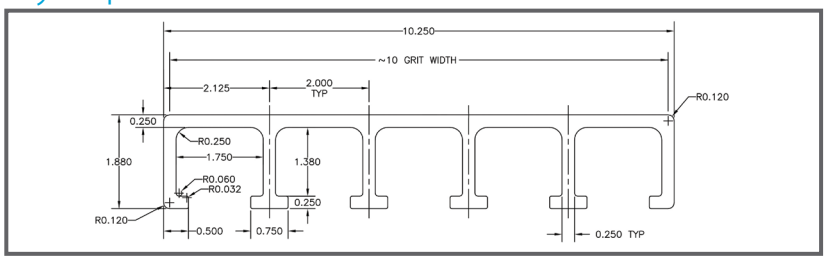
Dynaplank Boardwalk Plank

Fibergrate Composite Structures
Building the World to Last®

Dynaplank Boardwalk Plank is the perfect solution to your boardwalk, decking, and bridge needs. Fibergrate FRP Dynaplank is extremely durable yet very lightweight. Highly corrosive salt water air is no match for the corrosion resistant properties of Fibergrate FRP Dynaplank and Dynaform structural supports. In addition, the lightweight properties make installation an ease, especially in remote areas where heavy machinery cannot be used. Dynaplank is 10-1/4" wide x 1-7/8" deep.

Dynaplank Boardwalk Plank Profile



Benefits of FRP

Corrosion Resistant: Fibergrate® Dynaplank is made of corrosion resistant FRP and can with stand the harsh salt water air of coast environments.

Low Install Cost: Due to ease of fabrication and light weight, Dynaplank does not need heavy lifting equipment.

Electrically & Thermally Non Conductive: Fiberglass is electrically non conductive and has low thermal conductivity which results in a more comfortable product when physical contact occurs.

Low Maintenance: The corrosion resistant properties of Fibergrate FRP reduce or eliminate the need for sandblasting, scraping and painting. Products are also easily cleaned with a high pressure washer.

Slip Resistant: Fibergrate pultruded products have unmatched slip resistance for improved safety.

UV Protection: UV inhibitors in the resin matrix and a synthetic surfacing veil provide optimum protection from the structural effects of UV weathering.

Long Service Life: Fiberglass products provide outstanding durability and corrosion resistance in demanding applications; therefore, providing improved product life over traditional materials.

High Strength to Weight Ratio: Despite the lightweight properties of FRP, Dynaplank Boardwalk Plank can carry very heavy loads.

ISO 9001-2008 QUALITY CERTIFIED FACILITIES

Heavy Metal SAFE
Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver

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1.88" Deep Dynaplank Boardwalk Plank Load Span Table - Uniform Loads

Span (in)	Uniform Load (psf)									Max.Rec. Load (psf)	Ultimate Load (psf)
	50	65	100	150	200	300	500	1000	2000		
12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	40450	80900
24	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.04	0.08	10110	20200
36	<0.01	0.01	0.02	0.03	0.04	0.05	0.09	0.18	0.35	4940	9800
48	0.03	0.03	0.05	0.08	0.11	0.16	0.27	-	-	3030	6000
60	0.06	0.08	0.12	0.18	0.25	0.37	-	-	-	1940	3800
72	0.13	0.17	0.26	0.38	-	-	-	-	-	1340	2600
84	0.24	0.31	0.47	-	-	-	-	-	-	990	1900

Values given are for a continuous installation of planks laid side by side.

1.88" Deep Dynaplank Boardwalk Plank Load Span Table - Line Loads

Span (in)	Line Loads (lb/ft of width)							Max.Rec. Load (lb/ft)	Ultimate Load (lb/ft)
	50	100	200	300	500	1000	2000		
12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	20220	40450
24	<0.01	<0.01	<0.01	<0.01	0.02	0.03	0.07	10110	20220
36	<0.01	<0.01	0.02	0.03	0.05	0.09	0.19	7410	14830
48	0.01	0.02	0.04	0.06	0.11	0.21	0.42	6060	12130
60	0.02	0.04	0.08	0.12	0.20	0.39	-	4850	9700
72	0.03	0.07	0.14	0.20	0.34	-	-	4040	8090
84	0.05	0.11	0.22	0.32	-	-	-	3460	6930

Values given are for a continuous installation of planks laid side by side. To calculate the deflection of a single plank multiply the values above by 1.17. To calulate the Max. Rec. or Ult. Load, multiply values by 0.85.

Allowable Spans for Vehicular Loads

	Wheel Load (lb)[4]	Load Distribution		Allowable Span[2,3]
		Parallel to Axle (1)	Perpendicular to Axle	
Light Truck 12,870 max GVW	3,860	7-1/2" + 2-3/4"	8"	30"
H-10 Truck 20,000 max. GVW	8,000	7-1/2" + 2-3/4"	8"	20"

NOTES:

1. Load is carried by the full 10-1/4 inch width of the plank.
2. Allowable Span is based on a 0.25" maximum deflection and a Factor of Safety of 3.0. Other criteria may be required by certain construction codes. Check code requirements to determine design criteria.
3. ALLOWABLE SPAN IS STRONGLY DEPENDENT ON WHEEL WIDTH AND VEHICLE WEIGHT/LOAD CAPACITY. If your application varies from the values given on this table, contact Fibergrate Engineering for application assistance.
4. H-10 loads based on AASHTO Standards, light truck load based on Metal Bar Grating Engineering Design Manual, NAAM MBG 534-12. The Light Truck wheel load assumes 60% of the total load on the rear wheels. The H-10 load assumes 80% of the total load on the rear wheels. For pedestrian bridges, a vehicle impact allowance is not required to be added to these loads.

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