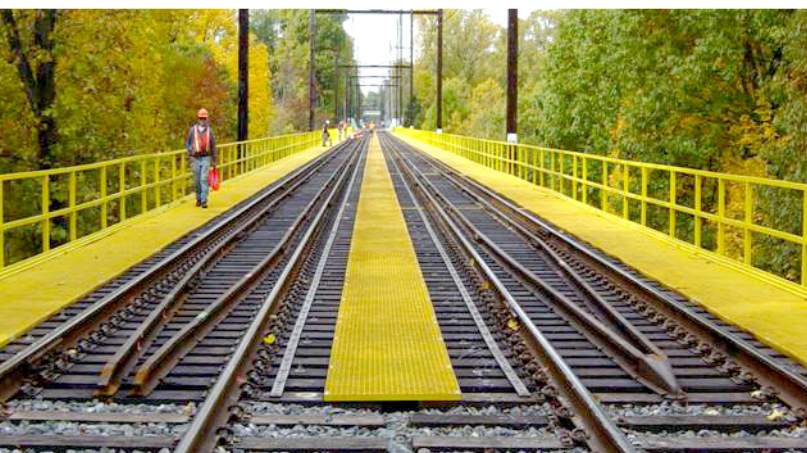


EXCLUSIVELY  
 MADE IN THE  
USA

**DURAGRATE**<sup>®</sup>

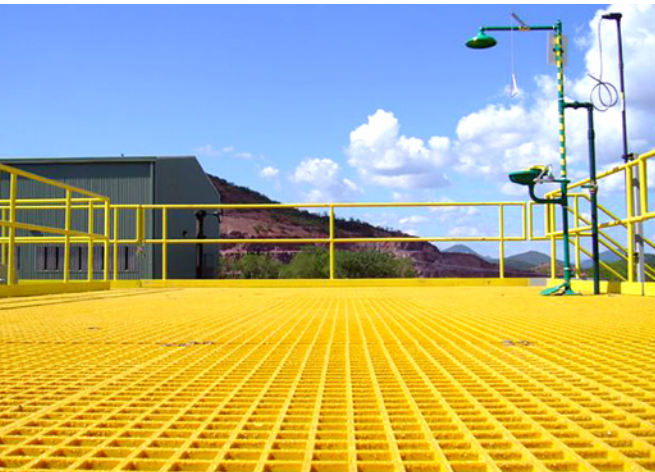
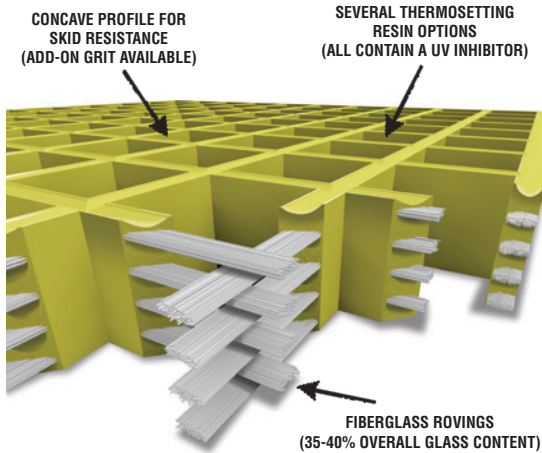
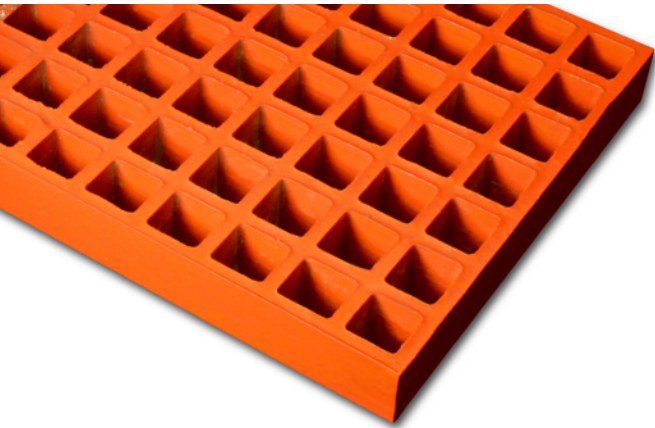
**MOLDED FIBERGLASS GRATING**

**METRIC**





# MOLDED FIBERGLASS GRATING



Corrosion resistant DURAGRATE® installed around the solvent extraction electrowinning (SXEW) process of a copper refinery in Piedras Verdes, Mexico.

## What is DURAGRATE®?

DURAGRATE® molded fiberglass grating is a premium-quality mesh grating panel made exclusively in the U.S.A. While molded grating is a chemical resistant flooring choice for many industrial applications, DURAGRATE® offers performance and quality superior to imported suppliers.

DURAGRATE® panels are molded in one piece and feature a concave non-slip walking surface. The panels allow for efficient on-site cutting to minimize grating waste. Load bearing bars in both directions allow for use without continuous side support.

DURAGRATE® molded fiberglass grating weighs significantly less than metal gratings while a high resin content provides excellent corrosion resistance which requires very little maintenance. A high glass content offers greater stiffness and strength resulting in a higher safety factor.

## Materials of Construction

DURAGRATE® molded fiberglass grating is composed of fiberglass rovings combined with a thermosetting resin. Standard resins are Isophthalic Polyester and Vinyl Ester. Special resins for additional fire retardancy, lower smoke, and high temperature are also available upon special request. All of the resins contain a UV inhibitor.

Standard DURAGRATE® grating has a concave profile on the upper surface for skid resistance. Grit tops are available upon request.

## Resin Systems Available\*

	Resin Code	Description	Resin Base	Corrosion Resistance	Flame Spread Index**	Smoke-Developed Index**
Standard	VE	Chemical Proof Fire Retardant	Vinyl Ester	Excellent	Class A, 25 or less	Class A, 450 or less
	ISO	Industrial Grade Fire Retardant	Isophthalic	Very Good	Class A, 25 or less	Class A, 450 or less
	FF	Food Grade Fire Retardant	Isophthalic	Very Good	Class A, 25 or less	Class A, 450 or less

\*Strongwell's standard colors are dark gray, green, yellow, orange, red, and light gray. Custom colors are available upon request.

\*\* Per ASTM E-84 Tunnel Test. DURAGRATE® panels are tested with the flame impinging the top side of the panel and separately with the flame impinging the bottom side of the panel. This ensures Class A performance is met in both configurations.

## DURAGRATE® molded fiberglass grating is:

- Corrosion Resistant
- Easy To Fabricate
- Fire Retardant
- Impact Resistant
- Low in Maintenance
- Low in Conductivity
- Lightweight
- Bidirectional Load Bearing
- Easy To Install
- Cost Effective
- Uniform in Appearance
- The Only Molded Grating Made Exclusively in the U.S.A.

# CERTIFICATIONS



## Fiberglass Grating Manufacturers Council (FGMC)

All DURAGRATE® molded fiberglass grating is manufactured in accordance with FGMC standards. All DURAGRATE® panels are tested and meet or exceed the mechanical properties of FGMC protocols.



## NSF

DURAGRATE® can be manufactured to meet NSF 61 certification for hot and cold upon request (VE resin system only).








## American Bureau of Shipping


Approved for use on a variety of ABS Class ships.

# TECHNICAL DATA

## Shapes, Sizes, and Availability

Standard DURAGRATE® Panels								
THICKNESS (mm)	MESH PATTERN (mm)	PANEL SIZE (m)		A (PER M OF WIDTH)	I (PER M OF WIDTH)	S (PER M OF WIDTH)	OPEN AREA	APPROX. WEIGHT
25.4	50.8 Square	1.22 x 3.66		3.05 x 10 <sup>3</sup> mm <sup>2</sup>	1.64 x 10 <sup>5</sup> mm <sup>4</sup>	1.29 x 10 <sup>4</sup> mm <sup>3</sup>	72%	11.8 kg/m <sup>2</sup>
25.4	38.1 Square	0.91 x 3.05	1.22 x 3.66	3.62 x 10 <sup>3</sup> mm <sup>2</sup>	1.91 x 10 <sup>5</sup> mm <sup>4</sup>	1.56 x 10 <sup>4</sup> mm <sup>3</sup>	70%	12.7 kg/m <sup>2</sup>
25.4	25.4 x 101.6 Rectangular	0.91 x 3.05	1.22 x 3.66	5.44 x 10 <sup>3</sup> mm <sup>2</sup>	3.00 x 10 <sup>5</sup> mm <sup>4</sup>	2.31 x 10 <sup>4</sup> mm <sup>3</sup>	69%	13.7 kg/m <sup>2</sup>
25.4	19.05 x 101.6 Rectangular  	1.22 x 3.66		8.13 x 10 <sup>3</sup> mm <sup>2</sup>	4.37 x 10 <sup>5</sup> mm <sup>4</sup>	3.44 x 10 <sup>4</sup> mm <sup>3</sup>	63%	14.2 kg/m <sup>2</sup>
38.1	38.1 Square	0.91 x 3.05	1.22 x 3.66	6.03 x 10 <sup>3</sup> mm <sup>2</sup>	6.96 x 10 <sup>5</sup> mm <sup>4</sup>	3.49 x 10 <sup>4</sup> mm <sup>3</sup>	70%	18.6 kg/m <sup>2</sup>
38.1	19.05 x 19.05 on Center (Top), 38.1 x 38.1 on Center (Bottom)  	1.22 x 3.66		7.98 x 10 <sup>3</sup> mm <sup>2</sup>	9.75 x 10 <sup>5</sup> mm <sup>4</sup>	4.26 x 10 <sup>4</sup> mm <sup>3</sup>	44%	22.0 kg/m <sup>2</sup>
38.1	25.4 x 50.8 Rectangular HD	1.22 x 1.83		13.72 x 10 <sup>3</sup> mm <sup>2</sup>	16.59 x 10 <sup>5</sup> mm <sup>4</sup>	8.71 x 10 <sup>4</sup> mm <sup>3</sup>	51%	29.5 kg/m <sup>2</sup>
50.8	50.8 Square	1.22 x 3.66		6.09 x 10 <sup>3</sup> mm <sup>2</sup>	13.11 x 10 <sup>5</sup> mm <sup>4</sup>	5.05 x 10 <sup>4</sup> mm <sup>3</sup>	72%	19.5 kg/m <sup>2</sup>

: Panels meet all ADA requirements for both mesh size (12.7mm open space) and slip resistance.

: Optionally available with a fine, slip-resistant, barefoot safe grit, suitable for residential or commercial pedestrian foot traffic.

NOTE: Custom panel sizes and resins are available upon request. Descriptions of available resin systems are located on the previous page.

## How to Specify

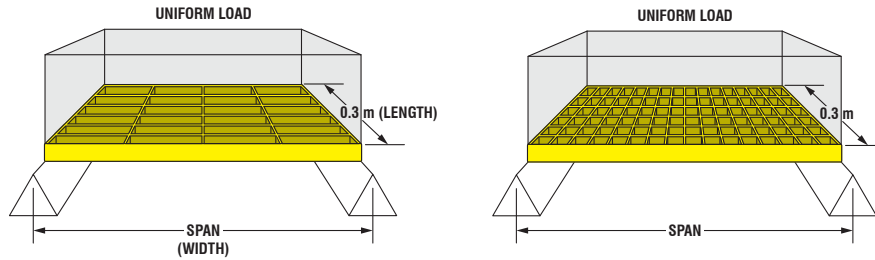
The molded fiberglass grating shall be DURAGRATE® as supplied by Strongwell. Grating panels shall be manufactured in the U.S.A. according to the standards set by the Fiberglass Grating Manufacturers Council (FGMC). Grating panels shall be (pick one from chart for thickness, mesh pattern, resin code) molded grid pattern. The grating shall be one-piece construction with the tops of the bearing bars and cross bars in the same plane. Surface shall be concave top or gritted.



DURAGRATE® was chosen for this all-FRP bascule bridge because it could be outfitted with a grit system surface proving maximum traction while still remaining a non-marking walking surface, even in wet conditions. This 11.6m long, 3m wide Cayman Islands bridge is capable of supporting up to 2,268 kg.

# LOAD TABLES FOR STANDARD RESIN SYSTEMS

## Molded Grating - Uniform Load (Deflection in Millimeters)



LOAD in KG / SQUARE METER (KG/M<sup>2</sup>)

SPAN (m)	STYLE (mm)		293	488	732	976	1221	2442	4882	9764	MAXIMUM RECOMMENDED LOAD (KG/M)	APPARENT EI (10 <sup>9</sup> N-CM <sup>2</sup> ) / METER of WIDTH
	DEPTH	MESH										
<b>0.30</b>	25.4	50.8 x 50.8	0.25	0.25	0.51	0.51	0.76	1.52	2.79		1845	0.02
	25.4	38.1 x 38.1	<0.25	0.25	0.25	0.51	0.51	1.02	2.03		2678	0.03
	25.4	25.4 x 101.6	<0.25	0.25	0.25	0.51	0.51	1.02	2.03		2916	0.03
	25.4	101.6 x 19.05	<0.25	0.25	0.25	0.25	0.25	0.76	1.52		3958	0.04
	38.1	38.1 x 38.1	<0.25	<0.25	<0.25	0.25	0.25	0.51	0.76	1.52	5535	0.07
	38.1	19.05 x 19.05	<0.25	<0.25	<0.25	0.25	0.25	0.25	0.76	1.52	5535	0.08
	50.8	50.8 x 50.8	<0.25	<0.25	<0.25	<0.25	0.25	0.25	0.51	1.27	6369	0.09
<b>0.46</b>	25.4	50.8 x 50.8	0.76	1.52	2.29	2.79	3.56				784	0.02
	25.4	38.1 x 38.1	0.51	1.02	1.52	2.03	2.29				1131	0.03
	25.4	25.4 x 101.6	0.51	0.76	1.02	1.52	1.78	3.56			1413	0.04
	25.4	101.6 x 19.05	0.51	0.76	1.02	1.52	1.78	3.56	7.11		1587	0.04
	38.1	38.1 x 38.1	0.25	0.25	0.51	0.51	0.76	1.52	2.79		2827	0.09
	38.1	19.05 x 19.05	0.25	0.25	0.51	0.51	0.76	1.27	2.54		2827	0.10
	50.8	50.8 x 50.8	<0.25	0.25	0.25	0.51	0.51	1.02	2.03	4.06	3571	0.13
<b>0.61</b>	25.4	50.8 x 50.8	2.79	4.57	6.86	9.14	11.43				394	0.02
	25.4	38.1 x 38.1	1.78	3.05	4.57	6.10	7.62				610	0.03
	25.4	25.4 x 101.6	1.27	2.29	3.56	4.57	5.84				795	0.04
	25.4	101.6 x 19.05	1.02	1.78	2.79	3.56	4.57	9.14			893	0.05
	38.1	38.1 x 38.1	0.51	0.76	1.27	1.78	2.03	4.06			1771	0.10
	38.1	19.05 x 19.05	0.51	0.76	1.27	1.52	2.03	3.81			1771	0.11
	50.8	50.8 x 50.8	0.25	0.51	0.76	1.27	1.52	2.79	5.84		2158	0.15
<b>0.76</b>	25.4	50.8 x 50.8	6.60	11.18							238	0.02
	25.4	38.1 x 38.1	4.57	7.37							381	0.03
	25.4	25.4 x 101.6	3.30	5.59							500	0.04
	25.4	101.6 x 19.05	2.79	4.57	6.60	8.89	11.18				577	0.05
	38.1	38.1 x 38.1	1.27	2.03	3.05	4.06	5.08				1131	0.10
	38.1	19.05 x 19.05	1.02	1.78	2.79	3.81	4.57				1131	0.11
	50.8	50.8 x 50.8	0.76	1.27	2.03	2.54	3.30	6.60			1345	0.16
<b>0.91</b>	25.4	50.8 x 50.8	13.97	23.11							139	0.02
	25.4	38.1 x 38.1	9.14	15.49							268	0.03
	25.4	25.4 x 101.6	6.86	11.68							353	0.04
	25.4	101.6 x 19.05	5.59	9.14	13.97						367	0.05
	38.1	38.1 x 38.1	2.29	3.81	5.84						734	0.11
	38.1	19.05 x 19.05	2.03	3.56	5.33						734	0.12
	50.8	50.8 x 50.8	1.52	2.54	3.56	4.83					903	0.18

Note: 25.4mm thick by 25.4mm x 101.6mm rectangular mesh grating panels are only available with a grit surface.

Note: 38.1mm thick by 25.4mm x 50.8mm rectangular mesh deflection data is not included here, contact Strongwell for more information.



LOAD in KG / SQUARE METER (KG/M<sup>2</sup>)

SPAN (m)	STYLE (mm)		293	488	732	976	1221	2442	4882	9764	MAXIMUM RECOMMENDED LOAD (KG/M)	APPARENT EI (10 <sup>9</sup> N-CM <sup>2</sup> ) / METER of WIDTH
	DEPTH	MESH										
<b>1.07</b>	38.1	38.1 x 38.1	4.57	7.87							502	0.10
	38.1	19.05 x 19.05	4.32	7.11							502	0.11
	50.8	50.8 x 50.8	2.54	4.32	6.35	8.64					663	0.19
<b>1.22</b>	38.1	38.1 x 38.1	8.89								327	0.09
	38.1	19.05 x 19.05	7.37								327	0.11
	50.8	50.8 x 50.8	4.32	7.37	10.92						506	0.19
<b>1.37</b>	38.1	38.1 x 38.1	13.97								234	0.09
	38.1	19.05 x 19.05	11.68								234	0.11
	50.8	50.8 x 50.8	7.11	11.68							397	0.19
<b>1.52</b>	50.8	50.8 x 50.8	10.67								315	2.0

Note: 25.4mm thick by 25.4mm x 101.6mm rectangular mesh grating panels are only available with a grit surface.

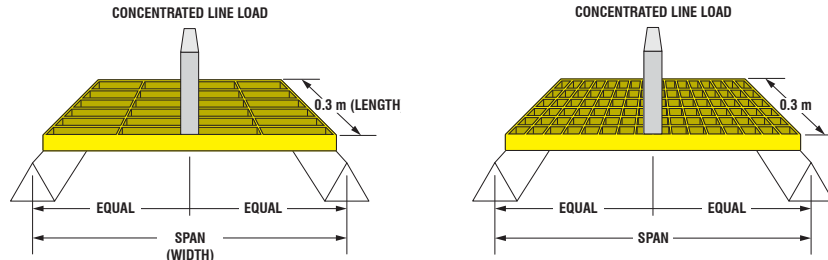
Note: 38.1mm thick by 25.4mm x 50.8mm rectangular mesh deflection data is not included here, contact Strongwell for more information.



38.1mm DURAGRATE<sup>®</sup> was chosen along with EXTREN<sup>®</sup> wide flange beams as the support structure for a walking surface around equipment at a lift station that houses a wet scrubber for foul air treatment. DURAGRATE<sup>®</sup> has a high resin content (65%) which provides extended maintenance-free performance.

# LOAD TABLES FOR STANDARD RESIN SYSTEMS

## Molded Grating - Concentrated Line Load (Deflection in Millimeters)



LOAD in KG / METER of WIDTH

SPAN (m)	STYLE (mm)		74	149	223	298	372	744	1488	2976	MAXIMUM RECOMMENDED LOAD (KG/M)	APPARENT EI (10 <sup>9</sup> N-CM <sup>2</sup> ) / METER of WIDTH	
	DEPTH	MESH											
<b>0.30</b>	25.4	50.8 x 50.8	0.51	0.76	1.27	1.52	1.78	3.05			923	0.02	
	25.4	38.1 x 38.1	0.25	0.25	0.51	0.76	1.02	1.78			1339	0.03	
	25.4	25.4 x 101.6	<0.25	0.25	0.51	0.51	0.76	1.52	3.05		1458	0.03	
	25.4	101.6 x 19.05	0.25	0.51	0.76	1.02	1.02	1.78	2.79		1979	0.04	
	38.1	38.1 x 38.1	<0.25	<0.25	<0.25	0.25	0.25	0.51	1.27	2.54		2768	0.07
	38.1	19.05 x 19.05	<0.25	<0.25	<0.25	0.25	0.25	0.51	1.27	2.29		2768	0.08
	50.8	50.8 x 50.8	<0.25	<0.25	<0.25	0.25	0.25	0.51	1.02	1.78		3185	0.09
<b>0.46</b>	25.4	50.8 x 50.8	1.02	1.78	2.54	3.56	4.32				588	0.02	
	25.4	38.1 x 38.1	0.51	1.02	1.78	2.29	2.79				848	0.03	
	25.4	25.4 x 101.6	0.51	0.76	1.27	1.52	2.03	4.06			1060	0.04	
	25.4	101.6 x 19.05	0.51	1.02	1.27	1.78	2.03	3.30	7.11		1191	0.04	
	38.1	38.1 x 38.1	<0.25	0.25	0.25	0.51	0.76	1.52	3.05		2121	0.09	
	38.1	19.05 x 19.05	<0.25	0.25	0.25	0.51	0.76	1.52	2.79		2121	0.10	
	50.8	50.8 x 50.8	<0.25	0.25	0.25	0.51	0.51	1.02	2.29	4.32		2679	0.13
<b>0.61</b>	25.4	50.8 x 50.8	2.29	4.32	6.35	8.38	10.41				394	0.02	
	25.4	38.1 x 38.1	1.27	2.54	3.81	5.08	6.10				610	0.03	
	25.4	25.4 x 101.6	1.02	1.78	2.79	3.81	4.83				795	0.04	
	25.4	101.6 x 19.05	1.02	1.78	2.29	3.05	3.81	7.37			893	0.05	
	38.1	38.1 x 38.1	0.25	0.51	1.02	1.27	1.52	3.30			1771	0.10	
	38.1	19.05 x 19.05	0.25	0.51	1.02	1.27	1.52	3.05			1771	0.11	
	50.8	50.8 x 50.8	<0.25	0.25	0.51	0.76	1.02	2.29	4.57		2158	0.15	
<b>0.76</b>	25.4	50.8 x 50.8	3.81	7.62	11.18						298	0.02	
	25.4	38.1 x 38.1	2.29	4.83	7.11						476	0.03	
	25.4	25.4 x 101.6	1.78	3.56	5.33	7.11					625	0.04	
	25.4	101.6 x 19.05	1.52	2.79	4.32	5.84	7.11	14.22			722	0.05	
	38.1	38.1 x 38.1	0.51	1.27	1.78	2.54	3.05	6.35			1414	0.10	
	38.1	19.05 x 19.05	0.51	1.27	1.78	2.29	3.05	5.84			1414	0.11	
	50.8	50.8 x 50.8	0.25	0.76	1.27	1.52	2.03	4.06			1682	0.16	
<b>0.91</b>	25.4	50.8 x 50.8	6.10	12.19							208	0.02	
	25.4	38.1 x 38.1	3.81	7.62							402	0.03	
	25.4	25.4 x 101.6	3.05	6.10							530	0.04	
	25.4	101.6 x 19.05	2.54	4.83	7.11	9.40	11.68				551	0.05	
	38.1	38.1 x 38.1	1.02	2.03	3.05	4.06	5.08				1101	0.11	
	38.1	19.05 x 19.05	1.02	1.78	2.79	3.81	4.83				1101	0.12	
	50.8	50.8 x 50.8	0.51	1.27	1.78	2.54	3.05	6.35			1354	0.18	

Note: 25.4mm thick by 25.4mm x 101.6mm rectangular mesh grating panels are only available with a grit surface.

Note: 38.1mm thick by 25.4mm x 50.8mm rectangular mesh deflection data is not included here, contact Strongwell for more information.

LOAD in KG / METER of WIDTH

SPAN (m)	STYLE (mm)		74	149	223	298	372	744	1488	2976	MAXIMUM RECOMMENDED LOAD (KG/M)	APPARENT EI (10 <sup>9</sup> N-CM <sup>2</sup> ) / METER of WIDTH
	DEPTH	MESH										
<b>1.07</b>	25.4	38.1 x 38.1	6.10						327	0.03		
	25.4	25.4 x 101.6	4.83	9.91						452	0.04	
	25.4	101.6 x 19.05	3.81	7.87	11.68						469	0.05
	38.1	38.1 x 38.1	1.78	3.56	5.33	7.11	8.89		878	0.10		
	38.1	19.05 x 19.05	1.52	3.30	4.83	6.60	8.13		878	0.11		
	50.8	50.8 x 50.8	0.76	1.78	2.79	3.81	4.83		1161	0.19		
<b>1.22</b>	38.1	38.1 x 38.1	2.79	5.84	8.64	11.68				655	0.09	
	38.1	19.05 x 19.05	2.54	4.83	7.37	9.65				655	0.11	
	50.8	50.8 x 50.8	1.27	2.79	4.32	5.84	7.11		1012	0.19		
<b>1.37</b>	38.1	38.1 x 38.1	4.06	8.38						527	0.09	
	38.1	19.05 x 19.05	3.56	6.86						527	0.11	
	50.8	50.8 x 50.8	2.03	4.06	6.10	8.13	10.41		893	0.19		
<b>1.52</b>	50.8	50.8 x 50.8	2.79	5.59	8.38	11.43				789	0.19	

Note: 25.4mm thick by 25.4mm x 101.6mm rectangular mesh grating panels are only available with a grit surface.

Note: 38.1mm thick by 25.4mm x 50.8mm rectangular mesh deflection data is not included here, contact Strongwell for more information.

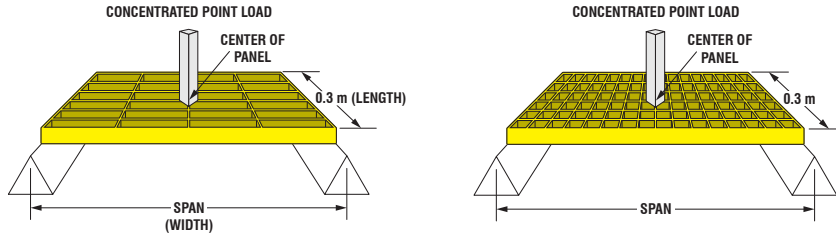


This 55-meter ski jump in Eau Claire, WI utilized DURAGRATE® molded grating and stair treads within the skier access and walking areas. Epoxy grit was applied to aid in long term slip resistance. DURAGRATE® allows for snow to melt or disperse through the grating, preventing excessive snow buildup which would have created slip hazards.

# LOAD TABLES FOR STANDARD RESIN SYSTEMS

## Molded Grating - Concentrated Point Load (Deflection in Millimeters)

Note: This loading criteria is not recognized by Fiberglass Composites Grating Manual



LOAD in KG

SPAN (m)	STYLE (mm)		74	149	223	298	372	744	1488	2976	APPARENT EI (10 <sup>9</sup> N-CM <sup>2</sup> ) / METER of WIDTH
	DEPTH	MESH									
<b>0.30</b>	25.4	50.8 x 50.8	<0.25	<0.25	<0.25	<0.25	0.25	0.51	1.27	2.29	0.02
	25.4	38.1 x 38.1	<0.25	<0.25	<0.25	<0.25	<0.25	0.51	0.76	1.52	0.03
	25.4	25.4 x 101.6	<0.25	<0.25	<0.25	<0.25	<0.25	0.51	0.76	1.52	0.03
	25.4	101.6 x 19.05	<0.25	<0.25	<0.25	<0.25	<0.25	0.25	0.51	1.27	0.04
	38.1	38.1 x 38.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.25	0.76	0.07
	38.1	19.05 x 19.05	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.25	0.51	0.08
	50.8	50.8 x 50.8	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.51	0.09
<b>0.46</b>	25.4	50.8 x 50.8	<0.25	0.51	0.51	0.76	1.02	2.03	3.81	7.62	0.02
	25.4	38.1 x 38.1	<0.25	0.25	0.51	0.51	0.76	1.27	2.54	5.08	0.03
	25.4	25.4 x 101.6	<0.25	<0.25	0.25	0.51	0.51	1.02	2.03	3.81	0.04
	25.4	101.6 x 19.05	<0.25	<0.25	0.25	0.51	0.51	1.02	2.03	3.81	0.04
	38.1	38.1 x 38.1	<0.25	<0.25	<0.25	<0.25	<0.25	0.51	0.76	1.52	0.09
	38.1	19.05 x 19.05	<0.25	<0.25	<0.25	<0.25	<0.25	0.25	0.76	1.52	0.10
	50.8	50.8 x 50.8	<0.25	<0.25	<0.25	<0.25	<0.25	0.25	0.51	1.02	0.13
<b>0.61</b>	25.4	50.8 x 50.8	0.51	1.02	1.27	1.78	2.29	4.57	9.14		0.02
	25.4	38.1 x 38.1	0.25	0.51	1.02	1.27	1.52	3.05	6.10		0.03
	25.4	25.4 x 101.6	<0.25	0.51	0.76	1.02	1.27	2.29	4.57	9.14	0.04
	25.4	101.6 x 19.05	<0.25	0.25	0.51	0.76	1.02	1.78	3.56	7.37	0.05
	38.1	38.1 x 38.1	<0.25	<0.25	<0.25	0.25	0.51	0.76	1.78	3.30	0.10
	38.1	19.05 x 19.05	<0.25	<0.25	<0.25	0.25	0.51	0.76	1.52	3.05	0.11
	50.8	50.8 x 50.8	<0.25	<0.25	<0.25	<0.25	0.25	0.51	1.27	2.29	0.15
<b>0.76</b>	25.4	50.8 x 50.8	1.02	1.78	2.79	3.56	4.57	8.89			0.02
	25.4	38.1 x 38.1	0.51	1.27	1.78	2.29	3.05	5.84			0.03
	25.4	25.4 x 101.6	0.51	1.02	1.27	1.78	2.29	4.57	8.89		0.04
	25.4	101.6 x 19.05	0.25	0.76	1.02	1.52	1.78	3.56	7.11		0.05
	38.1	38.1 x 38.1	<0.25	0.25	0.51	0.76	0.76	1.52	3.30		0.10
	38.1	19.05 x 19.05	<0.25	0.25	0.51	0.51	0.76	1.52	3.05		0.11
	50.8	50.8 x 50.8	<0.25	<0.25	0.25	0.51	0.51	1.02	2.03	4.32	0.16
<b>0.91</b>	25.4	50.8 x 50.8	1.52	3.05	4.57	6.10	7.62				0.02
	25.4	38.1 x 38.1	1.02	2.03	3.05	4.06	5.08				0.03
	25.4	25.4 x 101.6	0.76	1.52	2.29	3.05	3.81	7.62			0.04
	25.4	101.6 x 19.05	0.51	1.27	1.78	2.54	3.05	6.10			0.05
	38.1	38.1 x 38.1	0.25	0.51	0.76	1.02	1.27	2.54	5.08		0.11
	38.1	19.05 x 19.05	<0.25	0.51	0.76	1.02	1.27	2.29	4.83		0.12
	50.8	50.8 x 50.8	<0.25	0.25	0.51	0.76	0.76	1.52	3.30	6.60	0.18

Note: 25.4mm thick by 25.4mm x 101.6mm rectangular mesh grating panels are only available with a grit surface.

Note: 38.1mm thick by 25.4mm x 50.8mm rectangular mesh deflection data is not included here, contact Strongwell for more information.

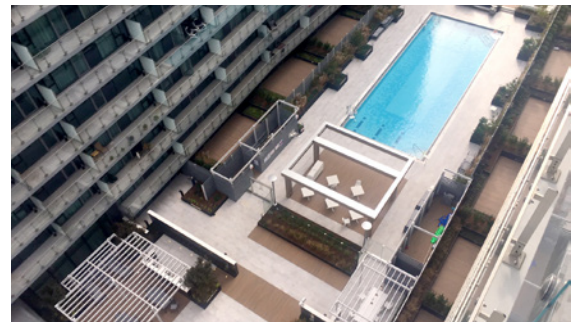


LOAD in KG

SPAN (m)	STYLE (mm)		74	149	223	298	372	744	1488	2976	APPARENT EI (10 <sup>9</sup> N-CM <sup>2</sup> ) / METER of WIDTH
	DEPTH	MESH									
<b>1.07</b>	25.4	38.1 x 38.1	1.52	3.30	4.83	6.60					0.03
	25.4	25.4 x 101.6	1.27	2.54	3.56	4.83	6.10				0.04
	25.4	101.6 x 19.05	1.02	2.03	3.05	3.81	4.83				0.05
	38.1	38.1 x 38.1	0.51	1.02	1.27	1.78	2.29	4.57	8.89		0.10
	38.1	19.05 x 19.05	0.51	0.76	1.27	1.52	2.03	4.06	8.13		0.11
	50.8	50.8 x 50.8	<0.25	0.51	0.76	1.02	1.27	2.54	4.83		0.19
<b>1.22</b>	38.1	38.1 x 38.1	0.76	1.52	2.29	3.05	3.56	7.37			0.09
	38.1	19.05 x 19.05	0.51	1.27	1.78	2.54	3.05	6.10			0.11
	50.8	50.8 x 50.8	0.25	0.76	1.02	1.52	1.78	3.56	7.37		0.19
<b>1.37</b>	38.1	38.1 x 38.1	1.02	2.03	3.05	4.06	5.33				0.09
	38.1	19.05 x 19.05	0.76	1.78	2.54	3.56	4.32				0.11
	50.8	50.8 x 50.8	0.51	1.02	1.52	2.03	2.54	5.33			0.19
<b>1.52</b>	50.8	50.8 x 50.8	0.76	1.52	2.03	2.79	3.56	7.11			0.19

Note: 25.4mm thick by 25.4mm x 101.6mm rectangular mesh grating panels are only available with a grit surface.

Note: 38.1mm thick by 25.4mm x 50.8mm rectangular mesh deflection data is not included here, contact Strongwell for more information.



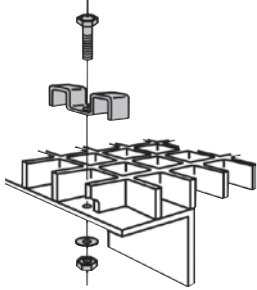
This New York City, NY housing development used DURAGRATE® as subflooring material for their rooftop space. The landscape architect needed a lightweight, bi-directional load, subflooring product which could be easily fabricated onsite.

# ACCESSORIES

## PANEL INSTALLATION CLIPS

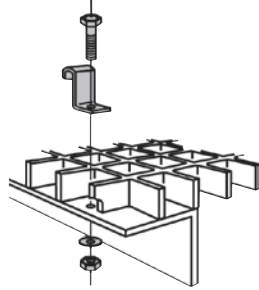
### Type M Clips

For attaching grating to supports.



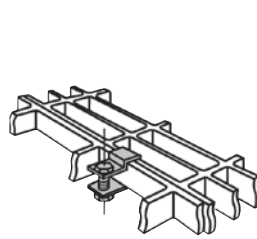
### Type J Clips

For attaching grating to supports for moderate loads.



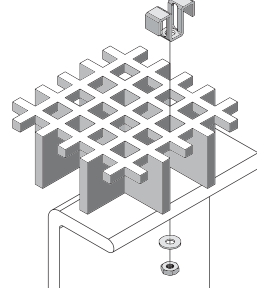
### Type C Clips

For joining two unsupported edges if needed.

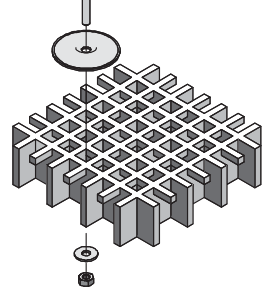


### Clips for panels with 19.05mm mesh

Type M Clips



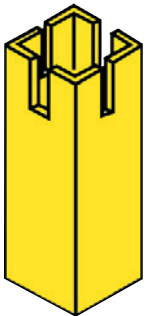
Surface Mount Clips



## ELEVATED FLOOR SYSTEM

Fixed and adjustable legs for molded grating are available to provide sturdy support for elevated flooring. Contact Strongwell with your exact requirements.

### Fixed Leg

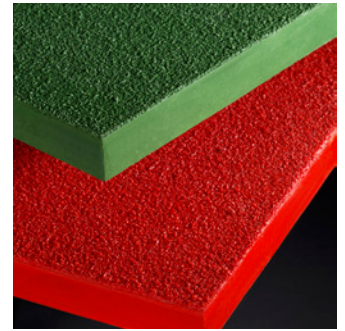


### Adjustable Leg

Fits all square mesh grating panels including Mini Mesh. Comprised of two compression molded parts separated by a section of FIBREBOLT® threaded rod. See the *Adjustable Grating Pedestal Layout Guide* for more information.

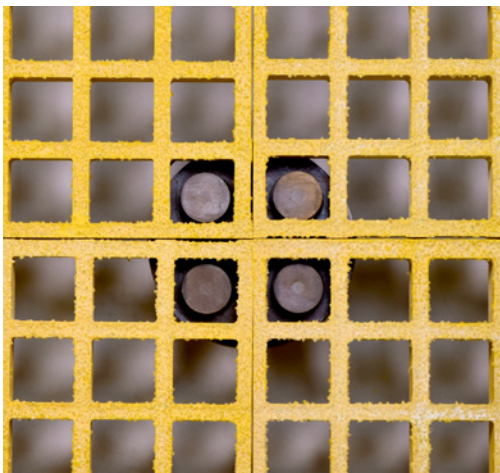
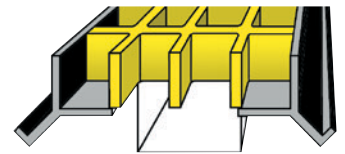
## SOLID SURFACE

DURAGRATE® is available with an integral cover bonded to the top surface with a slip resistant grit surface. Integrating a solid surface to DURAGRATE® at the time of manufacture yields approximately 30% additional stiffness over standard DURAGRATE® panels.



## CURB ANGLE

Strongwell's pultruded fiberglass Curb Angle provides a strong, firm base for bearing bars. Standard Curb Angle is produced using a gray, fire retardant vinyl ester resin system and is available in three sizes.

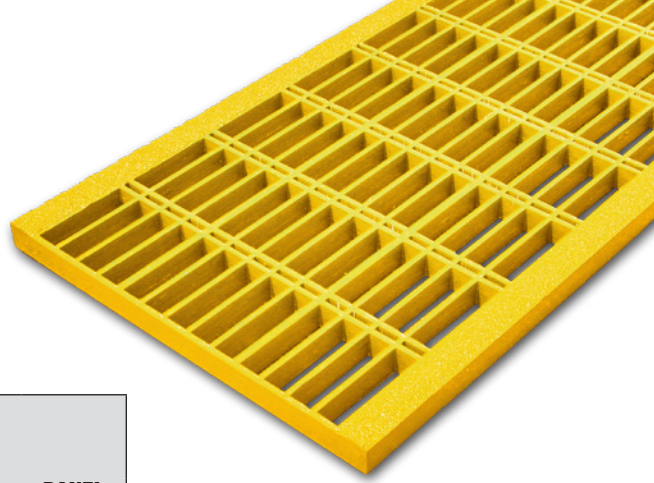


## SEALING KITS

To maintain corrosion resistance and structural integrity, standard resin sealing kits are available to protect the exposed ends of cut panels and other components.

# STAIR TREADS

DURAGRATE® molded fiberglass stair treads are available in a 38.1mm thick 38.1mm x 152.4mm rectangular mesh pattern. The standard panel size is 0.57m x 3.05m. Stair treads can be produced in any of the standard DURAGRATE® resin systems. The stair tread panel comes complete with anti-slip nosing.



## DURAGRATE® Stair Tread

THICKNESS (mm)	MESH (mm)	PANEL SIZE (m)	MAXIMUM SPAN FOR 136.08 kg AT MID-SPAN		OPEN AREA	PANEL WEIGHT
			3.2mm OR LESS DEFLECTION	6.4mm OR LESS DEFLECTION		
38.1	38.1 x 152.4	0.57 x 3.05	0.79m	0.97m	67%	27.22 kg

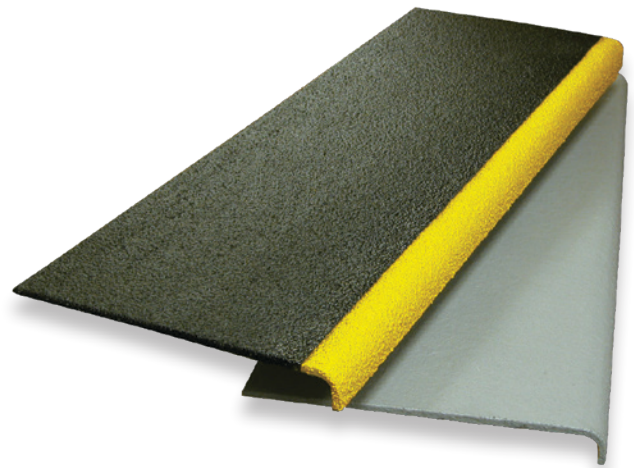
# DURATREAD™ STAIR TREAD COVERS

DURATREAD™ molded fiberglass stair tread covers provide an easy, cost-effective way to increase the safety of stairways. The covers are intended for installation over concrete, metal, or wood steps. Fiberglass stair treads may also be covered with DURATREAD™ covers.

DURATREAD™ stair tread covers are ideal for use in any area where frequent use or exposure to slippery environments increases the risk of accidents. The ADA-compliant covers feature a durable gritted surface and a highly visible nosing to ensure years of safe, maintenance-free service. DURATREAD™ covers also improve the appearance of warped, chipped, and rotten steps and are perfect for use in commercial building applications where it is important to maintain an attractive appearance. DURATREAD™ can be customized with various colors and stenciled safety messages.

DURATREAD™ covers are available in thicknesses of 3.18mm and 6.35mm. Standard depths are 203mm, 229mm, 254mm, 279mm, and 305mm.

For more information, see the DURATREAD™ Flyer.



*These rail station stairs in Baltimore, MD were renovated with DURATREAD™ stair tread covers, allowing the train station to keep the existing stairs, reduce downtime, and saver time and money in the process of the upgrade.*





**STRONGWELL**

*ISO 9001 Quality Certified Manufacturing Plants*

**BRISTOL LOCATION**

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Bristol, VA 24201 USA

(276) 645-8000

[www.strongwell.com](http://www.strongwell.com)