



Fiberglass Stair Solutions

Slip Resistant

Corrosion Resistant

Low Maintenance

Fire Retardant

Highly Durable

Nonconductive

Impact Resistant

Low Installation Cost

Long Service Life

Fibergrate
Composite Structures

High Performance Composite Solutions

Stair Solutions - Molded Stair Treads



Chemtred® Panels

Chemtred is an open grating type stair tread with tapered bars that allow self-cleaning. Chemtred is molded with an integral solid contrasting nosing and integral slip-resistant grit top. There are two specially designed panel sizes and bars are on 1-1/2" x 6" centers. Panels are available in all Chemgrate resins.

Standard Chemtred® Panels

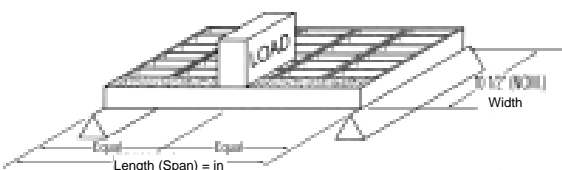
Depth	Mesh	Panel Size	Weight	Open Area
1-1/2"	1-1/2" x 6"	21-1/2" x 120-1/2"	72 lbs.	67%
1-1/2"	1-1/2" x 6"	27-3/8" x 144-1/2"	103 lbs.	67%

Chemtred® Load Table *(see notes below)*

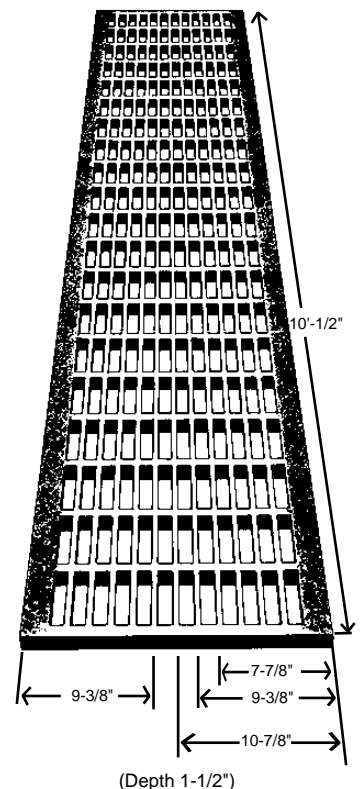
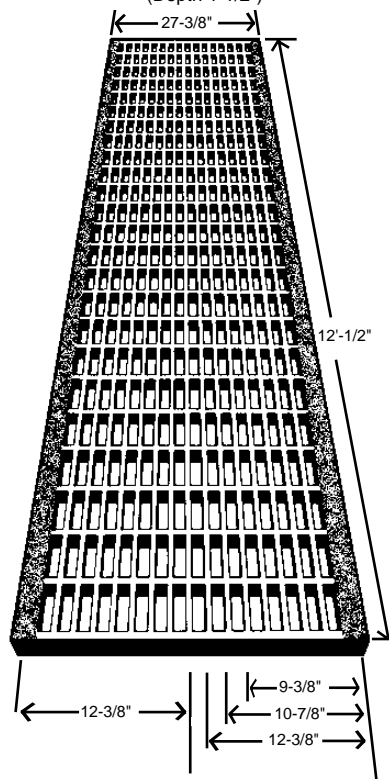
Load	Span (in)	18	24	30	36	42	48
(lb)	Span/150	0.12	0.16	0.20	0.24	0.28	0.32
250		0.03	0.05	0.09	0.14	0.25	0.41
500		0.06	0.10	0.18	0.29	0.50	—

Notes:

1. It is suggested that stair tread deflections be limited to Span/150. Deflections based on this ratio are at the top of the tables.
2. Deflections in the body of the tables are for concentrated loads of both 250 and 500 lbs. A concentrated load is applied at the centerline of the tread, an area of 4" along the length and 6" along the width, starting at the nosing edge to simulate the landing of a foot.
3. Stair treads with square mesh for longer spans are available by custom order. Please contact Fibergrate for more information.

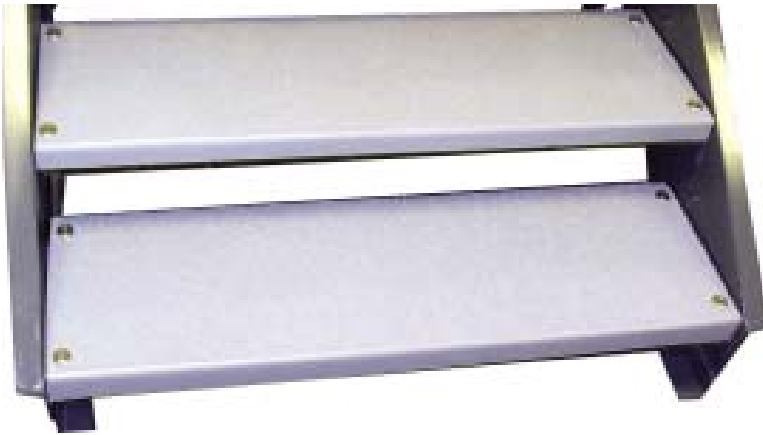


Approximate Weight 103 lb
Normally for 42-1/2", 48-1/2",
54-1/2" & 60-1/2" tread sizes
(Depth 1-1/2")



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Stair Solutions - Covered Stair Treads



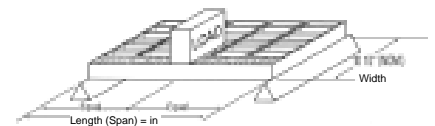
Fibergate® Covered Stair Treads

Designed as an alternative to the heavy, high-maintenance concrete or slippery metal and wood steps, covered stair treads are designed for commercial and architectural applications where slip resistance, aesthetics and low maintenance are important considerations. Covered stair treads are available in a light grey color FS-25 resin and has an integral grit top which

comes in two slip-resistant textures — coarse and fine which is suitable even for barefoot traffic. With the solid impact-resistant cover, they are high heel friendly. They can perform well in many corrosive environments including salt, continuous moisture and constant cleaning. The lightweight tread weighs less than 20 percent of a precast concrete step and can be easily fabricated and installed with simple wood working tools. Covered stair treads come in 12' lengths that are designed to be cut and installed on-site with a circular saw and an abrasive masonry blade. This product is ideal for motels, universities, commercial office parks and aquatic parks or any structure with outdoor stairs.

Standard Covered Stair Tread Panels

Depth	Panel Size	Weight
1-5/8"	10-5/8" x 12'	50 lbs.
1-5/8"	12-1/4" x 12'	60 lbs.
2-1/8"	10-1/4" x 12'	57 lbs.
2-1/8"	12-1/4" x 12'	68 lbs.



Covered Stair Tread Load Table

Tread Type (Depth x Width)	Load (lb)	Span (in)	30	36	42	48	54	60
		L/D=150	0.2	0.24	0.28	0.32	0.36	0.4
1-5/8" x 10-5/8"	250		0.08	0.15	0.23	0.35	—	—
	500		0.17	0.29	0.47	—	—	—
1-5/8" x 12-1/4"	250		0.07	0.11	0.18	0.27	0.37	—
	500		0.13	0.23	0.36	—	—	—
2-1/8" x 10-1/4"	250		0.04	0.06	0.09	0.14	0.20	0.27
	500		0.07	0.13	0.19	0.28	0.39	—
2-1/8" x 12-1/4"	250		0.03	0.05	0.08	0.12	0.17	0.23
	500		0.05	0.10	0.17	0.24	0.33	0.46

Grating tolerances ± 1/8"

Stair Solutions - Stair Tread Covers



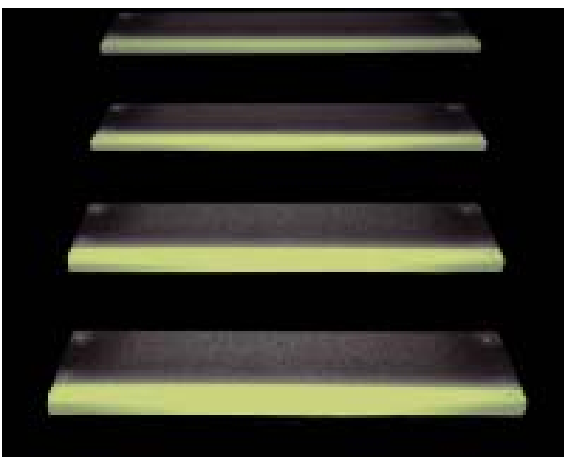
Fiberplate® stair tread covers are a convenient way to provide solid slip-resistant footing for existing treads that are still structurally sound. Stair

tread covers may be installed over wood, concrete or metal treads. Standard industrial color is dark gray with a highly visible safety yellow nosing and light gray for architectural applications.

An integral aluminum oxide grit-top surface provides secure footing for maximum safety and a highly durable tread. Reinforced with a woven glass mat for durability and impact resistance, these tread covers come in 8", 9", 10", 11" and 12" widths. The standard thickness is 1/8" with 1/4" thick covers available for heavy duty applications. Standard 12' long panels are easily cut to size during installation, or are available pre-cut to custom lengths.

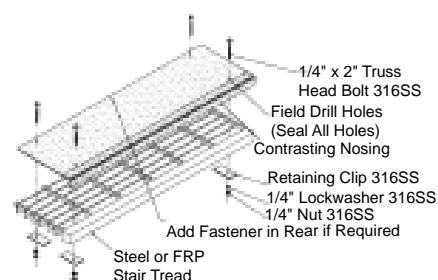
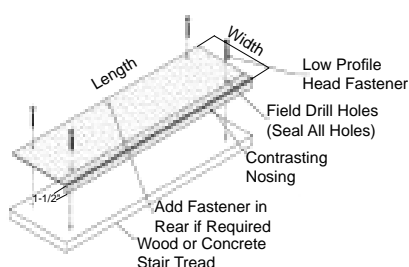


Phosphorescent Nosing



Fiberplate stair tread covers can be ordered with a special phosphorescent coating for the nosing area, causing it to glow even after the primary light source has been removed. The special nosing is perfect in stairways which serve as emergency exits during power outages, outdoor accessways where lighting is periodically dimmed as in arenas and concert halls or as a safety measure for nighttime operation in outdoor applications such as on passenger ships. This special nosing has been tested in accordance with ISO/TC 8/SC 1 N. Ships and Marine Technology — Low Location Lighting on Passenger Ships.

Installation Details



Stair Solutions - Pultruded Treads



Safe-T-Span® Pultruded Industrial Stair Treads

Slip-resistant and non-conductive Safe-T-Span pultruded stair treads offer the same level of safety, strength and corrosion resistance of other Fibergate pultruded fiberglass products. Designed for use in industrial applications where wider support spans are required, Safe-T-Span pultruded stair treads are available in 1" and 1-1/2" depths in an I bar configuration with 40% and 60% open areas for most applications. 2" depth T bar configuration with either 33% or 50% open area is also available for applications which require wider spans or lower deflections.

Safe-T-Span® Pultruded Industrial Stair Treads

Load/Deflection Information

TREAD TYPE	Load (lbs.)	SPAN (in.)	18	24	30	36	42	48
		SPAN/150	.12	.16	.20	.24	.28	.32
1" Deep, I6010	250		.03	.08	.14	.22	.34	.46
	500		.07	.15	.28	.44	—	—
1-1/2" Deep, I6015	250		.01	.02	.04	.06	.09	.13
	500		.02	.04	.08	.11	.18	.26
2" Deep, T5020	250		.01	.02	.03	.04	.06	.09
	500		.02	.04	.06	.09	.12	.18
1" Deep, I4010	250		.02	.05	.10	.16	.24	.33
	500		.05	.11	.20	.32	.49	—
1-1/2" Deep, I4015	250		.01	.01	.03	.04	.06	.09
	500		.02	.03	.05	.07	.12	.17
2" Deep, T3320	250		.01	.01	.02	.03	.05	.07
	500		.02	.03	.04	.06	.09	.14

NOTES:

1. It is suggested that stair tread deflection be limited to SPAN/150. Deflections based on this ratio are provided at the top of the table.
2. Deflection in the body of the table are for concentrated loads of both 250 lbs. and 500 lbs. A concentrated load is applied at the center of the tread, over a width of 4" and a length of 6", starting at the nosing edge to simulate the landing of a foot.
3. Deflections are not appreciably different due to stair tread depth. Actual depth will vary depending on stair tread configuration.

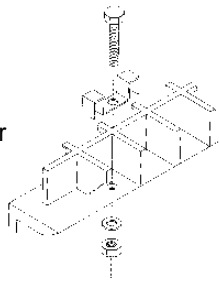
Stair Solutions - Accessories

Clip Assemblies For Stair Solutions Products

Fibergrate offers specially designed attachments and clips to secure stair treads to support structures and stair tread covers to stair treads. All types are made of Type 316 Stainless Steel and are available in 1", 1-1/2" and 2" sizes. *(Always install stair treads and stair tread covers with 4 hold down clips per step.)*

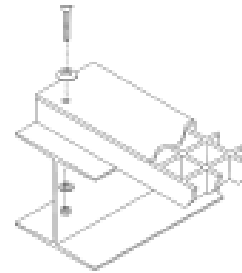
TYPE M HOLD DOWN

CLIPS: secure open mesh treads to a support using two adjacent grating bars for a secure fit. Similar in design to metal grating saddle clips.



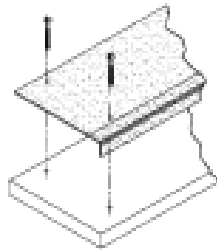
TYPE WLP STRUCTURAL

CLIPS: secure covered treads to a structure or stair tread covers to an existing stair tread. *(Also available in 304 SS)*



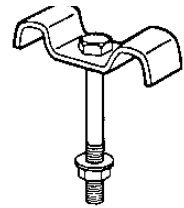
TYPE H (TRUSS HEAD) STRUCTURAL

CLIPS: secure stair tread covers to an existing stair tread.



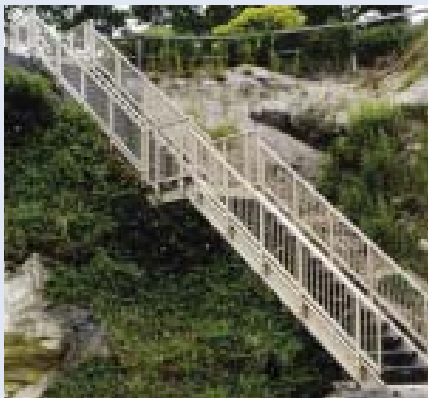
TYPE M HOLD DOWN CLIP ASSEMBLIES FOR PULTRUDED STAIR TREADS:

- MI40 for I4010 and I4015 treads
- MI60 for I6010 and I6015 treads
- MT5020 for T5020 treads
- MT3320 for T3320 treads



Sealing and Bonding Kits

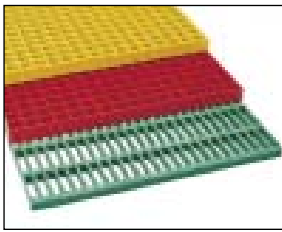
To maintain corrosion resistance and structural integrity, Fibergrate offers standard resin sealing in 1/2 pint and gallon kits for protecting the exposed ends of cut panels and other components. One 1/2 pint kit coats approximately 20-40 lineal feet. Sealing and bonding kits come in a natural, unpigmented color.



Stairway at Pebble Beach

Featured on the cover of this brochure, this FRP stairway is located just off the 18th hole at the residence of the CEO of Pebble Beach, leading from his front yard to his private beach below. The challenge was finding a product to replace a rusting stairway with something that would last in the harsh marine environment. Fibergrate offered the best solution. Not only will the new stairway withstand the corrosive effects of the ocean environment, it also blends in nicely with the Carmel sandstone. Let Fibergrate provide your facility with a stair solution today.

Fibergrate Products & Services

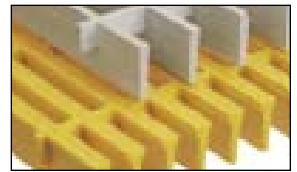


Fibergrate® Molded Grating

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 including Chemgrate CP-84 and more than twenty grating configurations available in many panel sizes and surfaces.

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.

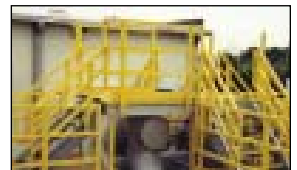


Safe-T-Span® Pultruded Industrial and Pedestrian Gratings

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

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.

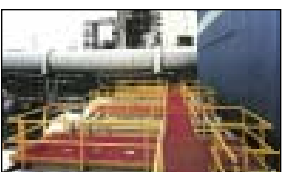


Stair Solutions

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

Uniquely designed adjustable single and quad head pedestals for square mesh molded grating are manufactured to provide safe and economical support for elevated flooring.



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.