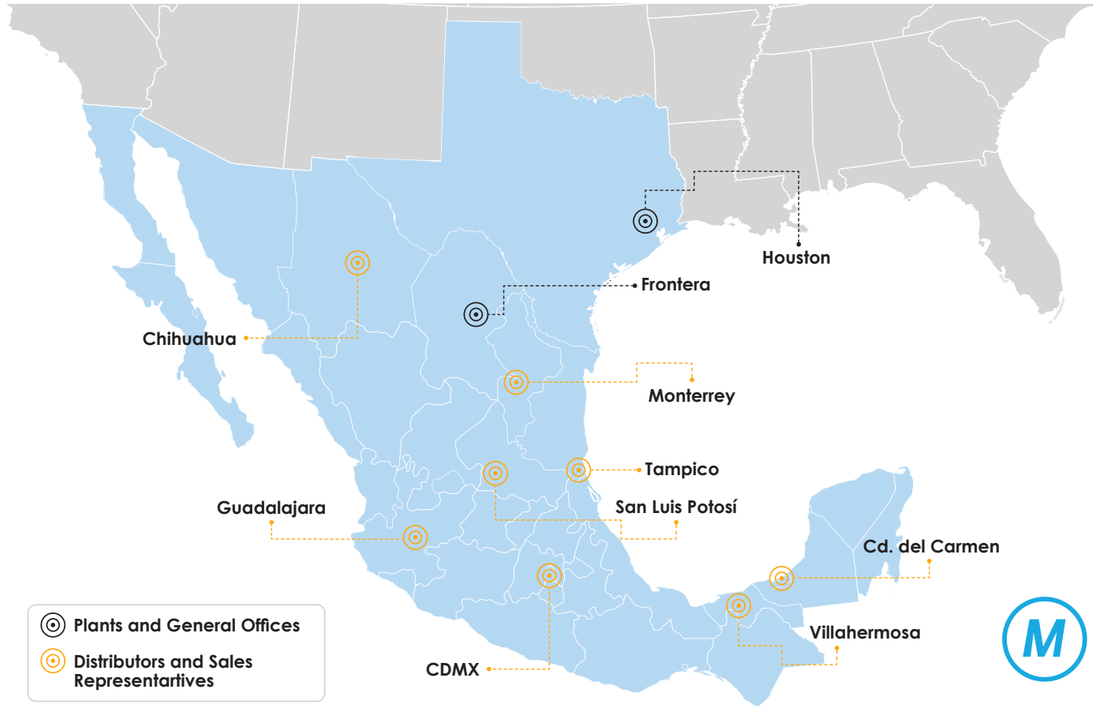
METELMEX

Quality Performance Every Step you Take

Grating



METELMEX

For over 40 years Metelmex has successfully provided products and services to a multitude of industries worldwide.

By offering high quality products and services at competitive prices, we have achieved the prestige as one of the premier Mexican companies in its field, on both a national and international level.

Our expertise lies in the manufacturing and fabrication of metal bar grating. However, due to the increasing market demand of higher standards and continuous improvement and our clients' need to meet these challenges, we have grown our range of products and services to meet or exceed these demands. Thus, we are able to offer integrated products, throughout our clients' projects, with the industry's highest quality and superior lead times.

Metelmex holds itself to the highest of standards following strict manufacturing/fabrication quality control processes and procedures required by our memberships in NAAMM, AMEGAC and ASTM. Our dedication to excellence has allowed Metelmex to achieve ISO-9001, CFE-LAPEM certification for the electric industry, BI-CERT for export projects and AARM-1003 certification, allowing us to extend our reach to the railroad industry.

OUR COMMITMENT

Our vast experience, customer centric culture commitment to service and product knowledge creates a well-rounded technical staff ready to answer your questions and provide you with the best customer experience. Our sales staff is ready to fill your standard orders or offer alternatives and solutions, when necessary, to the more challenging requirements. There are no "small" clients: we are committed to offering you the right product at the right price and with the right delivery schedule.

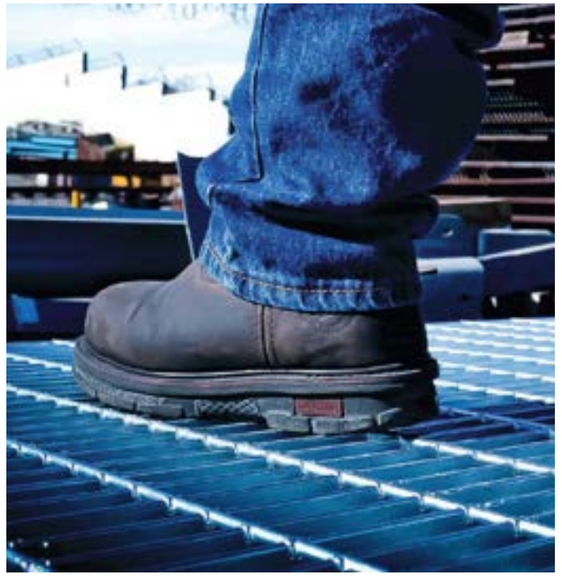
From estimating to sales and from detailing to fabrication, Metelmex offers the kind of "vendor-to customer" communication that is vital for successful project completion.

STEEL BAR GRATING

Metelmex's steel bar grating is manufactured through the forged welding process, which has been successfully used worlwide for several decades, ensuring a product of high quality and resistance.

Once the pieces are cut to size, final fabrication is performed prior to galvanizing or painting including, but not limited to, straight and/or circular cut outs, straight and/or circular banding and straight and/or circular toe plate...fabrication extras are based on design drawing specifications and standards. Each piece of grating has a piece mark tag welded to the grating to identify it for ease of installation. Erection drawings are also provided and show each piece mark and its location in the floor area.

Smooth or Checkered Plate can also be attached to the surface of the grating creating a composite product.


Stainless Steel


FRP Pultruted Grating

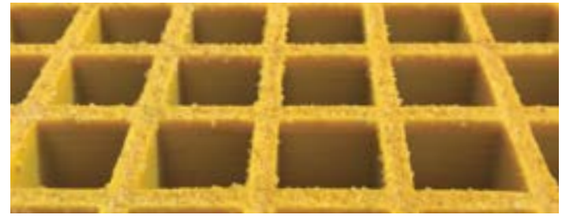
WIDE VARIETY OF GRATING

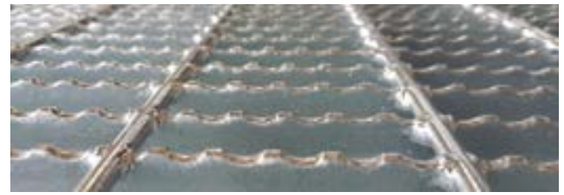
- Steel Bar Grating
- Heavy Duty Steel Bar Grating
- Stainless Steel Bar Grating
- Aluminium Swaged Grating
- Fiberglass Reinforced Plastic Grating

Application of modular products. Stair treads and trench drains.

Advantages. Allows the passage of light, allows air circulation, prevents blockages or accumulation of trash, dust or liquid, provides lightness and high load resistance, due to the increasing friction that provides to the shoe sole, increases safety in working areas.

Common applications. Industrial and commercial plants, mining underground vents, catwalks, conveyors, flooring, machine rooms, marine platforms, heliports, industrial stair treads, trench and Storm Drains.

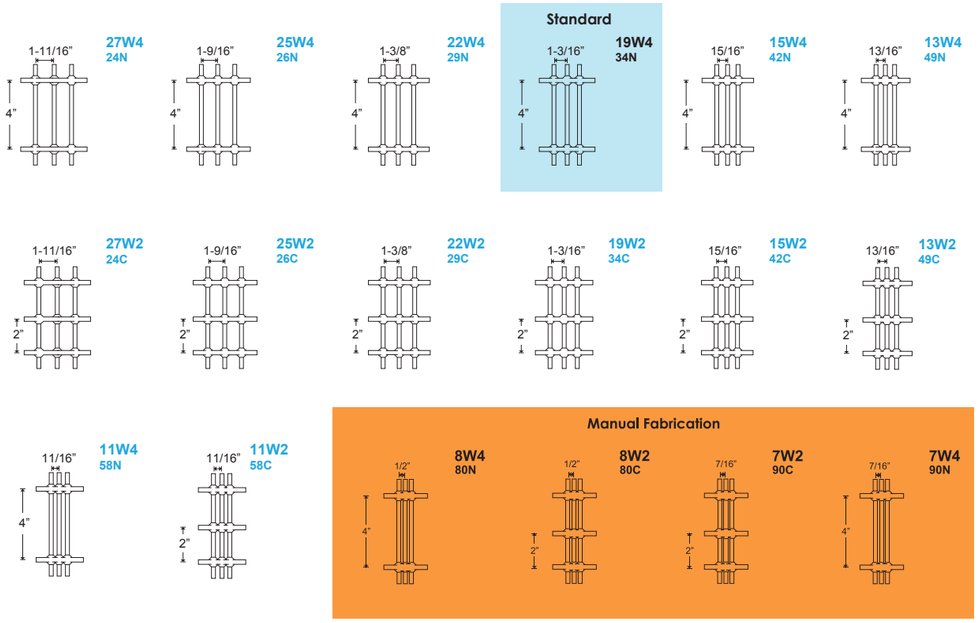

FRP Molded Grating


Galvanized Serrated Steel Grating

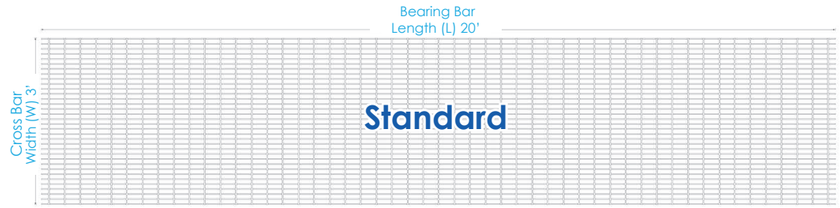

Aluminum Swage Grating


Mill Heavy Duty Serrated Grating

TYPES OF STEEL BAR GRATING



NOTE: All types of Grating that are not Standard are fabricated as a special order and downpayment is required.



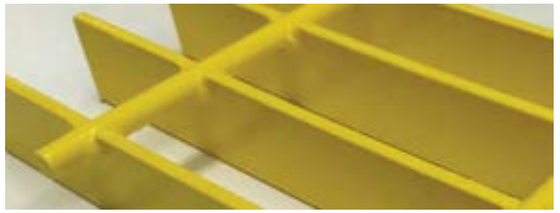
Dimensions
- Standard Panel 3' width x 20' length
- Maximum length: 24'

(Limited to specific types of grating and bearing bars)

Surfaces
- Smooth
- Serrated

Metal finishes
- Mill
- Black paint
- Hot dip galvanized under ASTM-A-123 specifications
- Other colors available on special request.


Galvanized


Powder Coating


Black Paint

PANEL WIDTH CHART (IN.) -7-SGCS-4, 7-SGCS-2, 7-DT-4 & 7-DT-2

DIMENSIONS ARE OUT-TO-OUT OF BEARING BARS**

No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3/16" Bars	5/8	1-1/16	1-1/2	1-15/16	2-3/8	2-13/16	3-1/4	3-11/16	4-1/8	4-9/16	5	5-7/16	5-7/8	6-5/16	6-3/4
No. of Bars	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
3/16" Bars	7-3/16	7-5/8	8-1/16	8-1/2	8-15/16	9-3/8	9-13/16	10-1/4	10-11/16	11-1/8	11-9/16	12	12-7/16	12-7/8	13-5/16
No. of Bars	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
3/16" Bars	13-3/4	14-3/16	14-5/8	15-1/16	15-1/2	15-15/216	16-3/8	16-13/16	17-1/4	17-11/16	18-1/8	18-9/16	19	19-7/16	19-7/8
No. of Bars	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61
3/16" Bars	20-5/16	20-3/4	21-3/16	21-5/8	22-1/16	22-1/2	22-15/16	23-3/8	23-13/16	24-1/4	24-11/16	25-1/8	25-9/16	26	26-7/16
No. of Bars	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
3/16" Bars	26-7/8	27-5/16	27-3/4	28-3/16	28-5/8	29-1/16	29-1/2	29-15/16	30-3/8	30-13/16	31-1/4	31-11/16	32-1/8	32-9/16	33
No. of Bars	77	78	79	80	81	82	83								
3/16" Bars	33-7/16	33-7/8	34-5/16	34-3/4	35-3/16	35-5/8	36-1/16								

PANEL WIDTH CHART (IN.) -11-W-4 & 11-W-2

DIMENSIONS ARE OUT-TO-OUT OF BEARING BARS**

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

PANEL WIDTH CHART (IN.) -15-W-4 & 15-W-2

DIMENSIONS ARE OUT-TO-OUT OF BEARING BARS**

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

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Grating

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PANEL WIDTH CHART (IN.) -19-W-4 & 19-W-2

DIMENSIONS ARE OUT-TO-OUT OF BEARING BARS**

No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1/4" Bars	1-7/16	2-5/8	3-13/16	5	6-3/16	7-3/8	8-9/16	9-3/4	10-15/16	12-1/8	13-5/16	14-1/2	15-11/16	16-7/8	18-1/16
5/16" Bars	1-1/2	2-11/16	3-7/8	5-1/16	6-1/4	7-7/16	8-5/8	9-13/16	11	12-3/16	13-3/8	14-9/16	15-3/4	16-15/16	18-1/8
3/8" Bars	1-9/16	2-3/4	3-15/16	5-1/8	6-5/16	7-1/2	8-11/16	9-7/8	11-1/16	12-1/4	13-7/16	14-5/8	15-13/16	17	18-3/16
1/2" Bars	1-11/16	2-7/8	4-1/16	5-1/4	6-7/16	7-5/8	8-13/16	10	11-3/16	12-3/8	13-9/16	14-3/4	15-15/16	17-1/8	18-5/16

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

PANEL WIDTH CHART (IN.) -22-W-4 & 22-W-2

DIMENSIONS ARE OUT-TO-OUT OF BEARING BARS**

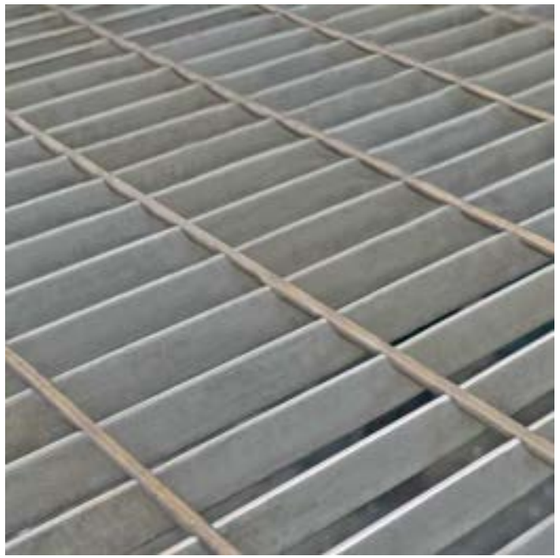
No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1/4" Bars	1-5/8	3	4-3/8	5-3/4	7-1/8	8-1/2	9-7/8	11-1/4	12-5/8	14	15-3/8	16-3/4	18-1/8	19-1/2	20-7/8
5/16" Bars	1-11/16	3-1/16	4-7/16	5-13/16	7-3/16	8-9/16	9-15/16	11-5/16	12-11/16	14-1/16	15-7/16	16-13/16	18-3/16	19-9/16	20-15/16
3/8" Bars	1-3/4	3-1/8	4-1/2	5-7/8	7-1/4	8-5/8	10	11-3/8	12-3/4	14-1/8	15-1/2	16-7/8	18-1/4	19-5/8	21
1/2" Bars	1-7/8	3-1/4	4-5/8	6	7-3/8	8-3/4	10-1/8	11-1/2	12-7/8	14-1/4	15-3/8	17	18-3/8	19-3/4	21-1/8

No. of Bars	17	18	19	20	21	22	23	24	25	26	27				
1/4" Bars	22-1/4	23-5/8	25	26-3/8	27-3/4	29-1/8	30-1/2	31-7/8	33-1/4	34-5/8	36				
5/16" Bars	22-5/16	23-11/16	25-1/16	26-7/16	27-13/16	29-3/16	30-9/16	31-15/16	33-5/16	34-11/16	36-1/16				
3/8" Bars	22-3/8	23-3/4	25-1/8	26-1/2	27-7/8	29-1/4	30-5/8	32	33-3/8	34-3/4	36-1/8				
1/2" Bars	22-1/2	23-7/8	25-1/4	26-5/8	28	29-3/8	30-3/4	32-1/8	33-1/2	34-7/8	36-1/4				

PANEL WIDTH CHART (IN.) -38-W-4 & 38-W-2

DIMENSIONS ARE OUT-TO-OUT OF BEARING BARS**

No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1/4" Bars	2-5/8	5	7-3/8	9-3/4	12-1/8	14-1/2	16-7/8	11-1/4	21-5/8	24	26-3/8	28-3/4	31-1/8	33-1/2	35-7/8
5/16" Bars	2-11/16	5-1/16	7-7/16	9-13/16	12-3/16	14-9/16	16-15/16	11-5/16	21-11/16	24-1/16	26-7/16	28-13/16	31-3/16	33-9/16	35-15/16
3/8" Bars	2-3/4	5-1/8	7-1/2	9-7/8	12-1/4	14-5/8	17	11-3/8	21-3/4	24-1/8	26-1/2	28-7/8	31-1/4	33-5/8	36
1/2" Bars	2-7/8	5-1/4	7-5/8	10	12-3/8	14-3/4	17-1/8	11-1/2	21-7/8	24-1/4	26-3/8	29	31-3/8	33-3/4	36-1/8



APPROXIMATE WEIGHT FOR STEEL BAR GRATING

Bearing Bar		GRATING TYPE							
		22		19		15		13	
mm	in	W4	W2	W4	W2	W4	W2	W4	W2
3 x 13	1/8 x 1/2	2.44	2.94	2.70	3.20	3.28	3.78	3.67	4.17
3 x 19	1/8 x 3/4	3.41	3.91	3.80	4.30	4.67	5.17	5.26	5.76
5 x 19	3/16 x 3/4	4.87	5.37	5.45	5.95	6.76	7.26	7.64	8.14
3 x 25	1/8 x 1	4.38	4.88	4.90	5.40	6.07	6.57	6.84	7.34
5 x 25	3/16 x 1	6.32	6.82	7.10	7.60	8.85	9.35	10.01	10.51
3 x 32	1/8 x 1-1/4	5.35	5.85	6.00	6.50	7.46	7.96	8.43	8.93
5 x 32	3/16 x 1-1/4	7.78	8.28	8.75	9.25	10.94	11.44	12.39	12.89
3 x 38	1/8 x 1-1/2	6.32	6.82	7.10	7.60	8.85	9.35	10.01	10.51
5 x 38	3/16 x 1-1/2	9.52	10.30	10.68	11.46	13.30	14.09	15.05	15.83
5 x 44	3/16 x 1-3/4	10.97	11.76	12.33	13.11	15.39	16.17	17.43	18.21
5 x 50	3/16 x 2	12.43	13.21	13.98	14.77	17.48	18.26	19.79	20.59

NOTE: Data in pounds per square foot.

PERMISSIBLE LOADING CAPACITY FOR STEEL BAR GRATING

19W4- STANDARD GRATING TYPE

Concentrated Load

C= Concentrated Load (Lbs./ft)

Uniform Load

C= Concentrated Load (Lbs./ft)

TYPE OF GRATING	ASSIGNED VALUE
27W4 and 27W2	0.70
25 W4 and 25 W2	0.76
22 W4 and 22W2	0.85
15W4 and 15W2	1.24
13W4 and 13W2	1.44
11 W4 and 11W2	1.70

In order to obtain the permissible loading capacity for each type of grating, multiply its assigned value times the value on the table.

BEARING BAR		Loading Type	DISTANCE BETWEEN SUPPORTS AND LOAD CAPACITY					
mm	in		20"	30"	39"	49"	59"	69"
3 X 13	1/8 X 1/2	U	213					
		C	53					
3 X 19	1/8 X 3/4	U	479	206				
		C	120	83				
5 X 19	3/16 X 3/4	U	719	319				
		C	180	120				
3 X 25	1/8 X 1	U	852	379	217			
		C	213	142	107			
5 X 25	3/16 X 1	U	1,278	568	319			
		C	313	210	160			
3 X 32	1/8 X 1-1/4	U	1,331	591	333	215		
		C	333	222	167	133		
5 X 32	3/16 X 1-1/4	U	2,218	986	554	322		
		C	556	370	278	201		
3 X 38	1/8 X 1-1/2	U	1,917	852	479	307		
		C	480	320	240	192		
5 X 38	3/16 X 1-1/2	U	2,875	1,232	719	460		
		C	720	480	360	288		
5 X 44	3/16 X 1-3/4	U	3,913	1,691	983	626		
		C	965	630	485	394		
5 X 50	3/16 X 2	U	5,111	2,271	1,278	818	455	
		C	1,280	835	640	512	372	
5 X 57	3/16 X 2-1/4	U	6,468	2,996	1,617	1,035	640	
		C	1,617	1,100	853	723	511	
5 X 63	3/16 X 2-1/2	U	7,985	3,810	1,996	1,310	887	556
		C	2,165	1,387	1,132	944	725	572

U= Uniform load, Psf
C= Concentrated load at (mid-span), LB per foot of grating width

NOTE: For serrated grating, the depth of grating required for a specified load is 1/4" greater than in the chart.

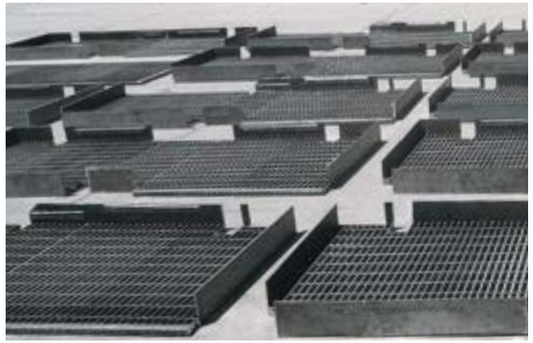
PERMISSIBLE LOADING CAPACITY FOR HEAVY DUTY GRATING

19W4 - STANDARD GRATING TYPE

Section Module	Moment of Inertia	Aproximate Weight	Suggestes Bearing Bar	H20 (3 axle)		H15 (2 axle)		Vehicular Traffic 10 Ton		Lift truck 5 Ton Concentrated		Lift truck 3 Ton Concentrated		Lift truck 1 Ton Concentrated	
				in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
0.421	0.211	9.7	1/4 x 1	10	254	9	228.6	12	304.8	7	177.8	6	152.4	7	177.8
0.632	0.316	14	3/8 x 1	13	330.2	11	279.4	16	406.4	9	228.6	8	203.2	9	228.6
0.658	0.411	11.9	1/4 x 1-1/4	13	330.2	12	304.8	17	431.8	9	228.6	8	203.2	10	254
0.987	0.617	17.2	3/8 x 1-1/4	16	406.4	14	355.6	23	584.2	12	304.8	10	254	14	355.6
0.947	0.711	14	1/4 x 1-1/2	16	406.4	14	355.6	23	584.2	11	279.4	10	254	13	330.2
1.421	1.066	20.5	3/8 x 1-1/2	20	508	18	457.2	30	762	14	355.6	13	330.2	19	482.6
1.289	1.128	16.2	1/4 x 1-3/4	19	482.6	17	431.8	29	736.6	14	355.6	12	304.8	17	431.8
1.934	1.692	23.7	3/8 x 1-3/4	23	584.2	21	533.4	38	965.2	18	457.2	17	431.8	25	635
1.684	1.684	18.3	1/4 x 2	22	558.8	20	508	37	939.8	16	406.4	15	381	22	558.8
2.526	2.526	26.9	3/8 x 2	28	711.2	26	660.4	46	1168.4	22	558.8	21	533.4	33	838.2
2.132	2.398	20.5	1/4 x 2-1/4	25	635	23	584.2	45	1143	19	482.6	18	457.2	28	711.2
3.197	3.597	30.1	3/8 x 2-1/4	32	812.8	31	787.4	53	1346.2	26	660.4	26	660.4	41	1041.4
2.632	3.289	22.6	1/4 x 2-1/2	28	711.2	27	685.8	52	1320.8	22	558.8	22	558.8	34	863.6
3.947	4.934	33.3	3/8 x 2-1/2	38	965.2	36	914.4	59	1498.6	31	787.4	31	787.4	50	1270
3.789	5.684	26.9	1/4 x 3	37	939.8	35	889	62	1574.8	30	762	30	762	49	1244.6
5.684	8.526	39.8	3/8 x 3	50	1270	49	1244.6	71	1803.4	43	1092.2	44	1117.6	61	1549.4
5.158	9.026	31.2	1/4 x 3-1/2	46	1168.4	45	1143	72	1828.8	39	990.6	40	1016	62	1574.8
7.737	13.539	46.2	3/8 x 3-1/2	60	1524	60	1524	83	2108.2	56	1422.4	58	1473.2	71	1803.4
6.737	13.474	35.5	1/4 x 4	58	1473.2	57	1447.8	83	2108.2	50	1270	51	1295.4	71	1803.4
10.105	20.211	52.7	3/8 x 4	68	1727.2	69	1752.6	95	2413	66	1676.4	68	1727.2	81	2057.4
8.526	19.184	39.8	1/4 x 4-1/2	69	1752.6	70	1778	96	2438.4	61	1549.4	64	1625.6	82	2082.8
12.789	28.776	59.1	3/8 x 4-1/2	71	1803.4	72	1828.8	96	2438.4	69	1752.6	71	1803.4	84	2133.6

U= Uniform load, Psf, C= Concentrated load at (mid-span), LB per foot of grating width

NOTES:
If the analyzed grating has serrated surface, you must choose the next higher bearing bar to ensure loading capacity.
Length is limited to 96" to avoid a simultanous double axle load stress.
Highlighted area indicates that maximum open area is limited by the maximum permisible capacity or the minimum deflection between L/400 and 1/8".



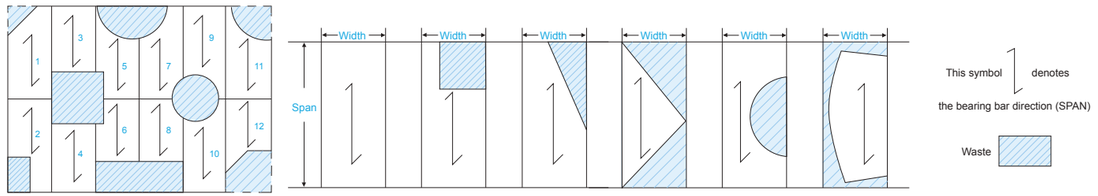
CUSTOM FABRICATED GRATING

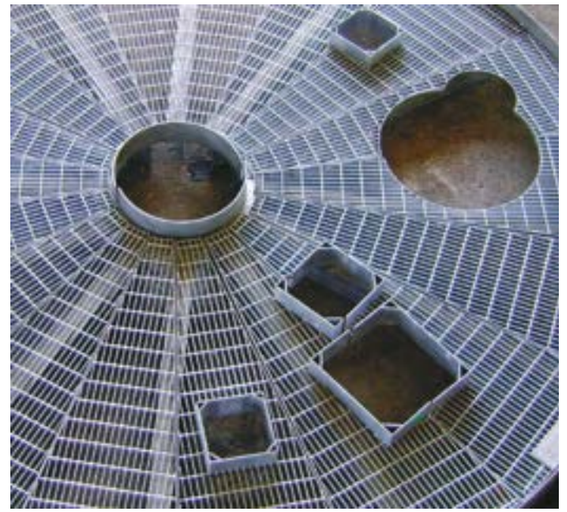
To ensure the maximum use of time and costs, Metelmex's gratings can be provided in cut to fit pieces. These are based on the drawings provided by the designer, or made by our engineering department.

Once the pieces are cut, they are Custom Fabricated Grating according to client's drawings presented to guarantee an easy installation. Each piece has an identification stamp, so the installer has a guide when assembling the grating.

The net area is calculated based on the distances from center to center, to rectangular area (whichever is greater), without discounting tolerances.

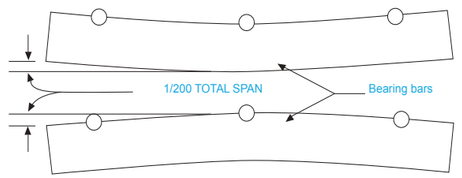
In the Following Figures, Net Area and Waste are Illustrated.



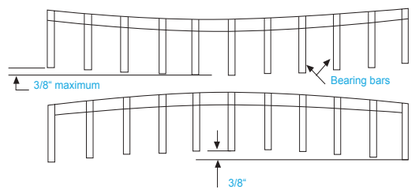


STEEL BAR GRATING FABRICATION TOLERANCES

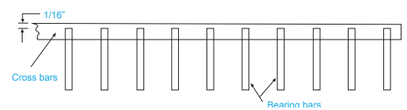
Longitudinal Bow



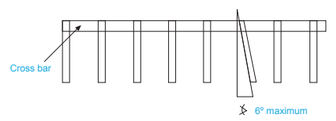
Transversal Bow (Before Fastening to Supports)



Cross Bar Location

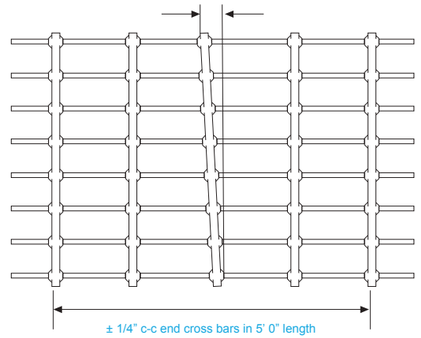


Bearing Bar Lean

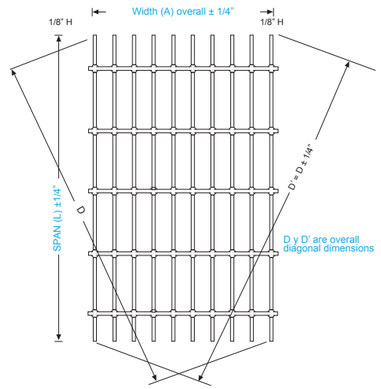


Cross Bar Alignment and Spacing

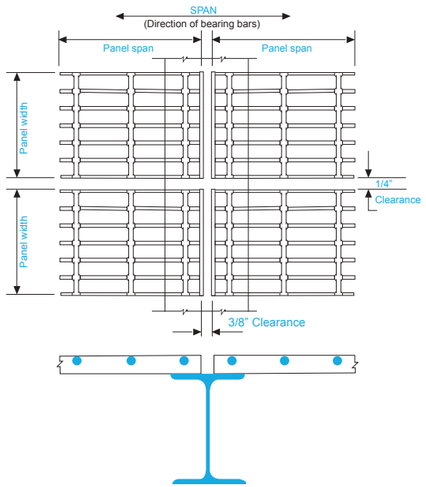
Cross bar shall not vary more than 1/8" in 12 in either direction from perpendicular alignment with bearing bars.



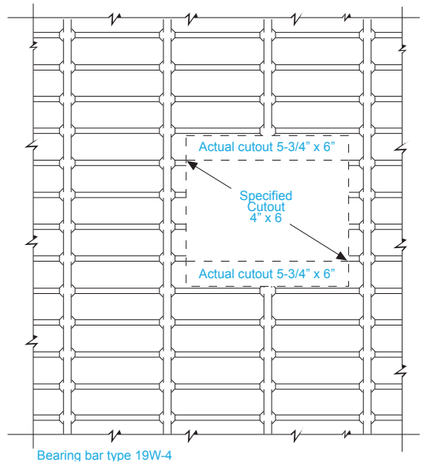
Overall Dimensions and Squareness



Installation Suggestions

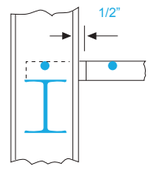


Cutouts

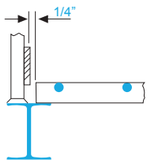


STANDARD INSTALLATION CLEARANCES

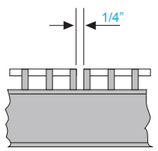
Clearance for column beam cutout



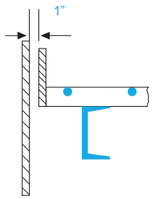
Clearance between handrail and grating



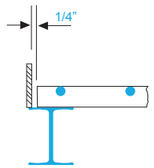
Clearance between adjacent gratings



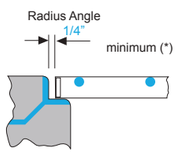
Clearances between circular cutouts



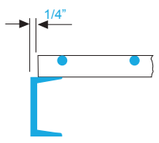
Clearance at kick plate



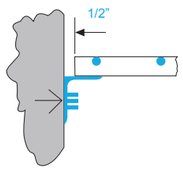
Clearance at trenches
(* Minimum clearance equal to support angle thickness)



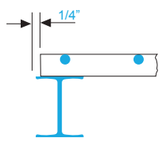
Common grating clearance at end of channel



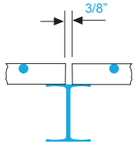
Clearance between concrete wall and grating



On top of beams: span between grating and edge of beam



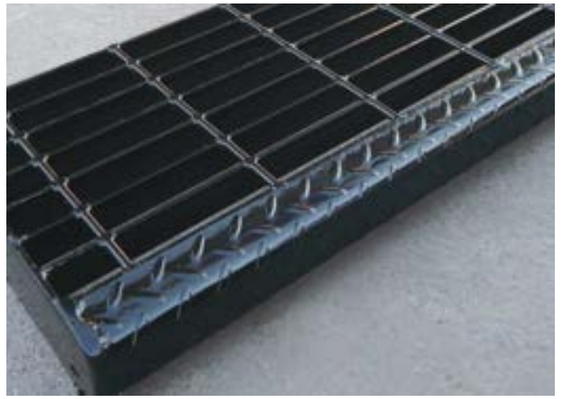
Clearance between two gratings



Display for client of Custom Fabricated Gratings for Platform Pipeline

Galvanized Ladder with Galvanized Serrated Stair Treads

Serrated Stair Treads in Operation Platform



Black Painted Stair Tread

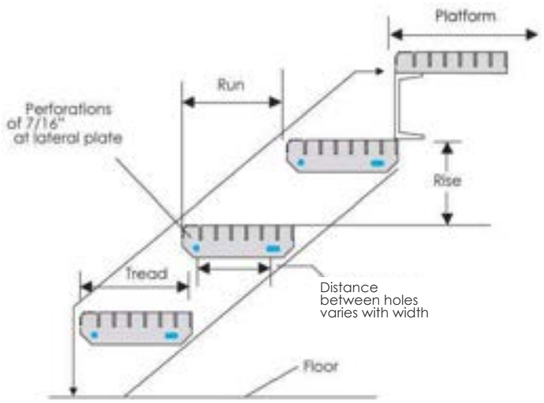
STAIR TREADS

Steel stair treads with serrated or smooth bearing bar. They include two side carrier plates and front nosing to be installed easily on stair stringers.

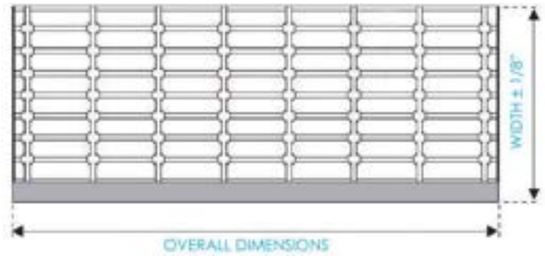
Stair treads are supplied with 3 standard dimensions: 8-1/2", 9-3/4" and 11", lengths are also standard 30", 36",42" and 48", (other treads and lengths can be ordered).

WE CAN MANUFACTURE STAIR TREADS ON DIFFERENT DIMENSIONS ACCORDING TO OUR CLIENT'S REQUEST.

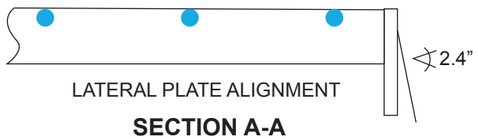
Stair Treads Typical Detail



Manufacturing Tolerances for Metelmex Stair Treads



Alignment of Lateral Plate



Grating

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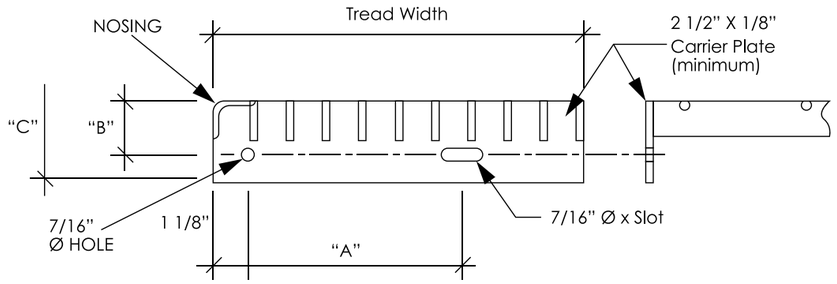
19-W-4 Stair Tread



Grating Size	Width	Tread Weight - Length					Maximum Length		"A" Dim.	"B" Dim.	"C" Dim.
		2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	Smooth	Serrated			
3/4" x 3/16"	6-3/16"	9.87	11.91				2'-4"	2'-10"	2-1/2"	1-3/4"	2-1/2"
	7-3/8"	11.31	13.65						4-1/2"		
	8-9/16"	12.69	15.27						4-1/2"		
	9-3/4"	14.13	17.01						7"		
	10-15/16"	15.57	18.75						7"		
	12-1/8"	16.95	20.37						7"		

Grating Size	Width	Tread Weight - Length					Maximum Length		"A" Dim.	"B" Dim.	"C" Dim.
		2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	Smooth	Serrated			
1 x 3/16"	6-3/16"	14.49	13.95	16.41			3'-5"	2'-10"	2-1/2"	1-3/4"	2-1/2"
	7-3/8"	13.23	16.05	18.87					4-1/2"		
	8-9/16"	14.91	18.03	21.15					4-1/2"		
	9-3/4"	16.71	20.25	23.79					7"		
	10-15/16"	18.45	22.35	26.25					7"		
	12-1/8"	20.19	24.45	28.71					7"		

Grating Size	Width	Tread Weight - Length					Maximum Length		"A" Dim.	"B" Dim.	"C" Dim.
		2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	Smooth	Serrated			
1 - 1/4" x 3/16"	6-3/16"	13.11	15.99	18.87	21.75	24.63	4'-8"	4'-2"	2-1/2"	1-3/4"	2-1/2"
	7-3/8"	15.15	18.45	21.75	25.05	28.35			4-1/2"		
	8-9/16"	17.19	20.91	24.63	28.35	32.07			4-1/2"		
	9-3/4"	19.23	23.37	27.51	31.65	35.79			7"		
	10-15/16"	21.27	25.83	30.39	34.95	39.51			7"		
	12-1/8"	23.37	28.41	33.45	38.49	43.53			7"		

Grating Size	Width	Tread Weight - Length					Maximum Length		"A" Dim.	"B" Dim.	"C" Dim.
		2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	Smooth	Serrated			
1 - 1/2" x 3/16"	6-3/16"	14.44	17.08	19.72	22.36	25.00	5'-6"	5'-3"	2-1/2"	2-1/4"	3"
	7-3/8"	16.00	19.30	22.60	25.90	29.20			4-1/2"		
	8-9/16"	19.34	23.18	27.02	30.86	34.70			4-1/2"		
	9-3/4"	21.78	26.16	30.54	34.92	39.30			7"		
	10-15/16"	24.22	29.14	34.06	38.98	43.90			7"		
	12-1/8"	26.60	32.00	37.40	43.20	48.20			7"		

STORM AND TRENCH DRAINS

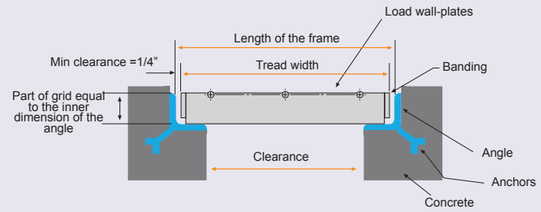
Our product is suitable to control the quantity and quality of the receiving waters from urban runoffs.

They create a sustainable environment for people and vehicle traffic during rainy seasons.

Benefits

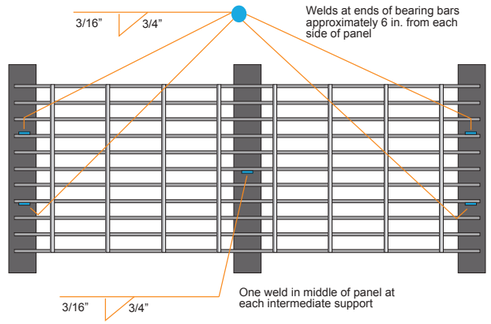
- Prevents the accumulation of water and dirt
- Safe for pedestrians and heavy transit

Support and Banding of Trench Grating



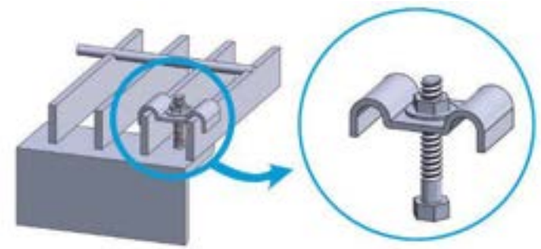
GRATING FASTENING SOLUTIONS

Welded Anchorage



For installations of permanent or sporadic placement.

Saddle Clips



Used for grating installations under constant relocation. Delivered galvanized, screws included.

TYPES OF CLIPS

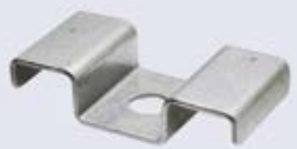
Galvanized Rake

Rake:
16 gauge steel sheet.
Saddle Clip:
14 gauge steel sheet.
Finish:
Galvanized

Galvanized Saddle

Saddle Clip:
14 gauge steel sheet.
Finish:
Galvanized.
Required screw:
1/4

Molded Stainless Saddle



Saddle Clip:
14 gauge steel sheet.
Finish:
Natural.
Required screw:
1/4

Pultruded Stainless Saddle

Saddle Clip:
14 gauge steel sheet.
Finish:
Natural.
Required screw:
1/4

Stainless Saddle

Saddle Clip:
14 gauge steel sheet.
Finish:
Natural.
Required screw:
1/4

Galvanized G-Type

Saddle Clip:
14 gauge steel sheet.
Finish:
Galvanized.
Required screw:
1/4

STAINLESS STEEL GRATING

Our Stainless Steel grating is manufactured under the forged welding process. It is used for highly corrosive environments, such as: steam, acids, chemicals, or permanent water contact, but also when aesthetic is required.

PERMISSIBLE LOADING CAPACITY FOR STEEL BAR GRATING

34N- STANDARD GRATING TYPE

Bearing Bar		Loading Type	Distance Between Supports and Load Capacity					
mm	in		20"	30"	39"	49"	59"	69"
3 X 13	1/8 x 1/2	U	213					
		C	53					
3 X 19	1/8 x 3/4	U	479	206				
		C	120	83				
5 X 19	3/16 x 3/4	U	719	319				
		C	180	120				
3 X 25	1/8 x 1	U	852	379	217			
		C	213	142	107			
5 X 25	3/16 x 1	U	1,278	568	319			
		C	313	210	160			
3 X 32	1/8 x 1-1/4	U	1,131	591	333	215		
		C	333	222	167	133		
5 X 32	3/16 x 1-1/4	U	2,218	986	554	322		
		C	556	370	278	201		
3 X 38	1/8 x 1-1/2	U	1,917	852	479	307		
		C	480	320	240	192		
5 X 38	3/16 x 1-1/2	U	2,875	1,232	719	460		
		C	720	480	360	288		
5 X 44	3/16 x 1-3/4	U	3,913	1,691	983	626		
		C	965	630	485	394		
5 X 50	3/16 x 2	U	5,111	2,271	1,278	818	455	
		C	1,280	835	640	512	372	
5 X 57	3/16 x 2-1/4	U	6,468	2,996	1,617	1,035	640	
		C	1,617	1,100	853	723	511	
5 X 63	3/16 x 2-1/2	U	7,985	3,810	1,196	1,310	887	556
		C	2,165	1,387	1,132	944	725	572

U= Uniform load, Psf
C= Concentrated load at (mid-span), LB per foot of grating width
NOTE: For serrated grating, the depth of grating required for a specified load is 1/4" greater than in the chart.

FRP PULTRUDED GRATING

Our Pultruded Grating is manufactured by pulling guided fiberglass rovings and mats into a resin bath which are then heated in a die to form the "i" bar shape. Crossrods are introduced through the bar and locked.
It´s design considers a high percentage of fiberglass (70%), which offers durability and a higher loading capacity than the molded grating. Is ideal for applications where longer support spans are required. It is also outstanding for the most corrosive environments, such as: steam, acids or chemicals.

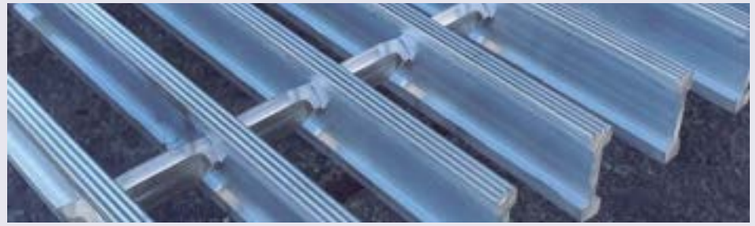
PERMISIBLE LOADING CAPACITY FOR FPR PULTRUDED 60% OPENING GRATING

Bearing Bar		Loading Type	Distance Between Supports and Load Capacity							
mm	in		12"	18"	24"	30"	36"	42"	48"	54"
3 x 13	1/8 x 1/2	U	632	330	181	115	58			
		C	313	255	181	146	96			
3 x 19	1/8 x 3/4	U	1,104	497	253	173	118	85	59	51
		C	552	362	277	222	176	146	135	118

U= Uniform load, Psf C= Concentrated load at (mid-span), LB per foot of grating width
NOTE: For serrated grating, the depth of grating required for a specified load is 1/4" greater than in the chart.

ALUMINIUM GRATING

Our Aluminium Grating is used when fine appearance and light weight is important. Is manufactured under a swaging process wih 6063-T6 Aluminium Bearing Bars, and 6063-T1 Cross Rods.
Types of Aluminium Grating: "i" bar and rectangular bar



Rejilla de Aluminio.

PERMISSIBLE LOADING CAPACITY FOR ALUMINIUM GRATING

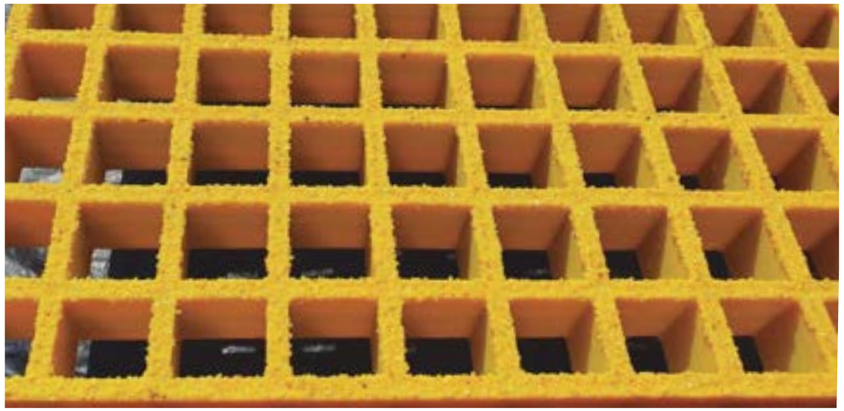
34N- STANDARD GRATING TYPE

Bearing Bar	Loading Type	Distance Between Supports and Load Capacity							
in		24"	30"	36"	42"	48"	54"	60"	66"
1/8 x 1	U	382	244	170	125	96	75		
	C	116	93	78	67	58	52		
3/16 x 1	U	573	367	255	187	143	113		
	C	175	140	116	100	87	78		
1/8 x 1-1/4	U	597	382	265	195	149	118	96	79
	C	182	146	121	104	91	81	73	66
3/16 x 1-1/4	U	896	573	398	292	224	177	143	118
	C	273	218	182	156	136	121	109	99
1/8 x 1-1/2	U	860	550	382	281	215	170	138	114
	C	262	210	175	150	131	116	105	95
3/16 x 1-1/2	U	1,290	825	573	421	322	255	206	171
	C	393	314	262	225	196	175	157	143

U= Uniform load, Psf C= Concentrated load at (mid-span), LB per foot of grating width
NOTE: For serrated grating, the depth of grating required for a specified load is 1/4" greater than in the chart.

FRP MOLDED GRATING

Our Molded Grating performance is outstanding for the most corrosive environments, such as: steam, acids or chemicals. Since its design offers a bidirectional loading capacity, it is easier to custom fabricate according to area drawings.



PERMISSIBLE LOADING CAPACITY FOR FPR MOLDED 1.5" X 1.5" GRATING

Bearing Bar		Loading Type	Distance Between Supports and Load Capacity									
mm	in		12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"
3 x 13	1/8 x 1/2	U	2,183	1,469	810	508	351	258	198	157	140		
		C	1,579	1,057	788	634	530	453	398	351	317		
3 x 19	1/8 x 3/4	U	2,906	1,936	1,258	777	563	398	308	242	206	162	135
		C	2,466	1,634	1,238	1,057	821	717	618	546	492	453	423

U= Uniform load, Psf
C= Concentrated load at (mid-span), LB per foot of grating width
NOTE: For serrated grating, the depth of grating required for a specified load is 1/4" greater than in the chart.

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Grating

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