

# PRODUCT BROCHURE OVERVIEW

GRP AUSTRALIA | 2024



# PAGE CONTENTS

03	OVERVIEW About GRP Australia, what is FRP & Advantages
04	MOULDED GRATING Standard surface finishes & colours. Product range, applications & gallery
80	STRUCTURAL SECTIONS Standard resins & colours. Product range, applications & gallery
12	MODULAR HANDRAIL Standard details & colours. Product range, applications & gallery
16	PULTRUDED DECKING Product Range, Applications & Gallery
18	COMPOSITE FASTENERS Product Range, Applications & Gallery
20	FIBRE FRAME Product Range, Applications & Gallery





### 1.0 INTRODUCTION

GRP Australia is a Brisbane based, family owned and operated company. As an independent supplier we source and import FRP pultruded structural sections, FRP grating and other related products from trusted quality manufacturers while also designing & producing our own product range. This enables us to provide our customers with quality products at competitive prices.

### WHAT IS FRP?

FRP (fibreglass reinforced polymer), also known as fibreglass is a composite material made primarily of glass fibres and a thermosetting resin. The two main products supplied by GRP Australia are structural sections and moulded grating. Our FRP Sturctural Sections are a manufactured fiberglass product made in a continuous pultruded process while FRP Moulded Grating is a fiberglass decking product made in a batch process.

The exceptional high strength to weight ratio and versatility of FRP allows it to be used in various applications, while its customizability makes it ideal for meeting specific industry needs.

### **ADVANTAGES**



Cost Competitive



Non-corrosive & rot resistant



As strong as steel



Termite and **vermin proof** 



High fire resistance



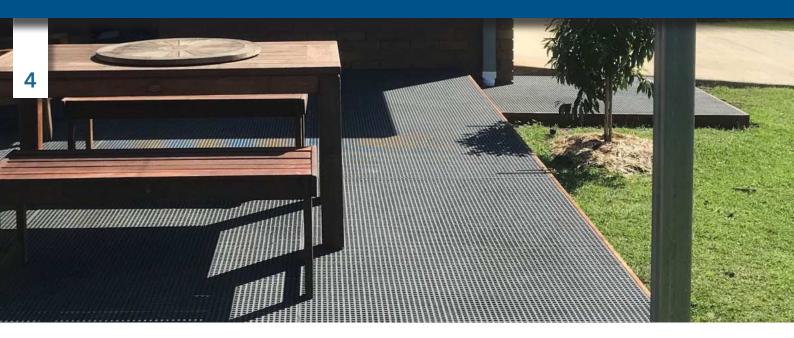
∪∀ **Stabilised** 



Lightweight & easy to manoeuvre



# FRP MOULDED GRATING



GRP Australia supplies high-quality FRP Moulded Grating, designed for strength, durability, and versatility across a wide range of industrial, commercial & residential applications. Available in various surface finishes and a broad spectrum of colors, our moulded grating is designed to address diverse safety and environmental conditions. Whether you require slip resistance, chemical resistance, or a specific aesthetic, GRP Australia's FRP Moulded Grating provides the ideal solution.

### SURFACE FINISHES

GRP Australia supply a wide range of surface finishes for FRP moulded grating, each providing varying levels of slip resistance and durability to suit different environmental conditions.



Glass **Beaded** 



Standard Grit



Fine **Grit** 



Flat Surface



Concave Finish



Solid **Grit Top** 

### STANDARD COLOUR RANGE

GRP Australia offer six standard colours in FRP Moulded Grating & Stair Treads



GRASS GREEN RAL6010



SLATE GREY RAL7015



SIGNAL YELLOW RAL1003



LIGHT GREY RAL9006



BLACK GREY RAL7021

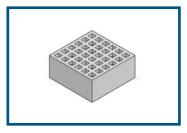


SIGNAL BLACK
RAL9004



### PRODUCT RANGE | MOULDED GRATING

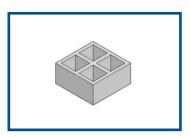
GRP Australia offers a comprehensive range of FRP Moulded Grating, all designed for superior strength, safety, and durability. Whether you need general-purpose grating or custom solutions, we have the perfect fit for your project.



13x13/40x40 HEEL GUARD

Hole Apperture: 8mm Thickness: 25, 30 & 38mm

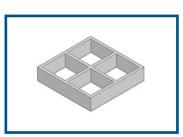
**Sheet Size:** 1007 x 3007mm 1247 x 4047mm



38x38 STANDARD

Hole Apperture: 33mm Thickness: 15, 25, 30 & 38mm

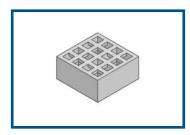
**Sheet Size:** 615 x 3665mm 1226 x 3665mm



83x83 STANDARD

Hole Apperture: 76mm Thickness: 38 & 40mm

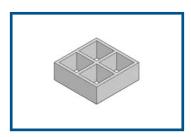
**Sheet Size:** 1007 x 3007mm 1247 x 4047mm



19x19/38x38 MINI MESH

Hole Apperture: 13mm Thickness: 25, 30 & 38mm

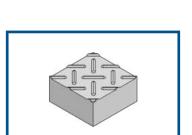
**Sheet Size:** 1226 x 2445mm 1226 x 36665mm



50x50 STANDARD

Hole Apperture: 44mm Thickness: 25, 40,50mm

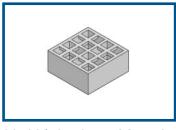
**Sheet Size:** 1230 x 4020mm



#### **DIAMOND TOP**

Diamond Plated Surface Plate Thickness: 3 or 5mm Grating Thickness: 25,30 & 38mm

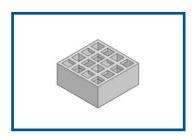
**Sheet Size:** 1226 x 3665mm



#### 20x20/40x40 MIRCO MESH

Hole Apperture: 14mm Thickness: 25, 30 & 38mm

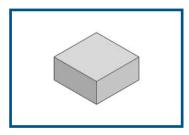
**Sheet Size:** 1007 x 3007mm 1247 x 4047mm



26x26/52x52 AGRI MESH

Hole Apperture: 19mm Thickness: 30 & 38mm

Sheet Size: 998 x 3075mm



SOLID TOP Solid Grit Surface

Plate Thickness: 3 or 5mm Grating Thickness: 25,30 & 38mm

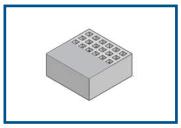
**Sheet Size:** 1226 x 3665mm

# FRP MOULDED GRATING

6

### PRODUCT RANGE | STAIR TREADS

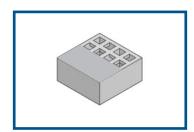
FRP Stair Treads are designed for maximum safety and durability, offering slip-resistant surfaces and exceptional resistance to corrosion, chemicals, and extreme weather conditions. Ideal for both indoor and outdoor environments, they provide long-lasting performance in industrial, commercial, and public settings.



#### 13x13/40x40 TREADS

Hole Apperture: 8mm Moulded Nosing: 44mm Thickness: 38mm

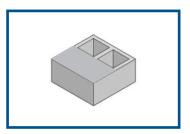
**Sheet Size:** 287 x 3687mm



#### 19x19/38x38 TREADS

Hole Apperture: 13mm Moulded Nosing: 44mm Thickness: 38mm

**Sheet Size:** 275 x 1188mm 275 x 3665mm



#### **38x38 TREADS**

Hole Apperture: 33mm Moulded Nosing: 44mm Thickness: 38mm

Sheet Size: 275 x 3665mm







WANT TO FIND OUT MORE?

SCAN QR CODE
TO VIEW FULL FRP MOULDED GRATING
BROCHURE







### **APPLICATIONS**

FRP Moulded Grating excels in challenging environments, offering outstanding performance in conditions where traditional materials may fail. It resists corrosion from chemicals, saltwater, and moisture. Additionally, its non-slip surface and resistance to extreme temperatures and UV exposure ensure safety and durability in harsh environments. These include:

- Industrial flooring and walkways
- Stair treads and landings
- Platform surfaces and decking
- Catwalks and access platforms
- Chemical processing plants
- Offshore and marine environments
- Wastewater treatment facilities

- Oil and gas facilities
- Cooling towers and power plants
- Pedestrian bridges and walkways
- Food and beverage processing areas
- Pulp and paper mills
- Conveyor system platforms
- Electrical substations













# FRP STRUCTURAL SECTIONS



FRP Structural Sections are high-performance, load-bearing profiles made from Fiberglass Reinforced Polymer designed to replace traditional materials like steel, aluminum, or wood in structural applications. These profiles are known for their exceptional strength, lightweight nature, and resistance to corrosion, chemicals, and environmental factors, making them ideal for use in demanding industrial, marine, and corrosive environments.

### STANDARD RESINS



#### **ISOPHTHALIC RESIN**

Isophthalic resin is a high-performance polyester resin known for its excellent chemical resistance, durability, and strength. Commonly used in the production of FRP (Fiberglass Reinforced Plastic) products, it is ideal for applications that require resistance to corrosive environments, including chemical processing, marine, and industrial settings.



#### **VINYL ESTER RESIN**

Vinyl ester resin is a versatile, high-performance resin offering superior chemical resistance, durability, and mechanical strength. It combines the benefits of epoxy and polyester resins, making it ideal for demanding applications in corrosive environments, such as chemical processing, marine, and industrial settings, where enhanced toughness and long-term performance are essential.

### STANDARD COLOURS

Structural Sections made from Isophthalic Polysrer Resin / Vinyl Ester Resin

TELEGREY 2
RAL7046
(ISOPHTHALIC RESIN)
GRP-BR-10-REV1

SIGNAL YELLOW

RAL1003

(TYPICAL FOR FRP HANDRAIL)

WINDOW GREY RAL7040 (VINYL ESTER RESIN)



### PRODUCT RANGE | STRUCTURAL SECTIONS

FRP Structural Sections come in a wide variety of profiles, available in multiple sizes to suit diverse project needs. These lightweight, durable sections are designed for easy installation in construction and industrial applications.



**H BEAM Profile Range: (mm)**76 × 6.4 **TO** 305 × 12.7

(min)



I BEAM

Profile Range: (mm)

15 × 32 × 6.4 TO 152 × 305 × 12.7
(min) (max)



C CHANNEL

Profile Range: (mm)

25 × 14 × 3 TO 300 × 55 × 5

(min) (max)



Y BEAM

Profile Range: (mm)
25 × 38 × 6.4 TO 58 × 38 × 6.4
(min) (max)



(max)

SQUARE HOLLOW SECTION Profile Range:

25 x 3.2 **TO** 152 x 12.7



RECTANGULAR HOLLOW SECTION Profile Range:

44 x 25 x 3.2 **TO** 200 x 30 x 5



CORRUGATED ROUND TUBE Profile Range:

(min)

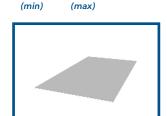
19 x 32 x 6.4 **TO** 71 x 90 x 9.5

(max)



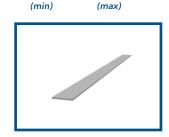
Profile Range: 25 x 3.2 TO 150 x 9.5 (min) (max)

**ROUND TUBE** 



**FLAT PLATE Profile Range: (mm)**3.2 × 1000 *TO* 25.4 × 1220

(min)



FLAT STRIP
Profile Range: (mm)
19 x 6.4 TO 250 x 12
(min) (max)



Profile Range: (mm) 25 x 3.2 TO 152 x 12.7 (min) (max)



UN-EQUAL ANGLE

Profile Range: (mm)

40 × 22 × 4 TO 254 × 40 × 6.4
(min) (max)



(max)

TOP HAT

Profile Range: (mm)

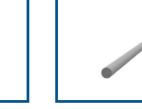
90 × 30 × 30 × 4



SOLID SQUARE ROD Profile Range: (mm) 25 x 25 7O 38 x 38

(max)

(min)



SOLID ROUND ROD

Profile Range: (mm)
6 TO 38
(min) (max)



**KICK PLATE Profile Range: (mm)**100 × 13 × 3.2 *TO* 148 × 12 × 4 (*min*) (*max*)

# FRP STRUCTURAL SECTIONS

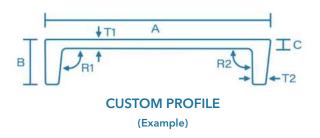
10

### **CUSTOM PROFILES**

GRP Australia have the capabilities of providing custom FRP profiles, tailored to your requirements. The lead time on this process is typically 3-5 weeks to produce the profile's pultrusion die & an additional 10 - 12 weeks to manufacture. You will need to keep in mind that a minimum order quanity of 100 lineal metres is required for custom / non-stocked profiles.







WANT TO FIND OUT MORE?

SCAN QR CODE
TO VIEW FULL FRP STRUCTURAL
SECTIONS BROCHURE





### **APPLICATIONS**

FRP Structural Sections provide exceptional benefits in demanding environments where traditional materials are prone to deterioration. They are highly resistant to corrosion, chemicals, and moisture, making them ideal for use in corrosive environments. These sections also withstand extreme temperatures, UV exposure, and harsh weather conditions, ensuring long-term durability in outdoor and industrial settings. Their lightweight nature, combined with high strength, offers easy installation and low maintenance, even in the most challenging conditions. These include:

- Structural framing and supports
- Handrails and guardrails
- Platforms and walkways
- Pipe and cable trays
- Ladders and stairways
- Cooling tower structures
- Grating and flooring supports

- Bridge components and decking
- Offshore oil and gas platforms
- Chemical plant infrastructure
- Seawalls and coastal structures
- Electrical enclosures and panels
- Water treatment facilities
- Roof supports and purlins











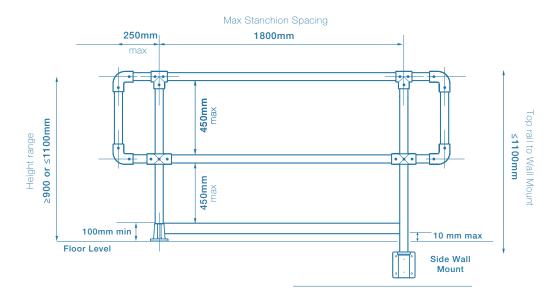


# FRP MODULAR HANDRAIL



Our FRP modular handrail system uses round tube (RT50x5) made from premium vinyl ester resin which forms the top rail, knee rail and stanchions. The rails and stanchions are connected using BMC composite fittings which are fire retardant, non-corrsoive and contain UV inhibitors. The fittings are clamped together with stainless steel fasteners provided by GRP Australia.

The modular handrail system has been designed and laboratory tested to be compliant with the requirements of AS 1657-2018. The minimum design requirements for FRP Modular Handrail have been set out in the diagram below.



### STANDARD COLOUR RANGE

GRP Australia offer two standard colours in FRP Modular Handrail

SIGNAL YELLOW RAL1003

LIGHT GREY RAL9006



### PRODUCT RANGE | COMPONENTS

GRP Australia's FRP Modular Handrail product range offers a versatile and corrosion-resistant solution for safety and durability in various environments. Engineered for easy installation and long-term performance, our handrails provide a reliable alternative to traditional materials, ensuring optimal protection in demanding conditions.



MH1-4 BASE-IB Four hole base mount



MH1-2 BASE Two hole base mount



MH1 WALL MOUNT
Stanchion
wall mount



MH1-SM Stanchion sleeve mount



MH1-END CAP End tube cap



MH2 90 ELBOW 90° degree elbow



MH2 120 ELBOW 120° degree elbow



MH2 135 ELBOW 135° degree elbow



MH2-SC Rail splice connector



MH2-FLEX
Two way flexible
angle connector



MH3-30/45 30°/45° flexible connector



MH3-W CROSS Three way cross connector



MH3 CORNER
Three way corner
connertor



MH3-UNIVERSAL

Three way
universal connector



MH4-CONNECT Four way cross connector



MH4-CORNER
Four way
corner connector



MH4-FLEX
Four way flex
connector



MH4-UNIVERSAL Four way universal connector



KPM100x16x5 Kick plate M Style



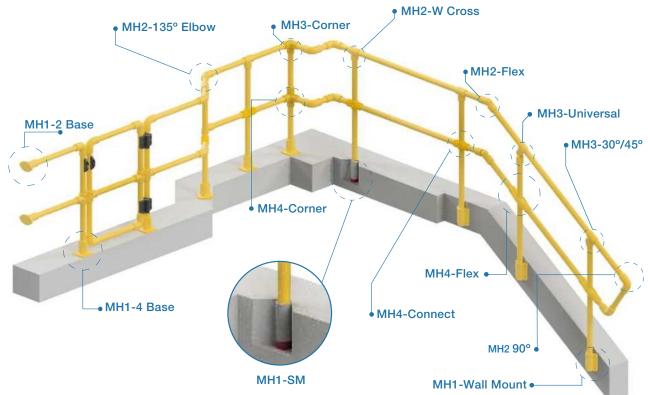
RT50x5 Round tube

# FRP MODULAR HANDRAIL

14



### HANDRAIL ASSEMBLY GUIDE



### WANT TO FIND OUT MORE?

**SCAN QR CODE**TO VIEW FULL FRP HANDRAIL
BROCHURE





### **APPLICATIONS**

FRP Modular Handrails are specifically designed for environments exposed to harsh chemicals, moisture, and extreme weather, ensuring long-lasting performance where traditional materials often deteriorate. Ideal for industrial, marine, and coastal settings, these handrails offer superior corrosion resistance and safety in the most demanding conditions. These include:

- Industrial Walkways and Platforms
- Chemical Plants and Refineries
- Marine and Coastal Environments
- Water and Wastewater Treatment Plants
- Oil and Gas Facilities
- Mining and Mineral Processing Sites
- Public Infrastructure and Bridges
- Staircases and Ramps
- Power Generation Stations
- Food and Beverage Processing Plants
- Manufacturing Facilities
- Pulp and Paper Mills













# FRP PULTRUDED DECKING



Pultruded FRP decking is perfect for commercial or industrial walkways and platforms, offering a safe & durable flooring solution. The non-slip surface enhances safety in both wet and dry conditions, making it a reliable choice for areas with high foot traffic or exposure to the elements. Its lightweight yet durable construction simplifies installation, while the material's resistance to corrosion, moisture, and UV rays ensures a long lifespan with minimal maintenance.

### APPLICATIONS

FRP pultruded decking is specifically engineered for environments exposed to harsh chemicals, moisture, and heavy traffic, making it perfect for industrial sites, marine platforms, and wastewater facilities. Its superior corrosion resistance ensures reliable performance and longevity in the most challenging conditions. These include:

- Bridges and Boardwalks
- Jetties & Pontoons
- Water and Wastewater Treatment Facilities Food and Beverage Processing Areas
- Industrial Walkways and Catwalks
- **Chemical Processing Plants**
- Offshore Oil and Gas Platforms

- Cooling Towers
- Corrosive Environments in Power Plants
- Mining Operations
- Transportation Facilities
- Storage and Containment Areas

### WANT TO FIND OUT MORE?

SCAN QR CODE TO VIEW FULL FRP PULTRUDED **DECKING BROCHURE** 





### PRODUCT RANGE | PULTRUDED DECKING

Discover the versatility and durability of our FRP pultruded decking profiles, designed to meet the highest standards of performance and safety. Please refer to the tables below for a overview of our FRP pultruded decking profiles, showcasing the diverse sizes, available to suit a wide range of applications.



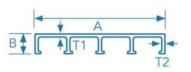


TYPE	TOP WIDTH (mm)	OVERALL WIDTH (mm)	DEPTH (mm)	WEIGHT (kg/m)	SURFACE FINISH
FL-A DECK	482.6	508	50.8	19.7	Silicon Grit

**FL-A DECKING** 



STANDARD DECKING



TYPE	TOP WIDTH (mm)	DEPTH (mm)	WALL THICKNESS (mm)	WEIGHT (kg/m)	SURFACE FINISH
DECK250x32x5	250	32	5	4.5	Silicon Grit
DECK250x40x6	250	40	6	5.3	Silicon Grit



**FLOOR PLATE** 



TYPE	TOP WIDTH (mm)	DEPTH (mm)	BOTTOM WIDTH (mm)	WEIGHT (kh/m)	SURFACE FINISH
FP500-50 (Light)	500	48.5	450	16.4	Silicon Grit
FP500-50	600	48.5	550	18.5	Silicon Grit
FP725-45	725	45	675	17.9	Silicon Grit



# **COMPOSITE FASTENERS**



Introducing our FRP Composite Fasteners, designed for, corrosion resistance, and durability in challenging environments. These lightweight, non-conductive fasteners are the ideal alternative to traditional metal options, ensuring long-lasting performance across various applications.

### **APPLICATIONS**

FRP Composite Fasteners are versatile solutions designed to meet the demands of a wide range of applications. Ideal for use in electrical construction, marine, and industrial settings, these fasteners excel in environments where electrical insolation, corrosion resistance, lightweight strength, and durability are crucial. These include:

- Marine and Offshore Structures
- Chemical Processing Equipment
- Automotive and Transportation
- Railway and Subway Systems

- Construction and Infrastructure Projects
- Electrical and Electronic Enclosures
- Water and Wastewater Treatment Plants
- Telecommunication Towers

### WANT TO FIND OUT MORE?

SCAN QR CODE
TO VIEW FULL COMPOSITE
FASTENER BROCHURE

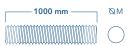




# PRODUCT RANGE | COMPOSITE FASTENERS



**THREADED ROD** 



SIZE	AVAILABILITY	LENGTH (mm)	COLOUR
M10	To Order	As Required	LIGHT GREEN
M12	Std Stock Item	1000	LIGHT GREEN
M16	Std Stock Item	1000	LIGHT GREEN
M20	Std Stock Item	1000	LIGHT GREEN
M24	To Order	1000	LIGHT GREEN



**COMPOSITE BOLTS** 

[H]	_ т _

SIZE	AVAILABILITY	BOLT LENGTH 'L' (mm)	THREAD LENGTH 'T' (mm)	HEX HEAD 'H' (mm)	COLOUR
M10	To Order	As Required	As Required	10	LIGHT GREEN
M12	To Order	As Required	As Required	12	LIGHT GREEN
M16	To Order	As Required	As Required	16	LIGHT GREEN
M20	To Order	As Required	As Required	20	LIGHT GREEN
M24	To Order	As Required	As Required	24	LIGHT GREEN



**HEX NUTS** 



SIZE	AVAILABILITY	LENGTH 'H' (mm)	HEX HEAD 'H' (mm)	COLOUR
M10	To Order	N/A	N/A	LIGHT GREEN
M12	Std Stock Item	20	24	LIGHT GREEN
M16	Std Stock Item	25	32	LIGHT GREEN
M20	STD Stock Item	32	40	LIGHT GREEN
M24	To Order	N/A	N/A	LIGHT GREEN



**FLAT WASHERS** 



SIZE	AVAILABILITY	EXTERNAL DIAMETER 'D' (mm)	INTERNAL DIAMETER 'd' (mm)	COLOUR
M10	To Order	N/A	N/A	LIGHT GREEN
M12	Std Stock Item	25	13	LIGHT GREEN
M16	Std Stock Item	32	17	LIGHT GREEN
M20	STD Stock Item	36	21	LIGHT GREEN
M24	To Order	N/A	N/A	LIGHT GREEN

# FIBRE FRAME



GRP Australia's Fibre Frame System offers a future-proof solution in structural frameworks with Fibreglass composites, specifically designed for longevity in challenging environments. With its range of FRP joists, bearers & posts, this system excels in durability, making it the perfect choice for residential decks, coastal boardwalks, and public walkways, where it ensures decades of reliable, maintenance-free performance.

### **ADVANTAGES**



Designed for FRP Grating, Timber & Composite decking



Durable



Lightweight



Termite Proof



Long Term Savings

### **APPLICATIONS**

- Coastal Decking and Boardwalks
- Swimming Pool Surrounds and Platforms
- Wetland Walkways and Nature Trails
- Rooftop Terraces and Green Roofs
- Rainforest or Tropical Region Structures
- Aquaculture Farms
- Coastal Home Decks & Patios
- Garden Walkways & Bridge
- Jetties & Pontoons
- Infrastructure in Flood-Prone Areas

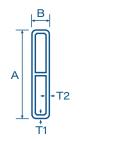


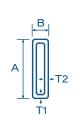


### PRODUCT RANGE | PROFILES

Designed for use in both residential and commercial settings, these components offer a modern, maintenance-free alternative to traditional timber, ensuring a stable and long-lasting foundation for your decking.







TYPE	DIMENSIONS (mm)	LENGTI	HS AVAILABL	.E (mm)	Weight (kg/m)
FF200x50	200 x 50 x 8 x 5	6050	3620	2420	5.6
FF140x45	140 x 45 x 6 x 4	6050	3620	2420	3
FF120x45	120 x 45 x 6 x 4	6050	3620	2420	2.8
FF90x45	90 x 45 x 5 x 4	6050	3620	2420	2.1





TYPE	DIMENSIONS (mm)	LENGTHS AVAILABLE (mm)	Weight (kg/m)
FF100×100	100 x 100 x 8 x 8	5800	6
FF76x76	76 x76 x 6.4 x 6.4	5800	4.9

### PRODUCT RANGE | END CAPS

Our premium range of End Caps offers the perfect finishing touch to your decking system, combining both aesthetic appeal and enhanced durability. Designed to complement a variety of decking styles, these end caps ensure a clean, polished look by covering exposed edges and open ends.



**END CAPS** 

TYPE	DESCRIPTION	PAIRED PROFILES
EC100100	End Cap 100 x 100	FF100x100
EC7676	End Cap 76 x 76	FF7676
EC20050	End Cap 200 x 50 x 8 x 5	FF200x50
EC14045	End Cap 140 x 45 x 6 x 4	FF140x45
EC12045	End Cap 120 x 45 x 6 x 4	FF120x45
EC9045	End Cap 90 x 45 x 5 x 4	FF90x45

### PRODUCT RANGE | BRACKETS

Our comprehensive range of brackets is specifically designed to seamlessly integrate with our FRP posts, bearers, and joists, ensuring a secure, stable, and durable decking structure. Engineered for maximum strength and ease of installation, these brackets are essential for creating a robust framework that supports your decking system's longevity and safety.



FFAB10040 Angle Bracket 100x40x2



**FFHB4590**Joist Hanger
Bracket



FFHB45140 Joist Hanger Bracket



**FFPB01**Pergola Bracket



FFPSB10045 Bearer to Post Side Bracket



FFPSB10050 Bearer to Post Side Bracket



FFPTB76 Post Top Bracket 76



FFPTB100 Post Top Bracket 100



**FFTGRH**Triple Grip
Right Hand



**FFTGLH**Triple Grip
Left Hand



FFSP190100 Splice Plate 190 x 100



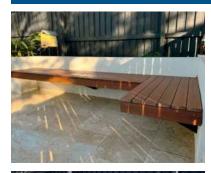
FASTENERS Our 10G x 25mm W

Our 10G x 25mm Wafer Head Self-Drilling Screws are specifically designed for securely fastening our FRP profiles, These screws are an essential component for any project involving the *Fibre Frame System*, providing both strength and durability in demanding environments.

10Gx25-G410-W Self Drilling Screw















Thank you for exploring our product range. For more information, please scan the QR code to visit GRP Australia's website. We look forward to assisting you with your next FRP project.





### **GRP AUSTRALIA**

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