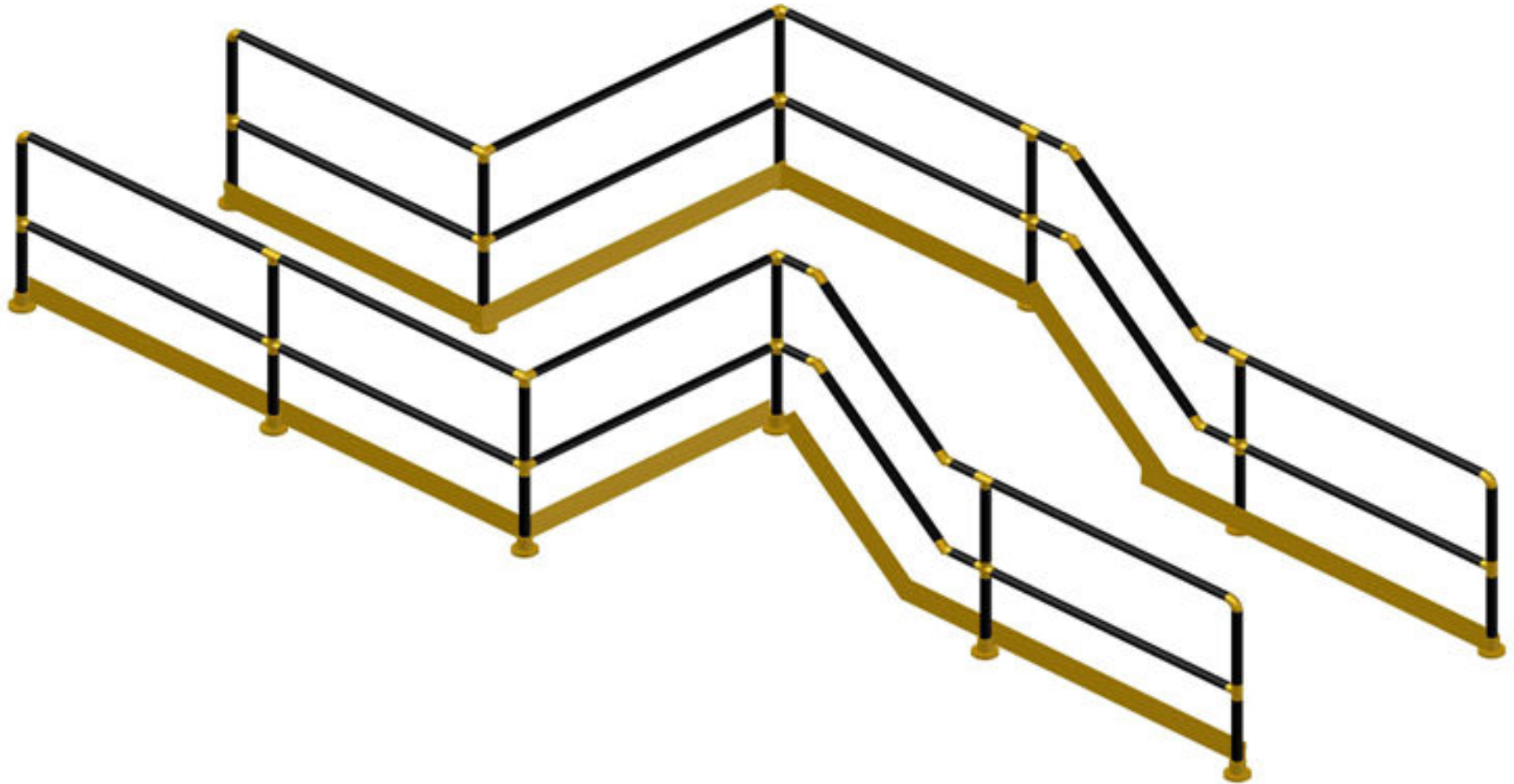


PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM



PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM

What is Permastruct FRP Handrail?

Permastruct FRP Handrail is an Australian Standards Compliant, Industrial strength Composite Handrailing System that requires little maintenance, is extremely easy to install thanks to its light weight and simplistic system and is Corrosion and Rust Resistant.

BLH Safety Solutions can design and fabricate handrail to suit any requirement, and are able to deliver it in pre-assembled modules for a 'drop in and go' installation, or for the more hands on approach we can deliver our Permastruct Handrail system in component form.

Permastruct FRP Handrail is the most developed FRP handrail system on the market.

Why Choose Permastruct FRP Handrail?

Permastruct FRP Handrail has been tested and has been certified to Australian Standards 1657-1992 (If installed as per Instructions).

















Why Else Should You Choose Permastruct FRP Handrail?

- ✓ Permastruct FRP Handrail is corrosion and rust proof
- ✓ Is simple to install thanks to its lightweight and simplistic joining methods
- ✓ Does not require any hot work / welding or any protective coating as Permastruct FRP requires almost zero maintenance
- ✓ Thanks to a life expectancy of over 50 years with almost zero maintenance and a quick and easy installation method, Permastruct FRP Handrails provide long term cost benefits.
- ✓ Permastruct FRP Handrails are Non Conductive and are also transparent to any radio frequency that may be being used in the area

	Permastruct FRP Handrail	Stainless Steel	Galvanised Steel	Aluminium	Timber
Chemical Resistance	✓✓✓✓✓	✓✓✓	✓	✓✓✓	✓✓
Strength	✓✓✓✓✓	✓✓✓✓✓	✓✓✓✓✓	✓✓✓✓	✓✓
Lightweight	✓✓✓✓✓	✓	✓	✓✓✓✓	✓
Electrical Resistance	✓✓✓✓✓	✓	✓	✓✓✓	✓✓✓✓✓

PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM

Permastruct FRP Handrail Parts List

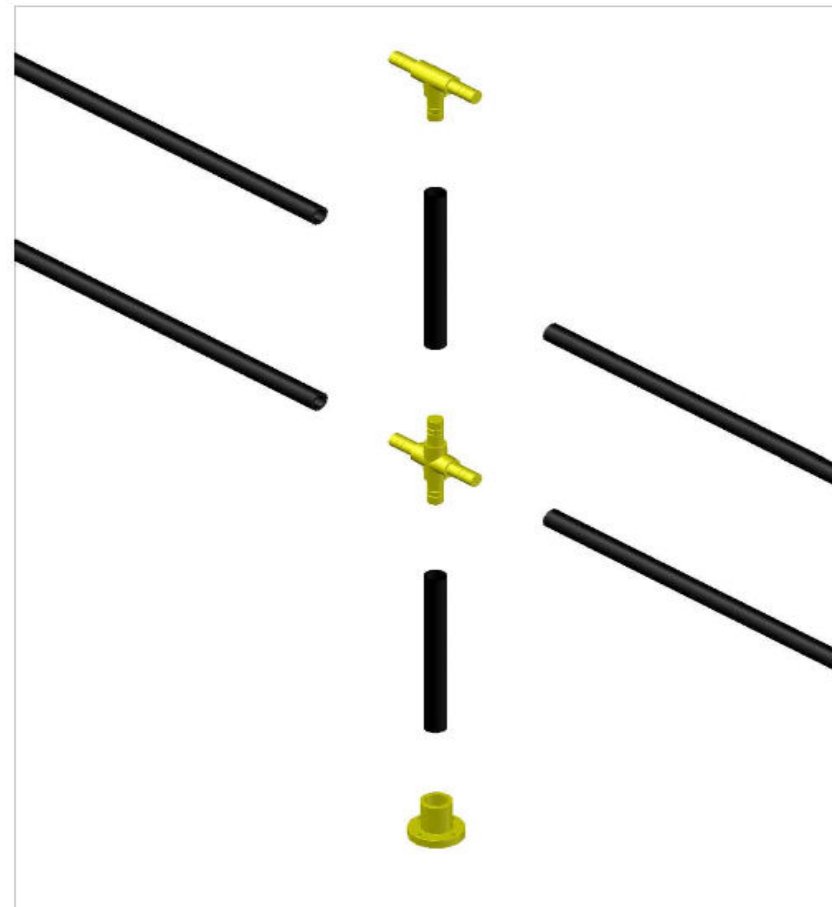
Part code	Description	Weight Kg	Picture	Part code	Description	Weight Kg	Picture
S HR 150x3	Kick Plate 150 x 3 x 3000 mm	3.00		S HR50Y 3WC	Permastruct 3 Way Corner	1.07	
S HR50 NS 3WC	Permastruct 3 Way Corner Non Steel	0.90		S HR50Y 3WS	Permastruct 3 Way Straight	1.06	
S HR50 NS 4WC	Permastruct 4 Way Corner Non Steel	1.17		S HR50Y 3WT ADJ	3 Way Tee Adjustable	1.09	
S HR50 NS ELB	50 mm Dia 90 Degree Elbow Non Steel	0.59		S HR50Y 4WC	Permastruct 4 Way Corner	1.38	
S HR50 NS FOOT	50 mm Base Foot Non Steel	0.85		S HR50Y 4WS	Permastruct 4 Way Straight	1.35	
S HR50Y 3000	Handrail Smooth 50 mm x 3 m	5.30		S HR50Y 4WT ADJ	4 Way Tee Adjustable	1.35	
S HR50Y ADJEL	50 mm Adjustable Elbow	0.80		S HR50Y ELB	50 mm Dia 90 Degree Elbow	0.70	
S HR50Y ELB 34.7	50 mm Dia 34.7 Degree Elbow	0.80		S HR50Y FOOT	50 mm Base Foot	0.80	

PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM



1. Closed End of Handrail

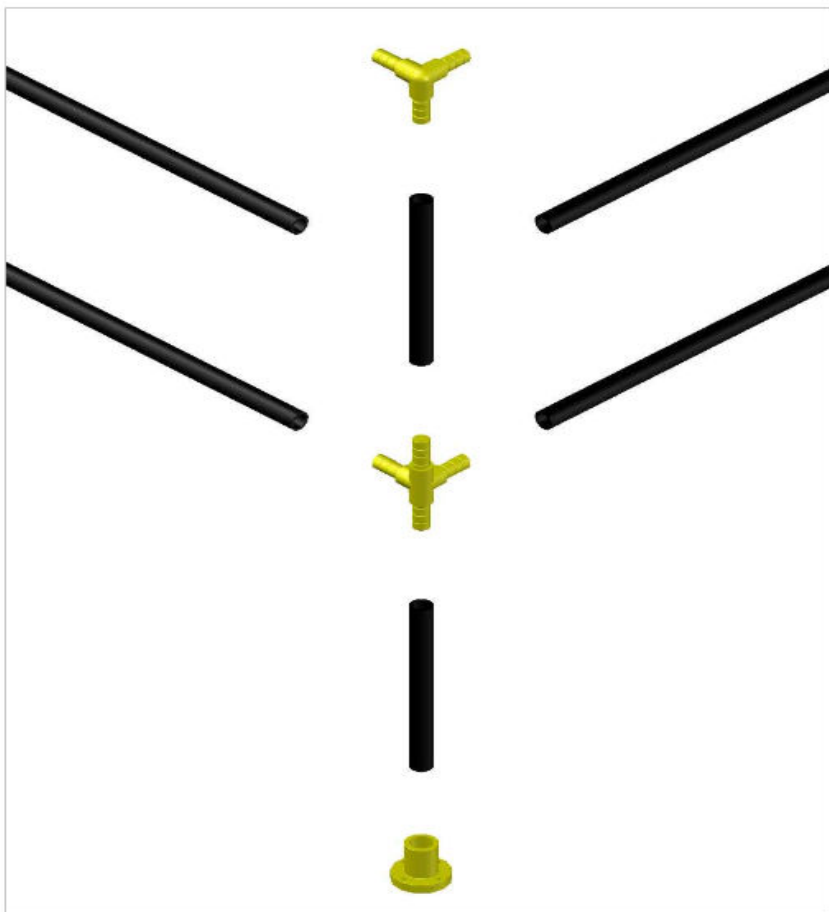
Parts Required;
 Permastruct FRP Handrail 50mm Tube (As Required)
 1 x Permastruct FRP Base
 1 x Permastruct 3 Way Straight Connector
 1 x Permastruct 90 Degree Elbow



2. Straight Continual Join

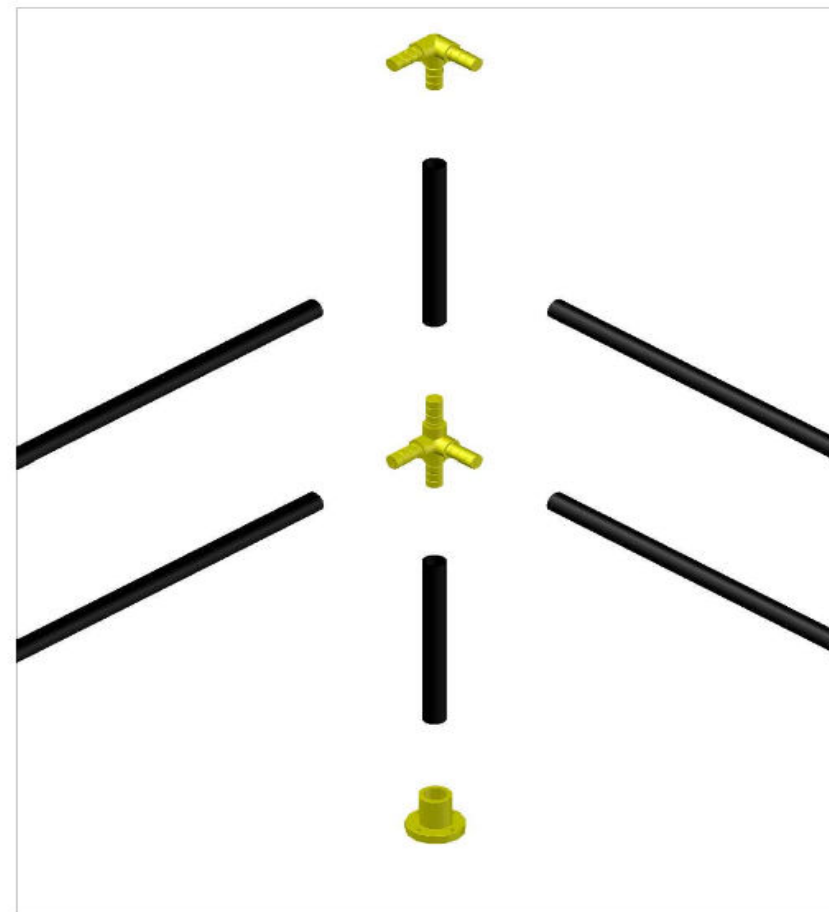
Parts Required;
 Permastruct FRP Handrail 50mm Tube (As Required)
 1 x Permastruct FRP Base
 1 x Permastruct 3 Way Straight Connector
 1 x Permastruct 4 Way Directional Joiner

PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM



3. External Corner of Handrail

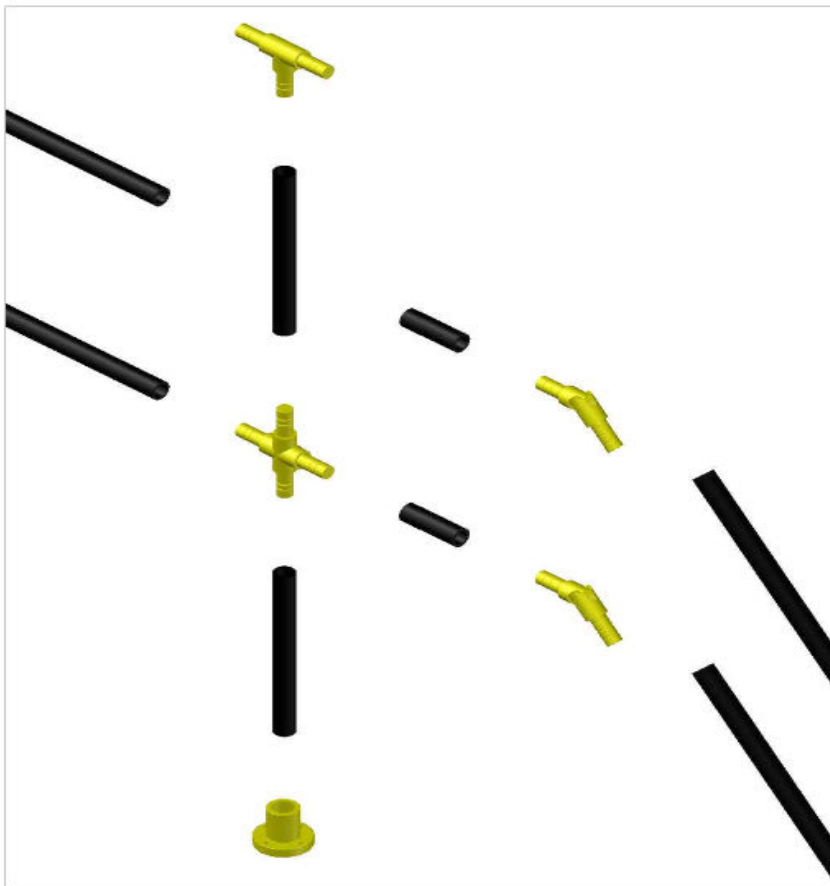
Parts Required;
 Permastruct FRP Handrail 50mm Tube (As Required)
 1 x Permastruct FRP Base
 1 x Permastruct 3 Way Corner Connector
 1 x Permastruct 4 Way Corner Connector



4. Internal Corner of Handrail

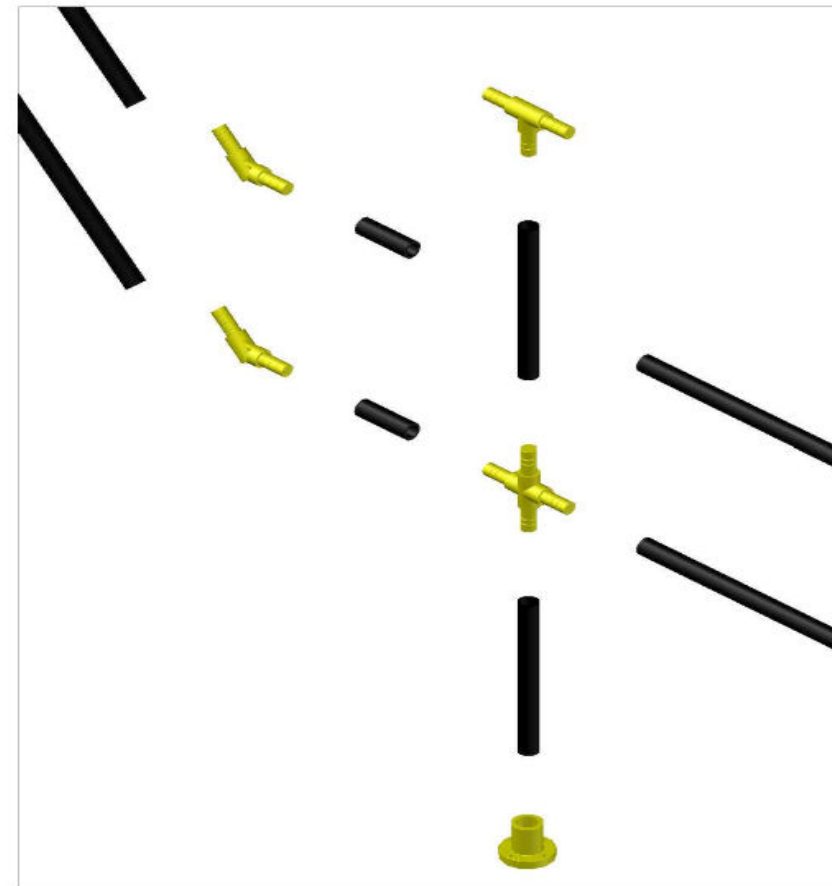
Parts Required;
 Permastruct FRP Handrail 50mm Tube (As Required)
 1 x Permastruct FRP Base
 1 x Permastruct 3 Way Corner Connector
 1 x Permastruct 4 Way Corner Connector

PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM



5. Top Step Connection of Handrail

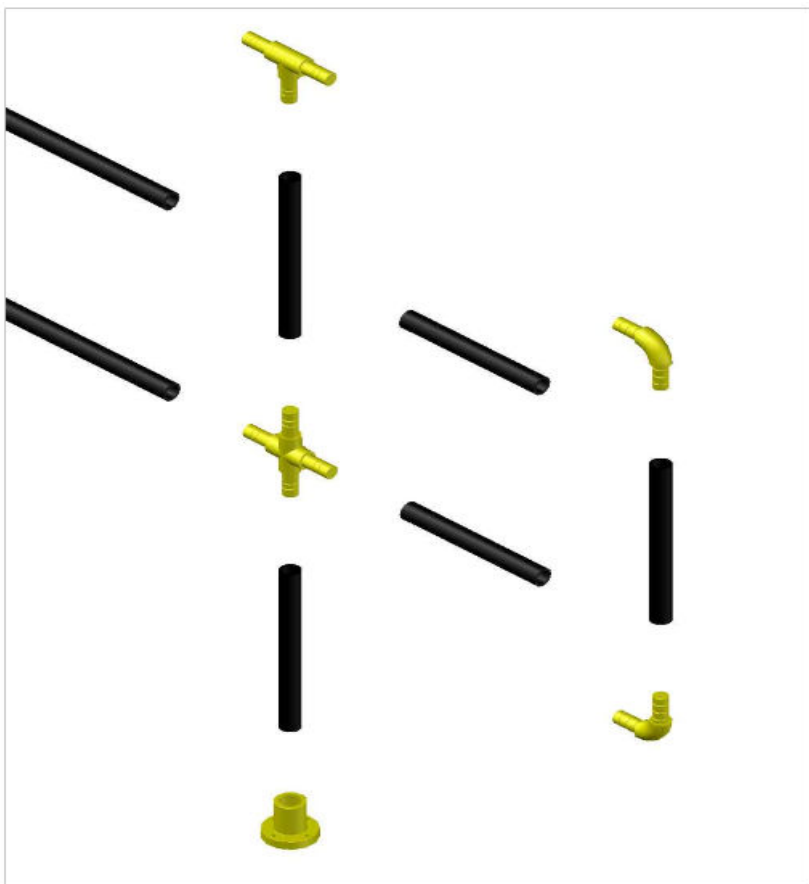
Parts Required;
 Permastruct FRP Handrail 50mm Tube (As Required)
 1 x Permastruct FRP Base
 1 x Permastruct 3 Way Straight Connector
 1 x Permastruct 4 Way Directional Connector
 2 x Permastruct Adjustable Elbow Connectors



6. Bottom Step Connection of Handrail

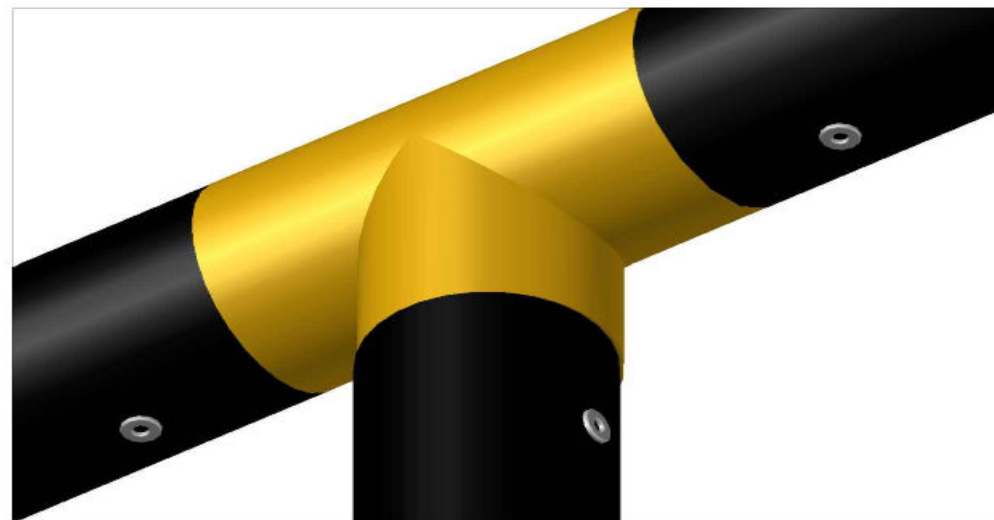
Parts Required;
 Permastruct FRP Handrail 50mm Tube (As Required)
 1 x Permastruct FRP Base
 1 x Permastruct 3 Way Straight Connector
 1 x Permastruct 4 Way Directional Connector
 2 x Permastruct Adjustable Elbow Connectors

PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM



7. End Stanchion Loop of Handrail

Parts Required;
 Permastruct FRP Handrail 50mm Tube (As Required)
 1 x Permastruct FRP Base
 1 x Permastruct 3 Way Straight Connector
 1 x Permastruct 4 Way Directional Connector
 2 x Permastruct 90 Degree Elbow Connectors



Typical Fixing Method

For each join in Permastruct FRP Handrail, we recommend the use of Grade 316 Stainless Steel Rivets (3/16 " Diameter and a 9.6mm Grip Range) on the underside of each Joiner to keep a smooth and unobstructed top surface of the handrail. At each join, a 1 part Polyurethane bonding agent is also recommended.

To pre drill each rivet, we suggest the use of a metal drill bit to suit the above mentioned rivets.

Notes

During Installation please be sure to have all parts clear of grease and dust.

When fixing all joiners to handrail, ignore the pre drilled hole in each connector - it simply helps with bonding.

PERMASTRUCT FRP TUBULAR GUARDRAIL SYSTEM

SUMMARY:

The PERMASTRUCT Guardrail System is a lightweight corrosion resistant, cost effective solution to traditional steel guardrailing issues that are used in the following applications:

- Marine service
- Sewage Treatment Plants
- Petrochemical Refineries
- Chemical Plants
- Pulp Mills
- Mining
- Industrial Sites
- Public Walkways
- Roof Access Walkways
- And many more

CONTACT US:

To find out more contact us at
+61 3 6383 4333
info@blhsafety solutions.com
www.blhsafety solutions.com

