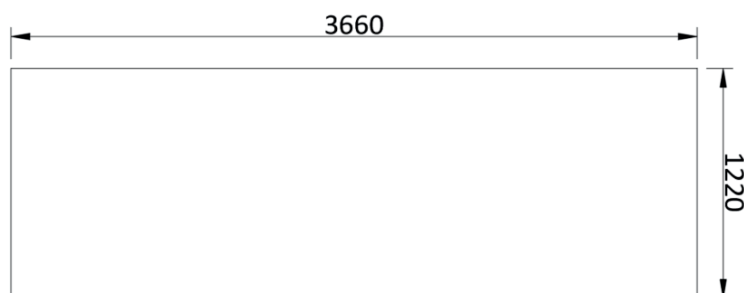


4.8MM DEEP FRP SOLID PLATE



All dimensions are in mm

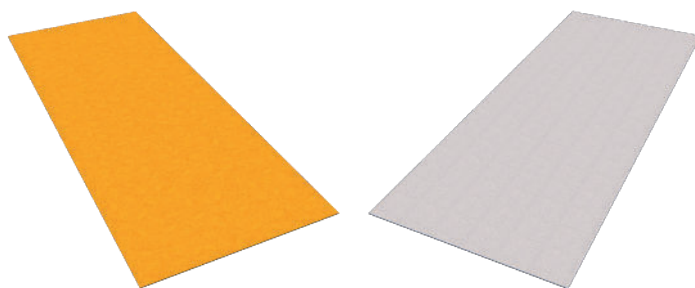
Thickness	4.8 mm
Plate Size	1220 x 3660 mm (Custom sizes are available on request)
Approximate Weight	11.1 kg/m 9.1 kg/m ² 40.70 kg/panel
Resin Type	ISO
Surface	Grit Finish
Slip Rate ¹	P5

Colours²

YELLOW	GREY
RAL 1003	RAL 7047

Order Information

Product Name	Colour	Item Code
PermaStruct® Solid Plate - 4.8mm	Yellow	GSP4.8Y
PermaStruct® Solid Plate - 4.8mm	Grey	GSP4.8G



Typical Properties

<u>PROPERTIES</u>	<u>UNITS</u>	<u>VALUE</u>	<u>STANDARD</u>
Tensile Strength, LW	MPa	420	ASTM D-638
Tensile Strength, CW	MPa	72.4	ASTM D-638
Tensile Modulus, LW	GPa	32.7	ASTM D-638
Tensile Modulus, CW	GPa	11.5	ASTM D-638
Compressive Strength, LW	MPa	321	ASTM D-695
Compressive Strength, CW	MPa	122	ASTM D-695
Compressive Modulus, LW	GPa	32.3	ASTM D-695
Compressive Modulus, CW	GPa	11.2	ASTM D-695
Flexural Strength, LW	MPa	506	ASTM D-790
Flexural Strength, CW	MPa	182	ASTM D-790
Flexural Modulus, LW	GPa	23.8	ASTM D-790
Flexural Modulus, CW	GPa	14.2	ASTM D-790
Bearing Strength	MPa	134	ASTM D-953
Shear Strength, CW	MPa	111	ASTM D-732
Notched Izod Impact, LW	J/m	1006	ASTM D-256
Notched Izod Impact, CW	J/m	>2270	ASTM D-256
Density	g/cc	1.72-1.94	ASTM D-792

LW = Lengthwise (Y direction)

CW = Crosswise (X direction)

¹Indicative value

²PermaStruct® FRP products are not limited to the available colours and can be custom ordered in your preferred colour choice.



You can download the guide by scanning the QR Code or visiting
[www.permacomposites.com/
brochure-installation-guide-library/](http://www.permacomposites.com/brochure-installation-guide-library/)



Email us: info@permacomposites.com
Call us: 1300 366 938

Essential Safety Guidelines for Working with FRP Products:

Familiarize Yourself:

Before cutting FRP products, make sure to thoroughly read the Materials Data Sheet (MSDS). If it is not available, contact Perma Composites or visit our website www.permacomposites.com for additional information before proceeding with fabrication. For the safety and well-being of individuals with respiratory ailments, it is strongly advised to refrain from engaging in the fabrication of FRP products.

Personal Protective Equipment (PPE):

Practice standard safety precautions when using cutting tools. Always wear protective gloves when handling FRP products. Utilize approved safety glasses or goggles to safeguard your eyes and wear an approved mask (with a permissible exposure limit (PEL) of not less than 0.1 mg/M³) to minimize dust inhalation. Dust produced during cutting FRP products can cause skin irritation. Wear appropriate clothing to reduce skin exposure to dust. IF CUTTING LEADS TO BREATHING DIFFICULTIES OR EXCESSIVE SKIN IRRITATION, STOP IMMEDIATELY AND SEEK MEDICAL ADVICE.

Epoxy/Sealing Coating Precautions:

When using epoxy/sealing coatings, adhere to general safety practices. Carefully read and follow the instructions provided with the product before application. Always wear PPE when working with FRP products or using epoxy/sealing coatings. AVOID SKIN CONTACT WITH RESIN OR CATALYST.

By adhering to these recommended safety practices, you can ensure a safer working environment when handling FRP products and protect yourself from potential hazards.

Essential Tools for FRP Fabrication:

1. A power circular saw with a masonry or diamond blade for straight cuts
2. Power Jig saw with a masonry or diamond blade for circular cuts.
3. For extensive fabrication tasks, it is recommended to utilize a diamond grit blade for enhanced efficiency.
4. Sawhorses or a sturdy platform are required to provide adequate support to the products during the cutting process.
5. To ensure precise cuts, have a tape measure, straight-edge, and chalk lines or a felt-tip pen on hand for marking the cutting lines. These marking tools will help you achieve accurate dimensions and shapes.

FRP Installation Procedure:

Cutting and Shaping:

- Firmly support the panel to avoid flexing or shifting during cutting.
- Mark the cutting lines clearly and precisely.
- Avoid splitting of bars.
- Cut from the smooth side (bottom) of a gritted panel to achieve cleaner edges.
- Apply even and steady pressure when cutting to avoid generating excessive heat or producing ragged edges. Regularly replace blunt or worn blades to maintain clean cuts and prevent buildup.



You can download the guide by scanning the QR Code or visiting
[www.permacomposites.com/
brochure-installation-guide-library/](http://www.permacomposites.com/brochure-installation-guide-library/)

Surface Protection:

Coat all holes, cut/trimmed edges or sanded surfaces with a sealer to safeguard against corrosive chemicals reaching exposed fibers. Follow the provided instructions for the epoxy sealer.

Fixing clips:

Utilize recommended fixing clips, spacing them a maximum of every 1000mm and using a minimum of four clips per panel for secure fastening.

By following these meticulous installation procedures, you'll ensure the longevity and integrity of the FRP installation while achieving a professional and aesthetically pleasing outcome.

Tips:

- One of the significant benefits of utilizing PermaStruct FRP grating lies in the straightforward fabrication process.
- The procedures such as sawing, grinding, drilling, and machining closely resemble working with other construction materials.
- To enhance precision, conduct fabrication on-site whenever possible.
- When performing take-offs and layouts, it is essential to account for the saw thickness.

