



MODULAR HANDRAIL **PRODUCT GUIDE**

GRP AUSTRALIA | 2026

GRP-BR-03-REV04

MODULAR HANDRAIL 2026

CONTENTS

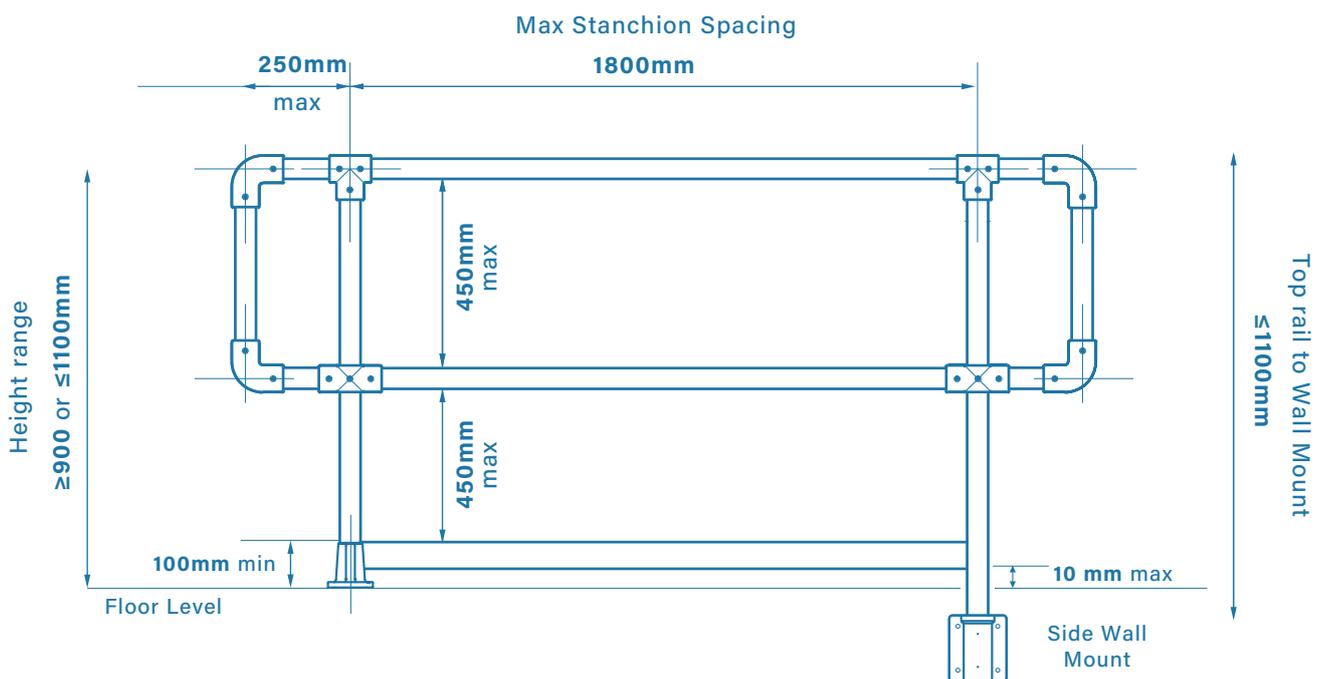
PAGE
NUMBER

1.0	OVERVIEW	3
2.0	PRODUCT RANGE	4
3.0	FIXING COMPONENTS	8
4.0	TYPICAL COMPONENT ASSEMBLY	8
5.0	KICK PLATE INSTALLATION	11
6.0	PRE-ASSEMBLED COMPONENTS	12
7.0	PAINTING FRP MODULAR HANDRAIL	14
8.0	GALLERY	15

1.0 OVERVIEW

The **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-corrosive and contain UV inhibitors. The fittings are clamped together with stainless steel fasteners provided by GRP Australia. The standard stock colours are yellow RAL 1003 & light grey RAL 7047.

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. Please refer to the GRP Australia Modular Handrail Installation Guide for fabrication procedures and requirements.



Standard Colours

GRP Australia offers two standard colours for modular handrail.



Signal Yellow
RAL1003

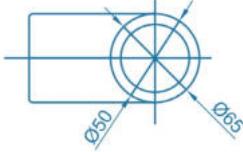
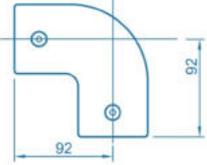
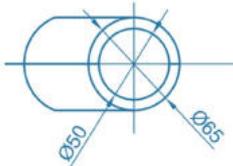
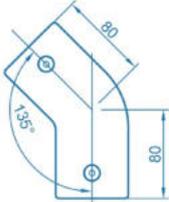
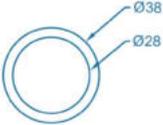
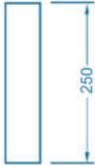
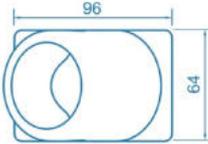
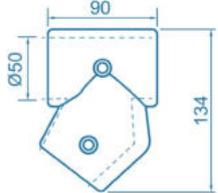
MODULAR HANDRAIL

PRODUCT GUIDE

4 2.0 PRODUCT RANGE

Handrail components shown in the table below are supplied with all fasteners except for stanchion mount anchor bolts. Note: STEP files of all components can be downloaded from www.grpaustralia.com.au.

MH1-4 BASE IB	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Four angle base foot</p> <p>*Note: Maximum Stanchion Height - 1.1 metre</p>			
MH1-2 BASE	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Two hole base foot</p> <p>*Note: Maximum Stanchion Height - 1 metre</p>			
MH1 WALL MOUNT	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Stanchion Wall Mount</p> <p>*Note: Maximum Stanchion Height - 1.1 metre</p>			
MH1-SM	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Stanchion Sleeve Mount</p> <p>*Note: End cap included</p>			
MH1 END CAP	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: End tube cap</p>			

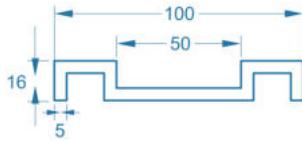
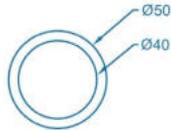
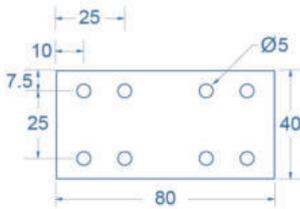
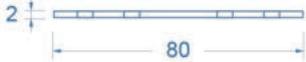
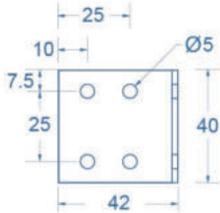
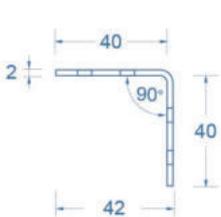
MH2 90° ELBOW	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: 90° Degree Elbow</p>			
MH2 135° ELBOW	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: 135° Degree Elbow</p>			
MH2-SC	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Rail Splice Connector</p>			
MH2 FLEX	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Two Way Flexible Variable Angle Connector</p>			
MH3 30°/45°	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: MH3-30°/45° Flexible Connector</p> <p>*Note: To suit stair top rails between 30° and 45°</p>			

MODULAR HANDRAIL

PRODUCT GUIDE

6

MH3-W CROSS	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Wide Three Way Cross Connection</p>			
MH3 CORNER	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Three Way Corner</p>			
MH3 UNIVERSAL	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Three Way Universal Connector</p>			
MH4 CONNECT	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Wide Four Way Cross Connection</p>			
MH4 CORNER	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Four Way Corner</p>			
MH4 FLEX	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: Four Way flex connector</p>			

<p>MH4-UNIVERSAL</p> <p>Description: Four Way Universal Connector</p>		<p>IMAGE</p> 		
<p>KPM 100x16x5</p> <p>Description: Kick Plate M Shape</p> <p>*Note: Standard length 3.6m Standard length 5.8m</p>		<p>IMAGE</p> 	<p>TOP VIEW</p> 	
<p>RT50x5</p> <p>Description: Round Tube</p> <p>*Note: Standard length 3.6m Standard length 5.8m</p>		<p>IMAGE</p> 	<p>TOP VIEW</p> 	
<p>BR-KPM-SP</p> <p>Description: Kick Plate Splicer Material Grade: 316ss</p> <p>*Note: 8 x G316 RVSS66 Rivets included</p>		<p>IMAGE</p> 	<p>TOP VIEW</p> 	<p>SIDE VIEW</p> 
<p>BR-KPM-BR</p> <p>Description: Kick Plate Bracket Material Grade: 316ss</p> <p>*Note: 8 x G316 RVSS66 Rivets included</p>		<p>IMAGE</p> 	<p>TOP VIEW</p> 	<p>SIDE VIEW</p> 

MODULAR HANDRAIL

PRODUCT GUIDE

8

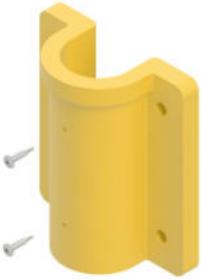
3.0 FIXING COMPONENTS

Handrail components shown in the table below are supplied with all fasteners except for stanchion mount anchor bolts. Note: STEP files of all components can be downloaded from www.grpaustralia.com.au.

MHR-M6-304	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: M6 x 30 Barrel Nut & M6 x 40 Pan Head Soc Screw Fastener</p>			
WS10Gx25	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: 10G x 25 G550 (Stainless Steel) Wafer Head Screw</p>			
RVSS66 Rivets	IMAGE	TOP VIEW	SIDE VIEW
<p>Description: G316 Dome Rivets 4.8x14.5 Max Grip 9.5</p>			

4.0 TYPICAL COMPONENT ASSEMBLY

MH1-4 BASE IB	EXPLODED	ASSEMBLED
<p>Description: Four hole stanchion mount with integrated kick plate mount.</p> <p>Fixings: 2 x Wafer Screws required to secure mount stanchion. Refer to installation guide for fastener requirements.</p>		

MH1 WALL MOUNT	IMAGE	TOP VIEW
<p>Description: Stanchion wall mount</p> <p>Fixings: 2 x Wafer Screws required to secure stanchion. Refer to installation guide for fastener requirements.</p>		
MH2 90° ELBOW	IMAGE	TOP VIEW
<p>Description: The 90° Elbow is comprised of 2 x parts joined at two points</p> <p>Fixings: 2 x MHR-M6-304</p>		
MH2 FLEX	IMAGE	TOP VIEW
<p>Description: The two way flexible rail connector is joined at a singular point that acts and axis.</p> <p>Fixings: 1 x MHR-M6-304 2 x WS10Gx22</p>		

MODULAR HANDRAIL

PRODUCT GUIDE

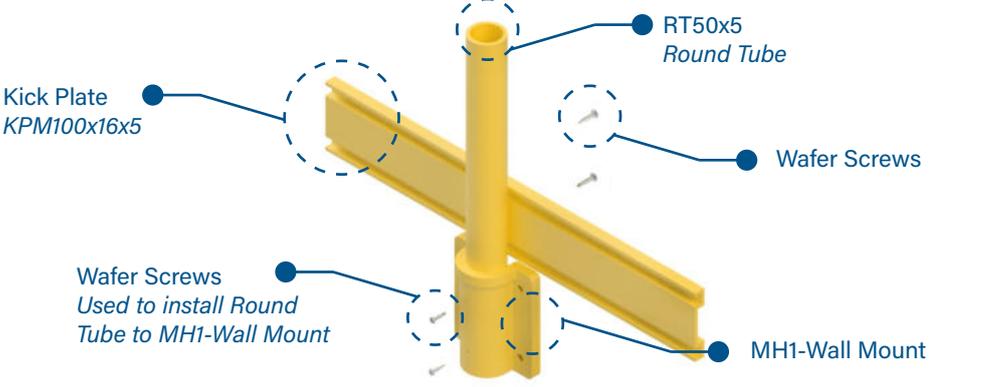
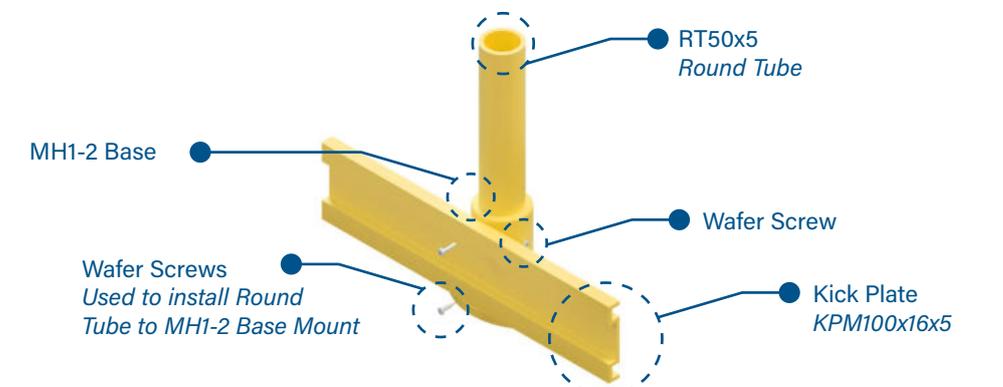
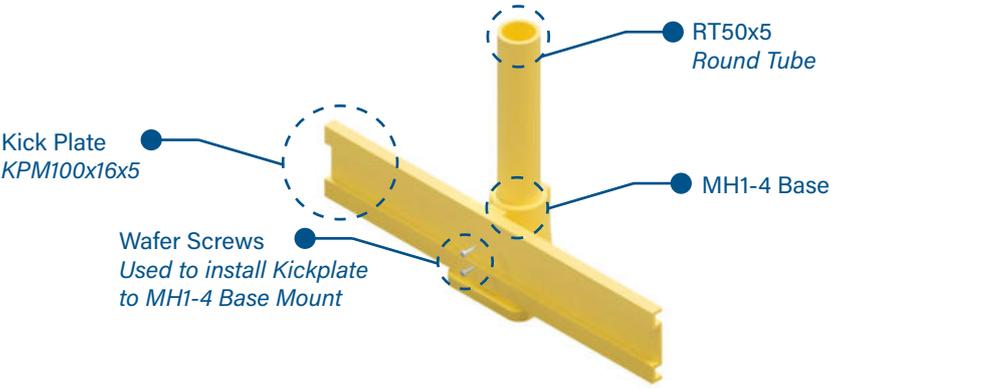
10

MH3 UNIVERSAL	IMAGE	TOP VIEW
<p>Description: Three way flex connectors paired with an MH1-Flex</p> <p>Fixings: 2 x MHR-M6x304 2 x WS10Gx22</p>		
MH4 CONNECT	IMAGE	TOP VIEW
<p>Description: The four way connector</p> <p>Fixings: 3 x MHR-M6-304</p>		
MH4-UNIVERSAL	IMAGE	TOP VIEW
<p>Description: Four way universal connector</p> <p>Fixings: 3 x MHR-M6-304</p>		

The guide above illustrates - key fastening techniques applied to the handrail fitting collection. Please note, wafer screws are used only to secure tubing in footings, wall mounts and the MH2-Flex connector. Other fittings do not require additional support if installed properly with the required fixings. Take care when fastening and ensure the correct use of PPE when necessary.

5.0 KICK PLATE INSTALLATION

Handrail components shown in the table below are supplied with all fasteners except for stanchion mount anchor bolts. Note: STEP files of all components can be downloaded from www.grpaustralia.com.au.

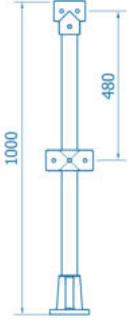
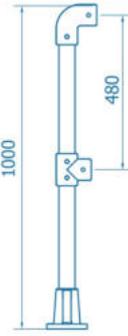
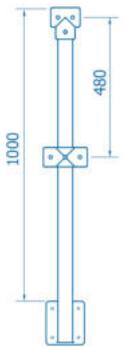
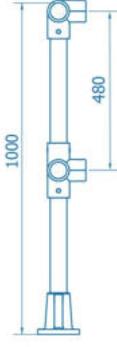
MH1- WALL MOUNT	IMAGE
<p>Description: Once the stanchion has been installed the kick plate is secured with a riv nut no more than 10mm from the ground.</p> <p>Fixings: 2 x Rivet 6 - 8.5 Ø5.1 304 SS 2 x WS10G22</p>	
MH1-2 BASE	IMAGE
<p>Description: The kick plate, stanchion and tubing is secured with a singular wafer screw. In this case a riv nut is not suitable.</p> <p>Fixings: 4 x WS10G22.</p>	
MH1-4 BASE IB	IMAGE
<p>Description: To install kick plate onto a MH1-4 Base Mount, a connector should be secured prior.</p> <p>Fixings: 4 x WS10G50 2 x WS10G22</p>	

MODULAR HANDRAIL

PRODUCT GUIDE

12

6.0 PRE-ASSEMBLED COMPONENTS

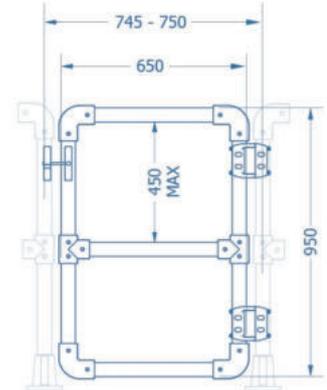
MHST-01	IMAGE	TOP VIEW
<p>Description: Typical mid rail assembled stanchion with 4 hole base mount.</p>		
<p>Description: Typical end assembled stanchion with 4 hole base mount.</p>		
<p>Description: Typical mid rail assembled stanchion with wall mount.</p>		
<p>Description: Typical corner assembled stanchion with 4 hole base mount.</p>		

MHGT-01-RIGHT

IMAGE

Description:
Assembled gate complete with non-conductive, corrosion resistant gate hinges and toggle latch. Hinges and latch included.

*Note: Custom Gate sizes available on request

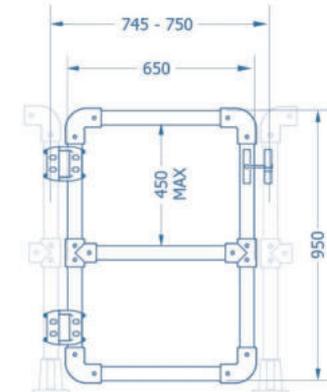


MHGT-01-LEFT

IMAGE

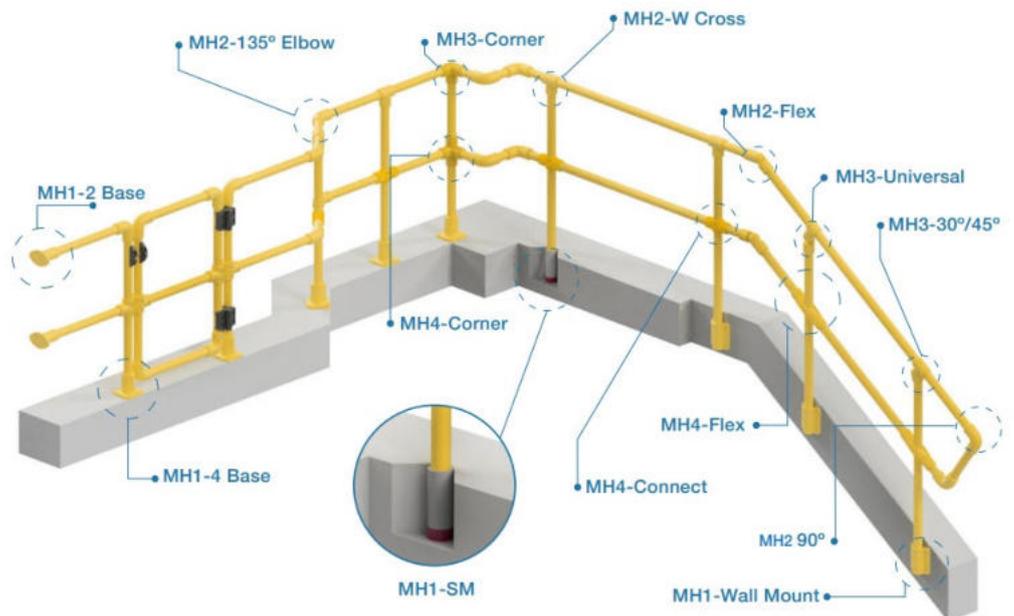
Description:
Assembled gate complete with non-conductive, corrosion resistant gate hinges and toggle latch. Hinges and latch included.

*Note: Custom Gate sizes available on request



HAND RAIL ASSEMBLY GUIDE

Description:
A comprehensive assembly diagram illustrating the function of each FRP component in creating a modular handrail system.



MODULAR HANDRAIL

PRODUCT GUIDE

14

7.0 PAINTING FRP MODULAR HANDRAIL

Although GRP includes UV inhibitors to protect against sunlight, prolonged exposure to direct sunlight can cause the surface to develop a chalk-like appearance. This degradation depends on the level of UV exposure. For any installation in direct sunlight, we strongly recommend painting the FRP to extend its lifespan and maintain its appearance. However, indoor applications do not require coating as they are sheltered from UV damage.

• Recommended Paints

Domestic Applications: For non-harsh environments, a good quality outdoor acrylic paint.

Commercial Applications: In harsher conditions, a 2-Pack Polyurethane Base and Hardener is recommended for optimal durability.

• Preparation

Proper surface preparation ensures the best paint adherence and finish quality, whether the GRP is new or weathered.

For new GRP: Begin by cleaning the surface with a 'Wax and Grease Remover' to eliminate residues.

For weathered GRP: Clean the surface thoroughly with water to remove any accumulated dust and debris.

• Painting Techniques

Different application tools can be used for painting GRP, each delivering distinct finishes. Choose the right method based on the desired outcome and available tools:

Brush: Ideal for small areas or touch-ups. Apply thin, even coats to avoid visible brush strokes. A high-quality synthetic brush works best to achieve smooth coverage.

Roller: Suitable for larger flat surfaces. Use a foam or short-nap roller for even paint distribution. Multiple coats may be required to ensure full coverage and a polished finish.

Spray Gun: Recommended for professional-level results and an even, glossy finish. Use a spray gun with adjustable settings to control paint flow and achieve uniform coverage. Ensure adequate ventilation and wear appropriate protective gear during spray painting.

With these guidelines, GRP surfaces can be effectively coated to maintain their aesthetic appeal and structural integrity, whether they are installed indoors or exposed to direct sunlight.

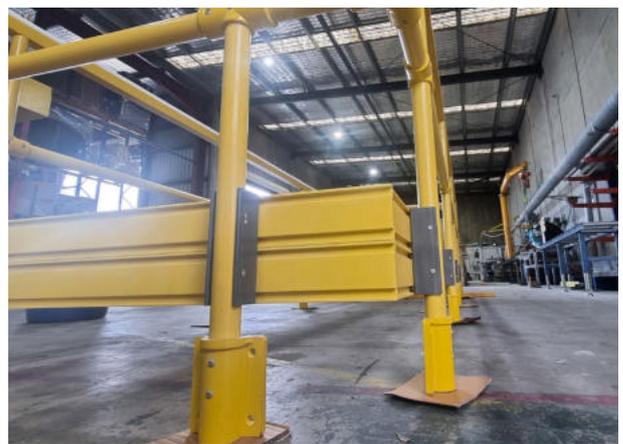
8.0 GALLERY



MODULAR HANDRAIL

PRODUCT GUIDE

16







GRP AUSTRALIA

L: 936 Nudgee Rd, Banyo. QLD. 4014

E: sales@grpaustralia.com.au

P: 07 3252 1244