

KENTEC PRODUCTS



Molded Grating

Integrally molded construction with Bi-directional load carrying capability. High resin content provides higher chemical corrosion resistance and fire retardancy.



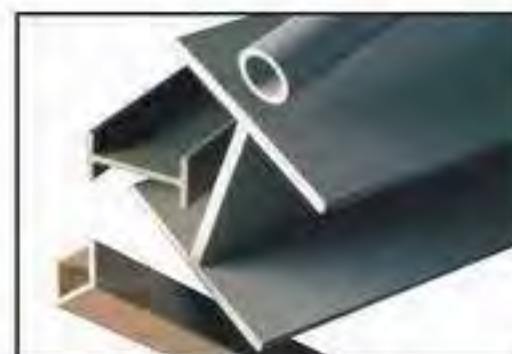
Covered Grating

Offers the same characteristics as std. grating with the benefits of a solid surface, which eliminates items from falling thru the panel grid. Slip resistant surface added for safety.



Pultruded Grating

High strength unidirectional rovings allow for greater load carrying capability on larger spans. Fire resistant and Chemical resistant.



Structural Shapes

Standard Structural shapes include angles, I-beams, wide flange beams, channels and tube. Custom profile capabilities are available.



Floor Plate

The anti-slip surface is ideal for slip/fall areas, where water, oil and hazardous liquids are present.



Stair Treads

Molded and Pultruded stairtreads are available in two resin systems, polyester and vinylester. Standard and custom sizes available.



Handrail

Constructed to OSHA standards using pultruded shapes. Safety rails guard slip/fall areas in the workplace.



Caged Ladders

Stands up to rugged use in various environments. Design offers easy gripping and slip resistant traction.

KENTEC COMPOSITES

www.kentecomposites.com

FIBERGLASS GRATING & STRUCTURAL SYSTEMS



KENTEC

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KENTEC Composites

Company profile

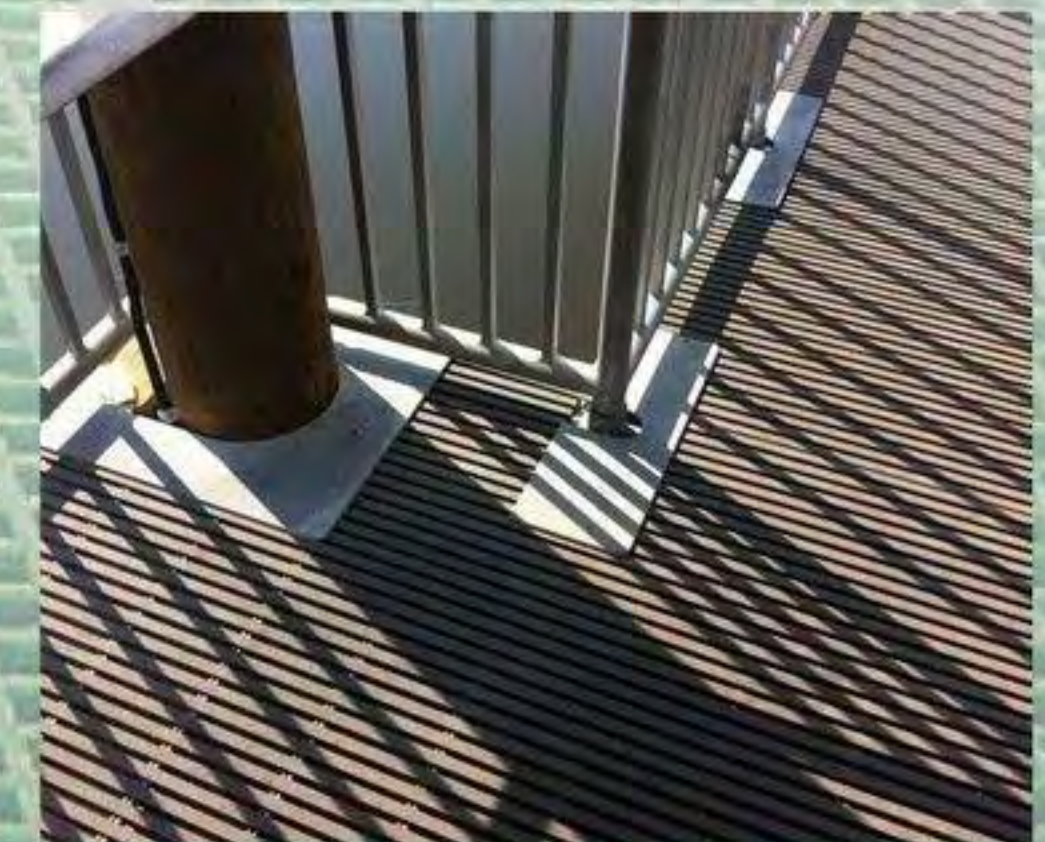
Kentec Composites was founded in 1998 with the vision of providing the highest quality fiberglass reinforced plastics (FRP) products for industrial, commercial and residential use on a global scale. With proven expertise, Kentec has become an industry leader in manufacturing and fabrication worldwide.



Kentec Composites operates its own manufacturing facilities, allowing them to maintain strict quality measures. Kentec's facilities are ISO 9001:2008 Certified. Some of Kentec's other certifications include the following approvals and standards:

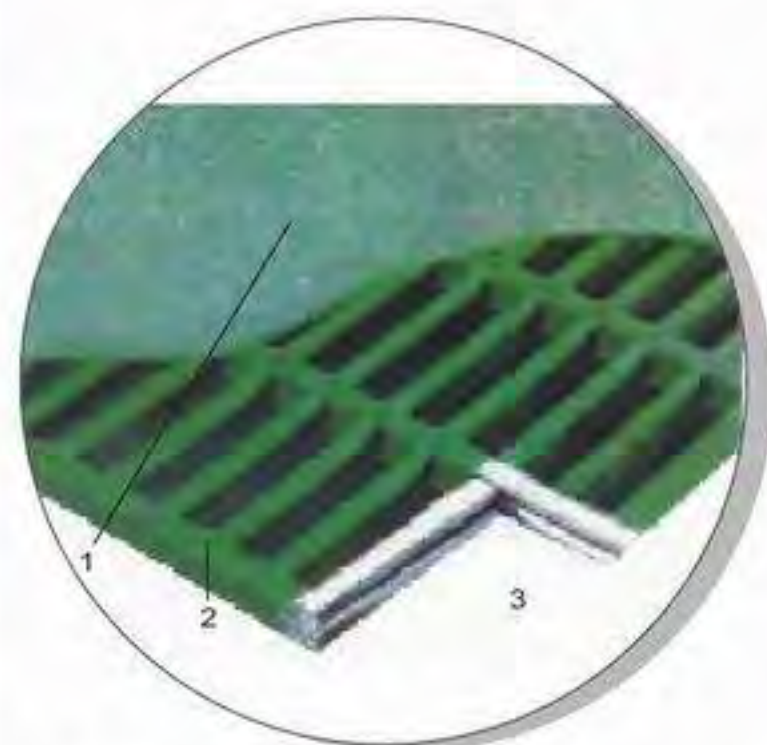
- ~ABS
- ~U.S. Coastguard Level 2
- ~USDA Approvable
- ~VGBA, ADA, OSHA, IBC, UBC

Kentec's full line of products, manufacturing, Design and Engineering capabilities are here to provide you solutions to your project needs.





1. Integral, one-piece construction distributes load to both bearing bars and cross bars.
2. Interwoven continuous fiberglass rovings are saturated with resin during production.
3. Slip-resistant top surface.



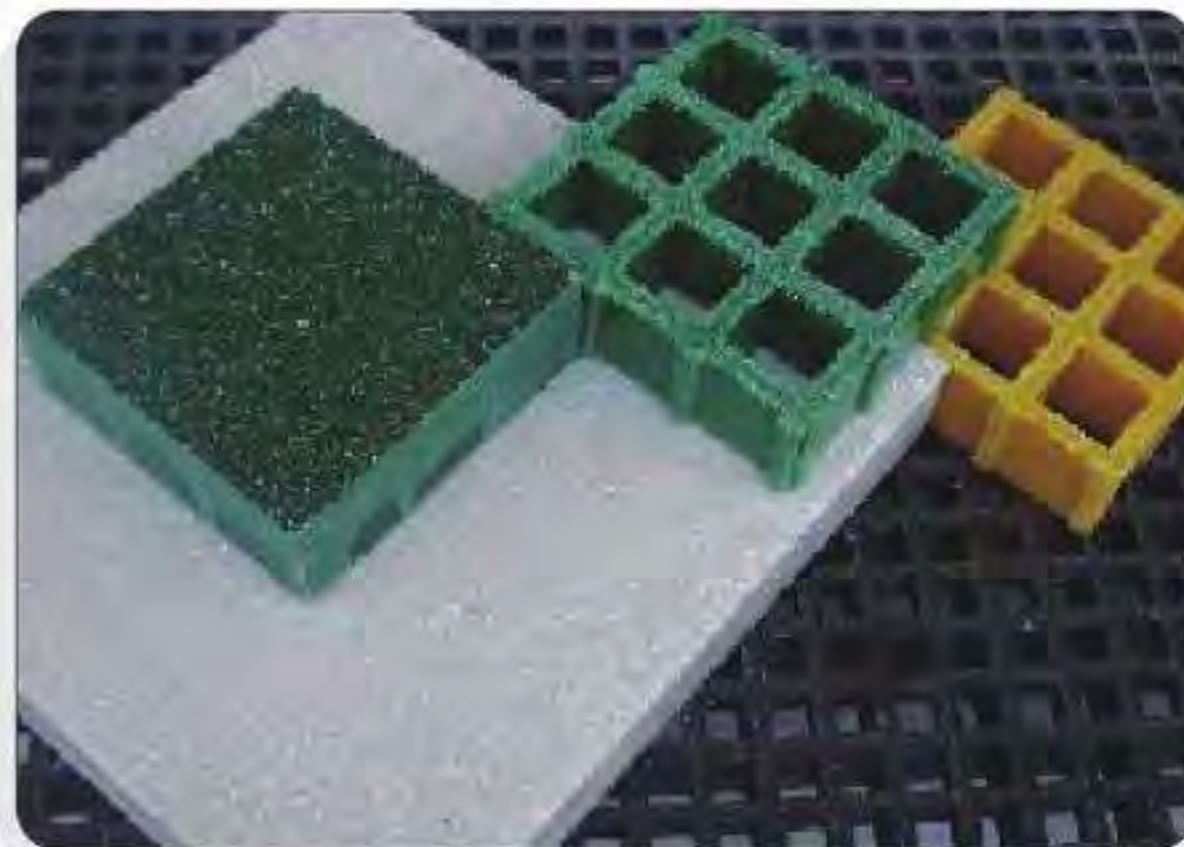
1. Anti-slip plate
2. Grating
3. Grating covered with anti-slip plate as an integral corrosion resistant construction.

Benefits of FRP Grating

- Lightweight Materials
- Reduced Installation Costs
- Low maintenance Life Cycles
- Ease of Fabrication
- Enhanced Workplace Environment

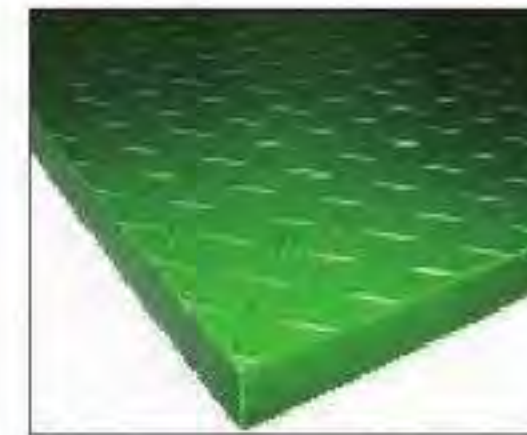
Features of FRP Grating

- Corrosion Resistant
- Slip resistant top surface
- Fire Retardant
- Variety of Standard colors
- Impact Resistant
- UV Inhibitors



Type of Grating Surfaces

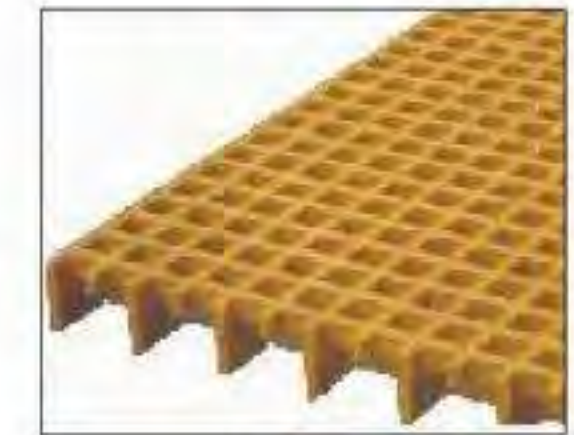
- Concave surface: Anti-Skid surface.
- Plain surface: Flat top after sanding.
- Grit surface: Extra slip-resistance as per BS 7976-2.
- Cover surface: Available in smooth top, check pattern top and grit top.
- Mini mesh type grating prevents small tools and other objects from dropping through.



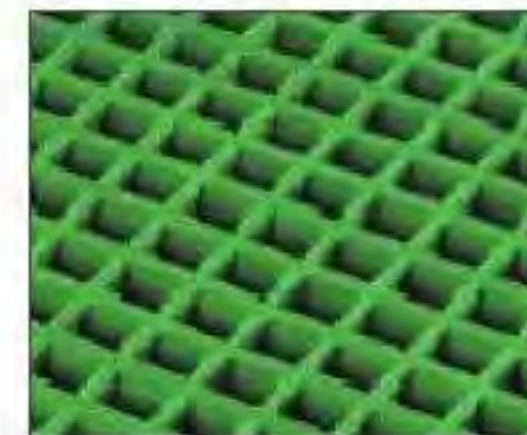
CHECK PLATE COVER



GRIT COVER



MICRO MESH



CONCAVE SURFACE



GRIT SURFACE



ANTI-STATIC GRATING

Standard Resin Systems Available

Resin Type	Resin Base	Description	Corrosion Resistance	Flame Spread Rating ASTM E-84	Max Oper. Temp.
VFR	Vinyl Ester	Superior Corrosion Resistance and Fire Retardant	Excellent	Class 1,25 or less	110 C / 230 F
IFR	Isophthalic Polyester	Industrial Grade Corrosion Resistance and Fire Retardant	Very Good	Class 1,25 or less	90 C / 190 F
PFR	Orthophthalic Polyester	Architectural Grade Corrosion Resistance and Fire Retardant	Very Good	Class 1,25 or less	60 C / 140 F

Find Superior-class Grating here!

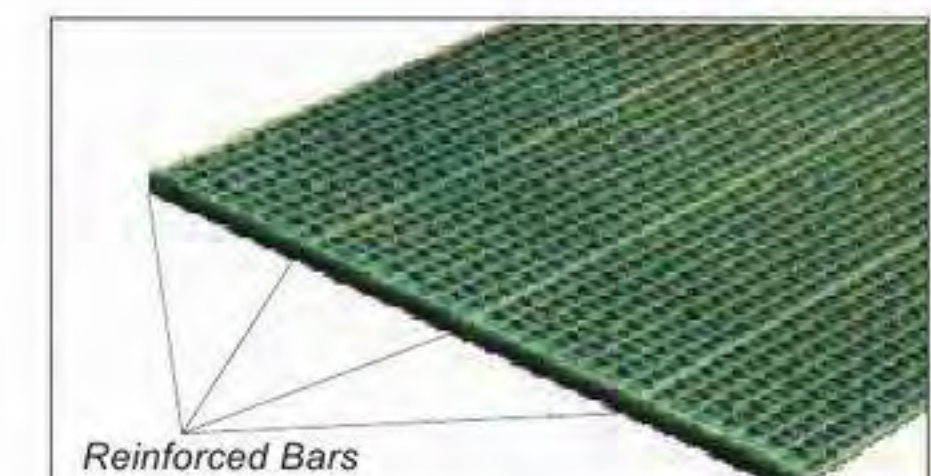
Made with Special Tooling

Completed Through Unique Process

Treated in an Optional Non-filler Formula

Unparalleled in Chemical-resistance

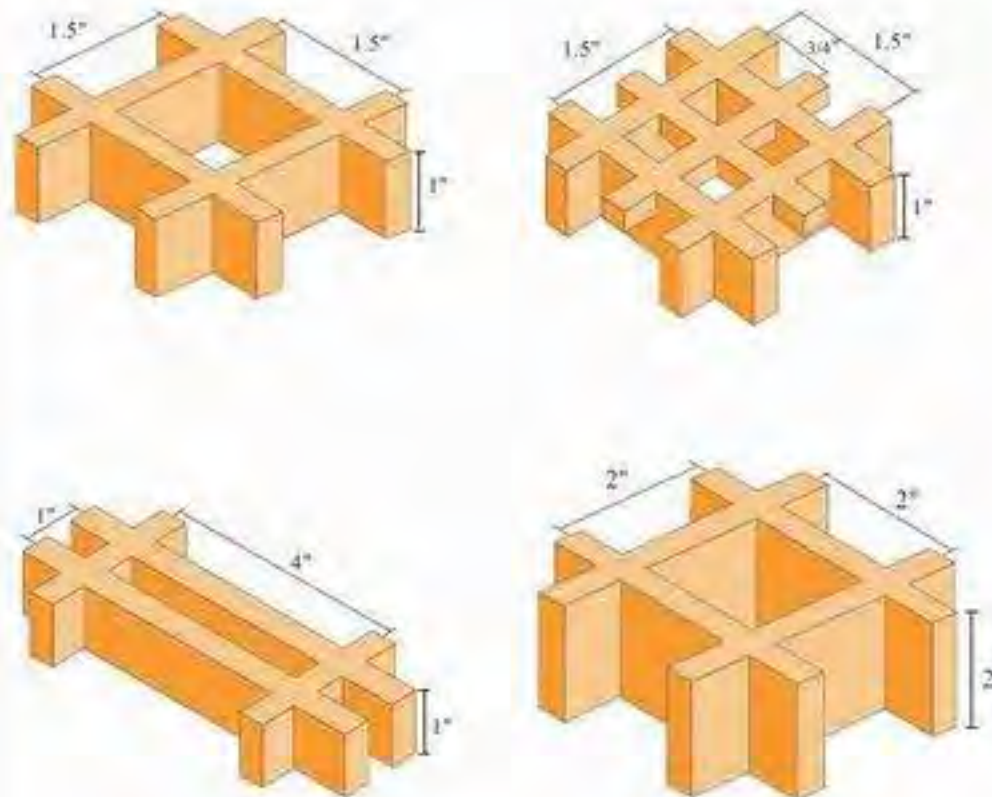
Unsurpassed Mechanical Performance



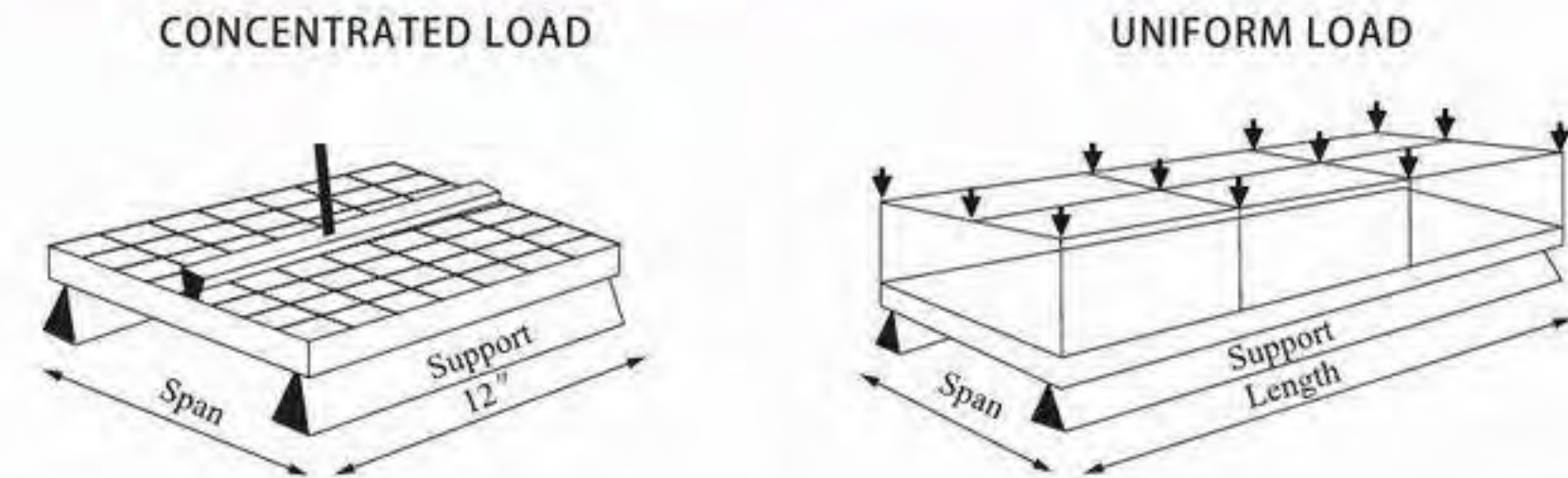
Molded Grating Specifications

Type	Thickness	Mesh Size	Open Area	Weight/ Sq. Ft	Available Panel Size
Square	1/2"	1 1/2" x 1 1/2"	69%	1.5	4' x 8' 4' x 12'
Square	1/2"	2" x 2"	76%	1.3	4' x 8' 4' x 12'
Rectangular	1"	1" x 4"	69%	2.7	4' x 8' 4' x 12'
Square	1"	1 1/2" x 1 1/2"	69%	2.6	3' x 10' 4' x 8' 4' x 12'
Mini Mesh	1"	3/4" x 3/4"	44%	3.1	4' x 8' 4' x 12'
Square	1 1/4"	1 1/2" x 1 1/2"	69%	3.2	4' x 8' 4' x 12'
Square	1 1/2"	1 1/2" x 1 1/2"	69%	4.0	3' x 10' 4' x 8' 4' x 12' 5' x 10'
Mini Mesh	1 1/2"	3/4" x 3/4"	44%	4.7	4' x 8' 4' x 12'
Rectangular	1 1/2"	1 1/2" x 4"	78%	3.0	4' x 12'
Rectangular	1 1/2"	1" x 6"	38%	4.7	4' x 12'
Square	2"	2" x 2"	72%	4.5	4' x 8' 4' x 12'
Mini Mesh	2 3/8"	3/4" x 3/4"	42%	7.3	4' x 12'
High Load	2 1/2"	1 1/2" x 1 1/2" Square	47%	11	3' x 10' 4' x 8' 4' x 12' 5' x 10'
High Load	1 1/2"	1" x 2" Rectangular	48%	6.2	4' x 6' 4' x 8'
High Load	2"	1" x 2" Rectangular	48%	8.4	4' x 6' 4' x 8'
Stair Tread	1 1/2"	1 1/2" x 6" Rectangular	62%	3.2	24 1/4" x 12' 4' x 12'

Note: 1. Panel weight may vary according to type of resin used and top surface.
2. Mesh size : Spacing between bar centers.
3. Other thicknesses and sizes are available upon request.



Molded Grating Load and Deflection Data



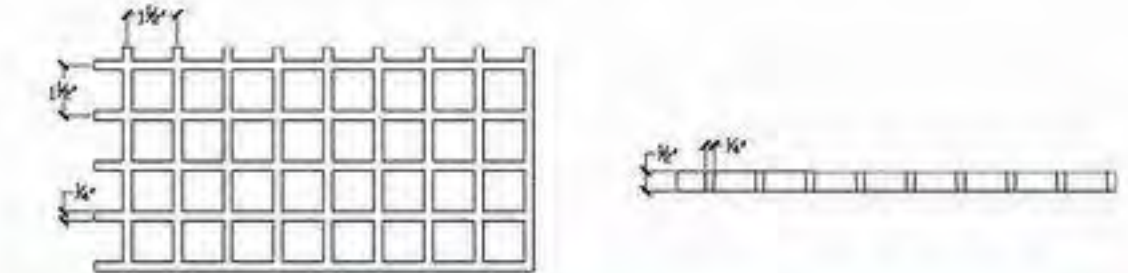
The designer should not exceed MAXIMUM-RECOMMENDED load at any time. MAXIMUM LOAD represents a 3 : 1 factor of safety on ULTIMATE CAPACITY. ULTIMATE CAPACITY represents MAX LOAD observed at initial fracture.

Walking loads for maintenance traffic are typically a live load of 60 PSF. Deflections for worker comfort are typically limited to 3/8" or SPAN divided by 120 under full live load. For a firmer feel under full live load or a line load 250 lbs/ft of width, limit deflections to 1/4" or SPAN divided by 200.

The loads represented are for STATIC LOAD CONDITIONS at ambient temperature. Deflections for impact loads or dynamic loads will MULTIPLY the deflections shown by 2. Long term loads will result in added deflection due to creep in the material and will require higher factors of safety to ensure acceptable performance.

0.5" Thick 1.5" x 1.5" Square Mesh

72% Open Area
1.34 lbs./ft²

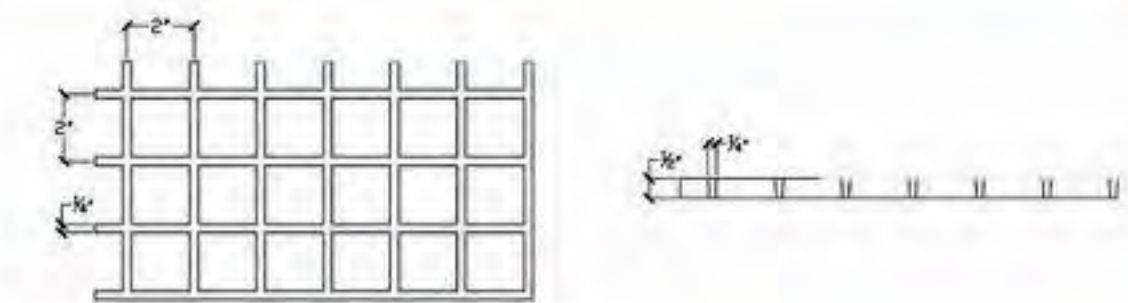


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12	0.04	0.08	0.13	0.17	0.25	0.42			280
18	0.13	0.26	0.38	0.52	0.73				180
24	0.29	0.58							140

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12	0.03	0.05	0.08	0.11	0.17	0.29	0.53		350
18	0.12	0.24	0.36	0.48					150
24	0.37								80

0.5" Thick 2.0" x 2.0" Square Mesh

78% Open Area
1.03 lbs./ft²



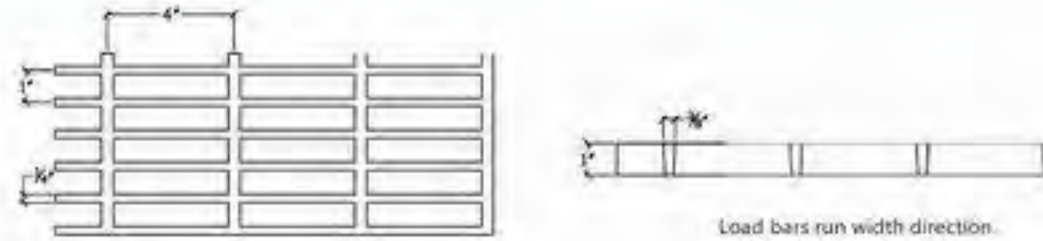
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12	0.05	0.11	0.15	0.20	0.27	0.51			230
18	0.15	0.32	0.45	0.64					150
24	0.39	0.68							110

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12	0.03	0.06	0.10	0.13	0.18	0.35	0.63		300
18	0.14	0.28	0.45	0.58					130
24	0.41								70

FIBERGLASS GRATING

1" Thick 1" x 4" Rectangular Mesh

68% Open Area
2.62 lbs./ft²

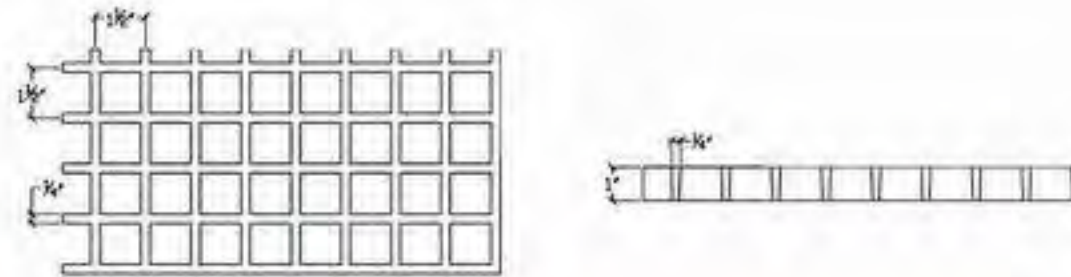


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12		0.01	0.01	0.02	0.03	0.04	0.08	0.17	1830
18	0.01	0.03	0.04	0.05	0.08	0.13	0.25	0.49	1415
24	0.03	0.06	0.09	0.12	0.19	0.28	0.56		960
30	0.05	0.11	0.16	0.23	0.32	0.54			765
36	0.09	0.18	0.27	0.37	0.53				640
42	0.14	0.28	0.43	0.55	0.89				545
46	0.18	0.36							481

Span (inch)	UNIFORM LOAD in lbs/ft								Max Load
	50	100	150	200	300	500	1000	2000	
12		0.01	0.01	0.01	0.02	0.03	0.05	0.11	3655
18	0.01	0.02	0.04	0.05	0.07	0.12	0.23	0.46	1820
24	0.04	0.07	0.11	0.14	0.19	0.35	0.74		960
30	0.09	0.17	0.25	0.34	0.46				585
36	0.17	0.35	0.52	0.69					420
42	0.31	0.62							311
46	0.43								272

1.0" Thick 1.5" x 1.5" Square Mesh

69% Open Area
2.5 lbs./ft²

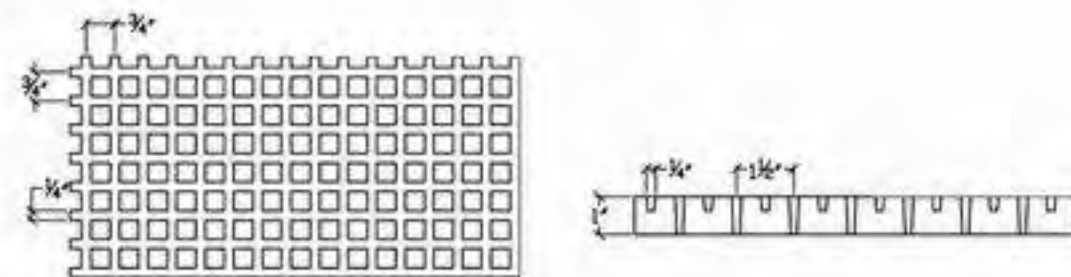


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12		0.01	0.02	0.03	0.04	0.06	0.13	0.23	1140
18	0.02	0.04	0.05	0.07	0.10	0.18	0.36		930
24	0.04	0.08	0.12	0.16	0.22	0.41			660
30	0.08	0.15	0.24	0.33	0.41				530
36	0.14	0.26	0.38	0.52	0.69				350

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12		0.01	0.01	0.02	0.03	0.04	0.07	0.14	2300
18	0.02	0.03	0.05	0.07	0.09	0.17	0.33	0.66	1200
24	0.05	0.10	0.15	0.21	0.29	0.51			660
30	0.12	0.24	0.36	0.47	0.63				420
36	0.24	0.48							210

1.0" Thick 0.75" x 0.75" Mini Mesh

44% Open Area
3.08 lbs./ft²



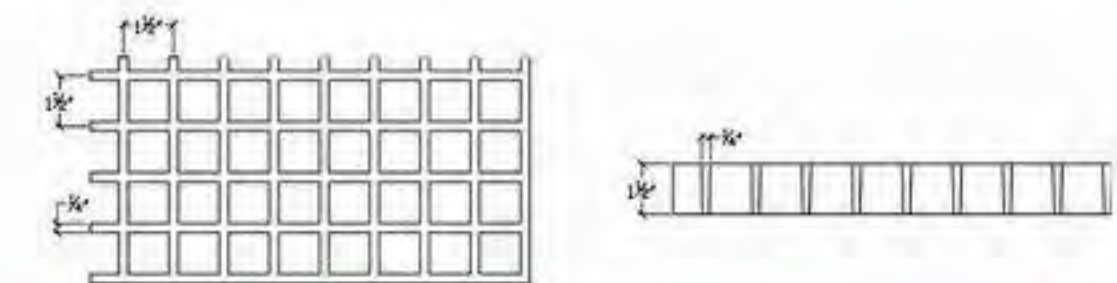
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12			0.01	0.01	0.02	0.03	0.07	0.19	1520
18	0.01	0.02	0.03	0.04	0.06	0.10	0.25	0.42	960
24	0.03	0.06	0.09	0.11	0.17				680
30	0.06	0.11	0.18	0.22					550
36	0.10	0.20	0.28	0.39					400

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12				0.01	0.01	0.02	0.05	0.09	2510
18	0.01	0.02	0.04	0.05	0.07	0.12	0.23	0.47	1310
24	0.04	0.07	0.11	0.15	0.22	0.36	0.73		710
30	0.09	0.17	0.26	0.35	0.52	0.87			460
36	0.19	0.38							230

KENTEC COMPOSITES

1.5" Thick 1.5" x 1.5" Square Mesh

68% Open Area
3.95 lbs./ft²

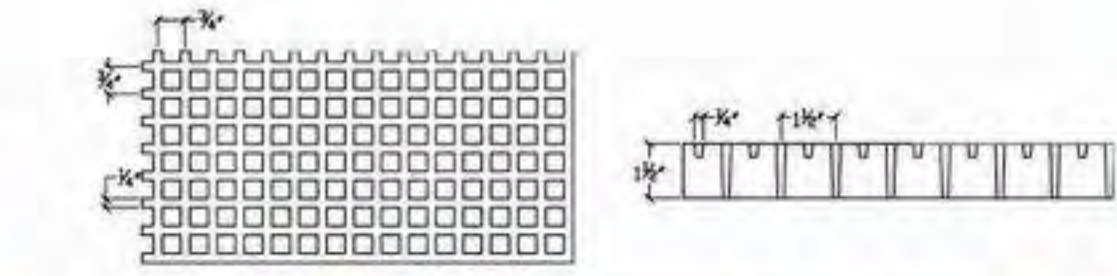


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12				0.01	0.02	0.03	0.04	0.09	2010
18		0.01	0.02	0.03	0.04	0.06	0.11	0.22	1320
24	0.01	0.02	0.04	0.05	0.06	0.12	0.23	0.46	1010
30	0.02	0.04	0.06	0.09	0.17	0.24	0.48		810
36	0.04	0.07	0.11	0.14	0.18	0.36			640
42	0.06	0.13	0.19	0.25	0.28	0.56			530
48	0.08	0.17	0.25	0.34	0.48				490
54	0.12	0.28	0.37	0.48	0.59				430

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.02	0.03	0.06	4020
18		0.01	0.02	0.02	0.04	0.05	0.10	0.21	1810
24	0.01	0.03	0.04	0.06	0.07	0.15	0.32	0.58	920
30	0.03	0.07	0.10	0.14	0.17	0.34	0.68		630
36	0.07	0.15	0.20	0.27	0.37	0.67			430
42	0.13	0.26	0.37	0.49	0.66				310
48	0.21	0.47	0.66						215
54	0.34	0.69							185

1.5" Thick 0.75" x 0.75" Mini Mesh

44% Open Area
4.78 lbs./ft²

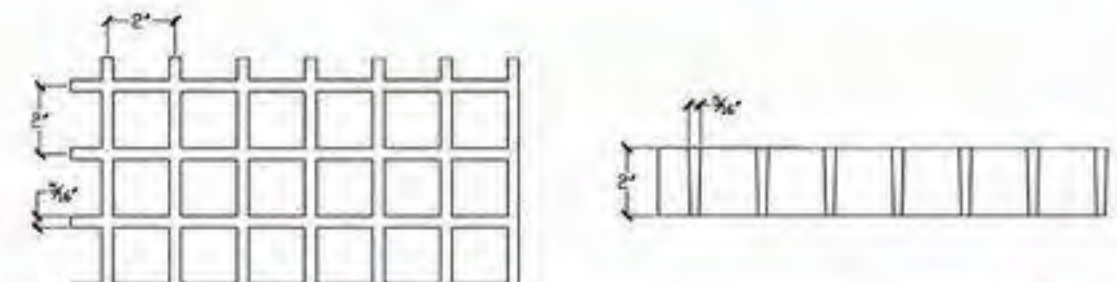


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.02	0.03	0.06	3090
18		0.01	0.01	0.02	0.03	0.05	0.09	0.17	2060
24	0.01	0.02	0.03	0.04	0.05	0.09	0.18	0.35	1540
30	0.02	0.03	0.05	0.06	0.08	0.16	0.32	0.64	1230
36	0.03	0.05	0.08	0.11	0.15	0.27	0.53		1030
42	0.04	0.08	0.14	0.17	0.27	0.43			880
48	0.06	0.12	0.18	0.26	0.32	0.65			730
54	0.09	0.17	0.26	0.39	0.44				670
60	0.12	0.23	0.37	0.46	0.59				584

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.02	0.03	0.04	6010
18		0.01	0.01	0.02	0.03	0.04	0.08	0.17	2470
24	0.01	0.02	0.03	0.04	0.06	0.11	0.22	0.44	1450
30	0.03	0.05	0.08	0.10	0.15	0.25	0.52		928
36	0.05	0.10	0.17	0.21	0.29	0.49			670
42	0.09	0.18	0.27	0.36	0.45				485
48	0.15	0.32	0.45	0.65					360
54	0.29	0.48							305
60	0.37								215

2.0" Thick 2.0" x 2.0" Square Mesh

72% Open Area
4.38 lbs./ft²

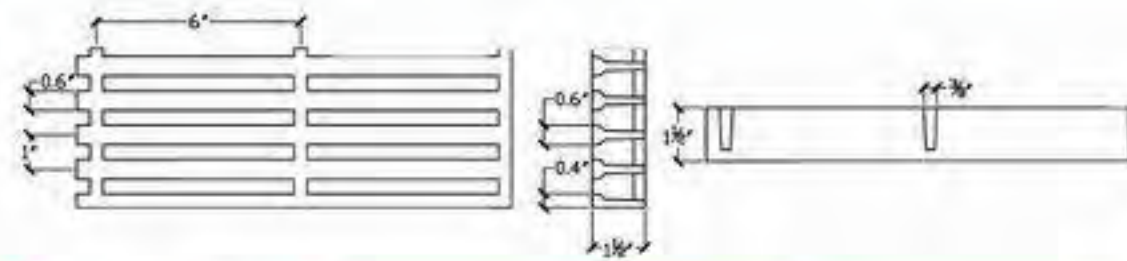


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.02	0.04		4320
18			0.01	0.02	0.03	0.04	0.06	0.14	3080
24		0.01	0.02	0.03	0.04	0.06	0.12	0.24	2160
30	0.01	0.02	0.04	0.05	0.06	0.13	0.25	0.45	1530
36	0.02	0.04	0.07	0.08	0.11	0.19	0.38		1440
42	0.03	0.06	0.09	0.13	0.18	0.32	0.59		1230
48	0.04	0.09	0.13	0.18	0.27	0.45			1080
54	0.06	0.12	0.18	0.26	0.35	0.61			990
60	0.08	0.17	0.27	0.34	0.45				860

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.02	0.02	0.03	9240
18			0.01	0.02	0.03	0.04	0.05	0.11	4010
24	0.01	0.02	0.03	0.04	0.05	0.08	0.15	0.30	2160
30	0.02	0.04	0.05	0.07	0.09	0.16	0.35		1402
36	0.04	0.07	0.11	0.14	0.19	0.28			920
42	0.07	0.13	0.19	0.29	0.33	0.37			660
48	0.11	0.27	0.36	0.45	0.54	0.67			560
54	0.18	0.34	0.54	0.69					450
60	0.29	0.59							345

1.5" Thick 1.0" x 6.0" Rectangular Mesh (Pultrusion style)

38% Open Area
4.7 lbs./ft²

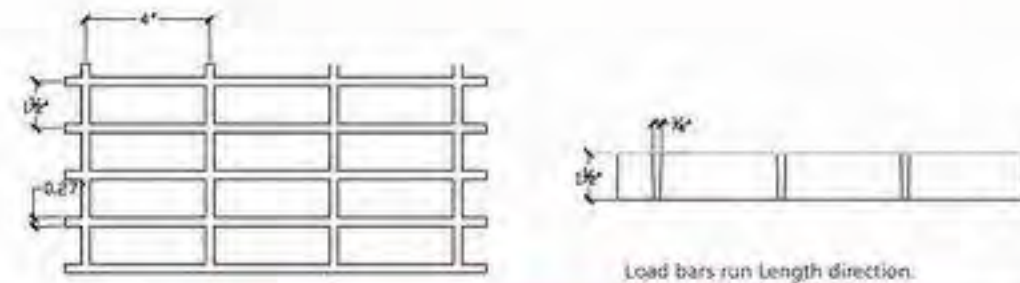


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.02	0.03	0.05	3510
18			0.01	0.02	0.03	0.04	0.07	0.13	2610
24		0.01	0.02	0.03	0.03	0.06	0.13	0.26	2050
30	0.01	0.03	0.04	0.06	0.08	0.12	0.23	0.47	1480
36	0.02	0.04	0.06	0.09	0.12	0.19	0.39		1330
42	0.03	0.06	0.09	0.15	0.15	0.33	0.65		1020
48	0.05	0.09	0.14	0.23	0.23	0.46			930
54	0.06	0.15	0.20	0.31	0.43	0.67			820
60	0.09	0.17	0.26	0.47	0.47				

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.03	6520
18			0.01	0.02	0.03	0.04	0.06	0.14	3470
24	0.01	0.02	0.03	0.04	0.05	0.08	0.16	0.35	2050
30	0.02	0.04	0.06	0.07	0.09	0.18	0.36		1300
36	0.04	0.07	0.11	0.15	0.19	0.38			930
42	0.07	0.13	0.20	0.27	0.33	0.67			670
48	0.12	0.23	0.34	0.46	0.57				520
54	0.18	0.35	0.59						405
60	0.27	0.54							310

1.5" Thick 1.5" x 4.0" Rectangular Mesh

77% Open Area
2.67 lbs./ft²

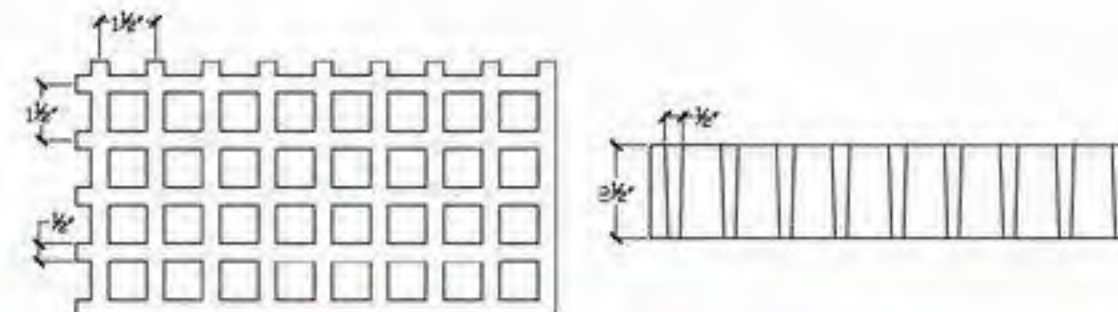


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12			0.01	0.01	0.02	0.04	0.06	0.13	1410
18	0.01	0.02	0.03	0.04	0.06	0.10	0.20		867
24	0.02	0.05	0.07	0.09	0.14	0.23			567
30	0.04	0.09	0.13	0.18	0.27				433
36	0.08	0.15	0.23	0.31					300
42	0.13	0.25	0.38						217
48	0.19	0.37							133

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12			0.01	0.02	0.03	0.04	0.04	0.08	2840
18	0.01	0.03	0.04	0.08	0.06	0.14	0.12	0.34	1210
24	0.04	0.06	0.08	0.14	0.10	0.21	0.48	0.76	710
30	0.08	0.14	0.22	0.31	0.25	0.42	0.82		519
36	0.14	0.28	0.38	0.46	0.51	0.99			230
42	0.22	0.40	0.57						151
48	0.45	0.62							107

2.5" Thick 1.5" x 1.5" Square Mesh

47% Open Area
10.9 lbs./ft²

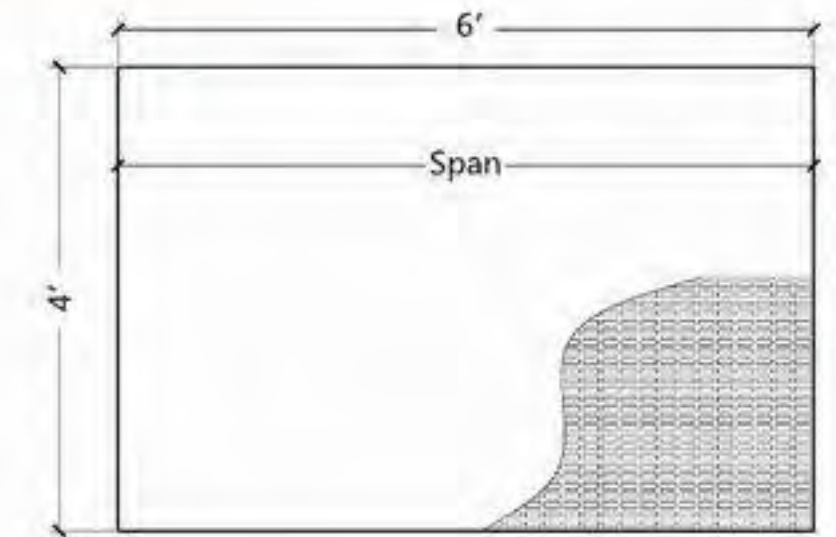


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
24					0.01	0.01	0.03	0.06	16660
30				0.01	0.02	0.03	0.06	0.11	10660
36		0.01	0.01	0.02	0.03	0.05	0.10	0.20	7333
42	0.01	0.02	0.02	0.03	0.05	0.08	0.16	0.31	5600
48	0.01	0.02	0.03	0.05	0.07	0.12	0.23	0.47	4667
54	0.02	0.03	0.05	0.07	0.10	0.16	0.33	0.66	3733
60	0.02	0.05	0.07	0.09	0.14	0.23	0.46		2933
66	0.03	0.06	0.09	0.12	0.18	0.30	0.61		2400

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
24			0.01	0.01	0.01	0.02	0.04	0.07	13600
30		0.01	0.01	0.02	0.03	0.04	0.09	0.18	6400
36	0.01	0.02	0.03	0.04	0.06	0.10	0.19	0.38	3840
42	0.02	0.03	0.05	0.07	0.10	0.17	0.35		2600
48	0.03	0.06	0.09	0.12	0.18	0.30	0.59		1800
54	0.05	0.09	0.14	0.19	0.28	0.47			1280
60	0.07	0.15	0.22	0.29	0.44	0.73			880
66	0.11	0.21	0.32	0.43	0.64				680

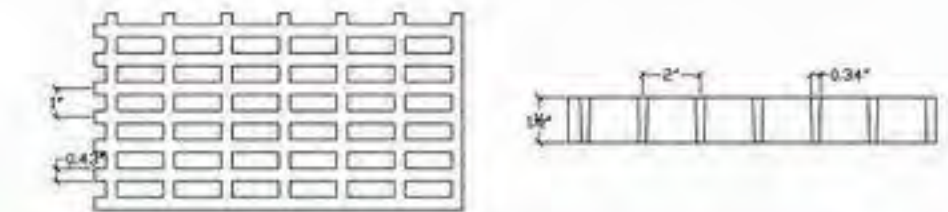
High Load Capacity Molded Grating

Molded High Load Capacity grating is yet another product in the arsenal of engineered fiberglass reinforced plastic solutions. While capitalizing on most of the traditional benefits of molded grating products high strength, corrosion resistance, fire retardancy, non-conductivity and low maintenance, this specially manufactured molded FRP product has been engineered to carry forklift loads that traditional molded FRP grating products are unable to support. With a 48% open surface area, Kentec molded HLC grating is available in a 4' x 6' panel with depths of 1-1/2" and 2" is now available in Kentec ISO and VE Resin systems. Surface options include either a smooth surface or grit surface. Kentec molded HLC grating merits an ASTM E-84 flame spread rating of 25 or less and a Class 1 Fire Rating.



1.5" Thick 1.0" x 2.0" Rectangular Mesh

48% Open Area
6.32 lbs./ft²

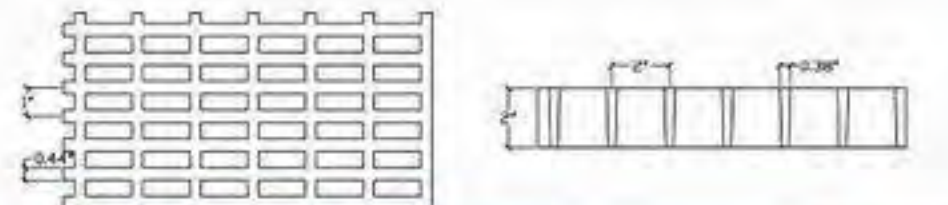


Span (inch)	CONCENTRATED LOAD in lbs/ft of width							Max Load
	200	500	1000	2000	3000	4000	5000	
18		0.02	0.04	0.07	0.11	0.15	0.19	26,070
24	0.02	0.04	0.09	0.17	0.26	0.34	0.44	19,530
36	0.06	0.14	0.28					12,520
42	0.09	0.22	0.44					10,890

Span (inch)	UNIFORM LOAD in lbs/ft ²						Max Load
	200	400	500	600	800	1000	
18		0.01	0.02	0.02	0.03	0.04	35,100
24	0.02	0.04	0.05	0.06	0.09	0.11	19,910
36	0.10	0.21	0.26	0.31	0.42		7,840
42	0.19	0.39	0.48				5,790

2.0" Thick 1.0" x 2.0" Rectangular Mesh

48% Open Area
8.65 lbs./ft²



Span (inch)	CONCENTRATED LOAD in lbs/ft of width							Max Load
	200	500	1000	2000	3000	4000	5000	
18		0.01	0.03	0.05	0.07	0.10	0.13	31,510
24	0.02	0.03	0.06	0.11	0.17	0.22	0.27	25,450
36	0.04	0.09	0.17	0.34	0.51			17,320
42	0.05	0.13	0.26					14,520

Span (inch)	UNIFORM LOAD in lbs/ft ²						Max Load
	200	400	500	600	800	1000	
18		0.01	0.01	0.01	0.02	0.03	43,440
24	0.01	0.02	0.03	0.04	0.05	0.06	27,150
36	0.06	0.12	0.15	0.18	0.24	0.30	8,550
42	0.11	0.22	0.28	0.33	0.44		7,390

Allowable Spans for Vehicular Loads

	Wheel Load (lb) (1/2 Axle Load + 30% Impact)	Load Distribution		Allowable Span in Inches	
		Parallel to Axle	Perpendicular to Axle	1.5" Deep HLC Molded Grating	2" Deep HLC Molded Grating
AASHTO Standard Truck 32,000 lb. Axle Load - Dual Wheels	20,800	20" x 4"	8"	1'-2"	1'-5"
Automobile Traffic 3500 lb. Vehicle - 1,500 lb. Load 55% Drive Axle Load	2,220	8" x 4"	8"	2'-2"	2'-8"
5 Ton Capacity Forklift 15,400 lb. Vehicle - 7,400 lb. Load 45% Drive Axle Load	13,480	11" x 4"	11"	1'-1"	1'-5"
3 Ton Capacity Forklift 9800 lb. Vehicle - 11,800 lb. Load 85% Drive Axle Load	8,730	7" x 4"	7"	1'-0"	1'-4"
1 Ton Capacity Forklift 4,200 lb. Vehicle - 6,200 lb. Load 85% Drive Axle Load	3,425	4" x 4"	4"	1'-7"	2'-1"



The raw materials for pultrusion include a liquid resin mixture (containing resin, fillers and specialized additives) and reinforcing fibers. To achieve the reinforcement purpose, materials in continuous forms such as rolls of fiberglass mat and doffs of fiberglass roving are used. During the pultrusion process, the raw materials are pulled through a heated steel forming die. When the reinforcements are saturated with the resin mixture ("wet-out") in the resin bath and pulled through the die, the resin comes hardened due to the heat from the die and the cured profiles are thus formed in the same shape as the die.

The advantages of pultruded FRP Sections

- 1 Corrosion resistant and anti-aging
- 2 Non-conductive and non magnetic
- 3 Light weight and high strength
- 4 Long service life and maintenance-free
- 5 Bright color and good appearance
- 6 Easy of installation and dimensional stability
- 7 Water-proof, fire retardant

Pultruded Grating



- ♦ High Content of Fiberglass
- ♦ Extremely High Unidirectional Strength and Stiffness
- ♦ Accommodates long spans and higher load capacities
- ♦ Good Corrosion Resistance
- ♦ Long Life
- ♦ Low Maintenance & Installation Cost



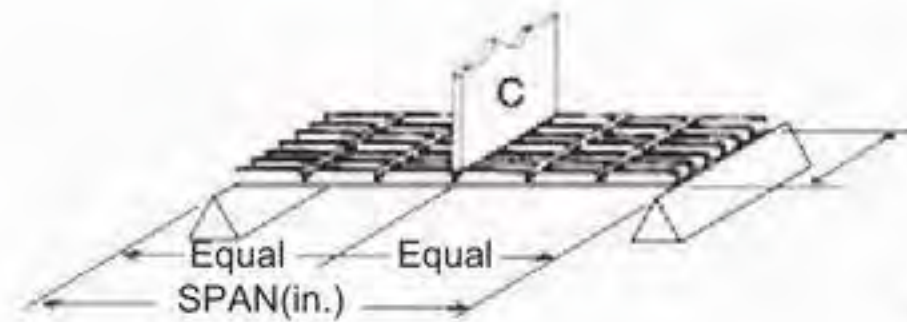
Pultruded Grating Specification

Series	Thickness	Load Bar Type & Spacing	Cross Rod Spacing	Open Area	Weight/ Sq. Ft	Available Panel Size
WT-1810	1.0"	T 2.0"	6"	18%	2.41	3' x 20' 4' x 20'
WT-3510	1.0"	T 2.5"	6"	35%	2.03	3' x 20' 4' x 20'
T-3310	1.0"	T 1.5"	6"	33%	2.28	3' x 20' 4' x 20'
T-5010	1.0"	T 2.0"	6"	50%	1.82	3' x 20' 4' x 20'
T-1715	1.5"	T 1.2"	6"	17%	3.42	3' x 20' 4' x 20'
T-3315	1.5"	T 1.5"	6"	33%	2.83	3' x 20' 4' x 20'
T-5015	1.5"	T 2.0"	6"	50%	2.25	3' x 20' 4' x 20'
WT-4015	1.5"	T 2.5"	6"	40%	2.61	3' x 20' 4' x 20'
WT-2515	1.5"	T 2.0"	6"	25%	3.22	3' x 20' 4' x 20'
WT-1515	1.5"	T 1.75"	6"	15%	3.50	3' x 20' 4' x 20'
T-3320	2.0"	T 1.5"	6"	33%	4.26	3' x 20' 4' x 20'
T-5020	2.0"	T 2.0"	6"	50%	3.32	3' x 20' 4' x 20'
I-4010	1.0"	I 1.0"	6"	40%	3.52	3' x 20' 4' x 20'
I-5010	1.0"	I 1.2"	6"	50%	3.02	3' x 20' 4' x 20'
I-6010	1.0"	I 1.5"	6"	60%	2.52	3' x 20' 4' x 20'
I-4015	1.5"	I 1.0"	6"	40%	4.25	3' x 20' 4' x 20'
I-5015	1.5"	I 1.2"	6"	50%	3.65	3' x 20' 4' x 20'
I-6015	1.5"	I 1.5"	6"	60%	3.05	3' x 20' 4' x 20'
I-4010 ADA	1.0"	I 0.52"	6"	40%	4.11	3' x 20' 4' x 20'
I-5010 ADA	1.0"	I 0.63"	6"	50%	3.52	3' x 20' 4' x 20'
I-6010 ADA	1.0"	I 0.78"	6"	60%	2.95	3' x 20' 4' x 20'
I-4015 ADA	1.5"	I 0.52"	6"	40%	5.35	3' x 20' 4' x 20'
I-5015 ADA	1.5"	I 0.63"	6"	50%	4.65	3' x 20' 4' x 20'
I-6015 ADA	1.5"	I 0.78"	6"	60%	3.75	3' x 20' 4' x 20'
HD-4015	1.5"	HD 1.0"	6"	40%	9.21	3' x 20' 4' x 20'
HD-5015	1.5"	HD 1.2"	6"	50%	7.71	3' x 20' 4' x 20'
HD-6015	1.5"	HD 1.5"	6"	60%	6.26	3' x 20' 4' x 20'
HD-4020	2.0"	HD 1.0"	6"	40%	11.9	3' x 20' 4' x 20'
HD-5020	2.0"	HD 1.2"	6"	50%	9.95	3' x 20' 4' x 20'
HD-6020	2.0"	HD 1.5"	6"	60%	8.05	3' x 20' 4' x 20'

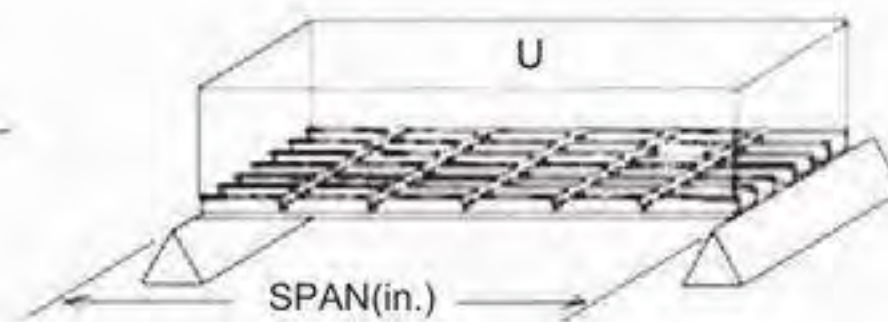
Note: 1. Panel weight may vary according to type of resin used and top surface.
 2. Spacing between bar centers.
 3. Other thicknesses and sizes are available upon request.

Pultruded Grating Load and Deflection Data

CONCENTRATED LOAD



UNIFORM LOAD

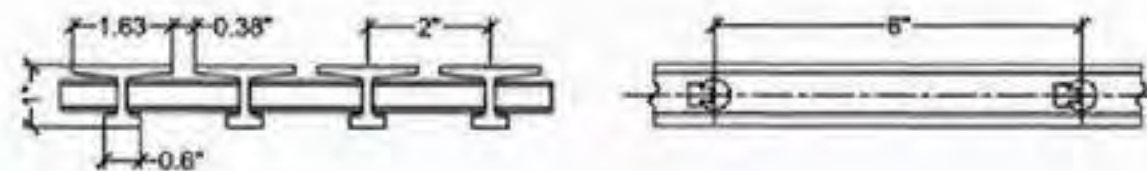


The designer should not exceed MAXIMUM-RECOMMENDED load at any time. MAXIMUM LOAD represents a 3 : 1 factor of safety on ULTIMATE CAPACITY. ULTIMATE CAPACITY represents MAX LOAD observed at initial fracture.

Walking loads for maintenance traffic are typically a live load of 60 PSF. Deflections for worker comfort are typically limited to 3/8" or SPAN divided by 120 under full live load. For a firmer feel under full live load or a line load 250 lbs/ft of width, limit deflections to 1/4" or SPAN divided by 200.

The loads represented are for STATIC LOAD CONDITIONS at ambient temperature. Deflections for impact loads or dynamic loads will MULTIPLY the deflections shown by 2. Long term loads will result in added deflection due to creep in the material and will require higher factors of safety to ensure acceptable performance.

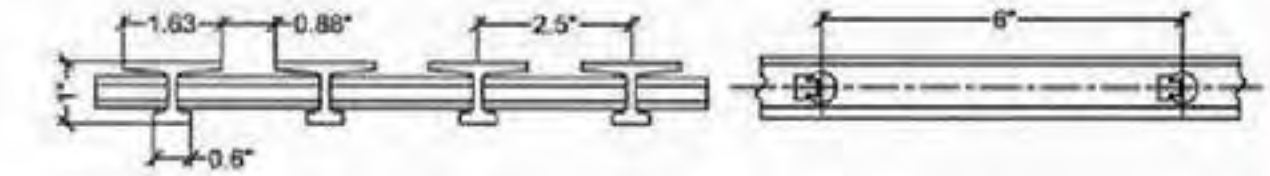
WT-1810
Wide T Bearing Bar
1" Thick 18% Open Area
2.41 lbs/ft²



Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12				0.01	0.02	0.03	0.04	0.08	5110
18		0.01	0.02	0.02	0.03	0.05	0.10	0.20	2400
24	0.01	0.02	0.04	0.05	0.06	0.11	0.22	0.46	2550
30	0.02	0.04	0.06	0.08	0.11	0.21	0.44		2040
36	0.04	0.07	0.11	0.14	0.18	0.35			1710
42	0.06	0.11	0.17	0.22	0.28	0.55			1420
48	0.08	0.16	0.25	0.35	0.46				1240

Span (inch)	UNIFORM LOAD in lbs/ft								Max Load
	50	100	150	200	300	500	1000	2000	
12				0.01	0.01	0.02	0.03	0.05	10310
18	0.01	0.01	0.02	0.03	0.04	0.05	0.10	0.19	4560
24	0.02	0.03	0.04	0.06	0.08	0.14	0.27	0.55	2540
30	0.03	0.07	0.10	0.13	0.19	0.33	0.66		1540
36	0.07	0.13	0.20	0.28	0.37	0.66			1130
42	0.12	0.24	0.36	0.48	0.63				810
48	0.21	0.41	0.62						625

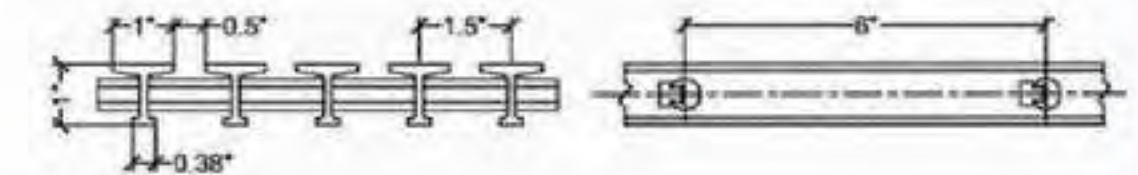
WT-3510
Wide T Bearing Bar
1" Thick 35% Open Area
2.03 lbs/ft²



Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12				0.01	0.01	0.02	0.04	0.05	3590
18	0.01	0.01	0.02	0.03	0.04	0.07	0.13	0.26	2460
24	0.02	0.03	0.04	0.06	0.07	0.14	0.27	0.54	1810
30	0.03	0.05	0.08	0.10	0.13	0.27	0.51		1450
36	0.05	0.09	0.13	0.18	0.21	0.42			1230
42	0.07	0.14	0.20	0.27	0.33	0.66			1040
48	0.10	0.20	0.29	0.39	0.48				890

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12			0.01	0.01	0.02	0.02	0.03	0.06	7260
18	0.01	0.01	0.02	0.02	0.03	0.06	0.12	0.24	3130
24	0.02	0.04	0.05	0.07	0.09	0.18	0.35	0.67	1880
30	0.04	0.08	0.12	0.16	0.20	0.39			1020
36	0.09	0.17	0.25	0.34	0.42				810
42	0.15	0.29	0.43	0.58					560
48	0.24	0.48							450

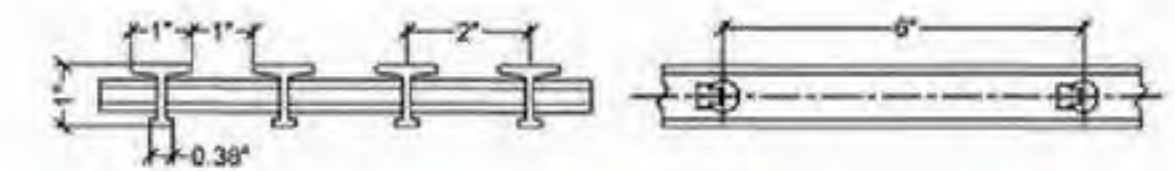
T-3310
T Bearing Bar
1" Thick 33% Open Area
2.28 lbs/ft²



Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12		0.01	0.01	0.01	0.02	0.03	0.06	0.11	186
18	0.01	0.02	0.03	0.03	0.04	0.08	0.15	0.27	125
24	0.02	0.03	0.05	0.06	0.08	0.15	0.29	0.58	95
30	0.03	0.06	0.09	0.11	0.14	0.28	0.55		76
36	0.05	0.10	0.14	0.19	0.24	0.47			63
42	0.08	0.15	0.22	0.30	0.38				55
48	0.11	0.22	0.36	0.45	0.55				47

Span (inches)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12			0.01	0.01	0.02	0.02	0.03	0.07	7440
18	0.01	0.01	0.02	0.03	0.04	0.07	0.14	0.26	3310
24	0.02	0.04	0.06	0.08	0.09	0.18	0.36		1950
30	0.05	0.09	0.13	0.17	0.25	0.43			1250
36	0.09	0.18	0.27	0.35	0.48				830
42	0.16	0.33	0.49	0.64					650
48	0.28	0.55							490

T-5010
T Bearing Bar
1" Thick 50% Open Area
1.82 lbs/ft²



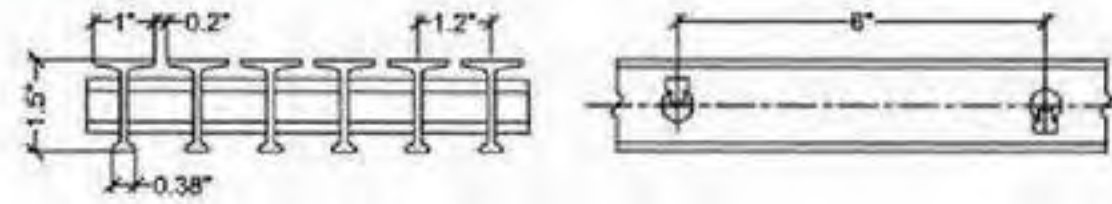
Span (inches)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12		0.01	0.01	0.02	0.03	0.04	0.08	0.16	146
18	0.01	0.02	0.03	0.04	0.06	0.10	0.21	0.38	98
24	0.02	0.04	0.06	0.08	0.10	0.20	0.39		73
30	0.04	0.07	0.11	0.15	0.18	0.36			57
36	0.06	0.13	0.19	0.26	0.35	0.65			42
42	0.10	0.20	0.29	0.40	0.49				38
48	0.15	0.29	0.43	0.59					34

Span (inch)	UNIFORM LOAD in lbs/ft²								Max Load
	50	100	150	200	300	500	1000	2000	
12		0.01	0.01	0.01	0.02	0.03	0.04	0.10	5730
18	0.01	0.02	0.03	0.04	0.05	0.09	0.17	0.35	2920
24	0.03	0.06	0.07	0.10	0.12	0.25	0.51		1430
30	0.06	0.13	0.19	0.25	0.28	0.57			930
36	0.15	0.23	0.36	0.46	0.59				615
42	0.22	0.42	0.64						420
48	0.36								360

T-1715

T Bearing Bar

1.5" Thick 17% Open Area
3.42 lbs/ft²



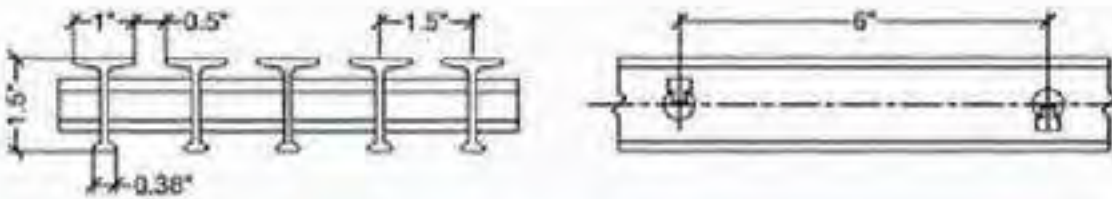
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02	0.04	10230
18			0.01	0.01	0.02	0.03	0.05	0.10	6490
24		0.01	0.02	0.02	0.03	0.05	0.09	0.18	5118
30	0.01	0.02	0.03	0.03	0.05	0.08	0.17	0.32	4194
36	0.02	0.03	0.04	0.06	0.07	0.14	0.28	0.55	3045
42	0.03	0.04	0.06	0.09	0.11	0.23	0.45		2853
48	0.04	0.06	0.09	0.13	0.16	0.32	0.64		2559
54	0.05	0.09	0.14	0.18	0.24	0.48			2230
60	0.06	0.13	0.19	0.25	0.32	0.62			2047
66	0.08	0.17	0.25	0.34	0.41				1790

Span (inch)	UNIFORM LOAD in lbs/ft²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.04	12340
18			0.01	0.01	0.01	0.02	0.04	0.09	5880
24	0.01	0.01	0.02	0.02	0.03	0.06	0.13	0.25	3130
30	0.02	0.03	0.04	0.05	0.06	0.15	0.25	0.51	2110
36	0.03	0.05	0.08	0.10	0.13	0.26	0.52		1470
42	0.05	0.10	0.14	0.19	0.24	0.48			1080
48	0.08	0.18	0.24	0.32	0.41				820
54	0.13	0.25	0.38	0.54	0.63				645
60	0.20	0.38	0.57						510
66	0.28	0.56							435

T-3315

T Bearing Bar

1.5" Thick 33% Open Area
2.83 lbs/ft²



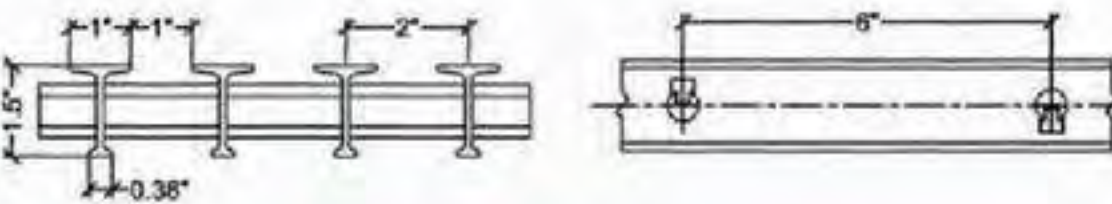
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02	0.04	8230
18			0.01	0.01	0.02	0.03	0.05	0.11	5490
24	0.01	0.01	0.02	0.02	0.03	0.05	0.11	0.22	4180
30	0.01	0.02	0.03	0.04	0.05	0.12	0.21	0.41	3290
36	0.02	0.04	0.05	0.07	0.09	0.17	0.38	0.69	2750
42	0.03	0.06	0.08	0.11	0.14	0.28	0.55		2330
48	0.04	0.08	0.12	0.16	0.21	0.43			2055
54	0.06	0.12	0.17	0.23	0.29	0.58			1830
60	0.08	0.16	0.23	0.31	0.41				1645
66	0.11	0.24	0.31	0.41	0.52				1475

Span (inch)	UNIFORM LOAD in lbs/ft²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.01	0.02	10540
18			0.01	0.01	0.01	0.02	0.03	0.05	4685
24	0.01	0.02	0.02	0.03	0.04	0.08	0.14	0.27	2630
30	0.02	0.03	0.05	0.06	0.08	0.16	0.32	0.64	1675
36	0.03	0.07	0.10	0.13	0.16	0.37	0.65		1170
42	0.06	0.12	0.19	0.24	0.29	0.59			860
48	0.10	0.20	0.32	0.43	0.53				655
54	0.16	0.32	0.49	0.68					515
60	0.24	0.48							420
66	0.35								345

T-5015

T Bearing Bar

1.5" Thick 50% Open Area
2.25 lbs/ft²



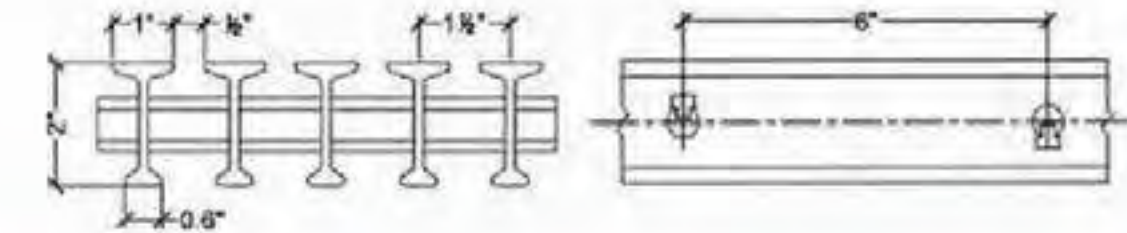
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.03	0.05	5230
18		0.01	0.01	0.02	0.02	0.03	0.07	0.13	3475
24	0.01	0.02	0.02	0.03	0.04	0.07	0.15	0.29	2610
30	0.02	0.03	0.04	0.06	0.07	0.14	0.28	0.54	2045
36	0.03	0.05	0.07	0.10	0.13	0.25	0.45		1740
42	0.04	0.07	0.11	0.14	0.17	0.35	0.71		1335
48	0.05	0.10	0.15	0.21	0.26	0.53			1250
54	0.07	0.15	0.22	0.29	0.36				1130
60	0.10	0.20	0.29	0.39	0.49				1045
66	0.13	0.28	0.39	0.52	0.65				945

Span (inch)	UNIFORM LOAD in lbs/ft²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.03	6651
18		0.01	0.01	0.01	0.02	0.03	0.06	0.14	3445
24	0.01	0.02	0.03	0.04	0.05	0.09	0.19	0.37	1660
30	0.02	0.04	0.06	0.08	0.11	0.21	0.42		1065
36	0.04	0.08	0.13	0.17	0.21	0.42			715
42	0.08	0.15	0.23	0.31	0.38				545
48	0.13	0.26	0.38	0.51	0.67				410
54	0.22	0.41	0.61						325
60	0.31	0.61							265
66	0.45								210

T-3320

T Bearing Bar

2" Thick 33% Open Area
4.26 lbs/ft²



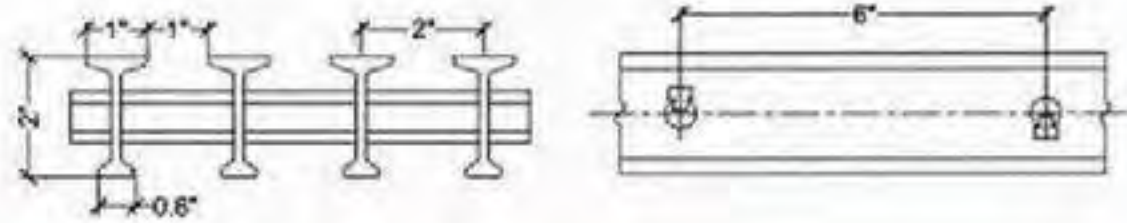
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.01	0.02	16210
18						0.01	0.02	0.04	10810
24			0.01	0.01	0.01	0.02	0.04	0.07	8105
30		0.01	0.01	0.01	0.02	0.03	0.06	0.12	6485
36	0.01	0.01	0.02	0.02	0.03	0.05	0.11	0.22	5405
42	0.01	0.02	0.03	0.03	0.04	0.07	0.16	0.31	4630
48	0.01	0.02	0.03	0.04	0.05	0.11	0.21	0.42	4040
54	0.02	0.03	0.05	0.06	0.07	0.16	0.29	0.59	3603
60	0.02	0.04	0.06	0.08	0.10	0.21	0.42		3240
66	0.03	0.06	0.08	0.11	0.13	0.26	0.53		2945
72	0.04	0.07	0.10	0.15	0.19	0.38	0.69		2653

Span (inch)	UNIFORM LOAD in lbs/ft²								Max Load
	50	100	150	200	300	500	1000	2000	
12							0.01	0.01	18265
18						0.01	0.01	0.02	11540
24		0.01	0.01	0.01	0.01	0.03	0.07	0.09	7380
30	0.01	0.01	0.02	0.02	0.03	0.05	0.10	0.19	5375
36	0.01	0.02	0.03	0.04	0.05	0.09	0.18	0.36	3262
42	0.02	0.03	0.05	0.07	0.08	0.19	0.32	0.67	2535
48	0.03	0.05	0.08	0.11	0.13	0.26	0.53		2030
54	0.04	0.08	0.13	0.17	0.21	0.41			1600
60	0.06	0.14	0.19	0.25	0.32	0.62			1295
66	0.09	0.18	0.29	0.39	0.45				1045
72	0.13	0.26	0.38	0.52	0.64				871

T-5020

T Bearing Bar

2" Thick 50% Open Area
3.32 lbs/ft²



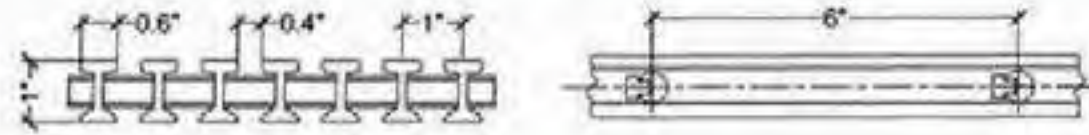
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.04	13210
18				0.01	0.01	0.02	0.03	0.06	8865
24			0.01	0.01	0.02	0.03	0.09	0.09	6650
30		0.01	0.01	0.02	0.02	0.04	0.08	0.15	5320
36	0.01	0.01	0.02	0.03	0.03	0.06	0.12	0.25	4430
42	0.01	0.02	0.03	0.04	0.05	0.09	0.19	0.37	3810
48	0.02	0.03	0.04	0.06	0.07	0.15	0.28	0.54	3325
54	0.02	0.04	0.06	0.08	0.10	0.19	0.39		2951
60	0.03	0.05	0.08	0.11	0.13	0.27	0.54		2640
66	0.04	0.07	0.12	0.14	0.17	0.34	0.68		2412
72	0.05	0.09	0.14	0.18	0.23	0.45			2211

Span (inch)	UNIFORM LOAD in lbs/ft²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.03	23430
18					0.01	0.02	0.03	0.06	8520
24		0.01	0.01	0.01	0.02	0.03	0.06	0.12	6360
30	0.01	0.01	0.02	0.03	0.04	0.06	0.12	0.24	4140
36	0.01	0.02	0.03	0.05	0.07	0.12	0.23	0.48	2840
42	0.02	0.04	0.06	0.08	0.12	0.21	0.41		2150
48	0.03	0.07	0.10	0.15	0.18	0.34	0.67		1670
54	0.05	0.11	0.16	0.23	0.27	0.54			1310
60	0.08	0.16	0.24	0.32	0.42				1060
66	0.12	0.24	0.35	0.49	0.59				870
72	0.17	0.33	0.49	0.66					720

FIBERGLASS GRATING

I-4010

I Bearing Bar
1.0" Thick 40% Open Area
3.52 lbs/ft²

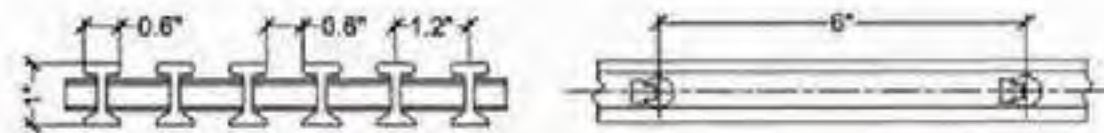


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02	0.04	7850
18				0.01	0.01	0.02	0.03	0.06	5490
24	0.01	0.01	0.02	0.03	0.03	0.07	0.13	0.26	3850
30	0.01	0.02	0.04	0.05	0.06	0.12	0.24	0.48	3290
36	0.02	0.04	0.06	0.08	0.11	0.21	0.41		2650
42	0.03	0.06	0.10	0.13	0.17	0.32			2250
48	0.05	0.10	0.14	0.19	0.25				1980
54	0.07	0.14	0.20	0.27	0.34				1760
60	0.09	0.19	0.28	0.38	0.46				1560

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.03	17560
18				0.01	0.01	0.03	0.05	0.11	7960
24	0.01	0.02	0.02	0.03	0.04	0.08	0.16	0.32	3951
30	0.02	0.04	0.06	0.07	0.09	0.19	0.37		2540
36	0.04	0.08	0.11	0.15	0.19	0.38			1710
42	0.07	0.14	0.21	0.28	0.35	0.69			1245
48	0.12	0.24	0.24	0.47	0.59				1004
54	0.19	0.38	0.35						790
60	0.29	0.57	0.56						710

I-5010

I Bearing Bar
1.0" Thick 50% Open Area
3.02 lbs/ft²

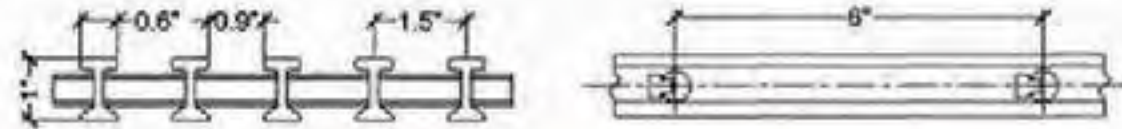


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.03	0.05	7285
18			0.01	0.02	0.02	0.04	0.07	0.15	4890
24	0.01	0.02	0.02	0.03	0.04	0.08	0.15	0.30	3650
30	0.02	0.03	0.04	0.06	0.07	0.14	0.28	0.57	2890
36	0.03	0.05	0.07	0.10	0.12	0.24	0.49		2450
42	0.04	0.08	0.11	0.15	0.19	0.38			2150
48	0.06	0.11	0.17	0.23	0.28				1850
54	0.08	0.16	0.24	0.32	0.40				1600
60	0.11	0.22	0.33	0.44	0.54				1450

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.03	11800
18			0.01	0.01	0.02	0.04	0.07	0.14	6350
24	0.01	0.02	0.03	0.04	0.05	0.10	0.20	0.40	3650
30	0.02	0.05	0.07	0.09	0.11	0.22	0.44		2350
36	0.05	0.09	0.14	0.18	0.23	0.45			1590
42	0.08	0.17	0.25	0.33	0.42				1170
48	0.14	0.28	0.42	0.56					910
54	0.22	0.45	0.67						720
60	0.34	0.68							640

I-6010

I Bearing Bar
1.0" Thick 60% Open Area
2.52 lbs/ft²



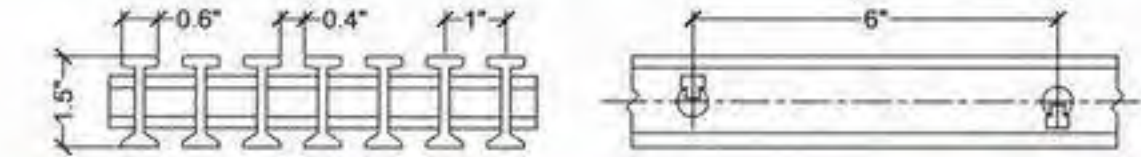
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12				0.01	0.01	0.02	0.03	0.06	5750
18		0.0	0.01	0.02	0.02	0.04	0.09	0.17	3850
24	0.01	0.02	0.03	0.04	0.05	0.10	0.19	0.38	2870
30	0.02	0.04	0.05	0.07	0.09	0.17	0.35	0.69	2310
36	0.03	0.06	0.09	0.12	0.12	0.29	0.59		1930
42	0.05	0.09	0.14	0.18	0.23	0.46			1650
48	0.07	0.14	0.20	0.27	0.34				1450
54	0.10	0.19	0.28	0.38	0.48				1280
60	0.13	0.26	0.39	0.52					1155

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.04	7950
18		0.01	0.01	0.02	0.02	0.04	0.08	0.16	5350
24	0.01	0.02	0.03	0.05	0.06	0.12	0.23	0.47	2950
30	0.03	0.05	0.08	0.11	0.13	0.27	0.54		1850
36	0.06	0.11	0.16	0.22	0.27	0.55			1280
42	0.10	0.20	0.30	0.40	0.50				940
48	0.17	0.34	0.51	0.68					720
54	0.27	0.54							570
60	0.40								510

KENTEC COMPOSITES

I-4015

I Bearing Bar
1.5" Thick 40% Open Area
4.25 lbs/ft²

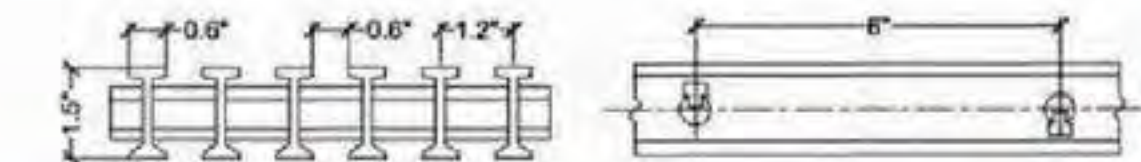


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.01	0.02	14100
18						0.01	0.01	0.03	9450
24				0.01	0.01	0.02	0.05	0.10	7020
30		0.01	0.01	0.02	0.02	0.04	0.09	0.17	5600
36		0.02	0.02	0.03	0.04	0.07	0.15	0.29	4740
42	0.01	0.02	0.03	0.05	0.06	0.11	0.23	0.46	4120
48	0.02	0.03	0.05	0.07	0.08	0.17	0.34	0.68	3510
54	0.02	0.05	0.07	0.09	0.12	0.24	0.48		3120
60	0.03	0.07	0.10	0.13	0.16	0.33	0.66		2810
66	0.04	0.09	0.13	0.17	0.22	0.44			2550
72	0.06	0.11	0.17	0.23	0.28	0.57			2340

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12							0.01	0.02	21050
18					0.01	0.01	0.02	0.05	14650
24			0.01	0.01	0.02	0.03	0.06	0.12	7150
30	0.01	0.01	0.02	0.03	0.04	0.06	0.13	0.27	4400
36	0.02	0.03	0.04	0.05	0.07	0.14	0.27	0.55	3160
42	0.03	0.05	0.08	0.10	0.13	0.25	0.50		2290
48	0.04	0.08	0.13	0.17	0.21	0.42			1750
54	0.07	0.14	0.20	0.27	0.34	0.68			1380
60	0.10	0.20	0.31	0.41	0.51				1150
66	0.15	0.30	0.45	0.60					930
72	0.21	0.42	0.64						780

I-5015

I Bearing Bar
1.5" Thick 50% Open Area
3.65 lbs/ft²

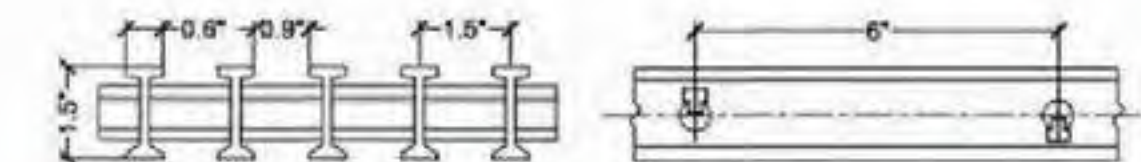


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.03	11150
18			0.01	0.01	0.02	0.03	0.06	0.17	7370
24			0.01	0.02	0.03	0.06	0.19	0.31	5540
30		0.01	0.02	0.03	0.05	0.11	0.24	0.56	4420
36	0.01	0.02	0.04	0.05	0.09	0.18	0.36		3680
42	0.01	0.03	0.06	0.07	0.14	0.29	0.56		3150
48	0.02	0.04	0.08	0.10	0.21	0.43			2760
54	0.03	0.06	0.12	0.15	0.29	0.58			2450
60	0.04	0.08	0.16	0.20	0.40				2210
66	0.05	0.11	0.21	0.27	0.53				2010
72	0.07	0.14	0.28	0.35	0.69				1840

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12							0.01	0.02	14500
18					0.01	0.02	0.03	0.07	9350
24		0.01	0.01	0.02	0.02	0.04	0.07	0.19	5940
30	0.01	0.02	0.03	0.03	0.04	0.08	0.18	0.35	3520
36	0.02	0.03	0.05	0.07	0.08	0.17	0.34	0.68	2580
42	0.03	0.06	0.09	0.12	0.15	0.35	0.61		1800
48	0.05	0.10	0.16	0.21	0.26	0.56			1340
54	0.08	0.16	0.27	0.33	0.42				1120
60	0.13	0.25	0.37	0.50	0.66				880
66	0.18	0.37	0.58						750
72	0.29	0.52							620

I-6015

I Bearing Bar
1.5" Thick 60% Open Area
3.05 lbs/ft²

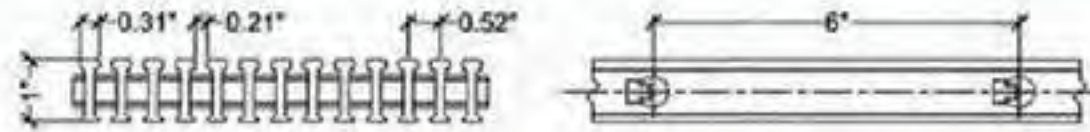


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.01	0.02	8980
18				0.01	0.01	0.02	0.04	0.07	5950
24		0.01	0.01	0.02	0.02	0.04	0.07	0.15	4510
30	0.01	0.01	0.02	0.03	0.03	0.07	0.13	0.26	3850
36	0.01	0.02	0.03	0.04	0.06	0.11	0.22	0.44	2990
42	0.02	0.04	0.05	0.07	0.08	0.17	0.35	0.69	2610
48	0.03	0.05	0.08	0.10	0.13	0.26	0.51		2250
54	0.04	0.07	0.11	0.15	0.18	0.36			1990
60	0.05	0.10	0.19	0.19	0.26	0.49			1790
66	0.07	0.13	0.19	0.26	0.33	0.67			1

FIBERGLASS GRATING

I-4010 ADA

I Bearing Bar
1.0" Thick 40% Open Area
4.11 lbs/ft²

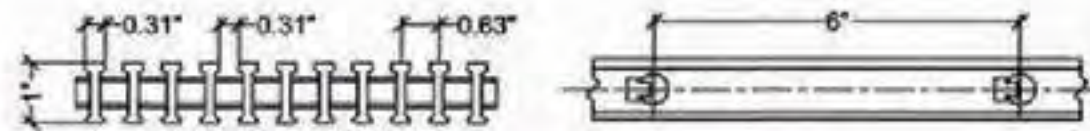


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.04	9050
18			0.01	0.01	0.02	0.03	0.07	0.12	6050
24		0.01	0.02	0.03	0.04	0.06	0.13	0.27	4500
30	0.01	0.03	0.04	0.05	0.06	0.12	0.29	0.49	3600
36	0.02	0.04	0.06	0.08	0.10	0.20	0.40		3050
42	0.03	0.06	0.10	0.16	0.18	0.35			2730
48	0.05	0.09	0.14	0.18	0.23	0.46			2250
54	0.07	0.13	0.19	0.26	0.33	0.66			2010
60	0.09	0.18	0.27	0.36	0.45				1850
66	0.12	0.24	0.39	0.49	0.59				1670
72	0.16	0.31	0.46	0.62					1500

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02		11500
18				0.01	0.01	0.03	0.05	0.11	5100
24	0.01	0.05	0.02	0.03	0.04	0.08	0.16	0.32	2800
30	0.02	0.04	0.06	0.07	0.09	0.18	0.37		1800
36	0.04	0.07	0.11	0.15	0.18	0.38			1280
42	0.07	0.14	0.21	0.27	0.35				900
48	0.12	0.23	0.35	0.46					710
54	0.19	0.37	0.58						560
60	0.28	0.56							460
66	0.42								380
72	0.58								300

I-5010 ADA

I Bearing Bar
1.0" Thick 50% Open Area
3.52 lbs/ft²

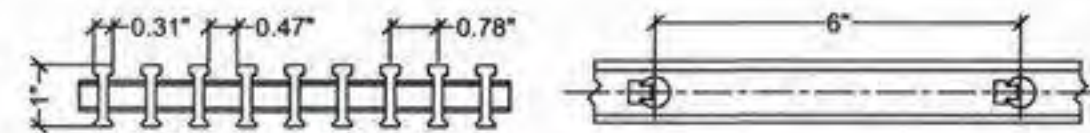


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.03	0.06	7320
18			0.01	0.02	0.02	0.04	0.07	0.14	4400
24	0.01	0.02	0.02	0.03	0.04	0.07	0.15	0.29	3650
30	0.01	0.03	0.04	0.07	0.09	0.14	0.28		2740
36	0.02	0.05	0.07	0.10	0.12	0.28	0.47		2450
42	0.04	0.08	0.12	0.15	0.19	0.37			2040
48	0.06	0.11	0.17	0.25	0.28				1770
54	0.08	0.16	0.27	0.32	0.39				1610
60	0.11	0.22	0.33	0.45	0.58				1420
66	0.14	0.29	0.48	0.57					1300
72	0.18	0.37	0.55						1150

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.04	9400
18			0.01	0.01	0.02	0.03	0.07	0.13	4120
24	0.01	0.02	0.03	0.04	0.04	0.09	0.19	0.37	2100
30	0.02	0.04	0.07	0.08	0.12	0.22	0.433		1500
36	0.05	0.09	0.13	0.19	0.22	0.47			1020
42	0.08	0.16	0.26	0.38	0.41				750
48	0.14	0.28	0.47						520
54	0.22	0.44	0.66						420
60	0.36	0.67							380
66	0.49								310
72	0.69								240

I-6010 ADA

I Bearing Bar
1.0" Thick 60% Open Area
2.95 lbs/ft²



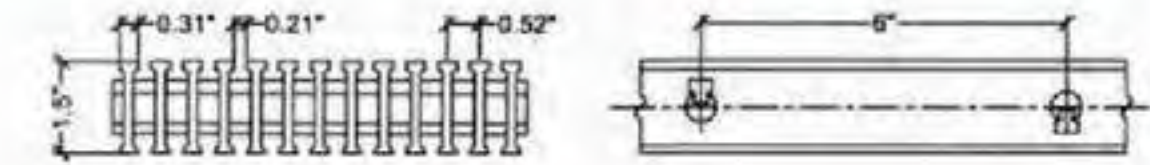
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.02	0.03	0.06	6050
18			0.01	0.02	0.02	0.04	0.08	0.16	4020
24	0.01	0.02	0.03	0.03	0.04	0.08	0.17	0.39	3010
30	0.02	0.03	0.05	0.06	0.08	0.16	0.37		2320
36	0.03	0.06	0.08	0.11	0.14	0.27			2010
42	0.04	0.08	0.13	0.17	0.21	0.49			1660
48	0.06	0.17	0.19	0.25	0.32				1500
54	0.09	0.18	0.27	0.37	0.44				1280
60	0.12	0.24	0.36	0.48	0.65				1150
66	0.16	0.32	0.48	0.64					1100
72	0.21	0.44	0.62						910

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02	0.04	7012
18			0.01	0.01	0.02	0.04	0.08	0.15	3160
24	0.01	0.02	0.03	0.04	0.06	0.11	0.22	0.44	1790
30	0.03	0.05	0.08	0.10	0.14	0.27			1210
36	0.05	0.14	0.16	0.21	0.29				820
42	0.09	0.19	0.28	0.37					600
48	0.18	0.32	0.47	0.63					470
54	0.25	0.50							380
60	0.38								310
66	0.55								250
72	0.77								220

KENTEC COMPOSITES

I-4015 ADA

I Bearing Bar
1.5" Thick 40% Open Area
5.35 lbs/ft²

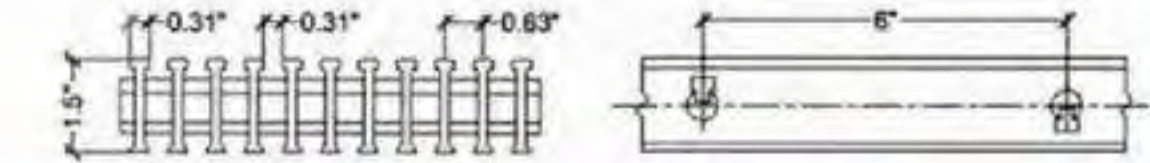


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02		14570
18						0.01	0.02	0.05	9380
24				0.01	0.01	0.02	0.05	0.09	6210
30			0.01	0.02	0.02	0.04	0.08	0.17	5720
36		0.01	0.02	0.03	0.04	0.07	0.14	0.29	4910
42	0.01	0.02	0.03	0.04	0.06	0.11	0.24	0.47	4020
48	0.02	0.03	0.05	0.06	0.08	0.16	0.37		3640
54	0.02	0.05	0.07	0.09	0.15	0.29	0.45		3300
60	0.03	0.06	0.09	0.13	0.17	0.31			3010
66	0.04	0.08	0.15	0.17	0.28	0.46			2380
72	0.05	0.11	0.16	0.25	0.29	0.59			2090

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12								0.01	19200
18						0.01	0.02	0.04	8500
24			0.01	0.01	0.02	0.03	0.06	0.12	4620
30	0.01	0.01	0.02	0.03	0.04	0.07	0.13	0.26	3004
36	0.01	0.03	0.04	0.05	0.07	0.14	0.29		2100
42	0.02	0.05	0.07	0.10	0.12	0.24			1510
48	0.04	0.08	0.13	0.16	0.24				1150
54	0.07	0.13	0.19	0.28	0.33				950
60	0.10	0.20	0.29	0.39	0.49				760
66	0.14	0.29	0.49						620
72	0.20	0.40							510

I-5015 ADA

I Bearing Bar
1.5" Thick 50% Open Area
4.65 lbs/ft²

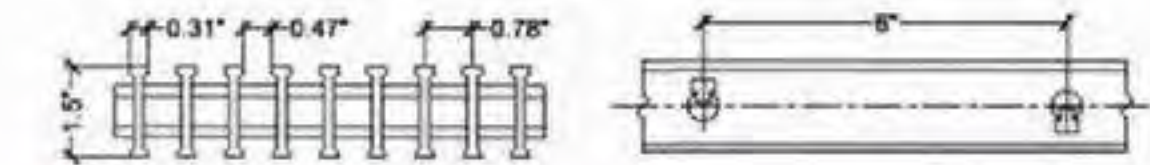


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.02		10520
18						0.01	0.03	0.06	7350
24			0.01	0.01	0.02	0.03	0.08	0.12	5260
30		0.01	0.02	0.02	0.03	0.05	0.14	0.21	4520
36	0.01	0.02	0.03	0.04	0.05	0.09	0.17	0.36	3910
42	0.01	0.03	0.04	0.05	0.07	0.14	0.29		3400
48	0.02	0.04	0.06	0.09	0.11	0.20	0.39		2950
54	0.03	0.06	0.09	0.13	0.141	0.28			2680
60	0.04	0.08	0.12	0.15	0.19	0.38			2210
66	0.05	0.10	0.15	0.24	0.26	0.55			2010
72	0.07	0.13	0.19	0.26	0.33				1890

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12								0.01	14270
18						0.01	0.01	0.03	6560
24			0.01	0.02	0.02	0.04	0.07	0.14	3057
30	0.01	0.02	0.02	0.03	0.04	0.08	0.16	0.34	2410
36	0.02	0.03	0.05	0.06	0.08	0.16	0.34		1510
42	0.03	0.06	0.09	0.12	0.17	0.29			1250
48	0.05	0.10	0.15	0.21	0.25				960
54	0.08	0.19	0.28	0.37	0.39				750
60	0.12	0.24	0.36	0.48					610
66	0.18	0.35							490
72	0.28	0.49							410

I-6015 ADA

I Bearing Bar
1.5" Thick 60% Open Area
3.75 lbs/ft²

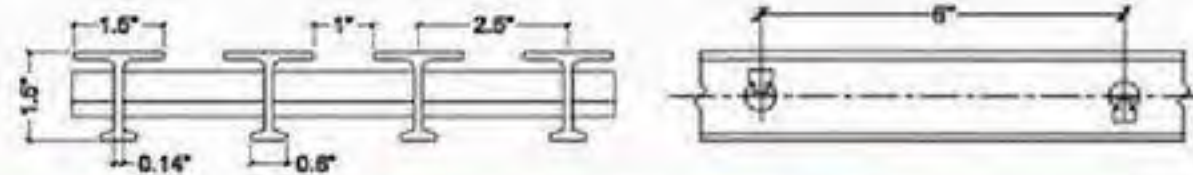


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12						0.01	0.01	0.03	905
18				0.01	0.01	0.02	0.04	0.08	657
24			0.01	0.01	0.02	0.04	0.09	0.19	501
30		0.01	0.02	0.02	0.03	0.06	0.12	0.25	401
36	0.01	0.02	0.03	0.04	0.05	0.11	0.22	0.42	330
42	0.02	0.03	0.05	0.07	0.08	0.16	0.33		278
48	0.03	0.05	0.07	0.10	0.14	0.24	0.49		250
54	0.04	0.07	0.11	0.14	0.17	0.39			213
60	0.05	0.10	0.14	0.19	0.28	0.47			198
66	0.06	0.16	0.19	0.25	0.36				182
72	0.08	0.16	0.25	0.37	0.48				161

FIBERGLASS GRATING

WT-4015

Wide T Bearing Bar
1.5" Thick 40% Open Area
2.61 lbs/ft²

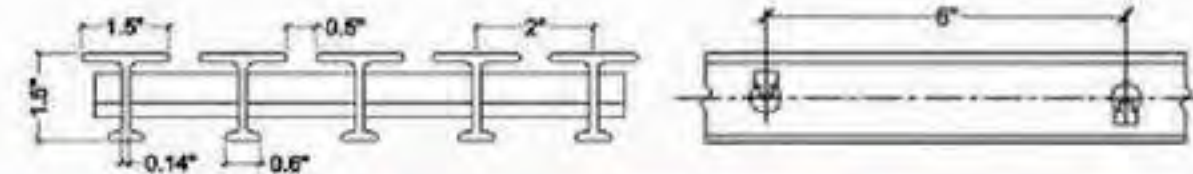


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02	0.04	8900
18			0.01	0.01	0.02	0.03	0.05	0.12	8100
24		0.01	0.01	0.02	0.03	0.05	0.10	0.19	6400
30	0.01	0.02	0.03	0.04	0.05	0.09	0.18	0.38	5300
36	0.01	0.03	0.04	0.06	0.09	0.15	0.31		4500
42	0.02	0.06	0.09	0.10	0.14	0.23	0.47		3700
48	0.03	0.07	0.10	0.13	0.20	0.35			3200
54	0.05	0.09	0.12	0.18	0.27	0.47			3000
60	0.06	0.14	0.17	0.25	0.39				2600

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.03		8300
18				0.01	0.01	0.02	0.05	0.11	5600
24			0.01	0.02	0.04	0.06	0.12	0.25	4100
30	0.01	0.03	0.04	0.06	0.08	0.14	0.29		3200
36	0.03	0.06	0.08	0.11	0.17	0.29			2800
42	0.05	0.10	0.14	0.20	0.31				2200
48	0.08	0.17	0.20	0.35					1600
54	0.13	0.27	0.31						1300
60	0.20	0.41							1000

WT-2515

Wide T Bearing Bar
1.5" Thick 25% Open Area
3.22 lbs/ft²

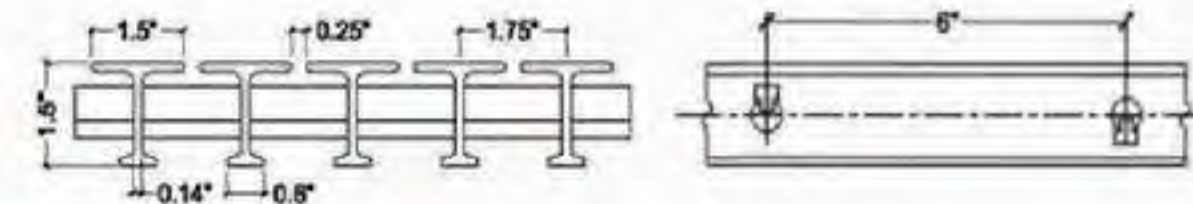


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02	0.04	11000
18			0.01	0.01	0.01	0.02	0.04	0.09	10200
24		0.01	0.01	0.02	0.02	0.04	0.08	0.16	8000
30	0.01	0.01	0.02	0.03	0.04	0.07	0.15	0.29	6400
36	0.01	0.02	0.03	0.05	0.07	0.12	0.25	0.48	5300
42	0.02	0.04	0.06	0.08	0.11	0.19	0.37		4600
48	0.03	0.06	0.08	0.11	0.17	0.28			4020
54	0.04	0.08	0.10	0.16	0.23	0.38			3600
60	0.05	0.10	0.14	0.21	0.30				3200

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02		10300
18				0.01	0.01	0.02	0.04	0.08	6700
24			0.01	0.02	0.03	0.05	0.10	0.21	5000
30	0.01	0.02	0.03	0.05	0.07	0.12	0.24	0.48	4100
36	0.02	0.05	0.07	0.09	0.14	0.24	0.47		3400
42	0.04	0.08	0.11	0.17	0.25	0.42			2600
48	0.07	0.14	0.18	0.28	0.43				2000
54	0.11	0.22	0.27	0.45					1600
60	0.16	0.35	0.41						1240

WT-1515

Wide T Bearing Bar
1.5" Thick 15% Open Area
3.50 lbs/ft²



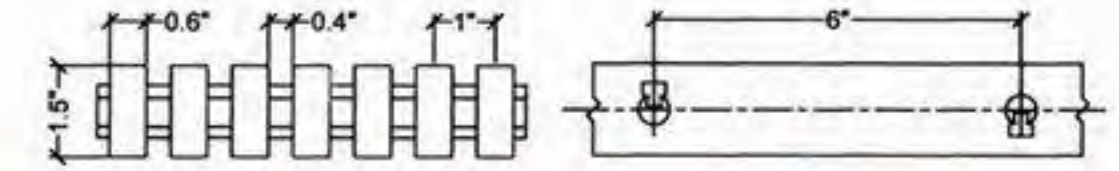
Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02	0.03	12200
18				0.01	0.01	0.02	0.04	0.08	11600
24		0.01	0.01	0.01	0.02	0.04	0.07	0.15	9200
30	0.01	0.01	0.02	0.03	0.04	0.07	0.14	0.26	7300
36	0.01	0.02	0.03	0.04	0.07	0.12	0.24	0.45	6100
42	0.02	0.04	0.06	0.08	0.11	0.19	0.37		5280
48	0.02	0.05	0.08	0.11	0.15	0.25	0.50		4600
54	0.03	0.07	0.09	0.14	0.21	0.34			4100
60	0.04	0.09	0.11	0.19	0.28	0.48			3700

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
12					0.01	0.01	0.02		10500
18				0.01	0.01	0.02	0.04	0.07	7700
24		0.01	0.01	0.02	0.03	0.04	0.10	0.19	5700
30	0.01	0.02	0.03	0.05	0.06	0.11	0.21	0.43	4500
36	0.02	0.04	0.06	0.09	0.13	0.21	0.42		3800
42	0.04	0.08	0.10	0.15	0.22	0.41			2900
48	0.06	0.13	0.14	0.25	0.38				2200
54	0.09	0.20	0.25	0.40					1700
60	0.15	0.30	0.37						1480

KENTEC COMPOSITES

HD-4015

Heavy Duty Bearing Bar
1.5" Thick 40% Open Area
9.21 lbs/ft²

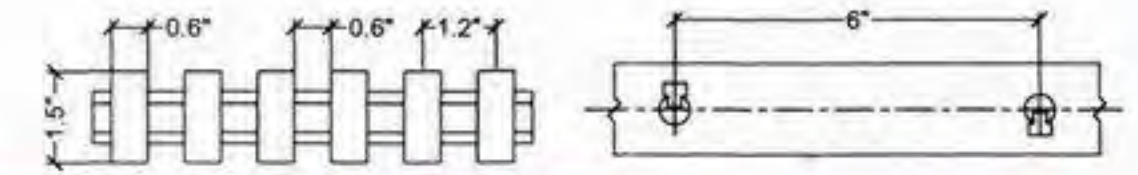


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
18					0.01	0.01	0.03		15110
24					0.01	0.02	0.03	0.06	12480
30			0.01	0.01	0.01	0.03	0.05	0.11	10270
36		0.01	0.01	0.02	0.02	0.04	0.09	0.18	8555
42		0.01	0.02	0.03	0.03	0.07	0.13	0.26	7320
48	0.01	0.02	0.03	0.04	0.05	0.10	0.19	0.38	6420
54	0.01	0.03	0.04	0.06	0.07	0.14	0.28	0.56	5710
60	0.02	0.04	0.06	0.07	0.09	0.18	0.36		5135
66	0.02	0.05	0.07	0.10	0.12	0.24	0.48		4624
72	0.03	0.06	0.10	0.14	0.16	0.31	0.62		4231

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
18					0.01	0.02	0.03		18350
24				0.01	0.01	0.02	0.04	0.08	14725
30		0.01	0.01	0.02	0.02	0.04	0.08	0.17	11808
36	0.01	0.02	0.03	0.04	0.04	0.09	0.17	0.36	8325
42	0.02	0.03	0.04	0.07	0.07	0.15	0.29	0.59	6021
48	0.03	0.05	0.07	0.10	0.12	0.25	0.48		4642
54	0.04	0.08	0.13	0.15	0.19	0.39			3628
60	0.06	0.12	0.17	0.23	0.28	0.58			2941
66	0.08	0.17	0.26	0.33	0.42				2452
72	0.12	0.24	0.35	0.47	0.59				2040

HD-5015

Heavy Duty Bearing Bar
1.5" Thick 50% Open Area
7.71 lbs/ft²

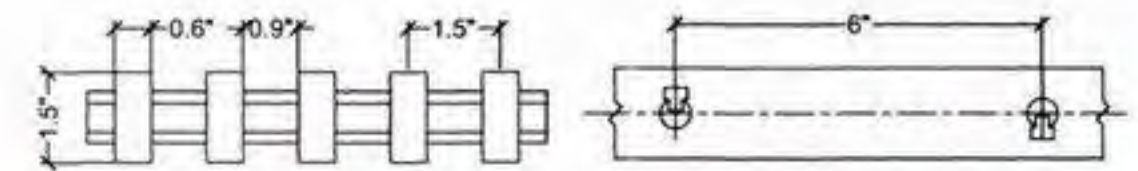


Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
18						0.02	0.04		14510
24						0.02	0.03	0.07	10880
30				0.01	0.02	0.03	0.06	0.12	8710
36			0.02	0.02	0.03	0.05	0.12	0.20	7250
42		0.02	0.03	0.04	0.05	0.09	0.15	0.32	6210
48	0.01	0.02	0.04	0.05	0.08	0.16	0.23	0.46	5420
54	0.02	0.03	0.05	0.07	0.08	0.162	0.35	0.69	4780
60	0.02	0.05	0.07	0.09	0.15	0.29	0.49		4350
66	0.03	0.06	0.09	0.12	0.15	0.29	0.58		3950
72	0.04	0.08	0.13	0.15	0.21	0.39			3590

Span (inch)	UNIFORM LOAD in lbs/ft ²								Max Load
	50	100	150	200	300	500	1000	2000	
18						0.02	0.04		15630
24						0.02	0.04	0.08	11720
30			0.02	0.03	0.04	0.05	0.10	0.20	9380
36		0.02	0.03	0.04	0.05	0.09	0.19	0.38	6510
42	0.02	0.04	0.06	0.07	0.09	0.17	0.38	0.69	4780
48	0.03	0.06	0.09	0.115	0.14	0.29	0.69		3660
54	0.05	0.10	0.14	0.19	0.28	0.46			2890
60	0.07	0.14	0.22	0.28	0.34	0.68			2340
66	0.10	0.20	0.30	0.40	0.51				1930
72	0.15	0.29	0.44	0.58					1620

HD-6015

Heavy Duty Bearing Bar
1.5" Thick 60% Open Area
6.26 lbs/ft²



Span (inch)	CONCENTRATED LOAD in lbs/ft of width								Max Load
	50	100	150	200	300	500	1000	2000	
18						0.01	0.02	0.05	11810
24					0.01	0.02	0.04	0.08	8860
30				0.01	0.03	0.04	0.08	0.16	7080
36		0.02	0.02	0.03	0.04	0.06	0.14	0.27	5900
42		0.02	0.03	0.04	0.05	0.10	0.20	0.41	5030
48	0.02	0.03	0.05	0.06	0.08	0.15	0.29	0.59	4430
54	0.02	0.04	0.061	0.08	0.12	0.25	0.41		3930
60	0.03	0.06	0.09	0.12	0.14	0.29	0.55		3540
66	0.04	0.07	0.11	0.15	0.19	0.37			3220

Stair Tread & Tread Covers



Stair Tread

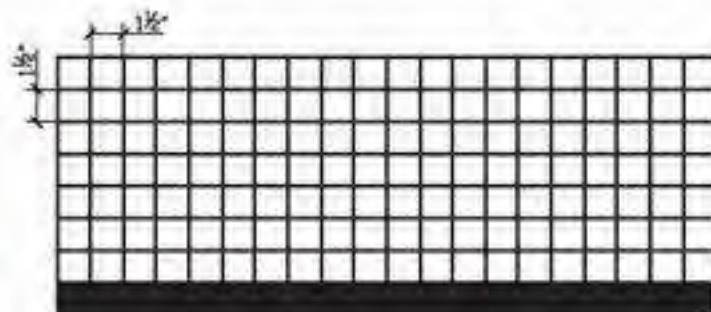
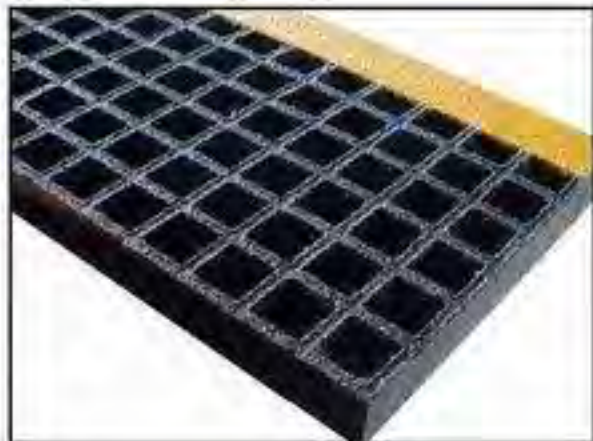
Manufactured with the same criteria as the gratings, with a reinforced nosing of a contrasting color and integrated anti-slip surface. Molded and Pultruded stairtreads are available in two resin systems. Standard and custom sizes available.

Stair Tread Covers

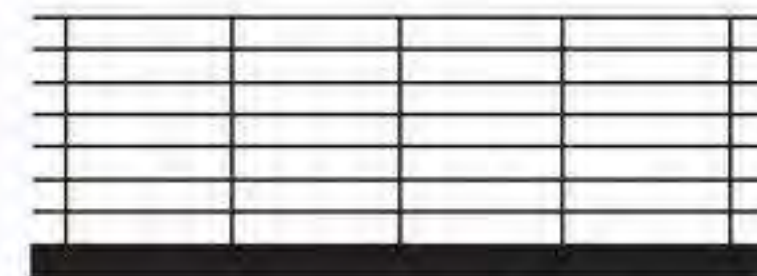
Stair cover represents the ideal solution to make stairways safer, both in civil and industrial environments. It can be installed on existing steps (made of wood, cement, steel, etc.) by attaching it with the manufacturer's recommended clips. The special integration of the aggregate in the upper surface gives an excellent resistance to slip, even in the most extreme conditions (presence of water, ice, grease, oil, wax, etc.) Stair covers are supplied with a yellow integral nosing, emphasizing even more the safety features of the product.



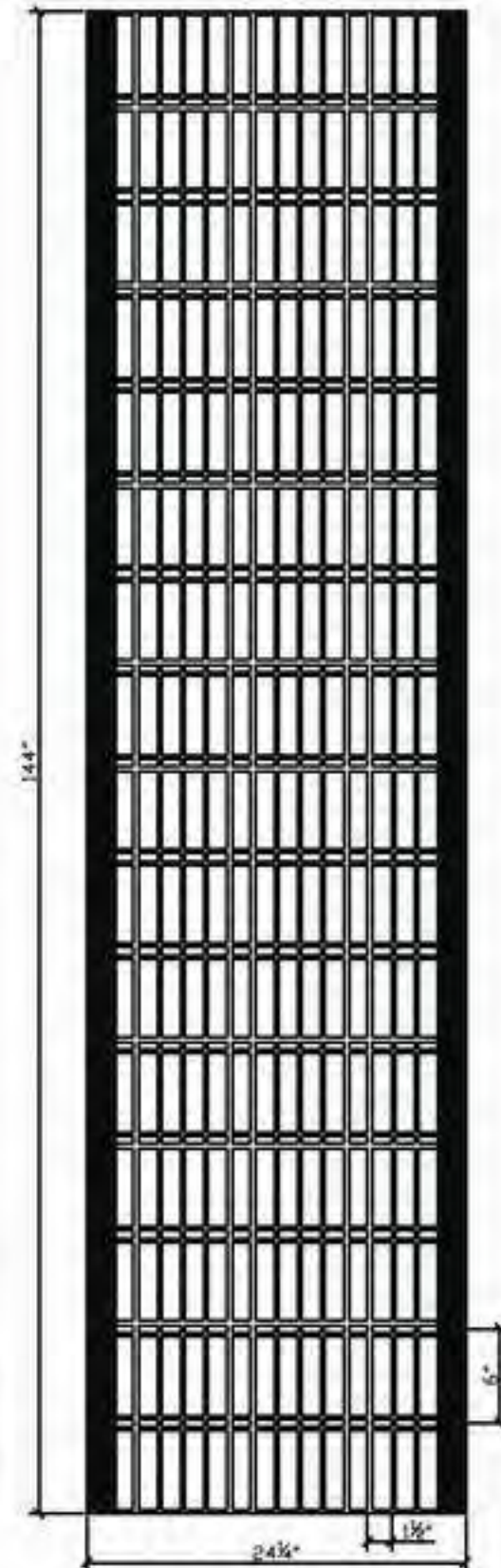
Stair Tread Cover



Molded Stair Tread



Pultruded Stair Tread



Chemical Resistance Guide

Chemical Environment	Concentration %	Temp °F	Molded Grating			Pultruded Grating & Structural Shapes	
			VFR	IFR	GP	VFR	IFR
Acetic Acid	50	MAX	C	C	S	C	C
Aluminum Hydroxide	ALL	MAX	C	C	C	C	C
Ammonium Chloride	ALL	120	C	C	C	C	C
Ammonium Bicarbonate	15	120	C	C	S	C	S
Ammonium Bicarbonate	50	120	C	C	S	S	I
Aluminum Hydroxide	20	80	S	N	N	I	N
Ammonium Sulfate	ALL	120	C	C	C	C	S
Calcium Carbonate	ALL	MAX	C	C	S	C	C
Calcium Nitrate	ALL	MAX	C	C	C	C	C
Carbon Tetrachloride	100	80	I	N	N	I	N
Chlorine, Dry Gas	ALL	MAX	C	C	S	C	S
Chlorine Water	SAT	120	C	I	N	I	N
Chromic Acid	50	150	I	N	N	I	N
Copper Chloride	ALL	MAX	C	C	C	C	C
Copper Cyanide	ALL	140	C	S	I	S	I
Copper Nitrate	ALL	MAX	C	C	C	C	C
Ethanol	10	120	C	S	S	C	S
Ethanol	50	120	C	I	I	C	I
Ethylene Glycol	ALL	ISO	C	C	S	C	S
Ferric Chloride	100	MAX	C	C	C	C	C
Forrous Chloride	ALL	MAX	C	C	C	C	C
Formaldehyde 0-50%	50	120	S	I	I	S	I
Gasoline	ALL	120	C	C	S	C	S
Glucose	ALL	120	C	C	C	C	C
Glycerin	100	MAX	C	C	S	C	S
Hydrobromic Acid	50	MAX	S	S	I	I	N
Hydrobromic Acid	10	MAX	C	S	S	S	S
Hydrobromic Acid	37	MAX	I	S	I	I	I
Hydrogen Peroxide	30	80	C	N	N	S	N
Nickel Sulfate	ALL	MAX	C	C	C	C	C
Nitric Acid	20	120	S	S	I	I	I
Oxalic Acid	ALL	150	C	C	S	C	S
Perchloric Acid	30	90	S	I	I	I	I
Phosphoric Acid	80	MAX	C	C	C	C	S
Potassium Chloride	ALL	MAX	C	C	C	C	C
Potassium Dichromate	ALL	MAX	C	C	C	C	C
Potassium Nitrate	ALL	MAX	C	C	C	C	C
Potassium Sulfate	ALL	MAX	C	C	C	C	C
Propylene Glycol	ALL	MAX	C	C	S	C	S
Sodium Acetate	ALL	MAX	C	C	C	C	C
Sodium Bisulfate	ALL	80	S	S	I	C	I
Sodium Bromide	ALL	80	C	C	C	C	C
Sodium Cyanide	ALL	80	C	I	I	S	I
Sodium Hydroxide	10	MAX	C	I	N	I	N
Sodium Hydroxide	50	MAX	S	N	N	N	N
Sodium Nitrate	ALL	MAX	C	C	C	C	C
Sodium Sulfate	ALL	MAX	C	C	C	C	C
Tartaric Acid	ALL	MAX	C	C	S	C	S
Vinegar	ALL	MAX	C	C	S	C	S
Water, Distilled	ALL	MAX	C	C	C	C	C

C = Continuous exposure of the grating to the chemical environment listed at the temperature listed.

S = Frequent exposure of the grating to splashes and spills from the chemical environment listed with that environment at the temperature listed.

I = Infrequent exposure of the grating to splashes and spills from the chemical environment listed with that environment at the temperature listed and the spill immediately cleaned up or washed from the grating.

N = Not recommended for the concentrations and temperatures listed.

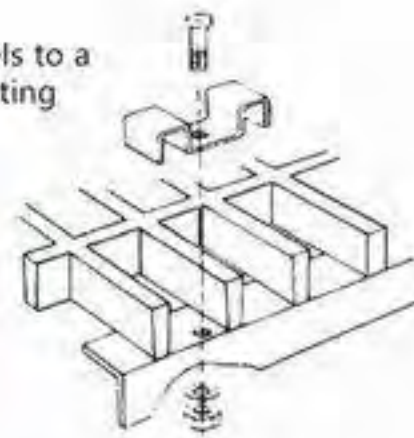
GRATING INSTALLATION

Fasteners

Hold-down clips should be used with a minimum of 4 clips per panel. Different fasteners available on request. All clips are made of SS316 stainless steel.

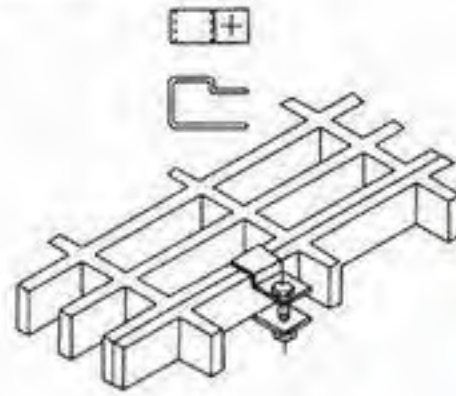
M Clips

M clips are used to secure panels to a support using two adjacent grating bars for a secure fit.



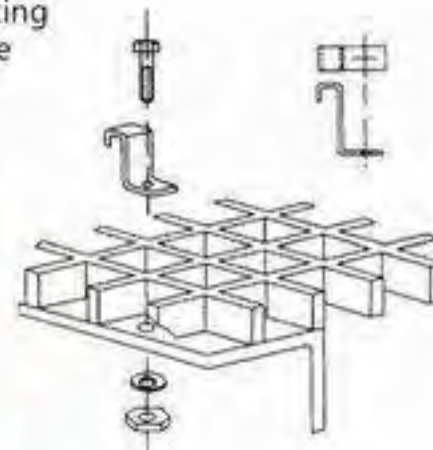
C Clips

C clips are used to join two ends of molded grating together.



L Clips

L clips are used to fasten grating to a support bar for moderate loads.



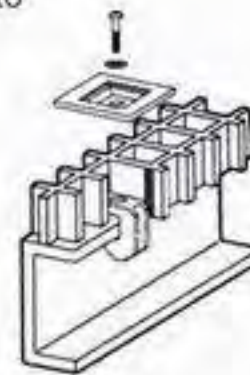
Round Clips

Round clips are made specifically for plate or grating with plate on top.



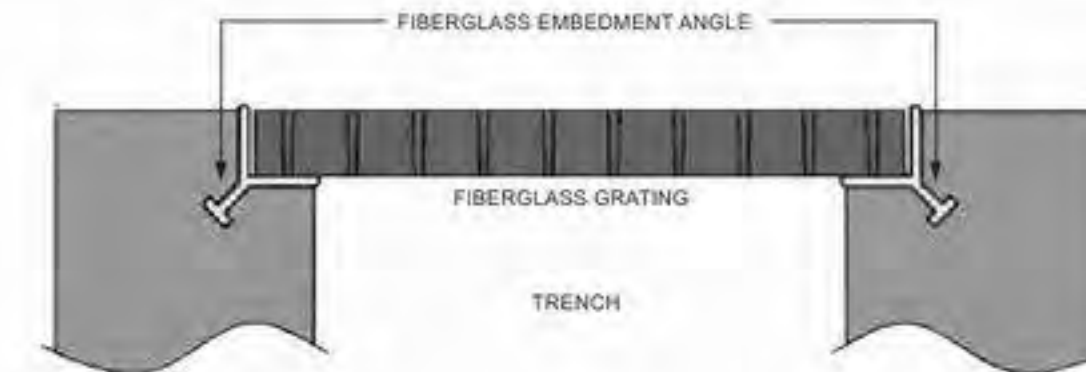
G Clips

G clips are designed to attach grating to any structural.



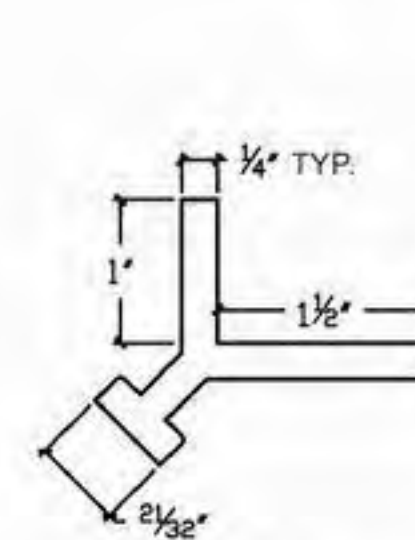
Fiberglass Embedment Angle

Fiberglass pultruded embedment angles, with continuous integral anchors, provide corrosion resistant grating support in trenches and other concrete openings. Available for all thicknesses of grating. All embedment angles are supplied in a vinylester resin system with a Class 1 flame spread rating.

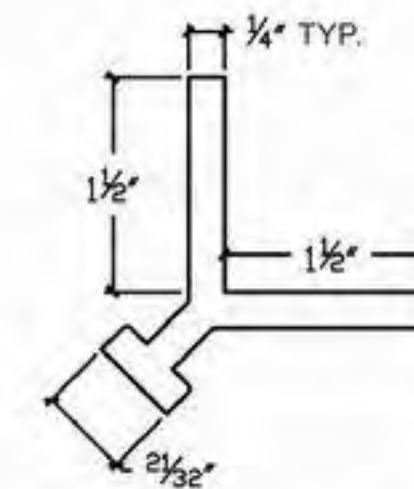


FEATURES

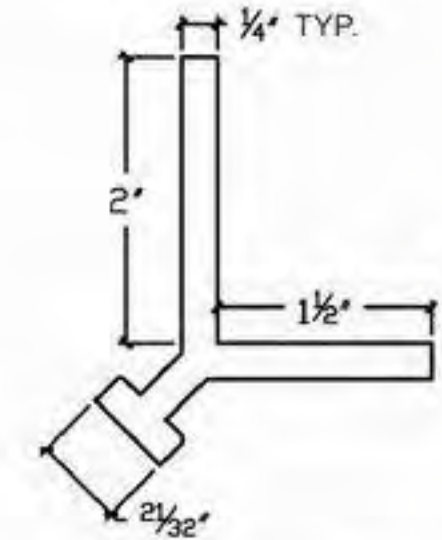
- Corrosion resistant
- Low conductivity
- UV stable
- Fire retardant
- High strength
- Easy to install



1" Embedment Angle



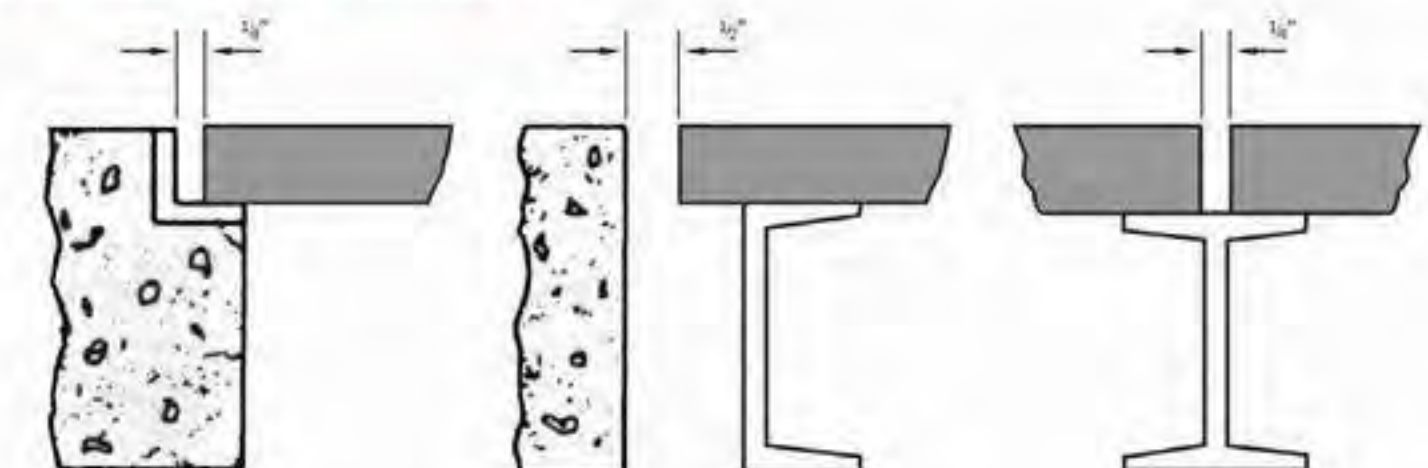
1 1/2" Embedment Angle



2" Embedment Angle

STANDARD INSTALLATION CLEARANCES

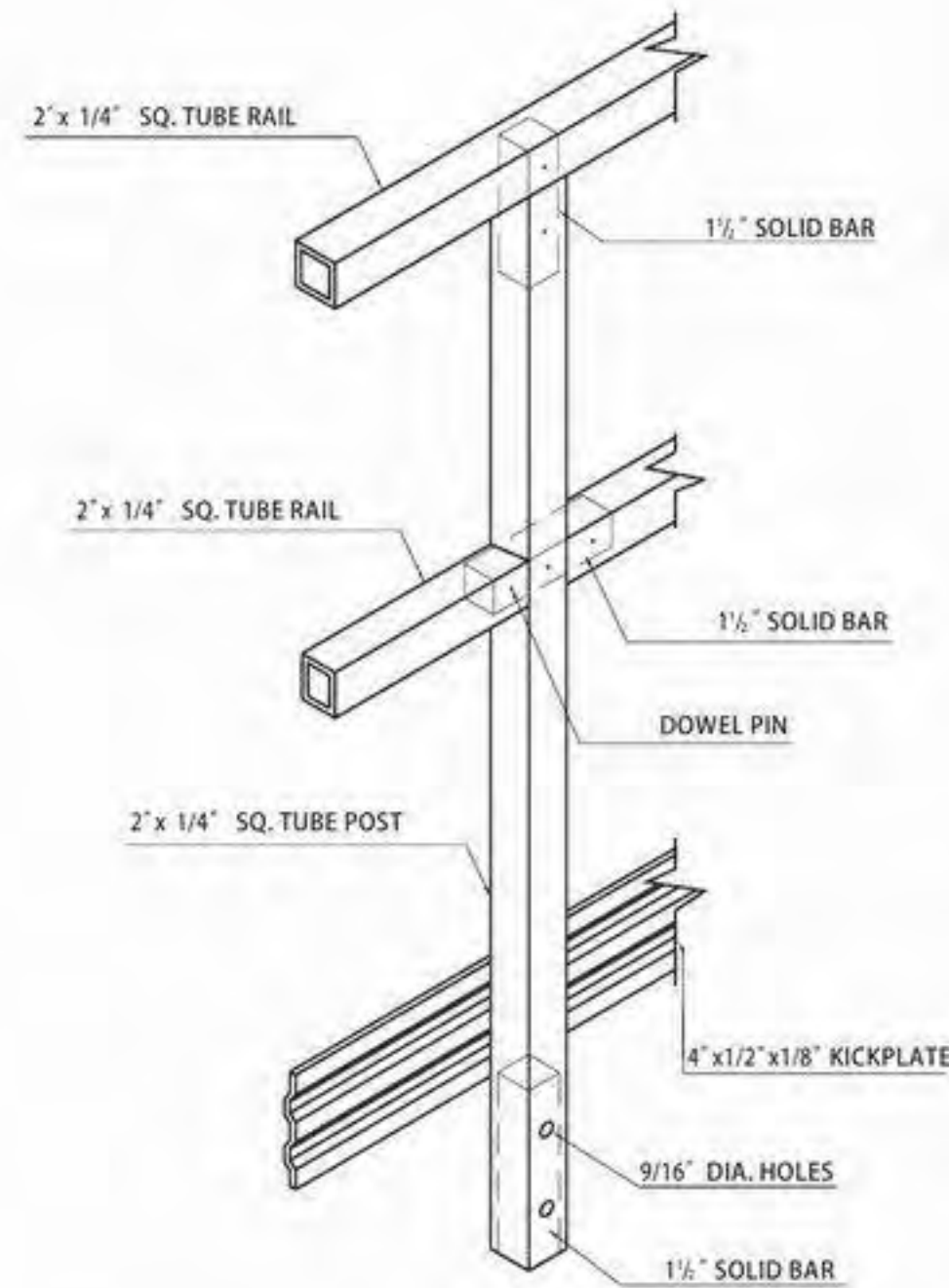
A minimum of 1 1/2" bearing support should be provided under the edges of panels.



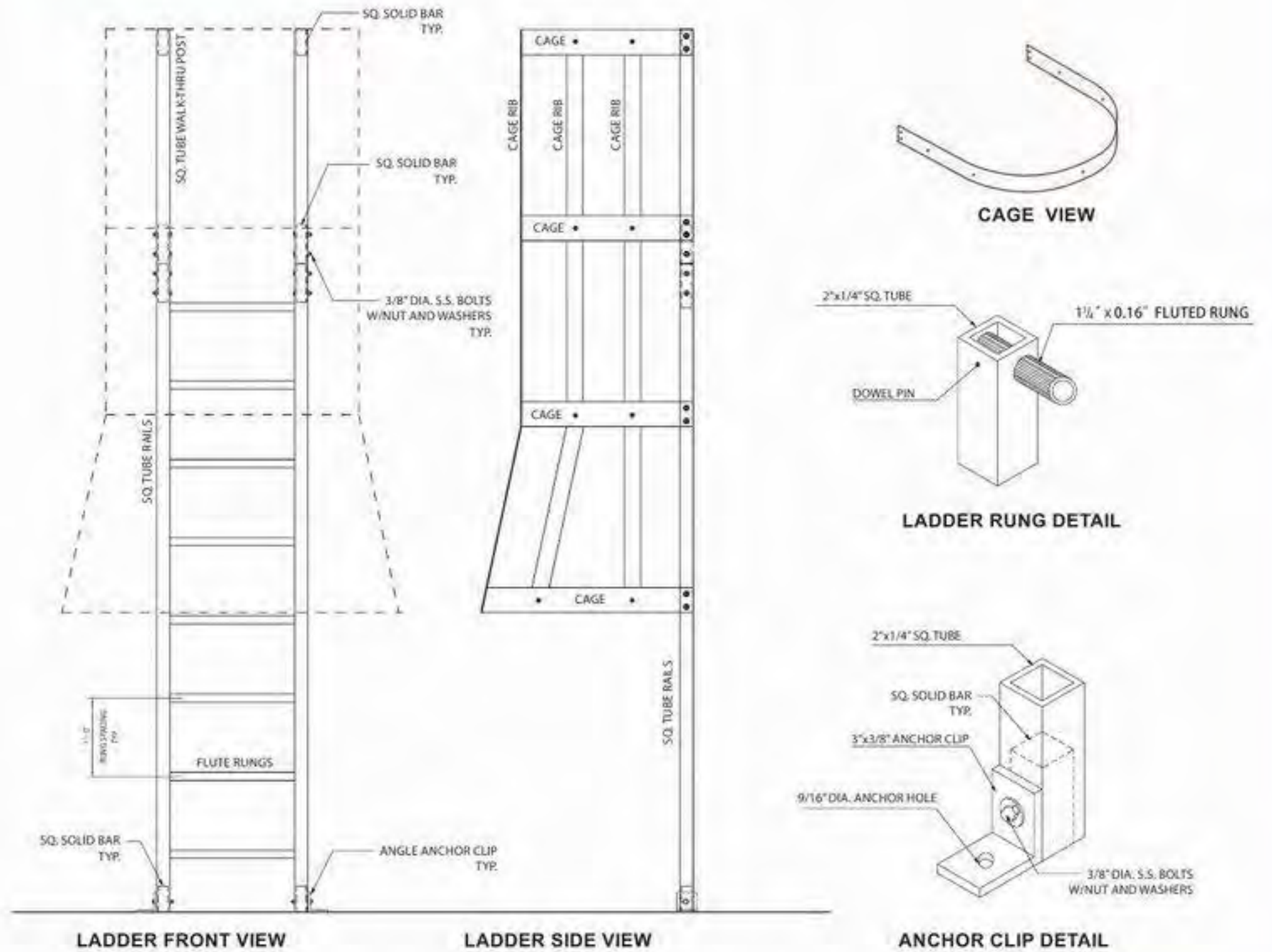
Fiberglass Handrail

Manufactured with the pultrusion process, the fiberglass reinforced handrail shapes contain up to 70% glass fibers, guaranteeing extraordinary mechanical properties to the system.

The handrail system is composed of various pultruded shapes. These systems utilize tubes, kickplate and solid inserts. Handrail systems are designed to meet OSHA requirements. They are available in Polyester and Vinyester resin. A secondary clear U.V. coating is applied as a standard.



Fiberglass Ladder



Corrosion Resistant Ladders

Manufactured with pultruded profiles, vertical ladders are suitable for any application in corrosive environments.

Mechanical Excellence

Kentec's fiberglass safety ladders meet and or exceed OSHA requirements. Serrated fluted rungs are incorporated for a slip resistant foothold.

Easy to use

Supplied in custom lengths, their light weight structure enhances ease of installation.

Economical and durable

With a cost comparable to aluminum ladders, fiberglass ladders offer additional distinctive features such as:

- Resistant to impact (No permanent deformation due to temporary overloading or impact).
- Low or no maintenance (maintenance free over the years, no painting required and no corrosion).
- Fiberglass Safety cages are pre-drilled for a rapid field installation.



FIBERGLASS STRUCTURAL SYSTEMS

Fiberglass Structural Typical Properties

The tables below offer details on the typical properties of Structural fiberglass profiles (in standard formulation, fire retardant and vinylester resin system) per ASTM test methods. Our standard formulation includes synthetic veil and ultraviolet inhibitors.

MECHANICAL PROPERTIES	ASTM	ENGLISH		METRIC	
		Value	Units	Value	Units
Tensile Stress, LW	D-638	41,000	psi	286.0	MPa
Tensile Stress, CW	D-638	7,400	psi	51.0	MPa
Tensile Modulus, LW	D-638	5.1	10 ⁶ psi	35.2	GPa
Tensile Modulus, CW	D-638	1.1	10 ⁶ psi	7.4	GPa
Compressive Stress, LW	D-695	33,000	psi	227.8	MPa
Compressive Stress, CW	D-695	16,000	psi	110.0	MPa
Compressive Modulus, LW	D-695	3.4	10 ⁶ psi	23.5	GPa
Compressive Modulus, CW	D-695	1.5	10 ⁶ psi	11.3	GPa
Flexural Stress, LW	D-790	55,000	psi	381.0	MPa
Flexural Stress, CW	D-790	11,000	psi	80.4	MPa
Flexural Modulus, LW	D-790	3.0	10 ⁶ psi	20.7	GPa
Flexural Modulus, CW	D-790	1.4	10 ⁶ psi	9.5	GPa
Modulus of Elasticity, E	Full Section	2.7	10 ⁶ psi	19.3	GPa
Shear Modulus	—	0.5	10 ⁶ psi	3.1	GPa
Short Beam Shear	D-2344	4350	psi	30.0	MPa
Punch Shear	D-732	11,000	psi	91.7	MPa
Notched Izod Impact, LW	D-256	39	ft.-lbs./in	3.12	J/mm
Notched Izod Impact, CW	D-256	6	ft.-lbs./in	0.32	J/mm
PHYSICAL PROPERTIES	ASTM	Value		Value	
		Value	Units	Value	Units
Barcol Hardness	D-2533	55	—	55	—
24 Hour Water Absorption	D-570	0.3	% max	0.3	% max
Density	D-792	0.063-0.07	lbs./in. ³	1.74-1.95	g/cc
Coefficient of Thermal Expansion, LW	D-696	4.9	10 ⁻⁶ in./in./°F	8.4	10 ⁻⁶ mm/mm/°C
ELECTRICAL PROPERTIES	ASTM	Value		Value	
		Value	Units	Value	Units
Arc Resistance, LW	D-495	132	seconds	132	seconds
Dielectric Strength, LW	D-149	35	kv./in	11.8	kv./mm
Dielectric Strength, PF	D-149	217	volts/mil.	217	volts/mil.
Dielectric Constant, PF	D-150	5	@60hz	5	@60hz
FLAMMABILITY PROPERTIES	ASTM	Units		Value	
		Units		Value	
Tunnel Test	E-84	Flame Spread		15 max.	
Flammability	D-635	—		Nonburing	
UL	94	—		V0	
NBS Smoke Chamber	E-662	Smoke Density		600-700	

LW = Lengthwise CW = Crosswise PF = Perpendicular to Laminate Face

KENTEC COMPOSITES

Fiberglass Structural Shapes Guide

WF-BEAM	CHANNEL	SQUARE TUBE	FLAT SHEET
SIZE (inch)	SIZE (inch)	SIZE (inch)	SIZE (inch)
4x4x ³ / ₄	1 ³ / ₄ x1 ³ / ₈ x ¹ / ₈	1x1x ¹ / ₈	4x ¹ / ₈
6x6x ³ / ₈	4x1 ¹ / ₈ x ¹ / ₄	1 ¹ / ₂ x1 ¹ / ₂ x ¹ / ₈	4x ¹ / ₄
8x8x ³ / ₈	4x2x ⁵ / ₁₆	1 ¹ / ₂ x1 ¹ / ₂ x ¹ / ₄	4x ³ / ₈
	4 ³ / ₄ x1 ⁷ / ₁₆ x ¹ / ₄	2x2x ¹ / ₈	4x ¹ / ₂
	5 ⁵ / ₁₆ x1 ³ / ₈ x ¹ / ₄	2x2x ¹ / ₄	6x ¹ / ₄
	6x1 ¹ / ₁₆ x ³ / ₈	5x5x ³ / ₈	6x ¹ / ₂
	6 ⁵ / ₁₆ x1 ⁷ / ₈ x ⁵ / ₁₆	2x1 ¹ / ₄ x ¹ / ₄	9x ¹ / ₄
	7 ¹ / ₈ x2 ¹ / ₈ x ³ / ₈		10x ¹ / ₄
	8x2 ³ / ₁₆ x ³ / ₈		11x ¹ / ₄
	10x2 ³ / ₄ x ¹ / ₂		12x ¹ / ₄
	12x6x ¹ / ₂ x ¹ / ₄		24x ¹ / ₄
			36x ¹ / ₄
			48x ³ / ₈
			48x ³ / ₁₆
			48x ¹ / ₄
			48x ³ / ₈
			48x ¹ / ₂
			48x ⁵ / ₈
			48x ³ / ₄
			48x1
ANGLE	ROUND ROD	ROUND TUBE	
SIZE (inch)	SIZE (inch)	SIZE (inch)	
2x2x ¹ / ₄	¹ / ₄	1x ¹ / ₈	
3x3x ³ / ₈	³ / ₈	1 ¹ / ₂ x ¹ / ₈	
4x4x ³ / ₈	³ / ₄	1 ¹ / ₂ x ¹ / ₄	
4x4x ¹ / ₂	1	2x ¹ / ₈	
	1 ¹ / ₂	2x ¹ / ₄	
	2		
HANDRAIL CONNECTORS	LADDER RUNG	TOE PLATE	SQUARE BAR
SIZE (inch)	SIZE (inch)	SIZE (inch)	SIZE (inch)
1 ¹ / ₂ 90° fixed	1 ¹ / ₄ x0.16	4x ¹ / ₂ x ¹ / ₈	1x1
1 ¹ / ₂ adjustable	1 ³ / ₈ x0.18	6x ¹ / ₂ x ¹ / ₈	1 ¹ / ₂ x1 ¹ / ₂
			2x2
EMBEDMENT ANGLE	STAIR TREAD COVER		
SIZE (inch)	SIZE (inch)		
1x1 ¹ / ₂ x ¹ / ₄	1x6x ¹ / ₈		
1 ¹ / ₂ x1 ¹ / ₂ x ¹ / ₄	1x9x ¹ / ₈		
2x1 ¹ / ₂ x ¹ / ₄	1x12x ¹ / ₈		
	1.5x9x ¹ / ₈		

Note: Other sizes are available on request.