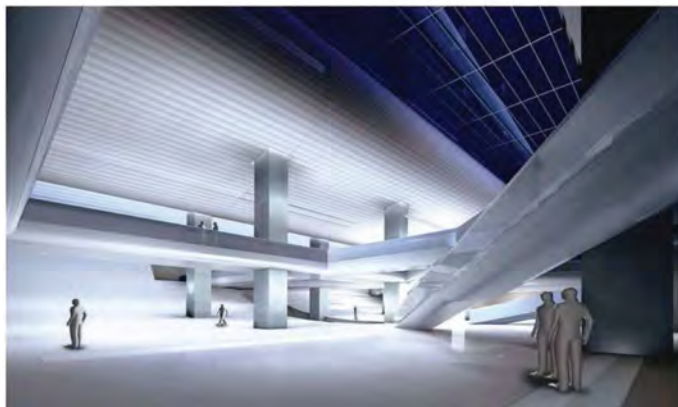


SecureGrate™ Molded Grating Products



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SecureGrate™ Molded Grating Products



Mona Composites SecureGrate™ Molded Grating panels are manufactured by systematically setting layers of liquid resin and continuous fiberglass roving in a mold. The finished panels are released from the molds after they are cured for a predetermined time.

The one-piece interwoven mesh construction of molded grating results in a product with optimal corrosion resistance and bi-directional strength. The grating is “cast” in one piece and there are no mechanical joints between bearing bars.

The high percentage of resin (65%) in molded grating also adds to its superior corrosion and optimal impact resistance. The bi-directional trait of Square Mesh Molded gratings offers increased load capacity and panel utilization. These advantages make molded grating a better alternative to steel and aluminum grating products.

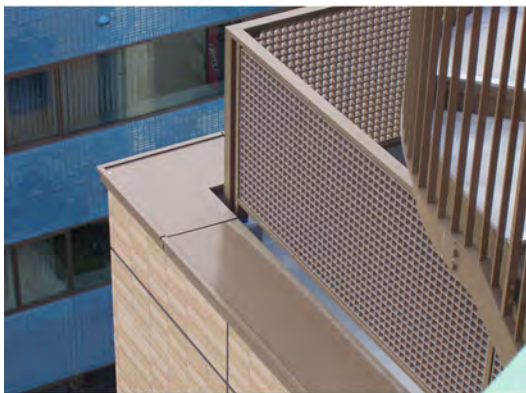


Penetrations for piping, valve access, and columns can be made without the need for additional structural framing. As molded grating panels are constructed as one piece, penetrations do not affect the structural integrity of the panel and the load is evenly distributed throughout the section and around cut-outs. This differs from pultruded grating products which may require additional supports around penetrations.

- **Optimum Corrosion Resistance:** High resin content in SecureGrate™ Molded Grating ensures optimum corrosion resistance from a variety of harsh chemicals. SecureGrate™ is also available in several resin combinations to ensure structural integrity and performance in highly corrosive environments.
- **Bidirectional Strength:** Provides structural stability in both axes and allows penetrations without additional supports.
- **High Impact Resistance:** SecureGrate™ Molded Grating products can withstand major impacts with minimal structural damage.
- **UV Resistance:** Resin mix for SecureGrate™ Molded Grating has built-in UV inhibitors to resist harmful rays. This means the product retains its color and texture even years after it is installed.
- **Anti-Skid:** SecureGrate™ is manufactured with either a meniscus or grit surface. Both options provide a safe and slip-resistant walking surface.

Fiberglass Molded Grating Products

- **Fire-Retardant:** All SecureGrate™ Molded Grating products are manufactured with a flame spread rating of 25 or less as tested in accordance to ASTM E-84. These products also meet the self-extinguishing requirements of ASTM D-635.
- **Non-Conductive:** All SecureGrate™ Molded Grating products are thermally and electrically nonconductive, providing additional safety for employees.
- **Electronically Transparent:** FRP products do not interfere with electromagnetic and radio waves.
- **Minimal Maintenance:** FRP grating does not need maintenance like steel grating products.
- **Ease of Fabrication:** All SecureGrate™ Molded Grating products are light-weight. They can be lifted without heavy equipment and extra workers.

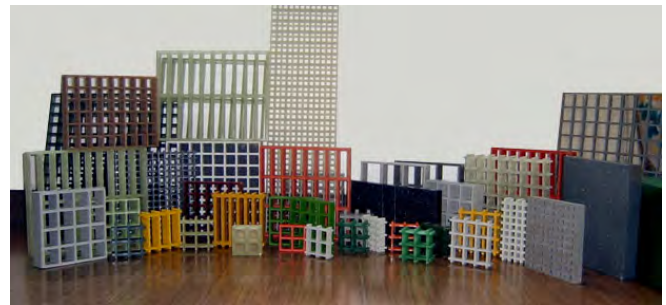
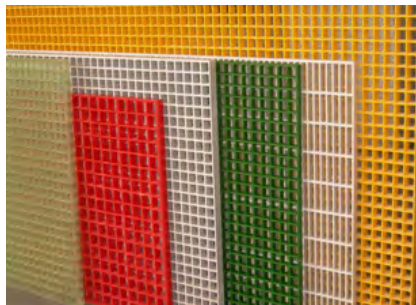
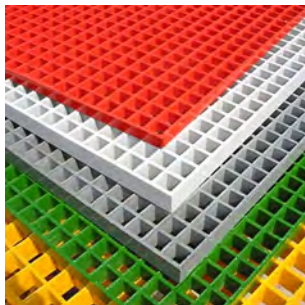


Molded Grating : Available Sizes, Resins, & Colors

SecureGate™ Molded Grating Selection & Details

TYPE	THICKNESS	MESH PATTERN	PANEL SIZE	WEIGHT / SQFT	OPEN AREA
SecureScreen I	½"	1 ½" x 1 ½"	4 Ft x 12 Ft	1.33 lbs	72%
SecureScreen II	½"	2" x 2"	4 Ft x 12 Ft	1.01 lbs	78%
SecureGate™	1"	1 ½" x 1 ½"	3 Ft x 10 Ft, 4 Ft x 8 Ft, 4 Ft x 12 Ft	2.5 lbs	69 %
SecureGate™	1"	1" x 4"	10 Ft x 3 Ft	2.61 lbs	68 %
SecureGate™	1 ½"	1 ½" x 1 ½"	3 Ft x 10 Ft, 4 Ft x 8 Ft, 4 Ft x 12 Ft, 5 Ft x 10 Ft	3.8 lbs	69 %
SecureMesh™ (ADA)	1 ½"	¾" x ¾"	4 Ft x 12 Ft	4.75 lbs	44 %
SecureGate™	2"	2" x 2"	3 Ft x 10 Ft, 4 Ft x 12 Ft	4.5 lbs	71 %
HD SecureGate™	1 ½"	1 ½" x 6"	4 Ft x 12 Ft	4.4 lbs	55 %
HD SecureGate™	1 ½"	1" x 2"	6 Ft x 4 Ft	6.1 lbs	48 %
HD SecureGate™	2"	1" x 2"	6 Ft x 4 Ft	8.2 lbs	48 %

RESIN	STOCKED COLORS	SURFACE
General Purpose Polyester (CFR)	Yellow, Dark Gray, Green, Light Gray	Meniscus, Grit
Isophthalic Polyester (ISOFR)	Green	Meniscus, Grit
Vinyl Ester (VFR / VEFR)	Orange, Dark Gray	Meniscus, Grit



SecureGate™ Molded Grating Resins

Mona Composites manufactures molded grating products in the following resins:

VINYL ESTER (VFR / VEFR)

Vinyl ester offers outstanding resistance to a wide range of highly corrosive environments, from caustic to acidic. Especially in acidic environments where grating is subjected to frequent and/or direct contact with harsh chemicals, Vinyl Ester resin has no match. Standard stock colors are Orange and Dark Gray. Flame spread rating per ASTM E84 is 20 or less.

ISOPHTHALIC POLYESTER (ISOFR)

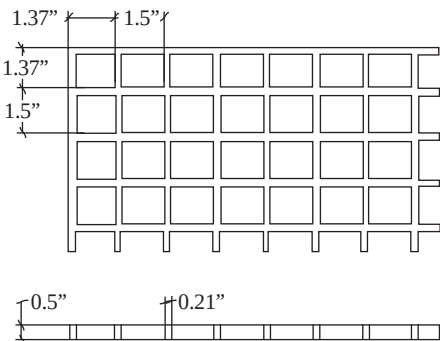
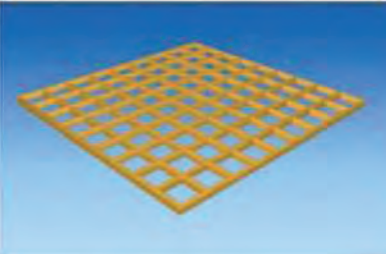
ISOFR resin is designed with flame spread rating per ASTM E84 of 25 or less. This mid-level resin provides corrosion resistance to grating where it is subjected to infrequent contact, splashes, and spills to harsh chemicals. It is available at a lower cost compared to VEFR resin. Standard stock colors are Green and Dark Gray.

ORTHOPHTHALIC POLYESTER (CFR)

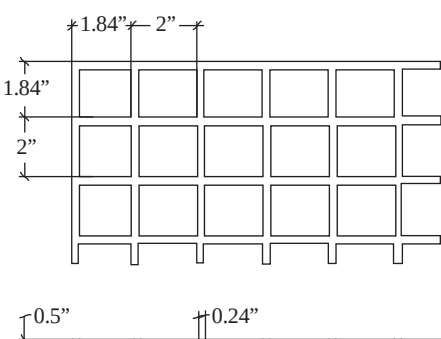
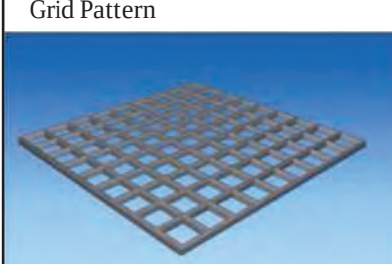
This general purpose resin is designed with flame spread rating per ASTM E84 of 25 or less. It is widely used in light to moderate corrosive environments such as light industrial, water, and wastewater applications. Standard stock colors are Dark Gray, Green, Yellow, and Transparent.

Molded Grating Details

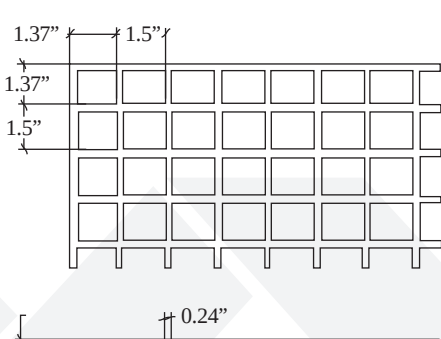
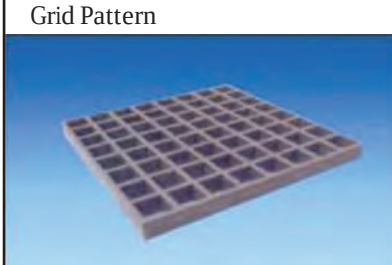
◆ 1/2" Deep x 1 1/2" Square Mesh

Engineering Properties Per Foot of Width:		A=0.84 in ²	I=0.02 in ⁴	S=0.07 in ³
Grid Pattern				
				
Stocked Item				
Panel Sizes Available:				
4' x 12'				
# of Bars:	8			
Load Bar Width:	7/32"			
Load Bar Centers:	1-1/2"			
Open Area:	72%			
Approx. Weight:	1.33 lbs/ft ²			

◆ 1/2" Deep x 2" Square Mesh

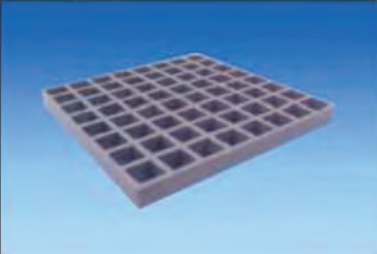
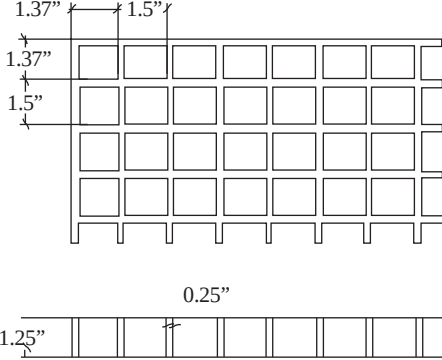
Engineering Properties Per Foot of Width:		A=0.68 in ²	I=0.02 in ⁴	S=0.08 in ³
Grid Pattern				
				
Stocked Item				
Panel Sizes Available:				
4' x 12'				
# of Bars:	6			
Load Bar Width:	1/4"			
Load Bar Centers:	2"			
Open Area:	78%			
Approx. Weight:	1.01 lbs/ft ²			

◆ 1" Deep x 1 1/2" Square Mesh

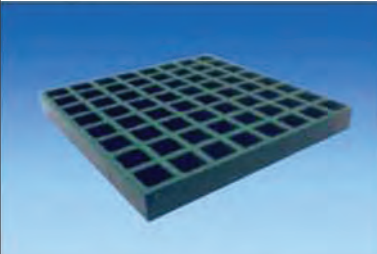
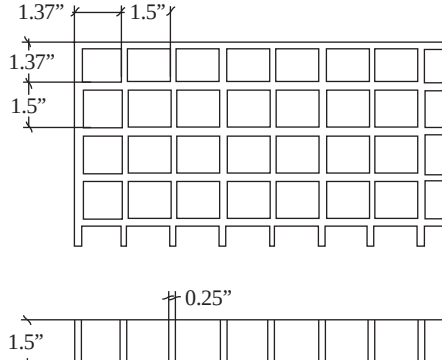
Engineering Properties Per Foot of Width:		A=1.75 in ²	I=0.15 in ⁴	S=0.29 in ³
Grid Pattern				
				
Stocked Item				
Panel Sizes Available:				
3' x 10', 4' x 8', 4' x 12'				
	# of Bars:	8		
	Load Bar Width:	1/4"		
	Load Bar Centers:	1-1/2"		
	Open Area:	69%		
	Approx.	2.50		
	Weight:	lbs/ft ²		

Molded Grating Details

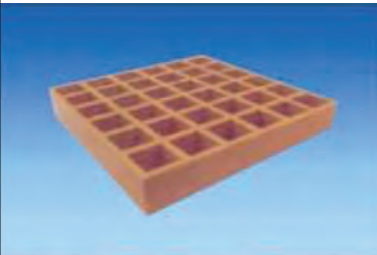
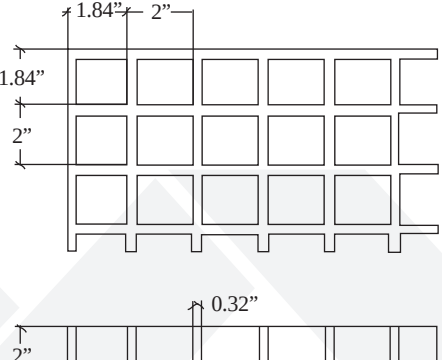
◆ 1 1/4" Deep x 1 1/2" Square Mesh

Engineering Properties Per Foot of Width: $A=2.13 \text{ in}^2$ $I=0.28 \text{ in}^4$ $S=0.45 \text{ in}^3$											
Grid Pattern											
											
Non-Stocked Item (Custom Order)											
Panel Sizes Available:											
Please Call											
	<table border="1"> <tr> <td># of Bars:</td><td>8</td></tr> <tr> <td>Load Bar Width:</td><td>1/4"</td></tr> <tr> <td>Load Bar Centers:</td><td>1-1/2"</td></tr> <tr> <td>Open Area:</td><td>69%</td></tr> <tr> <td>Approx. Weight:</td><td>3.08 lbs/ft²</td></tr> </table>	# of Bars:	8	Load Bar Width:	1/4"	Load Bar Centers:	1-1/2"	Open Area:	69%	Approx. Weight:	3.08 lbs/ft ²
# of Bars:	8										
Load Bar Width:	1/4"										
Load Bar Centers:	1-1/2"										
Open Area:	69%										
Approx. Weight:	3.08 lbs/ft ²										

◆ 1 1/2" Deep x 1 1/2" Square Mesh

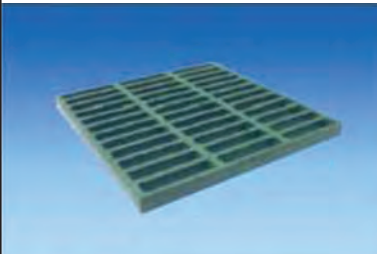
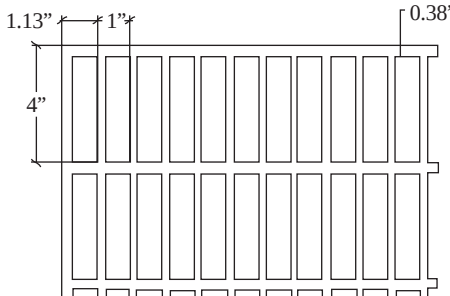
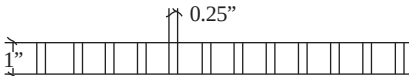
Engineering Properties Per Foot of Width: $A=2.73 \text{ in}^2$ $I=0.49 \text{ in}^4$ $S=0.65 \text{ in}^3$											
Grid Pattern											
											
Stocked Item											
Panel Sizes Available:											
3' x 10', 5' x 10', 4' x 8', 4' x 12'											
	<table border="1"> <tr> <td># of Bars:</td><td>8</td></tr> <tr> <td>Load Bar Width:</td><td>1/4"</td></tr> <tr> <td>Load Bar Centers:</td><td>1-1/2"</td></tr> <tr> <td>Open Area:</td><td>69%</td></tr> <tr> <td>Approx. Weight:</td><td>3.08 lbs/ft²</td></tr> </table>	# of Bars:	8	Load Bar Width:	1/4"	Load Bar Centers:	1-1/2"	Open Area:	69%	Approx. Weight:	3.08 lbs/ft ²
# of Bars:	8										
Load Bar Width:	1/4"										
Load Bar Centers:	1-1/2"										
Open Area:	69%										
Approx. Weight:	3.08 lbs/ft ²										

◆ 2" Deep x 2" Square Mesh

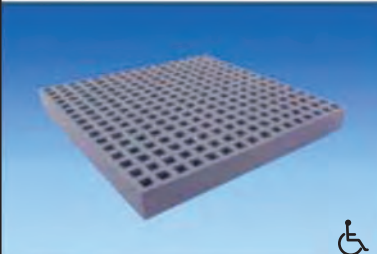
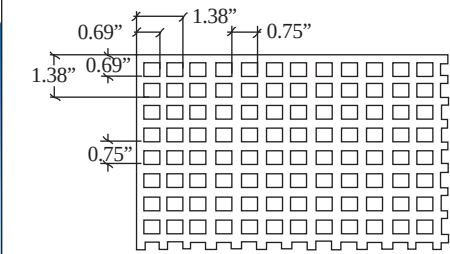
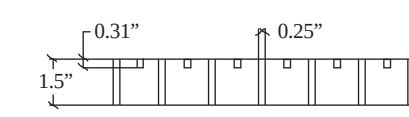
Engineering Properties Per Foot of Width: $A=3.12 \text{ in}^2$ $I=0.03 \text{ in}^4$ $S=1.03 \text{ in}^3$											
Grid Pattern											
											
Stocked Item											
Panel Sizes Available:											
4' x 12'											
	<table border="1"> <tr> <td># of Bars:</td><td>8</td></tr> <tr> <td>Load Bar Width:</td><td>5/16"</td></tr> <tr> <td>Load Bar Centers:</td><td>2"</td></tr> <tr> <td>Open Area:</td><td>71%</td></tr> <tr> <td>Approx. Weight:</td><td>4.51 lbs/ft²</td></tr> </table>	# of Bars:	8	Load Bar Width:	5/16"	Load Bar Centers:	2"	Open Area:	71%	Approx. Weight:	4.51 lbs/ft ²
# of Bars:	8										
Load Bar Width:	5/16"										
Load Bar Centers:	2"										
Open Area:	71%										
Approx. Weight:	4.51 lbs/ft ²										

Molded Grating Details

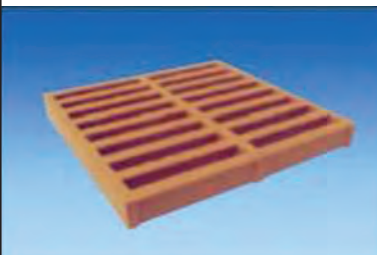
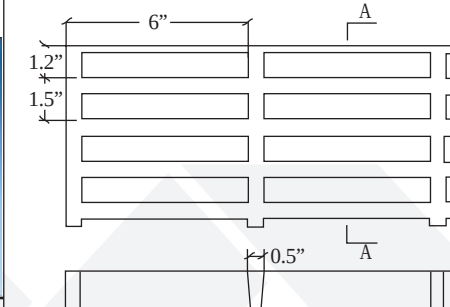
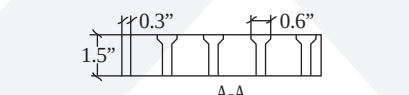
◆ 1" Deep x 1 x 4" Rectangular Mesh

Engineering Properties Per Foot of Width: $A=2.69 \text{ in}^2$ $I=0.22 \text{ in}^4$ $S=0.45 \text{ in}^3$			
Grid Pattern	  		
Non-Stocked Item (Custom Order)			
Panel Sizes Available: 10' x 3'			
** Load Bars Run 3' Direction			
	# of Bars:	12	
	Load Bar Width:	1/4"	
	Load Bar Centers:	1"	
	Open Area:	68%	
	Approx. Weight:	2.61 lbs/ft ²	

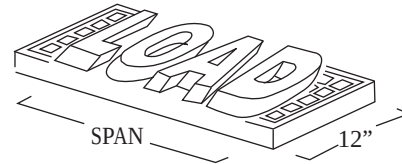
◆ 1 1/2" Deep x 3/4" Mini Mesh

Engineering Properties Per Foot of Width: $A=3.29 \text{ in}^2$ $I=0.74 \text{ in}^4$ $S=0.9 \text{ in}^3$			
Grid Pattern	  		
Stocked Item			
Panel Sizes Available:			
4' x 12'			
	# of Bars:	8	
	Load Bar Width:	1/4"	
	Load Bar Centers:	3/4"	
	Open Area:	44%	
	Approx. Weight:	4.75 lbs/ft ²	

◆ 1 1/2" Deep x 1 1/2" x 6" Rectangular Mesh

Engineering Properties Per Foot of Width: $A=4.39 \text{ in}^2$ $I=0.88 \text{ in}^4$ $S=1.3 \text{ in}^3$ $S_B=1.24 \text{ in}^3$			
Grid Pattern	  		
Non-Stocked Item (Custom Order)			
Panel Sizes Available:			
Please Call			
	# of Bars:	8	
	Load Bar Width:	0.6"	
	Load Bar Centers:	1-1/2"	
	Open Area:	55%	
	Approx. Weight:	4.42 lbs/ft ²	

Molded Grating Deflection Tables

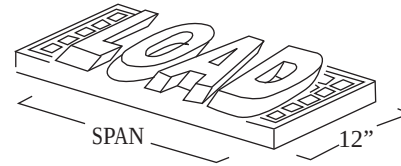


Uniform Load Deflection Table:

SPAN in inches	STYLE	LOAD IN lbs/ft ²								Max Rec. Load	Apparent EI x 10 ⁶ (LB-IN ²)
		50	100	150	200	250	500	1000	2000		
12	SM 1/2" x 1 1/2"	0.03	0.05	0.08	0.10	0.13	0.26	0.52		361	0.04
	SM 1/2" x 2"	0.03	0.06	0.09	0.13	0.16	0.32	0.63		302	0.04
	SM 1" x 1 1/2"	<0.01	<0.01	0.01	0.01	0.02	0.04	0.07	0.14	2,378	0.31
	SM 1 1/4" x 1 1/2"	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.05	0.10	2,832	0.43
	SM 1 1/2" x 1 1/2"	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.03	0.06	4,082	0.80
	SM 2" x 2"	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.03	9,264	1.80
	RM 1" x 1" x 4"	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.05	0.10	3,668	0.45
	MM 1 1/2" x 3/4"	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.04	6,180	1.14
	SS 1 1/2" x 1 1/2" x 6"	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.03	7,202	1.40
18	SM 1/2" x 1 1/2"	0.12	0.24	0.36	0.48					160	0.05
	SM 1/2" x 2"	0.14	0.28	0.42	0.57					134	0.04
	SM 1" x 1 1/2"	0.02	0.03	0.05	0.07	0.08	0.17	0.33	0.66	1,245	0.34
	SM 1 1/4" x 1 1/2"	0.01	0.02	0.03	0.04	0.05	0.11	0.21	0.43	1,259	0.53
	SM 1 1/2" x 1 1/2"	<0.01	0.01	0.02	0.02	0.03	0.05	0.10	0.21	1,813	1.11
	SM 2" x 2"	<0.01	<0.01	<0.01	0.01	0.01	0.03	0.05	0.11	4,117	2.13
	RM 1" x 1" x 4"	0.01	0.02	0.03	0.05	0.06	0.11	0.23	0.46	1,892	0.50
	MM 1 1/2" x 3/4"	<0.01	<0.01	0.01	0.02	0.02	0.04	0.08	0.16	2,747	1.43
	SS 1 1/2" x 1 1/2" x 6"	<0.01	<0.01	<0.01	0.01	0.02	0.03	0.07	0.13	3,201	1.75
24	SM 1/2" x 1 1/2"	0.36								90	0.05
	SM 1/2" x 2"	0.41								75	0.04
	SM 1" x 1 1/2"	0.05	0.10	0.15	0.20	0.25	0.50			668	0.36
	SM 1 1/4" x 1 1/2"	0.03	0.06	0.09	0.12	0.15	0.31	0.61		708	0.59
	SM 1 1/2" x 1 1/2"	0.01	0.03	0.04	0.06	0.07	0.14	0.29	0.58	1,021	1.25
	SM 2" x 2"	<0.01	0.02	0.02	0.03	0.04	0.08	0.15	0.30	2,316	2.40
	RM 1" x 1" x 4"	0.03	0.07	0.10	0.14	0.17	0.35	0.69		961	0.52
	MM 1 1/2" x 3/4"	0.01	0.02	0.03	0.04	0.05	0.11	0.22	0.44	1,545	1.64
	SS 1 1/2" x 1 1/2" x 6"	<0.01	0.02	0.03	0.04	0.05	0.09	0.18	0.36	1,800	2.00
30	SM 1" x 1 1/2"	0.12	0.24	0.36	0.47	0.59				427	0.37
	SM 1 1/4" x 1 1/2"	0.07	0.15	0.22	0.29	0.37				453	0.60
	SM 1 1/2" x 1 1/2"	0.03	0.07	0.10	0.13	0.17	0.33	0.67		653	1.31
	SM 2" x 2"	0.02	0.04	0.05	0.07	0.09	0.18	0.35		1,482	2.50
	RM 1" x 1" x 4"	0.08	0.08	0.25	0.33	0.42				615	0.53
	MM 1 1/2" x 3/4"	0.03	0.05	0.08	0.10	0.13	0.25	0.50		989	1.75
	SS 1 1/2" x 1 1/2" x 6"	0.02	0.04	0.06	0.08	0.10	0.20	0.39		1,152	2.24

Notes: SM-Square Mesh Grating, RM- Rectangular Mesh Grating, MM- Mini-Mesh Grating, SS- SuperSpan Grating compliant grating

Molded Grating Deflection Tables

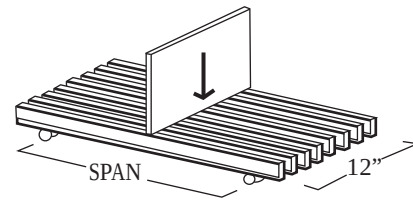


Uniform Load Deflection Table:

SPAN in inches	STYLE	LOAD IN lbs/ft ²								Max Rec. Load	Apparent El x 10 ⁶ (LB-IN ²)
		50	100	150	200	250	500	1000	2000		
36	SM 1" x 1 1/2"	0.24	0.48							240	0.38
	SM 1 1/4" x 1 1/2"	0.15	0.30	0.45	0.60					315	0.61
	SM 1 1/2" x 1 1/2"	0.07	0.13	0.20	0.27	0.34	0.67			453	1.35
	SM 2" x 2"	0.04	0.07	0.11	0.14	0.18	0.36			1,029	2.35
	RM 1" x 1" x 4"	0.17	0.34	0.51	0.68					427	0.54
	MM 1 1/2" x 3/4"	0.05	0.10	0.15	0.20	0.25	0.50			687	1.83
	SS 1 1/2" x 1 1/2" x 6"	0.04	0.08	0.12	0.16	0.19	0.39			800	2.34
42	SM 1" x 1 1/2"	0.43								205	0.39
	SM 1 1/4" x 1 1/2"	0.27	0.54							231	0.62
	SM 1 1/2" x 1 1/2"	0.12	0.25	0.37	0.49	0.62				333	1.37
	SM 2" x 2"	0.06	0.13	0.19	0.26	0.32	0.65			756	2.61
	RM 1" x 1" x 4"	0.30	0.60							314	0.56
	MM 1 1/2" x 3/4"	0.09	0.18	0.27	0.36	0.45				505	1.87
	SS 1 1/2" x 1 1/2" x 6"	0.07	0.14	0.21	0.28	0.35				588	2.38
46	RM 1" x 1" x 4"	0.43								287	0.57
48	SM 1 1/2" x 1 1/2"	0.21	0.42	0.63						255	1.38
	SM 2" x 2"	0.11	0.22	0.33	0.43	0.54				579	2.65
	MM 1 1/2" x 3/4"	0.15	0.30	0.45	0.60					386	1.90
	SS 1 1/2" x 1 1/2" x 6"	0.12	0.24	0.36	0.48	0.60				450	2.42
54	SM 1 1/2" x 1 1/2"	0.33	0.67							201	1.38
	SM 2" x 2"	0.17	0.34	0.51	0.69					457	2.69
	MM 1 1/2" x 3/4"	0.24	0.48							305	1.93
	SS 1 1/2" x 1 1/2" x 6"	0.19	0.38	0.57						356	2.44
60	SM 2" x 2"	0.26	0.52							371	2.71
	MM 1 1/2" x 3/4"	0.36								247	1.94
	SS 1 1/2" x 1 1/2" x 6"	0.29	0.57							288	2.46

Notes: SM-Square Mesh Grating, RM- Rectangular Mesh Grating, MM- Mini-Mesh Grating, SS- SuperSpan Grating compliant grating

Molded Grating Deflection Tables

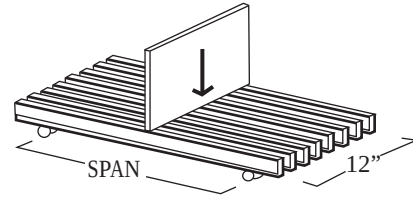


Concentrated Line Load Deflection Table:

SPAN in inches	STYLE	LOAD IN lbs/ft OF WIDTH								Max Rec. Load	Apparent EI x 10 ⁶ (LB-IN ²)
		50	100	150	200	250	500	1000	2000		
12	SM 1/2" x 1 1/2"	0.04	0.08	0.12	0.17	0.21	0.41			282	0.04
	SM 1/2" x 2"	0.05	0.10	0.15	0.20	0.25	0.50			236	0.04
	SM 1"x 1 1/2"	<0.01	0.01	0.02	0.02	0.03	0.06	0.11	0.23	1,189	0.31
	SM 1 1/4" x 1 1/2"	<0.01	<0.01	0.01	0.02	0.02	0.04	0.08	0.17	1,416	0.43
	SM 1 1/2" x 1 1/2"	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.05	0.09	2,041	0.80
	SM 2"x 2"	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.04	4,632	1.80
	SM 1"x 1"x 4"	<0.01	<0.01	0.01	0.02	0.02	0.04	0.08	0.16	1,834	0.45
	MM 1 1/2" x 3/4"	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.03	0.06	3,090	1.45
	SS 1 1/2" x 1 1/2" x 6"	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.03	0.05	3,601	1.43
18	SM 1/2" x 1 1/2"	0.13	0.26	0.38	0.51	0.64				188	0.05
	SM 1/2" x 2"	1.15	1.30	0.45	0.60					158	0.04
	SM 1"x 1 1/2"	0.02	0.04	0.05	0.07	0.09	0.18	0.35		934	0.34
	SM 1 1/4" x 1 1/2"	0.01	0.02	0.03	0.05	0.06	0.11	0.23	0.46	944	0.53
	SM 1 1/2" x 1 1/2"	<0.01	0.01	0.02	0.02	0.03	0.05	0.11	0.22	1,360	1.11
	SM 2"x 2"	<0.01	<0.01	<0.01	0.01	0.01	0.03	0.06	0.11	3,088	2.13
	RM 1"x 1"x 4"	0.01	0.02	0.04	0.05	0.06	0.12	0.24	0.49	1,419	0.50
	MM 1 1/2" x 3/4"	<0.01	<0.01	0.01	0.02	0.02	0.04	0.09	0.17	2,060	1.43
	SS 1 1/2" x 1 1/2" x 6"	<0.01	<0.01	<0.01	0.01	0.02	0.03	0.07	0.14	2,401	1.75
24	SM 1/2" x 1 1/2"	0.29	0.57							141	0.05
	SM 1/2" x 2"	0.33	0.66							118	0.04
	SM 1"x 1 1/2"	0.04	0.08	0.12	0.16	0.02	0.40			668	0.36
	SM 1 1/4" x 1 1/2"	0.02	0.05	0.07	0.10	0.12	0.24	0.49		708	0.59
	SM 1 1/2" x 1 1/2" ♿	0.01	0.02	0.03	0.05	0.06	0.12	0.23	0.46	1,021	1.25
	SM 2"x 2"	<0.01	0.01	0.02	0.02	0.03	0.06	0.11	0.24	2,316	2.40
	RM 1"x 1"x 4"	0.03	0.06	0.08	0.11	0.17	0.28	0.56		961	0.52
	MM 1 1/2" x 3/4"	0.01	0.02	0.03	0.04	0.04	0.09	0.18	0.35	1,545	1.64
	SS 1 1/2" x 1 1/2" x 6"	<0.01	0.01	0.02	0.03	0.04	0.07	0.14	0.29	1,800	2.00
30	SM 1"x 1 1/2"	0.08	0.15	0.30	0.36	0.38				534	0.37
	SM 1 1/4" x 1 1/2"	0.05	0.09	0.14	0.19	0.23	0.47			566	0.60
	SM 1 1/2" x 1 1/2"	0.02	0.04	0.06	0.09	0.11	0.20	0.43		816	1.31
	SM 2"x 2"	0.01	0.02	0.03	0.05	0.06	0.11	0.23	0.45	1,853	2.50
	RM 1"x 1"x 4"	0.05	0.11	0.16	0.21	0.27	0.53			769	0.53
	MM 1 1/2" x 3/4"	0.02	0.03	0.05	0.06	0.08	0.16	0.32	0.64	1,236	1.75
	1 1/2" x 1 1/2" x 6"	0.01	0.03	0.04	0.05	0.06	0.13	0.25	0.50	1,440	2.24

Notes: SM-Square Mesh Grating, RM- Rectangular Mesh Grating, MM- Mini-Mesh Grating, SS- SuperSpan Grating compliant grating

Molded Grating Deflection Tables

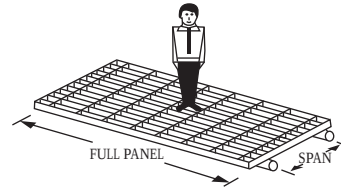


Concentrated Line Load Deflection Table:

SPAN in inches	STYLE	LOAD IN lbs/ft OF WIDTH								Max Rec. Load	Apparent El x 10 ⁶ (LB-IN ²)
		50	100	150	200	250	500	1000	2000		
36	SM 1" x 1 1/2"	0.13	0.26	0.38	0.51	0.64				360	0.38
	SM 1 1/4" x 1 1/2"	0.08	0.16	0.24	0.32	0.40				472	0.61
	SM 1 1/2" x 1 1/2"	0.04	0.07	0.11	0.14	0.18	0.36			680	1.35
	SM 2" x 2"	0.02	0.04	0.06	0.08	0.10	0.19	0.38		1,544	2.55
	RM 1"x1"x4"	0.09	0.18	0.27	0.36	0.45				641	0.54
	MM 1 1/2" x 3/4"	0.03	0.05	0.08	0.11	0.13	0.27	0.53		1,030	1.83
	SS 1 1/2" x 1 1/2" x 6"	0.02	0.04	0.06	0.08	0.10	0.21	0.42		1,200	2.34
42	SM 1" x 1 1/2"	0.12	0.25	0.37	0.50	0.62				404	0.62
	SM 1 1/2" x 1 1/2"	0.06	0.11	0.17	0.23	0.28	0.56			583	1.37
	SM 2" x 2"	0.03	0.06	0.09	0.12	0.15	0.30	0.59		1,323	2.61
	RM 1"x1"x4"	0.14	0.28	0.41	0.55	0.69				549	0.56
	MM 1 1/2" x 3/4"	0.04	0.08	0.12	0.17	0.21	0.41			883	1.87
	SS 1 1/2" x 1 1/2" x 6"	0.03	0.06	0.10	0.13	0.16	0.32	0.65		1,029	2.38
48	SM 1 1/2" x 1 1/2"	0.08	0.17	0.25	0.33	0.42				510	1.38
	SM 2" x 2"	0.04	0.09	0.13	0.17	0.22	0.43			1,158	2.65
	MM 1 1/2" x 3/4"	0.06	0.12	0.18	0.24	0.30	0.60			773	1.90
	SS 1 1/2" x 1 1/2" x 6"	0.05	0.10	0.14	0.19	0.24	0.48			900	2.42
54	SM 1 1/2" x 1 1/2"	0.12	0.24	0.36	0.48	0.59				453	1.38
	SM 2" x 2"	0.06	0.12	0.18	0.24	0.30	0.61			1,029	2.69
	MM 1 1/2" x 3/4"	0.08	0.17	0.25	0.34	0.42				687	1.93
	SS 1 1/2" x 1 1/2" x 6"	0.07	0.13	0.20	0.27	0.34	0.67			800	2.44
60	SM 2" x 2"	0.08	0.17	0.25	0.33	0.42				926	2.71
	MM 1 1/2" x 3/4"	0.12	0.23	0.35	0.46	0.58				618	1.94
	SS 1 1/2" x 1 1/2" x 6"	0.09	0.18	0.27	0.37	0.46				720	2.46

Notes: SM- Square Mesh Grating, RM- Rectangular Mesh Grating, MM- Mini-Mesh Grating, SS- SuperSpan Grating compliant grating

Molded Grating Deflection Tables

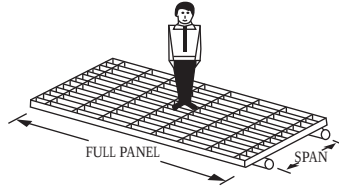


Point Load Deflection Table:

SPAN in inches	STYLE	LOAD IN LBS.						
		100	200	500	750	1000	1500	2000
18	SM 1/2" x 1 1/2"	0.06	0.12	0.29	0.44	0.59		
	SM 1/2" x 2"	0.08	0.15	0.38	0.57			
	SM 1" x 1 1/2"	<0.01	0.02	0.04	0.06	0.08	0.12	0.16
	SM 1 1/4" x 1 1/2"	<0.01	0.01	0.03	0.05	0.06	0.09	0.12
	SM 1 1/2" x 1 1/2"	<0.01	<0.01	0.01	0.02	0.03	0.04	0.06
	SM 2" x 2"	<0.01	<0.01	0.01	0.02	0.03	0.05	0.06
	RM 1"x1"x4"	<0.01	0.01	0.04	0.05	0.07	0.11	0.15
	MM 1 1/2" x 3/4"	<0.01	<0.01	0.02	0.02	0.03	0.05	0.06
	SS 1 1/2" x 1" x 1 1/2" x 6"	<0.01	<0.01	0.01	0.02	0.02	0.04	0.05
24	SM 1/2" x 1 1/2"	0.17	0.34					
	SM 1/2" x 2"	0.23	0.45					
	SM 1" x 1 1/2"	0.02	0.05	0.12	0.18	0.24	0.36	0.49
	SM 1 1/4" x 1 1/2"	0.01	0.03	0.07	0.10	0.14	0.20	0.27
	SM 1 1/2" x 1 1/2"	<0.01	0.02	0.04	0.06	0.08	0.12	0.15
	SM 2" x 2"	<0.01	0.01	0.03	0.04	0.05	0.08	0.10
	RM 1"x1"x4"	0.02	0.04	0.09	0.14	0.19	0.28	0.37
	MM 1 1/2" x 3/4"	<0.01	0.01	0.04	0.05	0.07	0.11	0.14
	SS 1 1/2" x 1 1/2" x 6"	<0.01	0.01	0.03	0.04	0.05	0.08	0.10
30	SM 1/2" x 1 1/2"	0.34	0.67					
	SM 1/2" x 2"	0.42						
	SM 1" x 1 1/2"	0.05	0.09	0.24	0.35	0.47		
	SM 1 1/4" x 1 1/2"	0.03	0.05	0.14	0.20	0.27	0.41	0.54
	SM 1 1/2" x 1 1/2"	0.01	0.03	0.07	0.10	0.13	0.20	0.26
	SM 2" x 2"	<0.01	0.02	0.04	0.06	0.09	0.13	0.17
	RM 1"x1"x4"	0.04	0.07	0.18	0.27	0.37	0.55	
	MM 1 1/2" x 3/4"	0.01	0.02	0.06	0.09	0.12	0.18	0.24
	SS 1 1/2" x 1 1/2" x 6"	<0.01	0.02	0.04	0.06	0.09	0.13	0.17
36	SM 1/2" x 1 1/2"	0.54						
	SM 1 1/2" x 1 1/2"	0.67						
	SM 1" x 1 1/2"	0.07	0.13	0.33	0.49	0.66		
	SM 1 1/4" x 1 1/2"	0.04	0.09	0.22	0.33	0.44	0.66	
	SM 1 1/2" x 1 1/2"	0.02	0.04	0.10	0.15	0.21	0.31	0.41
	SM 2" x 2"	0.01	0.02	0.06	0.09	0.12	0.18	0.24
	RM 1"x1"x4"	0.06	0.11	0.29	0.43	0.57		
	MM 1 1/2" x 3/4"	0.02	0.03	0.09	0.13	0.17	0.26	0.34
	SS 1 1/2" x 1 1/2" x 6"	0.01	0.03	0.07	0.11	0.15	0.22	0.29

Notes: SM-Square Mesh Grating, RM- Rectangular Mesh Grating, MM- Mini-Mesh Grating, SS- SuperSpan Grating compliant grating

Molded Grating Deflection Tables



Point Load Deflection Table:

SPAN in inches	STYLE	LOAD IN LBS.						
		100	200	500	750	1000	1500	2000
42	SM 1" x 1 1/2"	0.12	0.24	0.61				
	SM 1 1/4" x 1 1/2"	0.07	0.14	0.34	0.51	0.68		
	SM 1 1/2" x 1 1/2"	0.03	0.06	0.15	0.23	0.31	0.46	0.61
	SM 2" x 2"	0.02	0.03	0.09	0.13	0.17	0.36	0.35
	RM 1"x1"x4"	0.09	0.17	0.43	0.65			
	MM 1 1/2" x 3/4"	0.03	0.05	0.13	0.20	0.27	0.40	0.53
46	SS 1 1/2" x 1 1/2" x 6"	0.02	0.04	0.11	0.16	0.21	0.32	0.42
	SM 1" x 1 1/2"	0.14	0.29					
	SM 1 1/4" x 1 1/2"	0.08	0.17	0.42	0.64			
	SM 1 1/2" x 1 1/2"	0.04	0.08	0.20	0.29	0.39	0.59	
	SM 2" x 2"	0.02	0.04	0.10	0.15	0.20	0.30	0.40
48	MM 1 1/2" x 3/4"	0.03	0.07	0.17	0.25	0.33	0.50	0.66
	SS 1 1/2" x 1 1/2" x 6"	0.03	0.06	0.14	0.21	0.28	0.43	0.57
	MM 1 1/2" x 3/4"	0.03	0.05	0.13	0.20	0.27	0.40	0.53

Notes: SM-Square Mesh Grating, RM- Rectangular Mesh Grating, MM- Mini-Mesh Grating, SS- SuperSpan Grating compliant grating



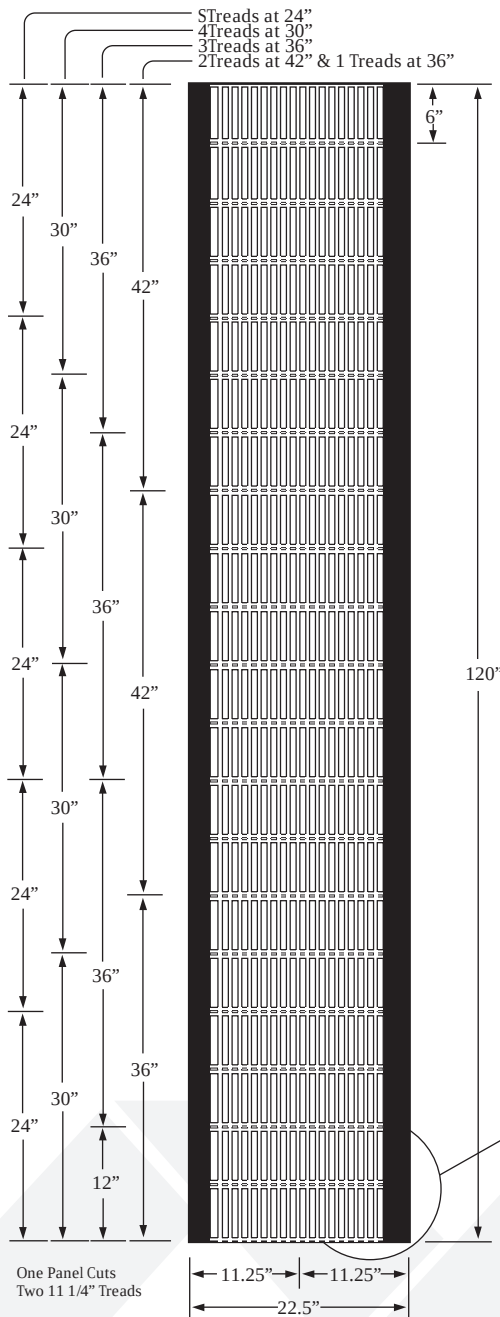


STAIR TREADS

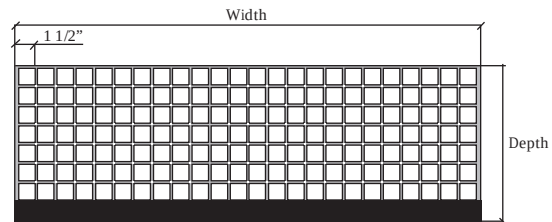
Slip-resistant and nonconductive stair treads.

Stocked in two standard stair tread gratings: 1 1/2" Square Mesh in a 12" x 144" panel, or 1" x 6" Rectangular Mesh in a 22 1/2" x 10" panel. Stair treads offer the same level of safety, strength, and corrosion resistance as its other molded products. Custom fabricated sizes also available upon request.

Standard 1"x 6" Rectangular Mesh Panel

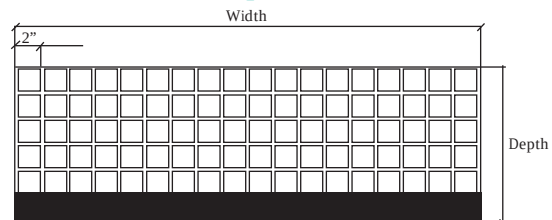


1 1/2" x 1 1/2" Square Mesh ST

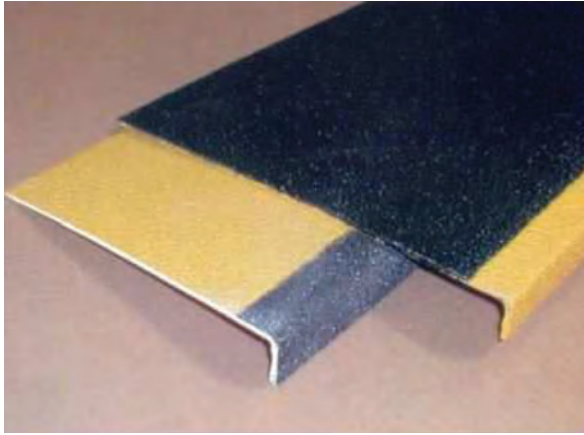


Note: Depth /Width: to have both sides closed at multiples of (1 1/2" + 1/4")

2" x 2" Square Mesh ST



Note: Custom treads can be fabricated from any SecureGrate™ molded or SecureSpan™ pultruded grating. Please call sales representative for details.



STAIR TREADS COVERS

Mona Composites stair tread covers are designed to be placed over existing stair treads that have become slippery and unsafe. Their gritted surface provides long-lasting secure footing for optimal safety. These can be installed over existing wood, concrete, or steel treads using a washer clip or epoxy. Easy installation makes these covers a low-cost alternative to replacing the tread.

Stair tread covers come with a contrasting 1/2" nosing. They are available in various colors and resins. The standard stock panel is 12" wide x 144" long but we can fabricate custom sizes to fit your needs.



SOLID PLATE

Mona Composites solid plates provide an excellent solution to slippery floors whether they are wood, steel, or concrete. Solid plates are offered in thicknesses from 1/8" to 3/4" thick and in all resin formulations to meet your specific corrosive environment. Plates can be installed using "W" clips, round head bolts, or anchors.



COVERED GRATING

Mona Composites Covered Grating is preferred when solid plates are not enough to meet your span, load, or odor control requirements. Solid plates at 1/8" thick combined with the structural strength of grating create a stiffer product for nearly all applications. Covered Grating is often used for trench or tank covers but it is also ideal in areas where a solid top is mandatory (e.g. elevated walkways, ramps, or to allow for high heel shoe traffic).

Grating Hold Down Clips

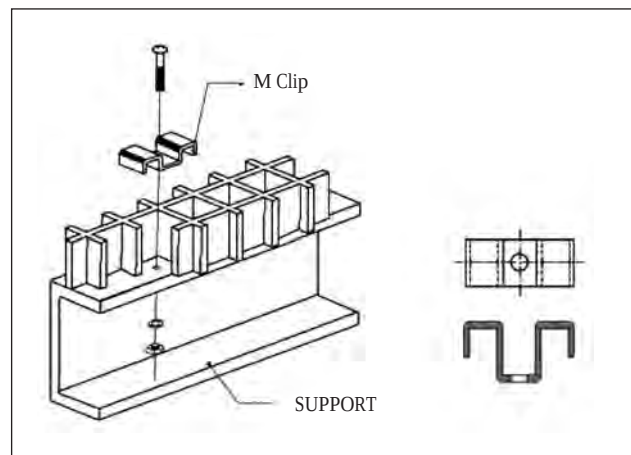


Molded & Pultruded Grating Clips

Mona Composites supplies a number of different types of 316SS clips to attach gratings to supporting members. Although the clips are illustrated here with molded grating products, similar clips are available for our pultruded grating as well. Contact Mona Composites for more information.

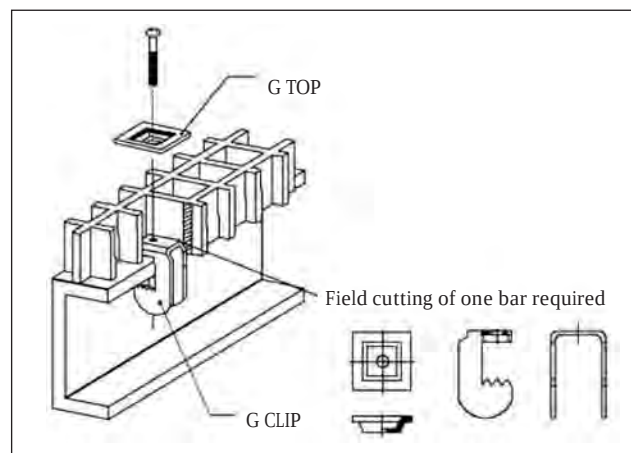
M Clips

"M" Clips clamp two load bars to the supporting member. This provides excellent hold down capability. "M" Clips are recommended for stair treads and most molded and pultruded gratings.

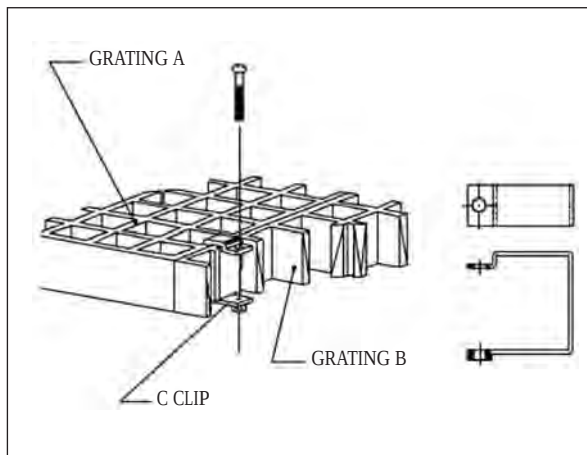


G Clips

"G" Clips are used to attach grating to any structural support without drilling for bolts. This not only provides excellent bidirectional holding capability for molded square mesh grating but also reduces installation labor cost.

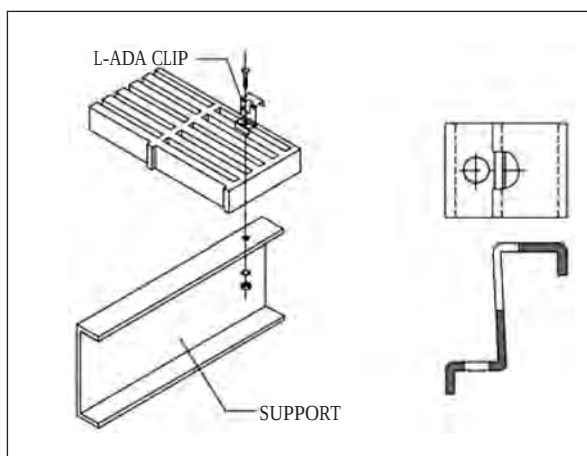
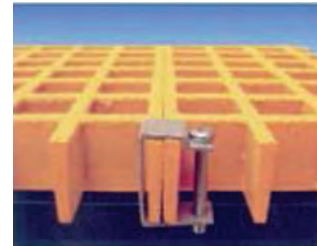


Molded & Pultruded Grating Clips



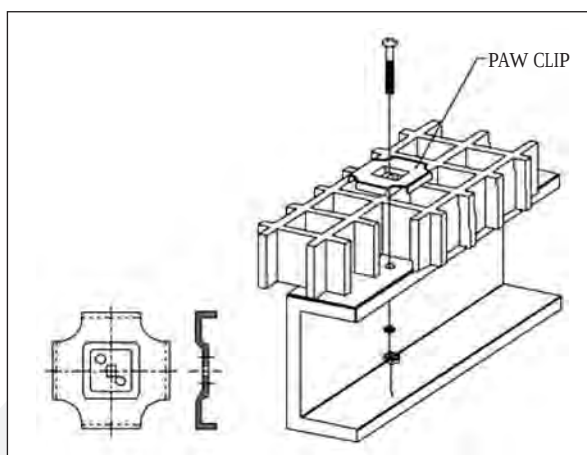
C Clips

"C" Clips are designed to attach two panels of molded gratings together. This helps minimize differential deflections when joints fall between supports.



L Clips

This lighter duty clip is used to hold one load bar to the support for lighter loads. It is available for both molded and pultruded gratings.



PAW Clips

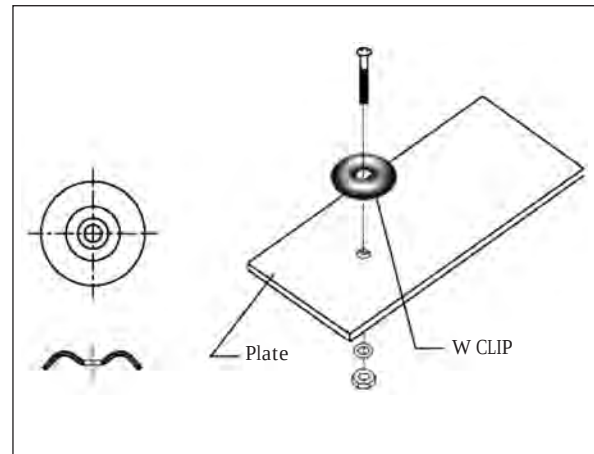
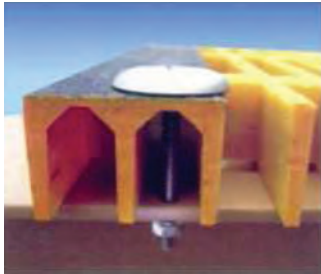
Mona Composites "PAW" Clip is used to maximize the hold down capacity of square mesh molded grating. These clips clamp 4 load bars to the support, offering excellent bidirectional resistance to loads from seismic or other lateral forces.



Molded & Pultruded Grating Clips

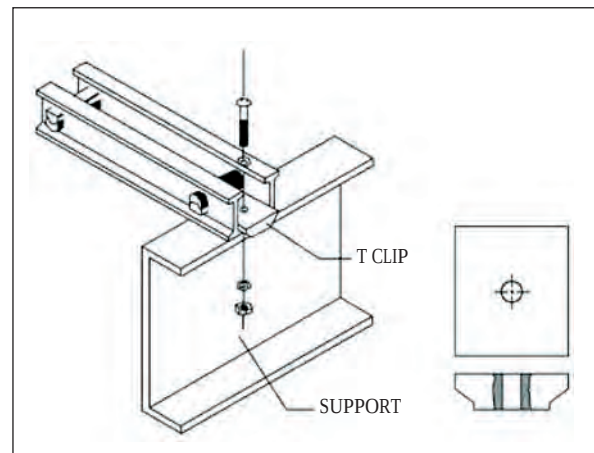
W Clips

"W" Clips are used to attach FRP plates, COVERED Molded or pultruded grating pieces to support members.



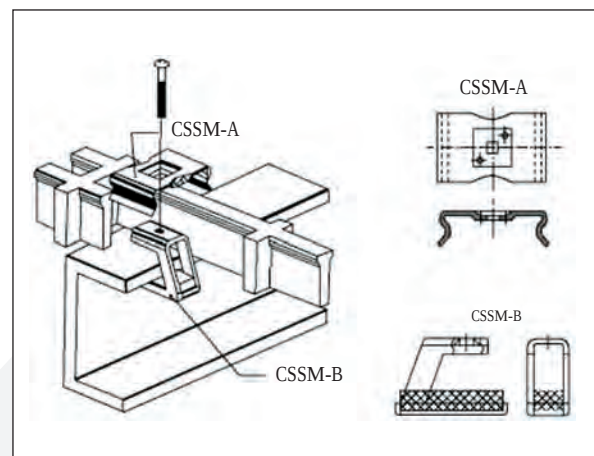
T Clips

"T" Clips are utilized when clips have to be below the pultruded grating surface. These clips should be specified in pairs as shown.



CSSM Clips - Plan A

Developed by our design team, the CSSM system is ideal for applications where vibration is an issue. This is a modified "G" Clip where jaw teeth that can damage steel coatings are replaced with a hard Neoprene Pad. Tightening the clip builds in a "spring" that minimizes loosening.



Chemical Resistance Chart

CHEMICAL ENVIRONMENT	% CONCENTRATION	TEMPERATURE	POLYESTER	ISOPHTHALIC	VINYLESTER
Acetic Acid	50	MAX	NR	NR	R
Acetone	100	75	NR	NR	NR
Alcohols	100	120	NR	NR	NR
Alum	ALL	MAX	R	NR	120
Aluminum Chloride	ALL	MAX	NR	NR	120
Aluminum Fluoride	20	75	SS	SS	R
Ammonium Hydroxide	30	75	NR	NR	R
Ammonium Salts-Neutral	ALL	120	R	R	R
Ammonium Salts-Aggressive	ALL	75	SSI	SSI	SSF
Aromatic Solvents	ALL	75	NR	NR	TEST
Barium Salts	ALL	MAX	R	R	R
Benzene	100	140	NR	SSI	SSI
Black Liquor (Pulp Mill)	ALL	MAX	NR	SSI	R
Bleach Liquor (Pulp Mill)	ALL	MAX	NR	SSI	R
Calcium Hydroxide	25	MAX	SSI	SSF	R
Calcium Hypochlorite	ALL	MAX	NR	SSI	R
Calcium Salts	ALL	MAX	R	R	R
Carbon Tetrachloride	100	75	NR	SSI	R
Chlorinated Hydrocarbons	100	75	TEST	TEST	TEST
Chlorine Dioxide	SAT	140	NR	NR	R
Chlorine Water	SAT	120	TEST	SSI	R
Chlorine, Wet	SAT	MAX	NR	NR	R
Chlorobenzene	100	75	NR	NR	SSF
Chlorobenzene	ALL	Up to 100	NR	NR	R
Chloroform	100	75	NR	NR	NR
Chromic Acid	50	140	NR	SSF	SSF
Citric Acid	ALL	MAX	R	R	R
Copper Cyanide Plating	ALL	125	SSI	SSF	R
Copper Salts	ALL	MAX	R	R	R
Crude Oil (Sweet or Sour)	ALL	MAX	R	R	R
Dichlorobenzene	100	75	NR	NR	NR
Ethers		75	NR	NR	NR
Ferric Chloride	100	MAX	R	R	R
Ferric Salts	ALL	MAX	R	R	R
Fluoride Salts+HCl	ALL	75	NR	SSF	R
Fluosilicic Acid	10	75	SSF	SSF	R
Formaldehyde	37	150	SSI	SSI	R
Formic Acid	25	100	SSI	SSF	R
Fuel (Diesel, Jet, Gasoline)	ALL	100	R	R	R
Glycerine	100	MAX	R	R	R
Green Liquor (Pulp Mill)	ALL	MAX	NR	NR	R
Hydrobromic Acid	48	MAX	NR	SSF	SSF
Hydrochloric Acid	10	MAX	NR	NR	R
Hydrochloric Acid	30	MAX	NR	NR	R
Hydrochloric Acid (concentrated)	ALL	Up to 180	NR	NR	SSI
Hydrocyanic Acid	ALL	MAX	NR	NR	R
Hydrofluoric Acid	20	75	NR	NR	SSF
Hydrogen Peroxide	30	75	NR	R	R
Lactic Acid	100	MAX	NR	R	R
Lime Slurry	SAT	MAX	R	R	R
Lithium Chloride	AT	MAX	NR	NR	NR
Lithium Salts	ALL	MAX	R	R	R
Magnesium Salts	ALL	MAX	R	R	R
Maleic Acid	100	MAX	NR	SSF	R
Mercury Chloride	100	MAX	R	R	R
Nickel Salts	ALL	MAX	R	R	R
Nitric Acid	20	120	SSI	SSF	R
Nitric Acid	35	100	NR	NR	R
Nitric Acid	40	Ambient	NR	NR	SSI
Nitric, Hydrofluoric	20:2	75	NR	NR	SSI
Nitrous Acid	10	75	R	R	R
Ozone for Sewage Treatment		100	R	R	R
Phenol	10	75	NR	NR	R
Phenol	88	Ambient	NR	NR	SSF
Phosphoric Acid	85	MAX	SSF	R	R
Phosphoric Acid, Super	115	MAX	TEST	SSI	R
Potassium Hydroxide	10	120	NR	SSI	R
Potassium Salts	ALL	MAX	R	R	R
Silver Nitrate	100	MAX	R	R	R
Sodium Cyanide	ALL	75	R	R	R
Sodium Hydroxide	50	MAX	NR	NR	120
Sodium Hydroxide	10	MAX	NR	NR	120
Sodium Hypochlorite (Stable)	10	100	SSI	SSF	R
Sodium Salts-Neutral	ALL	MAX	R	R	R
Sodium Salts-Aggressive	ALL	75	TEST	SSI	SSF
Sulfur Dioxide	SAT	MAX	NR	NR	R
Sulfuric Acid	25	MAX	NR	R	R
Sulfuric Acid	50	MAX	NR	NR	NR
Sulfuric Acid	75	100	NR	SSI	R
Toluene	100	120	NR	SSI	SSF
Trichloroethane1,1,1	ALL	75	NR	SSI	SSF
Trisodium Phosphate	50	MAX	SSI	SSI	R
Water (Fresh, Salt, Moderate D.I.)	100	MAX	R	R	R
Wet Chlorine/Hydrochloric Acid	10-20	Up to 350	NR	NR	SSF
White Liquor (Pulp Mill)	ALL	MAX	NR	NR	R
Zinc Chloride Plating	ALL	75	NR	SSF	R
Zinc Salts	100	MAX	R	R	R

NR = NOT RESISTANT

R = RESISTANT

SSI = SPLASHES & SPILLS INFREQUENT

SSF = SPLASHES & SPILLS FREQUENT

TEST = TEST ON PRODUCT



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