RIGIDEX[®] Fiberglass Moltruded Grating

High Strength-to-Weight Ratio

Slip Resistant

Corrosion Resistant

Low Maintenance

Low Installation Cost



Composite Structures

High Performance Composite Solutions



RIGIDEX[®] Moltruded[®] Grating

RIGIDEX[®] fiberglass moltruded[®] grating is the first grating to combine the high performance of fiberglass reinforced plastic (FRP) molded and pultruded grating construction at a cost more competitive with metal products. With the introduction of this revolutionary product, a new class of grating is now available to meet the needs of both pedestrian and industrial use.

RIGIDEX is engineered to be lighter than metal, molded or pultruded grating. Though lighter, this remarkable new grating offers excellent stiffness characteristics, while maintaining a high level of corrosion resistance. Based on its unique, one-piece unitized construction and high resin to glass ratio, RIGIDEX delivers corrosion resistance that is superior to galvanized and aluminum grating products. Even with its many advantages, RIGIDEX is competitively priced with maintenance-intensive metal grating.

RIGIDEX is available in 1-1/2" depth with 1-1/2" x 4" mesh pattern. Stock panel sizes include 4' widths and 8' lengths (load bars run in the length direction). RIGIDEX is standard in the Corvex[®] resin which has a flame spread of 25 or less.

High Strength

RIGIDEX is manufactured by the moltruded process where a high number of fiberglass rovings are uniquely placed to deliver superior unidirectional strength.

Tie bars occupy only the top half of the grating allowing more fiberglass rovings where they provide the most strength— in the lower half of the load bars. This unique design increases the cost effectiveness of the grating since the grating can span greater distances, so fewer structural supports are required.

Corrosion Resitance

RIGIDEX delivers corrosion resistance superior to that of metallic grating, ensuring a long, low maintenance life. RIGIDEX is composed of 65% resin and 35% fiberglass; this resin-to-glass ratio is key to its high level of corrosion resistance. In addition, the gratings' one-piece, molded design eliminates holes and mechanical joints to improve corrosion resistance and extend the life of the grating. RIGIDEX grating requires virtually no maintenance throughout its extended life cycle.

Lightweight, Easy To Install

At just over 2 pounds per square foot, RIGIDEX sets a new standard for strength in a lightweight product. Based on its light weight, RIGIDEX can significantly decrease the overall cost of installation and shipping.

Installation of RIGIDEX grating can be performed without a large team (two people can lift a 4' x 8' panel), and cutting requires only circular or jig saws. No heavy lifting machinery, cutting torches or welding equipment is required for installation.

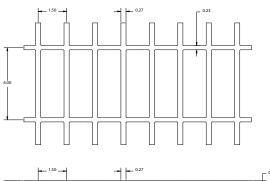
Large Open Area, Easy To Clean

Featuring over 79% open area, RIGIDEX meets a number of safety and operational considerations by providing for high volume ventilation and airflow, increased visibility and light penetration.

The large open area of RIGIDEX, combined with its unique construction, also allows for thorough cleaning. Because the tie bars used in RIGIDEX do extent to the full depth of the grating, they provide less of an obstruction to the flow of cleaning solutions.

Product Details and Load Tables

Product Details

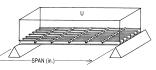




U ∆U Uniform Load - psf Uniform Load Deflection - in

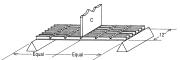
1-1/2" 1-1/2" x 4" 4' x 8' Corvex Grit Light Gray 25 or less

Uniform Load Table - Deflection in Inches



CLEAR SPAN (in)	STYLE				UNIF	MAXIMUM	ULTIMATE				
	DEPTH (in)	MESH (in x in)	50	65	100	200	300	500	1000	RECOMMENDED LOAD (psf)	CAPACITY (psf)
12	1-1/2	1-1/2 x 4	<.01	<.01	<.01	<.01	<.01	0.01	0.03	1644	8220
18	1-1/2	1-1/2 x 4	<.01	<.01	0.01	0.02	0.04	0.06	0.12	1180	7080
24	1-1/2	1-1/2 x 4	0.02	0.02	0.04	0.07	0.11	_	_	482	3855
30	1-1/2	1-1/2 x 4	0.04	0.06	0.08	0.17	0.25	_	_	306	2450
36	1-1/2	1-1/2 x 4	0.08	0.11	0.17	0.34	—	_	_	211	1690
42	1-1/2	1-1/2 x 4	0.15	0.20	0.31			_	_	154	1233
48	1-1/2	1-1/2 x 4	0.26	0.33	0.51	_	_	—	—	117	938
54	1-1/2	1-1/2 x 4	0.41	0.53				_	_	88	704
60	1-1/2	1-1/2 x 4	0.62	0.81	_	_	_	—	—	68	540

Concentrated Line Load Table - Deflection in Inches



SPAN (in.)

 $\begin{array}{c} \mathsf{C} & \mathsf{Concentrated Line Load - psf of width} \\ \Delta \mathsf{C} & \mathsf{Concentrated Line Load Deflection - in} \end{array}$

CLEAR SPAN (in)	STYLE			LI	NE LOAD (MAXIMUM	ULTIMATE			
	DEPTH (in)	MESH (in x in)	50	100	200	300	500	1000	RECOMMENDED LOAD (Ib)	CAPACITY (lb)
12	1-1/2	1-1/2 x 4	<.01	<.01	<.01	0.01	0.02	0.05	1644	8220
18	1-1/2	1-1/2 x 4	<.01	0.01	0.03	0.04	0.06	_	885	5310
24	1-1/2	1-1/2 x 4	0.01	0.03	0.06	0.09	_	_	482	3855
30	1-1/2	1-1/2 x 4	0.03	0.05	0.11	0.16	_	_	383	3063
36	1-1/2	1-1/2 x 4	0.04	0.09	0.18	0.27	_	_	317	2535
42	1-1/2	1-1/2 x 4	0.07	0.14	0.28	_	_	_	270	2158
48	1-1/2	1-1/2 x 4	0.10	0.20	0.41	_	_	_	235	1875
54	1-1/2	1-1/2 x 4	0.15	0.29	_	_	_	_	198	1583
60	1-1/2	1-1/2 x 4	0.20	0.40	_	_	_	_	169	1350

NOTES:

1. Functionality of grating is limited to MAXIMUM RECOMMENDED LOAD. The designer should not exceed this MAXIMUM RECOMMENDED LOAD at any given span.

2. ULTIMATE CAPACITY represents a complete and total failure of the grating. Values are provided to illustrate the reserve strength of the grating at a given span and are NOT to be used for design. Functionality of grating is limited to MAX RECOMMENDED LOAD. 3. Walking loads, typically 50-65 pst maximum are recommended for pedestrian traffic. Deflections for worker comfort are typically limited to the lesser of 3/8" or CLEAR SPAN divided by 125; for a firmer feel, limit deflec-

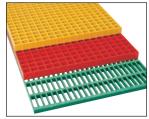
tion to the lesser of 1/1" or CLEAR SPAN divided by 200.
The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a maximum of ONE-HALF the values shown. Long-term

4. The allowable loads in this table are for STATE LOAD CONDITIONS at ambient temperatures only. Allowable loads to impact of dynamic conducts should be a maximum of ONE-TALE in evalues shown. Early en loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to ASCE Structural Plastics Design Manual.

5. All gratings were tested in accordance with the proposed standard of the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association (ACMA).



Fibergrate Products and Services

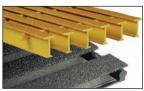


Fibergrate[®] Molded Grating

Fibergrate molded gratings are designed to provide the ultimate in reliable performance, even in the most demanding conditions. Fibergrate offers the widest selection in the market with more than ten resins and more than twenty grating configurations available in many panel sizes and surfaces.

Safe-T-Span[®] Pultruded Industrial and Pedestrian Gratings

Combining corrosion resistance, long-life and low-maintenance designs, Safe-T-Span provides unidirectional strength for industrial and pedestrian pultruded grating applications.





RIGIDEX® Moltruded® Grating

RIGIDEX moltruded gratings are the first fiberglass gratings to combine the corrosion resistance of molded grating with the longer span capacity of pultruded grating, all at the low cost of metal gratings.

Dynarail[®] Handrail

Easily assembled from durable prefabricated components or engineered to your specifications, Dynarail handrail meets or exceeds OSHA and strict building code requirements for safety and design.





Dynarail[®] Safety Ladder System

Easily assembled on site, Dynarail safety ladder systems meet or exceed OSHA requirements. Though less costly than prefabricated ladder systems, these safety ladders provide a custom fit to the supporting structure.

Dynaform® Structural Shapes

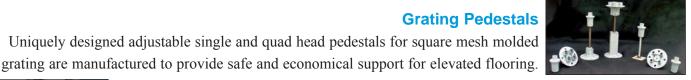
Fibergrate offers a wide range of pultruded structural components for industrial use, including bars, rods, tubes, beams, channels, leg angles and plates.



Stair Solutions

Fibergrate offers a wide range of slip-resistant products to meet your stair safety needs. These durable products which include treads, tread covers and covered stair treads are a long-term, cost-efficient solution for your facility.

Grating Pedestals





Fabrication Services

Combining engineering expertise with an understanding of fiberglass applications, Fibergrate provides turnkey design and fabrication of fiberglass structures, including platforms, catwalks, stairways and test racks.

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Fibergrate Composite Structures Inc. Phone: 800-527-4043 • Fax: 972-250-1530 www.fibergrate.com • Email: info@fibergrate.com



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