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GLOBALGRID Decking For Marina Industry

GLOBALGRID Decking is designed specially for application in the commercial and private marina industry. It is composed of the molded fiberglass grating (5/8" thick) and an integral fiberglass cover plate (1/8" thick) with grit surface. With double thickness for cross bar and bearing bar at every 1' interval, GLOBALGRID Decking substantially improves the strength and stiffness of Marina decking. The combination of flexibility in cutting, light weight, and ease of installation significantly reduces the project cost because of the reduced labor content and the simplicity of tooling during the installation. Special clip assemblies (Type W) are provided for attaching the GLOBALGRID decking to the substructure. The GLOBALGRID decking is the ideal replacement for the conventional concrete, wood, plastic and metal decking materials.

A) Key Characteristics of GLOBALGRID Composite Decking:

■ Permanent Resistance to Slipping and Sliding

GLOBALGRID Decking features a long-lasting slip-resistant grit surface, providing excellent slip and slid resistance in wet environments. It also offers a comfortable walking surface even with bare feet for safety.

We offer both grit top surface (fine, medium or rough) and diamond surface to suit your application requirements.

■ High Strength and Light Weight

GLOBALGRID Decking is designed to achieve high strength with the use of continuous fiberglass strands and high quality resins. With proper installation, GLOBALGRID Decking meets specified load requirements for steel and are more impact resistant than metals (and concretes).

The unit weight for GLOBALGRID Decking is only **2.98 lbs/sq. ft.** (only about 143 lbs for the standard 4'x12' decking panel, and only about 107 lbs for the 3'x12' decking panel), which is only a fraction of comparable metal panels. The lightweight allows significantly less freight charge and simpler and cheaper installation where a one-man or two-man crew can perform many small installations in a matter of hours, presenting a more cost effective alternative for marina decking.

■ Corrosion Resistant

The use of premium grade resin system provides excellent corrosion resistance with over a wide PH range – both acidic and caustic. GLOBALGRID gratings have proven their value under the toughest corrosive conditions.

GLOBALGRID decking is moisture resistant (never “waterlogged”), and it has excellent resistance to the penetration of oils and gasoline (likely present).

■ Utility Access

GLOBALGRID Decking puts an end to utility access problems forever. These lightweight panels can be easily lifted to allow for maintenance of all the utilities (e.g., lines, wires, pipes) under the decking floor.

■ Ergonomic and Anti-Fatigue

GLOBALGRID Decking has a slight resiliency that makes them comfortable to stand on for long periods. This gives a fatigue-reducing property that eases strain on the feet, legs, and lower backs of people walking or standing on the deck.

■ Easy to Fabricate and Install

GLOBALGRID Decking is easily fabricated with hand tools (e.g., cut with a conventional circular saw), and can be installed without welding. It is easy to cut into virtually any size, or to fit around piles and other obstructions.

The special W clip assembly is provided for decking attachment to the substructure. The installation of GLOBALGRID Decking may be easily handled by one person, due to its lightweight and its simplicity during installation.

With a standard panel size of 4'x12' or 3'x12', GLOBALGRID decking panels can be installed 10x faster compared to the installation of the 2x4 lumbers or recycled plastics.

■ Appearance (Uniform and Attractive)

The grit surface provides a uniform and attractive appearance. GLOBALGRID Decking offers many beautiful colors to meet your project needs (e.g., light gray, desert tan, green or others).

■ Maintenance Free

Painting or coating is never needed.

■ Fire Retardant

Flame Spread Rate: Class 1, 25 or less.

■ Long Service Life

Over 30 years service life.

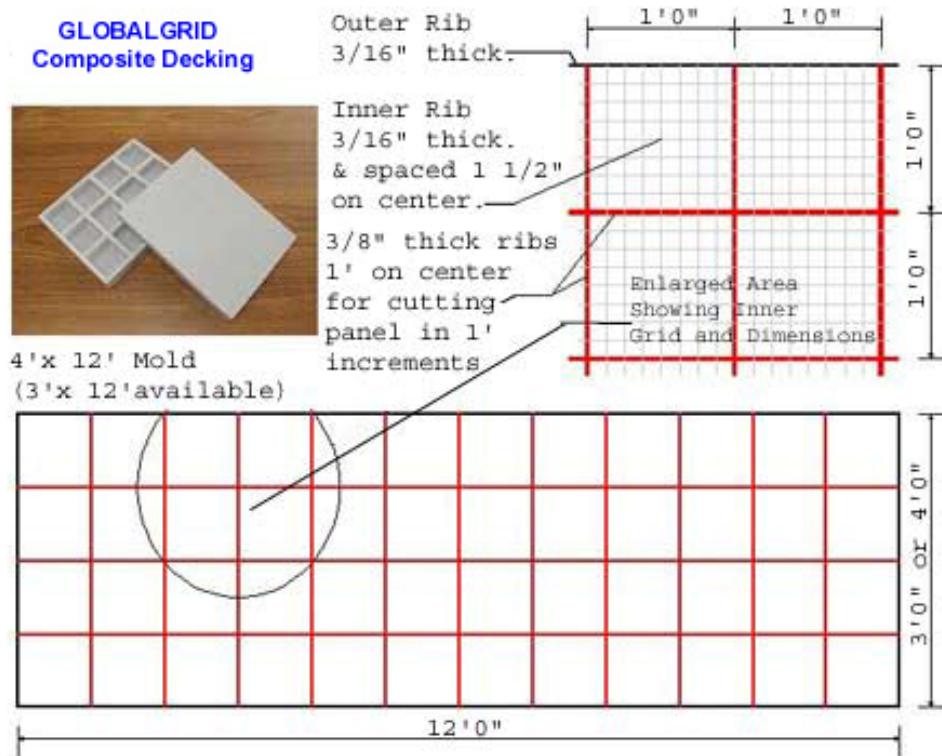
■ Economical

The lowest installation cost; virtually no maintenance cost.

Summary Table for GLOBALGRID Decking vs. Other Choices

	GLOBALGRID Decking	Wood	Concrete	Plastic Lumber	Aluminum	Steel
Features						
Strength	√√√	X	√	X	X	√√√
Anti-slip/skid	√√√	√	X	X	X	X
Anti-Corrosion	√√√	X	√	√	√	X
Resist Moisture	√√√	X	√	X	√√√	√√√
Lightweight	√√√	√√	X	√√	√√	XX
Comfort	√√	√	X	√	√	X
Material Cost	√	√√	√√	√	√	X
Installation						
Fabrication Ease	√√√	√√	X	√√√	√√	X
Labor/Time	√√√	√	XX	√	X	XX
Maintenance						
Annual Cost(paint)	√√√	XX	X	√√	√	√
Utility Access	√√√	X	XX	X	XX	XX
Resisting Mildew, fungi, and bacteria	√√√	XX	√√√	√	√√√	√√√

B) Standard 4'X12' and 3'x12' GLOBALGRID Composite Decking:



Thickness: 3/4" (5/8" molded grating plus 1/8" grit plate)
Standard size: 4'X12' and 3'x12'. Custom sizes available.
Color: light gray, desert tan, green or custom colors
Unit Weight: 2.98 lb/sq ft.

C) W Clip for GLOBALGRID Composite Decking Installation:



The type W clip is used to secure GLOBALGRID composite decking to the substructure. It is made of stainless steel. One set of clip includes W clip and self screw bolt.

It is very easy to use the W clips, hand electric drill and screwdriver to install the decking to the substructure.

The special design for the spacer component of W clips avoids a tripping hazard. A raised design for the spacer from outside to the center, and sunken in the center, this ensures that the head of the self screw bolt is lower than the level of collar flange of spacer. The outside diameter of the spacer is about 30mm(1-1/4"). The standard self screw will be 45mm(1-3/4") length with 6mm(1/4") diameter or 80mm(3-1/8") length with 6.3mm(1/4") diameter, the different length of the self screw bolt can be available upon the substructure.

D) GLOBALGRID Decking Load & Deflection

Concentrated Load: 12" Wide Strip

3/4" Thick Decking

SPAN	LOAD(Lb/Ft.)					
(in)	50	100	200	300	500	1000
12	<0.010	0.011	0.022	0.034	0.056	--
18	0.017	0.034	0.073	0.106	0.179	--
24	0.039	0.084	0.168	0.246	--	--
30	0.062	0.123	0.252	0.375	--	--
36	0.118	0.235	0.470	--	--	--

Uniformed Load: 12" Wide Strip

3/4" Thick Decking

SPAN	LOAD(Lbs/Ft. ²)							
(in)	50	65	100	150	200	300	500	1000
12	<0.010	<0.010	<0.010	0.011	0.011	0.022	0.034	0.067
18	0.017	0.022	0.034	0.050	0.067	0.101	0.168	--
24	0.050	0.067	0.101	0.157	0.207	0.308	--	--
30	0.095	0.129	0.196	0.297	0.392	--	--	--
36	0.218	0.286	0.437	0.655	--	--	--	--

Notes:

- 1) Clear span is 2.0" (50mm) less than the width of decking.
- 2) The Load & Deflection data provided here is for general information only, because actual environment and operational conditions are beyond our control. For these reasons, FRP Resource, LLC cannot guarantee that actual performance will correspond to the Load & Deflection tables provided here.

E) GLOBALGRID Decking Applications



1) Globalgrid Decking as Utility Cover, Knee Bracket and Walkway



2) Globalgrid Decking as Gangway and Trans Plate



3) Globalgrid Decking as Performance Platform



4) Globalgrid Decking as Docks/Walkways



5) Globalgrid Decking as Finger Walkways



6) Globalgrid Decking as Main Walkways

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