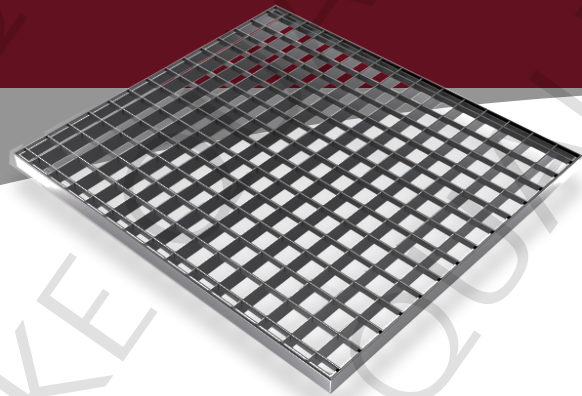




Steel Grating

METAL PRODUCT CATALOG



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DER INFORMATION

Ordering steel grating can be a confusing task if one has not ordered before. Below is a check list that can help you making certain each dimension of the job is correct when placing an order.

Material

- › Carbon steel
- › Stainless steel

Type of grating

- › Welded
- › Press-locked

Bearing bar size

Cross bar size

Bearing bar pitch

Cross bar pitch

Span (bearing bar direction)

Finish

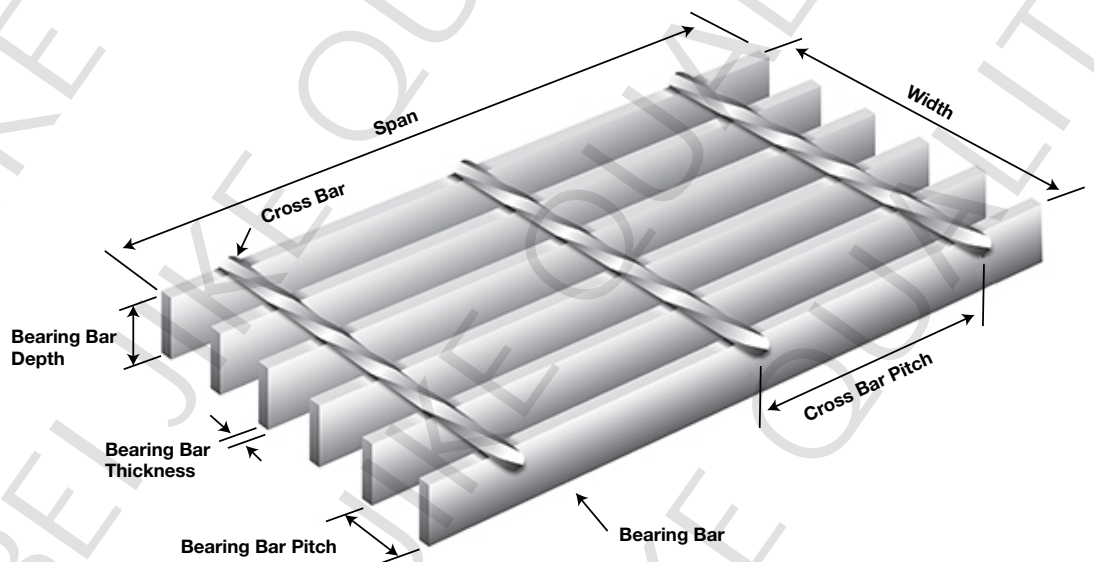
- › Painted
- › Galvanized
- › Untreated

Surface

- › Plain surface
- › Serrated surface

Type of anchorage

- › Welded
- › Saddle clip
- › G-clip
- › Grate fast clip



PRODUCTION CAPACITY

Production Line Capacity

Welded Bar Grating 10000 pcs/month
 Press Bar Grating 8000 pcs/month
 Stair Tread 8000 pcs/month
 Drainage Cover 5000 pcs/month

Actual Units Produced (Previous 12 months)

Welded Bar Grating 10000 pcs/month
 Press Bar Grating 8000 pcs/month
 Stair Tread 8000 pcs/month
 Drainage Cover 5000 pcs/month



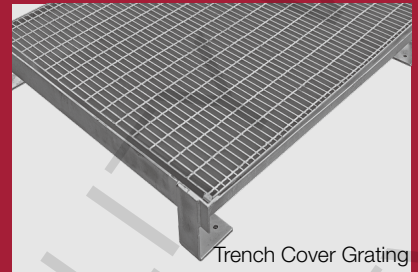
Welded Bar Grating



Press Bar Grating



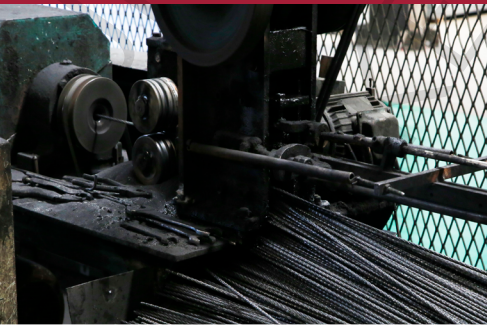
Stair Tread Steel Grating



Trench Cover Grating

PRODUCTION MACHINERY

Machine Name	Quantity	Number of Year(s) Used	Condition
Straightening Machine	5	3	Acceptable
Welding Machine	10	2	Acceptable
Plate Cutting Machine	3	2	Acceptable
Cutting Machine	5	2	Acceptable
Spray Painting Machine	2	1	Acceptable
Electro Galvanized Machine	5	1	Acceptable
Hot Dipped Galvanized Line	1	1	Acceptable
Electro Galvanized Line	2	1	Acceptable



Straightening Machine

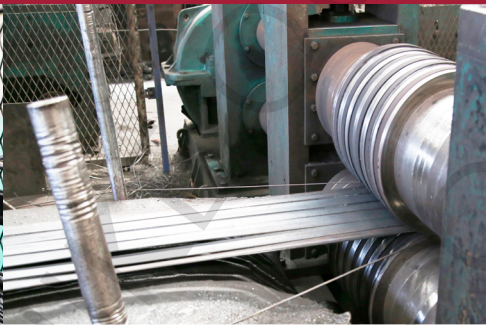


Plate Cutting Machine



Welding Machine



Cutting Machine



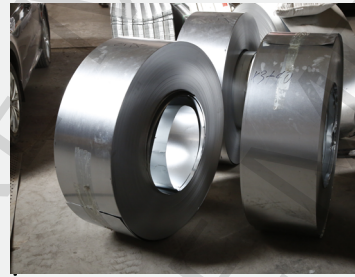
Spray Painting Machine



Hot Dipped Galvanized Line

TESTING MACHINERY

Machine Name	Quantity	Number of Year(s) Used	Condition
Tape measure	5	1	Acceptable
Caliper	3	1	Acceptable
Coating Thickness Tester	4	1	Acceptable



Step 1

Raw Material
(plate)



Step 3

Plate Cutting

Step 1

Step 2

Step 3

Step 4



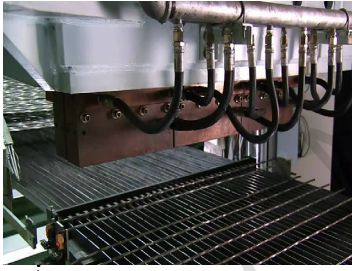
Step 2

Raw Material (wire)



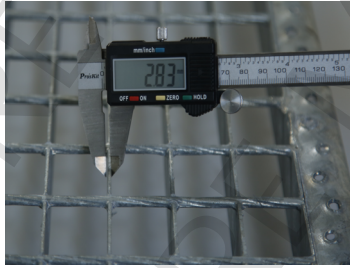
Step 4

Wire Straightening
& Cutting



Step 5

Steel Grating Welding



Step 10

Inspection

Step 11

Finished



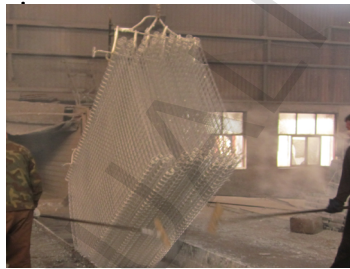
Step 7

Standard Steel Grating Cutting



Step 6

Edge Cutting

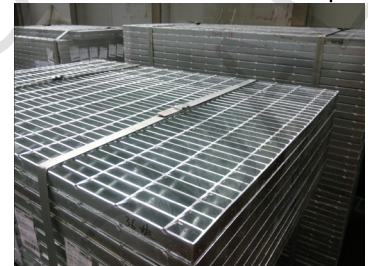


Step 9

Surface Treatment (Galvanized)

Step 12

Packaging & Storage



Step 8

Edge Banding

Step 5

Step 6

Step 7

Step 8

Step 9

Step 10

Step 11

Step 12



QUALITY CONTROL

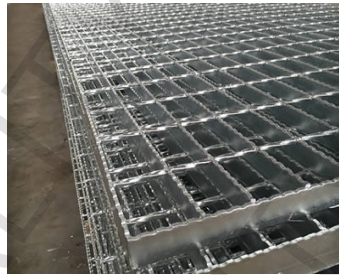


With the development of enterprise system, we set up a series of steel grating inspection for quality control during production. Additionally, we will re-inspect the products before delivery to ensure all the products are qualified and perfect in condition when our customers receive them. Inspection items are as follows:



Appearance inspection.

All the steel grating will be inspected one by one to ensure the smooth and integrated surface and appearance. If there are some defects, they will be selected and replaced by qualified products.



Appearance inspection



Bearing bar size inspection

Sizing inspection.

No matter the sheet thickness, bearing bar size and cross bar size or the whole size of width, length and height, they will be inspected with meter rulers, vernier caliper, micrometer and other professional measurement tools. All the sizes must accord with the tolerance of International Standards and customers' requirements.



Angle bar size inspection

Performance inspection.

The steel grating will be sampling inspected about the load performance according to customers' requirements and International standards. And the test report will be delivered along with the steel bar goods.

Package inspection.

Steel grating is commonly packed in steel belt or it is packed in wooden or metal pallet. Quantity and weight of each package should be made according to specific conditions and customers' requirements. All the package should be firm and rigid to withstand the high impact during transportation.

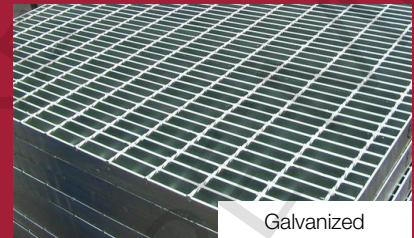
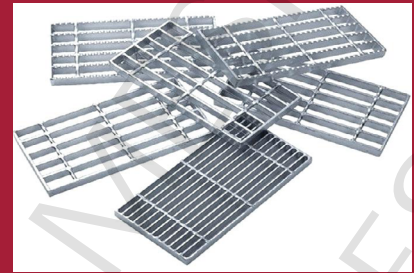


Package inspection



WHAT IS STEEL GRATING?

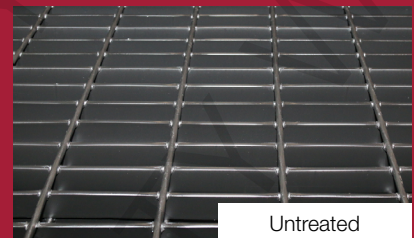
Steel grating is an open grid assembly of metal bars, in which the bearing bars, running in one direction, are spaced by rigid attachment to cross bars running perpendicular to them or by bent connecting bars extending between them, which is designed to hold heavy loads with minimal weight. It allows air, light and heat transmission, while providing strength to support everything on it from light pedestrian traffic to the heaviest vehicular traffic. It is widely used as flooring, catwalk, mezzanines/decking, stair tread, fencing, ramp, dock, trench cover, drainage pit cover, maintenance platform, pedestrian/crowded pedestrian in factories, workshops, motor rooms, trolley channels, heavy loading areas, boiler equipment and heavy equipment areas, etc.



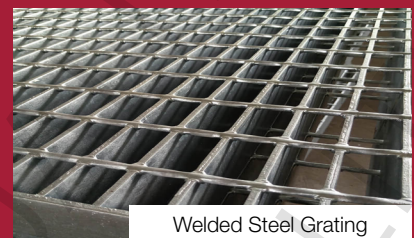
Galvanized



Painted



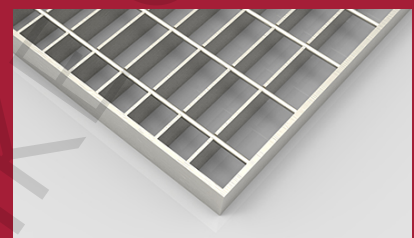
Untreated



Welded Steel Grating



Press-Locked Steel Grating



BENEFITS

› Range of bar grating alternatives

Provide safe, durable, and functional products for all environments.

› Flexibility

Allow ventilation and light to pass-through while providing strength alternatives to support light pedestrian traffic to the heaviest vehicular traffic.

› Longevity

Last longer than any other material alternatives including wood, plastic and competing metal products.

› Ease of installation and fabrication

Adapt to complex floor configurations and hard-to-fit areas.

› Maintenance-free

Open areas allow excellent drainage as well as lack of debris build-up.

BANDING

As manufactured, steel grating panels are provided with open ends. The open ends of the grating may be banded to provide additional transverse stiffness and a finished architectural appearance.

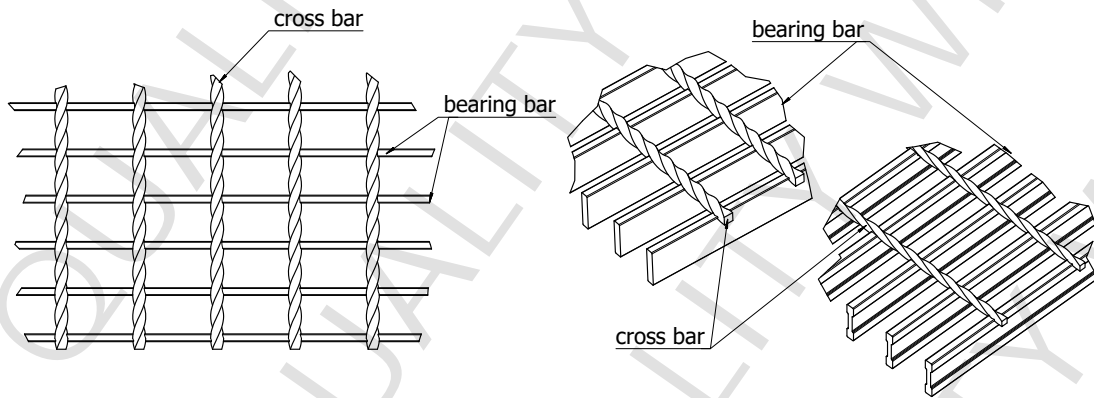
Achieved by welding a flat bar, similar in size to the bearing bars, to the cut end, banding enhances safety and should always be specified when gratings are designed to be removable.



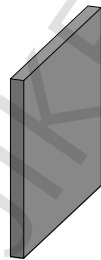
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WELDED STEEL GRATING

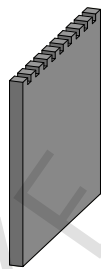
Welded steel grating is the most popular and versatile of all the industrial grating types. It consists of bearing bars that are automatically resistance-welded with the cross bars via the precise application of intense heat and pressure. This produces a rugged, one-piece panel with cross bars that are extremely rigid, yet smooth enough for easy, safe walking. This type of grating can be manufactured from stainless steel or low carbon steel. It has anti-slip surface, corrosion resistance, good drainage function, high strength and load capacity. Therefore, it is widely used in the form of walkways, safety barriers, drainage covers, platforms, ventilation grates and stair treads.



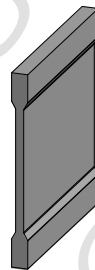
BEARING BAR TYPE



Flat Bar Type



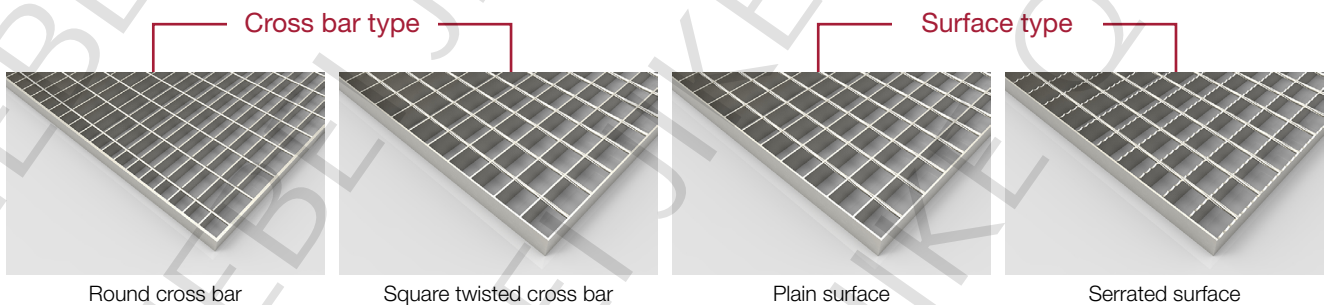
Serrated Type



I-Bar Type



Serrated I-Bar Type



Round cross bar

Square twisted cross bar

Plain surface

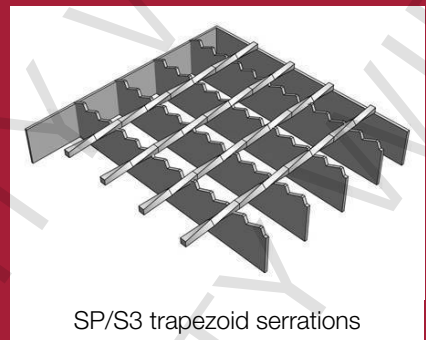
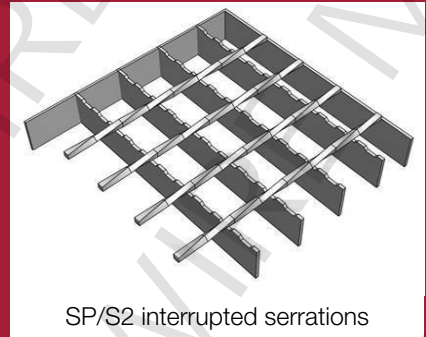
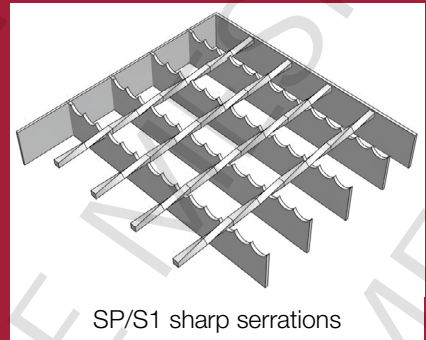
Serrated surface

BENEFITS

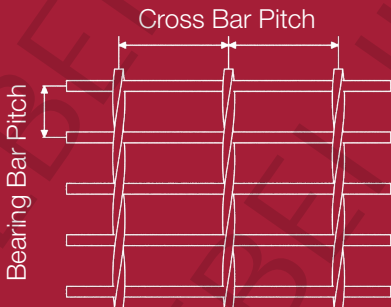
- › High strength and load capacity
- › Anti-slip surface
- › Corrosion resistance
- › Good drainage function
- › Easy to install and maintain

SPECIFICATIONS (STANDARD)

- › Material: carbon steel and stainless steel.
- › Surface treatment: galvanized, painted, untreated.
- › Surface type: standard plain surface, serrated surface.
- › Bearing bar type: flat bar and I-bar.
- › Cross bar type: round and square twisted cross bar.



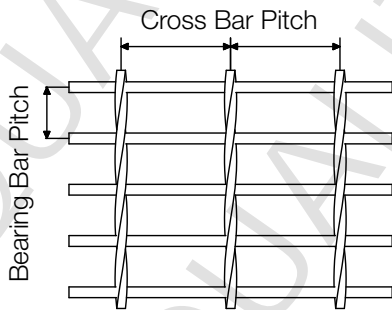
SPECIFICATION OF W-19 WELDED STEEL GRATING



Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
SGW19-01	3/4" × 1/8"	1-3/16"	4"	4.0
			2"	4.3
SGW19-02	3/4" × 3/16"	1-3/16"	4"	5.6
			2"	6.4
SGW19-03	1" × 1/8"	1-3/16"	4"	5.1
			2"	5.4
SGW19-04	1" × 3/16"	1-3/16"	4"	7.3
			2"	8.0
SGW19-05	1-1/4" × 1/8"	1-3/16"	4"	6.1
			2"	6.5
SGW19-06	1-1/4" × 3/16"	1-3/16"	4"	8.9
			2"	9.7
SGW19-07	1-1/2" × 1/8"	1-3/16"	4"	7.3
			2"	7.9
SGW19-08	1-1/2" × 3/16"	1-3/16"	4"	10.6
			2"	11.8
SGW19-09	1-3/4" × 3/16"	1-3/16"	4"	12.2
			2"	13.5
SGW19-10	2" × 3/16"	1-3/16"	4"	13.9
			2"	15.1
SGW19-11	2-1/4" × 3/16"	1-3/16"	4"	15.4
			2"	16.7
SGW19-12	2-1/2" × 3/16"	1-3/16"	4"	17.1
			2"	18.3

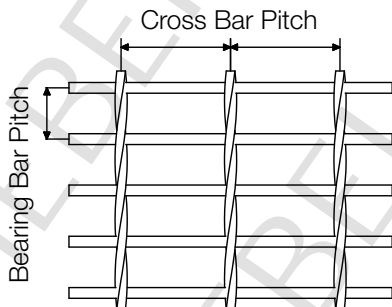
WELDED STEEL GRATING

SPECIFICATION OF W-15 WELDED STEEL GRATING



Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
SGW15-01	3/4" × 1/8"	15/16"	4"	4.8
			2"	4.8
SGW15-02	3/4" × 3/16"	15/16"	4"	6.9
			2"	7.0
SGW15-03	1" × 1/8"	15/16"	4"	6.2
			2"	6.4
SGW15-04	1" × 3/16"	15/16"	4"	9.0
			2"	9.3
SGW15-05	1-1/4" × 1/8"	15/16"	4"	7.5
			2"	7.9
SGW15-06	1-1/4" × 3/16"	15/16"	4"	11.1
			2"	11.3
SGW15-07	1-1/2" × 1/8"	15/16"	4"	9.0
			2"	9.5
SGW15-08	1-1/2" × 3/16"	15/16"	4"	13.1
			2"	13.7
SGW15-09	1-3/4" × 3/16"	15/16"	4"	15.2
			2"	15.8
SGW15-10	2" × 3/16"	15/16"	4"	17.3
			2"	17.9
SGW15-11	2-1/4" × 3/16"	15/16"	4"	19.2
			2"	20.3
SGW15-12	2-1/2" × 3/16"	15/16"	4"	21.3
			2"	22.1

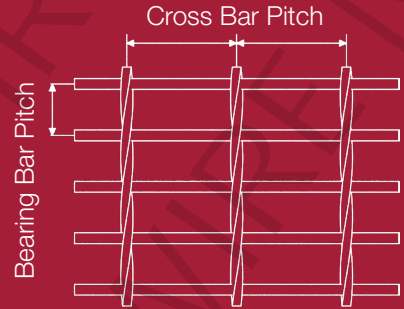
SPECIFICATION OF W-11 WELDED STEEL GRATING



Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
SGW11-01	3/4" × 1/8"	11/16"	4"	6.1
			2"	6.6
SGW11-02	3/4" × 3/16"	11/16"	4"	9.1
			2"	9.0
SGW11-03	1" × 1/8"	11/16"	4"	8.0
			2"	8.5
SGW11-04	1" × 3/16"	11/16"	4"	11.9
			2"	11.9
SGW11-05	1-1/4" × 1/8"	11/16"	4"	9.9
			2"	10.3
SGW11-06	1-1/4" × 3/16"	11/16"	4"	14.9
			2"	14.8
SGW11-07	1-1/2" × 1/8"	11/16"	4"	11.8
			2"	12.6
SGW11-08	1-1/2" × 3/16"	11/16"	4"	17.0
			2"	17.8
SGW11-09	1-3/4" × 3/16"	11/16"	4"	20.4
			2"	20.8
SGW11-10	2" × 3/16"	11/16"	4"	23.2
			2"	23.8
SGW11-11	2-1/4" × 3/16"	11/16"	4"	25.9
			2"	26.5
SGW11-12	2-1/2" × 3/16"	11/16"	4"	28.7
			2"	29.3

HEAVY DUTY

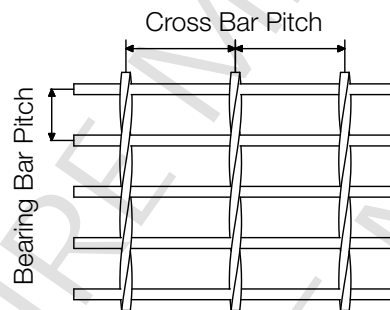
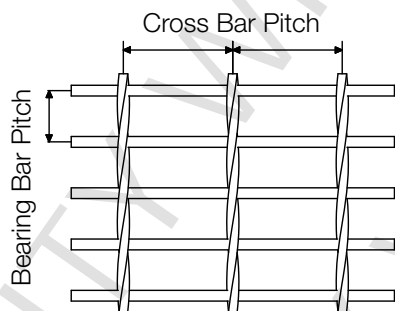
- › Material: carbon steel and stainless steel.
- › Surface treatment: galvanized, painted, untreated.
- › Surface type: plain surface, serrated surface.
- › Bearing bar type: flat bar and I-bar.
- › Cross bar type: round and square twisted cross bar.



SPECIFICATION OF W-15 WELDED STEEL GRATING (HD)

Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
HDSGW15-01	1" x 1/4"	15/16"	4"	11.7
			2"	12.4
HDSGW15-02	1" x 5/16"	15/16"	4"	14.9
			2"	16.1
HDSGW15-03	1-1/4" x 1/4"	15/16"	4"	14.5
			2"	15.1
HDSGW15-04	1-1/4" x 5/16"	15/16"	4"	18.4
			2"	19.6
HDSGW15-05	1-1/2" x 1/4"	15/16"	4"	17.3
			2"	17.9
HDSGW15-06	1-1/2" x 5/16"	15/16"	4"	21.9
			2"	23.1
HDSGW15-07	1-3/4" x 1/4"	15/16"	4"	20.1
			2"	20.7
HDSGW15-08	1-3/4" x 5/16"	15/16"	4"	25.3
			2"	26.8
HDSGW15-09	2" x 1/4"	15/16"	4"	22.8
			2"	23.5
HDSGW15-10	2" x 5/16"	15/16"	4"	28.8
			2"	29.9
HDSGW15-11	2-1/4" x 1/4"	15/16"	4"	25.6
			2"	26.3
HDSGW15-12	2-1/4" x 5/16"	15/16"	4"	32.3
			2"	33.4
HDSGW15-13	2-1/2" x 1/4"	15/16"	4"	28.4
			2"	29.1
HDSGW15-14	2-1/2" x 5/16"	15/16"	4"	35.7
			2"	36.9
HDSGW15-15	2-3/4" x 1/4"	15/16"	4"	31.2
			2"	31.8
HDSGW15-16	2-3/4" x 5/16"	15/16"	4"	39.6
			2"	41.1
HDSGW15-17	3" x 1/4"	15/16"	4"	34.4
			2"	35.5
HDSGW15-18	3" x 5/16"	15/16"	4"	43.1
			2"	44.6

WELDED STEEL GRATING

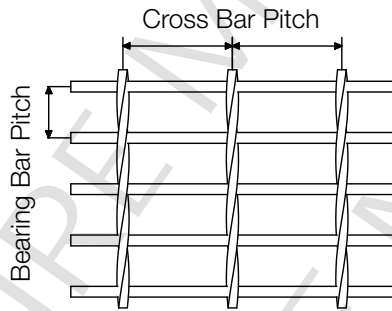
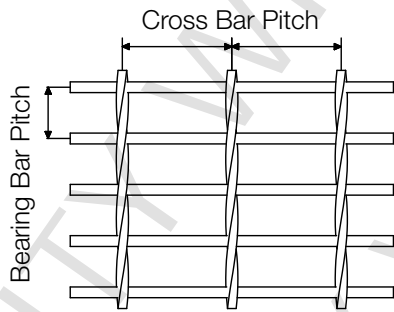


SPECIFICATION OF W-19 WELDED STEEL GRATING (HD)

Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
HDSGW19-01	1" x 1/4"	1-3/16"	4"	9.5
			2"	10.1
HDSGW19-02	1" x 5/16"	1-3/16"	4"	12.1
			2"	13.3
HDSGW19-03	1-1/4" x 1/4"	1-3/16"	4"	11.7
			2"	12.3
HDSGW19-04	1-1/4" x 5/16"	1-3/16"	4"	14.3
			2"	16.0
HDSGW19-05	1-1/2" x 1/4"	1-3/16"	4"	13.9
			2"	14.5
HDSGW19-06	1-1/2" x 5/16"	1-3/16"	4"	17.8
			2"	18.8
HDSGW19-07	1-3/4" x 1/4"	1-3/16"	4"	16.1
			2"	16.7
HDSGW19-08	1-3/4" x 5/16"	1-3/16"	4"	20.4
			2"	21.5
HDSGW19-09	2" x 1/4"	1-3/16"	4"	18.3
			2"	18.9
HDSGW19-10	2" x 5/16"	1-3/16"	4"	23.1
			2"	24.6
HDSGW19-11	2-1/4" x 1/4"	1-3/16"	4"	20.5
			2"	21.1
HDSGW19-12	2-1/4" x 5/16"	1-3/16"	4"	25.9
			2"	27.0
HDSGW19-13	2-1/2" x 1/4"	1-3/16"	4"	22.7
			2"	23.3
HDSGW19-14	2-1/2" x 5/16"	1-3/16"	4"	28.6
			2"	29.8
HDSGW19-15	2-3/4" x 1/4"	1-3/16"	4"	24.9
			2"	25.6
HDSGW19-16	2-3/4" x 5/16"	1-3/16"	4"	31.8
			2"	33.3
HDSGW19-17	3" x 1/4"	1-3/16"	4"	27.8
			2"	28.7
HDSGW19-18	3" x 5/16"	1-3/16"	4"	34.5
			2"	36.1

SPECIFICATION OF W-22 WELDED STEEL GRATING (HD)

Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
HDSGW22-01	1" x 1/4"	1-3/8"	4"	8.3
			2"	9.0
HDSGW22-02	1" x 5/16"	1-3/8"	4"	10.7
			2"	11.8
HDSGW22-03	1-1/4" x 1/4"	1-3/8"	4"	10.2
			2"	10.9
HDSGW22-04	1-1/4" x 5/16"	1-3/8"	4"	13.1
			2"	14.2
HDSGW22-05	1-1/2" x 1/4"	1-3/8"	4"	12.1
			2"	12.8
HDSGW22-06	1-1/2" x 5/16"	1-3/8"	4"	15.4
			2"	16.8
HDSGW22-07	1-3/4" x 1/4"	1-3/8"	4"	14.0
			2"	14.7
HDSGW22-08	1-3/4" x 5/16"	1-3/8"	4"	17.8
			2"	19.0
HDSGW22-09	2" x 1/4"	1-3/8"	4"	16.0
			2"	16.6
HDSGW22-10	2" x 5/16"	1-3/8"	4"	20.2
			2"	21.3
HDSGW22-11	2-1/4" x 1/4"	1-3/8"	4"	17.9
			2"	18.5
HDSGW22-12	2-1/4" x 5/16"	1-3/8"	4"	22.6
			2"	23.7
HDSGW22-13	2-1/2" x 1/4"	1-3/8"	4"	19.8
			2"	20.4
HDSGW22-14	2-1/2" x 5/16"	1-3/8"	4"	25.0
			2"	26.1
HDSGW22-15	2-3/4" x 1/4"	1-3/8"	4"	21.7
			2"	22.3
HDSGW22-16	2-3/4" x 5/16"	1-3/8"	4"	27.8
			2"	29.3
HDSGW22-17	3" x 1/4"	1-3/8"	4"	24.1
			2"	25.2
HDSGW22-18	3" x 5/16"	1-3/8"	4"	30.2
			2"	31.7



SPECIFICATION OF W-30 WELDED STEEL GRATING (HD)

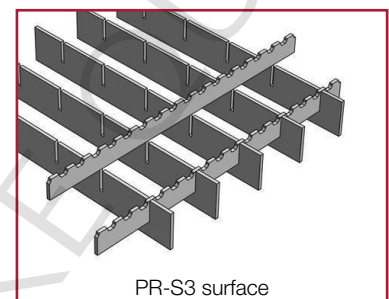
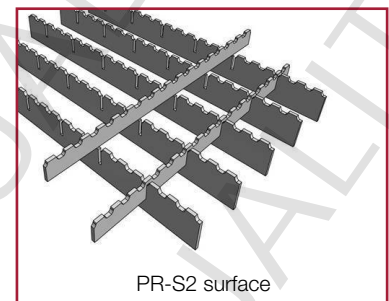
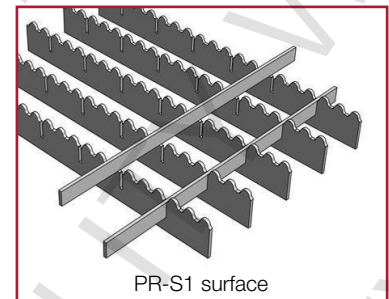
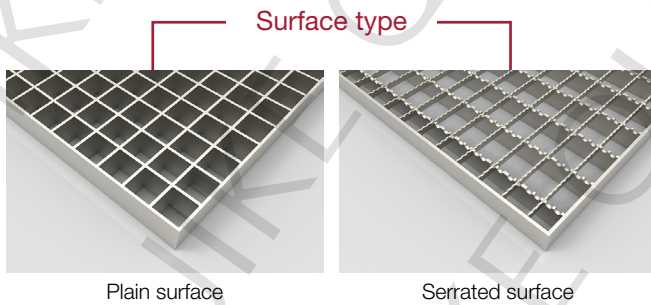
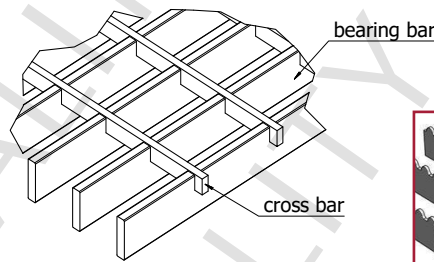
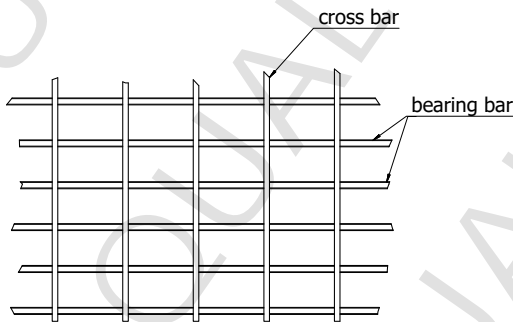
Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
HDSGW30-01	1" x 1/4"	1-7/8"	4"	6.3
			2"	7.0
HDSGW30-02	1" x 5/16"	1-7/8"	4"	8.2
			2"	9.4
HDSGW30-03	1-1/4" x 1/4"	1-7/8"	4"	7.8
			2"	8.4
HDSGW30-04	1-1/4" x 5/16"	1-7/8"	4"	10.0
			2"	11.1
HDSGW30-05	1-1/2" x 1/4"	1-7/8"	4"	9.2
			2"	9.8
HDSGW30-06	1-1/2" x 5/16"	1-7/8"	4"	11.8
			2"	12.9
HDSGW30-07	1-3/4" x 1/4"	1-7/8"	4"	10.6
			2"	11.3
HDSGW30-08	1-3/4" x 5/16"	1-7/8"	4"	13.6
			2"	14.7
HDSGW30-09	2" x 1/4"	1-7/8"	4"	12.0
			2"	12.7
HDSGW30-10	2" x 5/16"	1-7/8"	4"	15.3
			2"	16.5
HDSGW30-11	2-1/4" x 1/4"	1-7/8"	4"	13.6
			2"	14.1
HDSGW30-12	2-1/4" x 5/16"	1-7/8"	4"	17.1
			2"	18.3
HDSGW30-13	2-1/2" x 1/4"	1-7/8"	4"	14.9
			2"	15.3
HDSGW30-14	2-1/2" x 5/16"	1-7/8"	4"	18.9
			2"	20.0
HDSGW30-15	2-3/4" x 1/4"	1-7/8"	4"	16.3
			2"	17.0
HDSGW30-16	2-3/4" x 5/16"	1-7/8"	4"	21.0
			2"	22.6
HDSGW30-17	3" x 1/4"	1-7/8"	4"	18.2
			2"	19.3
HDSGW30-18	3" x 5/16"	1-7/8"	4"	22.8
			2"	24.4

SPECIFICATION OF W-38 WELDED STEEL GRATING (HD)

Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
HDSGW38-01	1" x 1/4"	2-3/8"	4"	5.2
			2"	5.9
HDSGW38-02	1" x 5/16"	2-3/8"	4"	6.8
			2"	7.9
HDSGW38-03	1-1/4" x 1/4"	2-3/8"	4"	8.3
			2"	7.0
HDSGW38-04	1-1/4" x 5/16"	2-3/8"	4"	8.2
			2"	9.4
HDSGW38-05	1-1/2" x 1/4"	2-3/8"	4"	7.5
			2"	8.1
HDSGW38-06	1-1/2" x 5/16"	2-3/8"	4"	9.6
			2"	10.8
HDSGW38-07	1-3/4" x 1/4"	2-3/8"	4"	8.6
			2"	9.3
HDSGW38-08	1-3/4" x 5/16"	2-3/8"	4"	11.1
			2"	12.2
HDSGW38-09	2" x 1/4"	2-3/8"	4"	9.8
			2"	10.4
HDSGW38-10	2" x 5/16"	2-3/8"	4"	12.5
			2"	13.6
HDSGW38-11	2-1/4" x 1/4"	2-3/8"	4"	10.9
			2"	11.5
HDSGW38-12	2-1/4" x 5/16"	2-3/8"	4"	13.9
			2"	15.0
HDSGW38-13	2-1/2" x 1/4"	2-3/8"	4"	12.0
			2"	12.7
HDSGW38-14	2-1/2" x 5/16"	2-3/8"	4"	15.3
			2"	16.5
HDSGW38-15	2-3/4" x 1/4"	2-3/8"	4"	13.2
			2"	13.8
HDSGW38-16	2-3/4" x 5/16"	2-3/8"	4"	17.2
			2"	18.7
HDSGW38-17	3" x 1/4"	2-3/8"	4"	14.9
			2"	15.9
HDSGW38-18	3" x 5/16"	2-3/8"	4"	18.6
			2"	20.1

PRESS-LOCKED STEEL GRATING

Press-locked steel grating features a system of interlocking perpendicular bars that offer the same degree of strength, durability and openness as welded bar grating. However, instead of welding the joints together, press-locked bar grating relies on the application of enormous hydraulic pressure that fuses the two close-tolerance slotted bars together. Permanent locking is achieved by forcing the deep cross bar into the notched bearing bar. This type of grating can be manufactured from stainless steel or low carbon steel. With the performance of high bearing capacity, non-slip, anti-corrosion and easy to install and remove, pressure locked grating is widely used for ceilings, platforms, floors, fence and all kinds of cover in the factories, civil and commercial buildings.



SERRATED SURFACE TYPE

- › PR/S1: Trapezoidal teeth on the bearing bar.
- › PR/S2: Trapezoidal tooth both on the bearing bar and cross bar with the highest non-slip performance. It is the most popular types among the three types.
- › PR/S3: The non-slip tooth is applied to the connect components. It has the lowest non-slip performance.

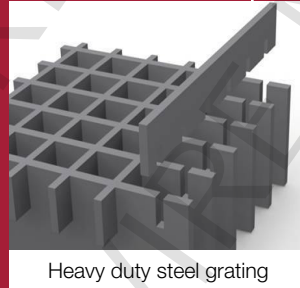
CATEGORY



Common steel grating



Integral steel grating



Heavy duty steel grating



Louver steel grating

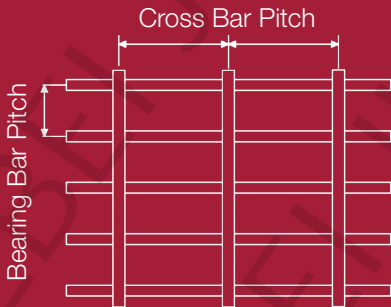
BENEFITS

- › Light weight, high bearing capability and high strength
- › Non-slip & anti-corrosion performance
- › Not easy to deform
- › Beautiful appearance
- › Easy to install and remove
- › Extended service life

SPECIFICATIONS

- › Material: carbon steel and stainless steel.
- › Surface treatment: galvanized, painted, untreated.
- › Surface type: standard plain surface, serrated surface.
- › Cross bar type: flat cross bar and serrated cross bar.

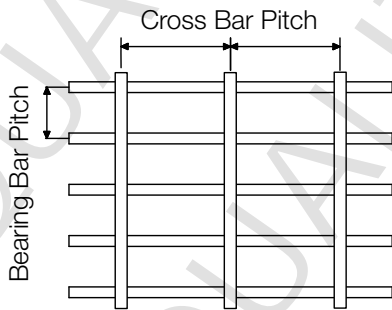
SPECIFICATION OF P-19 PRESS-LOCKED STEEL GRATING



Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
SGP19-01	3/4" x 1/8"	1-3/16"	4"	4.6
			2"	4.9
SGP19-02	3/4" x 3/16"	1-3/16"	4"	6.3
			2"	7.1
SGP19-03	1" x 1/8"	1-3/16"	4"	5.7
			2"	6.0
SGP19-04	1" x 3/16"	1-3/16"	4"	8.0
			2"	8.7
SGP19-05	1-1/4" x 1/8"	1-3/16"	4"	6.8
			2"	7.2
SGP19-06	1-1/4" x 3/16"	1-3/16"	4"	9.6
			2"	10.4
SGP19-07	1-1/2" x 1/8"	1-3/16"	4"	7.9
			2"	8.5
SGP19-08	1-1/2" x 3/16"	1-3/16"	4"	11.2
			2"	12.4
SGP19-09	1-3/4" x 3/16"	1-3/16"	4"	12.9
			2"	14.2
SGP19-10	2" x 3/16"	1-3/16"	4"	14.5
			2"	15.7
SGP19-11	2-1/4" x 3/16"	1-3/16"	4"	16.1
			2"	17.4
SGP19-12	2-1/2" x 3/16"	1-3/16"	4"	17.7
			2"	18.9

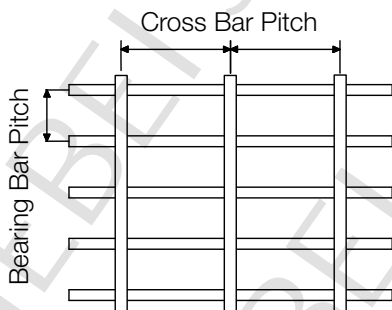
PRESS-LOCKED STEEL GRATING

SPECIFICATION OF P-15 PRESS-LOCKED STEEL GRATING



Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
SGP15-01	3/4" × 1/8"	15/16"	4"	5.5
			2"	5.5
SGP15-02	3/4" × 3/16"	15/16"	4"	7.5
			2"	7.7
SGP15-03	1" × 1/8"	15/16"	4"	6.9
			2"	7.2
SGP15-04	1" × 3/16"	15/16"	4"	9.8
			2"	10.1
SGP15-05	1-1/4" × 1/8"	15/16"	4"	8.2
			2"	8.7
SGP15-06	1-1/4" × 3/16"	15/16"	4"	11.7
			2"	12.2
SGP15-07	1-1/2" × 1/8"	15/16"	4"	9.6
			2"	10.6
SGP15-08	1-1/2" × 3/16"	15/16"	4"	13.8
			2"	14.8
SGP15-09	1-3/4" × 3/16"	15/16"	4"	15.8
			2"	16.9
SGP15-10	2" × 3/16"	15/16"	4"	17.9
			2"	19.0
SGP15-11	2-1/4" × 3/16"	15/16"	4"	19.9
			2"	21.1
SGP15-12	2-1/2" × 3/16"	15/16"	4"	22.0
			2"	23.2

SPECIFICATION OF P-11 PRESS-LOCKED STEEL GRATING



Item	Bearing Bar Size	Bearing Bar Pitch	Cross Bar Pitch	Weight (Lbs./S.F.)
SGP11-01	3/4" × 1/8"	11/16"	4"	6.6
			2"	7.6
SGP11-02	3/4" × 3/16"	11/16"	4"	9.7
			2"	10.4
SGP11-03	1" × 1/8"	11/16"	4"	8.5
			2"	9.5
SGP11-04	1" × 3/16"	11/16"	4"	12.6
			2"	13.3
SGP11-05	1-1/4" × 1/8"	11/16"	4"	10.4
			2"	11.3
SGP11-06	1-1/4" × 3/16"	11/16"	4"	15.6
			2"	16.2
SGP11-07	1-1/2" × 1/8"	11/16"	4"	12.3
			2"	13.9
SGP11-08	1-1/2" × 3/16"	11/16"	4"	17.7
			2"	19.7
SGP11-09	1-3/4" × 3/16"	11/16"	4"	21.0
			2"	22.7
SGP11-10	2" × 3/16"	11/16"	4"	23.8
			2"	25.7
SGP11-11	2-1/4" × 3/16"	11/16"	4"	26.5
			2"	28.4
SGP11-12	2-1/2" × 3/16"	11/16"	4"	29.4
			2"	31.2

APPLICATION

“

Steel grating is popular with industrial and commercial areas and is widely used as mezzanines, stair treads, walkways, ceilings, floorings, drainage trench covers, sun shade panels, observation towers, bridge decks, and various platforms for temporary or permanent applications in daily life.

”



Steel grating platform



Steel grating platform walkways



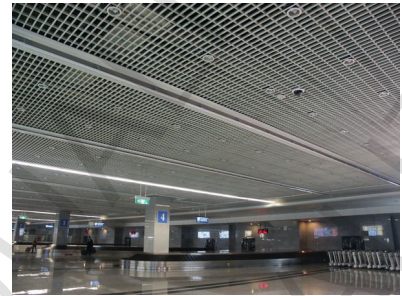
Steel grating trench covers



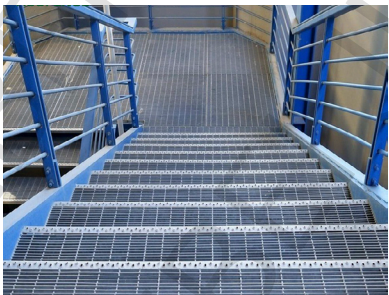
Steel grating platform mezzanine



Steel grating flooring



Steel grating ceiling



Steel grating stair treads



Steel grating bridge decks



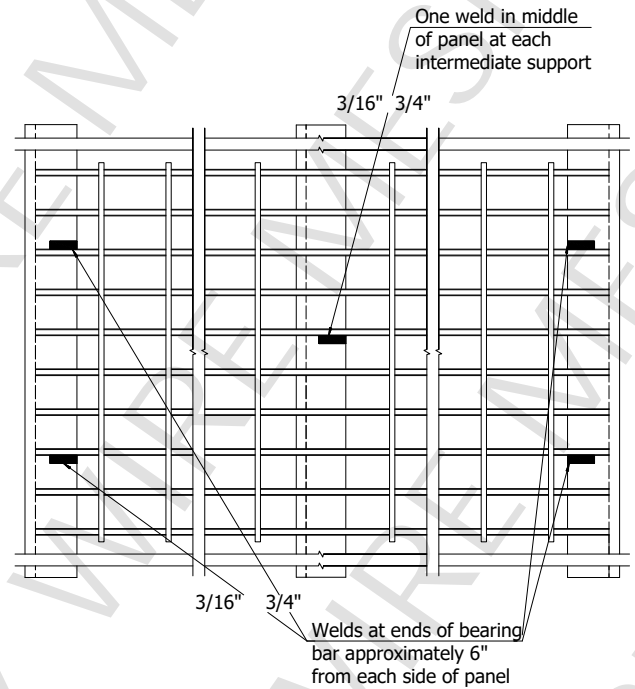
Steel grating sun shade panels

INSTALLATION

Steel gratings can be installed in two ways: welded installation and grating fasteners.

Welded Installation

When steel grating needs to be a permanent installation, welding is highly recommended to fasten steel grating in place by securing welding panels to the supporting structure. The diagram to the right shows the recommended minimum weld size and spacing for pedestrian applications.



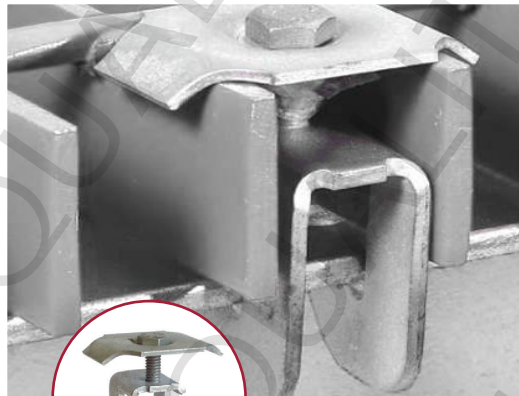
Grating fasteners

When steel grating is designed to be removable or when welding is not practical, grating fasteners are highly recommended. The minimum fastener spacing for pedestrian application is equal to the minimum weld pattern illustrated above.



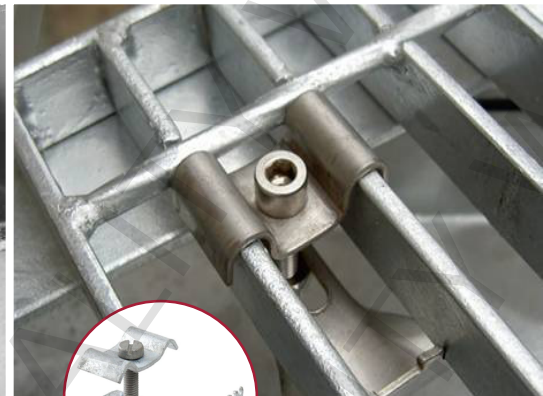
Saddle Clips

The saddle clip bridges two bearing bars and is attached with self-tapping bolt, self-threader, weld stud or bolt and nut.



G-Clips

This G-clip fastens grating to a horizontal-facing steel structural member edge.



Grate Fast Clips

This grate fast clip enables rapid and secure connection of open grate flooring to steel sections.

FEATURES

- Do not damage the galvanized layer.
- It can be demolished at any time, reused.
- In the later stage, it is necessary to check regularly whether the bolts are loose and fasten them in time to avoid them falling off.
- Easy to install.

LOADING TABLES (STANDARD)

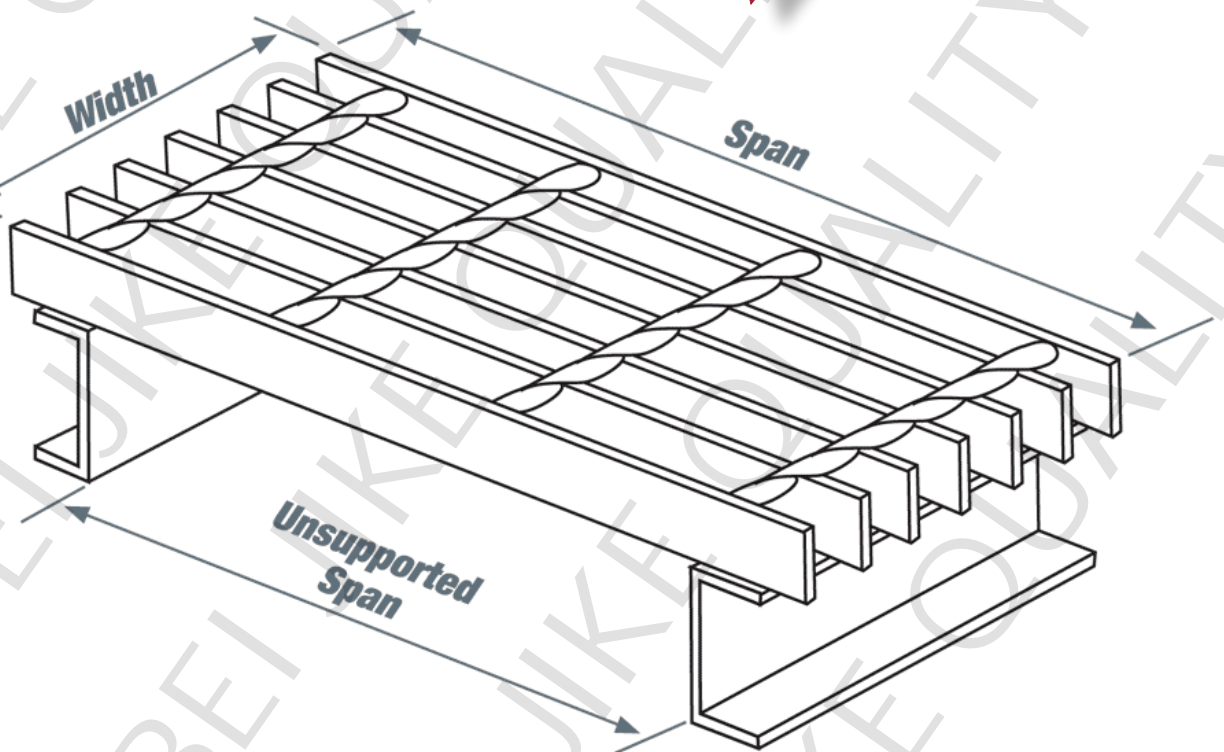
Service Loads

The load tables 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.

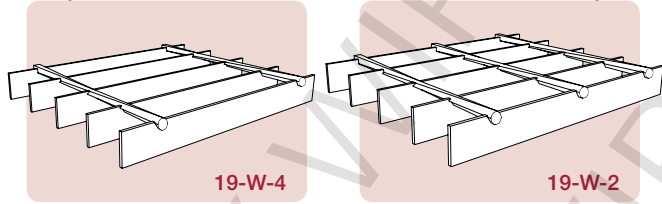
For more detailed information, see Loading Table.



Carbon Steel Welded Bar Grating Carbon Steel Press-Locked Bar Grating

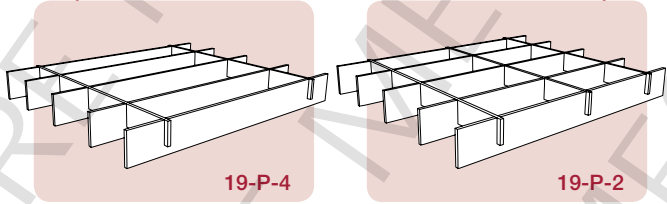
Steel Welded Grating

1-3/16" Center to Center of Bearing Bars



Steel Pressure-Locked

1-3/16" Center to Center of Bearing Bars



1/4" Round Twisted Cross Bars
4" Center to Center

1/4" Round Twisted Cross Bars
2" Center to Center

Rectangular Cross Bars
4" Center to Center

Rectangular Cross Bars
2" Center to Center

Static Load Table - Loads & deflections are theoretical, based on a maximum allowable fiber stress of 18,000 PSI. E = 30,000,000 PSI

Bar Size	Type	Approximate Weight #/Sq. Ft.	Sec. Mod. Per Foot of Width	Load Types	Maximum Safe Clear Span															
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"			
3/4" x 1/8"	19-W-4	4.0	0.122	U	366	234	163	120	92	72	NOTE: Spans and loads to the right of the heavy line exceed a deflection of 1/4" for uniform loads of 100#/sq. ft. which provide safe pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer. NOTE: When calculating loads that require serrated bearing bars, subtract 1/4" from your grating depth and use that load table. EXAMPLE: (1 1/4" x 3/16") serrated bearing bars would have the same strength as (1" x 3/16") non-serrated bearing bars, therefore you would use the (1" x 3/16") load table.									
	19-W-2	4.3		D	.096	.150	.216	.295	.386	.484										
	19-P-4	4.6		C	366	293	244	209	183	163										
	19-P-2	4.9		D	.077	.120	.173	.235	.307	.389										
3/4" x 3/16"	19-W-4	5.6	0.183	U	549	351	244	179	137	108										
	19-W-2	6.4		D	.096	.150	.216	.294	.383	.482										
	19-P-4	6.3		C	549	439	366	314	275	244										
	19-P-2	7.1		D	.177	.120	.173	.236	.308	.389										
1" x 1/8"	19-W-4	5.1	0.216	U	648	415	288	212	162	128										
	19-W-2	5.4		D	.057	.112	.162	.221	.288	.364										
	19-P-4	5.7		C	648	518	432	370	324	288										
	19-P-2	6.0		D	.057	.090	.129	.176	.230	.291										
1" x 3/16"	19-W-4	7.3	0.325	U	975	624	433	318	244	193										
	19-W-2	8.0		D	.072	.113	.162	.221	.289	.366										
	19-P-4	8.0		C	975	780	650	557	488	435										
	19-P-2	8.7		D	.058	.090	.130	.177	.231	.292										
1 1/4" x 1/8"	19-W-4	6.1	0.339	U	1017	651	452	332	254	201										
	19-W-2	6.5		D	.058	.090	.130	.177	.231	.293										
	19-P-4	6.8		C	1017	814	678	581	509	452										
	19-P-2	7.2		D	.046	.072	.104	.142	.185	.234										
1 1/4" x 3/16"	19-W-4	8.9	0.507	U	1521	973	676	497	380	300										
	19-W-2	9.7		D	.058	.090	.130	.177	.230	.291										
	19-P-4	9.6		C	1521	1217	1014	869	761	676										
	19-P-2	10.4		D	.046	.072	.104	.141	.184	.233										
1 1/2" x 1/8"	19-W-4	7.3	0.488	U	1464	937	651	478	366	289										
	19-W-2	7.9		D	.048	.075	.108	.147	.192	.233										
	19-P-4	7.9		C	1464	1171	976	837	732	651										
	19-P-2	8.5		D	.038	.060	.086	.118	.153	.194										
1 1/2" x 3/16"	19-W-4	10.6	0.73	U	2190	1402	973	715	548	433										
	19-W-2	11.8		D	.048	.075	.108	.147	.192	.243										
	19-P-4	11.2		C	2190	1752	1460	1251	1095	973										
	19-P-2	12.4		D	.038	.060	.086	.118	.154	.196										
1 3/4" x 3/16"	19-W-4	12.2	0.994	U	2982	1908	1325	974	746	589										
	19-W-2	13.5		D	.041	.064	.093	.126	.165	.208										
	19-P-4	12.9		C	2982	2386	1988	1704	1491	1325										
	19-P-2	14.2		D	.033	.051	.074	.101	.132	.167										
2" x 3/16"	19-W-4	13.9	1.299	U	3897	2494	1732	1272	974	770										
	19-W-2	15.1		D	.036	.056	.081	.110	.144	.182										
	19-P-4	14.5		C	3897	3118	2598	2227	1949	1732										
	19-P-2	15.7		D	.029	.045	.065	.088	.115	.146										
2 1/4" x 3/16"	19-W-4	15.4	1.644	U	4932	3156	2192	1610	1233	974										
	19-W-2	16.7		D	.032	.050	.072	.098	.128	.162										
	19-P-4	16.1		C	4932	3946	3288	2818	2466	2192										
	19-P-2	17.4		D	.026	.040	.058	.078	.102	.130										
2 1/2" x 3/16"	19-W-4	17.1	2.029	U	6087	3896	2705	1988	1522	1202										
	19-W-2	18.3		D	.029	.045	.065	.088	.115	.146										
	19-P-4	17.7		C	6087	4870	4058	3478	3044	2705										
	19-P-2	18.9		D	.023	.036	.052	.071	.092	.117										

Panel Width Chart in Inche Dimensions are Outside to Outside of Bearing Bars.

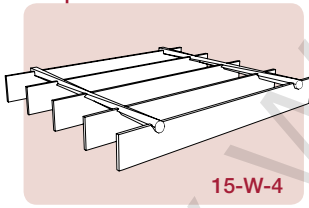
Also Available in Stainless Steel

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

Shaded columns indicate Standard Panel Width

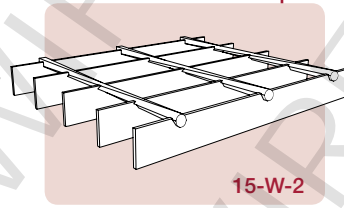
Steel Welded Grating

15/16" Center to Center of Bearing Bars



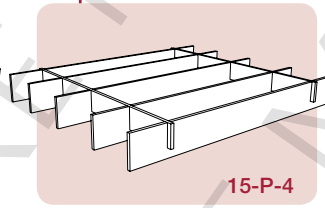
15-W-4

1/4" Round Twisted Cross Bars
4" Center to Center



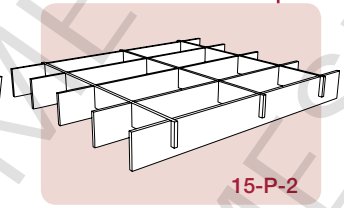
15-W-2

1/4" Round Twisted Cross Bars
2" Center to Center



15-P-4

Rectangular Cross Bars
4" Center to Center



15-P-2

Rectangular Cross Bars
2" Center to Center

Static Load Table – Loads & deflections are theoretical, based on a maximum allowable fiber stress of 18,000 PSI. E = 30,000,000 PSI

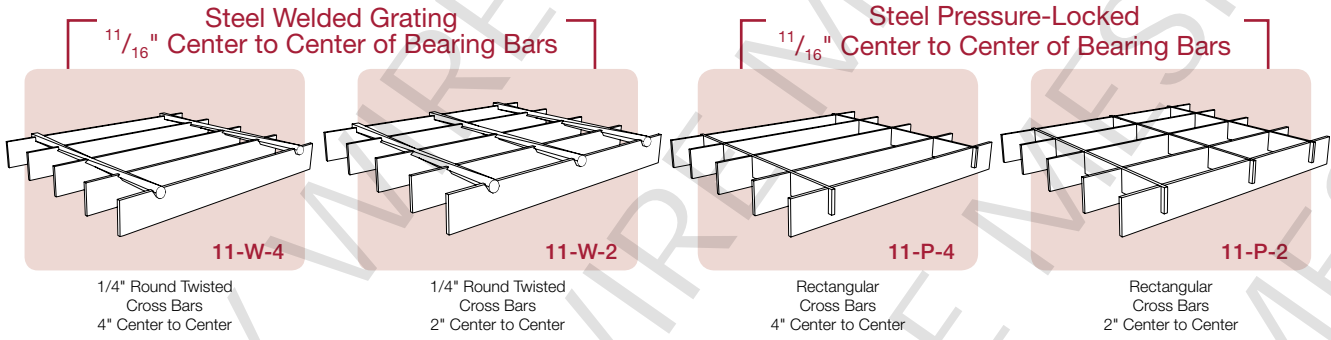
Bar Size	Type	Approximate Weight #/Sq. Ft.	Sec. Mod. Per Foot of Width	Load Types	Maximum Safe Clear Span												
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"
3/4" x 1/8"	15-W-4	4.8	0.153	U	459	294	204	150	115	91	NOTE: Spans and loads to the right of the heavy line exceed a deflection of 1/4" for uniform loads of 100#/sq. ft. which provide safe pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer. NOTE: When calculating loads that require serrated bearing bars, subtract 1/4" from your grating depth and use that load table. EXAMPLE: (1 1/4" x 3/16") serrated bearing bars would have the same strength as (1" x 3/16") non-serrated bearing bars, therefore you would use the (1" x 3/16") load table.						
	15-W-2	4.8		D	.096	.150	.215	.293	.391	.486							
	15-P-4	5.5		C	459	367	306	262	230	204							
	15-P-2	5.5		D	.077	.120	.172	.234	.307	.387							
3/4" x 3/16"	15-W-4	6.9	0.23	U	690	442	307	225	173	136							
	15-W-2	7.0		D	.096	.150	.216	.293	.393	.485							
	15-P-4	7.5		C	690	552	460	394	345	307							
	15-P-2	7.7		D	.077	.120	.173	.235	.307	.389							
1" x 1/8"	15-W-4	6.2	0.272	U	816	522	362	266	204	161	131	108	91	U - Safe Uniform Load in lbs. per sq. ft. C - Safe Concentrated Load in lbs. per foot of grating width. D - Deflection in inches.			
	15-W-2	6.4		D	.072	.119	.162	.220	.294	.364	.451	.544	.649				
	15-P-4	6.9		C	816	653	544	466	408	363	326	297	272				
	15-P-2	7.2		D	.058	.090	.129	.176	.230	.291	.359	.435	.518				
1" x 3/16"	15-W-4	9.0	0.409	U	1227	785	545	401	307	242	196	162	136				
	15-W-2	9.3		D	.072	.113	.162	.221	.295	.365	.451	.545	.648				
	15-P-4	9.8		C	1227	982	818	701	614	545	491	446	409				
	15-P-2	10.1		D	.058	.090	.130	.177	.231	.292	.361	.437	.520				
1 1/4" x 1/8"	15-W-4	7.5	0.427	U	1281	820	569	418	320	253	205	169	142	121	105		
	15-W-2	7.9		D	.058	.090	.130	.177	.236	.293	.362	.436	.519	610	.711		
	15-P-4	8.2		C	1281	1025	854	732	641	569	512	466	427	394	366		
	15-P-2	8.7		D	.046	.072	.104	.142	.185	.234	.289	.350	.416	.489	.567		
1 1/4" x 3/16"	15-W-4	11.1	0.638	U	1914	1225	850	625	479	378	306	253	213	181	156		
	15-W-2	11.3		D	.058	.090	.130	.177	.236	.292	.360	.436	.519	.608	.705		
	15-P-4	11.7		C	1914	1531	1276	1094	957	851	766	696	638	589	547		
	15-P-2	12.2		D	.046	.072	.104	.141	.184	.234	.288	.349	.415	.487	.565		
1 1/2" x 1/8"	15-W-4	9.0	0.614	U	1842	1179	819	601	461	364	295	244	205	174	150	115	91
	15-W-2	9.5		D	.048	.075	.108	.147	.196	.243	.300	.363	.432	.506	.586	.767	.972
	15-P-4	9.6		C	1842	1474	1228	1052	921	819	737	670	614	567	526	461	409
	15-P-2	10.6		D	.038	.060	.086	.118	.154	.194	.240	.290	.345	.406	.470	.615	.777
1 1/2" x 3/16"	15-W-4	13.1	0.919	U	2757	1764	1225	900	689	545	441	365	306	261	225	172	136
	15-W-2	13.7		D	.048	.075	.108	.147	.192	.243	.300	.364	.432	.507	.588	.767	.972
	15-P-4	15.2		C	2757	2206	1838	1575	1379	1225	1103	1003	919	848	788	689	613
	15-P-2	15.8		D	.038	.060	.086	.118	.154	.194	.240	.291	.346	.406	.477	.615	.779
1 3/4" x 3/16"	15-W-4	15.2	1.251	U	3753	2402	1668	1226	938	741	600	496	417	355	306	235	184
	15-W-2	15.8		D	.041	.064	.093	.126	.165	.208	.257	.311	.371	.434	.504	.660	.828
	15-P-4	15.8		C	3753	3002	2502	2145	1877	1668	1501	1365	1251	1115	1072	938	834
	15-P-2	16.9		D	.033	.051	.074	.101	.132	.167	.206	.249	.296	.348	.403	.527	.667
2" x 3/16"	15-W-4	17.3	1.634	U	4902	3137	2179	1601	1226	968	784	648	545	464	400	306	242
	15-W-2	17.9		D	.036	.056	.081	.110	.144	.182	.225	.272	.324	.380	.441	.575	.729
	15-P-4	17.9		C	4902	3922	3268	2801	2451	2179	1961	1783	1634	1508	1401	1226	1089
	15-P-2	19.0		D	.029	.045	.065	.088	.115	.146	.180	.218	.259	.304	.353	.461	.583
2 1/4" x 3/16"	15-W-4	19.2	2.068	U	6204	3971	2757	2026	1551	1225	993	820	689	587	506	388	306
	15-W-2	20.0		D	.032	.050	.072	.098	.128	.162	.200	.242	.288	.338	.392	.512	.647
	15-P-4	19.9		C	6204	4963	4136	3545	3102	2757	2482	2256	2068	1909	1773	1551	1379
	15-P-2	21.1		D	.026	.040	.058	.078	.102	.130	.160	.194	.230	.270	.314	.410	.519
2 1/2" x 3/16"	15-W-4	21.3	2.553	U	7659	4902	3404	2501	1915	1513	1225	1037	851	725	625	479	378
	15-W-2	22.1		D	.029	.045	.065	.088	.115	.146	.180	.223	.259	.304	.353	.461	.583
	15-P-4	22.0		C	7659	6127	5106	4377	3830	3404	3064	2785	2553	2357	2188	1915	1702
	15-P-2	23.2		D	.023	.036	.052	.071	.092	.117	.144	.174	.207	.243	.282	.369	.467

Panel Width Chart in Inche Dimensions are Outside to Outside of Bearing Bars.

Also Available in Stainless Steel

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

Carbon Steel Welded Bar Grating
Carbon Steel Press-Locked Bar Grating



Static Load Table – Loads & deflections are theoretical, based on a maximum allowable fiber stress of 18,000 PSI. E = 30,000,000 PSI

Bar Size	Type	Approximate Weight #/Sq. Ft.	Sec. Mod. Per Foot of Width	Load Types	Maximum Safe Clear Span																	
					2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"					
3/4" x 1/8"	11-W-4	6.1	0.207	U	.366	.397	.276	.203	.155	.123	.099	NOTE: Spans and loads to the right of the heavy line exceed a deflection of 1/4" for uniform loads of 100#/sq. ft. which provide safe pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer.										
	11-W-2	6.6		D	.096	.151	.216	.295	.374	.466	.596	NOTE: When calculating loads that require serrated bearing bars, subtract 1/4" from your grating depth and use that load table.										
	11-P-4	6.6		C	.366	.496	.414	.355	.310	.277	.248	EXAMPLE: (11/4"x 3/16") serrate bearing bars would have the same strength as (1"x3/16") non-serrate bearing bars, therefore you would use the (1"x3/16") load table.										
	11-P-2	7.6		D	.077	.119	.173	.234	.308	.389	.478											
3/4" x 3/16"	11-W-4	9.1	0.311	U	.549	.597	.415	.305	.233	.184	.149											
	11-W-2	9.0		D	.096	.151	.216	.295	.374	.466	.596											
	11-P-4	9.7		C	.549	.746	.623	.534	.466	.414	.373											
	11-P-2	10.4		D	.177	.119	.173	.234	.308	.389	.480											
1" x 1/8"	11-W-4	8.0	0.369	U	.648	.708	.492	.361	.277	.219	.177	.146	.123									
	11-W-2	8.5		D	.057	.111	.159	.219	.288	.366	.451	.547	.673									
	11-P-4	8.5		C	.648	.885	.738	.632	.554	.493	.443	.402	.369									
	11-P-2	9.5		D	.057	.090	.129	.176	.231	.293	.360	.434	.518									
1" x 3/16"	11-W-4	11.9	0.554	U	.975	1.064	.739	.543	.416	.328	.266	.220	.185	.157	U - Safe Uniform Load in lbs. per sq. ft.							
	11-W-2	11.9		D	.072	.111	.159	.219	.288	.366	.451	.547	.673	.760	C - Safe Concentrated Load in lbs. per foot of grating width.							
	11-P-4	12.6		C	.975	1.330	1.109	.950	.832	.738	.665	.605	.555	.510	D - Deflection in inches.							
	11-P-2	13.3		D	.058	.090	.129	.176	.231	.293	.360	.434	.518	.608								
1 1/4" x 1/8"	11-W-4	9.9	0.578	U	1.017	1.110	.771	.566	.434	.343	.277	.229	.193	.164	.142							
	11-W-2	10.3		D	.058	.090	.129	.176	.231	.291	.358	.433	.520	.608	.704							
	11-P-4	10.4		C	1.017	1.388	1.157	.991	.868	.772	.693	.630	.579	.533	.497							
	11-P-2	11.3		D	.046	.072	.104	.141	.183	.233	.288	.349	.416	.487	.565							
1 1/4" x 3/16"	11-W-4	14.9	0.864	U	1.521	1.659	1.152	.846	.648	.512	.415	.343	.288	.245	.212	.162						
	11-W-2	14.8		D	.058	.090	.129	.176	.231	.291	.358	.433	.520	.608	.704	.821						
	11-P-4	15.6		C	1.521	2.074	1.728	1.481	1.296	1.152	1.038	.943	.864	.796	.742	.648						
	11-P-2	16.2		D	.046	.072	.104	.141	.183	.233	.288	.349	.416	.487	.565	.673						
1 1/2" x 1/8"	11-W-4	11.8	0.831	U	1.464	1.596	1.108	.814	.623	.492	.399	.330	.277	.236	.204	.156	.123					
	11-W-2	12.6		D	.048	.075	.106	.147	.192	.243	.300	.365	.433	.506	.587	.774	.978					
	11-P-4	12.3		C	1.464	1.995	1.662	1.425	1.246	1.107	.998	.908	.831	.767	.714	.624	.554					
	11-P-2	13.9		D	.038	.059	.087	.117	.154	.195	.241	.289	.347	.406	.470	.614	.777					
1 1/2" x 3/16"	11-W-4	17.0	1.244	U	2.190	2.388	1.659	1.219	.933	.737	.597	.493	.415	.353	.305	.233	.184					
	11-W-2	17.8		D	.048	.075	.106	.147	.192	.243	.300	.365	.433	.506	.587	.774	.978					
	11-P-4	17.7		C	2.190	2.985	2.489	2.133	1.866	1.658	1.493	1.356	1.245	1.147	1.068	.932	.828					
	11-P-2	19.7		D	.038	.059	.087	.117	.154	.195	.241	.289	.347	.406	.470	.614	.777					
1 3/4" x 3/16"	11-W-4	20.4	1.694	U	2.982	3.252	2.259	1.659	1.271	1.004	.813	.672	.565	.481	.415	.318	.251					
	11-W-2	20.8		D	.041	.064	.092	.126	.165	.208	.258	.310	.371	.435	.506	.664	.838					
	11-P-4	21.0		C	2.982	4.065	3.389	2.903	2.542	2.259	2.033	1.848	1.695	1.563	1.453	1.272	1.130					
	11-P-2	22.7		D	.033	.052	.074	.101	.132	.167	.206	.249	.297	.347	.403	.527	.667					
2" x 3/16"	11-W-4	23.2	2.212	U	3.897	4.247	2.949	2.167	1.659	1.311	1.062	.877	.737	.628	.542	.415	.328					
	11-W-2	23.8		D	.036	.056	.081	.111	.144	.183	.226	.273	.325	.384	.447	.580	.732					
	11-P-4	23.8		C	3.897	5.309	4.424	3.792	3.318	2.950	2.655	2.412	2.211	2.041	1.897	1.660	1.476					
	11-P-2	25.7		D	.029	.045	.064	.088	.115	.145	.180	.217	.259	.303	.353	.480	.583					
2 1/4" x 3/16"	11-W-4	25.9	2.8	U	4.932	5.376	3.733	2.743	2.100	1.659	1.344	1.111	.933	.795	.686	.525	.415					
	11-W-2	26.5		D	.032	.050	.072	.098	.127	.162	.199	.241	.287	.338	.393	.512	.646					
	11-P-4	26.5		C	4.932	6.720	5.600	4.800	4.200	3.733	3.360	3.055	2.799	2.584	2.401	2.100	1.868					
	11-P-2	28.4		D	.026	.039	.057	.079	.102	.129	.160	.194	.230	.270	.314	.410	.518					
2 1/2" x 3/16"	11-W-4	28.7	3.456	U	6.087	6.636	4.608	3.385	2.592	2.048	1.659	1.371	1.152	.982	.846	.648	.512					
	11-W-2	29.3		D	.029	.044	.064	.088	.116	.145	.180	.217	.260	.304	.354	.465	.586					
	11-P-4	29.4		C	6.087	8.295	6.912	5.924	5.184	4.608	4.148	3.770	3.456	3.192	2.961	2.592	2.304					
	11-P-2	31.2		D	.023	.036	.051	.071	.092	.116	.144	.173	.207	.242	.282	.369	.467					

Panel Width Chart in Inche Dimensions are Outside to Outside of Bearing Bars.

Also Available in Stainless Steel

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

Maximum Available Panel Width: 2'-0" (24 1/4") Maximum

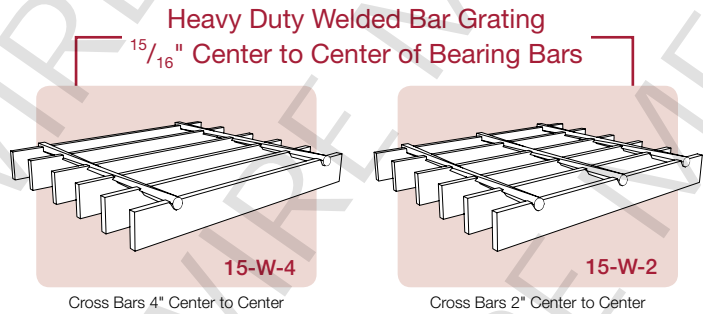
Carbon Steel Material: ASTM A-1011

LOADING TABLES (HEAVY DUTY)

15 Space Load Table

Heavy Duty $\frac{15}{16}$ " C/C Bearing Bars
Non-Serrated & Serrated

U: Safe uniform load (psf)
C: Concentrated load (psf)



Bar Size	Type	Approx Weight psf	Sec Mod Per Ft of Width	Load Types	LOAD & DEFLECTION TABLE / SPAN (Direction of Bearing Bar)											
					24"	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"	
1" x 1/4"	15-W-4	11.7	0.533	U	1,778	1,138	790	580	444	351	284	235	198	145	111	
	15-W-2	12.4		C	1,778	1,422	1,185	1,016	889	790	711	646	593	508	444	
1" x 5/16"	15-W-4	14.9	0.667	U	2,222	1,422	988	726	556	439	356	294	247	181	139	
	15-W-2	16.1		C	2,222	1,778	1,481	1,270	1,111	988	889	808	741	635	556	
1-1/4" x 1/4"	15-W-4	14.5	0.833	U	2,778	1,778	1,235	907	694	549	444	367	309	227	174	
	15-W-2	15.1		C	2,778	2,222	1,852	1,587	1,389	1,235	1,111	1,010	926	794	694	
1-1/4" x 5/16"	15-W-4	18.4	1.042	U	3,472	2,222	1,543	1,134	868	686	556	459	386	283	217	
	15-W-2	19.6		C	3,472	2,778	2,315	1,984	1,736	1,543	1,389	1,263	1,157	992	868	
1-1/2" x 1/4"	15-W-4	17.3	1.200	U	4,000	2,560	1,778	1,306	1,000	790	640	529	444	327	250	
	15-W-2	17.9		C	4,000	3,200	2,667	2,286	2,000	1,778	1,600	1,455	1,333	1,143	1,000	
1-1/2" x 5/16"	15-W-4	21.9	1.500	U	5,000	3,200	2,222	1,633	1,250	988	800	661	556	408	313	
	15-W-2	23.1		C	5,000	4,000	3,333	2,857	2,500	2,222	2,000	1,818	1,667	1,429	1,250	
1-3/4" x 1/4"	15-W-4	20.1	1.633	U	5,444	3,484	2,420	1,778	1,361	1,075	871	720	605	444	340	
	15-W-2	20.7		C	5,444	4,356	3,630	3,111	2,722	2,420	2,178	1,980	1,815	1,556	1,361	
1-3/4" x 5/16"	15-W-4	25.3	2.042	U	6,806	4,356	3,025	2,222	1,701	1,344	1,089	900	756	556	425	
	15-W-2	26.8		C	6,806	5,444	4,537	3,889	3,403	3,025	2,722	2,475	2,269	1,944	1,701	
2" x 1/4"	15-W-4	22.8	2.133	U	7,111	4,551	3,160	2,322	1,778	1,405	1,138	940	790	580	444	
	15-W-2	23.5		C	7,111	5,689	4,741	4,063	3,556	3,160	2,844	2,586	2,370	2,032	1,778	
2" x 5/16"	15-W-4	28.8	2.667	U	8,889	5,689	3,951	2,902	2,222	1,756	1,422	1,175	988	726	556	
	15-W-2	29.9		C	8,889	7,111	5,926	5,079	4,444	3,951	3,556	3,232	2,963	2,540	2,222	
2-1/4" x 1/4"	15-W-4	25.6	2.700	U	9,000	5,760	4,000	2,939	2,250	1,778	1,440	1,190	1,000	735	563	
	15-W-2	26.3		C	9,000	7,200	6,000	5,143	4,500	4,000	3,600	3,273	3,000	2,571	2,250	
2-1/4" x 5/16"	15-W-4	32.3	3.375	U	11,250	7,200	5,000	3,673	2,813	2,222	1,800	1,488	1,250	918	703	
	15-W-2	33.4		C	11,250	9,000	7,500	6,429	5,625	5,000	4,500	4,091	3,750	3,214	2,813	
2-1/2" x 1/4"	15-W-4	28.4	3.333	U	11,111	7,111	4,938	3,628	2,778	2,195	1,778	1,469	1,235	907	694	
	15-W-2	29.1		C	11,111	8,889	7,407	6,349	5,556	4,938	4,444	4,040	3,704	3,175	2,778	
2-1/2" x 5/16"	15-W-4	35.7	4.167	U	13,889	8,889	6,173	4,535	3,472	2,743	2,222	1,837	1,543	1,134	868	
	15-W-2	36.9		C	13,889	11,111	9,259	7,937	6,944	6,173	5,556	5,051	4,630	3,968	3,472	
2-3/4" x 1/4"	15-W-4	31.2	4.033	U	13,444	8,604	5,975	4,390	3,361	2,656	2,151	1,778	1,494	1,098	840	
	15-W-2	31.8		C	13,444	10,756	8,963	7,683	6,722	5,975	5,378	4,889	4,481	3,841	3,361	
2-3/4" x 5/16"	15-W-4	39.6	5.042	U	16,806	10,756	7,469	5,488	4,201	3,320	2,689	2,222	1,867	1,372	1,050	
	15-W-2	41.1		C	16,806	13,444	11,204	9,603	8,403	7,469	6,722	6,111	5,602	4,802	4,201	
3" x 1/4"	15-W-4	34.4	4.800	U	16,000	10,240	7,111	5,224	4,000	3,160	2,560	2,116	1,778	1,306	1,000	
	15-W-2	35.5		C	16,000	12,800	10,667	9,143	8,000	7,111	6,400	5,818	5,333	4,571	4,000	
3" x 5/16"	15-W-4	43.1	6.000	U	20,000	12,800	8,889	6,531	5,000	3,951	3,200	2,645	2,222	1,633	1,250	
	15-W-2	44.6		C	20,000	16,000	13,333	11,429	10,000	8,889	8,000	7,273	6,667	5,714	5,000	

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.

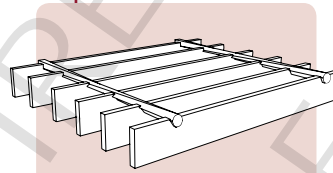
HEAVY DUTY STEEL BAR GRATING

19 Space Load Table

Heavy Duty $1\text{-}\frac{3}{16}$ " C/C Bearing Bars
Non-Serrated & Serrated

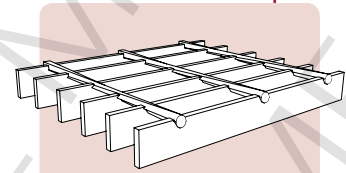
Heavy Duty Welded Bar Grating

$1\text{-}\frac{3}{16}$ " Center to Center of Bearing Bars



19-W-4

Cross Bars 4" Center to Center



19-W-2

Cross Bars 2" Center to Center

U: Safe uniform load (psf)

C: Concentrated load (psf)

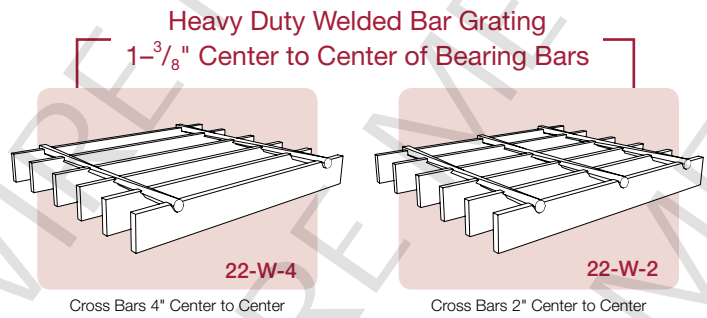
Bar Size	Type	Approx Weight psf	Sec Mod Per Ft of Width	Load Types	LOAD & DEFLECTION TABLE / SPAN (Direction of Bearing Bar)												
					24"	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"		
1" x 1/4"	19-W-4	9.5	0.421	U	1,404	898	624	458	351	277	225	186	156	115	88		
	19-W-2	10.1		C	1,404	1,123	936	802	702	624	561	510	468	401	351		
1" x 5/16"	19-W-4	12.1	0.526	U	1,754	1,123	780	573	439	347	281	232	195	143	110		
	19-W-2	13.3		C	1,754	1,404	1,170	1,003	877	780	702	638	585	501	439		
1-1/4" x 1/4"	19-W-4	11.7	0.658	U	2,193	1,404	975	716	548	433	351	290	244	179	137		
	19-W-2	12.3		C	2,193	1,754	1,462	1,253	1,096	975	877	797	731	627	548		
1-1/4" x 5/16"	19-W-4	14.3	0.822	U	2,741	1,754	1,218	895	685	541	439	362	305	224	171		
	19-W-2	16.0		C	2,741	2,193	1,827	1,566	1,031	1,218	1,096	997	914	783	685		
1-1/2" x 1/4"	19-W-4	13.9	0.947	U	3,158	2,021	1,404	1,031	789	624	505	418	351	258	197		
	19-W-2	14.5		C	3,158	2,526	2,105	1,805	1,579	1,404	1,263	1,148	1,053	902	789		
1-1/2" x 5/16"	19-W-4	17.8	1.184	U	3,947	2,526	1,754	1,289	987	780	632	522	439	322	247		
	19-W-2	18.8		C	3,947	3,158	2,632	2,256	1,974	1,754	1,579	1,435	1,316	1,128	987		
1-3/4" x 1/4"	19-W-4	16.1	1.289	U	4,298	2,751	1,910	1,404	1,075	849	688	568	478	351	269		
	19-W-2	16.7		C	4,298	3,439	2,865	2,456	2,149	1,910	1,719	1,563	1,433	1,228	1,075		
1-3/4" x 5/16"	19-W-4	20.4	1.612	U	5,373	3,439	2,388	1,754	1,343	1,061	860	710	597	439	336		
	19-W-2	21.5		C	5,373	4,298	3,582	3,070	2,686	2,388	2,149	1,954	1,791	1,535	1,343		
2" x 1/4"	19-W-4	18.3	1.684	U	5,614	3,593	2,495	1,833	1,404	1,109	898	742	624	458	351		
	19-W-2	18.9		C	5,614	4,491	3,743	3,208	2,807	2,495	2,246	2,041	1,871	1,604	1,404		
2" x 5/16"	19-W-4	23.1	2.105	U	7,018	4,491	3,119	2,291	1,754	1,386	1,123	928	780	573	439		
	19-W-2	24.6		C	7,018	5,614	4,678	4,010	3,509	3,119	2,807	2,552	2,339	2,005	1,754		
2-1/4" x 1/4"	19-W-4	20.5	2.132	U	7,105	4,547	3,158	2,320	1,776	1,404	1,137	940	789	580	444		
	19-W-2	21.1		C	7,105	5,684	4,737	4,060	3,553	3,158	2,842	2,584	2,368	2,030	1,776		
2-1/4" x 5/16"	19-W-4	25.9	2.664	U	8,882	5,684	3,947	2,900	2,220	1,754	1,421	1,174	987	725	555		
	19-W-2	27		C	8,882	7,105	5,921	5,075	4,441	3,947	3,553	3,230	2,961	2,538	2,220		
2-1/2" x 1/4"	19-W-4	22.7	2.632	U	8,772	5,614	3,899	2,864	2,193	1,733	1,404	1,160	975	716	548		
	19-W-2	23.3		C	8,772	7,018	5,848	5,013	4,386	3,899	3,509	3,190	2,924	2,506	2,193		
2-1/2" x 5/16"	19-W-4	28.6	3.289	U	10,965	7,018	4,873	3,580	2,741	2,166	1,754	1,450	1,218	895	685		
	19-W-2	29.8		C	10,965	8,772	7,310	6,266	5,482	4,873	4,386	3,987	3,655	3,133	2,741		
2-3/4" x 1/4"	19-W-4	24.9	3.184	U	10,614	6,793	4,717	3,466	2,654	2,097	1,698	1,404	1,179	866	663		
	19-W-2	25.6		C	10,614	8,491	7,076	6,065	5,307	4,717	4,246	3,860	3,538	3,033	2,654		
2-3/4" x 5/16"	19-W-4	31.8	3.980	U	13,268	8,491	5,897	4,332	3,317	2,621	2,123	1,754	1,474	1,083	829		
	19-W-2	33.3		C	13,268	10,614	8,845	7,581	6,634	5,897	5,307	4,825	4,423	3,791	3,317		
3" x 1/4"	19-W-4	27.8	3.789	U	12,632	8,084	5,614	4,125	3,158	2,495	2,021	1,670	1,404	1,031	789		
	19-W-2	28.7		C	12,632	10,105	8,421	7,218	6,316	5,614	5,053	4,593	4,211	3,609	3,158		
3" x 5/16"	19-W-4	34.5	4.737	U	15,789	10,105	7,018	5,156	3,947	3,119	2,526	2,088	1,754	1,289	987		
	19-W-2	36.1		C	15,789	12,632	10,526	9,023	7,895	7,018	6,316	5,742	5,263	4,511	3,947		

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.

22 Space Load Table

Heavy Duty 1-³/₈" C/C Bearing Bars
Non-Serrated & Serrated



U: Safe uniform load (psf)
C: Concentrated load (psf)

Bar Size	Type	Approx Weight psf	Sec Mod Per Ft of Width	Load Types	LOAD & DEFLECTION TABLE / SPAN (Direction of Bearing Bar)										
					24"	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"
1" x 1/4"	22-W-4	8.3	0.364	U	1,212	776	539	396	303	239	194	160	135	99	76
	22-W-2	9.0		C	1,212	970	808	693	606	539	485	441	404	346	303
1" x 5/16"	22-W-4	10.7	0.455	U	1,515	970	673	495	379	299	242	200	168	124	95
	22-W-2	11.8		C	1,515	1,212	1,010	866	758	673	606	551	505	433	379
1-1/4" x 1/4"	22-W-4	10.2	0.568	U	1,894	1,212	842	618	473	374	303	250	210	155	118
	22-W-2	10.9		C	1,894	1,515	1,263	1,082	947	842	758	689	631	541	473
1-1/4" x 5/16"	22-W-4	13.1	0.710	U	2,367	1,515	1,052	773	592	468	379	313	263	193	148
	22-W-2	14.2		C	2,367	1,894	1,578	1,353	1,184	1,052	947	861	789	676	592
1-1/2" x 1/4"	22-W-4	12.1	0.818	U	2,727	1,745	1,212	891	682	539	436	361	303	223	170
	22-W-2	12.8		C	2,727	2,182	1,818	1,558	1,364	1,212	1,091	992	909	779	682
1-1/2" x 5/16"	22-W-4	15.4	1.023	U	3,409	2,182	1,515	1,113	852	673	545	451	379	278	213
	22-W-2	16.8		C	3,409	2,727	2,273	1,948	1,705	1,515	1,364	1,240	1,136	974	852
1-3/4" x 1/4"	22-W-4	14.0	1.114	U	3,712	2,376	1,650	1,212	928	733	594	491	412	303	232
	22-W-2	14.7		C	3,712	2,970	2,475	2,121	1,856	1,650	1,485	1,350	1,237	1,061	928
1-3/4" x 5/16"	22-W-4	17.8	1.392	U	4,640	2,970	2,062	1,515	1,160	917	742	614	516	379	290
	22-W-2	19.0		C	4,640	3,712	3,093	2,652	2,320	2,062	1,856	1,687	1,547	1,326	1,160
2" x 1/4"	22-W-4	16.0	1.455	U	4,848	3,103	2,155	1,583	1,212	958	776	641	539	396	303
	22-W-2	16.6		C	4,848	3,879	3,232	2,771	2,424	2,155	1,939	1,763	1,616	1,385	1,212
2" x 5/16"	22-W-4	20.2	1.818	U	6,061	3,879	2,694	1,979	1,515	1,197	970	801	673	495	379
	22-W-2	21.3		C	6,061	4,848	4,040	3,463	3,030	2,694	2,424	2,204	2,020	1,732	1,515
2-1/4" x 1/4"	22-W-4	17.9	1.841	U	6,136	3,927	2,727	2,004	1,534	1,212	982	811	682	501	384
	22-W-2	18.5		C	6,136	4,909	4,091	3,506	3,068	2,727	2,455	2,231	2,045	1,753	1,534
2-1/4" x 5/16"	22-W-4	22.6	2.301	U	7,670	4,909	3,409	2,505	1,918	1,515	1,227	1,014	852	626	479
	22-W-2	23.7		C	7,670	6,136	5,114	4,383	3,835	3,409	3,068	2,789	2,557	2,192	1,918
2-1/2" x 1/4"	22-W-4	19.8	2.273	U	7,576	4,848	3,367	2,474	1,894	1,496	1,212	1,002	842	618	473
	22-W-2	20.4		C	7,576	6,061	5,051	4,329	3,788	3,367	3,030	2,755	2,525	2,165	1,894
2-1/2" x 5/16"	22-W-4	25.0	2.841	U	9,470	6,061	4,209	3,092	2,367	1,871	1,515	1,252	1,052	773	592
	22-W-2	26.1		C	9,470	7,576	6,313	5,411	4,735	4,209	3,788	3,444	3,157	2,706	2,367
2-3/4" x 1/4"	22-W-4	21.7	2.750	U	9,167	5,867	4,074	2,993	2,292	1,811	1,467	1,212	1,019	748	573
	22-W-2	22.3		C	9,167	7,333	6,111	5,238	4,583	4,074	3,667	3,333	3,056	2,619	2,292
2-3/4" x 5/16"	22-W-4	27.8	3.438	U	11,458	7,333	5,093	3,741	2,865	2,263	1,833	1,515	1,273	935	716
	22-W-2	29.3		C	11,458	9,167	7,639	6,548	5,729	5,093	4,583	4,167	3,819	3,274	2,865
3" x 1/4"	15-W-4	24.1	3.273	U	10,909	6,982	4,848	3,562	2,727	2,155	1,745	1,443	1,212	891	682
	15-W-2	25.2		C	10,909	8,727	7,273	6,234	5,455	4,848	4,364	3,967	3,636	3,117	2,727
3" x 5/16"	15-W-4	30.2	4.091	U	13,636	8,727	6,061	4,553	3,409	2,694	2,182	1,803	1,515	1,113	852
	15-W-2	31.7		C	13,636	10,909	9,091	7,792	6,818	6,061	5,455	4,959	4,545	3,896	3,409

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.

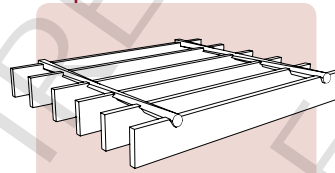
HEAVY DUTY STEEL BAR GRATING

30 Space Load Table

Heavy Duty 1-7/8" C/C Bearing Bars
Non-Serrated & Serrated

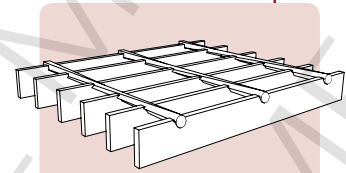
Heavy Duty Welded Bar Grating

1-7/8" Center to Center of Bearing Bars



30-W-4

Cross Bars 4" Center to Center



30-W-2

Cross Bars 2" Center to Center

U: Safe uniform load (psf)

C: Concentrated load (psf)

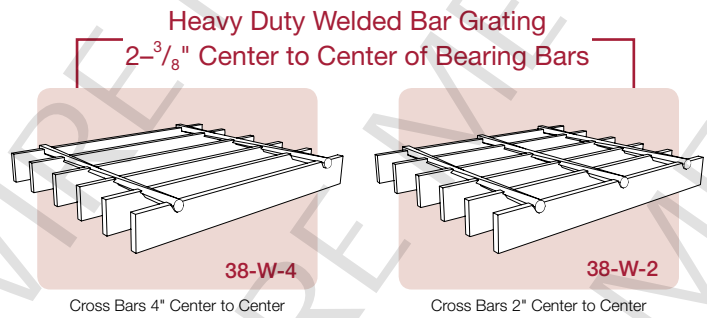
Bar Size	Type	Approx Weight psf	Sec Mod Per Ft of Width	Load Types	LOAD & DEFLECTION TABLE / SPAN (Direction of Bearing Bar)												
					24"	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"		
1" x 1/4"	30-W-4	6.3	0.267	U	889	569	395	290	222	176	142	118	99	73	56		
	30-W-2	7.0		C	889	711	593	508	444	395	356	323	296	254	222		
1" x 5/16"	30-W-4	8.2	0.333	U	1,111	711	494	363	278	219	178	147	123	91	69		
	30-W-2	9.4		C	1,111	889	741	635	556	494	444	404	370	317	278		
1-1/4" x 1/4"	30-W-4	7.8	0.417	U	1,389	889	617	454	347	274	222	184	154	113	87		
	30-W-2	8.4		C	1,389	1,111	926	794	694	617	556	505	463	397	347		
1-1/4" x 5/16"	30-W-4	10.0	0.521	U	1,736	1,111	772	567	434	343	278	230	193	142	109		
	30-W-2	11.1		C	1,736	1,389	1,157	992	868	772	694	631	579	496	434		
1-1/2" x 1/4"	30-W-4	9.2	0.600	U	2,000	1,280	889	653	500	395	320	264	222	163	125		
	30-W-2	9.8		C	2,000	1,600	1,333	1,143	1,000	889	800	727	667	571	500		
1-1/2" x 5/16"	30-W-4	11.8	0.750	U	2,500	1,600	1,111	816	625	494	400	331	278	204	156		
	30-W-2	12.9		C	2,500	2,000	1,667	1,429	1,250	1,111	1,000	909	833	714	625		
1-3/4" x 1/4"	30-W-4	10.6	0.817	U	2,722	1,742	1,210	889	681	538	436	360	302	222	170		
	30-W-2	11.3		C	2,722	2,178	1,815	1,556	1,361	1,210	1,089	990	907	778	681		
1-3/4" x 5/16"	30-W-4	13.6	1.021	U	3,403	2,178	1,512	1,111	851	672	544	450	378	278	213		
	30-W-2	14.7		C	3,403	2,722	2,269	1,944	1,701	1,512	1,361	1,237	1,134	972	851		
2" x 1/4"	30-W-4	12.0	1.067	U	3,556	2,276	1,580	1,161	889	702	569	470	395	290	222		
	30-W-2	12.7		C	3,556	2,844	2,370	2,032	1,778	1,580	1,422	1,293	1,185	1,016	889		
2" x 5/16"	30-W-4	15.3	1.333	U	4,444	2,844	1,975	1,451	1,111	878	711	588	494	363	278		
	30-W-2	16.5		C	4,444	3,556	2,963	2,540	2,222	1,975	1,778	1,616	1,481	1,270	1,111		
2-1/4" x 1/4"	30-W-4	13.6	1.350	U	4,500	2,880	2,000	1,469	1,125	889	720	595	500	367	281		
	30-W-2	14.1		C	4,500	3,600	3,000	2,571	2,250	2,000	1,800	1,636	1,500	1,286	1,125		
2-1/4" x 5/16"	30-W-4	17.1	1.688	U	5,625	3,600	2,500	1,837	1,406	1,111	900	744	625	459	352		
	30-W-2	18.3		C	5,625	4,500	3,750	3,214	2,813	2,500	2,250	2,045	1,875	1,607	1,406		
2-1/2" x 1/4"	30-W-4	14.9	1.667	U	5,556	3,556	2,469	1,814	1,389	1,097	889	735	617	454	347		
	30-W-2	15.3		C	5,556	4,444	3,704	3,175	2,778	2,469	2,222	2,020	1,852	1,587	1,389		
2-1/2" x 5/16"	30-W-4	18.9	2.083	U	6,944	4,444	3,086	2,268	1,736	1,372	1,111	918	772	567	434		
	30-W-2	20.0		C	6,944	5,556	4,630	3,968	3,472	3,086	2,778	2,525	2,315	1,984	1,736		
2-3/4" x 1/4"	30-W-4	16.3	2.017	U	6,722	4,302	2,988	2,195	1,681	1,328	1,076	889	747	549	420		
	30-W-2	17.0		C	6,722	5,378	4,481	3,841	3,361	2,988	2,689	2,444	2,241	1,921	1,681		
2-3/4" x 5/16"	30-W-4	21.0	2.521	U	8,403	5,378	3,735	2,744	2,101	1,660	1,344	1,111	934	686	525		
	30-W-2	22.6		C	8,403	6,722	5,602	4,802	4,201	3,735	3,361	3,056	2,801	2,401	2,101		
3" x 1/4"	30-W-4	18.2	2.400	U	8,000	5,120	3,556	2,612	2,000	1,580	1,280	1,058	889	653	500		
	30-W-2	19.3		C	8,000	6,400	5,333	4,571	4,000	3,556	3,200	2,909	2,667	2,286	2,000		
3" x 5/16"	30-W-4	22.8	3.000	U	10,000	6,400	4,444	3,265	2,500	1,975	1,600	1,322	1,111	816	625		
	30-W-2	24.4		C	10,000	8,000	6,667	5,714	5,000	4,444	4,000	3,636	3,333	2,857	2,500		

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.

38 Space Load Table

Heavy Duty 2-³/₈" C/C Bearing Bars
Non-Serrated & Serrated



U: Safe uniform load (psf)
C: Concentrated load (psf)

Bar Size	Type	Approx Weight psf	Sec Mod Per Ft of Width	Load Types	LOAD & DEFLECTION TABLE / SPAN (Direction of Bearing Bar)										
					24"	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"
1" x 1/4"	38-W-4	5.2	0.211	U	702	449	312	229	175	139	112	93	78	57	44
	38-W-2	5.9		C	702	561	468	401	351	312	281	255	234	201	175
1" x 5/16"	38-W-4	6.8	0.263	U	877	561	390	286	219	173	140	116	97	72	55
	38-W-2	7.9		C	877	702	585	501	439	390	351	319	292	251	219
1-1/4" x 1/4"	38-W-4	8.3	0.329	U	1,096	702	487	358	274	217	175	145	122	90	69
	38-W-2	7.0		C	1,096	877	731	627	548	487	439	399	365	313	274
1-1/4" x 5/16"	38-W-4	8.2	0.411	U	1,371	877	609	448	343	271	219	181	152	112	86
	38-W-2	9.4		C	1,371	1,096	914	783	685	609	548	498	457	392	343
1-1/2" x 1/4"	38-W-4	7.5	0.474	U	1,579	1,011	702	516	395	312	253	209	175	129	99
	38-W-2	8.1		C	1,579	1,263	1,053	902	789	702	632	574	526	451	395
1-1/2" x 5/16"	38-W-4	9.6	0.592	U	1,974	1,263	877	644	493	390	316	261	219	161	123
	38-W-2	10.8		C	1,974	1,579	1,316	1,128	987	877	789	718	658	564	493
1-3/4" x 1/4"	38-W-4	8.6	0.645	U	2,149	1,375	955	702	537	425	344	284	239	175	134
	38-W-2	9.3		C	2,149	1,719	1,433	1,228	1,075	955	860	781	716	614	537
1-3/4" x 5/16"	38-W-4	11.1	0.806	U	2,686	1,719	1,194	877	672	531	430	355	298	219	168
	38-W-2	12.2		C	2,686	2,149	1,791	1,535	1,343	1,194	1,075	977	895	768	672
2" x 1/4"	38-W-4	9.8	0.842	U	2,807	1,796	1,248	917	702	554	449	371	312	229	175
	38-W-2	10.4		C	2,807	2,246	1,871	1,604	1,404	1,248	1,123	1,021	936	802	702
2" x 5/16"	38-W-4	12.5	1.053	U	3,509	2,246	1,559	1,146	877	693	561	464	390	286	219
	38-W-2	13.6		C	3,509	2,807	2,339	2,005	1,754	1,559	1,404	1,276	1,170	1,003	877
2-1/4" x 1/4"	38-W-4	10.9	1.066	U	3,553	2,274	1,579	1,160	888	702	568	470	395	290	222
	38-W-2	11.5		C	3,553	2,842	2,368	2,030	1,776	1,579	1,421	1,292	1,184	1,015	888
2-1/4" x 5/16"	38-W-4	13.9	1.332	U	4,441	2,842	1,974	1,450	1,110	877	711	587	493	363	278
	38-W-2	15.0		C	4,441	3,553	2,961	2,538	2,220	1,974	1,776	1,615	1,480	1,269	1,110
2-1/2" x 1/4"	38-W-4	12.0	1.316	U	4,386	2,807	1,949	1,432	1,096	866	702	580	487	358	274
	38-W-2	12.7		C	4,386	3,509	2,924	2,506	2,193	1,949	1,754	1,595	1,462	1,253	1,096
2-1/2" x 5/16"	38-W-4	15.3	1.645	U	5,482	3,509	2,437	1,790	1,371	1,083	877	725	609	448	343
	38-W-2	16.5		C	5,482	4,386	3,655	3,133	2,741	2,437	2,193	1,994	1,827	1,566	1,371
2-3/4" x 1/4"	38-W-4	13.2	1.592	U	5,307	3,396	2,359	1,733	1,327	1,048	849	702	590	433	332
	38-W-2	13.8		C	5,307	4,246	3,538	3,033	2,654	2,359	2,123	1,930	1,769	1,516	1,327
2-3/4" x 5/16"	38-W-4	17.2	1.990	U	6,634	4,246	2,948	2,166	1,658	1,310	1,061	877	737	542	415
	38-W-2	18.7		C	6,634	5,307	4,423	3,791	3,317	2,948	2,654	2,412	2,211	1,895	1,658
3" x 1/4"	38-W-4	14.9	1.895	U	6,316	4,042	2,807	2,062	1,579	1,248	1,011	835	702	516	395
	38-W-2	15.9		C	6,316	5,053	4,211	3,609	3,158	2,807	2,526	2,297	2,105	1,805	1,579
3" x 5/16"	38-W-4	18.6	2.368	U	7,895	5,053	3,509	2,578	1,974	1,559	1,263	1,044	877	644	493
	38-W-2	20.1		C	7,895	6,316	5,263	4,511	3,947	3,509	3,158	2,871	2,632	2,256	1,974

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.

HEAVY DUTY STEEL BAR GRATING

The following shows the capacities on the basis of vehicular load distribution and concentrated loading per foot of grating width for a given span.

Notes:

- a) For continuous spans, use continuity factor = .80
- b) This distribution results in larger grating sizes for lighter trucks on shorter spans. Spans shown for H15/H20 reflect the more critical condition.
- c) The fork lift wheel loads and load distribution patterns depicted below, generally and only partially represent the broad range of rubber-tired lift trucks available.
- d) Wheeled vehicles with urethane tires should NEVER be used in conjunction with open grid bar grating.
- e) HS20 is the same as H-20 and HS15 is the same as H-15. The "S" stands for semi-trailer.

EQUATION VARIABLES

M = Bending Moment

S = Section Modulus - in³/ foot of grating width

i = Moment of Inertia - in⁴/ bar

E = Modulus of Elasticity (29,000,000 psi)

F = Allowable Bending Stress (20,000 psi)

ψ = Clear, Simple Span - inches

D = Deflection (inches)

a = Partial Load Contact Parallel to Span - inches

s = Center-to-Center Spacing Between Bearing Bars - inches

b = Partial Load Contact Dimension at 90° to Span - inches

b = a + (2s)

P = Total Wheel or Partial Load including Impact - Pounds

P₁ = P per bearing bar

P₁ = P x (s/b)

Step 1: Determine M

$$M = FS/12$$

Step 2: Substituting for M

$$(i) a > \psi \quad (ii) a < \psi$$

Solve for ψ:







$$M = \frac{P\psi^2}{8ab}$$

$$M = \frac{P(.25\psi - .125a)}{b}$$

Step 3: Check D*

$$D = \frac{P1[(2\psi^3) - (a^2\psi) + (a^3/4)]}{8ab}$$

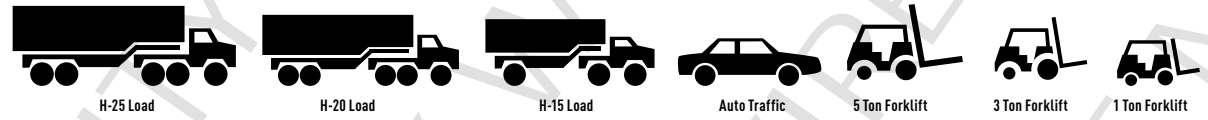
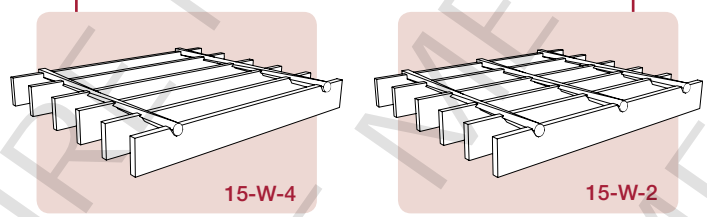
*Deflection should be limited to 1/400 Span

Maximum Traffic Conditions		Wheel Load in Pounds (1/2 Axle Load + 30% impact)	Loading	Load Distribution	
				a	b
	Truck Traffic 40,000 pound Axle Load Dual Wheels	26,000	H-25	25"	25" + (2s)
	Truck Traffic 32,000 pound Axle Load Dual Wheels	20,800	H-20	20"	20" + (2s)
	Truck Traffic 24,000 pound Axle Load Dual Wheels	15,600	H-15	15"	15" + (2s)
 Rubber Tires	10,000 Pound Capacity Lift Truck 14,400 Pound Vehicle 24,400 Pound Total Load 85% Drive Axle Load	13,480	5 Ton	11"	11" + (2s)
 Rubber Tires	6,000 Pound Capacity Lift Truck 9,800 Pound Vehicle 15,800 Pound Total Load 85% Drive Axle Load	8,730	3 Ton	7"	7" + (2s)
 Rubber Tires	2,000 Pound Capacity Lift Truck 4,200 Pound Vehicle 6,200 Pound Total Load 85% Drive Axle Load	3,425	1 Ton	4"	4" + (2s)

15 Space Load Table

Heavy Duty $1\frac{5}{16}$ " C/C Bearing Bars
Non-Serrated & Serrated

Heavy Duty Welded Bar Grating
 $1\frac{5}{16}$ " Center to Center of Bearing Bars

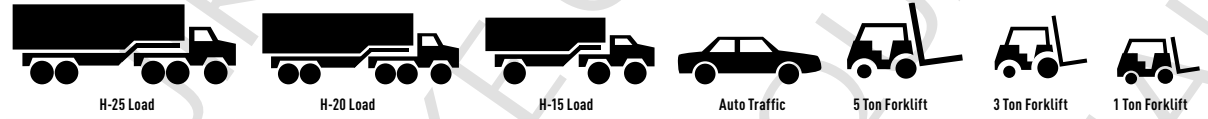
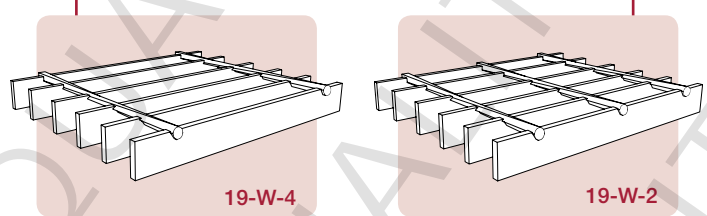


Bar Size	Section Modulus psf	Moment of Inertia psf	Approx Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1" x 1/4"	0.533	0.267	12.0	1'-1"	1'-0"	0'-10"	1'-2"	0'-8"	0'-7"	0'-8"
1" x 5/16"	0.667	0.333	14.7	1'-3"	1'-2"	1'-0"	1'-5"	0'-9"	0'-8"	0'-9"
1-1/4" x 1/4"	0.833	0.521	14.7	1'-4"	1'-3"	1'-1"	1'-8"	0'-10"	0'-9"	0'-11"
1-1/4" x 5/16"	1.042	0.651	18.1	1'-6"	1'-5"	1'-3"	1'-11"	1'-0"	0'-10"	1'-1"
1-1/2" x 1/4"	1.200	0.900	17.4	1'-8"	1'-6"	1'-4"	2'-3"	1'-1"	0'-11"	1'-3"
1-1/2" x 5/16"	1.500	1.125	21.5	1'-10"	1'-8"	1'-6"	2'-6"	1'-3"	1'-1"	1'-7"
1-3/4" x 1/4"	1.633	1.429	20.2	1'-11"	1'-9"	1'-7"	2'-10"	1'-3"	1'-2"	1'-8"
1-3/4" x 5/16"	2.042	1.786	24.9	2'-2"	2'-0"	1'-10"	3'-2"	1'-6"	1'-5"	2'-1"
2" x 1/4"	2.133	2.133	22.9	2'-3"	2'-0"	1'-10"	3'-6"	1'-7"	1'-5"	2'-2"
2" x 5/16"	2.667	2.667	28.3	2'-6"	2'-4"	2'-2"	3'-11"	1'-10"	1'-9"	2'-8"
2-1/4" x 1/4"	2.700	3.038	25.6	2'-7"	2'-4"	2'-2"	4'-2"	1'-10"	1'-9"	2'-8"
2-1/4" x 5/16"	3.375	3.797	31.7	2'-11"	2'-9"	2'-7"	4'-5"	2'-2"	2'-2"	3'-4"
2-1/2" x 1/4"	3.333	4.167	28.3	2'-11"	2'-9"	2'-7"	4'-7"	2'-2"	2'-2"	3'-4"
2-1/2" x 5/16"	4.167	5.208	35.1	3'-5"	3'-3"	3'-1"	4'-11"	2'-8"	2'-7"	4'-1"
3" x 1/4"	4.800	7.200	33.8	3'-9"	3'-7"	3'-6"	5'-6"	3'-0"	3'-0"	4'-8"
3" x 5/16"	6.000	9.000	41.9	4'-5"	4'-4"	4'-2"	5'-11"	3'-7"	3'-8"	5'-0"

19 Space Load Table

Heavy Duty $1\frac{3}{16}$ " C/C Bearing Bars
Non-Serrated & Serrated

Heavy Duty Welded Bar Grating
 $1\frac{3}{16}$ " Center to Center of Bearing Bars



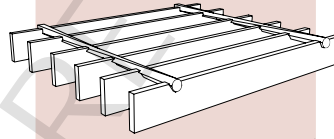
Bar Size	Section Modulus psf	Moment of Inertia psf	Approx Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1" x 1/4"	0.421	0.211	9.7	1'-0"	0'-10"	0'-9"	1'-0"	0'-7"	0'-6"	0'-7"
1" x 5/16"	0.526	0.263	11.9	1'-1"	1'-0"	0'-10"	1'-2"	0'-8"	0'-7"	0'-8"
1-1/4" x 1/4"	0.658	0.411	11.9	1'-3"	1'-1"	1'-0"	1'-5"	0'-9"	0'-8"	0'-10"
1-1/4" x 5/16"	0.822	0.514	14.5	1'-4"	1'-3"	1'-1"	1'-8"	0'-10"	0'-9"	1'-0"
1-1/2" x 1/4"	0.947	0.711	14.0	1'-6"	1'-4"	1'-2"	1'-11"	0'-11"	0'-10"	1'-1"
1-1/2" x 5/16"	1.184	0.888	17.2	1'-8"	1'-6"	1'-4"	2'-3"	1'-1"	0'-11"	1'-4"
1-3/4" x 1/4"	1.289	1.128	16.2	1'-9"	1'-7"	1'-5"	2'-5"	1'-2"	1'-0"	1'-5"
1-3/4" x 5/16"	1.612	1.410	19.9	1'-11"	1'-9"	1'-7"	2'-11"	1'-4"	1'-3"	1'-9"
2" x 1/4"	1.684	1.684	18.3	2'-0"	1'-10"	1'-8"	3'-1"	1'-4"	1'-3"	1'-10"
2" x 5/16"	2.105	2.105	22.6	2'-3"	2'-1"	1'-11"	3'-6"	1'-7"	1'-6"	2'-4"
2-1/4" x 1/4"	2.132	2.398	20.4	2'-3"	2'-1"	1'-11"	3'-9"	1'-7"	1'-6"	2'-4"
2-1/4" x 5/16"	2.664	2.998	25.3	2'-7"	2'-5"	2'-3"	4'-2"	1'-11"	1'-10"	2'-11"
2-1/2" x 1/4"	2.632	3.289	22.6	2'-6"	2'-4"	2'-3"	4'-4"	1'-10"	1'-10"	2'-10"
2-1/2" x 5/16"	3.289	4.112	28.0	2'-11"	2'-9"	2'-7"	4'-8"	2'-3"	2'-3"	3'-6"
3" x 1/4"	3.789	5.684	26.9	3'-3"	3'-1"	2'-11"	5'-2"	2'-6"	2'-6"	4'-1"
3" x 5/16"	4.737	7.105	33.3	3'-9"	3'-7"	3'-6"	5'-7"	3'-0"	3'-1"	4'-9"

HEAVY DUTY STEEL BAR GRATING

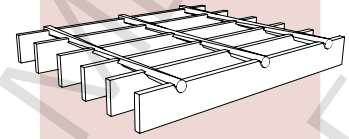
Heavy Duty Welded Bar Grating
1-³/₈" Center to Center of Bearing Bars

22 Space Load Table

Heavy Duty 1-³/₈" C/C Bearing Bars
Non-Serrated & Serrated



20-W-4



20-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



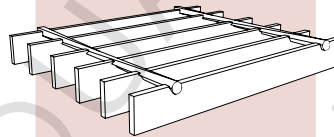
1 Ton Forklift

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"	0.364	0.182	8.5	0'-11"	0'-10"	0'-9"	0'-11"	0'-7"	0'-6"	0'-6"
1" x 5/16"	0.455	0.227	10.4	1'-0"	0'-11"	0'-10"	1'-1"	0'-8"	0'-6"	0'-7"
1-1/4" x 1/4"	0.568	0.355	10.4	1'-2"	1'-0"	0'-11"	1'-4"	0'-9"	0'-7"	0'-9"
1-1/4" x 5/16"	0.710	0.444	12.7	1'-3"	1'-2"	1'-0"	1'-6"	0'-10"	0'-8"	0'-11"
1-1/2" x 1/4"	0.818	0.614	12.2	1'-5"	1'-3"	1'-1"	1'-9"	0'-11"	0'-9"	1'-0"
1-1/2" x 5/16"	1.023	0.767	15.0	1'-7"	1'-5"	1'-3"	2'-1"	1'-0"	0'-11"	1'-3"
1-3/4" x 1/4"	1.114	0.974	14.1	1'-8"	1'-6"	1'-3"	2'-3"	1'-1"	0'-11"	1'-4"
1-3/4" x 5/16"	1.392	1.218	17.3	1'-10"	1'-8"	1'-6"	2'-8"	1'-2"	1'-1"	1'-8"
2" x 1/4"	1.455	1.455	16.0	1'-10"	1'-8"	1'-6"	2'-10"	1'-3"	1'-2"	1'-9"
2" x 5/16"	1.818	1.818	19.7	2'-1"	1'-11"	1'-9"	3'-4"	1'-5"	1'-5"	2'-1"
2-1/4" x 1/4"	1.841	2.071	17.8	2'-1"	1'-11"	1'-9"	3'-5"	1'-6"	1'-5"	2'-2"
2-1/4" x 5/16"	2.301	2.589	22.0	2'-4"	2'-2"	2'-0"	4'-0"	1'-9"	1'-8"	2'-8"
2-1/2" x 1/4"	2.273	2.841	19.7	2'-4"	2'-2"	2'-0"	4'-2"	1'-8"	1'-8"	2'-7"
2-1/2" x 5/16"	2.841	3.551	24.3	2'-8"	2'-6"	2'-5"	4'-6"	2'-0"	2'-0"	3'-3"
3" x 1/4"	3.273	4.909	23.4	2'-11"	2'-9"	2'-8"	5'-0"	2'-3"	2'-3"	3'-8"
3" x 5/16"	4.091	6.136	28.9	3'-5"	3'-3"	3'-2"	5'-4"	2'-9"	2'-9"	4'-7"

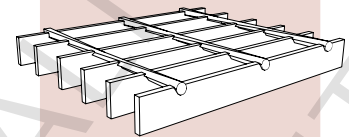
Heavy Duty Welded Bar Grating
1-⁷/₈" Center to Center of Bearing Bars

30 Space Load Table

Heavy Duty 1-⁷/₈" C/C Bearing Bars
Non-Serrated & Serrated



30-W-4



30-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



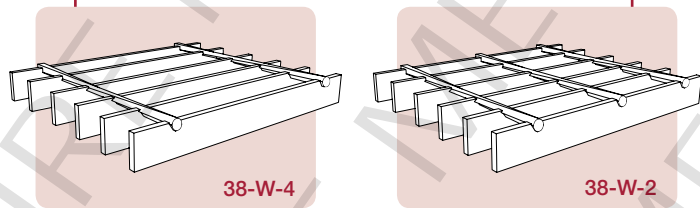
1 Ton Forklift

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"	0.267	0.133	6.6	0'-9"	0'-9"	0'-8"	0'-10"	0'-6"	0'-5"	0'-6"
1" x 5/16"	0.333	0.167	7.9	0'-11"	0'-10"	0'-8"	0'-11"	0'-7"	0'-6"	0'-7"
1-1/4" x 1/4"	0.417	0.260	7.9	1'-0"	0'-11"	0'-10"	1'-1"	0'-8"	0'-6"	0'-8"
1-1/4" x 5/16"	0.521	0.326	9.6	1'-1"	1'-0"	0'-11"	1'-3"	0'-9"	0'-7"	0'-9"
1-1/2" x 1/4"	0.600	0.450	9.3	1'-2"	1'-1"	1'-0"	1'-5"	0'-9"	0'-8"	0'-11"
1-1/2" x 5/16"	0.750	0.563	11.3	1'-4"	1'-3"	1'-1"	1'-9"	0'-10"	0'-9"	1'-1"
1-3/4" x 1/4"	0.817	0.715	10.6	1'-5"	1'-3"	1'-2"	1'-10"	0'-11"	0'-10"	1'-2"
1-3/4" x 5/16"	1.021	0.893	13.0	1'-7"	1'-5"	1'-3"	2'-2"	1'-0"	0'-11"	1'-5"
2" x 1/4"	1.067	1.067	12.0	1'-7"	1'-6"	1'-4"	2'-3"	1'-1"	1'-0"	1'-6"
2" x 5/16"	1.333	1.333	14.7	1'-10"	1'-8"	1'-6"	2'-9"	1'-3"	1'-2"	1'-10"
2-1/4" x 1/4"	1.350	1.519	13.4	1'-10"	1'-8"	1'-6"	2'-10"	1'-3"	1'-2"	1'-10"
2-1/4" x 5/16"	1.688	1.898	16.4	2'-0"	1'-10"	1'-9"	3'-5"	1'-5"	1'-5"	2'-3"
2-1/2" x 1/4"	1.667	2.083	14.7	2'-0"	1'-10"	1'-8"	3'-5"	1'-5"	1'-5"	2'-3"
2-1/2" x 5/16"	2.083	2.604	18.1	2'-3"	2'-1"	2'-0"	4'-2"	1'-8"	1'-8"	2'-9"
3" x 1/4"	2.400	3.600	17.4	2'-6"	2'-4"	2'-2"	4'-7"	1'-11"	1'-11"	3'-2"
3" x 5/16"	3.000	4.500	21.5	2'-10"	2'-8"	2'-7"	5'-0"	2'-3"	2'-4"	3'-11"

38 Space Load Table

Heavy Duty 2-³/₈" C/C Bearing Bars
Non-Serrated & Serrated

Heavy Duty Welded Bar Grating
2-³/₈" Center to Center of Bearing Bars



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"	0.211	0.105	5.4	0'-8"	0'-8"	0'-7"	0'-9"	0'-6"	0'-5"	0'-5"
1" x 5/16"	0.263	0.132	6.5	0'-10"	0'-9"	0'-8"	0'-10"	0'-6"	0'-5"	0'-6"
1-1/4" x 1/4"	0.329	0.206	6.5	0'-11"	0'-10"	0'-9"	1'-0"	0'-8"	0'-6"	0'-7"
1-1/4" x 5/16"	0.411	0.257	7.8	1'-0"	0'-11"	0'-10"	1'-2"	0'-8"	0'-7"	0'-9"
1-1/2" x 1/4"	0.474	0.355	7.6	1'-1"	1'-0"	0'-10"	1'-3"	0'-9"	0'-7"	0'-10"
1-1/2" x 5/16"	0.592	0.444	9.2	1'-3"	1'-1"	1'-0"	1'-6"	0'-10"	0'-8"	1'-0"
1-3/4" x 1/4"	0.645	0.564	8.6	1'-4"	1'-2"	1'-0"	1'-7"	0'-10"	0'-9"	1'-0"
1-3/4" x 5/16"	0.806	0.705	10.5	1'-5"	1'-3"	1'-2"	1'-11"	0'-11"	0'-10"	1'-3"
2" x 1/4"	0.842	0.842	9.7	1'-5"	1'-4"	1'-2"	2'-0"	1'-0"	0'-11"	1'-4"
2" x 5/16"	1.053	1.053	11.9	1'-8"	1'-6"	1'-4"	2'-5"	1'-1"	1'-0"	1'-7"
2-1/4" x 1/4"	1.066	1.199	10.8	1'-8"	1'-6"	1'-4"	2'-5"	1'-1"	1'-1"	1'-8"
2-1/4" x 5/16"	1.332	1.499	13.2	1'-10"	1'-8"	1'-6"	3'-0"	1'-3"	1'-3"	2'-0"
2-1/2" x 1/4"	1.316	1.645	11.9	1'-10"	1'-8"	1'-6"	2'-11"	1'-3"	1'-3"	2'-0"
2-1/2" x 5/16"	1.645	2.056	14.5	2'-1"	1'-11"	1'-9"	3'-7"	1'-6"	1'-6"	2'-6"
3" x 1/4"	1.895	2.842	14.0	2'-2"	2'-1"	1'-11"	4'-1"	1'-8"	1'-8"	2'-10"
3" x 5/16"	2.368	3.553	17.2	2'-6"	2'-4"	2'-3"	4'-9"	1'-11"	2'-0"	3'-6"



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