



Ball Type Handrail Barrier

Glorail Handrail system is an economical, strong and simple form of handrail. It is a complete system comprising of stanchions, rails, bends, enclosure, kickplates, etc. As well, GLORAIL is available to manufacture to suit individual requirement.

Glorail Systems can be used in a multitude of applications including stairways, bridges, parking stations, schools, commercial premises, fire escapes, gangways, power stations, sewage treatment works and marinas.

Materials Selection

STEEL

This is the most commonly used material and is used in all types of applications. Steel is available untreated or powder coated but is usually hot dipped galvanized to EN ISO 1461 to protect against corrosion.

ALUMINUM

Aluminium is usually used when weight or corrosion is an issue or in conditions where steel is unsuitable. Aluminum handrailing is commonly used in sewerage treatment facilities and commercial and architectural applications. Aluminum can be anodized or powder coated or left as mill finish.

STAINLESS STEEL

Stainless Steel 304 and 316 are available with Electro-Polished.



Standard Dimension

| | Diameter (mm) | Thickness (mm) |
|---|---------------|----------------|
| Tubes for Rails & Stanchions | 33.5 | 2.5 |
| | 42.3 | 2.5 |
| | 48.0 | 3.0 |
| | 48.0 | 3.5 |
| | 48.0 | 4.0 |
| | 60.0 | 2.0 |
| | 60.0 | 3.5 |
| | 75.0 | 3.75 |

| | Diameter (mm) | Thickness (mm) |
|-------------|---------------|----------------|
| Ball | 66 | 3.0 |
| | 76 | 3.0 |
| | 90 | 3.0 |
| | | |

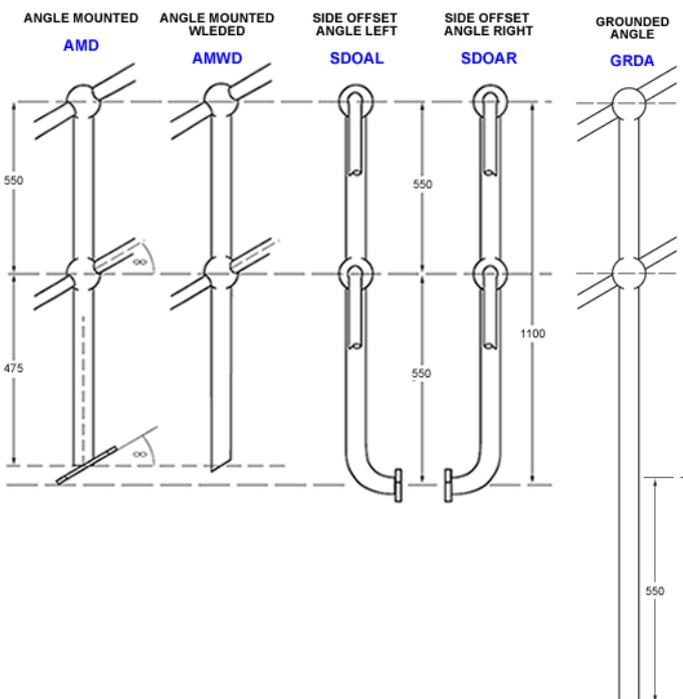
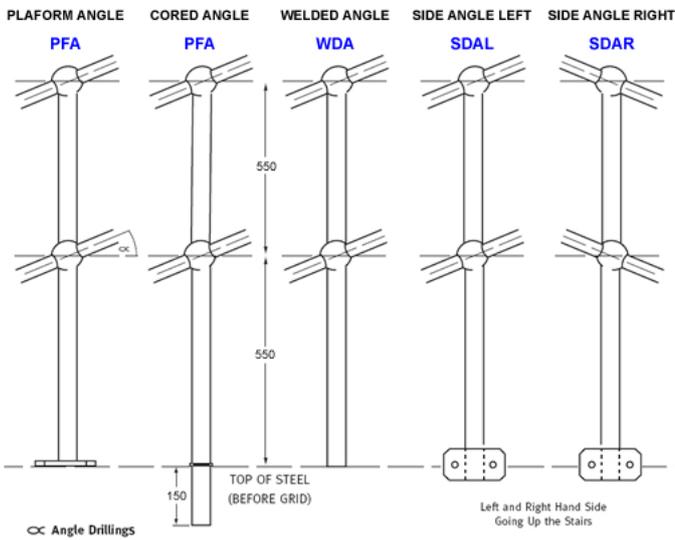
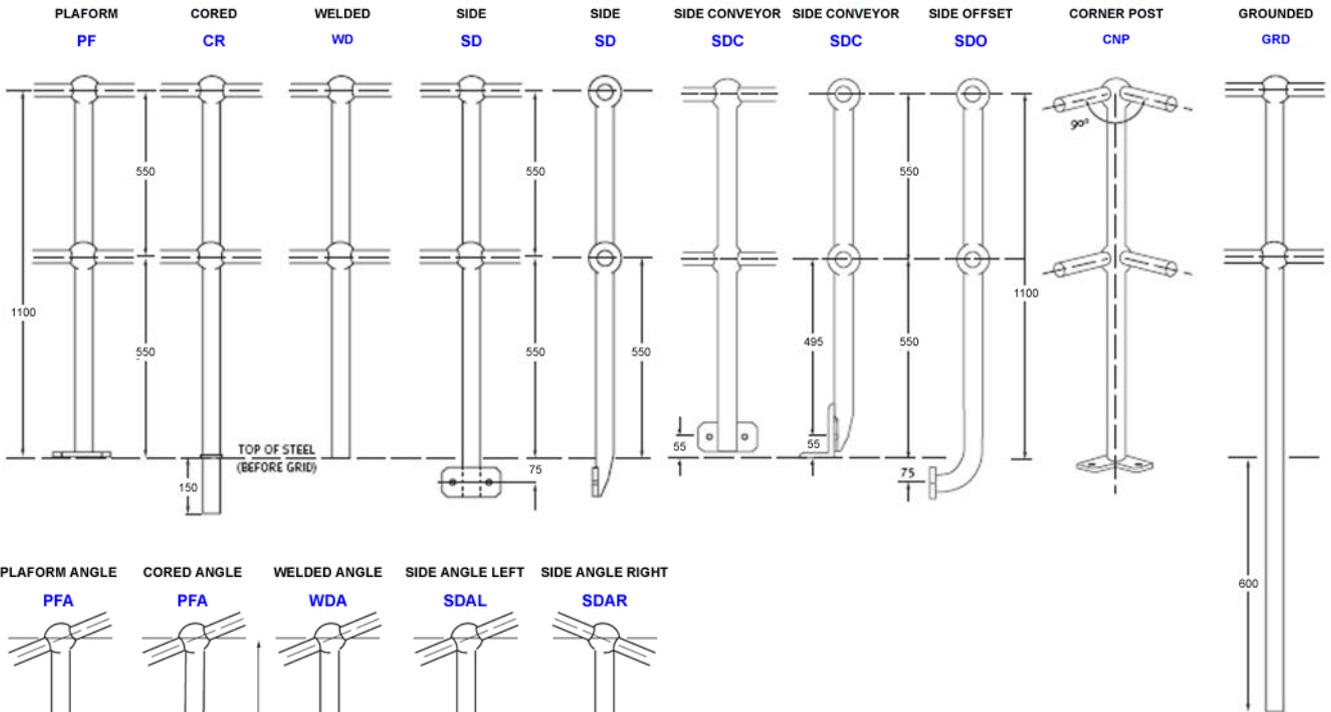
- * Min 42.3 x 2.5mm for Stanchion is recommended
- * Other dimensions are available upon request
- * Fabrication per customers design is available.

Standard Design

| Type | No. of Rails | Height | Ball | Stanchion | Handrail | Knee Rails |
|-----------|--------------|--------|------|-----------|----------|------------|
| GS-4266/1 | 1 | 650 | 66 | 42.3 | 42.3 | |
| GS-4876/1 | 1 | 650 | 76 | 48 | 48 | |
| GS-4876/2 | 2 | 1100 | 76 | 48 | 48 | 48 |
| GD-6090/2 | 2 | 1100 | 90 | 60 | 48 | 48 |
| GD-7590/2 | 2 | 1100 | 90 | 75 | 60 | 60 |
| GS-4876/3 | 3 | 1400 | 76 | 48 | 48 | 48 |



Types of Stanchions



Surface Treatment

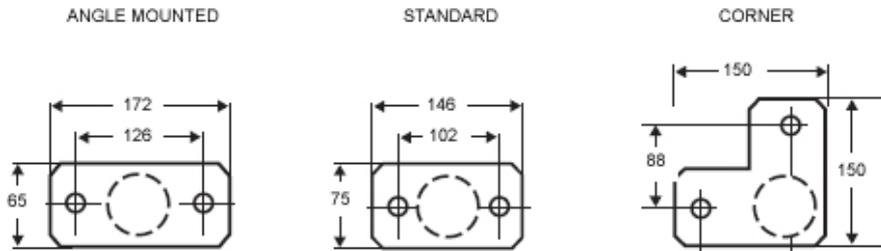
Steel handrail is most cases Galvanized to EN ISO 1461 to protect against corrosion or available Powder Coated

Aluminum handrail can be anodized, Powder Coated or left as Mill Finish.

Stainless steel handrail is Electro-Polished



Base Plates



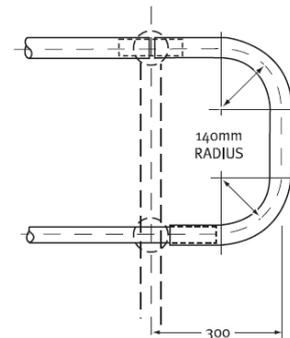
Holes Size 17.5mm typical
 All baseplate are 10mm thk for steel and stainless steel , 12 mm thk for aluminium



Endclosures and Bends

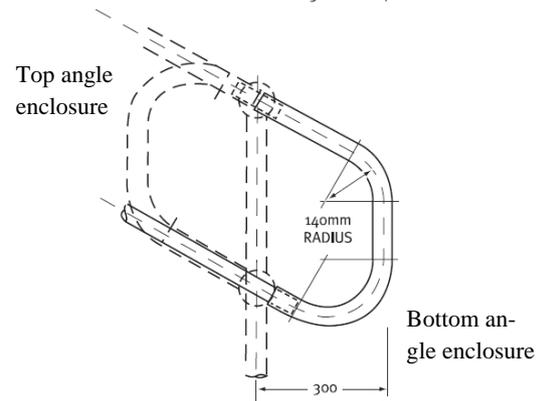
Horizontal Endclosures

Horizontal enclosure are generally manufactured from galvanized tube. Standard 90 degree closure bend has 140mm radius bends have 300/260mm legs at 550mm centres. NOTE: Position of horizontal closure bend to stanchion, handrail, knee rail. NOTE: Knee rail extension giving support to bottom leg of bend.



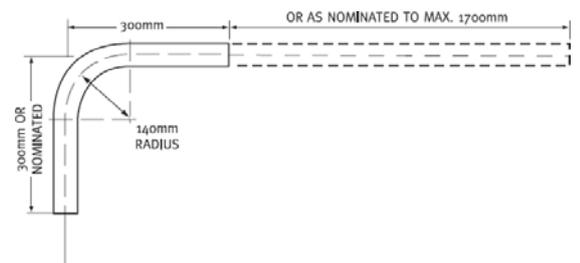
Angle Endclosures

Angle enclosure have 140mm radius bends with 300/260mm legs at 460mm centres. Angle enclosure are made to order with angle nominated to any angle between 1 degree and 45 degrees. NOTE: Position of angle closure bend to stanchion, handrail, knee rail. Top and bottom enclosure bends are not interchangeable.



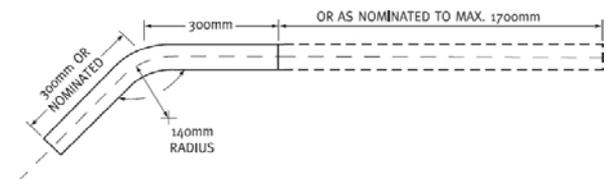
90° Bends

Standard 90 degree bend has 140mm radius with 300mm legs. Non-Standard 90 degree bend has 140mm radius with nominated leg lengths up to a maximum of 1700mm.

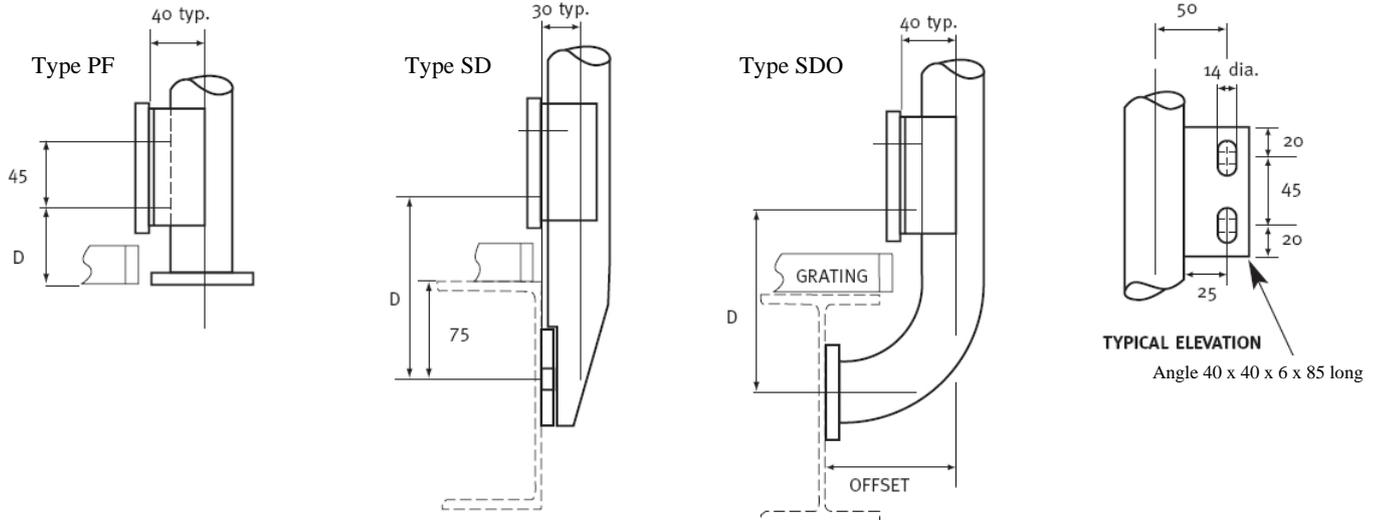


Angle Bends

Standard angle bends have a 140mm radius with 300mm long legs. The angles can be made to suit customer requirements. Always specify angles as shown. Anon standard angle bend has a 140mm radius with nominated leg lengths up to a maximum of 1700mm.



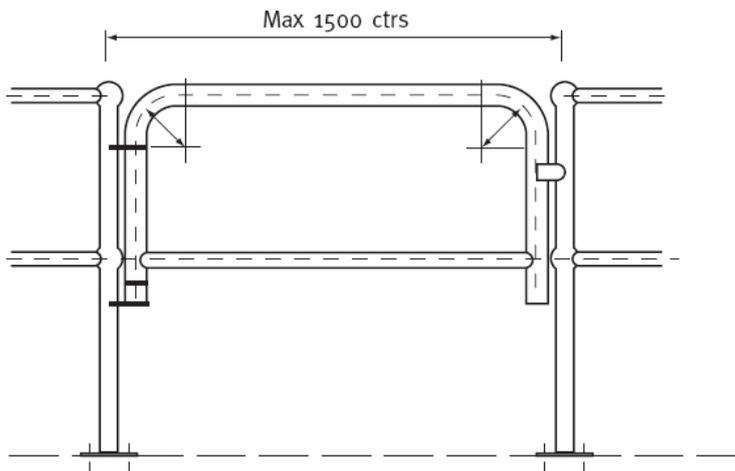
Kickplate Mounting Brackets



| DIMENSION 'D' FOR VARIOUS STANCHION TYPES | | | | |
|---|---------|----------|----------|---------|
| Grating Ht. mm | nil | 20,25,32 | 40,45,50 | 60,65 |
| PF, WD, CRD | D = 40 | D = 65 | D = 80 | D = 100 |
| SD & SDO | D = 115 | D = 140 | D = 160 | D = 175 |
| Slot allow 7mm up/down adjust to kick plate | | | | |

Gates

The self closing gate allows entry through the passage way and because of its design will close on release and return to the stop position. The striker plate can be drilled to allow for a padlock or other locking device to restrict entry when not in use. Gates with kick plates can also be supplied.



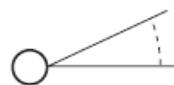
it is essential to nominate the swing direction



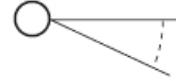
NW swing



SW swing

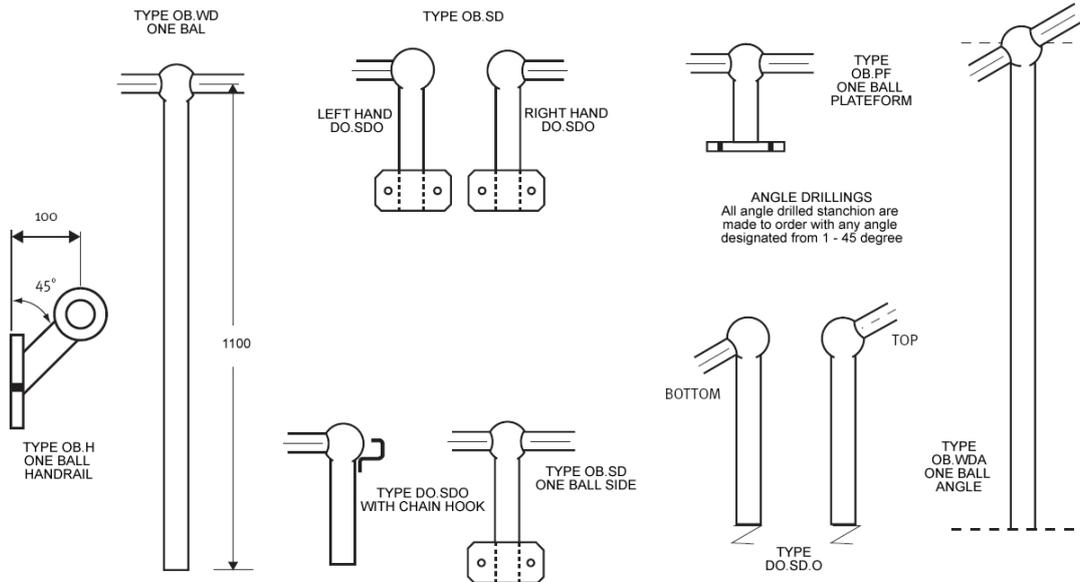


NE swing



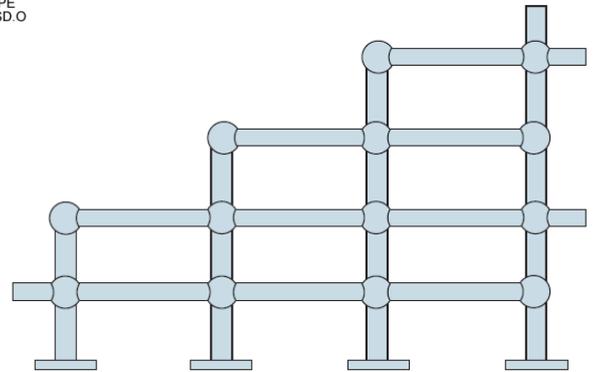
SE swing

One Ball Stanchion



Multi-Ball Stanchions

For those applications which require more than two rails, Multi-Ball Stanchions are suitable for a wide variety of applications including commercial projects where a safe, strong, aesthetically pleasing handrail safety barrier system is required. The Multi-Ball System is available in both Steel and Aluminum construction and finishes .



Barrier

Fabricate Glorail systems into Barrier Panels. This service eliminates the need for on-site assembly. We also have the facilities kick plate to customers specific requirements.

