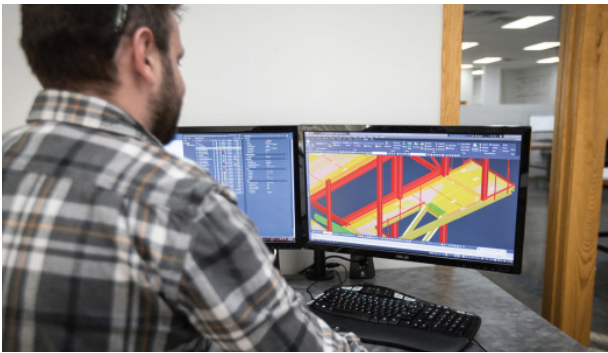
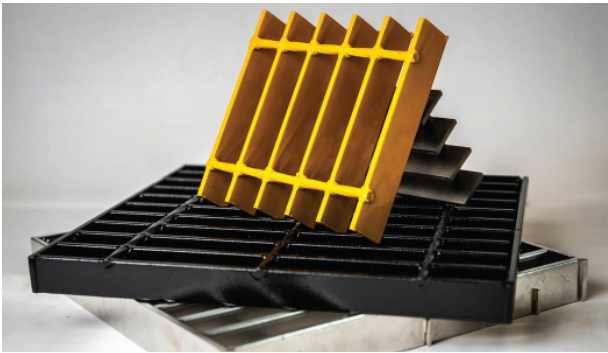
Fabrication

- Multiple burn-tables with custom software cutting solutions
- Live tracking of all projects
- Paperless shop environment
- Architectural division for Press-Lock, Hand-Made, and Custom designs
- Full fabrication of Carbon Steel, Stainless Steel, and Aluminum Grating
- Multiple machine presses and tooling for Heavy Duty / Grizzly Grating

Quality Control

- Dedicated quality control division
- Quality control manual and written procedures
- All manufactured and fabricated products built to NAAMM standards
- In-house raw material testing and traceability
- Job specification conformance

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NAAMM

NAAMM – The National Association of Architectural Metal Manufacturers consists of five operating divisions, each focused on specific metal products for building and related applications. Each division develops and maintains technical standards for its products and actively promotes their use by design professionals.

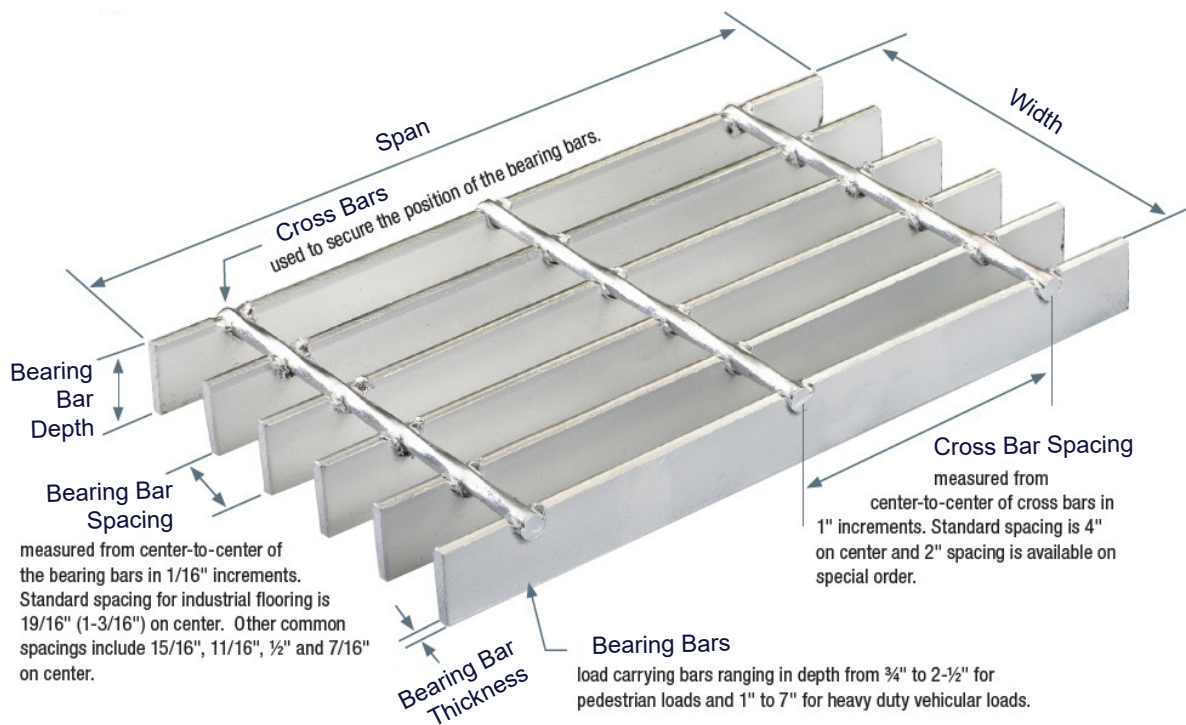
The Metal Bar Grating Division of NAAMM publishes the only manuals for standard and heavy duty gratings which are recognized by ANSI, the American National Standards Institute. These ANSI/NAAMM standards are your guide in assuring that your grating needs are satisfied by products of consistent quality and availability.

Interstate Gratings, LLC, an active NAAMM member in good standing, designs, manufactures and fabricates bar grating in strict accordance with published NAAMM standards. Supporting engineering documentation is available upon request.

Introduction

Metal Bar Grating is the workhorse of the industrial flooring market and has served industry for decades. Strong and durable with an exceptional strength-to-weight ratio, metal bar grating can be easily fabricated to nearly any configuration. The high percentage of open area makes bar grating nearly maintenance free and all products are fully recyclable.

Manufactured by assembling a series of equally spaced metal bars to connecting cross members, bar grating is available in three popular materials; mild carbon steel, 6000 series aluminum and 300 series stainless steels. Additionally, Interstate Gratings can produce gratings constructed with other specialty metal alloys.



Manufacturing Methods



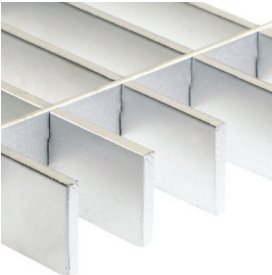
Welded Grating

Economical design ideal for most industrial applications. Manufactured by welding the bearing bar/cross bar intersection, typically with automated forge welding equipment. Available in carbon steel and stainless steel.



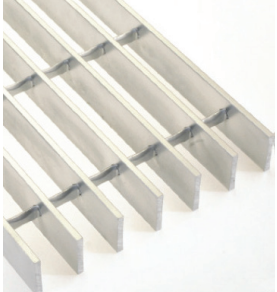
Heavy Duty Grating

Designed to service applications subject to heavy rolling and static loads such as highways, plant floors, loading docks, inlet covers and airports. Available in carbon steel and stainless steel.



Dovetail Pressure Locked Grating

Assembled by inserting pre-punched bearing and cross bars into an interlocking configuration and deforming the cross bars under intense hydraulic pressure. Available in all materials and ideal for many architectural and ornamental applications.



Swage Locked Grating

Cross bars are inserted into prepunched holes in the bearing bars and then hydraulically deformed to lock the bars in place. Available in all materials.

Product Specification

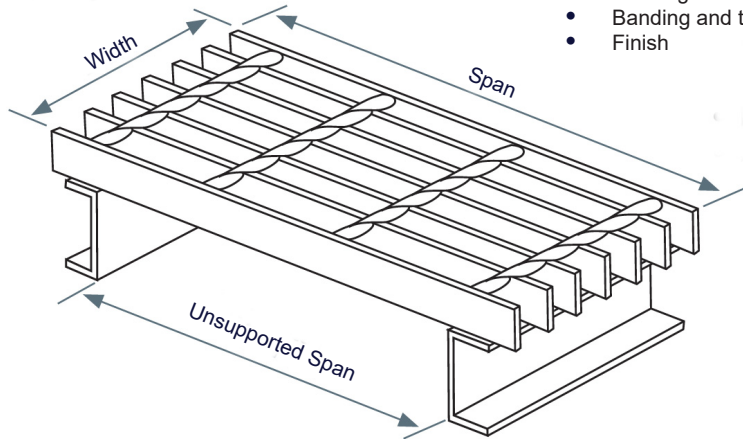
Service Loads

The load tables on the pages within this catalog provide load/deflection criteria for most common applications. These tables provide a concise reference allowing the specifying authority to select the appropriate bearing bar size and spacing for the intended application. Pedestrian loads are commonly analyzed with uniform and concentrated loads. For pedestrian comfort, deflection is typically limited to 1/4". Heavy duty and vehicular load tables are presented for specific load conditions. Heavy duty load tables are presented with deflection limited to the lesser of 1/8" or L/400. If your application is not addressed by the load tables found in this catalog, please contact Interstate Gratings. We will gladly discuss the merits of our diverse products and assist in selecting the product most appropriate for your application.

Load/Deflection Criteria

When specifying metal bar grating it is important to consider the following factors:

- Service load required and acceptable deflection
- Unsupported clear span
- Flooring surface
- Banding and trim
- Finish



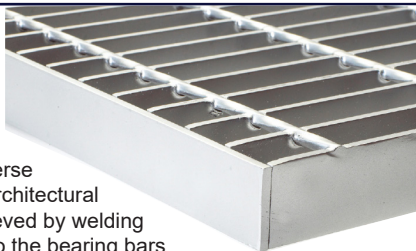
IG GritWeld™

IG GritWeld™ utilizes processes developed for thermal sprayed hard surfacing and incorporates anti-skid ingredients to the super hard substrate. IG GritWeld™ offers the ultimate in traction and longevity for extreme environments.



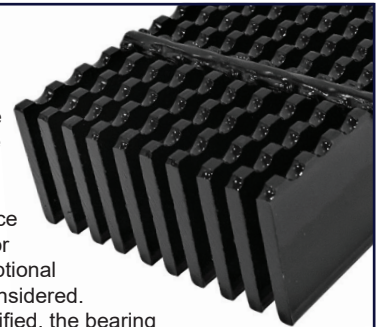
Banding

The open ends of the grating panels can be banded to provide additional transverse stiffness and a finished architectural appearance. This is achieved by welding a flat bar, similar in size to the bearing bars, to the cut ends of the grating. Trim banding should always be specified when gratings are designed to be removable. Banding can reduce impact stresses by transferring loads to adjacent bearing bars and should always be specified when the grating is subject to vehicular loads. Further banding descriptions and details can be found on **page 41** of this catalog.



Serrated Surface

The excellent self-cleaning characteristics of plain surface grating make it suitable for the majority of applications. In the presence of fluids or materials that could cause the top surface of the grating to become wet or slippery, specification of the optional serrated surface should be considered. When serrated grating is specified, the bearing bar depth must be 1/4" greater than the sizes shown on the load tables to provide the equivalent strength of non-serrated gratings.



Finishes

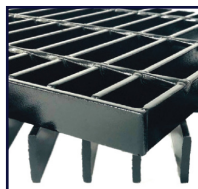
Steel grating is usually provided with bare steel (no finish), painted with one coat of IG EcoCoat™ or other special paint finishes, or hot dip galvanized in accordance with ASTM A-123.

Aluminum products are commonly supplied mill finish but they are also available with optional chemically cleaned or anodized finishes. Due to discoloration that occurs during welding and fabrication,

Stainless Steel products typically require secondary cleaning.

IG EcoClean™, abrasive blasting, and passivation provide a uniform and clean surface.

All grating products can be provided with specialty finishes including enamel or epoxy paints or powder coating. When considering specialty finishes, consultation with the coating manufacturer is essential.



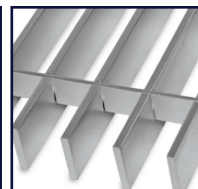
IG EcoCoat™
Standard Black



Mill Finished &
Anodized Aluminum



Galvanized
Steel

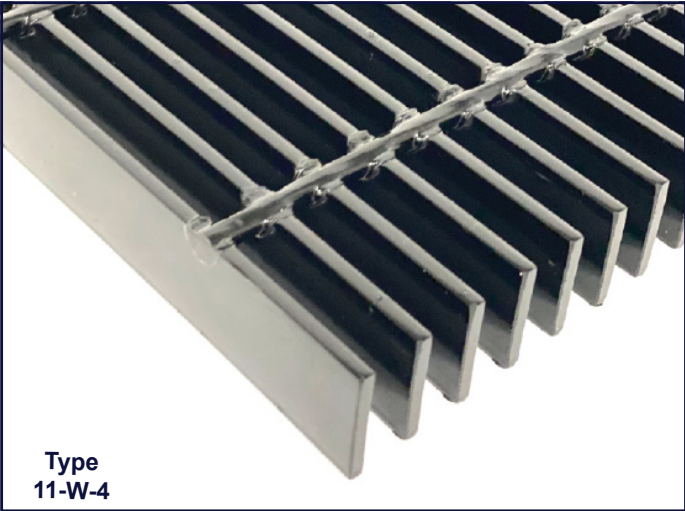


IG EcoClean™
Stainless Steel



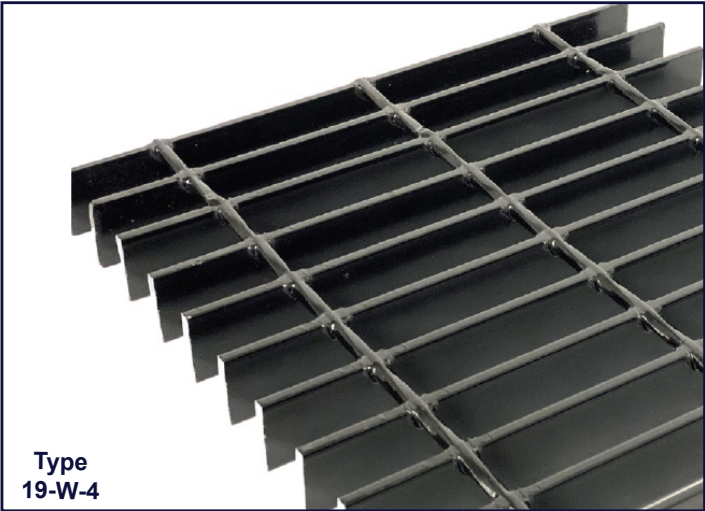
Powder Coated
Steel

Steel Bar Grating



Steel Bar Grating

Steel Bar Grating is manufactured from ASTM A 1011/A 1011M Commercial Steel (Type B) and is available in three distinct products, type “W” Welded Bar Grating, type “DT” Dovetail Pressure Locked Grating, and type “SL” Swage Locked Grating. All three products are available with bearing bar spacing ranging from 19/16” (1-3/16”) to 7/16” on center and with cross bars at either 4” or 2” on center. Each product is available with the standard plain or optional serrated surface, and each product is available with a bare steel, painted or galvanized finish. The load tables on **pages 8-13** provide detailed product specification information related to all three products.



Type “W” Welded Steel Grating

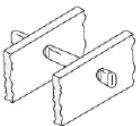
Our most economical steel grating products, type “W” Welded Steel Gratings are manufactured by forge welding rectangular bearing bars and drawn cross bars. This welding process provides a positive fused connection providing years of service under the most demanding conditions. Type 19-W-4 steel grating is our most popular product and is recommended for nearly all industrial flooring applications. With nearly 80% open area, 19-W-4 allows for the easy passage of dirt, debris, snow and liquids and is essentially self-cleaning. Type “W” gratings are available in close mesh ADA conforming spacings 11-W-4 (IGtru™) and 7-W-4 which are commonly used in public areas. When specifying type 11-W-4 (IGtru™) for ADA applications, 3/16” thick bearing bars must be specified.



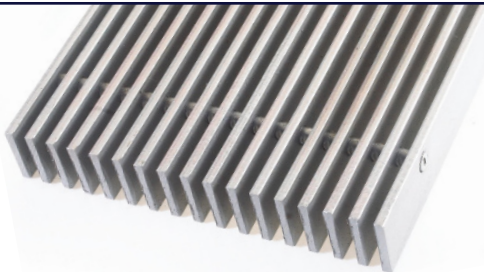
Type “DT” Dovetail Intersection

Type “DT” steel gratings have rectangular cross bars that are slotted to fit into pre-punched bearing bars which are assembled and permanently connected under intense hydraulic pressure. In addition to being one of the most aesthetically appealing floor gratings with its clean uniform lines, the interlocking design provides excellent lateral stability and axial load distribution. The multiple combinations of bearing bar / cross bar sizes and spacing on type “DT” gratings make them popular for architectural applications such as sun shades, fencing and infill panels with a deeper cross bar serving as a distinct architectural accent. Type “DT” gratings are available in close mesh ADA conforming spacings. Type 7-DT-4 with 3/16” thick bearing bars provides a net 1/4” clear opening between the bearing bars. This narrow opening is often preferred in public areas where concerns of drainage and the presence of high heeled shoes converge.

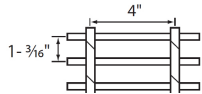
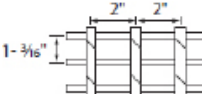
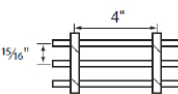
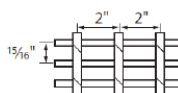
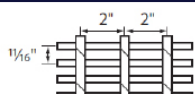
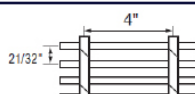
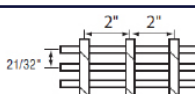
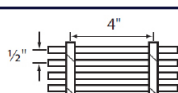
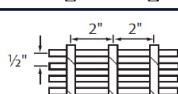
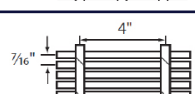
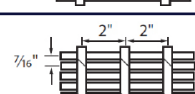
Type “SL” Swage Locked Steel Grating



Type “SL” rectangular bar provides clean, crisp lines and the cross bar is fully locked within the bearing bar, slightly below the top surface.



Steel Grating Table of Spacings

Part No.	Spacing	Open Area *	
19-W-4 19-DT-4 19-SL-4		78%	Bearing bars spaced at 1-3/16" on center and cross bars at 4" on center. The workhorse of industrial flooring popular for platforms, catwalks, mezzanines and stairways.
19-W-2 19-DT-2 19-SL-2		73%	Bearing bars spaced at 1-3/16" on center and cross bars at 2" on center. Excellent for short spans and applications where small wheeled carts continuously cross the grating surface.
15-W-4 15-DT-4 15-SL-4		75%	Bearing bars spaced at 15/16" on center and cross bars at 4" on center. More than 26% stronger than similar "19" spaced gratings and provides additional flooring surface.
15-W-2 15-DT-2 15-SL-2		69%	Bearing bars spaced at 15/16" on center and close spaced cross bars at 2" on center. Provides the advantage of closer spaced bearing bars and cross bars.
11-SL-4		68%	Due to NAAMM allowable material and manufacturing tolerances, Interstate Gratings offers IGtru™ with bearing bars spaced at 21/32" on center, with 3/16" thick bearing bars to ensure compliance with the spacing requirements of the Americans with Disabilities Act. For ADA installations, specify that the bearing bars span perpendicular to the normal flow of traffic.
11-SL-2		63%	
IGtru™ 11-W-4 11-DT-4		66%	
IGtru™ 11-W-2 11-DT-2		61%	
8-W-4 8-DT-4 8-SL-4		58%	The bar spacings on 8-4 and 8-2 gratings comply with ADA spacing requirements. In addition to pedestrian applications, these products are popular for material handling platforms and mezzanines subject to continuous cart and dolly traffic.
8-W-2 8-DT-2 8-SL-2		54%	
7-W-4 7-DT-4 7-SL-4		53%	The bar spacings on 7-4 and 7-2 gratings comply with ADA spacing requirements and are popular for applications in the public way. When specified with 3/16" thick bearing bars, 7-4 and 7-2 gratings have a net 1/4" clear opening between the bearing bars and often reject intrusion by high-heeled shoes.
7-W-2 7-DT-2 7-SL-2		49%	

* Percentage of open area is based upon 3/16" thick bearing bars and .275 cross bars. Contact Interstate Gratings if exact open area calculation is required for alternative bearing bar thicknesses or cross bar sizes.

How to Specify Steel Bar Grating

- Select type of grating
 - "W" for Welded Steel Grating
 - "DT" for Dovetail Pressure Locked Grating
 - "SL" for Swage Locked Grating
- Select bar spacing from table above
- Select bearing bar size (consult load tables on **pages 8-13** considering service loads and clear spans)
- Specify Plain or Serrated surface
- Specify banding or additional trim required
- Specify finish
 - Bare steel (no finish)
 - IG EcoCoat™ - Standard Black Paint
 - Hot Dip Galvanized (per ASTM A-123)
 - Other
- Specify fasteners (if required) – see **page 42**

Steel Bar Grating

19 Space Load Table

Use this table when evaluating spans and loads for the following types of steel grating:
19-W-4, 19-W-2, 19-DT-4, 19-DT-2, 19-SL-4 and 19-SL-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
3/4 x 1/8	3.9	3'-5"	U	355	227	158	116	89	70	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 18,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances. Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf. U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches						
			D	0.099	0.155	0.223	0.304	0.397	0.503							
			C	355	284	237	203	178	158							
			D	0.079	0.124	0.179	0.243	0.318	0.402							
3/4 x 3/16	5.6	3'-10"	U	533	341	237	174	133	105	85						
			D	0.099	0.155	0.223	0.304	0.397	0.503	0.621						
			C	533	426	355	305	266	237	213						
			D	0.079	0.124	0.179	0.243	0.318	0.402	0.497						
1 x 1/8	5.0	4'-3"	U	632	404	281	206	158	125	101	84					
			D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563					
			C	632	505	421	361	316	281	253	230					
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451					
1 x 3/16	7.2	4'-9"	U	947	606	421	309	237	187	152	125	105				
			D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670				
			C	947	758	632	541	474	421	379	345	316				
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536				
1-1/4 x 1/8	6.1	5'-1"	U	987	632	439	322	247	195	158	131	110	93			
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629			
			C	987	790	658	564	493	439	395	359	329	304			
			D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504			
1-1/4 x 3/16	8.9	5'-7"	U	1,480	947	658	483	370	292	237	196	165	140	121		
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730		
			C	1,480	1,184	987	846	740	658	592	538	493	456	423		
			D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584		
1-1/2 x 1/8	7.2	5'-10"	U	1,421	910	632	464	355	281	227	188	158	135	116		
			D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608		
			C	1,421	1,137	947	812	711	632	568	517	474	437	406		
			D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487		
1-1/2 x 3/16	10.7	6'-5"	U	2,132	1,364	947	696	533	421	341	282	237	202	174	133	
			D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	
			C	2,132	1,705	1,421	1,218	1,066	947	853	775	711	656	609	533	
			D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.636	
1-3/4 x 1/8	8.5	6'-6"	U	1,934	1,238	860	632	484	382	310	256	215	183	158	121	96
			D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862
			C	1,934	1,547	1,290	1,105	967	860	774	703	645	595	553	484	430
			D	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.545	0.689
1-3/4 x 3/16	12.3	7'-3"	U	2,901	1,857	1,290	947	725	573	464	384	322	275	237	181	143
			D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862
			C	2,901	2,321	1,934	1,658	1,451	1,290	1,161	1,055	967	893	829	725	645
			D	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.545	0.689
2 x 1/8	9.6	7'-4"	U	2,526	1,617	1,123	825	632	499	404	334	281	239	206	158	125
			D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754
			C	2,526	2,021	1,684	1,444	1,263	1,123	1,011	919	842	772	722	632	561
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.356	0.477	0.603
2 x 3/16	13.9	8'-0"	U	3,790	2,425	1,684	1,237	947	749	606	501	421	359	309	237	187
			D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754
			C	3,790	3,032	2,526	2,165	1,895	1,684	1,516	1,378	1,263	1,166	1,083	947	842
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603
2-1/4 x 3/16	15.6	8'-9"	U	4,796	3,070	2,132	1,566	1,199	947	767	634	533	454	392	300	237
			D	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.530	0.670
			C	4,796	3,837	3,197	2,741	2,398	2,132	1,918	1,744	1,599	1,476	1,370	1,199	1,060
			D	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	0.324	0.424	0.536
2-1/2 x 3/16	17.2	9'-5"	U	5,921	3,790	2,632	1,933	1,480	1,170	947	783	658	561	483	370	292
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603
			C	5,921	4,737	3,947	3,384	2,961	2,632	2,368	2,153	1,974	1,822	1,692	1,480	1,316
			D	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.381	0.483

* Weight per square foot based upon 19-W-4 grating. Add .60 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.
The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24", 36" and 48" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 1-3/8"	3 2-9/16"	4 3-3/4"	5 4-15/16"	6 6-1/8"	7 7-5/16"	8 8-1/2"	9 9-11/16"	10 10-7/8"	11 12-1/16"	12 13-1/4"	13 14-7/16"	14 15-5/8"	15 16-13/16"	16 18"
No. of Bearing Bars Panel Width	17 19-3/16"	18 20-3/8"	19 21-9/16"	20 22-3/4"	21 23-15/16"	22 25-1/8"	23 26-5/16"	24 27-1/2"	25 28-11/16"	26 29-7/8"	27 31-1/16"	28 32-1/4"	29 33-7/16"	30 34-5/8"	31 35-13/16"
No. of Bearing Bars Panel Width	32 37"	33 38-3/16"	34 39-3/8"	35 40-9/16"	36 41-3/4"	37 42-15/16"	38 44-1/8"	39 45-5/16"	40 46-1/2"	41 47-11/16"					

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.

■ Indicates stock panel widths. (**3'-0" max width for "DT" & "SL")

Steel Bar Grating

15 Space Load Table

Use this table when evaluating spans and loads for the following types of steel grating:
15-W-4, 15-W-2, 15-DT-4, 15-DT-2, 15-SL-4 and 15-SL-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
3/4 x 3/16	6.9	4'-0"	U D C D	675 0.099 675 0.079	432 0.155 540 0.124	300 0.223 450 0.179	220 0.304 386 0.243	169 0.397 338 0.318	133 0.503 300 0.402	108 0.621 270 0.497	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 18,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances. Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.					
1 x 1/8	6.2	4'-6"	U D C D	800 0.074 800 0.060	512 0.116 640 0.093	356 0.168 533 0.134	261 0.228 457 0.182	200 0.298 400 0.238	158 0.377 356 0.302	128 0.466 320 0.372						
1 x 3/16	8.9	5'-0"	U D C D	1,200 0.074 1,200 0.060	768 0.116 960 0.093	533 0.168 800 0.134	392 0.228 686 0.182	300 0.298 600 0.238	237 0.377 533 0.302	192 0.466 480 0.372						
1-1/4 x 1/8	7.5	5'-4"	U D C D	1,250 0.060 1,250 0.048	800 0.093 1,000 0.074	556 0.134 833 0.107	408 0.182 714 0.146	313 0.238 625 0.191	247 0.302 556 0.241	200 0.372 500 0.298	165 0.451 455 0.360	139 0.536 417 0.429	118 0.629 385 0.504			
1-1/4 x 3/16	11.0	5'-11"	U D C D	1,875 0.060 1,875 0.048	1,200 0.093 1,500 0.074	833 0.134 1,250 0.107	612 0.182 1,071 0.146	469 0.238 938 0.191	370 0.302 833 0.241	300 0.372 750 0.298	248 0.451 682 0.360	208 0.536 625 0.429	178 0.629 577 0.504	153 0.730 536 0.584		
1-1/2 x 1/8	8.9	6'-2"	U D C D	1,800 0.050 1,800 0.040	1,152 0.078 1,440 0.062	800 0.112 1,200 0.089	588 0.152 1,029 0.122	450 0.199 900 0.159	356 0.251 800 0.201	288 0.310 720 0.248	238 0.376 655 0.300	200 0.447 600 0.358	170 0.524 554 0.420	147 0.608 514 0.487	113 0.794 450 0.636	
1-1/2 x 3/16	13.2	6'-10"	U D C D	2,700 0.050 2,700 0.040	1,728 0.078 2,160 0.062	1,200 0.112 1,800 0.089	882 0.152 1,543 0.122	675 0.199 1,350 0.159	533 0.251 1,200 0.201	432 0.310 1,080 0.248	357 0.376 982 0.300	300 0.447 900 0.358	256 0.524 831 0.420	220 0.608 771 0.487	169 0.794 675 0.636	133 1,006 600 0.804
1-3/4 x 1/8	10.4	6'-11"	U D C D	2,450 0.043 2,450 0.034	1,568 0.067 1,960 0.053	1,089 0.096 1,633 0.077	800 0.130 1,400 0.104	613 0.170 1,225 0.136	484 0.215 1,089 0.172	392 0.266 980 0.213	324 0.322 891 0.257	272 0.383 817 0.306	232 0.450 754 0.360	200 0.521 700 0.487	153 0.681 613 0.545	121 0.862 544 0.689
1-3/4 x 3/16	15.3	7'-8"	U D C D	3,675 0.043 3,675 0.034	2,352 0.067 2,940 0.053	1,633 0.096 2,450 0.077	1,200 0.130 2,100 0.104	919 0.170 1,838 0.136	726 0.215 1,633 0.172	588 0.266 1,470 0.213	486 0.322 1,336 0.257	408 0.383 1,225 0.306	348 0.450 1,131 0.360	300 0.521 1,050 0.417	230 0.681 919 0.545	182 0.862 817 0.689
2 x 1/8	11.8	7'-7"	U D C D	3,200 0.037 3,200 0.030	2,048 0.058 2,560 0.047	1,422 0.084 2,133 0.067	1,045 0.114 1,829 0.091	800 0.149 1,600 0.119	632 0.189 1,422 0.151	512 0.233 1,280 0.186	423 0.282 1,164 0.225	356 0.335 985 0.268	303 0.393 914 0.315	261 0.456 914 0.365	200 0.596 800 0.477	158 0.754 711 0.603
2 x 3/16	17.3	8'-6"	U D C D	4,800 0.037 4,800 0.030	3,072 0.058 3,840 0.047	2,133 0.084 3,200 0.067	1,567 0.114 2,743 0.091	1,200 0.149 2,400 0.119	948 0.189 2,133 0.151	768 0.233 1,920 0.186	635 0.282 1,746 0.225	533 0.335 1,600 0.268	454 0.393 1,477 0.315	392 0.456 1,371 0.365	300 0.596 1,200 0.477	237 0.754 1,067 0.603
2-1/4 x 3/16	19.4	9'-3"	U D C D	6,075 0.033 6,075 0.026	3,888 0.052 4,860 0.041	2,700 0.074 4,050 0.060	1,984 0.101 3,471 0.081	1,519 0.132 3,038 0.106	1,200 0.168 2,700 0.134	972 0.207 2,430 0.166	803 0.250 2,209 0.200	675 0.298 2,025 0.238	575 0.350 1,869 0.280	496 0.406 1,736 0.324	380 0.530 1,519 0.424	300 0.670 1,350 0.536
2-1/2 x 3/16	21.5	10'-0"	U D C D	7,500 0.030 7,500 0.024	4,800 0.047 6,000 0.037	3,333 0.067 5,000 0.054	2,449 0.091 4,286 0.073	1,875 0.119 3,750 0.095	1,482 0.151 3,333 0.121	1,200 0.186 3,000 0.149	992 0.225 2,727 0.180	833 0.268 2,500 0.215	710 0.315 2,308 0.252	612 0.365 2,143 0.292	469 0.477 1,875 0.381	370 0.603 1,667 0.483

* Weight per square foot based upon 15-W-4 grating. Add .60 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.
The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 1-1/8"	3 2-1/16"	4 3"	5 3-15/16"	6 4-7/8"	7 5-13/16"	8 6-3/4"	9 7-11/16"	10 8-5/8"	11 9-9/16"	12 10-1/2"	13 11-7/16"	14 12-3/8"	15 13-5/16"	16 14-1/4"
No. of Bearing Bars Panel Width	17 15-3/16"	18 16-1/8"	19 17-1/16"	20 18"	21 18-15/16"	22 19-7/8"	23 20-13/16"	24 21-3/4"	25 22-11/16"	26 23-5/8"	27 24-9/16"	28 25-1/2"	29 26-7/16"	30 27-3/8"	31 28-5/16"
No. of Bearing Bars Panel Width	32 29-1/4"	33 30-3/16"	34 31-1/8"	35 32-1/16"	36 33"	37 33-15/16"	38 34-7/8"	39 35-13/16"							

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.
■ Indicates stock panel widths.

Steel Bar Grating

11 Space Load Table

Use this table when evaluating spans and loads for the following types of steel grating:
11-SL-4 and 11-SL-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span													
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	7'-6	8'-0	
3/4 x 3/16	9.1	4'-4"	U	921	589	409	301	230	182	147	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 18,000 psi.						
			D	0.099	0.155	0.223	0.304	0.397	0.503	0.621							
			C	921	736	614	526	460	409	368	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.						
			D	0.079	0.124	0.179	0.243	0.318	0.402	0.497							
1 x 1/8	8.1	4'-11"	U	1,091	698	485	356	273	216	175	144	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.					
			D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563						
			C	1,091	873	727	623	546	485	436	397	U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches					
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451						
1 x 3/16	11.9	5'-5"	U	1,636	1,047	727	534	409	323	262	216	182	161	209	153		
			D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670					
			C	1,636	1,309	1,091	935	818	727	655	595	546	525	731	588		
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536					
1-1/4 x 1/8	10.0	5'-9"	U	1,705	1,091	758	557	426	337	273	225	189	161	209	153		
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536				0.629	
			C	1,705	1,364	1,136	974	852	758	682	620	568	525	731	588		
			D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429				0.504	
1-1/4 x 3/16	14.7	6'-5"	U	2,557	1,636	1,136	835	639	505	409	338	284	242	209	153		
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730			
			C	2,557	2,046	1,705	1,461	1,278	1,136	1,023	930	852	787	731	584		
			D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584			
1-1/2 x 1/8	11.9	6'-8"	U	2,455	1,571	1,091	802	614	485	393	325	273	232	200	153		
			D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794		
			C	2,455	1,964	1,636	1,403	1,227	1,091	982	893	818	755	701	614	636	
			D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.636		
1-1/2 x 3/16	17.7	7'-4"	U	3,682	2,356	1,636	1,202	921	727	589	487	409	349	301	230	182	
			D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1,006	
			C	3,382	2,946	2,455	2,104	1,841	1,636	1,473	1,339	1,227	1,133	1,052	921	818	804
			D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.636		
1-3/4 x 1/8	13.9	7'-5"	U	3,341	2,138	1,485	1,091	835	660	535	442	371	316	273	209	165	
			D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862	
			C	3,341	2,673	2,227	1,909	1,671	1,485	1,336	1,215	1,114	1,028	955	835	742	689
			D	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.545		
1-3/4 x 3/16	20.5	8'-3"	U	5,011	3,207	2,227	1,636	1,253	990	802	663	557	474	409	313	248	
			D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862	
			C	5,011	4,009	3,341	2,864	2,506	2,227	2,005	1,822	1,671	1,542	1,432	1,253	1,114	689
			D	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.545		
2 x 1/8	15.8	8'-3"	U	4,364	2,793	1,939	1,425	1,091	862	698	577	485	413	356	273	216	
			D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754	
			C	4,364	3,491	2,909	2,494	2,182	1,939	1,746	1,587	1,455	1,393	1,247	1,091	970	603
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477		
2 x 3/16	23.3	9'-1"	U	6,546	4,189	2,909	2,137	1,636	1,293	1,047	866	727	620	534	409	323	
			D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754	
			C	6,546	5,236	4,364	3,740	3,273	2,909	2,618	2,380	2,182	2,014	1,870	1,636	1,455	603
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477		
2-1/4 x 3/16	26.1	10'-0"	U	8,284	5,302	3,682	2,705	2,071	1,636	1,326	1,095	921	784	676	518	409	
			D	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.530	0.670	
			C	8,284	6,627	5,523	4,734	4,142	3,682	3,314	3,012	2,761	2,549	2,367	2,071	1,841	536
			D	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	0.324	0.424		
2-1/2 x 3/16	28.9	10'-9"	U	10,227	6,546	4,546	3,340	2,557	2,020	1,636	1,352	1,136	968	835	639	505	
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603	
			C	10,227	8,182	6,818	5,844	5,114	4,546	4,091	3,719	3,409	3,147	2,922	2,557	2,273	483
			D	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.381		

* Weight per square foot based upon 11-W-4 grating. Add .60 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.
The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 7/8"	3 1-9/16"	4 2-1/4"	5 2-15/16"	6 3-5/8"	7 4-5/16"	8 5"	9 5-11/16"	10 6-3/8"	11 7-1/16"	12 7-3/4"	13 8-7/16"	14 9-1/8"	15 9-13/16"	16 10-1/2"
No. of Bearing Bars Panel Width	17 11-3/16"	18 11-7/8"	19 12-9/16"	20 13-1/4"	21 13-15/16"	22 14-5/8"	23 15-5/16"	24 16"	25 16-11/16"	26 17-3/8"	27 18-1/16"	28 18-3/4"	29 19-7/16"	30 20-1/8"	31 20-13/16"
No. of Bearing Bars Panel Width	32 21-1/2"	33 22-3/16"	34 22-7/8"	35 23-9/16"	36 24-1/4"	37 24-15/16"	38 25-5/8"	39 26-5/16"	40 27"	41 27-11/16"	42 28-3/8"	43 29-1/16"	44 29-3/4"	45 30-7/16"	46 31-1/8"
No. of Bearing Bars Panel Width	47 31-13/16"	48 32-1/2"	49 33-3/16"	50 33-7/8"	51 34-9/16"	52 35-1/4"	53 35-15/16"								

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.
■ Indicates stock panel widths.

Steel Bar Grating

IGtru™ Load Table

IGtru™ is manufactured to NAAMM standards and is fully ADA compliant with a minimum 3/16" bearing bar thickness

Use this table when evaluating spans and loads for the following types of steel grating:
11-W-4, 11-W-2, 11-DT-4, 11-DT-2

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
	3/4 x 3/16	9.3	4'-4"	U D C D	964 0.099 964 0.079	617 0.155 771 0.124	429 0.223 643 0.179	315 0.304 551 0.243	241 0.397 482 0.318	190 0.503 429 0.402	154 0.621 386 0.497	128 0.751 351 0.601	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 18,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.				
	1 x 1/8	8.4	4'-11"	U D C D	1,143 0.074 1,143 0.060	731 0.116 914 0.093	508 0.168 762 0.134	373 0.228 653 0.182	286 0.298 571 0.238	226 0.377 508 0.302	183 0.466 457 0.372	151 0.563 416 0.451					
	1 x 3/16	12.3	5'-5"	U D C D	1,714 0.074 1,714 0.060	1,097 0.116 1,371 0.093	762 0.168 1,143 0.134	560 0.228 980 0.182	429 0.298 857 0.238	339 0.377 762 0.302	274 0.466 686 0.372	227 0.563 623 0.451	190 0.670 571 0.536	U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches			
	1-1/4 x 1/8	10.3	5'-9"	U D C D	1,786 0.060 1,786 0.048	1,143 0.093 1,429 0.074	794 0.134 1,190 0.107	583 0.182 1,020 0.146	446 0.238 893 0.191	353 0.302 794 0.241	286 0.372 714 0.298	236 0.451 649 0.360	198 0.536 595 0.429	169 0.629 549 0.504	146 0.730 510 0.584	For pedestrian comfort, deflection in excess of .250 inches is not recommended.	
	1-1/4 x 3/16	15.2	6'-5"	U D C D	2,679 0.060 2,679 0.048	1,714 0.093 2,143 0.074	1,190 0.134 1,786 0.107	875 0.182 1,531 0.146	670 0.238 1,339 0.191	529 0.302 1,190 0.241	429 0.372 1,071 0.298	354 0.451 974 0.360	298 0.536 893 0.429	254 0.629 824 0.504	219 0.730 765 0.584	167 0.953 670 0.763	
	1-1/2 x 1/8	12.3	6'-8"	U D C D	2,571 0.050 2,571 0.40	1,646 0.078 2,057 0.062	1,143 0.112 1,714 0.089	840 0.152 1,469 0.122	643 0.199 1,286 0.159	508 0.251 1,143 0.201	411 0.310 1,029 0.248	340 0.376 935 0.300	286 0.447 857 0.358	243 0.524 791 0.420	210 0.608 735 0.487	161 0.794 643 0.636	127 1.006 571 0.804
	1-1/2 x 3/16	18.3	7'-4"	U D C D	3,857 0.050 3,857 0.040	2,469 0.078 3,086 0.062	1,714 0.112 2,571 0.089	1,259 0.152 2,204 0.122	964 0.199 1,929 0.159	762 0.251 1,714 0.201	617 0.310 1,543 0.248	510 0.376 1,403 0.300	429 0.447 1,286 0.358	365 0.524 1,187 0.420	315 0.608 1,102 0.487	241 0.794 964 0.636	190 1.006 857 0.804
	1-3/4 x 1/8	14.4	7'-5"	U D C D	3,500 0.043 3,500 0.034	2,240 0.067 2,800 0.053	1,556 0.096 2,333 0.077	1,143 0.130 2,000 0.104	875 0.170 1,750 0.136	691 0.215 1,556 0.172	560 0.266 1,400 0.213	463 0.322 1,167 0.257	389 0.383 1,167 0.306	331 0.450 1,077 0.360	286 0.521 1,000 0.417	219 0.681 875 0.545	173 0.862 778 0.689
	1-3/4 x 3/16	21.2	8'-1"	U D C D	5,250 0.043 5,250 0.034	3,360 0.067 4,200 0.053	2,333 0.096 3,500 0.077	1,714 0.130 3,000 0.104	1,313 0.170 2,625 0.136	1,037 0.215 2,333 0.172	840 0.266 2,100 0.213	694 0.322 1,909 0.257	583 0.383 1,750 0.360	497 0.450 1,615 0.360	429 0.521 1,500 0.417	328 0.681 1,313 0.545	259 0.862 1,167 0.689
	2 x 1/8	16.3	8'-3"	U D C D	4,571 0.037 4,571 0.030	2,926 0.058 3,657 0.047	2,032 0.084 3,048 0.067	1,493 0.114 2,612 0.091	1,143 0.149 2,286 0.119	903 0.189 2,032 0.151	731 0.233 1,829 0.186	604 0.282 1,662 0.225	508 0.335 1,524 0.268	433 0.393 1,407 0.315	373 0.456 1,306 0.365	286 0.596 1,143 0.477	226 0.754 1,016 0.603
	2 x 3/16	24.1	9'-1"	U D C D	6,857 0.037 6,857 0.030	4,389 0.058 5,486 0.047	3,048 0.084 4,571 0.067	2,239 0.114 3,918 0.091	1,714 0.149 3,429 0.119	1,354 0.189 3,048 0.151	1,097 0.233 2,743 0.186	907 0.282 2,494 0.225	762 0.335 2,286 0.268	649 0.393 2,110 0.315	560 0.456 1,959 0.365	429 0.596 1,714 0.477	339 0.754 1,524 0.603
	2-1/4 x 3/16	27.0	10'-0"	U D C D	8,679 0.033 8,679 0.026	5,554 0.052 6,943 0.041	3,857 0.074 5,786 0.060	2,834 0.101 4,959 0.081	2,170 0.132 4,339 0.106	1,714 0.168 3,857 0.134	1,389 0.207 3,471 0.166	1,148 0.250 3,156 0.200	964 0.298 2,893 0.238	822 0.350 2,670 0.280	708 0.406 2,480 0.324	542 0.530 2,170 0.424	429 0.670 1,929 0.536
	2-1/2 x 3/16	29.9	10'-9"	U D C D	10,714 0.030 10,714 0.024	6,857 0.047 8,571 0.037	4,762 0.067 7,143 0.054	3,499 0.091 6,122 0.073	2,679 0.119 5,357 0.095	2,116 0.151 4,762 0.121	1,714 0.186 4,286 0.149	1,417 0.225 3,896 0.180	1,190 0.268 3,571 0.215	1,014 0.315 3,297 0.252	875 0.365 3,061 0.292	670 0.477 2,679 0.381	529 0.603 2,381 0.483

* Weight per square foot based upon IGtru™ 11-W-4 grating. Add .60 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel. Spacing is based on 21/32.

No. of Bearing Bars Panel Width	2 7/8"	3 1-1/2"	4 2-3/16"	5 2-13/16"	6 3-1/2"	7 4-1/8"	8 4-13/16"	9 5-7/16"	10 6-1/8"	11 6-3/4"	12 7-7/16"	13 8-1/16"	14 8-3/4"	15 9-3/8"	16 10-1/16"
No. of Bearing Bars Panel Width	17 10-11/16"	18 11-3/8"	19 12"	20 12-11/16"	21 13-5/16"	22 14"	23 14-5/8"	24 15-5/16"	25 15-15/16"	26 16-5/8"	27 17-1/4"	28 17-15/16"	29 18-9/16"	30 19-1/4"	31 19-7/8"
No. of Bearing Bars Panel Width	32 20-9/16"	33 21-3/16"	34 21-7/8"	35 22-1/2"	36 23-3/16"	37 23-13/16"	38 24-1/2"	39 25-1/8"	40 25-13/16"	41 26-7/16"	42 27-1/8"	43 27-3/4"	44 28-7/16"	45 29-1/16"	46 29-3/4"
No. of Bearing Bars Panel Width	47 30-3/8"	48 31-1/16"	49 31-11/16"	50 32-3/8"	51 33"	52 33-11/16"	53 34-5/16"	54 35"	55 35-5/8"	56 36-5/16"					

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.

■ Indicates stock panel widths.

Steel Bar Grating

8 Space Load Table

Use this table when evaluating spans and loads for the following types of steel grating:
8-W-4, 8-W-2, 8-DT-4, 8-DT-2, 8-SL-4 and 8-SL-2

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
	3/4 x 3/16	12.3	4'-9"	U D C D	1,266 0.099 1,266 0.079	810 0.155 1,013 0.124	563 0.223 844 0.179	413 0.304 723 0.243	316 0.397 633 0.318	250 0.503 563 0.402	203 0.621 506 0.497	167 0.751 460 0.601	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 18,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances. Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.				
	1 x 1/8	11.0	5'-3"	U D C D	1,500 0.074 1,500 0.060	960 0.116 1,200 0.093	667 0.168 1,000 0.134	490 0.228 857 0.182	375 0.298 750 0.238	296 0.377 667 0.302	240 0.466 600 0.372	198 0.563 546 0.451	167 0.670 500 0.536				
	1 x 3/16	16.2	5'-10"	U D C D	2,250 0.074 2,250 0.060	1,440 0.116 1,800 0.093	1,000 0.168 1,500 0.134	735 0.228 1,286 0.182	563 0.298 1,125 0.238	444 0.377 1,000 0.302	360 0.466 900 0.372	298 0.563 818 0.451	250 0.670 750 0.536	213 0.787 692 0.629	U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load pounds/ft. of grating width D = Deflection in inches		
	1-1/4 x 1/8	13.6	6'-3"	U D C D	2,344 0.060 2,344 0.048	1,500 0.093 1,875 0.074	1,042 0.134 1,563 0.107	765 0.182 1,339 0.146	586 0.238 1,172 0.191	463 0.302 938 0.241	375 0.372 852 0.298	310 0.451 781 0.360	260 0.536 721 0.429	222 0.629 1,082 0.504	191 0.730 670 0.584		
	1-1/4 x 3/16	20.0	6'-11"	U D C D	3,516 0.060 3,516 0.048	2,250 0.093 2,813 0.074	1,563 0.134 2,344 0.107	1,148 0.182 2,009 0.146	879 0.238 1,758 0.191	694 0.302 1,563 0.241	563 0.372 1,406 0.298	465 0.451 1,278 0.360	391 0.536 1,172 0.429	333 0.629 1,082 0.504	287 0.730 1,005 0.584	220 0.953 879 0.763	
	1-1/2 x 1/8	16.2	7'-2"	U D C D	3,375 0.050 3,375 0.040	2,160 0.078 2,700 0.062	1,500 0.112 2,250 0.089	1,102 0.152 1,929 0.122	844 0.199 1,688 0.159	667 0.251 1,500 0.201	540 0.310 1,350 0.248	446 0.376 1,227 0.300	375 0.447 1,125 0.358	320 0.524 1,039 0.420	276 0.608 964 0.487	211 0.794 844 0.636	
	1-1/2 x 3/16	24.0	7'-11"	U D C D	5,063 0.050 5,063 0.040	3,240 0.078 4,050 0.062	2,250 0.112 3,375 0.089	1,653 0.152 2,893 0.122	1,266 0.199 2,531 0.159	1,000 0.251 2,250 0.201	810 0.310 2,025 0.248	669 0.376 1,841 0.300	563 0.447 1,688 0.358	479 0.524 1,558 0.420	413 0.608 1,446 0.487	316 0.794 1,266 0.636	250 1,006 1,125 0.804
	1-3/4 x 1/8	18.9	8'-1"	U D C D	4,594 0.043 4,594 0.034	2,940 0.067 3,675 0.053	2,042 0.096 3,063 0.077	1,500 0.130 2,625 0.104	1,148 0.170 2,297 0.136	907 0.215 2,042 0.172	735 0.266 1,838 0.213	607 0.322 1,671 0.257	510 0.383 1,531 0.306	435 0.450 1,414 0.360	375 0.521 1,313 0.417	287 0.681 1,148 0.545	227 0.862 1,021 0.689
	1-3/4 x 3/16	27.9	8'-11"	U D C D	6,891 0.043 6,891 0.034	4,410 0.067 5,513 0.053	3,063 0.096 4,594 0.077	2,250 0.130 3,938 0.104	1,723 0.170 3,445 0.136	1,361 0.215 3,063 0.172	1,103 0.266 2,756 0.213	911 0.322 2,297 0.257	766 0.383 2,120 0.306	652 0.450 2,120 0.360	563 0.521 1,969 0.417	431 0.681 1,723 0.545	340 0.862 1,531 0.689
	2 x 1/8	21.5	8'-11"	U D C D	6,000 0.037 6,000 0.030	3,840 0.058 4,800 0.047	2,667 0.084 4,000 0.067	1,959 0.114 3,429 0.091	1,500 0.149 3,000 0.119	1,185 0.189 2,667 0.151	960 0.233 2,400 0.186	793 0.282 2,182 0.225	667 0.335 2,000 0.268	568 0.393 1,846 0.315	490 0.456 1,714 0.365	375 0.596 1,500 0.477	296 0.754 1,333 0.603
	2 x 3/16	31.8	9'-11"	U D C D	9,000 0.037 9,000 0.030	5,760 0.058 7,200 0.047	4,000 0.084 6,000 0.067	2,939 0.114 5,143 0.091	2,250 0.149 4,500 0.119	1,778 0.189 4,000 0.151	1,440 0.233 3,600 0.186	1,190 0.282 3,273 0.225	1,000 0.335 3,000 0.268	852 0.393 2,769 0.315	735 0.456 2,571 0.365	563 0.596 2,250 0.477	444 0.754 2,000 0.603
	2-1/4 x 3/16	35.7	10'-10"	U D C D	11,391 0.033 11,391 0.026	7,290 0.052 9,113 0.041	5,063 0.074 7,594 0.060	3,719 0.101 6,509 0.081	2,848 0.132 5,695 0.106	2,250 0.168 5,063 0.134	1,823 0.207 4,556 0.166	1,506 0.250 4,142 0.200	1,266 0.298 3,797 0.238	1,078 0.350 3,505 0.280	930 0.406 3,255 0.324	712 0.530 2,848 0.424	563 0.670 2,531 0.536
	2-1/2 x 3/16	39.6	11'-8"	U D C D	14,063 0.030 14,063 0.024	9,000 0.047 11,250 0.037	6,250 0.067 9,375 0.054	4,592 0.091 8,036 0.073	3,516 0.119 7,031 0.095	2,778 0.151 6,250 0.121	2,250 0.186 5,625 0.149	1,860 0.225 5,114 0.180	1,563 0.268 4,688 0.215	1,331 0.315 4,327 0.252	1,148 0.365 4,018 0.292	879 0.477 3,516 0.381	694 0.603 3,125 0.483

* Weight per square foot based upon 8-W-4 grating. Add .60 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.
The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.
Welded grating types 8-W-4 and 8-W-2 are available in bearing bar depths from 3/4" to 2", and panels are available from stock in nominal 24" widths (24" max for type "W").

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths (24" max for type "W"). When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 11/16"	3 1-3/16"	4 1-11/16"	5 2-3/16"	6 2-11/16"	7 3-3/16"	8 3-11/16"	9 4-3/16"	10 4-11/16"	11 5-3/16"	12 5-11/16"	13 6-3/16"	14 6-11/16"	15 7-3/16"	16 7-11/16"
No. of Bearing Bars Panel Width	17 8-3/16"	18 8-11/16"	19 9-3/16"	20 9-11/16"	21 10-3/16"	22 10-11/16"	23 11-3/16"	24 11-11/16"	25 12-3/16"	26 12-11/16"	27 13-3/16"	28 13-11/16"	29 14-3/16"	30 14-11/16"	31 15-3/16"
No. of Bearing Bars Panel Width	32 15-11/16"	33 16-3/16"	34 16-11/16"	35 17-3/16"	36 17-11/16"	37 18-3/16"	38 18-11/16"	39 19-3/16"	40 19-11/16"	41 20-3/16"	42 20-11/16"	43 21-3/16"	44 21-11/16"	45 22-3/16"	46 22-11/16"
No. of Bearing Bars Panel Width	47 23-3/16"	48 23-11/16"	49 24-3/16"	50 24-11/16"	51 25-3/16"	52 25-11/16"	53 26-3/16"	54 26-11/16"	55 27-3/16"	56 27-11/16"	57 28-3/16"	58 28-11/16"	59 29-3/16"	60 29-11/16"	61 30-3/16"
No. of Bearing Bars Panel Width	62 30-11/16"	63 31-3/16"	64 31-11/16"	65 32-3/16"	66 32-11/16"	67 33-3/16"	68 33-11/16"	69 34-3/16"	70 34-11/16"	71 35-3/16"	72 35-11/16"				

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.
 Indicates stock panel widths for types "DT" and "SL".  Indicates stock panel widths for type "W". (24" max)

Steel Bar Grating

7 Space Load Table

Use this table when evaluating spans and loads for the following types of steel grating:
7-W-4, 7-W-2, 7-DT-4, 7-DT-2, 7-SL-4 and 7-SL-2

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
	3/4x3/16	13.9	4'-10"	U D C D	1,446 0.099 1,446 0.079	926 0.155 1,157 0.124	643 0.223 964 0.179	472 0.304 827 0.243	362 0.397 723 0.318	286 0.503 643 0.402	231 0.621 579 0.497	191 0.751 526 0.601	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 18,000 psi.				
	1 x 1/8	12.4	5'-6"	U D C D	1,714 0.074 1,714 0.060	1,097 0.116 1,371 0.093	762 0.168 1,143 0.134	560 0.228 980 0.182	429 0.298 857 0.238	339 0.377 762 0.302	274 0.466 686 0.372	227 0.563 623 0.451	191 0.670 571 0.536	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.			
	1 x 3/16	18.3	6'-1"	U D C D	2,571 0.074 2,571 0.060	1,646 0.116 2,057 0.093	1,143 0.168 1,714 0.134	840 0.228 1,469 0.182	643 0.298 1,286 0.238	508 0.377 1,143 0.302	411 0.466 1,029 0.372	340 0.563 935 0.451	286 0.670 857 0.536	243 0.787 791 0.629	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.		
	1-1/4 x 1/8	15.3	6'-6"	U D C D	2,679 0.060 2,679 0.048	1,714 0.093 2,143 0.074	1,191 0.134 1,786 0.107	875 0.182 1,531 0.146	670 0.238 1,339 0.191	529 0.302 1,191 0.241	429 0.372 1,071 0.298	354 0.451 974 0.360	298 0.536 893 0.429	254 0.629 824 0.504	219 0.730 765 0.584	U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches	
	1-1/4 x 3/16	22.7	7'-2"	U D C D	4,018 0.060 4,018 0.048	2,571 0.093 3,214 0.074	1,786 0.134 2,679 0.107	1,312 0.182 2,296 0.146	1,005 0.238 2,009 0.191	794 0.302 1,786 0.241	643 0.372 1,607 0.298	531 0.451 1,461 0.360	446 0.536 1,339 0.429	380 0.629 1,236 0.504	328 0.730 1,148 0.584	251 0.953 1,005 0.763	
	1-1/2 x 1/8	18.3	7'-5"	U D C D	3,857 0.050 3,857 0.040	2,469 0.078 3,086 0.062	1,714 0.112 2,571 0.089	1,260 0.152 2,204 0.122	964 0.199 1,929 0.159	762 0.251 1,714 0.201	617 0.310 1,543 0.248	510 0.376 1,403 0.300	429 0.447 1,286 0.358	365 0.524 1,187 0.420	315 0.608 1,102 0.487	241 0.794 964 0.636	
	1-1/2 x 3/16	27.2	8'-3"	U D C D	5,786 0.050 5,786 0.040	3,703 0.078 4,629 0.062	2,571 0.112 3,857 0.089	1,889 0.152 3,306 0.122	1,446 0.199 2,893 0.159	1,143 0.251 2,571 0.201	926 0.310 2,104 0.248	765 0.376 2,104 0.300	643 0.447 1,929 0.358	548 0.524 1,780 0.420	472 0.608 1,653 0.487	362 0.794 1,446 0.636	286 1.006 1,286 0.804
	1-3/4 x 1/8	21.3	8'-4"	U D C D	5,250 0.043 5,250 0.034	3,360 0.067 4,200 0.053	2,333 0.096 3,500 0.077	1,714 0.130 3,000 0.104	1,313 0.170 2,625 0.136	1,037 0.215 2,333 0.172	840 0.266 2,100 0.213	694 0.322 1,909 0.257	583 0.383 1,750 0.306	497 0.450 1,615 0.360	429 0.521 1,500 0.417	328 0.681 1,313 0.545	259 0.862 1,167 0.689
	1-3/4 x 3/16	31.6	9'-3"	U D C D	7,875 0.043 7,875 0.034	5,040 0.067 6,300 0.053	3,500 0.096 5,250 0.077	2,571 0.130 4,500 0.104	1,969 0.170 3,938 0.136	1,556 0.215 3,500 0.172	1,260 0.266 3,150 0.213	1,041 0.322 2,864 0.257	875 0.383 2,625 0.306	746 0.450 2,423 0.360	643 0.521 2,250 0.417	492 0.681 1,969 0.545	389 0.862 1,750 0.689
	2 x 1/8	24.3	9'-3"	U D C D	6,857 0.037 6,857 0.030	4,389 0.058 5,486 0.047	3,048 0.084 4,571 0.067	2,239 0.114 3,918 0.091	1,714 0.149 3,429 0.119	1,355 0.189 3,048 0.151	1,097 0.233 2,743 0.186	907 0.282 2,494 0.225	762 0.335 2,286 0.268	649 0.393 2,110 0.315	560 0.456 1,959 0.365	429 0.596 1,714 0.477	339 0.754 1,524 0.603
	2 x 3/16	36.0	10'-3"	U D C D	10,286 0.037 10,286 0.030	6,593 0.058 8,229 0.047	4,571 0.084 6,857 0.067	3,359 0.114 5,878 0.091	2,571 0.149 5,143 0.119	2,032 0.189 4,571 0.151	1,646 0.233 4,114 0.186	1,360 0.282 3,740 0.225	1,143 0.335 3,429 0.268	974 0.393 3,165 0.315	840 0.456 2,939 0.365	643 0.596 2,571 0.477	508 0.754 2,286 0.603
	2-1/4 x 3/16	40.5	11'-2"	U D C D	13,018 0.033 13,018 0.026	8,331 0.052 10,414 0.041	5,786 0.074 8,679 0.060	4,251 0.101 7,439 0.081	3,255 0.132 6,509 0.106	2,571 0.168 5,786 0.134	2,083 0.207 5,207 0.166	1,721 0.250 4,734 0.200	1,446 0.298 4,339 0.238	1,233 0.350 4,006 0.280	1,063 0.406 3,719 0.324	814 0.530 3,255 0.424	643 0.670 2,893 0.536
	2-1/2 x 3/16	44.9	12'-1"	U D C D	16,071 0.030 16,071 0.024	10,286 0.047 12,857 0.037	7,143 0.067 10,714 0.054	5,248 0.091 9,184 0.073	4,018 0.119 8,036 0.095	3,175 0.151 7,143 0.121	2,571 0.186 6,429 0.149	2,125 0.225 5,844 0.180	1,786 0.268 5,357 0.215	1,522 0.315 4,945 0.252	1,312 0.365 4,592 0.292	1,005 0.477 4,018 0.381	794 0.603 3,571 0.483

* Weight per square foot based upon 7-W-4 grating. Add .60 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch. The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.
Welded grating types 7-W-4 and 7-W-2 are available in bearing bar depths from 3/4" to 2", and panels are available from stock in nominal 24" widths (24" max for type "W").

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths (24" max for type "W"). When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 5/8"	3 1-1/16"	4 1-1/2"	5 1-15/16"	6 2-3/8"	7 2-13/16"	8 3-1/4"	9 3-11/16"	10 4-1/8"	11 4-9/16"	12 5"	13 5-7/16"	14 5-7/8"	15 6-5/16"	16 6-3/4"
No. of Bearing Bars Panel Width	17 7-3/16"	18 7-5/8"	19 8-1/16"	20 8-1/2"	21 8-15/16"	22 9-3/8"	23 9-13/16"	24 10-1/4"	25 10-11/16"	26 11-1/8"	27 11-9/16"	28 12"	29 12-7/16"	30 12-7/8"	31 13-5/16"
No. of Bearing Bars Panel Width	32 13-3/4"	33 14-3/16"	34 14-5/8"	35 15-1/16"	36 15-1/2"	37 15-15/16"	38 16-3/8"	39 16-13/16"	40 17-1/4"	41 17-11/16"	42 18-1/8"	43 18-9/16"	44 19"	45 19-7/16"	46 19-7/8"
No. of Bearing Bars Panel Width	47 20-5/16"	48 20-3/4"	49 21-3/16"	50 21-5/8"	51 22-1/16"	52 22-1/2"	53 22-15/16"	54 23-3/8"	55 23-13/16"	56 24-1/4"	57 24-11/16"	58 25-1/8"	59 25-9/16"	60 26"	61 26-7/16"
No. of Bearing Bars Panel Width	62 26-7/8"	63 27-5/16"	64 27-3/4"	65 28-3/16"	66 28-5/8"	67 29-1/16"	68 29-1/2"	69 29-15/16"	70 30-3/8"	71 30-13/16"	72 31-1/4"	73 31-11/16"	74 32-1/8"	75 32-9/16"	76 33"
No. of Bearing Bars Panel Width	77 33-7/16"	78 33-7/8"	79 34-5/16"	80 34-3/4"	81 35-3/16"	82 35-5/8"	83 36-1/16"								

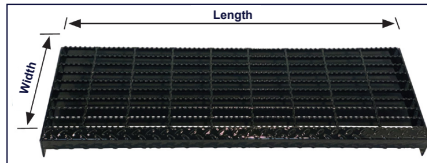
Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.
■ Indicates stock panel widths for types "DT" and "SL". ■ Indicates stock panel widths for type "W". (24" max)

Steel Stair Treads

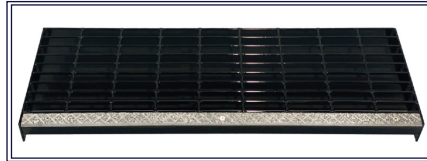
Steel Stair Treads

Steel grating stair treads are available fabricated to any size in type "W" welded, type "DT" dovetail pressure locked or type "SL" swage locked construction. Treads are manufactured with a defined visible nosing and pre-punched end carrier plates or angles, ready for bolting to the stair stringers.

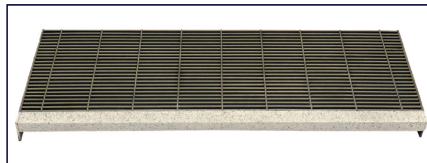
Type 19-W-4
Serrated with
Checker Plate
Nosing



Type 19-W-4 with
Cast Abrasive
Nosing



Type 7-DT-4 with IG
GritWeld™ Nosing



Nosing Options



Checker Plate Nosing welded to grating and carrier plates/angles.



Cast Abrasive Nosing mechanically fastened to welded mounting angle.

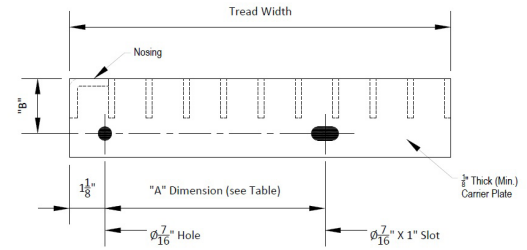


GritWeld™ Nosing welded to grating and carrier plates with thermally applied GritWeld™ surface.

Steel Carrier Plates & Angles

Steel Carrier Plates

Recommended for use with 19, 15 and 11 spaced gratings

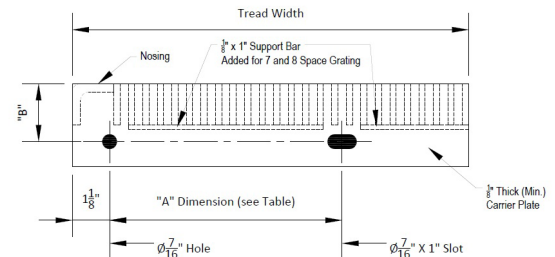


"B" Dimension

1-3/4" for 3/4" thru 1-1/4" Bearing Bars
2-1/4" for 1-1/2" and 1-3/4" Bearing Bars.
Consult manufacturer for 2" and above

Steel Carrier Angles

Recommended for use with 8 and 7 spaced gratings



Special Nosing

FRP Safety Yellow Nosing

Please contact us for special nosing requirements

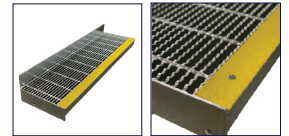


Table of Stair Tread Widths

19 Space			15 Space			IGtru™ / 11 Space			8 Space			7 Space		
Bearing Bars @ 1-3/16" O.C.			Bearing Bars @ 15/16" O.C.			Bearing Bars @ 21/32" O.C.*			Bearing Bars @ 1/2" O.C.			Bearing Bars @ 7/16" O.C.		
Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension
6-3/16"	5	2-1/2"	6-1/8"	6	2-1/2"	6-1/16"	8	2-1/2"	6-7/16"	11	2-1/2"	5-13/16"	11	2-1/2"
7-3/8"	6	4-1/2"	7-1/16"	7	4-1/2"	6-11/16"	9	4-1/2"	7-7/16"	13	4-1/2"	6-11/16"	13	2-1/2"
8-9/16"	7	4-1/2"	8"	8	4-1/2"	7-3/8"	10	4-1/2"	8-7/16"	15	4-1/2"	7-9/16"	15	4-1/2"
9-3/4"	8	7"	8-15/16"	9	4-1/2"	8"	11	4-1/2"	8-15/16"	16	4-1/2"	8-7/16"	17	4-1/2"
10-15/16"	9	7"	9-7/8"	10	7"	8-11/16"	12	4-1/2"	9-7/16"	17	7"	9-5/16"	19	7"
12-1/8"	10	7"	10-13/16"	11	7"	9-5/16"	13	7"	9-15/16"	18	7"	10-3/16"	21	7"
			11-3/4"	12	7"	10"	14	7"	10-7/16"	19	7"	10-5/8"	22	7"
			12-11/16"	13	7"	10-5/8"	15	7"	10-15/16"	20	7"	11-1/16"	23	7"
						11-5/16"	16	7"	11-7/16"	21	7"	11-1/2"	24	7"
						11-15/16"	17	7"	11-15/16"	22	7"	11-15/16"	25	7"

* Swage-Lock will be 11/16" O.C.

Recommended Maximum Steel Stair Tread Lengths **

Bearing Bar Size	19 Space		15 Space		IGtru™ / 11 Space		8 Space		7 Space	
	1-3/16" O.C.		15/16" O.C.		11/16" O.C.		1/2" O.C.		7/16" O.C.	
	Plain	Serrated	Plain	Serrated	Plain	Serrated	Plain	Serrated	Plain	Serrated
3/4" x 3/16"	2'-4"	--	2'-8"	--	3'-1"	--	3'-7"	--	3'-10"	--
1" x 3/16"	3'-5"	2'-10"	4'-0"	3'-4"	4'-3"	3'-9"	4'-9"	4'-1"	5'-2"	4'-5"
1-1/4" x 3/16"	4'-8"	4'-2"	5'-1"	4'-6"	5'-6"	4'-10"	5'-6"	5'-5"	5'-6"	5'-6"
1-1/2" x 3/16"	5'-6"	5'-3"	5'-6"	5'-6"	5'-6"	5'-6"	6'-0"	5'-6"	6'-4"	5'-8"

** For treads up to 5'-6", maximum tread lengths are based upon 300 lb. concentrated load on the front 5 inches of the tread, at the center of the tread length. When treads exceed 5'-6" in length, design allows for 300 lb. concentrated loads at 1/3 points of tread length. Deflection is limited to 1/240 of tread length in all cases.

Aluminum Bar Grating

Aluminum Bar Grating

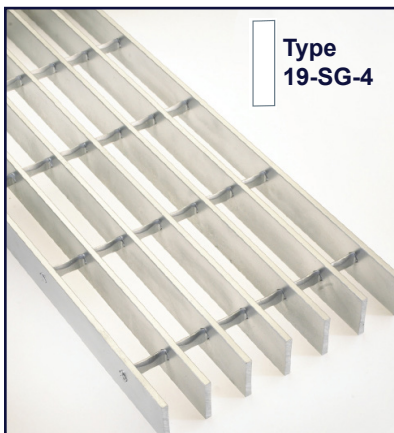
Aluminum Bar Grating is lightweight, corrosion resistant, non-sparking and has an unmatched strength-to-weight ratio. Manufactured from ASTM B221, 6063 or 6061 alloy, aluminum grating is available in three distinct products, type "ADT" Dovetail Pressure Locked, type "SG" Swaged Rectangular Bar, and type "SGI" Swaged "I" Bar. All three products are available with bearing bar spacing ranging from 19/16" (1-3/16") to 7/16" on center and with cross bars at either 4" or 2" on center.

Rectangular bar products are manufactured with standard plain or optional serrated walking surfaces and "I" bar products are manufactured with a standard skid-resistant striated walking surface. Aluminum products are typically shipped "mill finish" with no additional treatment. For architectural applications or highly corrosive environments, supplemental anodizing, chemical cleaning or powder coat finishes are available. The load tables on pages 17-22 provide detailed specification information relating to all three aluminum products.

Type "ADT" Aluminum Dovetail Pressure Locked Grating

Type "ADT" aluminum gratings have rectangular cross bars that are slotted to fit into pre-punched bearing bars which are assembled and permanently connected under intense hydraulic pressure. In addition to being one of the most aesthetically appealing floor gratings with its clean uniform lines, the interlocking design provides excellent lateral stability and axial load distribution. The multiple combinations of bearing bar / cross bar sizes and spacing on type "ADT" gratings make them popular for architectural applications such as sun shades, grills, soffits, fencing and infill panels with a deeper cross bar serving as a distinct architectural accent.

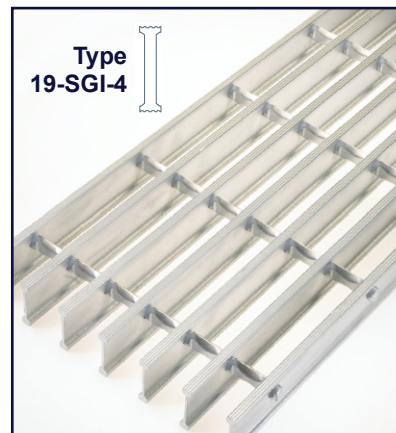
Type "ADT" gratings are available in close mesh ADA conforming spacings. Type 7-ADT-4 with 3/16" thick bearing bars provides a net 1/4" clear opening between the bearing bars. This narrow opening is often preferred in public areas where concerns of drainage and the presence of high heeled shoes converge.



Type
19-SG-4

Type "SG" Aluminum Grating

The most widely used and economical aluminum grating, type "SG" rectangular bar provides clean, crisp lines and the cross bar is fully locked within the bearing bar, slightly below the top surface.



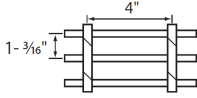
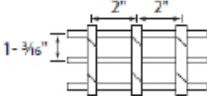
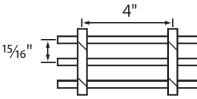
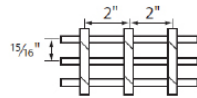
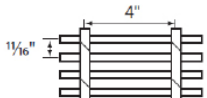
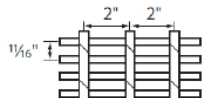
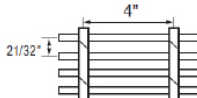
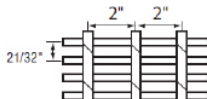
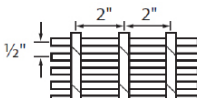
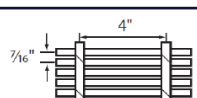
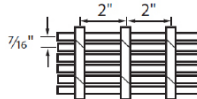
Type
19-SGI-4

Type "SGI" Aluminum Grating

Manufactured with a lighter "I" shaped extruded bearing bar, type "SGI" aluminum grating carries the same load as 3/16" thick rectangular bar type "SG" aluminum grating, but weighs slightly less per square foot. Additionally, the striated top and bottom flanges of the "I" bar provide enhanced skid resistance without the cost of serration.

Aluminum Bar Grating

Aluminum Grating Table of Spacings

Part No.	Spacing	Open Area *	
19-ADT-4 19-SG-4 19-SGI-4		78%	Bearing bars spaced at 1-3/16" on center and cross bars at 4" on center. The workhorse of industrial flooring popular for platforms, catwalks, mezzanines and stairways.
19-ADT-2 19-SG-2 19-SGI-2		73%	Bearing bars spaced at 1-3/16" on center and cross bars at 2" on center. Excellent for short spans and applications where small wheeled carts continuously cross the grating surface.
15-ADT-4 15-SG-4 15-SGI-4		75%	Bearing bars spaced at 15/16" on center and cross bars at 4" on center. More than 26% stronger than similar "19" spaced gratings and provides additional flooring surface.
15-ADT-2 15-SG-2 15-SGI-2		69%	Bearing bars spaced at 15/16" on center and close spaced cross bars at 2" on center. Provides the advantage of closer spaced bearing bars and cross bars.
11-SG-4 11-SGI-4		68%	Due to NAAMM allowable material and manufacturing tolerances, Interstate Gratings offers IGtru™ with bearing bars spaced at 21/32" on center, with 3/16" thick bearing bars to ensure compliance with the spacing requirements of the Americans with Disabilities Act. For ADA installations, specify that the bearing bars span perpendicular to the normal flow of traffic.
11-SG-2 11-SGI-2		63%	
 IGtru™ 11-ADT-4		66%	
 IGtru™ 11-ADT-2		61%	
 8-ADT-4 8-SG-4 8-SGI-4		58%	The bar spacings on 8-4 and 8-2 gratings comply with ADA spacing requirements. In addition to pedestrian applications, these products are popular for material handling platforms and mezzanines subject to continuous cart and dolly traffic.
 8-ADT-2 8-SG-2 8-SGI-2		54%	
 7-ADT-4 7-SG-4 7-SGI-4		53%	The bar spacings on 7-4 and 7-2 gratings comply with ADA spacing requirements and are popular for applications in the public way. When specified with 3/16" thick bearing bars, 7-4 and 7-2 gratings have a net 1/4" clear opening between the bearing bars and often reject intrusion by high-heeled shoes.
 7-ADT-2 7-SG-2 7-SGI-2		49%	

*Percentage of open area is based upon 3/16" thick bearing bars and .275 cross bars. Contact Interstate Gratings if exact open area calculation is required for alternative bearing bar thicknesses or cross bar sizes

How to Specify Aluminum Bar Grating

- Select type of grating
 - "ADT" for Aluminum Dovetail Pressure Locked Grating
 - "SG" for Swaged Rectangular Bar Grating
 - "SGI" for Swaged "I-Bar" Grating
- Select bar spacing from table above
- Select bearing bar size (consult load tables on **pages 17-22** considering service loads and clear spans)
- Specify Plain or Serrated surface
- Specify banding or additional trim required
- Specify finish
 - Mill finish (no finish)
 - Anodized (clear, bronze, other)
 - Powder coating
 - Other
- Specify fasteners (if required) – see **page 42**

Aluminum Bar Grating

19 Space Load Table

Use this table when evaluating spans and loads for the following types of aluminum grating:
19-ADT-4, 19-ADT-2, 19-SG-4, 19-SG-2, 19-SGI-4, 19-SGI-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span																
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0					
3/4x3/16	1.9	2'-11"	U	355	227	158	116	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 12,000 psi.												
3/4" I-Bar	1.7		D	0.192	0.300	0.432	0.588													
			C	355	284	237	203													
1 x 1/8	1.7	3'-3"	D	0.154	0.240	0.346	0.470	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.												
			U	421	270	187	138													105
			D	0.144	0.225	0.324	0.441													0.576
			C	421	337	281	241													211
1 x 3/16	2.5	3'-8"	D	0.115	0.180	0.259	0.353	0.461	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.											
			U	632	404	281	206	158								125				
			D	0.144	0.225	0.324	0.441	0.576								0.729				
1" I-Bar	2.0	3'-11"	C	632	505	421	361	316	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/foot of grating width D = Deflection in inches											
			D	0.115	0.180	0.259	0.353	0.461								0.583				
			U	658	421	292	215	165								130				
1-1/4 x 1/8	2.1	4'-4"	D	0.115	0.180	0.259	0.353	0.461												
			C	658	526	439	376	329								292				
			D	0.092	0.144	0.207	0.282	0.369								0.467				
			U	987	632	439	322	247								195	158	131	110	
1-1/4 x 3/16	3.1	4'-5"	D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037								
			C	987	790	658	564	493	395	359	329									
			D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829								
1-1/2 x 1/8	2.5	4'-11"	U	947	606	421	309	237	187	152	125	105	90	77	59					
			D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536					
			C	947	758	632	541	474	379	345	316	292	271	237						
			D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229					
1-1/2 x 3/16	3.7	5'-0"	U	1,421	910	632	464	355	281	227	188	158	135	116	89					
			D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536					
			C	1,421	1,137	947	812	711	632	568	517	474	437	406	355					
1-1/2" I-Bar	2.7	5'-6"	D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229					
			U	1,290	825	573	421	322	255	206	171	143	122	105	81					
			D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317					
			C	1,290	1,032	860	737	645	573	516	469	430	397	368	322					
1-3/4 x 1/8	2.9	5'-8"	D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053					
			U	1,934	1,238	860	632	484	382	310	256	215	183	158	121					
			D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317					
1-3/4" I-Bar	3.1	5'-11"	C	1,934	1,547	1,290	1,105	967	860	774	703	645	595	553	484					
			D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053					
			U	1,684	1,078	749	550	421	333	270	223	187	160	138	105					
2 x 1/8	3.3	6'-1"	D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152					
			C	1,684	1,347	1,123	962	842	749	674	612	561	518	481	421					
			D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922					
			U	2,526	1,617	1,123	825	632	499	404	334	281	239	206	158					
2 x 3/16	4.8	6'-8"	D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152					
			C	2,526	2,021	1,684	1,444	1,263	1,123	1,011	919	842	777	722	632					
			D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922					
2-1/4 x 3/16	5.4	7'-3"	U	3,197	2,046	1,421	1,044	799	632	512	423	355	303	261	200					
			D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	1.024					
			C	3,197	2,558	2,132	1,827	1,599	1,421	1,279	1,163	1,066	984	914	799					
			D	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.819					
2-1/2 x 3/16	5.9	8'-0"	U	3,947	2,526	1,754	1,289	987	780	632	522	439	374	322	247					
			D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922					
			C	3,947	3,158	2,632	2,256	1,974	1,754	1,579	1,435	1,316	1,215	1,128	987					
2-1/2" I-Bar	4.2		D	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.737					

* Weight per square foot based upon 19-SG-4 grating. Add .30 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

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

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values. For 1/4" I-bar add 1/16" to stated values. Add 1/4" to all dimensions for extended cross bars on all aluminum products.

■ Indicates stock panel widths.

Aluminum Bar Grating

15 Space Load Table

Use this table when evaluating spans and loads for the following types of aluminum grating:
15-ADT-4, 15-ADT-2, 15-SG-4, 15-SG-2, 15-SGI-4, 15-SGI-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span											
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0
3/4 x 3/16	2.4	3'-1"	U	450	288	200	147	113	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 12,000 psi.						
3/4" I-Bar	2.0		D	0.192	0.300	0.432	0.588	0.768							
			C	450	360	300	257	225							
			D	0.154	0.240	0.346	0.470	0.614							
1 x 1/8	2.1	3'-6"	U	533	341	237	174	133	105	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances. Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf. U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/foot of grating width D = Deflection in inches					
			D	0.144	0.225	0.324	0.441	0.576	0.729						
			C	533	427	356	305	267	237						
			D	0.115	0.180	0.259	0.353	0.461	0.583						
1 x 3/16	3.1	3'-10"	U	800	512	356	261	200	158						
1" I-Bar	2.5		D	0.144	0.225	0.324	0.441	0.576	0.729						
			C	800	640	533	457	400	356						
			D	0.115	0.180	0.259	0.353	0.461	0.583						
1-1/4 x 1/8	2.6	4'-1"	U	833	533	370	272	208	165	133					
			D	0.115	0.180	0.259	0.353	0.461	0.583	0.720					
			C	833	667	556	476	417	370	333					
			D	0.092	0.144	0.207	0.282	0.369	0.467	0.576					
1-1/4 x 3/16	3.8	4'-7"	U	1,250	800	556	408	313	247	200	165	139			
1-1/4" I-Bar	2.9		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037			
			C	1,250	1,000	833	714	625	556	500	455	417			
			D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829			
1-1/2 x 1/8	3.1	4'-8"	U	1,200	768	533	392	300	237	192	159	133	114	98	75
			D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536
			C	1,200	960	800	686	600	533	480	436	400	369	343	300
			D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229
1-1/2 x 3/16	4.5	5'-3"	U	1,800	1,152	800	588	450	356	288	238	200	170	147	113
1-1/2" I-Bar	3.4		D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536
			C	1,800	1,440	1,200	1,029	900	800	720	655	600	554	514	450
			D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229
1-3/4 x 1/8	3.6	5'-4"	U	1,633	1,045	726	533	408	323	261	216	182	155	133	102
			D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317
			C	1,633	1,307	1,089	933	817	726	653	594	544	397	467	408
			D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053
1-3/4 x 3/16	5.3	5'-10"	U	2,450	1,568	1,089	800	613	484	392	324	272	232	200	153
1-3/4" I-Bar	3.8		D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317
			C	2,450	1,960	1,633	1,400	1,225	1,089	980	891	817	754	700	613
			D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053
2 x 1/8	4.1	5'-10"	U	2,133	1,365	948	697	533	421	341	282	237	202	174	133
			D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152
			C	2,133	1,707	1,422	1,219	1,067	948	853	776	711	656	610	533
			D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922
2 x 3/16	6.0	6'-6"	U	3,200	2,048	1,422	1,045	800	632	512	423	356	303	261	200
2" I-Bar	4.3		D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152
			C	3,200	2,560	2,133	1,829	1,600	1,422	1,280	1,164	1,067	985	914	800
			D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922
2-1/4 x 3/16	6.7	7'-1"	U	4,050	2,592	1,800	1,322	1,013	800	648	536	450	383	331	253
2-1/4" I-Bar	4.7		D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	1.024
			C	4,050	3,240	2,700	2,314	2,025	1,800	1,620	1,473	1,350	1,246	1,157	1,013
			D	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.819
2-1/2 x 3/16	7.4	7'-8"	U	5,000	3,200	2,222	1,633	1,250	988	800	661	556	473	408	313
2-1/2" I-Bar	5.2		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922
			C	5,000	4,000	3,333	2,857	2,500	2,222	2,000	1,818	1,667	1,539	1,429	1,250
			D	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.737

* Weight per square foot based upon 15-SG-4 grating. Add .60 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.
The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 1-1/8"	3 2-1/16"	4 3"	5 3-15/16"	6 4-7/8"	7 5-13/16"	8 6-3/4"	9 7-11/16"	10 8-5/8"	11 9-9/16"	12 10-1/2"	13 11-7/16"	14 12-3/8"	15 13-5/16"	16 14-1/4"
No. of Bearing Bars Panel Width	17 15-3/16"	18 16-1/8"	19 17-1/16"	20 18"	21 18-15/16"	22 19-7/8"	23 20-13/16"	24 21-3/4"	25 22-11/16"	26 23-5/8"	27 24-9/16"	28 25-1/2"	29 26-7/16"	30 27-3/8"	31 28-5/16"
No. of Bearing Bars Panel Width	32 29-1/4"	33 30-3/16"	34 31-1/8"	35 32-1/16"	36 33"	37 33-15/16"	38 34-7/8"	39 35-13/16"							

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values. For 1/4" I-bar add 1/16" to stated values. Add 1/4" to all dimensions for extended cross bars on all aluminum products.

■ Indicates stock panel widths.

Aluminum Bar Grating

11 Space Load Table

Use this table when evaluating spans and loads for the following types of aluminum grating:
11-SG-4, 11-SG-2, 11-SGI-4, 11-SGI-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span											
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0
3/4 x 3/16	3.2	3'-4"	U	614	393	273	200	153	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 12,000 psi.						
3/4" I-Bar	2.7		D	0.192	0.300	0.432	0.588	0.768							
			C	614	491	409	351	307							
		D	0.154	0.240	0.346	0.470	0.614	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.							
1 x 1/8	2.8	U	727	466	323	238	182								144
		D	0.144	0.225	0.324	0.441	0.576								0.729
		C	727	582	485	416	364	323	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.						
		D	0.115	0.180	0.259	0.353	0.461	0.583							
1 x 3/16	4.1	4'-2"	U	1,091	698	485	356	273							
1" I-Bar	3.2		D	0.144	0.225	0.324	0.441	0.576	0.729	0.900					
			C	1,091	873	727	623	546	485	436					
		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720						
1-1/4 x 1/8	3.5	4'-5"	U	1,136	727	505	371	284	225	182					
			D	0.115	0.180	0.259	0.353	0.461	0.583	0.720					
		C	1,136	909	758	649	568	505	455						
		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576						
1-1/4 x 3/16	5.1	4'-11"	U	1,705	1,091	758	557	426	337	273	225	189			
1-1/4" I-Bar	3.8		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037			
			C	1,705	1,364	1,136	974	852	758	682	620	568			
		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829				
1-1/2 x 1/8	4.1	5'-1"	U	1,636	1,047	727	534	409	323	262	216	182	155	134	102
			D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536
		C	1,636	1,309	1,091	935	818	727	655	595	546	504	468	409	
		D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229	
1-1/2 x 3/16	6.1	5'-8"	U	2,455	1,571	1,091	802	614	485	393	325	273	232	200	153
1-1/2" I-Bar	4.4		D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536
			C	2,455	1,964	1,636	1,403	1,227	1,091	982	893	818	755	701	614
		D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229	
1-3/4 x 1/8	4.8	5'-9"	U	2,227	1,426	990	727	557	440	356	295	248	211	182	139
			D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317
		C	2,227	1,782	1,485	1,273	1,114	990	891	810	742	685	636	557	
		D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053	
1-3/4 x 3/16	7.1	6'-4"	U	3,341	2,138	1,485	1,091	835	660	535	442	371	316	273	209
1-3/4" I-Bar	5.1		D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317
			C	3,341	2,673	2,227	1,909	1,671	1,485	1,336	1,215	1,114	1,028	955	835
		D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053	
2 x 1/8	5.4	6'-4"	U	2,909	1,862	1,293	950	727	575	466	385	323	275	238	182
			D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152
		C	2,909	2,327	1,939	1,662	1,455	1,293	1,164	1,058	970	895	831	727	
		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922	
2 x 3/16	8.0	7'-0"	U	4,364	2,793	1,939	1,425	1,091	862	698	577	485	413	356	273
2" I-Bar	5.7		D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152
			C	4,364	3,491	2,909	2,494	2,182	1,939	1,746	1,587	1,455	1,343	1,247	1,091
		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922	
2-1/4 x 3/16	9.0	7'-8"	U	5,523	3,535	2,455	1,803	1,381	1,091	884	730	614	523	451	345
2-1/4" I-Bar	6.3		D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	1,024
			C	5,523	4,418	3,682	3,156	2,761	2,455	2,209	2,008	1,841	1,699	1,578	1,381
		D	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.819	
2-1/2 x 3/16	10.0	8'-4"	U	6,818	4,364	3,030	2,226	1,705	1,347	1,091	902	758	646	557	426
2-1/2" I-Bar	6.9		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922
			C	6,818	5,455	4,546	3,896	3,409	3,030	2,727	2,479	2,273	2,098	1,948	1,705
		D	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.737	

* Weight per square foot based upon 11-SG-4 grating. Add .30 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection $\leq 1/4$ inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 7/8"	3 1-9/16"	4 2-1/4"	5 2-15/16"	6 3-5/8"	7 4-5/16"	8 5"	9 5-11/16"	10 6-3/8"	11 7-1/16"	12 7-3/4"	13 8-7/16"	14 9-1/8"	15 9-13/16"	16 10-1/2"
No. of Bearing Bars Panel Width	17 11-3/16"	18 11-7/8"	19 12-9/16"	20 13-1/4"	21 13-15/16"	22 14-5/8"	23 15-5/16"	24 16"	25 16-11/16"	26 17-3/8"	27 18-1/16"	28 18-3/4"	29 19-7/16"	30 20-1/8"	31 20-13/16"
No. of Bearing Bars Panel Width	32 21-1/2"	33 22-3/16"	34 22-7/8"	35 23-9/16"	36 24-1/4"	37 24-15/16"	38 25-5/8"	39 26-5/16"	40 27"	41 27-11/16"	42 28-3/8"	43 29-1/16"	44 29-3/4"	45 30-7/16"	46 31-1/8"
No. of Bearing Bars Panel Width	47 31-13/16"	48 32-1/2"	49 33-3/16"	50 33-7/8"	51 34-9/16"	52 35-1/4"	53 35-15/16"								

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values. For 1/4" I-bar add 1/16" to stated values. Add 1/4" to all dimensions for extended cross bars on all aluminum products

■ Indicates stock panel widths.

Aluminum Bar Grating

IGtru™ 11 Space Load Table

Use this table when evaluating spans and loads for the following types of aluminum grating:
11-ADT-4 and 11-ADT-2

IGtru™ is manufactured to NAAMM standards and is fully ADA compliant with a minimum 3/16" bearing bar thickness

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
	3/4 x 3/16	3.2	3'-4"	U D C D	614 0.192 614 0.154	393 0.300 491 0.240	273 0.432 409 0.346	200 0.588 351 0.470	153 0.768 307 0.614	All loads and deflections are theorhetical and based upon the gross sections of the bearing bars, using a fiber stress of 12,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.							
	1 x 1/8	2.8	3'-9"	U D C D	727 0.144 727 0.115	465 0.225 582 0.180	323 0.324 485 0.259	237 0.441 416 0.353	182 0.576 364 0.461								
	1 x 3/16	4.1	4'-2"	U D C D	1,091 0.144 1,091 0.115	698 0.255 873 0.180	485 0.324 727 0.259	356 0.441 623 0.353	273 0.576 545 0.461	215 0.729 485 0.583	175 0.900 436 0.720	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf. U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. D = Deflection in inches					
	1-1/4 x 1/8	3.5	4'-5"	U D C D	1,136 0.115 1,136 0.092	727 0.180 909 0.144	505 0.259 758 0.207	371 0.353 649 0.282	284 0.461 568 0.369	224 0.583 505 0.467	182 0.720 455 0.576						
	1-1/4 x 3/16	5.1	4'-11"	U D C D	1,750 0.115 1,705 0.092	1,091 0.180 1,364 0.144	758 0.259 1,136 0.207	557 0.353 974 0.282	426 0.461 852 0.369	337 0.583 758 0.467	273 0.720 682 0.576	225 0.871 620 0.697	189 1.037 568 0.829				
	1-1/2 x 1/8	4.1	5'-1"	U D C D	1,636 0.096 1,636 0.077	1,047 0.150 1,309 0.120	727 0.216 1,091 0.173	534 0.294 935 0.235	409 0.384 818 0.307	323 0.486 727 0.389	262 0.600 655 0.480	216 0.726 595 0.581	182 0.864 545 0.691				
	1-1/2 x 3/16	6.1	5'-8"	U D C D	2,455 0.096 2,455 0.077	1,571 0.150 1,964 0.120	1,091 0.216 1,636 0.173	801 0.294 1,403 0.235	614 0.384 1,227 0.307	485 0.486 1,091 0.389	393 0.600 982 0.480	325 0.726 893 0.581	273 0.864 818 0.691	232 1.014 701 0.811	200 1.176 614 0.941	153 1.536 614 1.229	121 1.944 545 1.555
	1-3/4 x 1/8	4.8	5'-9"	U D C D	2,227 0.082 2,227 0.066	1,425 0.129 1,782 0.103	990 0.185 1,485 0.148	727 0.252 1,273 0.202	557 0.329 1,114 0.263	440 0.417 990 0.333	356 0.514 891 0.411	295 0.622 810 0.498	247 0.741 742 0.592	211 0.869 685 0.695	182 1.008 636 0.806	139 1.317 557 1.053	110 1.666 495 1.333
	1-3/4 x 3/16	7.1	6'-4"	U D C D	3,341 0.082 3,341 0.066	2,138 0.129 2,673 0.103	1,485 0.185 2,227 0.148	1,091 0.252 1,909 0.202	835 0.329 1,670 0.263	660 0.417 1,485 0.333	535 0.514 1,336 0.411	442 0.622 1,215 0.498	371 0.741 1,114 0.592	316 0.869 1,028 0.695	273 1.008 955 0.806	209 1.317 835 1.053	165 1.666 742 1.333
	2 x 1/8	5.4	6'-4"	U D C D	2,909 0.072 2,909 0.058	1,862 0.113 2,327 0.090	1,293 0.162 1,939 0.130	950 0.221 1,662 0.176	727 0.288 1,455 0.230	575 0.365 1,293 0.292	465 0.450 1,164 0.360	385 0.545 1,058 0.436	323 0.648 970 0.518	275 0.761 895 0.608	237 0.882 831 0.706	182 1.152 727 0.922	144 1.458 646 1.166
	2 x 3/16	8.0	7'-0"	U D C D	4,364 0.072 4,364 0.058	2,793 0.113 3,491 0.090	1,939 0.162 2,909 0.130	1,425 0.221 2,494 0.176	1,091 0.288 1,939 0.230	862 0.365 1,745 0.292	698 0.450 1,587 0.360	577 0.545 1,587 0.436	485 0.648 1,455 0.518	413 0.761 1,343 0.608	356 0.882 1,247 0.706	273 1.152 1,091 0.922	215 1.458 970 1.166
	2-1/4 x 3/16	9.0	7'-8"	U D C D	5,523 0.064 5,523 0.051	3,535 0.100 4,418 0.080	2,455 0.144 3,682 0.115	1,803 0.196 3,156 0.157	1,381 0.256 2,761 0.205	1,091 0.324 2,455 0.259	884 0.400 2,209 0.320	730 0.484 2,008 0.387	614 0.576 1,841 0.461	523 0.676 1,699 0.541	451 0.784 1,578 0.627	345 1.024 1,381 0.819	273 1.296 1,227 1.037
	2-1/2 x 3/16	10.0	8'-4"	U D C D	6,818 0.058 6,818 0.046	4,364 0.090 5,455 0.072	3,030 0.130 4,545 0.104	2,226 0.176 3,896 0.141	1,705 0.230 3,409 0.184	1,347 0.292 3,030 0.233	1,091 0.360 2,727 0.288	902 0.436 2,479 0.348	758 0.518 2,273 0.415	646 0.608 2,098 0.487	557 0.706 1,948 0.564	426 0.922 1,705 0.737	337 1.166 1,515 0.933

* Weight per square foot based upon IGtru™ 11-W-4 grating. Add .60 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 7/8"	3 1-1/2"	4 2-3/16"	5 2-13/16"	6 3-1/2"	7 4-1/8"	8 4-13/16"	9 5-7/16"	10 6-1/8"	11 6-3/4"	12 7-7/16"	13 8-1/16"	14 8-3/4"	15 9-3/8"	16 10-1/16"
No. of Bearing Bars Panel Width	17 10-11/16"	18 11-3/8"	19 12"	20 12-11/16"	21 13-5/16"	22 14"	23 14-5/8"	24 15-5/16"	25 15-15/16"	26 16-5/8"	27 17-1/4"	28 17-15/16"	29 18-9/16"	30 19-1/4"	31 19-7/8"
No. of Bearing Bars Panel Width	32 20-9/16"	33 21-3/16"	34 21-7/8"	35 22-1/2"	36 23-3/16"	37 23-13/16"	38 24-1/2"	39 25-1/8"	40 25-13/16"	41 26-7/16"	42 27-1/8"	43 27-3/4"	44 28-7/16"	45 29-1/16"	46 29-3/4"
No. of Bearing Bars Panel Width	47 30-3/8"	48 31-1/16"	49 31-11/16"	50 32-3/8"	51 33"	52 33-11/16"	53 34-5/16"	54 35"	55 35-5/8"	56 36-5/16"					

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.

■ Indicates stock panel widths.

Aluminum Bar Grating

8 Space Load Table

Use this table when evaluating spans and loads for the following types of aluminum grating:
8-ADT-4, 8-ADT-2, 8-SG-4, 8-SG-2, 8-SGI-4, 8-SGI-2

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span																	
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0						
	3/4 x 3/16	4.3	3'-7"	U	844	540	375	276	211	167	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 12,000 psi.											
	3/4" I-Bar	3.4		D	0.192	0.300	0.432	0.588	0.768	0.972												
	1 x 1/8	3.8	4'-1"	D	844	675	563	482	422	375	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.											
				C	0.154	0.240	0.346	0.470	0.614	0.778												
				U	1,000	640	444	327	250	198							160					
				D	0.144	0.225	0.324	0.441	0.576	0.729							0.900					
	1 x 3/16	5.6	4'-6"	D	1,000	800	667	571	500	444	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.											
				C	1,000	800	667	571	500	444							1,089					
				U	1,500	960	667	490	375	296							240	198				
				D	0.115	0.180	0.259	0.353	0.461	0.583							0.720	0.871				
	1" I-Bar	4.3	4'-10"	D	1,500	1,200	1,000	857	750	667	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	1,500	1,200	1,000	857	750	667							900	871				
				U	1,563	1,000	694	510	391	309							250	207				
				D	0.115	0.180	0.259	0.353	0.461	0.583							0.720	0.871				
	1-1/4 x 1/8	4.7	4'-10"	D	1,563	1,250	1,042	893	781	694	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	1,563	1,250	1,042	893	781	694							900	871				
				U	2,344	1,500	1,042	765	586	463							375	310	260	222		
				D	0.092	0.144	0.207	0.282	0.369	0.467							0.576	0.697	0.871	0.973		
	1-1/4 x 3/16	7.0	5'-4"	D	2,344	1,875	1,563	1,339	1,172	1,042	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	2,344	1,875	1,563	1,339	1,172	1,042							938	852	781	721		
				U	2,344	1,500	1,042	765	586	463							375	310	260	222		
				D	0.092	0.144	0.207	0.282	0.369	0.467							0.576	0.697	0.871	0.973		
	1-1/2 x 1/8	5.6	5'-6"	D	2,250	1,800	1,500	1,286	1,125	1,000	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	2,250	1,800	1,500	1,286	1,125	1,000							900	818	750	691		
				U	2,250	1,440	1,000	735	563	444							360	298	250	213	184	141
				D	0.077	0.120	0.173	0.235	0.307	0.389							0.480	0.581	0.726	0.864	1.014	1.176
	1-1/2 x 3/16	8.3	6'-1"	D	3,375	2,700	2,250	1,929	1,688	1,500	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	3,375	2,700	2,250	1,929	1,688	1,500							1,227	1,125	1,039	964	844	
				U	3,375	2,160	1,500	1,102	844	667							540	446	375	320	276	211
				D	0.077	0.120	0.173	0.235	0.307	0.389							0.480	0.581	0.726	0.864	1.014	1.176
	1-1/2" I-Bar	6.0	6'-1"	D	3,375	2,700	2,250	1,929	1,688	1,500	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	3,375	2,700	2,250	1,929	1,688	1,500							1,227	1,125	1,039	964	844	
				U	3,375	2,160	1,500	1,102	844	667							540	446	375	320	276	211
				D	0.077	0.120	0.173	0.235	0.307	0.389							0.480	0.581	0.726	0.864	1.014	1.176
	1-3/4 x 1/8	6.5	6'-2"	D	3,063	2,450	2,042	1,750	1,531	1,361	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	3,063	2,450	2,042	1,750	1,531	1,361							1,225	1,114	1,021	942	875	766
				U	3,063	1,960	1,361	1,000	766	605							490	405	340	290	250	191
				D	0.066	0.103	0.148	0.202	0.263	0.333							0.411	0.498	0.592	0.695	0.806	1.053
	1-3/4 x 3/16	9.6	6'-10"	D	4,594	3,675	3,063	2,625	2,297	2,042	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	4,594	3,675	3,063	2,625	2,297	2,042							1,671	1,531	1,414	1,313	1,148	
				U	4,594	2,940	2,042	1,500	1,148	907							735	607	510	435	375	287
				D	0.066	0.103	0.148	0.202	0.263	0.333							0.411	0.498	0.592	0.695	0.806	1.053
	1-3/4" I-Bar	6.8	6'-10"	D	4,594	3,675	3,063	2,625	2,297	2,042	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	4,594	3,675	3,063	2,625	2,297	2,042							1,671	1,531	1,414	1,313	1,148	
				U	4,594	2,940	2,042	1,500	1,148	907							735	607	510	435	375	287
				D	0.066	0.103	0.148	0.202	0.263	0.333							0.411	0.498	0.592	0.695	0.806	1.053
	2 x 1/8	7.4	6'-10"	D	4,000	3,200	2,667	2,286	2,000	1,778	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	4,000	3,200	2,667	2,286	2,000	1,778							1,600	1,455	1,333	1,231	1,143	1,000
				U	4,000	2,560	1,778	1,306	1,000	790							640	529	444	379	327	250
				D	0.058	0.090	0.130	0.176	0.230	0.292							0.360	0.436	0.518	0.608	0.706	0.922
	2 x 3/16	11.0	7'-7"	D	6,000	4,800	4,000	3,429	3,000	2,667	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	6,000	4,800	4,000	3,429	3,000	2,667							2,400	2,182	2,000	1,846	1,714	1,500
				U	6,000	3,840	2,667	1,959	1,500	1,185							960	793	667	568	490	375
				D	0.058	0.090	0.130	0.176	0.230	0.292							0.360	0.436	0.518	0.608	0.706	0.922
	2" I-Bar	7.7	7'-7"	D	6,000	4,800	4,000	3,429	3,000	2,667	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	6,000	4,800	4,000	3,429	3,000	2,667							2,400	2,182	2,000	1,846	1,714	1,500
				U	6,000	3,840	2,667	1,959	1,500	1,185							960	793	667	568	490	375
				D	0.058	0.090	0.130	0.176	0.230	0.292							0.360	0.436	0.518	0.608	0.706	0.922
	2" x 3/16	12.3	8'-4"	D	7,594	6,075	5,063	4,339	3,797	3,375	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	7,594	6,075	5,063	4,339	3,797	3,375							3,038	2,761	2,531	2,337	2,170	1,898
				U	7,594	4,860	3,375	2,480	1,898	1,500							1,215	1,004	844	719	620	475
				D	0.064	0.100	0.144	0.196	0.256	0.324							0.400	0.484	0.576	0.676	0.784	1.024
	2-1/4" I-Bar	8.5	8'-4"	D	7,594	6,075	5,063	4,339	3,797	3,375	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	7,594	6,075	5,063	4,339	3,797	3,375							3,038	2,761	2,531	2,337	2,170	1,898
				U	7,594	4,860	3,375	2,480	1,898	1,500							1,215	1,004	844	719	620	475
				D	0.051	0.080	0.115	0.157	0.205	0.259							0.320	0.387	0.461	0.541	0.627	0.819
	2-1/2 x 3/16	13.7	9'-0"	D	9,375	7,500	6,250	5,357	4,688	4,167	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	9,375	7,500	6,250	5,357	4,688	4,167							3,750	3,409	3,125	2,885	2,679	2,344
				U	9,375	6,000	4,167	3,061	2,344	1,852							1,500	1,240	1,042	888	765	586
				D	0.046	0.072	0.104	0.141	0.184	0.233							0.288	0.348	0.415	0.487	0.564	0.737
	2-1/2" I-Bar	9.5	9'-0"	D	9,375	7,500	6,250	5,357	4,688	4,167	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches											
				C	9,375	7,500	6,250	5,357	4,688	4,167							3,750	3,409	3,125	2,885	2,679	2,344
				U	9,375	6,000	4,167	3,061	2,344	1,852							1,500	1,240	1,042	888	765	586
				D	0.046	0.072	0.104	0.141	0.184	0.233							0.288	0.348	0.415	0.487	0.564	0.737

* Weight per square foot based upon 8-SG-4 grating. Add .30 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 11/16"	3 1-3/16"	4 1-11/16"	5 2-3/16"	6 2-11/16"	7 3-3/16"	8 3-11/16"	9 4-3/16"	10 4-11/16"	11 5-3/16"	12 5-11/16"	13 6-3/16"	14 6-11/16"	15 7-3/16"	16 7-11/16"
No. of Bearing Bars Panel Width	17 8-3/16"	18 8-11/16"	19 9-3/16"	20 9-11/16"	21 10-3/16"	22 10-11/16"	23 11-3/16"	24 11-11/16"	25 12-3/16"	26 12-11/16"	27 13-3/16"	28 13-11/16"	29 14-3/16"	30 14-11/16"	31 15-3/16"
No. of Bearing Bars Panel Width	32 15-11/16"	33 16-3/16"	34 16-11/16"	35 17-3/16"	36 17-11/16"	37 18-3/16"	38 18-11/16"	39 19-3/16"	40 19-11/16"	41 20-3/16"	42 20-11/16"	43 21-3/16"	44 21-11/16"	45 22-3/16"	46 22-11/16"
No. of Bearing Bars Panel Width	47 23-3/16"	48 23-11/16"	49 24-3/16"	50 24-11/16"	51 25-3/16"	52 25-11/16"	53 26-3/16"	54 26-11/16"	55 27-3/16"	56 27-11/16"	57 28-3/16"	58 28-11/16"	59 29-3/16"	60 29-11/16"	61 30-3/16"
No. of Bearing Bars Panel Width	62 30-11/16"	63 31-3/16"	64 31-11/16"	65 32-3/16"	66 32-11/16"	67 33-3/16"	68 33-11/16"	69 34-3/16"	70 34-11/16"	71 35-3/16"	72 35-11/16"				

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values. For 1/4" I-bar add 1/16" to stated values. Add 1/4" to all dimensions for extended cross bars on all aluminum products.

 Indicates stock panel widths.

Aluminum Bar Grating

7 Space Load Table

Use this table when evaluating spans and loads for the following types of aluminum grating:
7-ADT-4, 7-ADT-2, 7-SG-4, 7-SG-2

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span											
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0
	3/4 x 3/16	4.8	3'-9"	U	964	617	429	315	241	191		All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 12,000 psi.				
	3/4" I-Bar	3.8		D	0.192	0.300	0.432	0.588	0.768	0.972						
				C	964	771	643	551	482	429						
				D	0.154	0.240	0.346	0.470	0.614	0.778						
	1 x 1/8	4.3	4'-2"	U	1,143	731	508	373	286	226	183	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.				
			D	0.144	0.225	0.324	0.441	0.576	0.729	0.900						
				C	1,143	914	762	653	571	508	457					
				D	0.115	0.180	0.259	0.353	0.461	0.583	0.720					
	1 x 3/16	6.3	4'-8"	U	1,714	1,097	762	560	429	339	274	227	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.			
				D	0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.089				
	1" I-Bar	4.8		C	1,714	1,371	1,143	980	857	762	686	623	U = Safe Uniform Load in pounds/sq. foot C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches			
			D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871					
	1-1/4 x 1/8	5.3	4'-11"	U	1,786	1,143	794	583	446	353	286	236				
			D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871					
				C	1,786	1,429	1,191	1,020	893	794	714	649				
				D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697				
	1-1/4 x 3/16	7.9	5'-6"	U	2,679	1,714	1,191	875	670	529	429	354	298	254		
				D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217		
	1-1/4" I-Bar	5.8		C	2,679	2,143	1,786	1,531	1,339	1,191	1,071	974	893	824		
			D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829	0.973			
	1-1/2 x 1/8	6.3	5'-8"	U	2,571	1,646	1,143	840	643	508	411	340	286	243	210	161
			D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536	
				C	2,571	2,057	1,714	1,469	1,286	1,143	1,029	935	857	791	735	643
				D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229
	1-1/2 x 3/16	9.4	6'-4"	U	3,857	2,469	1,714	1,260	964	762	617	510	429	365	315	241
				D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536
	1-1/2" I-Bar	6.8		C	3,857	3,086	2,571	2,204	1,929	1,714	1,543	1,403	1,286	1,187	1,102	964
			D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.229	
	1-3/4 x 1/8	7.4	6'-5"	U	3,500	2,240	1,556	1,143	875	691	560	463	389	331	286	219
			D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317	
				C	3,500	2,800	2,333	2,000	1,750	1,556	1,400	1,273	1,167	1,077	1,000	875
				D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053
	1-3/4 x 3/16	10.9	7'-1"	U	5,250	3,360	2,333	1,714	1,313	1,037	840	694	583	497	429	328
				D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317
	1-3/4" I-Bar	7.7		C	5,250	4,200	3,500	3,000	2,625	2,333	2,100	1,909	1,750	1,615	1,500	1,313
			D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	1.053	
	2 x 1/8	8.4	7'-1"	U	4,571	2,926	2,032	1,493	1,143	903	731	605	508	433	373	286
			D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152	
				C	4,571	3,657	3,048	2,612	2,286	2,032	1,829	1,662	1,524	1,407	1,306	1,143
				D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922
	2 x 3/16	12.5	7'-10"	U	6,857	4,389	3,048	2,239	1,714	1,355	1,097	907	762	649	560	429
				D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152
	2" I-Bar	8.7		C	6,857	5,486	4,571	3,918	3,429	3,048	2,743	2,494	2,286	2,110	1,959	1,714
			D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922	
	2-1/4 x 3/16	14.0	8'-7"	U	8,679	5,554	3,857	2,834	2,170	1,714	1,389	1,148	964	822	709	542
				D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	1,024
	2-1/4" I-Bar	9.6		C	8,679	6,943	5,786	4,959	4,339	3,857	3,471	3,156	2,893	2,670	2,480	2,170
			D	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.819	
	2-1/2 x 3/16	15.5	9'-3"	U	10,714	6,857	4,762	3,499	2,679	2,116	1,714	1,417	1,191	1,014	875	670
				D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922
	2-1/2" I-Bar	10.7		C	10,714	8,571	7,143	6,122	5,357	4,762	4,286	3,896	3,571	3,297	3,061	2,679
			D	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.737	

* Weight per square foot based upon 7-SG-4 grating. Add .30 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 5/8"	3 1-1/16"	4 1-1/2"	5 1-15/16"	6 2-3/8"	7 2-13/16"	8 3-1/4"	9 3-11/16"	10 4-1/8"	11 4-9/16"	12 5"	13 5-7/16"	14 5-7/8"	15 6-5/16"	16 6-3/4"
No. of Bearing Bars Panel Width	17 7-3/16"	18 7-5/8"	19 8-1/16"	20 8-1/2"	21 8-15/16"	22 9-3/8"	23 9-13/16"	24 10-1/4"	25 10-11/16"	26 11-1/8"	27 11-9/16"	28 12"	29 12-7/16"	30 12-7/8"	31 13-5/16"
No. of Bearing Bars Panel Width	32 13-3/4"	33 14-3/16"	34 14-5/8"	35 15-1/16"	36 15-1/2"	37 15-15/16"	38 16-3/8"	39 16-13/16"	40 17-1/4"	41 17-11/16"	42 18-1/8"	43 18-9/16"	44 19"	45 19-7/16"	46 19-7/8"
No. of Bearing Bars Panel Width	47 20-5/16"	48 20-3/4"	49 21-3/16"	50 21-5/8"	51 22-1/16"	52 22-1/2"	53 22-15/16"	54 23-3/8"	55 23-13/16"	56 24-1/4"	57 24-11/16"	58 25-1/8"	59 25-9/16"	60 26"	61 26-7/16"
No. of Bearing Bars Panel Width	62 26-7/8"	63 27-5/16"	64 27-3/4"	65 28-3/16"	66 28-5/8"	67 29-1/16"	68 29-1/2"	69 29-15/16"	70 30-3/8"	71 30-13/16"	72 31-1/4"	73 31-11/16"	74 32-1/8"	75 32-9/16"	76 33"
No. of Bearing Bars Panel Width	77 33-7/16"	78 33-7/8"	79 34-5/16"	80 34-3/4"	81 35-3/16"	82 35-5/8"	83 36-1/16"								

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values. For 1/4" I-bar add 1/16" to stated values. Add 1/4" to all dimensions for extended cross bars on all aluminum products.

■ Indicates stock panel widths.

Aluminum Stair Treads

Aluminum Stair Treads

Aluminum grating stair treads are available fabricated to any size in type "ADT" aluminum dovetail pressure locked and types "SG" and "SGI" swage locked. Treads are manufactured with a defined visible nosing and pre-punched end carrier plates or angles, ready for bolting to the stair stringers.

Type 19-ADT-4
with Corrugated
Aluminum Nosing



Type 7-ADT-4
with Cast
Abrasive Nosing



Nosing Options



Corrugated Aluminum Nosing welded to grating and carrier plates/angles.

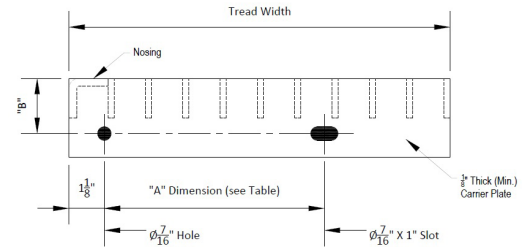


Cast Abrasive Nosing mechanically fastened to welded mounting angle.

Aluminum Carrier Plates & Angles

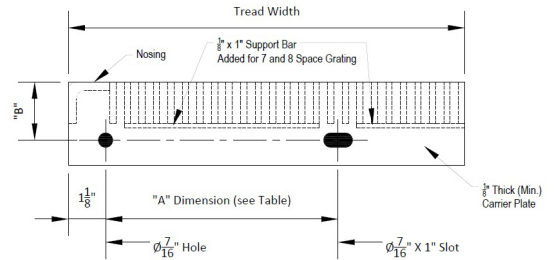
Aluminum Carrier Plates

Recommended for use with 19, 15 and 11 spaced gratings



Aluminum Carrier Angles

Recommended for use with 8 and 7 spaced gratings



Special Nosing

FRP Safety Yellow Nosing

Please contact us for special nosing requirements

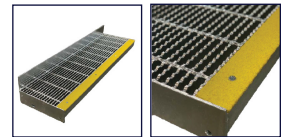


Table of Stair Tread Widths

19 Space			15 Space			IGtru™ / 11 Space			8 Space			7 Space		
Bearing Bars @ 1-3/16" O.C.			Bearing Bars @ 15/16" O.C.			Bearing Bars @ 21/32" O.C.*			Bearing Bars @ 1/2" O.C.			Bearing Bars @ 7/16" O.C.		
Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension
6-3/16"	5	2-1/2"	6-1/8"	6	2-1/2"	6-1/16"	8	2-1/2"	6-7/16"	11	2-1/2"	5-13/16"	11	2-1/2"
7-3/8"	6	4-1/2"	7-1/16"	7	4-1/2"	6-11/16"	9	4-1/2"	7-7/16"	13	4-1/2"	6-11/16"	13	2-1/2"
8-9/16"	7	4-1/2"	8"	8	4-1/2"	7-3/8"	10	4-1/2"	8-7/16"	15	4-1/2"	7-9/16"	15	4-1/2"
9-3/4"	8	7"	8-15/16"	9	4-1/2"	8"	11	4-1/2"	8-15/16"	16	4-1/2"	8-7/16"	17	4-1/2"
10-15/16"	9	7"	9-7/8"	10	7"	8-11/16"	12	4-1/2"	9-7/16"	17	7"	9-5/16"	19	7"
12-1/8"	10	7"	10-13/16"	11	7"	9-5/16"	13	7"	9-15/16"	18	7"	10-3/16"	21	7"
			11-3/4"	12	7"	10"	14	7"	10-7/16"	19	7"	10-5/8"	22	7"
			12-11/16"	13	7"	10-5/8"	15	7"	10-15/16"	20	7"	11-1/16"	23	7"
						11-5/16"	16	7"	11-7/16"	21	7"	11-1/2"	24	7"
						11-15/16"	17	7"	11-15/16"	22	7"	11-15/16"	25	7"

*Swage-Lock will be 11/16" O.C.

Recommended Maximum Stainless Steel Stair Tread Lengths*

Bearing Bar Size	19 Space		15 Space		IGtru™ / 11 Space		8 Space		7 Space	
	1-3/16" O.C.		15/16" O.C.		11/16" O.C.		1/2" O.C.		7/16" O.C.	
	Plain	Serrated	Plain	Serrated	Plain	Serrated	Plain	Serrated	Plain	Serrated
1" x 3/16" or 1" I-Bar	2'-4"	2'-2"	2'-6"	2'-3"	2'-8"	2'-4"	3'-0"	2'-8"	3'-2"	2'-9"
1-1/4" x 3/16" or 1-1/4" I-Bar	2'-10"	2'-7"	3'-1"	2'-9"	3'-4"	3'-0"	3'-11"	3'-5"	4'-1"	3'-7"
1-1/2" x 3/16" or 1-1/2" I-Bar	3'-6"	3'-2"	3'-10"	3'-5"	4'-2"	3'-9"	4'-11"	5'-5"	5'-2"	4'-7"
1-3/4" x 3/16" or 1-3/4" I-Bar	4'-3"	3'-10"	4'-8"	4'-3"	5'-1"	4'-7"	5'-6"	5'-6"	5'-6"	5'-6"
2" x 3/16" or 2" I-Bar	5'-1"	4'-8"	5'-6"	5'-1"	5'-6"	5'-6"	5'-6"	5'-6"	5'-8"	5'-6"

* For treads up to 5'-6", maximum tread lengths are based upon 300 lb. concentrated load on the front 5 inches of the tread, at the center of the tread length. When treads exceed 5'-6" in length, design allows for 300 lb. concentrated loads at 1/3 points of tread length. Deflection is limited to 1/240 of tread length in all cases.

Stainless Steel Bar Grating

Stainless Steel Bar Grating

Stainless Steel Bar Grating is manufactured from alloy types 304, 304L, 316 and 316L and available in grating types "WS" and "DTS". Popular for highly corrosive environments and long-lasting architectural applications. Each product is available with standard plain or optional serrated surface and finish options are diverse and should be closely considered.

Type "WS" Welded Stainless Steel Grating

Our strongest and most economical stainless product, type "WS" gratings are manufactured by forge welding rectangular bearing bars and drawn cross bars. This welding process provides a positive fused intersection providing years of service under the most demanding conditions. Type "WS" stainless gratings are available in "19 space" (1-3/16"), "15 space" (15/16") and "11 space" (11/16") bearing bar centers. Standard cross bar spacing is 4" on center.



Type
19-WS-4

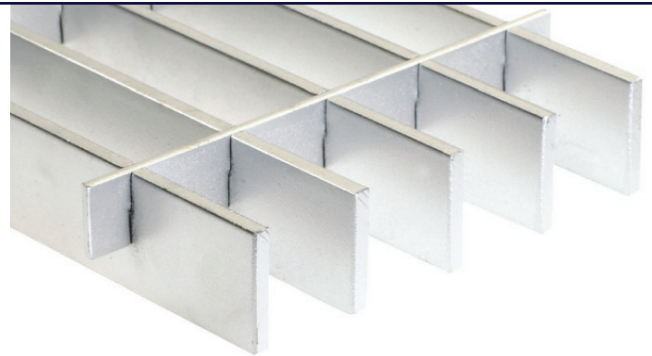
Type "DTS" Dovetail Pressure Locked Stainless

Type "DTS" stainless gratings have rectangular cross bars that are slotted to fit into pre-punched bearing bars which are assembled and permanently connected under intense hydraulic pressure.

In addition to being one of the most aesthetically appealing floor gratings with its clean uniform lines, the interlocking design provides excellent lateral stability and axial load distribution. The multiple combinations of bearing bar / cross bar sizes and spacing on type "DTS" gratings make them popular for architectural applications with a deeper cross bar serving as a distinct architectural accent.

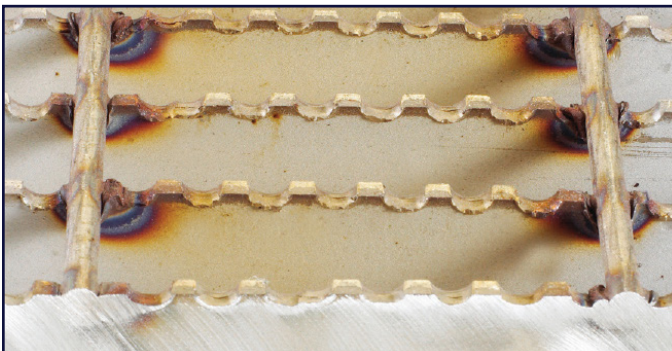
Type "DTS" gratings are available in close mesh ADA conforming spacings.

Type 7-DTS-4 with 3/16" thick bearing bars provides a net 1/4" clear opening between the bearing bars. This narrow opening is often preferred in public areas where concerns of drainage and the presence of high heeled shoes converge.



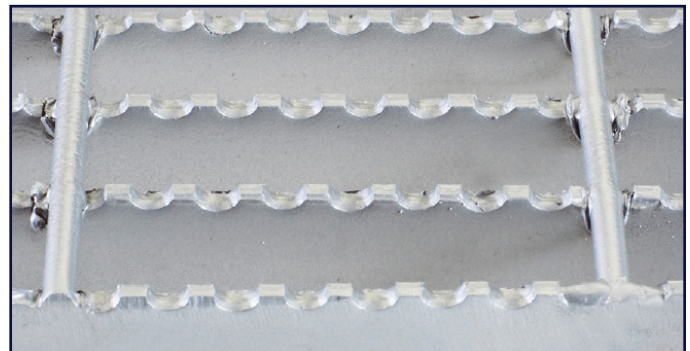
Stainless Steel Finishes

As produced, stainless steel products typically display discoloration caused by the introduction of heat during welding, cutting or grinding processes. If appearance is important to your application, consideration should be given to IG EcoClean™.



Mill Finish

Products will display discoloration from welding, cutting and grinding. Satisfactory for industrial or process applications where appearance is not a consideration.

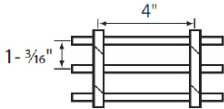
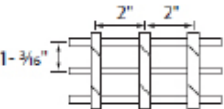
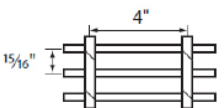
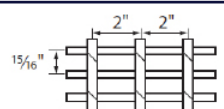
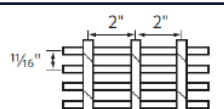
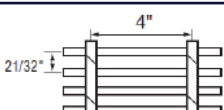
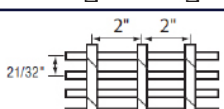
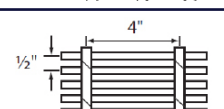
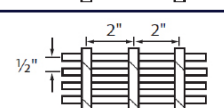
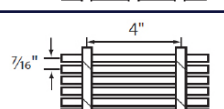
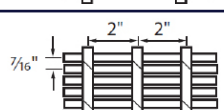


IG EcoClean™

A uniform and clean finish is achieved by abrasive blasting followed by passivation to remove manufacturing contaminants.

Stainless Steel Bar Grating

Stainless Steel Grating Table of Spacings

Part No.	Spacing	Open Area *	
19-WS-4 19-DTS-4		78%	Bearing bars spaced at 1-3/16" on center and cross bars at 4" on center. The workhorse of industrial flooring popular for platforms, catwalks, mezzanines and stairways.
19-DTS-2		73%	Bearing bars spaced at 1-3/16" on center and cross bars at 2" on center. Excellent for short spans and applications where small wheeled carts continuously cross the grating surface.
15-WS-4 15-DTS-4		75%	Bearing bars spaced at 15/16" on center and cross bars at 4" on center. More than 26% stronger than similar "19" spaced gratings and provides additional flooring surface.
15-DTS-2		69%	Bearing bars spaced at 15/16" on center and close spaced cross bars at 2" on center. Provides the advantage of closer spaced bearing bars and cross bars.
11-WS-4 11-DTS-4		68%	Due to NAAMM allowable material and manufacturing tolerances, Interstate Gratings offers IGtru™ with bearing bars spaced at 21/32" on center, with 3/16" thick bearing bars to ensure compliance with the spacing requirements of the Americans with Disabilities Act. For ADA installations, specify that the bearing bars span perpendicular to the normal flow of traffic.
11-DTS-2		63%	
IGtru™ 11-WS-4 11-DTS-4		66%	
IGtru™ 11-DTS-2		61%	
8-DTS-4		58%	The bar spacings on 8-4 and 8-2 gratings comply with ADA spacing requirements. In addition to pedestrian applications, these products are popular for material handling platforms and mezzanines subject to continuous cart and dolly traffic.
8-DTS-2		54%	
7-DTS-4		53%	The bar spacings on 7-4 and 7-2 gratings comply with ADA spacing requirements and are popular for applications in the public way. When specified with 3/16" thick bearing bars, 7-4 and 7-2 grating have a net 1/4" clear opening between the bearing bars and often reject intrusion by high-heeled shoes.
7-DTS-2		49%	

* Percentage of open area is based upon 3/16" thick bearing bars and .275 cross bars. Contact Interstate Gratings if exact open area calculation is required for alternative bearing bar thicknesses or cross bar sizes.

How to Specify Stainless Steel Bar Grating

- Select type of grating
 - "WS" for Welded Stainless Steel Grating
 - "DTS" for Dovetail Pressure Locked Stainless Steel Grating
- Select bar spacing from table above
- Select bearing bar size (consult load tables on **pages 26-30** considering service loads and clear spans)
- Specify Plain or Serrated surface
- Specify banding or additional trim required
- Specify finish
 - Mill Finish
 - IG EcoClean™
- Specify fasteners (if required) – see **page 42**

Stainless Steel Bar Grating

19 Space Load Table

Use this table when evaluating spans and loads for the following types of stainless steel grating:
19-WS-4, 19-DTS-4, 19-DTS-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
3/4 x 1/8	3.9	3'-5"	U	395	253	175	129	99	78	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 20,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances. Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf. U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches						
			D	0.114	0.179	0.257	0.350	0.457	0.579							
			C	395	316	263	226	197	175							
			D	0.091	0.143	0.206	0.280	0.366	0.463							
3/4 x 3/16	5.6	3'-9"	U	592	379	263	193	148	117	95						
			D	0.114	0.179	0.257	0.350	0.457	0.579	0.714						
			C	592	474	395	338	296	263	237						
			D	0.091	0.143	0.206	0.280	0.366	0.463	0.571						
1 x 1/8	5.0	4'-3"	U	702	449	312	229	175	139	112	93					
			D	0.086	0.134	0.193	0.263	0.343	0.434	0.536	0.648					
			C	702	561	468	401	351	312	281	255					
			D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519					
1 x 3/16	7.2	4'-8"	U	1,053	674	468	344	263	208	168	139	117				
			D	0.086	0.134	0.193	0.263	0.343	0.434	0.536	0.648	0.771				
			C	1,053	842	702	602	526	468	421	383	351				
			D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519	0.617				
1-1/4 x 1/8	6.1	5'-0"	U	1,097	702	487	358	274	217	175	145	122	104			
			D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519	0.617	0.724			
			C	1,097	877	731	627	548	487	439	399	366	337			
			D	0.055	0.086	0.123	0.168	0.219	0.278	0.343	0.415	0.494	0.579			
1-1/4 x 3/16	8.9	5'-6"	U	1,645	1,053	731	537	411	325	263	218	183	156	134		
			D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519	0.617	0.724	0.840		
			C	1,645	1,316	1,097	940	822	731	658	598	548	506	470		
			D	0.055	0.086	0.123	0.168	0.219	0.278	0.343	0.415	0.494	0.579	0.672		
1-1/2 x 1/8	7.2	5'-9"	U	1,579	1,011	702	516	395	312	253	209	175	150	129		
			D	0.057	0.089	0.129	0.175	0.229	0.289	0.357	0.432	0.514	0.604	0.700		
			C	1,579	1,263	1,053	902	790	702	632	574	526	486	451		
			D	0.046	0.071	0.103	0.140	0.183	0.231	0.286	0.346	0.411	0.483	0.560		
1-1/2 x 3/16	10.7	6'-4"	U	2,368	1,516	1,053	773	592	468	379	313	263	224	193	148	
			D	0.057	0.089	0.129	0.175	0.229	0.289	0.357	0.432	0.514	0.604	0.700	0.914	
			C	2,368	1,895	1,579	1,353	1,184	1,053	947	861	790	729	677	592	
			D	0.046	0.071	0.103	0.140	0.183	0.231	0.286	0.346	0.411	0.483	0.560	0.731	
1-3/4 x 1/8	8.5	6'-5"	U	2,149	1,375	955	702	537	425	344	284	239	204	175	134	106
			D	0.049	0.077	0.110	0.150	0.196	0.248	0.306	0.370	0.441	0.517	0.600	0.784	0.992
			C	2,149	1,719	1,433	1,228	1,075	955	860	782	716	661	614	537	478
			D	0.039	0.061	0.088	0.120	0.157	0.198	0.245	0.296	0.353	0.414	0.480	0.627	0.793
1-3/4 x 3/16	12.3	7'-2"	U	3,224	2,063	1,433	1,053	806	637	516	426	358	305	263	202	159
			D	0.049	0.077	0.110	0.150	0.196	0.248	0.306	0.370	0.441	0.517	0.600	0.784	0.992
			C	3,224	2,579	2,149	1,842	1,612	1,433	1,290	1,172	1,075	992	921	806	716
			D	0.039	0.061	0.088	0.120	0.157	0.198	0.245	0.296	0.353	0.414	0.480	0.627	0.793
2 x 1/8	9.6	7'-1"	U	2,807	1,797	1,248	917	702	555	449	371	312	266	229	175	139
			D	0.043	0.067	0.096	0.131	0.171	0.217	0.268	0.324	0.386	0.453	0.525	0.686	0.868
			C	2,807	2,246	1,871	1,604	1,404	1,248	1,123	1,021	936	864	802	702	624
			D	0.034	0.054	0.077	0.105	0.137	0.174	0.214	0.259	0.309	0.362	0.420	0.549	0.694
2 x 3/16	13.9	7'-11"	U	4,211	2,695	1,871	1,375	1,053	832	674	557	468	399	344	263	208
			D	0.043	0.067	0.096	0.131	0.171	0.217	0.268	0.324	0.386	0.453	0.525	0.686	0.868
			C	4,211	3,368	2,807	2,406	2,105	1,817	1,684	1,531	1,404	1,296	1,203	1,053	936
			D	0.034	0.054	0.077	0.105	0.137	0.174	0.214	0.259	0.309	0.362	0.420	0.549	0.694
2-1/4 x 3/16	15.6	8'-8"	U	5,329	3,411	2,368	1,740	1,332	1,053	853	705	592	505	435	333	263
			D	0.038	0.060	0.086	0.117	0.152	0.193	0.238	0.288	0.343	0.402	0.467	0.610	0.771
			C	5,329	4,263	3,553	3,045	2,665	2,368	2,132	1,938	1,776	1,640	1,523	1,332	1,184
			D	0.030	0.048	0.069	0.093	0.122	0.154	0.190	0.230	0.274	0.322	0.373	0.488	0.617
2-1/2 x 3/16	17.2	9'-4"	U	6,579	4,211	2,924	2,148	1,645	1,300	1,053	870	731	623	537	411	325
			D	0.034	0.054	0.077	0.105	0.137	0.174	0.214	0.259	0.309	0.362	0.420	0.549	0.694
			C	6,579	5,263	4,386	3,759	3,290	2,924	2,632	2,392	2,193	2,024	1,880	1,645	1,462
			D	0.027	0.043	0.062	0.084	0.110	0.139	0.171	0.207	0.247	0.290	0.336	0.439	0.555

* Weight per square foot based upon 19-WS-4 grating. Add .60 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.
The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

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

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.
■ Indicates stock panel widths.

Stainless Steel Bar Grating

15 Space Load Table

Use this table when evaluating spans and loads for the following types of stainless steel grating:
15-WS-4, 15-DTS-4, 15-DTS-2

Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
				2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
3/4 x 3/16	6.9	4'-0"	U D C D	750 0.114 750 0.091	480 0.179 600 0.143	333 0.257 500 0.206	245 0.350 500 0.280	188 0.457 375 0.366	148 0.579 333 0.463	120 0.714 300 0.571	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 20,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.					
1 x 1/8	6.2	4'-6"	U D C D	889 0.086 889 0.069	569 0.134 711 0.107	395 0.193 593 0.154	290 0.263 508 0.210	222 0.343 444 0.274	176 0.434 395 0.347	142 0.536 356 0.429						
1 x 3/16	8.9	4'-11"	U D C D	1,333 0.086 1,333 0.069	853 0.134 1,067 0.107	593 0.193 899 0.154	435 0.263 762 0.210	333 0.343 687 0.274	263 0.434 593 0.347	213 0.536 533 0.429	176 0.648 485 0.519	148 0.771 444 0.617	U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches			
1-1/4 x 1/8	7.5	5'-4"	U D C D	1,389 0.069 1,389 0.055	889 0.107 926 0.086	617 0.154 926 0.123	454 0.210 794 0.168	347 0.274 694 0.219	274 0.347 617 0.278	222 0.429 556 0.343	184 0.519 505 0.415	154 0.617 463 0.494				
1-1/4 x 3/16	11.0	5'-10"	U D C D	2,083 0.069 2,083 0.055	1,333 0.107 1,667 0.086	926 0.154 1,389 0.123	680 0.210 1,191 0.168	521 0.274 1,042 0.219	412 0.347 926 0.278	333 0.429 833 0.343	276 0.519 758 0.415	232 0.617 694 0.494	197 0.724 641 0.579	170 0.840 595 0.672		
1-1/2 x 1/8	8.9	6'-1"	U D C D	2,000 0.057 2,000 0.046	1,280 0.089 1,600 0.071	889 0.129 1,333 0.103	653 0.175 1,143 0.140	500 0.229 1,000 0.183	395 0.289 889 0.231	320 0.357 800 0.286	265 0.432 727 0.346	222 0.514 667 0.411	189 0.604 615 0.483	163 0.700 571 0.560	125 0.914 500 0.731	
1-1/2 x 3/16	13.2	6'-9"	U D C D	3,000 0.057 3,000 0.046	1,920 0.089 2,400 0.071	1,333 0.129 2,000 0.103	980 0.175 1,714 0.140	750 0.229 1,500 0.183	593 0.289 1,333 0.231	480 0.357 1,200 0.286	397 0.432 1,091 0.346	333 0.514 1,000 0.411	284 0.604 923 0.483	245 0.700 857 0.560	188 0.914 750 0.731	148 1.157 667 0.926
1-3/4 x 1/8	10.4	6'-10"	U D C D	2,722 0.049 2,722 0.039	1,742 0.077 2,178 0.061	1,210 0.110 1,815 0.088	889 0.150 1,556 0.120	681 0.196 1,361 0.157	538 0.248 1,210 0.198	436 0.306 1,089 0.245	360 0.370 990 0.296	303 0.441 907 0.353	258 0.517 838 0.414	222 0.600 778 0.480	170 0.784 681 0.627	134 0.992 605 0.793
1-3/4 x 3/16	15.3	7'-7"	U D C D	4,083 0.049 4,083 0.039	2,613 0.077 3,267 0.061	1,815 0.110 2,722 0.088	1,333 0.150 2,333 0.120	1,021 0.196 2,042 0.157	807 0.248 1,815 0.198	653 0.306 1,633 0.245	540 0.370 1,485 0.296	454 0.441 1,361 0.353	387 0.517 1,256 0.414	333 0.600 1,167 0.480	255 0.784 1,021 0.627	202 0.992 907 0.793
2 x 1/8	11.8	7'-7"	U D C D	3,556 0.043 3,556 0.034	2,276 0.067 2,844 0.054	1,580 0.096 2,370 0.077	1,161 0.131 2,032 0.105	889 0.171 1,778 0.137	702 0.271 1,580 0.174	569 0.268 1,422 0.214	470 0.324 1,293 0.259	395 0.386 1,185 0.309	337 0.453 1,094 0.362	290 0.525 1,016 0.420	222 0.686 889 0.549	176 0.868 790 0.694
2 x 3/16	17.3	8'-4"	U D C D	5,333 0.043 5,333 0.034	3,413 0.067 4,267 0.054	2,370 0.096 3,556 0.077	1,742 0.131 3,048 0.105	1,333 0.171 2,667 0.137	1,054 0.217 2,370 0.174	853 0.268 2,133 0.214	705 0.324 1,939 0.259	593 0.386 1,778 0.309	505 0.453 1,641 0.362	435 0.525 1,524 0.420	333 0.686 1,333 0.549	263 0.868 1,185 0.694
2-1/4 x 3/16	19.4	9'-2"	U D C D	6,750 0.038 6,750 0.030	4,320 0.060 5,400 0.048	3,000 0.086 4,500 0.069	2,204 0.117 3,857 0.093	1,688 0.152 3,375 0.122	1,333 0.193 3,000 0.154	1,080 0.238 2,700 0.190	893 0.288 2,455 0.230	750 0.343 2,250 0.274	639 0.402 2,077 0.322	551 0.467 1,929 0.373	422 0.610 1,688 0.488	333 0.771 1,500 0.617
2-1/2 x 3/16	21.5	9'-11"	U D C D	8,333 0.034 8,333 0.027	5,333 0.054 6,667 0.043	3,704 0.077 5,556 0.062	2,721 0.105 4,762 0.084	2,083 0.137 4,167 0.110	1,646 0.174 3,704 0.139	1,333 0.214 3,333 0.171	1,102 0.259 3,030 0.207	926 0.309 2,778 0.247	789 0.362 2,564 0.290	680 0.420 2,381 0.336	521 0.549 2,083 0.439	412 0.694 1,852 0.555

* Weight per square foot based upon 15-WS-4 grating. Add .60 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection $\leq 1/4$ inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 1-1/8"	3 2-1/16"	4 3"	5 3-15/16"	6 4-7/8"	7 5-13/16"	8 6-3/4"	9 7-11/16"	10 8-5/8"	11 9-9/16"	12 10-1/2"	13 11-7/16"	14 12-3/8"	15 13-5/16"	16 14-1/4"
No. of Bearing Bars Panel Width	17 15-3/16"	18 16-1/8"	19 17-1/16"	20 18"	21 18-15/16"	22 19-7/8"	23 20-13/16"	24 21-3/4"	25 22-11/16"	26 23-5/8"	27 24-9/16"	28 25-1/2"	29 26-7/16"	30 27-3/8"	31 28-5/16"
No. of Bearing Bars Panel Width	32 29-1/4"	33 30-3/16"	34 31-1/8"	35 32-1/16"	36 33"	37 33-15/16"	38 34-7/8"	39 35-13/16"							

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.

■ Indicates stock panel widths.

Stainless Steel Bar Grating

IGtru™ 11 Space Load Table

Use this table when evaluating spans and loads for the following types of stainless steel grating:
11-WS-4, 11-DTS-4, 11-DTS-2

IGtru™ is manufactured to NAAMM standards and is fully ADA compliant with a minimum 3/16" bearing bar thickness

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span													
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0	
	3/4 x 3/16	8.9	4'-4"	U	1,023	655	455	334	256	202	164	135	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 20,000 psi.					
				D	0.114	0.179	0.257	0.350	0.457	0.579	0.714	0.864						
				C	1,023	818	682	584	511	455	409	372						
				D	0.091	0.143	0.206	0.280	0.366	0.463	0.571	0.691						
	1 x 1/8	8.0	4'-10"	U	1,212	776	539	396	303	239	194	160	The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.					
				D	0.086	0.134	0.193	0.263	0.343	0.434	0.536	0.648						
				C	1,212	970	808	693	606	539	485	441						
				D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519					0.617	
	1 x 3/16	11.7	5'-4"	U	1,818	1,164	808	594	455	359	291	240	202	172	Grating for spans to the left of the heavy line have a deflection ≤ 1/4" for uniform loads of 100 psf.			
				D	0.086	0.134	0.193	0.263	0.343	0.434	0.536	0.648						
				C	1,818	1,455	1,212	1,039	909	808	727	661	606	559				0.905
				D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519	0.617	0.724				0.724
	1-1/4 x 1/8	9.9	5'-9"	U	1,894	1,212	842	618	473	374	303	250	210	179	155	U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches		
				D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519	0.617	0.724	0.840			
				C	1,894	1,515	1,263	1,082	947	842	758	689	631	583	541			
				D	0.055	0.086	0.123	0.168	0.219	0.278	0.343	0.415	0.494	0.579	0.672		0.672	
	1-1/4 x 3/16	14.5	6'-4"	U	2,841	1,818	1,263	928	710	561	455	376	316	269	232	178		
				D	0.069	0.107	0.154	0.210	0.274	0.347	0.429	0.519	0.617	0.724	0.840	1,097		
				C	2,841	2,273	1,894	1,623	1,420	1,263	1,136	1,033	947	874	812	710		
				D	0.055	0.086	0.123	0.168	0.219	0.278	0.343	0.415	0.494	0.579	0.672	0.878		
	1-1/2 x 1/8	11.7	6'-7"	U	2,727	1,745	1,212	891	682	539	436	361	303	258	223	170	135	
				D	0.057	0.089	0.129	0.175	0.229	0.289	0.357	0.432	0.514	0.604	0.700	0.914	1,157	
				C	2,727	2,182	1,818	1,558	1,364	1,212	1,091	992	909	839	779	682	606	
				D	0.046	0.071	0.103	0.140	0.183	0.231	0.286	0.346	0.411	0.483	0.560	0.731	0.926	
	1-1/2 x 3/16	17.5	7'-3"	U	4,091	2,618	1,818	1,336	1,023	808	655	541	455	387	334	256	202	
				D	0.057	0.089	0.129	0.175	0.229	0.289	0.357	0.432	0.514	0.604	0.700	0.914	1,157	
				C	4,091	3,273	2,727	2,338	2,045	1,818	1,636	1,488	1,364	1,259	1,169	1,023	909	
				D	0.046	0.071	0.103	0.140	0.183	0.231	0.286	0.346	0.411	0.483	0.560	0.731	0.926	
	1-3/4 x 1/8	13.8	7'-5"	U	3,712	2,376	1,650	1,212	928	733	594	491	412	351	303	232	183	
				D	0.049	0.077	0.110	0.150	0.196	0.248	0.306	0.370	0.441	0.517	0.600	0.784	0.992	
				C	3,712	2,970	2,475	2,121	1,856	1,650	1,485	1,350	1,237	1,142	1,061	928	825	
				D	0.039	0.061	0.088	0.120	0.157	0.198	0.245	0.296	0.353	0.414	0.480	0.627	0.793	
	1-3/4 x 3/16	20.3	8'-0"	U	5,568	3,564	2,475	1,818	1,392	1,100	891	736	619	527	455	348	275	
				D	0.049	0.077	0.110	0.150	0.196	0.248	0.306	0.370	0.441	0.517	0.600	0.784	0.992	
				C	5,568	4,455	3,712	3,182	2,784	2,475	2,227	2,025	1,856	1,713	1,591	1,392	1,237	
				D	0.039	0.061	0.088	0.120	0.157	0.198	0.245	0.296	0.353	0.414	0.480	0.627	0.793	
	2 x 1/8	15.6	8'-2"	U	4,848	3,103	2,155	1,583	1,212	958	776	641	539	459	396	303	239	
				D	0.043	0.067	0.096	0.131	0.171	0.217	0.268	0.324	0.386	0.453	0.525	0.686	0.868	
				C	4,848	3,879	3,232	2,771	2,424	2,155	1,939	1,763	1,616	1,492	1,385	1,212	1,077	
				D	0.034	0.054	0.077	0.105	0.137	0.174	0.214	0.259	0.309	0.362	0.420	0.549	0.694	
	2 x 3/16	23.1	9'-0"	U	7,273	4,655	3,232	2,375	1,818	1,437	1,164	962	808	689	594	455	359	
				D	0.043	0.067	0.096	0.131	0.171	0.217	0.268	0.324	0.386	0.453	0.525	0.686	0.868	
				C	7,273	5,818	4,848	4,156	3,636	3,232	2,909	2,645	2,424	2,238	2,078	1,818	1,616	
				D	0.034	0.054	0.077	0.105	0.137	0.174	0.214	0.259	0.309	0.362	0.420	0.549	0.694	
	2-1/4 x 3/16	25.8	9'-10"	U	9,205	5,891	4,091	3,006	2,301	1,818	1,473	1,217	1,023	871	751	575	455	
				D	0.038	0.060	0.086	0.117	0.152	0.193	0.238	0.288	0.343	0.402	0.467	0.610	0.771	
				C	9,205	7,364	6,136	5,260	4,602	4,091	3,682	3,347	3,068	2,832	2,630	2,301	2,045	
				D	0.030	0.048	0.069	0.093	0.122	0.154	0.190	0.230	0.274	0.322	0.373	0.488	0.617	
	2-1/2 x 3/16	28.6	10'-8"	U	11,364	7,273	5,051	3,711	2,841	2,245	1,818	1,503	1,263	1,076	928	710	561	
				D	0.034	0.054	0.077	0.105	0.137	0.174	0.214	0.259	0.309	0.362	0.420	0.549	0.694	
				C	11,364	9,091	7,576	6,494	5,682	5,051	4,545	4,132	3,788	3,497	3,247	2,841	2,525	
				D	0.027	0.043	0.062	0.084	0.110	0.139	0.171	0.207	0.247	0.290	0.336	0.439	0.555	

* Weight per square foot based upon IGtru™ 11-W-4 grating. Add .60 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths (24" max for type "WS"). When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 7/8"	3 1-1/2"	4 2-3/16"	5 2-13/16"	6 3-1/2"	7 4-1/8"	8 4-13/16"	9 5-7/16"	10 6-1/8"	11 6-3/4"	12 7-7/16"	13 8-1/16"	14 8-3/4"	15 9-3/8"	16 10-1/16"
No. of Bearing Bars Panel Width	17 10-11/16"	18 11-3/8"	19 12"	20 12-11/16"	21 13-5/16"	22 14"	23 14-5/8"	24 15-5/16"	25 15-15/16"	26 16-5/8"	27 17-1/4"	28 17-15/16"	29 18-9/16"	30 19-1/4"	31 19-7/8"
No. of Bearing Bars Panel Width	32 20-9/16"	33 21-3/16"	34 21-7/8"	35 22-1/2"	36 23-3/16"	37 23-13/16"	38 24-1/2"	39 25-1/8"	40 25-13/16"	41 26-7/16"	42 27-1/8"	43 27-3/4"	44 28-7/16"	45 29-1/16"	46 29-3/4"
No. of Bearing Bars Panel Width	47 30-3/8"	48 31-1/16"	49 31-11/16"	50 32-3/8"	51 33"	52 33-11/16"	53 34-5/16"	54 35"	55 35-5/8"	56 36-5/16"					

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.

 Indicates stock panel widths for type "DTS".

 Indicates stock panel widths for type "WS" (24" max).

Stainless Steel Bar Grating

8 Space Load Table

Use this table when evaluating spans and loads for the following types of stainless steel grating:
8-DTS-4, 8-DTS-2

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
						2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0
	3/4 x 3/16	12.3	4'-8"	U D C D	1,406 0.114 1,406 0.091	900 0.179 1,125 0.143	625 0.257 938 0.206	459 0.350 804 0.280	352 0.457 703 0.366	278 0.579 625 0.463	225 0.714 563 0.571	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 20,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances.					
	1 x 1/8	11.0	5'-3"	U D C D	1,667 0.086 1,667 0.069	1,067 0.134 1,333 0.107	741 0.193 1,111 0.154	544 0.263 952 0.210	417 0.343 833 0.274	329 0.434 741 0.347	267 0.536 667 0.429						
	1 x 3/16	16.2	5'-10"	U D C D	2,500 0.086 2,500 0.069	1,600 0.134 2,000 0.107	1,111 0.193 1,667 0.154	816 0.263 1,429 0.210	625 0.343 1,250 0.274	494 0.434 1,111 0.347	400 0.536 1,000 0.429	331 0.648 909 0.519	278 0.771 833 0.617	U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches			
	1-1/4 x 1/8	13.6	6'-2"	U D C D	2,604 0.069 2,604 0.055	1,667 0.107 2,083 0.086	1,157 0.154 1,736 0.123	850 0.210 1,488 0.168	651 0.274 1,302 0.219	514 0.347 1,157 0.278	417 0.429 1,042 0.343	344 0.519 947 0.415	289 0.617 868 0.494			247 0.724 801 0.579	
	1-1/4 x 3/16	20.0	6'-10"	U D C D	3,906 0.069 3,906 0.055	2,500 0.107 3,125 0.086	1,736 0.154 2,604 0.123	1,276 0.210 2,232 0.168	977 0.274 1,953 0.219	772 0.347 1,736 0.278	625 0.429 1,563 0.343	517 0.519 1,421 0.415	434 0.617 1,302 0.494	370 0.724 1,202 0.579	319 0.840 1,116 0.672	244 1.097 977 0.878	
	1-1/2 x 1/8	16.2	7'-1"	U D C D	3,750 0.057 3,750 0.046	2,400 0.089 3,000 0.071	1,667 0.129 2,500 0.103	1,225 0.175 2,143 0.140	938 0.229 1,875 0.183	741 0.289 1,667 0.231	600 0.357 1,500 0.286	496 0.432 1,364 0.346	417 0.514 1,250 0.411	355 0.604 1,154 0.483	306 0.700 1,071 0.560	234 0.914 938 0.731	
	1-1/2 x 3/16	24.0	7'-11"	U D C D	5,625 0.057 5,625 0.046	3,600 0.089 4,500 0.071	2,500 0.129 3,750 0.103	1,837 0.175 3,214 0.140	1,406 0.229 2,813 0.183	1,111 0.289 2,500 0.231	900 0.357 2,250 0.286	744 0.432 2,046 0.346	625 0.514 1,875 0.411	533 0.604 1,731 0.483	459 0.700 1,607 0.560	352 0.914 1,406 0.731	
	1-3/4 x 1/8	18.9	8'-0"	U D C D	5,104 0.049 5,104 0.039	3,267 0.077 4,083 0.061	2,269 0.110 3,403 0.088	1,667 0.150 2,917 0.120	1,276 0.196 2,552 0.157	1,008 0.248 2,269 0.198	817 0.306 2,042 0.245	675 0.370 1,856 0.296	567 0.441 1,701 0.353	483 0.517 1,571 0.414	417 0.600 1,458 0.480	319 0.784 1,276 0.627	252 0.992 1,134 0.793
	1-3/4 x 3/16	27.9	8'-10"	U D C D	7,656 0.049 7,656 0.039	4,900 0.077 6,125 0.061	3,403 0.110 5,104 0.088	2,500 0.150 4,375 0.120	1,914 0.196 3,828 0.157	1,512 0.248 3,403 0.198	1,225 0.306 3,063 0.245	1,012 0.370 2,784 0.296	851 0.441 2,552 0.353	725 0.517 2,356 0.414	625 0.600 2,188 0.480	479 0.784 1,914 0.627	378 0.992 1,701 0.793
	2 x 1/8	21.5	8'-10"	U D C D	6,667 0.043 6,667 0.034	4,267 0.067 5,333 0.054	2,963 0.096 4,444 0.077	2,177 0.131 3,810 0.105	1,667 0.171 3,333 0.137	1,317 0.217 2,963 0.174	1,067 0.268 2,667 0.214	882 0.324 2,424 0.259	741 0.386 2,222 0.309	631 0.453 2,051 0.362	544 0.525 1,905 0.420	417 0.686 1,667 0.549	329 0.868 1,482 0.694
	2 x 3/16	31.8	9'-9"	U D C D	10,000 0.043 10,000 0.034	6,400 0.067 8,000 0.054	4,444 0.096 6,667 0.077	3,265 0.131 5,714 0.105	2,500 0.171 5,000 0.137	1,975 0.217 4,444 0.174	1,600 0.268 4,000 0.214	1,322 0.324 3,636 0.259	1,111 0.386 3,333 0.309	947 0.453 3,077 0.362	816 0.525 2,857 0.420	625 0.686 2,500 0.549	494 0.868 2,222 0.694
	2-1/4 x 3/16	35.7	10'-8"	U D C D	12,656 0.038 12,656 0.030	8,100 0.060 10,125 0.048	5,625 0.086 8,438 0.069	4,133 0.117 7,232 0.093	3,164 0.152 6,328 0.122	2,500 0.193 5,625 0.154	2,025 0.238 5,063 0.190	1,674 0.288 4,602 0.230	1,406 0.343 4,219 0.274	1,198 0.402 3,894 0.322	1,033 0.467 3,616 0.373	791 0.610 3,164 0.488	625 0.771 2,813 0.617
	2-1/2 x 3/16	39.6	11'-7"	U D C D	15,625 0.034 15,625 0.027	10,000 0.054 12,500 0.043	6,944 0.077 10,417 0.062	5,102 0.105 8,929 0.084	3,906 0.137 7,813 0.110	3,086 0.174 6,944 0.139	2,500 0.214 6,250 0.171	2,066 0.259 5,682 0.207	1,736 0.309 5,208 0.247	1,479 0.362 4,808 0.290	1,276 0.420 4,464 0.336	977 0.549 3,906 0.439	772 0.694 3,472 0.555

* Weight per square foot based upon 8-SLS-4 grating. Add .30 psf for 2" on center cross bars.

** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.

The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.

Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 11/16"	3 1-3/16"	4 1-11/16"	5 2-3/16"	6 2-11/16"	7 3-3/16"	8 3-11/16"	9 4-3/16"	10 4-11/16"	11 5-3/16"	12 5-11/16"	13 6-3/16"	14 6-11/16"	15 7-3/16"	16 7-11/16"
No. of Bearing Bars Panel Width	17 8-3/16"	18 8-11/16"	19 9-3/16"	20 9-11/16"	21 10-3/16"	22 10-11/16"	23 11-3/16"	24 11-11/16"	25 12-3/16"	26 12-11/16"	27 13-3/16"	28 13-11/16"	29 14-3/16"	30 14-11/16"	31 15-3/16"
No. of Bearing Bars Panel Width	32 15-11/16"	33 16-3/16"	34 16-11/16"	35 17-3/16"	36 17-11/16"	37 18-3/16"	38 18-3/16"	39 19-3/16"	40 19-11/16"	41 20-3/16"	42 20-11/16"	43 21-3/16"	44 21-11/16"	45 22-3/16"	46 22-11/16"
No. of Bearing Bars Panel Width	47 23-3/16"	48 23-11/16"	49 24-3/16"	50 24-11/16"	51 25-3/16"	52 25-11/16"	53 26-3/16"	54 26-11/16"	55 27-3/16"	56 27-11/16"	57 28-3/16"	58 28-11/16"	59 29-3/16"	60 29-11/16"	61 30-3/16"
No. of Bearing Bars Panel Width	62 30-11/16"	63 31-3/16"	64 31-11/16"	65 32-3/16"	66 32-11/16"	67 33-3/16"	68 33-11/16"	69 34-3/16"	70 34-11/16"	71 35-3/16"	72 35-11/16"				

Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.

■ Indicates stock panel widths.

Stainless Steel Bar Grating

7 Space Load Table

Use this table when evaluating spans and loads for the following types of stainless steel grating:
7-DTS-4, 7-DTS-2

	Bearing Bar Size	Approx. Weight psf *	Maximum Pedestrian Span**		Unsupported Span												
					2'-0	2'-6	3'-0	3'-6	4'-0	4'-6	5'-0	5'-6	6'-0	6'-6	7'-0	8'-0	9'-0
	3/4 x 3/16	13.9	4'-10"	U D C D	1,607 0.114 1,607 0.091	1,029 0.179 1,286 0.143	714 0.257 1,071 0.206	525 0.350 918 0.280	402 0.457 804 0.366	318 0.579 714 0.463	257 0.714 643 0.571	All loads and deflections are theoretical and based upon the gross sections of the bearing bars, using a fiber stress of 20,000 psi. The values are not intended to be absolute since the actual load capacity will be affected by the slight variations in mill and manufacturing tolerances. Grating for spans to the left of the heavy line have					
	1 x 1/8	12.4	5'-5"	U D C D	1,905 0.086 1,905 0.069	1,219 0.134 1,524 0.107	847 0.193 1,270 0.154	622 0.263 1,088 0.210	476 0.343 952 0.274	376 0.434 847 0.347	305 0.536 762 0.429						
	1 x 3/16	18.3	6'-0"	U D C D	2,857 0.086 2,857 0.069	1,829 0.134 2,286 0.107	1,270 0.193 1,905 0.154	933 0.263 1,633 0.210	714 0.343 1,429 0.274	564 0.434 1,270 0.347	457 0.536 1,143 0.429	378 0.648 1,039 0.519	318 0.771 952 0.617	271 0.905 879 0.724	a deflection ≤ 1/4" for uniform loads of 100 psf. U = Safe Uniform Load in pounds/sq. ft. C = Concentrated Load in pounds/ft. of grating width D = Deflection in inches		
	1-1/4 x 1/8	15.3	6'-5"	U D C D	2,976 0.069 2,976 0.055	1,905 0.107 2,381 0.086	1,323 0.154 1,984 0.123	972 0.210 1,701 0.168	744 0.274 1,488 0.219	588 0.347 1,323 0.278	476 0.429 1,191 0.343	394 0.519 1,082 0.415	331 0.617 992 0.494	282 0.724 916 0.579			
	1-1/4 x 3/16	22.7	7'-1"	U D C D	4,464 0.069 4,464 0.055	2,857 0.107 3,571 0.086	1,984 0.154 2,976 0.123	1,458 0.210 2,551 0.168	1,116 0.274 2,232 0.219	882 0.347 1,984 0.278	714 0.429 1,786 0.343	590 0.519 1,623 0.415	496 0.617 1,488 0.494	423 0.724 1,374 0.579	364 0.840 1,276 0.672	279 1,097 1,116 0.878	
	1-1/2 x 1/8	18.3	7'-4"	U D C D	4,286 0.057 4,286 0.046	2,743 0.089 3,429 0.071	1,905 0.129 2,857 0.103	1,399 0.175 2,449 0.140	1,071 0.229 2,143 0.183	847 0.289 1,905 0.231	686 0.357 1,714 0.286	567 0.432 1,558 0.346	476 0.514 1,429 0.411	406 0.604 1,319 0.483	350 0.700 1,225 0.560	268 0.914 1,071 0.731	212 1,157 952 0.926
	1-1/2 x 3/16	27.2	8'-2"	U D C D	6,429 0.057 6,429 0.046	4,114 0.089 5,143 0.071	2,857 0.129 4,286 0.103	2,099 0.175 3,674 0.140	1,607 0.229 3,214 0.183	1,270 0.289 2,857 0.231	1,029 0.357 2,571 0.286	850 0.432 2,338 0.346	714 0.514 2,143 0.411	609 0.604 1,978 0.483	525 0.700 1,837 0.560	402 0.914 1,607 0.731	318 1,157 952 0.926
	1-3/4 x 1/8	21.3	8'-3"	U D C D	5,833 0.049 5,833 0.039	3,733 0.077 4,667 0.061	2,593 0.110 3,889 0.088	1,905 0.150 3,333 0.120	1,458 0.196 2,917 0.157	1,152 0.248 2,593 0.198	933 0.306 2,333 0.245	771 0.370 2,121 0.296	648 0.441 1,944 0.353	552 0.517 1,795 0.414	476 0.600 1,667 0.480	365 0.784 1,458 0.627	288 0.992 1,296 0.793
	1-3/4 x 3/16	31.6	9'-2"	U D C D	8,750 0.049 8,750 0.039	5,600 0.077 7,000 0.061	3,889 0.110 5,833 0.088	2,857 0.150 5,000 0.120	2,188 0.196 4,375 0.157	1,728 0.248 3,889 0.198	1,400 0.306 3,500 0.245	1,157 0.370 3,182 0.296	972 0.441 2,917 0.353	828 0.517 2,692 0.414	714 0.600 2,500 0.480	547 0.784 2,188 0.627	432 0.992 1,944 0.793
	2 x 1/8	24.3	9'-2"	U D C D	7,619 0.043 7,619 0.034	4,876 0.067 6,095 0.054	3,386 0.096 5,079 0.077	2,488 0.131 4,354 0.105	1,905 0.171 3,810 0.137	1,505 0.217 3,386 0.174	1,219 0.268 3,048 0.214	1,008 0.324 2,771 0.259	847 0.386 2,540 0.309	721 0.453 2,344 0.362	622 0.535 2,177 0.420	476 0.686 1,905 0.549	376 0.868 1,693 0.694
	2 x 3/16	36.0	10'-1"	U D C D	11,429 0.043 11,429 0.034	7,314 0.067 9,143 0.054	5,079 0.096 7,619 0.077	3,732 0.131 6,531 0.105	2,857 0.171 5,714 0.137	2,258 0.217 5,079 0.174	1,829 0.268 4,571 0.214	1,511 0.324 4,156 0.259	1,270 0.386 3,810 0.309	1,082 0.453 3,517 0.362	933 0.525 3,265 0.420	714 0.686 2,857 0.549	564 0.868 2,540 0.694
	2-1/4 x 3/16	40.5	11'-1"	U D C D	14,464 0.038 14,464 0.030	9,257 0.080 11,571 0.048	6,429 0.086 9,643 0.069	4,723 0.117 8,265 0.093	3,616 0.152 7,232 0.122	2,857 0.193 6,429 0.154	2,314 0.238 5,786 0.190	1,913 0.288 5,260 0.230	1,607 0.343 4,821 0.274	1,369 0.402 4,451 0.322	1,181 0.467 4,133 0.373	904 0.610 3,616 0.488	714 0.771 3,214 0.617
	2-1/2 x 3/16	44.9	12'-0"	U D C D	17,857 0.034 17,857 0.027	11,429 0.054 14,286 0.043	7,937 0.077 11,905 0.062	5,831 0.105 10,204 0.084	4,464 0.137 8,929 0.110	3,527 0.174 7,937 0.139	2,857 0.214 7,143 0.171	2,361 0.259 6,494 0.207	1,984 0.309 5,952 0.247	1,691 0.362 5,495 0.290	1,458 0.420 5,102 0.336	1,116 0.549 4,464 0.439	882 0.694 3,968 0.555

* Weight per square foot based upon 7-SLS-4 grating. Add .30 psf for 2" on center cross bars.
** Maximum pedestrian load is defined as a 100# Uniform Load with deflection ≤ 1/4 inch.
The 1/4" maximum deflection criteria is considered consistent with pedestrian comfort, but may be exceeded for other loading conditions at the discretion of the specifying authority.
Note: When gratings with serrated surface are specified, the depth of the grating required for a specific load will be 1/4" greater than that shown in these tables.

Panel Widths

Grating panels are available from stock in nominal 24" and 36" widths. When considering alternative widths, consult this table to select widths that will maintain uniform "out-to-out" spacing of the bearing bars. Specified widths deviating from this table will be fabricated to size with side banding and the bar spacing on one side of the finished panel will deviate from the spacing throughout the remainder of the panel.

No. of Bearing Bars Panel Width	2 5/8"	3 1-1/16"	4 1-1/2"	5 1-15/16"	6 2-3/8"	7 2-13/16"	8 3-1/4"	9 3-11/16"	10 4-1/8"	11 4-9/16"	12 5"	13 5-7/16"	14 5-7/8"	15 6-5/16"	16 6-3/4"
No. of Bearing Bars Panel Width	17 7-3/16"	18 7-5/8"	19 8-1/16"	20 8-1/2"	21 8-15/16"	22 9-3/8"	23 9-13/16"	24 10-1/4"	25 10-11/16"	26 11-1/8"	27 11-9/16"	28 12"	29 12-7/16"	30 12-7/8"	31 13-5/16"
No. of Bearing Bars Panel Width	32 13-3/4"	33 14-3/16"	34 14-5/8"	35 15-1/16"	36 15-1/2"	37 15-15/16"	38 16-3/8"	39 16-13/16"	40 17-1/4"	41 17-11/16"	42 18-1/8"	43 18-9/16"	44 19"	45 19-7/16"	46 19-7/8"
No. of Bearing Bars Panel Width	47 20-5/16"	48 20-3/4"	49 21-3/16"	50 21-5/8"	51 22-1/16"	52 22-1/2"	53 22-15/16"	54 23-3/8"	55 23-13/16"	56 24-1/4"	57 24-11/16"	58 25-1/8"	59 25-9/16"	60 26"	61 26-7/16"
No. of Bearing Bars Panel Width	62 26-7/8"	63 27-5/16"	64 27-3/4"	65 28-3/16"	66 28-5/8"	67 29-1/16"	68 29-1/2"	69 29-15/16"	70 30-3/8"	71 30-13/16"	72 31-1/4"	73 31-11/16"	74 32-1/8"	75 32-9/16"	76 33"
No. of Bearing Bars Panel Width	77 33-7/16"	78 33-7/8"	79 34-5/16"	80 34-3/4"	81 35-3/16"	82 35-5/8"	83 36-1/16"								

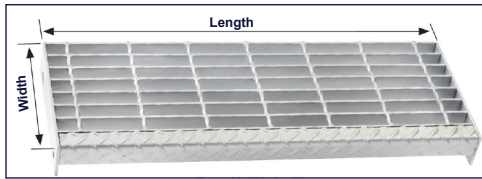
Panel widths indicated are for gratings with 3/16" thick bearing bars. For 1/8" thick bearing bars deduct 1/16" from the stated values.
■ Indicates stock panel widths.

Stainless Steel Stair Treads

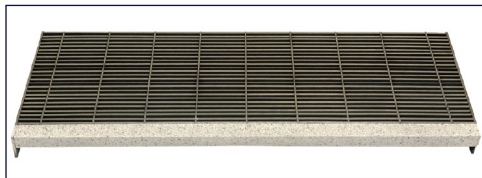
Stainless Steel Stair Treads

Stainless steel grating stair treads are available fabricated to any size in type "WS" welded and type "DTS" dovetail pressure locked. Treads are manufactured with a defined visible nosing and pre-punched end carrier plates or angles, ready for bolting to the stair stringers.

Type 19-WS-4
with Checker
Plate Nosing



Type 7-DTS-4
with GritWeld™
Nosing



Nosing Options



Checker Plate Nosing welded to grating and carrier plates/angles.

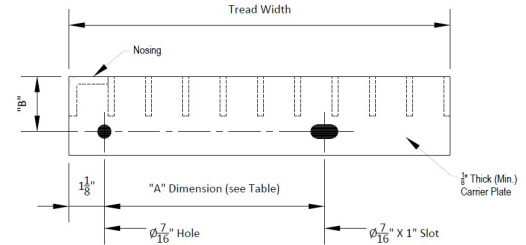


GritWeld™ Nosing welded to grating and carrier plates with thermally applied GritWeld™ surface.

Stainless Steel Carrier Plates & Angles

Stainless Steel Carrier Plates

Recommended for use with 19, 15 and 11 spaced gratings

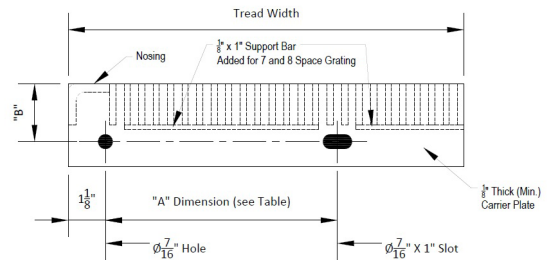


"B" Dimension

1-3/4" for 3/4" thru 1-1/4" Bearing Bars
2-1/4" for 1-1/2" thru 2" Bearing Bars

Stainless Steel Carrier Angles

Recommended for use with 8 and 7 spaced gratings



Special Nosing

FRP Safety Yellow Nosing

Please contact us for special nosing requirements

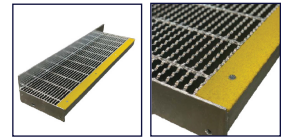


Table of Stair Tread Widths

19 Space			15 Space			IGtru™ / 11 Space			8 Space			7 Space		
Bearing Bars @ 1-3/16" O.C.			Bearing Bars @ 15/16" O.C.			Bearing Bars @ 21/32" O.C.*			Bearing Bars @ 1/2" O.C.			Bearing Bars @ 7/16" O.C.		
Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension	Nominal Tread Width	Number of Bearing Bars	Standard "A" Dimension
6-3/16"	5	2-1/2"	6-1/8"	6	2-1/2"	6-1/16"	8	2-1/2"	6-7/16"	11	2-1/2"	5-13/16"	11	2-1/2"
7-3/8"	6	4-1/2"	7-1/16"	7	4-1/2"	6-11/16"	9	4-1/2"	7-7/16"	13	4-1/2"	6-11/16"	13	2-1/2"
8-9/16"	7	4-1/2"	8"	8	4-1/2"	7-3/8"	10	4-1/2"	8-7/16"	15	4-1/2"	7-9/16"	15	4-1/2"
9-3/4"	8	7"	8-15/16"	9	4-1/2"	8"	11	4-1/2"	8-15/16"	16	4-1/2"	8-7/16"	17	4-1/2"
10-15/16"	9	7"	9-7/8"	10	7"	8-11/16"	12	4-1/2"	9-7/16"	17	7"	9-5/16"	19	7"
12-1/8"	10	7"	10-13/16"	11	7"	9-5/16"	13	7"	9-15/16"	18	7"	10-3/16"	21	7"
			11-3/4"	12	7"	10"	14	7"	10-7/16"	19	7"	10-5/8"	22	7"
			12-11/16"	13	7"	10-5/8"	15	7"	10-15/16"	20	7"	11-1/16"	23	7"
						11-5/16"	16	7"	11-7/16"	21	7"	11-1/2"	24	7"
						11-15/16"	17	7"	11-15/16"	22	7"	11-15/16"	25	7"

Recommended Maximum Stainless Steel Stair Tread Lengths*

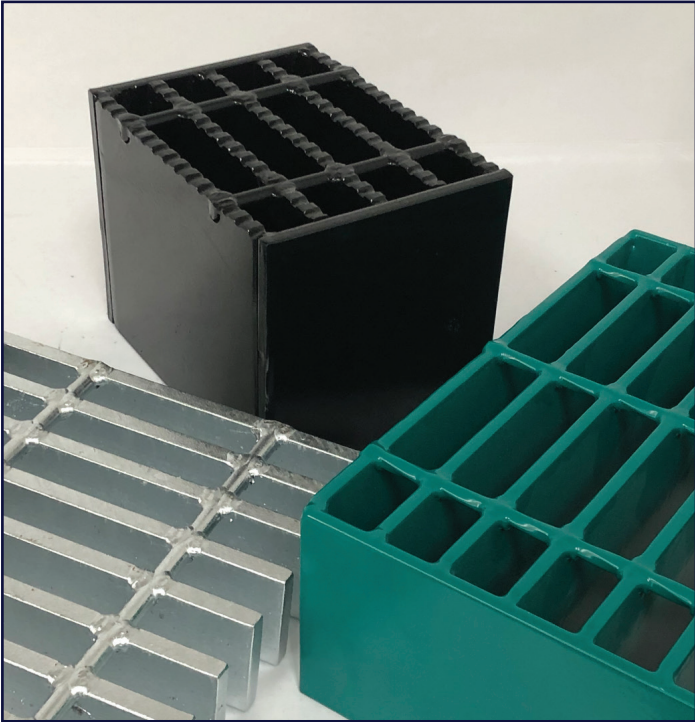
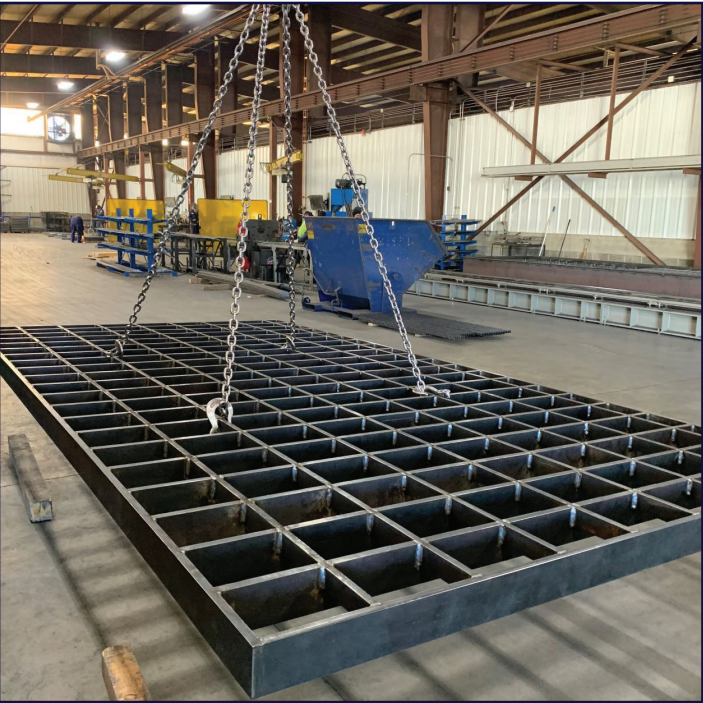
Bearing Bar Size	19 Space		15 Space		IGtru™ / 11 Space		8 Space		7 Space	
	1-3/16" O.C.		15/16" O.C.		11/16" O.C.		1/2" O.C.		7/16" O.C.	
	Plain	Serrated	Plain	Serrated	Plain	Serrated	Plain	Serrated	Plain	Serrated
3/4" x 3/16"	2'-7"	—	3'-0"	—	3'-3"	—	3'-7"	—	3'-9"	—
1" x 3/16"	3'-8"	3'-2"	3'-11"	3'-6"	4'-2"	3'-8"	4'-10"	4'-2"	5'-1"	4'-4"
1-1/4" x 3/16"	4'-7"	4'-1"	5'-2"	4'-5"	5'-5"	4'-9"	5'-6"	5'-6"	5'-6"	5'-6"
1-1/2" x 3/16"	5'-6"	5'-2"	5'-6"	5'-6"	5'-6"	5'-6"	5'-11"	5'-6"	6'-3"	5'-6"

* For treads up to 5'-6", maximum tread lengths are based upon 300 lb. concentrated load on the front 5 inches of the tread, at the center of the tread length. When treads exceed 5'-6" in length, design allows for 300 lb. concentrated loads at 1/3 points of tread length. Deflection is limited to 1/240 of tread length in all cases

Heavy Duty Grating

Welded Heavy Duty Gratings

Welded Heavy Duty Gratings are designed to service applications subject to heavy rolling and static loads such as highways, plant floors, loading docks, inlet covers and airports. Since these conditions can range from light-duty forklifts to heavy-duty truck or aircraft traffic, heavy duty gratings are manufactured in a wide range of bar sizes and spacings. Our most popular products are described on the following pages. Vehicular loads are designed in conformance with current AASHTO specifications for classifications H-15 through H-25. Automobile and forklift loads are similarly evaluated with loads calculated and distributed in accordance with the “Maximum Traffic Conditions” presented on **page 33**. If your application is not adequately addressed by these load conditions, please contact our engineering department and we will gladly assist in the selection of a heavy duty grating to satisfy your specific needs.

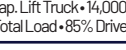
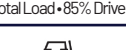


Materials & Finishes

Heavy duty gratings are manufactured in carbon steel and 300 series stainless steels. Carbon steel products are available bare (no finish), painted with IG EcoCoat - Standard Black paint, or hot dip galvanized. Stainless steel products are available mill finish or IG EcoClean™. (see **page 24**)

Table of Spacings					
15-W-4		Bearing Bars at 15/16" O.C. Cross Bars at 4" O.C.	15-W-2		Bearing Bars at 15/16" O.C. Cross Bars at 2" O.C.
19-W-4		Bearing Bars at 1-3/16" O.C. Cross Bars at 4" O.C.	19-W-2		Bearing Bars at 1-3/16" O.C. Cross Bars at 2" O.C.
22-W-4		Bearing Bars at 1-3/8" O.C. Cross Bars at 4" O.C.	22-W-2		Bearing Bars at 1-3/8" O.C. Cross Bars at 2" O.C.
30-W-4		Bearing Bars at 1-7/8" O.C. Cross Bars at 4" O.C.	30-W-2		Bearing Bars at 1-7/8" O.C. Cross Bars at 2" O.C.
38-W-4		Bearing Bars at 2-3/8" O.C. Cross Bars at 4" O.C.	38-W-2		Bearing Bars at 2-3/8" O.C. Cross Bars at 2" O.C.

Heavy Duty Grating

Maximum Traffic Conditions	Wheel Load (Lbs) (1/2 Axle Load + 30% Impact)	Load Distribution	
		Parallel with Axle	Perpendicular to Axle
 Truck Traffic • 40,000 lb. Axle Load Dual Wheels • Modified AASHTO H-25	26,000	$2(C) + 25"$ *	25"
 Truck Traffic • 32,000 lb. Axle Load Dual Wheels • Modified AASHTO H-20	20,800	$2(C) + 20"$ *	20"
 Truck Traffic • 24,000 lb. Axle Load Single Wheels • Modified AASHTO H-15	15,600	$2(C) + 15"$ *	15"
 Automobile Traffic • 6,322 lb. Vehicle 3,578 lb. Load • 60% Drive Axle Load	3,861	$2(C) + 9"$ *	9"
 10,000 lb. Cap. Lift Truck • 14,000 lb. Vehicle 24,000 lb. Total Load • 85% Drive Axle Load	13,480	$2(C) + 11"$ *	11"
 6,000 lb. Cap. Lift Truck • 9,000 lb. Vehicle 15,000 lb. Total Load • 85% Drive Axle Load	8,730	$2(C) + 7"$ *	7"
 2,000 lb. Cap. Lift Truck • 4,200 lb. Vehicle 6,200 lb. Total Load • 85% Drive Axle Load	3,425	$2(C) + 4"$ *	4"
*C=Center-to-center spacing of bearing bars. Allowable stress – 20,000 psi Modulus of Elasticity – 29,000,000 psi			

Heavy Duty Grating Cross Bars			
Bearing Bar			Cross Bar
Thickness	Depth	Center to Center	
1/4"	5" or less	all spacings	5/16" Ardox
1/4"	over 5"	all spacings	3/8" Round
3/8"	1-1/4" or less	all spacings	5/16" Ardox
3/8" **	over 1-1/2"	all spacings	3/8" Round

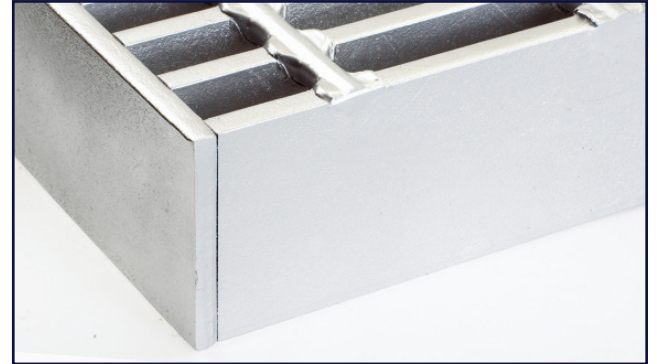
The sizes shown above are listed as minimums. Ardox and round cross bars are typically interchangeable and, unless otherwise specified, may be substituted at the discretion of the manufacturer. In substitution, the cross sectional area of the alternative cross bar shall equal or exceed that of the minimum size listed.

**For 4 space grating only. All 2 space using 3/8" bar will use 5/16" Ardox cross bars.



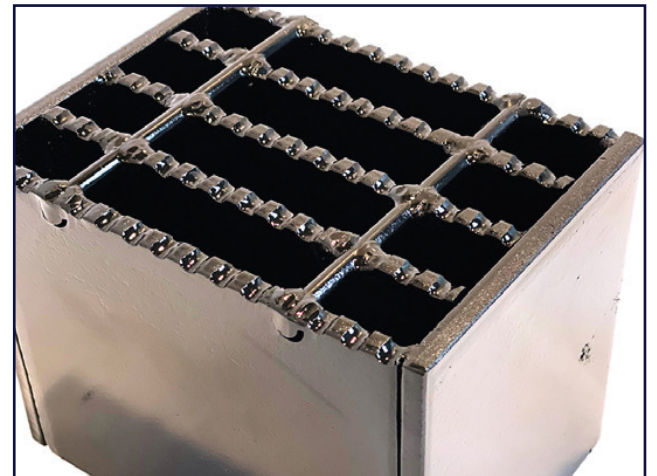
Banding

Heavy duty gratings are commonly subjected to shock and impact loads and it is highly recommended that all open ends be banded. The welded band bar helps distribute impact loads and minimizes distortion when subjected to repetitive traffic patterns. Banding details can be found on [page 41](#).



Serrated Surface

Optional serrated bearing bars enhance skid resistance. Consider this surface for applications subject to the accumulation of liquids or lubricants or inclined grating installations.



How to Specify Heavy Duty Bar Grating

- Select type of grating
 - "W" for Welded Steel Grating
 - "WS" for Welded Stainless Steel Grating
- Select bar spacing from [page 32](#).
- Select bearing bar size from tables on [pages 34-38](#).
- Specify Plain or Serrated surface
- Specify banding or additional trim required
- Specify finish
 - Bare steel (no finish)
 - IG EcoCoat™ - Standard Black Paint
 - Hot Dip Galvanized (per ASTM A-123)
 - Other
- Specify fasteners (if required) – see [page 42](#).

Heavy Duty Grating

15 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:
15-W-4 and 15-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



1 Ton Forklift

Bearing Bar size	Section Modulus psf	Moment of Inertia psf	Approx. Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1 x 1/4 1 x 5/16 1 x 3/8	0.533 0.667 0.800	0.267 0.333 0.400	12.0 14.7 17.4	1'-1" 1'-3" 1'-4"	1'-0" 1'-2" 1'-3"	0'-10" 1'-0" 1'-1"	1'-2" 1'-5" 1'-7"	0'-8" 0'-9" 0'-10"	0'-7" 0'-8" 0'-8"	0'-8" 0'-9" 0'-11"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.833 1.042 1.250	0.521 0.651 0.781	14.7 18.1 21.5	1'-4" 1'-6" 1'-8"	1'-3" 1'-5" 1'-6"	1'-1" 1'-3" 1'-4"	1'-8" 1'-11" 2'-1"	0'-10" 1'-0" 1'-1"	0'-9" 0'-10" 0'-11"	0'-11" 1'-1" 1'-4"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	1.200 1.500 1.800	0.900 1.125 1.350	17.4 21.5 25.6	1'-8" 1'-10" 2'-0"	1'-6" 1'-8" 1'-10"	1'-4" 1'-6" 1'-8"	2'-3" 2'-6" 2'-9"	1'-1" 1'-3" 1'-4"	0'-11" 1'-3" 1'-3"	1'-3" 1'-7" 1'-10"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	1.633 2.042 2.450	1.429 1.786 2.144	20.2 24.9 29.7	1'-11" 2'-2" 2'-5"	1'-9" 2'-0" 2'-3"	1'-7" 1'-10" 2'-1"	2'-10" 3'-2" 3'-6"	1'-3" 1'-6" 1'-9"	1'-2" 1'-5" 1'-8"	1'-8" 2'-1" 2'-6"
2 x 1/4 2 x 5/16 2 x 3/8	2.133 2.667 3.200	2.133 2.667 3.200	22.9 28.3 33.8	2'-3" 2'-6" 2'-10"	2'-0" 2'-4" 2'-8"	1'-10" 2'-2" 2'-6"	3'-6" 3'-11" 4'-3"	1'-7" 1'-10" 2'-1"	1'-5" 1'-9" 2'-1"	2'-2" 2'-8" 3'-2"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	2.700 3.375 4.050	3.038 3.797 4.556	25.6 31.7 37.8	2'-7" 2'-11" 3'-4"	2'-4" 2'-9" 3'-2"	2'-2" 2'-7" 3'-0"	4'-2" 4'-5" 4'-9"	1'-10" 2'-2" 2'-7"	1'-9" 2'-2" 2'-6"	2'-8" 3'-4" 3'-11"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	3.333 4.167 5.000	4.167 5.208 6.250	28.3 35.1 41.9	2'-11" 3'-5" 3'-10"	2'-9" 3'-3" 3'-9"	2'-7" 3'-1" 3'-7"	4'-7" 4'-11" 5'-3"	2'-2" 2'-7" 3'-1"	2'-2" 2'-7" 3'-1"	3'-4" 4'-1" 4'-5"
3 x 1/4 3 x 5/16 3 x 3/8	4.800 6.000 7.200	7.200 9.000 10.800	33.8 41.9 50.1	3'-9" 4'-5" 4'-8"	3'-7" 4'-4" 4'-7"	3'-6" 4'-2" 4'-7"	5'-6" 5'-11" 6'-4"	3'-0" 3'-7" 4'-3"	3'-0" 3'-8" 4'-4"	4'-8" 5'-0" 5'-4"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	6.533 8.167 9.800	11.433 14.292 17.150	39.2 48.7 58.2	4'-9" 5'-1" 5'-5"	4'-7" 5'-1" 5'-4"	4'-6" 5'-1" 5'-5"	6'-5" 6'-11" 7'-4"	3'-11" 4'-9" 5'-2"	3'-11" 4'-10" 5'-3"	5'-5" 5'-10" 6'-3"
4 x 1/4 4 x 5/16 4 x 3/8	8.533 10.667 12.800	17.067 21.333 25.600	44.6 55.5 66.4	5'-4" 5'-9" 6'-1"	5'-4" 5'-9" 6'-1"	5'-4" 5'-9" 6'-2"	7'-4" 7'-11" 8'-5"	4'-11" 5'-6" 5'-11"	5'-1" 5'-8" 6'-0"	6'-3" 6'-8" 7'-2"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	10.800 13.500 16.200	24.300 30.375 36.450	50.1 62.3 74.6	6'-0" 6'-6" 6'-10"	6'-0" 6'-6" 6'-10"	6'-0" 6'-6" 6'-11"	8'-3" 8'-11" 9'-6"	5'-9" 6'-3" 6'-7"	5'-11" 6'-4" 6'-9"	7'-0" 7'-7" 8'-0"
5 x 1/4 5 x 3/8 5 x 1/2	13.333 20.000 26.667	33.333 50.000 66.667	55.5 82.7 109.9	6'-8" 7'-7" 8'-4"	6'-8" 7'-8" 8'-5"	6'-9" 7'-8" 8'-5"	9'-2" 10'-6" 11'-7"	6'-5" 7'-4" 8'-1"	6'-7" 7'-6" 8'-3"	7'-9" 8'-11" 9'-10"
6 x 1/4 6 x 3/8 6 x 1/2	19.200 28.800 38.400	57.600 86.400 115.200	66.4 99.0 131.7	8'-0" 9'-1" 10'-0"	8'-0" 9'-2" 10'-1"	8'-1" 9'-2" 10'-2"	11'-1" 12'-8" 13'-11"	7'-8" 8'-10" 9'-9"	7'-10" 9'-0" 9'-11"	9'-4" 10'-9" 11'-10"
7 x 1/4 7 x 3/8 7 x 1/2	26.133 39.200 52.267	91.467 137.200 182.933	77.3 115.4 153.4	9'-3" 10'-7" 11'-8"	9'-4" 10'-8" 11'-9"	9'-5" 10'-9" 11'-10"	12'-11" 14'-9" 16'-3"	9'-0" 10'-4" 11'-4"	9'-2" 10'-6" 11'-7"	10'-11" 12'-6" 13'-9"

Heavy Duty Grating

19 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:
19-W-4 and 19-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



1 Ton Forklift

Bearing Bar size	Section Modulus psf	Moment of Inertia psf	Approx. Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1 x 1/4 1 x 5/16 1 x 3/8	0.421 0.526 0.632	0.211 0.263 0.316	9.7 11.9 14.0	1'-0" 1'-1" 1'-2"	0'-10" 1'-0" 1'-1"	0'-9" 0'-10" 0'-11"	1'-0" 1'-2" 1'-4"	0'-7" 0'-8" 0'-9"	0'-6" 0'-7" 0'-8"	0'-7" 0'-8" 0'-9"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.658 0.822 0.987	0.411 0.514 0.617	11.9 14.5 17.2	1'-3" 1'-4" 1'-6"	1'-1" 1'-3" 1'-4"	1'-0" 1'-1" 1'-2"	1'-5" 1'-8" 1'-11"	0'-9" 0'-10" 1'-0"	0'-8" 0'-9" 0'-10"	0'-10" 1'-0" 1'-2"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	0.947 1.184 1.421	0.711 0.888 1.066	14.0 17.2 20.4	1'-6" 1'-8" 1'-10"	1'-4" 1'-6" 1'-8"	1'-2" 1'-4" 1'-6"	1'-11" 2'-3" 2'-6"	0'-11" 1'-1" 1'-2"	0'-10" 0'-11" 1'-1"	1'-1" 1'-4" 1'-7"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	1.289 1.612 1.934	1.128 1.410 1.692	16.2 19.9 23.7	1'-9" 1'-11" 2'-2"	1'-7" 1'-9" 1'-11"	1'-5" 1'-7" 1'-9"	2'-5" 2'-11" 3'-2"	1'-2" 1'-4" 1'-6"	1'-0" 1'-4" 1'-5"	1'-5" 1'-9" 2'-1"
2 x 1/4 2 x 5/16 2 x 3/8	1.684 2.105 2.526	1.684 2.105 2.526	18.3 22.6 26.9	2'-0" 2'-3" 2'-6"	1'-10" 2'-1" 2'-4"	1'-8" 1'-11" 2'-2"	3'-1" 3'-6" 3'-10"	1'-4" 1'-7" 1'-10"	1'-3" 1'-6" 1'-9"	1'-10" 2'-4" 2'-9"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	2.132 2.664 3.197	2.398 2.998 3.597	20.4 25.3 30.1	2'-3" 2'-7" 2'-10"	2'-1" 2'-5" 2'-8"	1'-11" 2'-3" 2'-7"	3'-9" 4'-2" 4'-5"	1'-7" 1'-11" 2'-2"	1'-6" 1'-10" 2'-2"	2'-4" 2'-11" 3'-5"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	2.632 3.289 3.947	3.289 4.112 4.934	22.6 28.0 33.3	2'-6" 2'-11" 3'-4"	2'-4" 2'-9" 3'-2"	2'-3" 2'-7" 3'-0"	4'-4" 4'-8" 4'-11"	1'-10" 2'-3" 2'-7"	1'-10" 2'-3" 2'-7"	2'-10" 3'-6" 4'-2"
3 x 1/4 3 x 5/16 3 x 3/8	3.789 4.737 5.684	5.684 7.105 8.526	26.9 33.3 39.8	3'-3" 3'-9" 4'-4"	3'-1" 3'-7" 4'-2"	2'-11" 3'-6" 4'-1"	5'-2" 5'-7" 5'-11"	2'-6" 3'-0" 3'-7"	2'-6" 3'-4" 3'-8"	4'-1" 4'-9" 5'-1"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	5.158 6.447 7.737	9.026 11.283 13.539	31.2 38.7 46.2	4'-0" 4'-9" 5'-0"	3'-10" 4'-8" 5'-0"	3'-9" 4'-7" 5'-0"	6'-0" 6'-6" 6'-11"	3'-3" 4'-0" 4'-8"	3'-4" 4'-1" 4'-10"	5'-2" 5'-7" 5'-11"
4 x 1/4 4 x 5/16 4 x 3/8	6.737 8.421 10.105	13.474 16.842 20.211	35.5 44.1 52.7	4'-11" 5'-5" 5'-8"	4'-10" 5'-5" 5'-8"	4'-9" 5'-5" 5'-9"	6'-11" 7'-5" 7'-11"	4'-2" 5'-1" 5'-6"	4'-3" 5'-3" 5'-8"	5'-11" 6'-4" 6'-9"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	8.526 10.658 12.879	19.184 23.980 28.776	39.8 49.4 59.1	5'-7" 6'-0" 6'-5"	5'-7" 6'-0" 6'-5"	5'-8" 6'-1" 6'-5"	7'-9" 8'-4" 8'-11"	5'-1" 5'-10" 6'-2"	5'-4" 6'-0" 6'-4"	6'-8" 7'-2" 7'-7"
5 x 1/4 5 x 3/8 5 x 1/2	10.526 15.789 21.053	26.316 39.474 52.632	44.1 65.5 87.0	6'-3" 7'-1" 7'-10"	6'-3" 7'-1" 7'-10"	6'-3" 7'-2" 7'-11"	8'-8" 9'-11" 10'-11"	6'-0" 6'-11" 7'-7"	6'-2" 7'-1" 7'-9"	7'-5" 8'-6" 9'-4"
6 x 1/4 6 x 3/8 6 x 1/2	15.158 22.737 30.316	45.474 68.211 90.947	52.7 78.4 104.2	7'-5" 8'-6" 9'-4"	7'-5" 8'-6" 9'-4"	7'-6" 8'-7" 9'-5"	10'-4" 11'-10" 13'-1"	7'-3" 8'-3" 9'-1"	7'-5" 8'-6" 9'-4"	8'-11" 10'-2" 11'-2"
7 x 1/4 7 x 3/8 7 x 1/2	20.632 30.947 41.263	72.211 108.316 144.421	61.2 91.3 121.4	8'-8" 9'-11" 10'-10"	8'-8" 9'-11" 10'-11"	8'-9" 10'-0" 11'-0"	12'-1" 13'-10" 15'-3"	8'-5" 9'-8" 10'-7"	8'-8" 9'-11" 10'-11"	10'-4" 11'-10" 13'-1"

Heavy Duty Grating

22 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:
22-W-4 and 22-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



1 Ton Forklift

Bearing Bar size	Section Modulus psf	Moment of Inertia psf	Approx. Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1 x 1/4 1 x 5/16 1 x 3/8	0.364 0.455 0.545	0.182 0.227 0.273	8.5 10.4 12.2	0'-11" 1'-0" 1'-1"	0'-10" 0'-11" 1'-0"	0'-9" 0'-10" 0'-11"	0'-11" 1'-1" 1'-3"	0'-7" 0'-8" 0'-9"	0'-6" 0'-6" 0'-7"	0'-6" 0'-7" 0'-9"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.568 0.710 0.852	0.355 0.444 0.533	10.4 12.7 15.0	1'-2" 1'-3" 1'-5"	1'-0" 1'-2" 1'-3"	0'-11" 1'-0" 1'-1"	1'-4" 1'-6" 1'-9"	0'-9" 0'-10" 0'-11"	0'-7" 0'-8" 0'-9"	0'-9" 0'-11" 1'-1"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	0.818 1.023 1.227	0.614 0.767 0.920	12.2 15.0 17.8	1'-5" 1'-7" 1'-8"	1'-3" 1'-5" 1'-6"	1'-1" 1'-3" 1'-4"	1'-9" 2'-1" 2'-5"	0'-11" 1'-0" 1'-1"	0'-9" 0'-11" 1'-0"	1'-0" 1'-3" 1'-6"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	1.114 1.392 1.670	0.974 1.218 1.462	14.1 17.3 20.6	1'-8" 1'-10" 2'-0"	1'-6" 1'-8" 1'-10"	1'-3" 1'-8" 1'-8"	2'-3" 2'-8" 3'-0"	1'-1" 1'-2" 1'-4"	0'-11" 1'-1" 1'-3"	1'-4" 1'-8" 1'-11"
2 x 1/4 2 x 5/16 2 x 3/8	1.455 1.818 2.182	1.455 1.818 2.182	16.0 19.7 23.4	1'-10" 2'-1" 2'-4"	1'-8" 1'-11" 2'-1"	1'-6" 1'-9" 2'-0"	2'-10" 3'-4" 3'-8"	1'-3" 1'-5" 1'-8"	1'-2" 1'-5" 1'-7"	1'-9" 2'-1" 2'-6"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	1.841 2.301 2.761	2.071 2.589 3.107	17.8 22.0 26.2	2'-1" 2'-4" 2'-8"	1'-11" 2'-2" 2'-6"	1'-9" 2'-0" 2'-4"	3'-5" 4'-0" 4'-3"	1'-6" 1'-9" 2'-0"	1'-5" 1'-8" 2'-0"	2'-2" 2'-8" 3'-2"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	2.273 2.841 3.409	2.841 3.551 4.261	19.7 24.3 28.9	2'-4" 2'-8" 3'-0"	2'-2" 2'-6" 2'-10"	2'-0" 2'-5" 2'-9"	4'-2" 4'-6" 4'-9"	1'-8" 2'-0" 2'-4"	1'-8" 2'-0" 2'-4"	2'-7" 3'-3" 3'-10"
3 x 1/4 3 x 5/16 3 x 3/8	3.273 4.091 4.909	4.909 6.136 7.364	23.4 28.9 34.5	2'-11" 3'-5" 3'-11"	2'-9" 3'-2" 3'-9"	2'-8" 3'-2" 3'-8"	5'-0" 5'-4" 5'-8"	2'-3" 2'-9" 3'-2"	2'-3" 2'-9" 3'-4"	3'-8" 4'-7" 4'-11"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	4.455 5.568 6.682	7.795 9.744 11.693	27.1 33.6 40.1	3'-8" 4'-4" 4'-10"	3'-6" 4'-2" 4'-10"	3'-5" 4'-1" 4'-10"	5'-10" 6'-3" 6'-8"	2'-11" 3'-7" 4'-2"	3'-0" 3'-8" 4'-5"	5'-0" 5'-5" 5'-9"
4 x 1/4 4 x 5/16 4 x 3/8	5.818 7.273 8.727	11.636 14.545 17.455	30.8 38.2 45.6	4'-5" 5'-2" 5'-6"	4'-4" 5'-2" 5'-6"	4'-3" 5'-2" 5'-6"	6'-8" 7'-2" 7'-7"	3'-9" 4'-6" 5'-3"	3'-10" 4'-9" 5'-5"	5'-9" 6'-2" 6'-7"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	7.364 9.205 11.045	16.568 20.710 24.852	34.5 42.8 51.2	5'-4" 5'-9" 6'-2"	5'-3" 5'-9" 6'-2"	5'-3" 5'-10" 6'-2"	7'-6" 8'-1" 8'-7"	4'-7" 5'-7" 5'-11"	4'-10" 5'-9" 6'-1"	6'-5" 6'-11" 7'-5"
5 x 1/4 5 x 3/8 5 x 1/2	9.091 13.636 18.182	22.727 34.091 45.455	38.2 56.8 75.3	5'-11" 6'-9" 7'-6"	6'-0" 6'-10" 7'-6"	6'-0" 6'-10" 7'-7"	8'-4" 9'-6" 10'-6"	5'-7" 6'-7" 7'-3"	5'-11" 6'-10" 7'-6"	7'-2" 8'-3" 9'-1"
6 x 1/4 6 x 3/8 6 x 1/2	13.091 19.636 26.182	39.273 58.909 78.545	45.6 67.9 90.1	7'-1" 8'-1" 8'-11"	7'-2" 8'-2" 9'-0"	7'-2" 8'-3" 9'-1"	10'-0" 11'-5" 12'-7"	6'-11" 7'-11" 8'-9"	7'-2" 8'-2" 9'-0"	8'-7" 9'-10" 10'-10"
7 x 1/4 7 x 3/8 7 x 1/2	17.818 26.727 35.636	62.364 93.545 124.727	53.1 79.0 105.0	8'-3" 9'-5" 10'-5"	8'-4" 9'-6" 10'-6"	8'-5" 9'-7" 10'-7"	11'-8" 13'-4" 14'-8"	8'-1" 9'-3" 10'-2"	8'-4" 9'-6" 10'-6"	10'-1" 11'-6" 12'-8"

Heavy Duty Grating

30 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:
30-W-4 and 30-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



1 Ton Forklift

Bearing Bar size	Section Modulus psf	Moment of Inertia psf	Approx. Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1 x 1/4 1 x 5/16 1 x 3/8	0.267 0.333 0.400	0.133 0.167 0.200	6.6 7.9 9.3	0'-9" 0'-11" 1'-0"	0'-9" 0'-10" 0'-11"	0'-8" 0'-8" 0'-9"	0'-10" 0'-11" 1'-1"	0'-6" 0'-7" 0'-8"	0'-5" 0'-6" 0'-6"	0'-6" 0'-7" 0'-8"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.417 0.521 0.625	0.260 0.326 0.391	7.9 9.6 11.3	1'-0" 1'-1" 1'-3"	0'-11" 1'-0" 1'-1"	0'-10" 0'-11" 1'-0"	1'-1" 1'-3" 1'-6"	0'-8" 0'-9" 0'-10"	0'-6" 0'-7" 0'-8"	0'-8" 0'-9" 0'-11"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	0.600 0.750 0.900	0.450 0.563 0.675	9.3 11.3 13.4	1'-2" 1'-4" 1'-6"	1'-1" 1'-3" 1'-4"	1'-0" 1'-1" 1'-2"	1'-5" 1'-9" 2'-0"	0'-9" 0'-10" 1'-0"	0'-8" 0'-9" 0'-10"	0'-11" 1'-1" 1'-3"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	0.817 1.021 1.225	0.715 0.893 1.072	10.6 13.0 15.4	1'-5" 1'-7" 1'-9"	1'-3" 1'-5" 1'-7"	1'-2" 1'-3" 1'-5"	1'-10" 2'-2" 2'-7"	0'-11" 1'-0" 1'-2"	0'-10" 0'-11" 1'-1"	1'-2" 1'-5" 1'-8"
2 x 1/4 2 x 5/16 2 x 3/8	1.067 1.333 1.600	1.067 1.333 1.600	12.0 14.7 17.4	1'-7" 1'-10" 2'-0"	1'-6" 1'-8" 1'-10"	1'-4" 1'-6" 1'-8"	2'-3" 2'-9" 3'-3"	1'-1" 1'-3" 1'-5"	1'-0" 1'-2" 1'-4"	1'-6" 1'-10" 2'-2"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	1.350 1.688 2.025	1.519 1.898 2.278	13.4 16.4 19.5	1'-10" 2'-0" 2'-3"	1'-8" 1'-10" 2'-1"	1'-6" 1'-9" 1'-11"	2'-10" 3'-5" 3'-11"	1'-3" 1'-5" 1'-8"	1'-2" 1'-5" 1'-8"	1'-10" 2'-3" 2'-8"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	1.667 2.083 2.500	2.083 2.604 3.125	14.7 18.1 21.5	2'-0" 2'-3" 2'-6"	1'-10" 2'-1" 2'-5"	1'-8" 2'-0" 2'-3"	3'-5" 4'-2" 4'-5"	1'-5" 1'-8" 1'-11"	1'-5" 1'-8" 2'-0"	2'-3" 2'-9" 3'-3"
3 x 1/4 3 x 5/16 3 x 3/8	2.400 3.000 3.600	3.600 4.500 5.400	17.4 21.5 25.6	2'-6" 2'-10" 3'-3"	2'-4" 2'-8" 3'-1"	2'-2" 2'-7" 3'-0"	4'-7" 5'-0" 5'-3"	1'-11" 2'-4" 2'-7"	1'-11" 2'-4" 2'-9"	3'-2" 3'-11" 4'-8"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	3.267 4.083 4.900	5.717 7.146 8.575	20.2 24.9 29.7	3'-0" 3'-6" 4'-0"	2'-10" 3'-5" 3'-11"	2'-9" 3'-4" 3'-10"	5'-5" 5'-10" 6'-2"	2'-5" 2'-11" 3'-5"	2'-6" 3'-1" 3'-7"	4'-3" 5'-1" 5'-5"
4 x 1/4 4 x 5/16 4 x 3/8	4.267 5.333 6.400	8.533 10.667 12.800	22.9 28.3 33.8	3'-7" 4'-1" 4'-11"	3'-6" 4'-2" 4'-10"	3'-7" 4'-2" 4'-10"	6'-2" 6'-8" 7'-1"	3'-0" 3'-8" 4'-4"	3'-2" 3'-11" 4'-8"	5'-5" 5'-10" 6'-2"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	5.400 6.750 8.100	12.150 15.188 18.225	25.6 31.7 37.8	4'-4" 5'-2" 5'-7"	4'-3" 5'-1" 5'-7"	4'-2" 5'-1" 5'-8"	6'-11" 7'-6" 7'-11"	3'-8" 4'-6" 5'-4"	3'-11" 4'-10" 5'-8"	6'-1" 6'-7" 7'-0"
5 x 1/4 5 x 3/8 5 x 1/2	6.667 10.000 13.333	16.667 25.000 33.333	28.3 41.9 55.5	5'-1" 6'-3" 6'-10"	5'-0" 6'-3" 6'-10"	5'-0" 6'-4" 6'-11"	7'-8" 8'-10" 9'-8"	4'-6" 6'-1" 6'-9"	4'-10" 6'-4" 7'-0"	6'-9" 7'-9" 8'-7"
6 x 1/4 6 x 3/8 6 x 1/2	9.600 14.400 19.200	28.800 43.200 57.600	33.8 50.1 66.4	6'-6" 7'-5" 8'-2"	6'-6" 7'-6" 8'-3"	6'-7" 7'-7" 8'-4"	9'-3" 10'-7" 11'-8"	6'-3" 7'-4" 8'-1"	6'-8" 7'-7" 8'-5"	8'-2" 9'-4" 10'-3"
7 x 1/4 7 x 3/8 7 x 1/2	13.067 19.600 26.133	45.733 68.600 91.467	39.2 58.2 77.3	7'-7" 8'-8" 9'-6"	7'-7" 8'-8" 9'-7"	7'-9" 8'-10" 9'-9"	10'-9" 12'-4" 13'-7"	7'-6" 8'-7" 9'-5"	7'-9" 8'-11" 9'-9"	9'-6" 10'-11" 12'-0"

Heavy Duty Grating

38 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:
38-W-4 and 38-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



1 Ton Forklift

Bearing Bar size	Section Modulus psf	Moment of Inertia psf	Approx. Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1 x 1/4 1 x 5/16 1 x 3/8	0.211 0.263 0.316	0.105 0.132 0.158	5.4 6.5 7.6	0'-8" 0'-10" 0'-10"	0'-8" 0'-9" 0'-10"	0'-7" 0'-8" 0'-8"	0'-9" 0'-10" 0'-11"	0'-6" 0'-6" 0'-7"	0'-5" 0'-5" 0'-6"	0'-5" 0'-6" 0'-7"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.329 0.411 0.493	0.206 0.257 0.308	6.5 7.8 9.2	0'-11" 1'-0" 1'-1"	0'-10" 0'-11" 1'-0"	0'-9" 0'-10" 0'-11"	1'-0" 1'-2" 1'-4"	0'-8" 0'-8" 0'-9"	0'-6" 0'-7" 0'-7"	0'-7" 0'-9" 0'-10"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	0.474 0.592 0.711	0.355 0.444 0.533	7.6 9.2 10.8	1'-1" 1'-3" 1'-4"	1'-0" 1'-1" 1'-3"	0'-10" 1'-0" 1'-1"	1'-3" 1'-6" 1'-9"	0'-9" 0'-10" 0'-11"	0'-7" 0'-8" 0'-9"	0'-10" 1'-0" 1'-2"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	0.645 0.806 0.967	0.564 0.705 0.846	8.6 10.5 12.4	1'-4" 1'-5" 1'-7"	1'-2" 1'-3" 1'-5"	1'-0" 1'-2" 1'-3"	1'-7" 1'-11" 2'-3"	0'-10" 0'-11" 1'-1"	0'-9" 0'-10" 1'-0"	1'-0" 1'-3" 1'-6"
2 x 1/4 2 x 5/16 2 x 3/8	0.842 1.053 1.263	0.842 1.053 1.263	9.7 11.9 14.0	1'-5" 1'-8" 1'-9"	1'-4" 1'-6" 1'-8"	1'-2" 1'-4" 1'-6"	2'-0" 2'-5" 2'-10"	1'-0" 1'-4" 1'-3"	0'-11" 1'-0" 1'-2"	1'-4" 1'-7" 1'-11"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	1.066 1.332 1.599	1.199 1.499 1.799	10.8 13.2 15.6	1'-8" 1'-10" 2'-0"	1'-6" 1'-8" 1'-10"	1'-4" 1'-6" 1'-8"	2'-5" 3'-0" 3'-6"	1'-1" 1'-3" 1'-5"	1'-1" 1'-3" 1'-5"	1'-8" 2'-0" 2'-5"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	1.316 1.645 1.974	1.645 2.056 2.467	11.9 14.5 17.2	1'-10" 2'-1" 2'-3"	1'-8" 1'-11" 2'-1"	1'-6" 1'-9" 2'-0"	2'-11" 3'-7" 4'-2"	1'-3" 1'-6" 1'-8"	1'-3" 1'-6" 1'-9"	2'-0" 2'-6" 2'-11"
3 x 1/4 3 x 5/16 3 x 3/8	1.895 2.368 2.842	2.842 3.553 4.263	14.0 17.2 20.4	2'-2" 2'-6" 2'-10"	2'-1" 2'-4" 2'-8"	1'-11" 2'-3" 2'-7"	4'-1" 4'-9" 5'-0"	1'-8" 1'-11" 2'-3"	1'-8" 2'-0" 2'-5"	2'-10" 3'-6" 4'-2"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	2.579 3.224 3.868	4.513 5.641 6.770	16.2 19.9 23.7	2'-8" 3'-1" 3'-6"	2'-6" 2'-11" 3'-4"	2'-5" 2'-10" 3'-4"	5'-1" 5'-6" 5'-10"	2'-1" 2'-6" 2'-11"	2'-2" 2'-8" 3'-2"	3'-9" 4'-8" 5'-3"
4 x 1/4 4 x 5/16 4 x 3/8	3.368 4.211 5.053	6.737 8.421 10.105	18.3 22.6 26.9	3'-2" 3'-8" 4'-3"	3'-0" 3'-7" 4'-2"	2'-11" 3'-7" 4'-2"	5'-10" 6'-3" 6'-8"	2'-7" 3'-2" 3'-8"	2'-9" 3'-5" 4'-0"	4'-11" 5'-7" 6'-0"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	4.263 5.329 6.395	9.592 11.990 14.388	20.4 25.3 30.1	3'-9" 4'-5" 5'-1"	3'-7" 4'-4" 5'-0"	3'-7" 4'-4" 5'-1"	6'-7" 7'-1" 7'-6"	3'-2" 3'-11" 4'-7"	3'-5" 4'-3" 5'-0"	5'-10" 6'-4" 6'-9"
5 x 1/4 5 x 3/8 5 x 1/2	5.263 7.895 10.526	13.158 19.737 26.316	22.6 33.3 44.1	4'-4" 5'-10" 6'-5"	4'-3" 5'-10" 6'-5"	4'-3" 5'-11" 6'-6"	7'-4" 8'-4" 9'-2"	3'-10" 5'-6" 6'-4"	4'-2" 6'-0" 6'-8"	6'-6" 7'-6" 8'-3"
6 x 1/4 6 x 3/8 6 x 1/2	7.579 11.368 15.158	22.737 34.105 45.474	26.9 39.8 52.7	5'-10" 6'-11" 7'-8"	5'-10" 7'-0" 7'-8"	5'-11" 7'-1" 7'-10"	8'-9" 10'-0" 11'-1"	5'-4" 6'-11" 7'-7"	5'-11" 7'-3" 8'-0"	7'-10" 9'-0" 9'-11"
7 x 1/4 7 x 3/8 7 x 1/2	10.316 15.474 20.632	36.105 54.158 72.211	31.2 46.2 61.2	7'-1" 8'-1" 8'-11"	7'-2" 8'-2" 9'-0"	7'-3" 8'-4" 9'-2"	10'-3" 11'-8" 12'-11"	7'-1" 8'-1" 8'-11"	7'-5" 8'-5" 9'-4"	9'-2" 10'-6" 11'-6"

Architectural Products

Interstate Gratings' complete line of bar gratings and Architectural Products offer a distinct, contemporary design for architectural accents. Increased spacing between the bearing bars provides security and structural integrity without restricting sight lines and ventilation. The perfect merger of form and function, these products can be fully fabricated to complement design creativity.

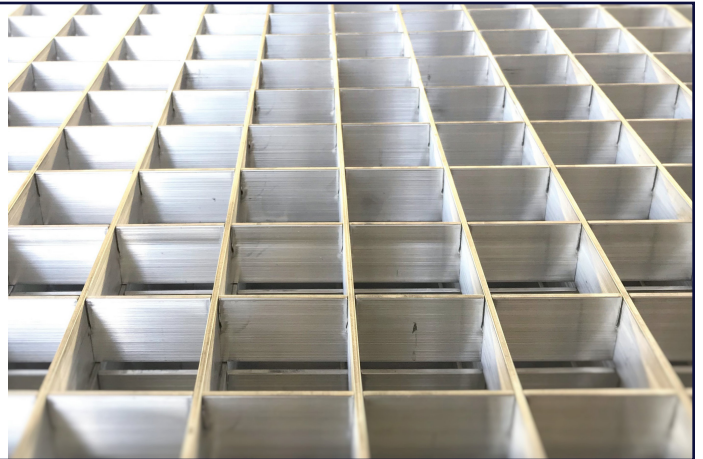
- Security
- Ventilation
- Fencing
- Handrail Infill
- Sunscreens
- Architectural Accents



VisiShield panels placed horizontally provide solar protection at building entrance.

Egg-Crate Grating

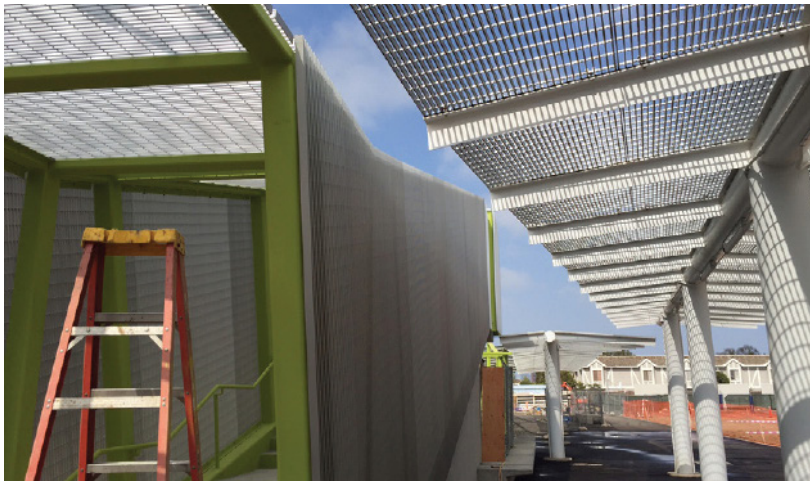
Egg-Crate Grating is a dove tail product with bearing bars and cross bars of equal depths. The spacing of the grating is equal in both bearing bar and cross bar directions and can be configured to any spacing needed for your application. Egg-Crate Grating is available in carbon steel, stainless steel and aluminum.



Architectural Products



Welded steel grating fence panels



Handrail infill panels



Aluminum panels installed as radial accent

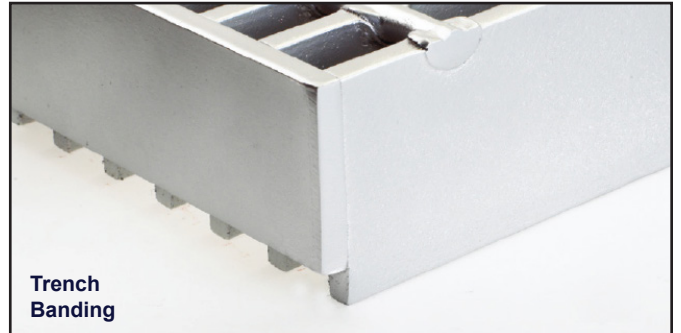
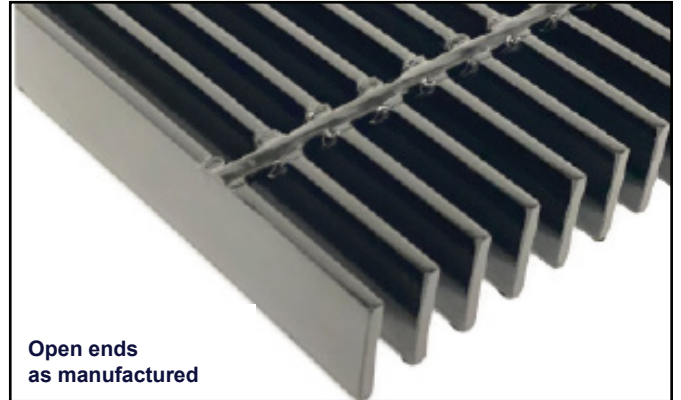
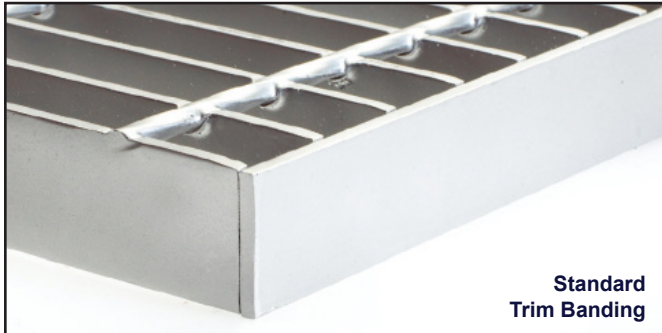


Ground floor security/ventilation screen

Banding

As manufactured, grating panels are provided with open ends. Optional trim banding, a metal flat bar welded to the open ends of the panel, provides additional transverse stiffness and a finished architectural appearance. Banding should be specified for all removable grating panels, the closed end of a banded panel providing additional worker safety during the removal and replacement process. Gratings subject to vehicular loads should always be specified as banded. In these applications, the band bar helps reduce impact stresses by transferring loads to adjacent bearing bars and further resists deformation caused by repetitive traffic patterns on open end gratings.

Trench banding, where the band bar is elevated above the bottom of the bearing bars, is appropriate for drainage applications. The elevated band bar allows for efficient drainage and will not trap liquids between the band bar and the grating support. Load banding, where each bearing bar is welded to the band bar, helps distribute load throughout the grating panel. See Banding Weld Standards for specific welding practices.

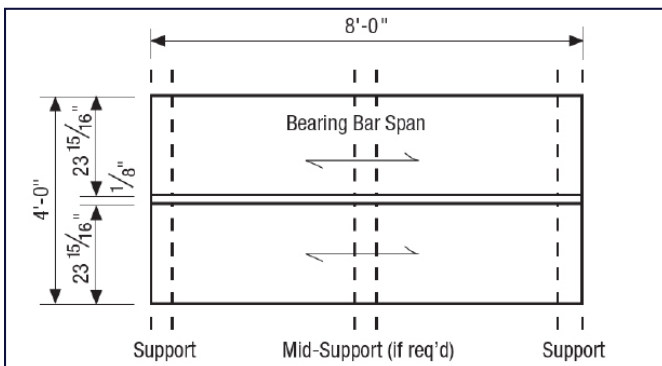
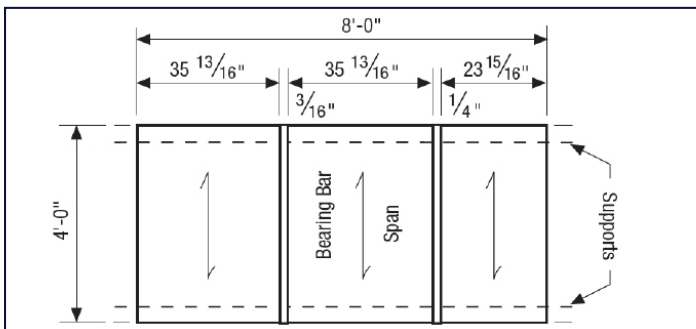


Panel Layout

Stock grating panels are manufactured in nominal 24" and 36" wide panels. These sizes allow for efficient layout and waste minimization when fabricated to your exact specification.

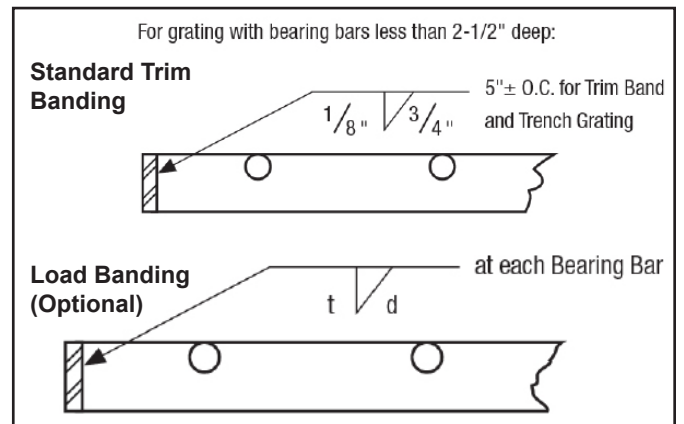
Unlike competing grating products, individual grating panels do not require supports on all four sides of each cut piece. Bar grating panels only require support perpendicular to the bearing bar span. There is no need to place supports parallel to the bearing bars where adjacent panels are installed in succession. The following diagrams illustrate proper layout and support of a simple bar grating platform.

Typical Panel Layouts

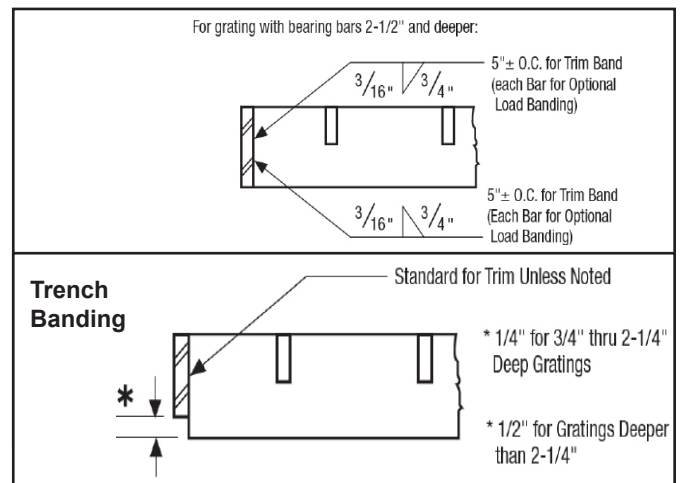


Banding Weld Standards

For grating with bearing bars less than 2-1/2" deep:



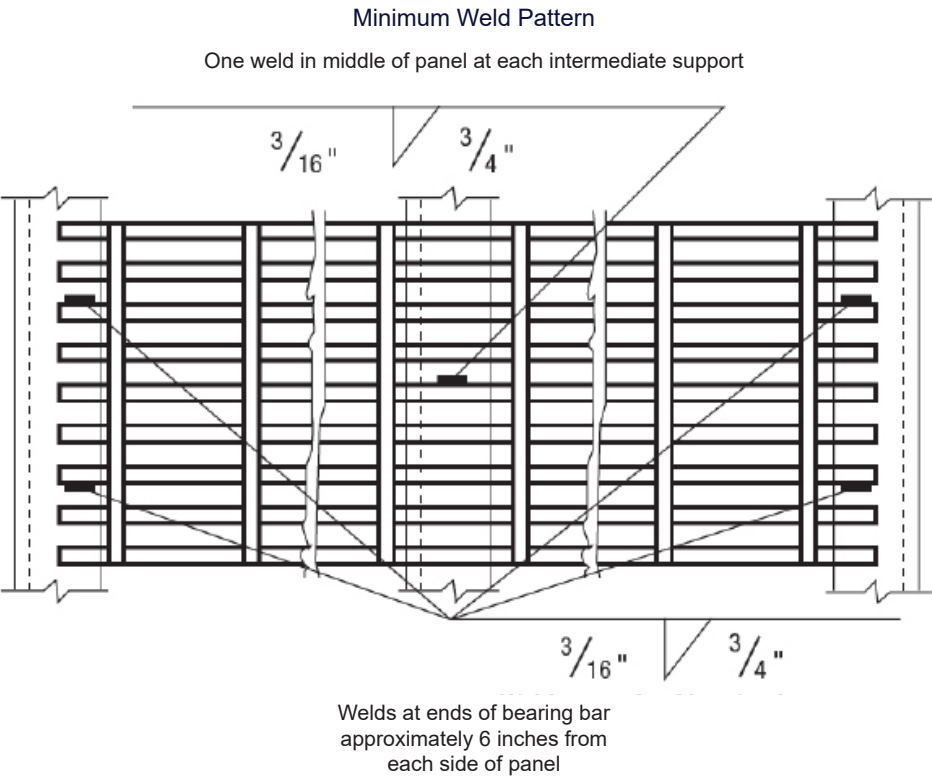
For grating with bearing bars 2-1/2" and deeper:



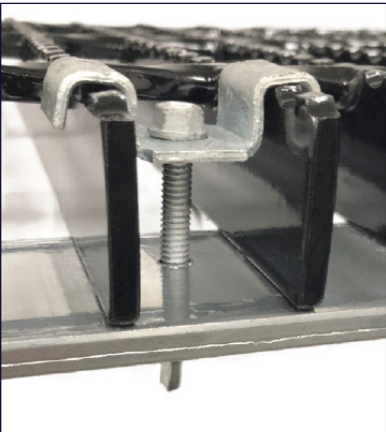
Grating Attachment

Welded Installation

All grating must be firmly fastened in place and welding panels to the supporting structure provides a superior, permanent installation. The diagram below indicates the recommended minimum weld size and spacing for pedestrian applications. This minimum spacing also applies to pedestrian applications where mechanical fasteners are specified. Vehicular applications typically require additional welding, size and spacing as determined by the specifying authority.



Mechanical Fasteners

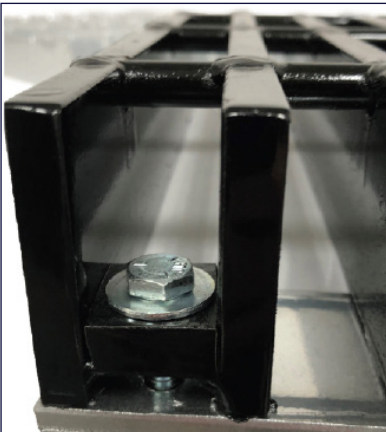


Saddle Clips

Bent clips bridging two bearing bars, available in galvanized steel, stainless steel or aluminum. Standard bolt holes are 5/16".

Tek Screws

Clima Seal or Stainless Steel Tek Screws are available to order upon request.



Weld Lugs

Plates punched with holes and shop welded between the bearing bars to facilitate bolting to the supporting structure. Bolts, screws or other connecting hardware shall be supplied by others.



"G" Clips

Mechanical fasteners that are installed on the top surface of the grating and create a friction connection with the flange supporting the panel. "G" Clips are easily installed without drilling or welding.

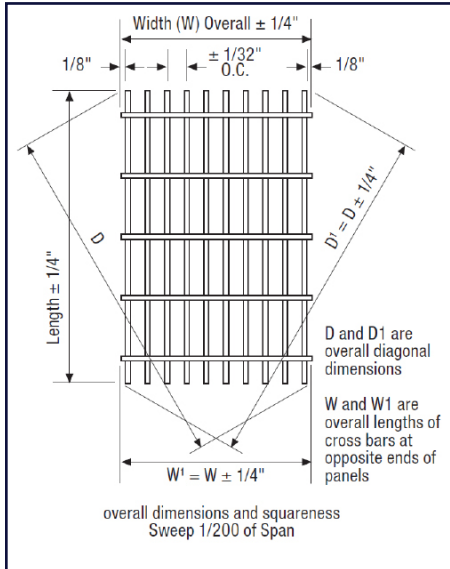


Counter Bore Anchor Tabs

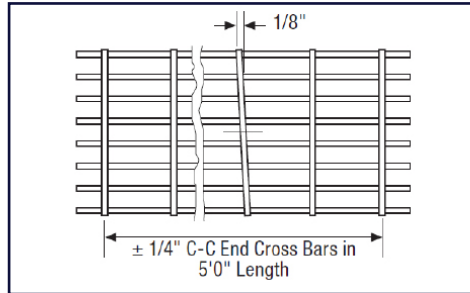
To be used with narrow spacing of close mesh gratings that require a solid fastener. Counter bore allows for the use of self-drilling fasteners which are recessed below the top surface.

Manufacturing Tolerances

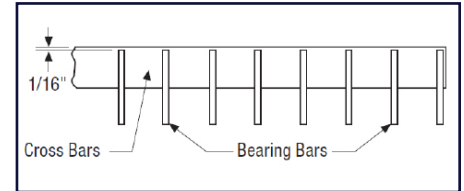
Overall Dimensions and Squareness



Cross Bar Alignment & Spacing

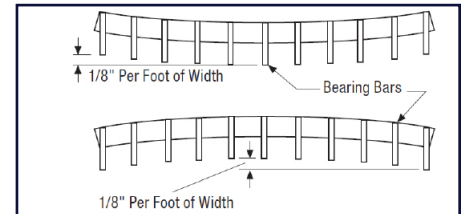


Cross Bar Location

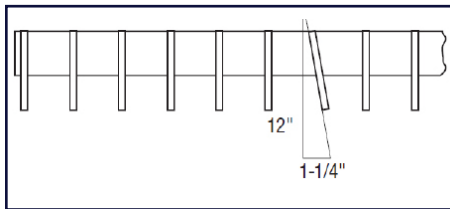


All Dimensions are Maximum Permissible

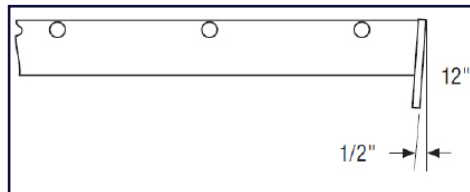
Transverse



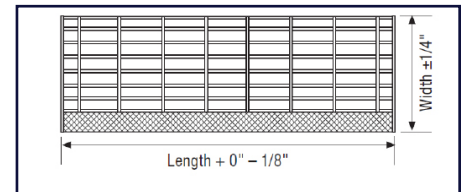
Bearing Bar Lean



Stair Tread Carrier Plate Lean

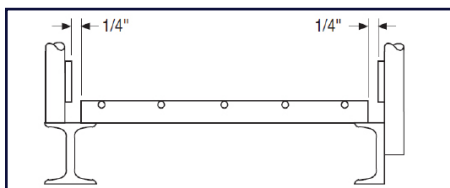


Stair Tread Tolerance

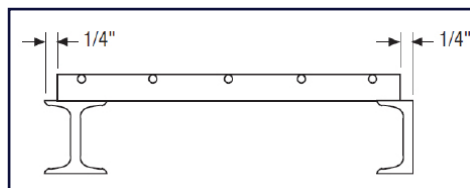


Installation Clearances

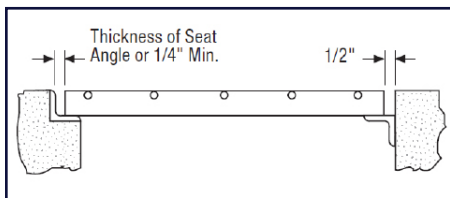
Handrail Posts & Toe Plate



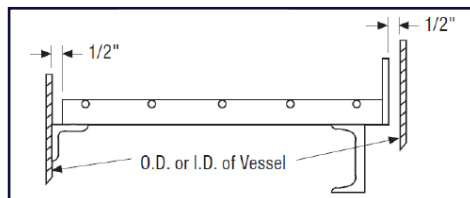
Beam & Channel



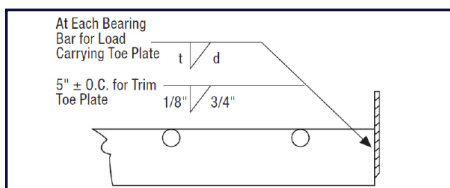
Angle Support in Concrete



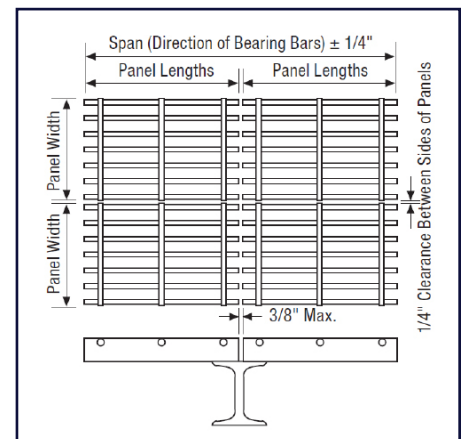
Circular Cuts



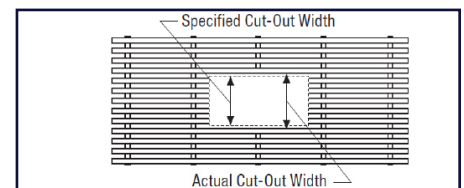
Toe Plate Weld Standards



Panel Clearances



Cut-Outs Made to Closest Adjacent Bearing Bars



Glossary

Anchor - A device by which grating is attached to its supports.

Band - A flat bar welded to the end of a grating panel, or along the side of a cutout, and extending neither above nor below the bearing bars.

Load Carrying Band: A band used to transfer load between bearing bars.

Trim Band: A band which carries no load, used primarily for appearance and closing open ends.

Bearing Bars - Load-carrying main elements made from steel, aluminum or stainless steel, extending in the direction of the grating span.

Bearing Bar Centers - The distance center-to-center of the bearing bars.

Carriers - Flats or angles which are welded to the grating panel and nosing of a stair tread and are bolted to a stair stringer to support the tread.

Clear Opening - The distance between faces of bearing bars in rectangular gratings, or between a bent connecting bar and a bearing bar in a riveted grating.

Cross Bars - The connecting bars which extend across the bearing bars, usually perpendicular to them. They may be bent into a corrugated or sinuous pattern and, where they intersect the bearing bars, are welded, forged or mechanically locked to them.

Cross Bar Centers - The distance center-to-center of the cross bars.

Curved Cut - A cutout following a curved pattern.

Cutout - An area of grating removed to clear an obstruction or to permit pipes, ducts, columns, etc. to pass through the grating.

Electro-Forged - A process of combining hydraulic pressure and heat fusion to forge bearing bars and cross bars into a panel grid.

Finish - The coating, usually paint or galvanizing, which is applied to the grating.

Grating - An open grid assembly of metal bars, in which the bearing bars, running in one direction, are spaced by rigid attachment to cross bars running perpendicular to them or by bent connecting bars extending between them.

Hinged Panel - Grating panels which are hinged to their supports or to other grating parts.

Length - Refer to Span of Grating

Load-Carrying Band - see Band

Nosing - A special "L" section member serving as the front or leading edge of a stair tread, or of grating at the head of a stair.

Pressure-Locked Grating - Pressure-locked means bearing bars are locked in position by cross bar deformation instead of riveting or welding. Several proven methods include:

- Expansion of an extruded or drawn tubular cross bar;
- Extruded cross bar deformed or swaged between bearing bars;
- Press assembly of rectangular cross bars into slotted bearing bars as pictured above.

Radially Cut Grating - Rectangular grating which is cut into panels shaped as annular segments, for use in circular or annular areas.

Serrated Grating - Grating which has the top surfaces of the bearing bars or cross bars, or both, notched.

Span of Grating - The distance between points of grating support, or the dimension of the bearing bars in this direction.

Straight Cut - That portion of the cut edge or cutout of a grating which follows a straight line.

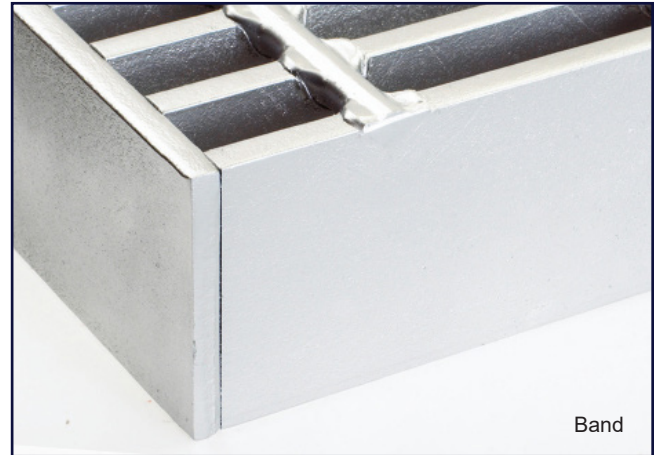
Toe Plate - A flat bar attached against the outer edge of a grating or rear edge of a tread, and projecting above the top surface of the grating or tread to form a lip or curb.

Tread - A panel of grating having carriers and a nosing attached by welding, and designed specifically to serve as a stair tread.

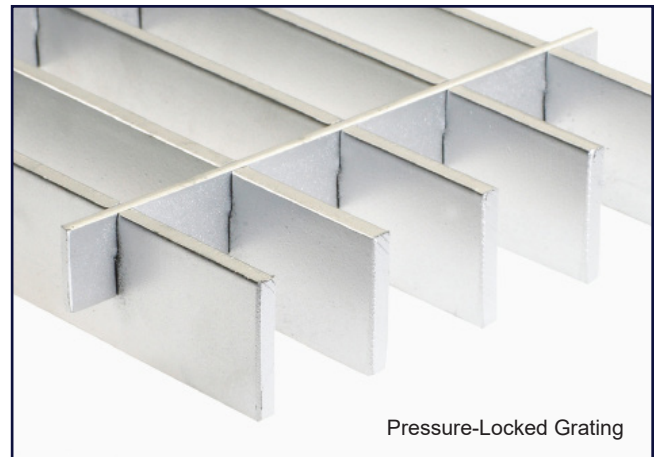
Trim Band - see Band

Welded Grating - Grating in which the bearing bars and cross bars are joined at their intersections by either electro-forging or conventional hand welding.

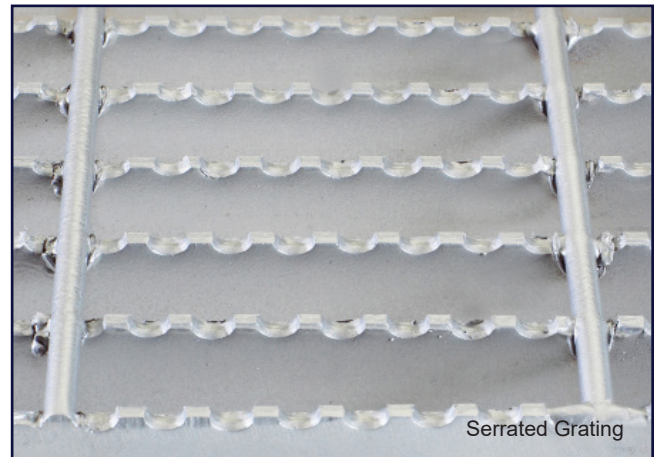
Width - The overall dimension of a grating panel, measured perpendicular to the bearing bars, and in the same direction as the cross bars.



Band



Pressure-Locked Grating



Serrated Grating

Special Spacing:

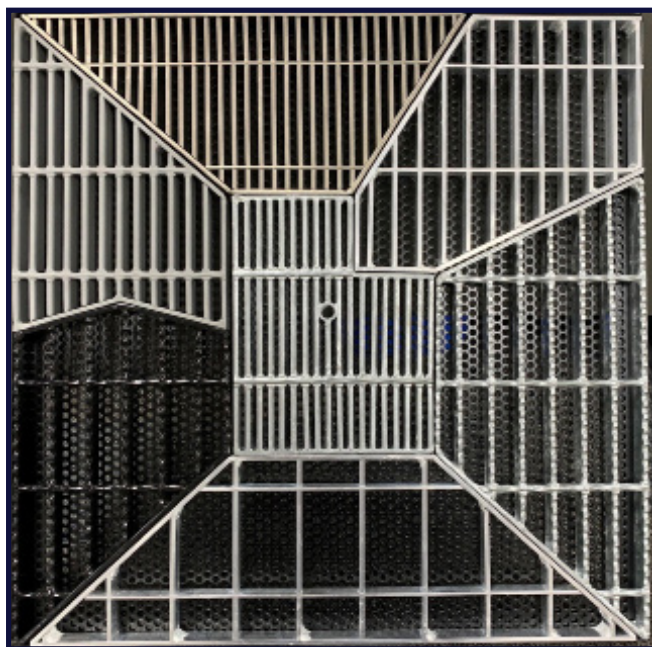
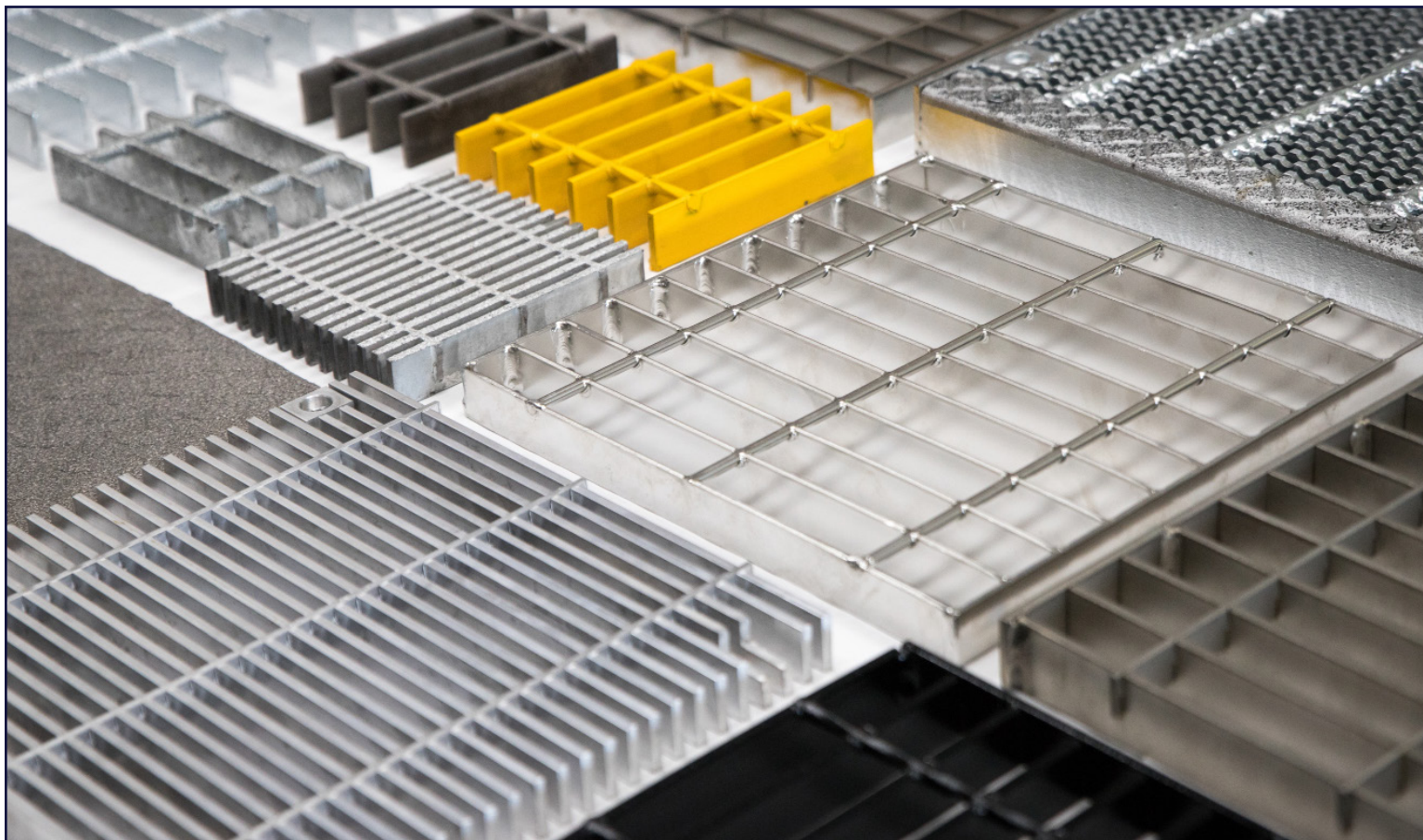
Special spacing is available in nominal widths, based off multiples of our standard bar spacing. By using our standard grating combs of 7 Space (7/16" O.C.), 8 Space (1/2" O.C.) ** minimum weight requirements, 11 Space (11/16" O.C.), 15 Space (15/16" O.C.), & 19 Space (1-3/16" O.C.) we are able to skip slots in our grating combs to provide large clear openings.

Examples

22 Space: 1-3/8" O.C

30 Space: 1-7/8" O.C.

38 Space: 2-3/8" O.C.



For Special Spacing options and availability, please contact our sales department





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www.InterstateGratings.com



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The background of the image is a wide-angle photograph of a large industrial facility, likely a manufacturing plant, with a dark blue roof and light-colored walls. The facility is situated in a snowy landscape with bare trees in the foreground. In the distance, a range of rugged, snow-covered mountains is visible under a blue sky with scattered clouds. A parking lot with several cars is visible on the right side of the image. The Interstate Gratings logo, consisting of a stylized 'IG' and the company name, is overlaid on the center of the image.

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