

## MOULDED STRUCTURAL PANELS



Advances in composite materials, fibreglass structural flooring is fast becoming the cost effective solution for heavy duty applications. A range of Solid Top and structurally Cored panels are available to suit a variety of commercial and industrial applications, and can be manufactured to suit BS 124 specifications.

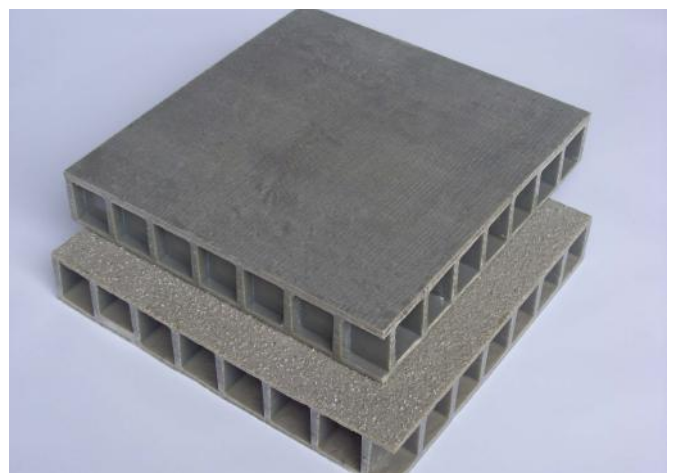
Solid Top panels in 29mm, 42mm and 54mm are held in stock. Cored panels (solid top and bottom) are available in 18mm and 46mm thick.

Ideally suited for trench covers in electrical applications due to the non conductivity or for use as covers in high traffic areas.

Solid Top



Cored Panels



## BENEFITS

- ✓ Anti-slip.
- ✓ High strength.
- ✓ Low maintenance.
- ✓ Fire retardant.
- ✓ Corrosive resistant.
- ✓ uV stable.
- ✓ Chemical resistant.
- ✓ Anti-static.

Two main components produce composite GRP: polyester resin and glass fibres. There are several types of resin systems depending on the application: Isophthalic, Orthophthalic, Vinyl ester and Phenolic. Isophthalic and Orthophthalic polyesters are the most widely used resin types and are suitable for most industrial applications. Phenolic and Vinylester are available by special order.

# DATASHEET DS-DSP-16

## MOULDED STRUCTURAL PANELS

### Previous Applications



### FOR MORE INFO

Call: 01206 322 899

Email: [sales@deck-safe.co.uk](mailto:sales@deck-safe.co.uk)

Visit: [www.decksafe.co.uk](http://www.decksafe.co.uk)

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## MOULDED STRUCTURAL PANELS

### MATERIAL CHARACTERISTICS



#### Quality Assurance

Manufactured in accordance with our ISO 9001 accredited Quality Management System, the structural integrity of the specified material is high grade. A suggested life span of 25 years is expected, but not guaranteed, and is based on a number of variables: environmental, installation process, maintenance, loading and traffic conditions.



#### Slip Resistance

The integral angular quartz gritted surface has been Tested in accordance with BS7976-2 and provides an exceptional level of slip resistance. Lifespan depends on frequency of use.



#### Handling/Cutting

Wear mask and goggles when cutting or grinding. Cover exposed parts of the body. Use diamond tipped or tungsten tipped cutting blades / circular discs. Further cutting instruction available upon request.



#### Surface Finish

Surfaces can be manufactured made to suit custom requirements, including minimum and maximum coarse grit, smooth gel coat or a natural concave finish.



#### Chemical Resistance

GRP is resistant to a wide range of chemicals, across a wide temperature spectrum. GRP can be made using different resin systems to achieve specific chemical resistant properties. Please refer to our separate chemical resistance charts DS-DST-10.



#### Fire Resistance

All products contain a fire resistant additive and comply with Euro Class 1 and ISO11952-2. Performance is equivalent to ASTM E84 class 1 and BS476 part 7 class 2 flame spread to give a 30 minute burn time.



#### Hazard Identification

None by contact. Dust produced by cutting or grinding can penetrate pores and skin causing itching. Avoid breathing dust, skin contact or dust inhalation when cutting. People with a condition that could be aggravated by dust should avoid cutting or grinding.



#### Available Colours

We keep a range of colours on the shelf. Grey and black with other colours available on request. Solid Top stock colours are grey and green, but along with cored panels, these can be pigmented to any RAL colour.

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## MOULDED STRUCTURAL PANELS

### Load and Deflection Data

Moulded Solid Top Grating			Unsupported Span (unfixed) over 1m width						
Thickness	Weight kg/m <sup>2</sup>	Load Type	300	500	600	750	1000	1200	1500
29	18	Point Load	8425	3025	2095	1335	740	505	315
		UDL	13485	4850	3360	2145	1195	825	515
42	24	Point Load	22975	8260	5730	3660	2045	1410	890
		UDL	36765	13225	9180	5865	3290	2275	1440
54	28	Point Load	33745	12140	8420	5380	3015	2080	1315
		UDL	53995	19430	13485	8620	4835	3345	2125

Moulded Sandwich Plate Grating			Unsupported Span (unfixed) over 1m width						
Thickness	Weight kg/m <sup>2</sup>	Load Type	300	500	600	750	1000	1200	1500
18	13.8	Point Load	3945	1415	980	620	340	230	140
		UDL	6315	2270	1570	1000	555	380	235
46	31.5	Point Load	22975	8260	5730	3660	2045	1410	890
		UDL	36765	13225	9180	5865	3290	2275	1440

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## MOULDED STRUCTURAL PANELS

### Manufacturing Tolerances

Standard Panel Size	+2mm -0mm
Cut Panel Size	+ 2mm -2mm
Thickness	+1mm -1mm
Mesh Pattern	0.5mm -0.5mm

GRP Characteristics	Unit	Reference
Voltage breakdown	18K volts/mm	ASTM D149
Density kg/m <sup>3</sup>	2100	BS 476
Thermal Expansion Factor	13 x 10 <sup>-6</sup> mm/mm°C	
Water Absorption rate	0.45 x 24 hrs	ASTM D570
Operating Temperature	-100°C to +200°C	BS 476

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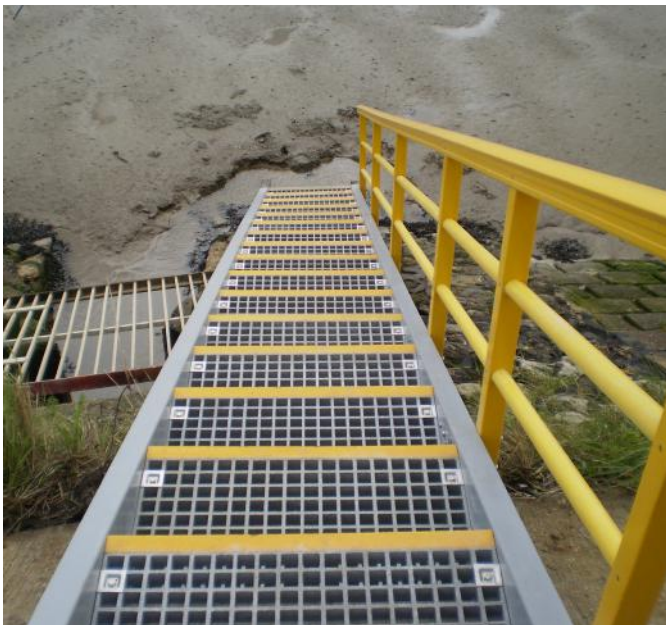
### Related Products



Handrail



Grating



Stairs



Access Ladders

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