



**GEF Incorporated**  
*Innovative Solutions in Fiberglass*

# **STRONGDEK™**

## **FIBERGLASS ARCHITECTURAL DECKING SYSTEM**

**Innovative Solutions in Fiberglass**



- **Easy to Install**
- **Hidden Fastening System**
- **Rot, Rust and Mildew Resistant**
- **Non-Conductive**
- **Stronger than Wood or Plastic Lumber**
- **Lightweight**

STRONGDEK™ fiberglass decking is an attractive, low-maintenance architectural decking system that offers an alternative to traditional decking materials. The panels will not rot, rust, chip or mildew, which make them ideal for high-moisture environments, including saltwater.

STRONGDEK™ panels are designed to connect to form a continuous solid surface utilizing an innovative interlocking design. The deck sections are easily installed with screw-like fasteners that are not visible, creating a smooth, attractive surface.

STRONGDEK™ panels have intermediate ribs on each panel that help provide extra stiffness and strength, allowing the deck to perform ideally in areas with pedestrian traffic. An optional grit surface can be added to provide a non-skid surface.



Typical applications of STRONGDEK™:

- Hotel Recreational Areas
- Homes and Condominiums
- Buildings in Coastal Areas
- Marinas and Docks

*STRONGDEK™ decking was installed at the Perdido Beach Resort in 2003, and still looks attractive today. The resort's owner, Jim Medlock, said, "The deck has held up very well. During the summer months, it has a function on it just about every Friday and Saturday night!"*



## Sizes and Colors

STRONGDEK™ is 12" wide and standard 24' long panels are available in stock. Panels can also be produced in any length that is practical. Standard colors are light gray or beige. Panels can be produced with an optional grit surface.

## Available Accessories

A STRONGDEK™ starter channel can be used to provide a finished look to lengthwise ends, while equal leg angles can be used for end closures and/or cantilever supports.

## STRONGDEK™ Load / Deflection Data

$I_{12} = 0.31 \text{ in.}^4$  Wt = 1.87 lb./lin. ft. (gritted)

SPAN		50	100	150	200	250	300	350	400	450	500	550	600	650
		u=2394 c=730	u=4788 c=1460	u=7182 c=2190	u=9576 c=2920	u=11970 c=3650	u=14364 c=4380	u=16758 c=5110	u=19152 c=5840	u=21546 c=6570	u=23940 c=7300	u=26334 c=8030	u=28728 c=8760	u=31122 c=9490
24" 610mm	$\Delta u$	0.019	0.026	0.034	0.041	0.048	0.054	0.073	0.080	0.086	0.094	0.100	0.107	0.113
	$\Delta u$	0.488	0.671	0.853	1.036	1.219	1.372	1.859	2.042	2.195	2.377	2.530	2.713	2.865
	$\Delta c$	0.016	0.022	0.028	0.034	0.04	0.045	0.061	0.067	0.072	0.078	0.083	0.089	0.094
	$\Delta c$	0.406	0.559	0.711	0.864	1.016	1.143	1.549	1.702	1.829	1.981	2.108	2.261	2.388
30" 762mm	$\Delta u$	0.032	0.041	0.056	0.069	0.081	0.096	0.117	0.131	0.144	0.155	0.165	0.179	
	$\Delta u$	0.800	1.029	1.410	1.753	2.057	2.438	2.972	3.315	3.658	3.924	4.191	4.534	
	$\Delta c$	0.021	0.027	0.037	0.046	0.054	0.064	0.078	0.087	0.096	0.103	0.11	0.119	
	$\Delta c$	0.533	0.686	0.940	1.168	1.372	1.626	1.981	2.210	2.438	2.616	2.794	3.023	
36" 914mm	$\Delta u$	0.047	0.065	0.090	0.115	0.140	0.169	0.207	0.227	0.252				
	$\Delta u$	1.189	1.646	2.286	2.926	3.566	4.298	5.258	5.761	6.401				
	$\Delta c$	0.026	0.036	0.05	0.064	0.078	0.094	0.115	0.126	0.14				
	$\Delta c$	0.660	0.914	1.270	1.626	1.981	2.388	2.921	3.200	3.556				
42" 1067mm	$\Delta u$	0.067	0.101	0.145	0.191	0.239	0.288	0.340	0.365					
	$\Delta u$	1.707	2.560	3.680	4.854	6.081	7.308	8.641	9.281					
	$\Delta c$	0.032	0.048	0.069	0.091	0.114	0.137	0.162	0.174					
	$\Delta c$	0.813	1.219	1.753	2.311	2.896	3.480	4.115	4.420					
48" 1220mm	$\Delta u$	0.096	0.158	0.233	0.310	0.391	0.463							
	$\Delta u$	2.438	4.023	5.913	7.864	9.936	11.765							
	$\Delta c$	0.04	0.066	0.097	0.129	0.163	0.193							
	$\Delta c$	1.016	1.676	2.464	3.277	4.140	4.902							
54" 1372mm	$\Delta u$	0.138	0.246	0.370	0.497	0.626								
	$\Delta u$	3.498	6.241	9.395	12.619	15.911								
	$\Delta c$	0.051	0.091	0.137	0.184	0.232								
	$\Delta c$	1.295	2.311	3.480	4.674	5.893								

u = Uniform load in lbs/ft<sup>2</sup> (N/m<sup>2</sup>). For example, a 100 lb. uniform load over 3 ft<sup>2</sup> is 300 lbs. of total load.

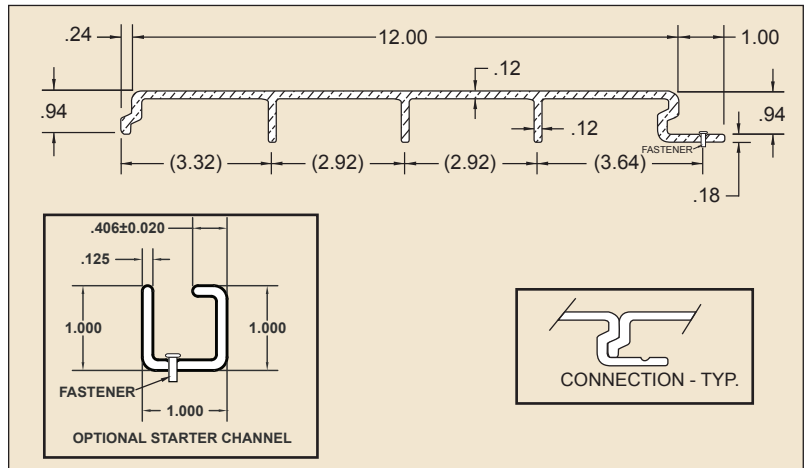
$\Delta u$  = Typical deflection under the uniform load in inches (mm)

c = Concentrated load in lbs/ft of width (N/m of width)

$\Delta c$  = Typical deflection under concentrated load in inches (mm)

**NOTE:** STRONGDEK™ panels were attached to beams with tek screws and tested in a multi-panel configuration. This data was used to create the STRONGDEK™ load table above for a single panel.

## Dimensional Details



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