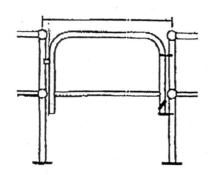


## NOVA Distributors



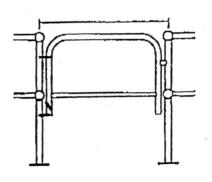
Fax 02 4956 1129 • 47 Kings Road New Lambton NSW 2305 • Phone 02 4952 9666 Email: sales@novadistributors.com.au

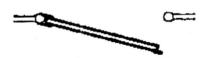
## **NORTH WEST SWING**



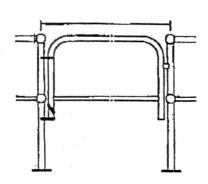


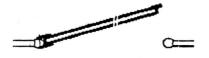
### **SOUTH EAST SWING**



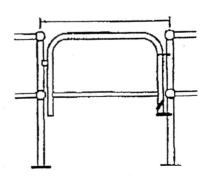


## **NORTH EAST SWING**





## **SOUTH WEST SWING**





## WELDLOK BALLTUBE® SPECIFICATIONS

#### **Standard Duty Stanchions**

Standard duty stanchions are manufactured from 40 NB tubing (48.3mm OD x 3.2mm wall thickness).

#### **Heavy Duty Stanchions**

Heavy duty stanchions are manufactured from 40 NB tubing (48.3mm OD x 4.0mm wall thickness).

#### **Stanchion Pitching**

Australian Standard AS1657:1992 recommends a maximum pitching of 2 metres for stanchions.

#### **Stanchion Handing**

Handing of stanchions is from point of view on stairway or platform, facing the inside of the stanchion. Those on the right-hand side are suffixed 'R', those on the left-hand side are suffixed 'L'.

#### Rails

Standard drilled openings on Balltube stanchions allow for a top rail of 32 NB (42.4mm OD) and a mid-rail of 25 NB (33.7mm OD). Hole sizes for 40 NB (48.3mm OD) and 20 NB (26.9mm OD) rails in either top rail or mid-rail positions are also available. Rails are supplied in medium gauge, with a maximum length of 6.5m.

#### **Kickplate Mounting Brackets**

Manufactured from 40mm x 40mm x 5mm angle x 85mm long, with two 14mm diameter slotted holes, to suit 100mm kickplate.

#### **Kickplates**

Standard kickplates are 100mm x 6mm in 6m lengths. Other sizes available on request.

#### **Base Plates**

All base plates (except BPAM type) are 75mm x 146mm x 10mm with 18mm diameter holes at 102mm centres. BPAM base plates are 65mm x 172mm x 10mm with 18mm diameter holes at 126mm centres. Note: Special base plates can be made to order.

#### **Finish**

Standard finish is hot-dip galvanised to AS/NZS4680:1999. Untreated finish available on request.

#### **Specials**

Variations on standard stanchions and fittings can be manufactured to individual requirements.



#### **Installation Instructions**

- 1. Loosely bolt stanchions to structure.
- 2. Feed top rails and mid-rail through ball joints.
- 3. Where top or mid-rails join, use slip joint.
- 4. Drill for taper pins. (Ensure the join is inside the ball unit, where possible.)
- 5. Tighten nuts and bolts on stanchions.
- 6. Run approximately 25mm (1 inch) of weld on side or top where ball units join top and mid-rails (not required when using tapered pins).
- 7. Bends and corners to be fully welded then ground and primed with zinc-rich paint.

#### Mega Ball Specifications (Refer page 10)

**Standard Duty Stanchions** – 65 NB (76.1mm OD x 3.6mm wall thickness). **Heavy Duty Stanchions** – 65 NB (76.1mm OD x 4.5mm wall thickness).

Spheres – 125mm OD, to suit 76.1mm OD piping.

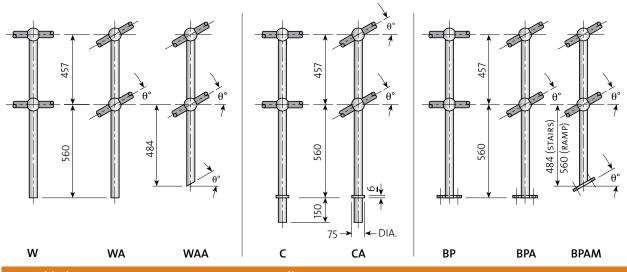
**Rails** – Same duty as stanchions. Supplied in 6.5m lengths.

Base Plates – 150mm x 150mm. Thickness 16mm. Holes 20mm OD.

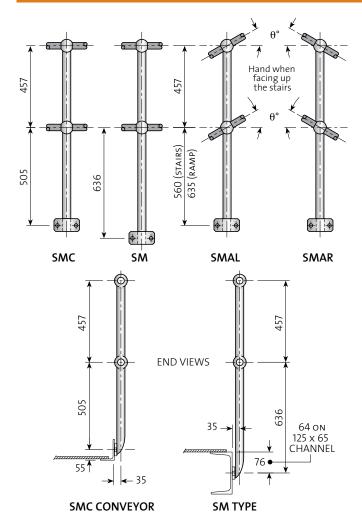
**Special Base Plates –** Made to requirements.

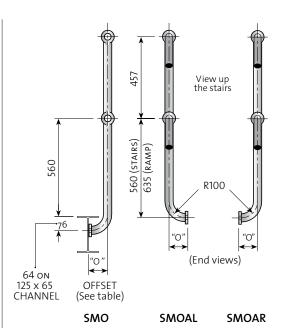
Finish – Hot-dip galvanised or untreated.

#### Weldlok Balltube® Standard Stanchions



Welded Collar Base Plate



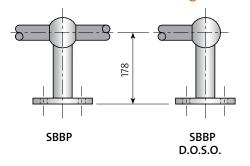


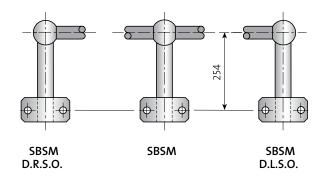
#### Offset "O" (mm)

| Channel   | "O" offset | Universal Beam | "O" offset |
|-----------|------------|----------------|------------|
| 125 x 65  | 110        | 200            | 110        |
| 150 x 75  | 110        | 250            | 110        |
| 180 x 75  | 110        | 310            | 120        |
| 200 x 75  | 110        | 360            | 125        |
| 230 x 75  | 110        | 410            | 125        |
| 250 x 90  | 125        | 460            | 135        |
| 300 x 90  | 125        | 530            | 140        |
| 380 x 100 | 135        |                |            |

Side Mounted Side Mounted Offset

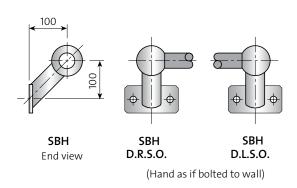
#### Weldlok Balltube® Standard Single Ball Stanchions

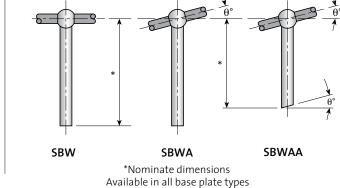




#### Single Ball Base Plate

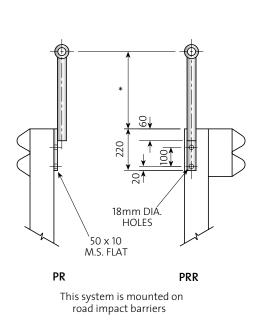
Single Ball Side Mounted

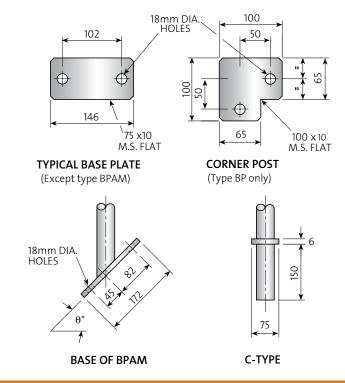




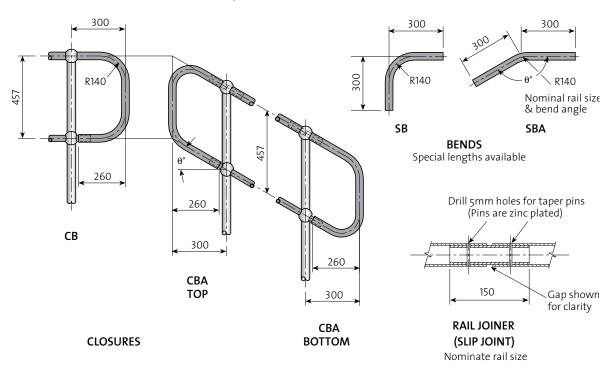
#### Single Ball Offset Handrail

#### Single Ball Welded

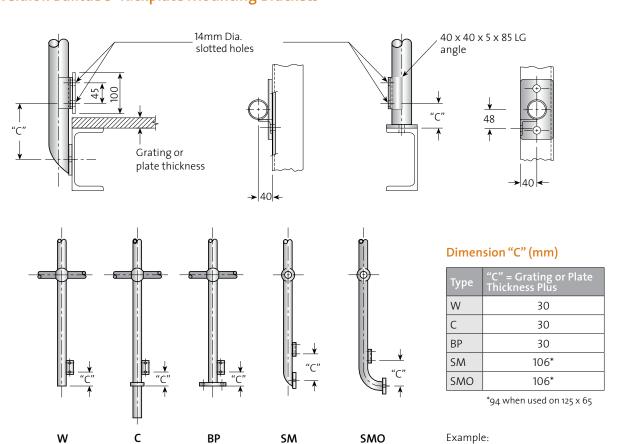




#### Weldlok Balltube® Standard Closures, Joiners and Bends



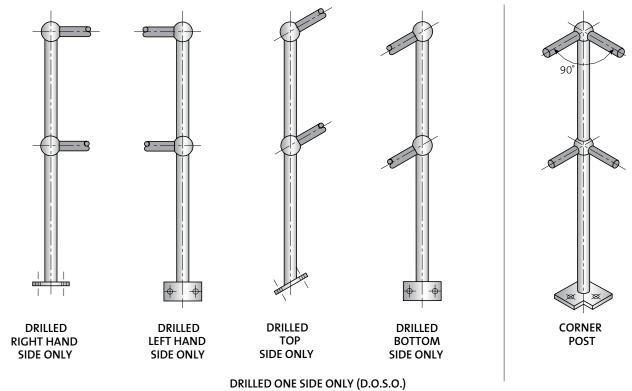
#### Weldlok Balltube® Kickplate Mounting Brackets



Note: Kickplate mounting brackets are an optional extra

Example: If grating is 25mm deep then "C" Dimension = 55mm for types W, C, & BP.

#### Weldlok Balltube<sup>®</sup> Special Drilling for Rails



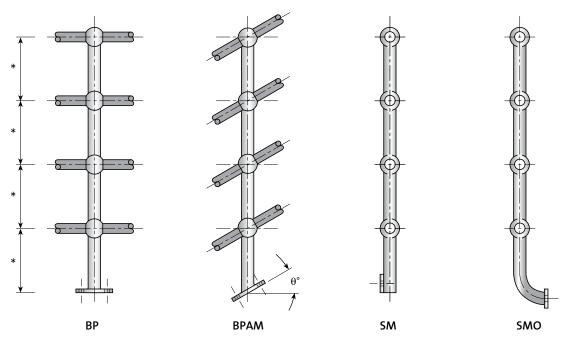
These combinations of drilling are available on full range of standard stanchions

# Weldlok Balltube® Chain Hooks Smm CHAIN DETAIL OF HOOK

#### D.O.S.O. STANCHIONS WITH CHAIN HOOKS

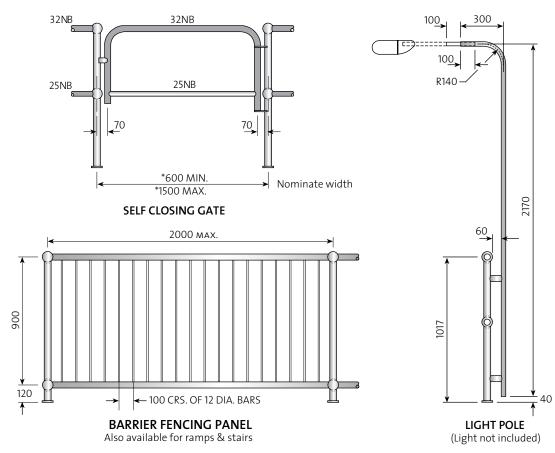
Specify whether top rail only or both rails 5mm heavy duty chain available on request

#### Weldlok Balltube® Multi Ball Stanchions



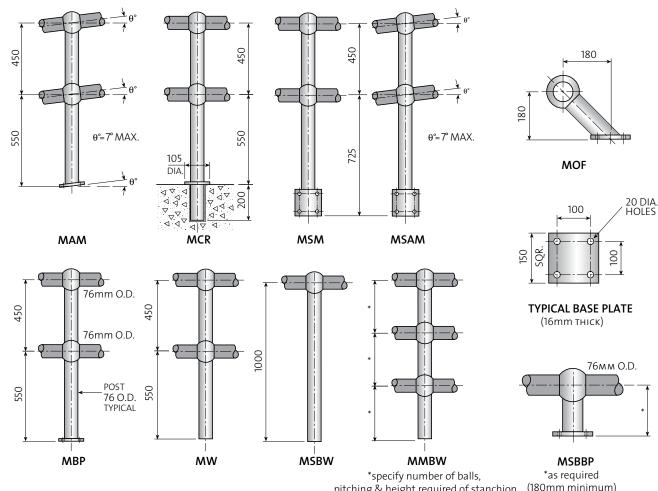
<sup>\*</sup>Specify number of balls, pitching & height required of stanchion (150mm minimum centres) Multi ball stanchions are available in any of the range of Balltube stanchion configurations

#### Weldlok Balltube® Handrail Accessories



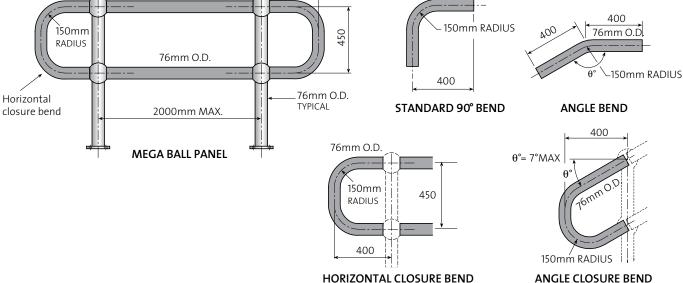
## WELDLOK BALLTUBE® MEGA BALL **COMPONENT DIMENSIONS**

#### Weldlok Balltube® Mega Ball Stanchions



#### Weldlok Balltube® Mega Ball Closures and Bends

pitching & height required of stanchion (180mm minimum) (300mm min. centres) 400 76mm O.D. 76mm O.D. 400 150mm RADIUS



## WELDLOK BALLTUBE® HANDRAIL WEIGHTS

#### Weldlok Balltube® Stanchions

| Туре   | 3.2mm<br>Wall<br>Thickness | 4.0mm<br>Wall<br>Thickness |
|--------|----------------------------|----------------------------|
| ВР     | 4.8kg                      | 5.3kg                      |
| BPA    | 4.8kg                      | 5.3kg                      |
| С      | 4.9kg                      | 5.4kg                      |
| CA     | 4.9kg                      | 5.4kg                      |
| W      | 3.9kg                      | 4.4kg                      |
| WA-WAA | 3.9kg                      | 4.4kg                      |
| SM     | 5.0kg                      | 5.6kg                      |
| SMO    | 5.3kg                      | 5.9kg                      |
| SMA    | 4.9kg                      | 5.4kg                      |
| SMC    | 4.9kg                      | 5.4kg                      |
| SMOA   | 5.3kg                      | 5.9kg                      |
| BPAM   | 4.5kg                      | 5.0kg                      |
| SBW    | 3.9kg                      | 4.4kg                      |
| SBWA   | 3.9kg                      | 4.4kg                      |
| SBBP   | 1.7kg                      | 2.0kg                      |
| SBSM   | 2.0kg                      | 2.3kg                      |
| SBH    | 1.3kg                      |                            |

#### Mega Ball Stanchions

| Туре                    | N.B. | Weight    |
|-------------------------|------|-----------|
| MAM                     | 65   | 11.50kg   |
| MCR                     | 65   | 10.50kg   |
| MSM                     | 65   | 12.65kg   |
| MSAM                    | 65   | 12.65kg   |
| MBP                     | 65   | 11.50kg   |
| MW                      | 65   | 8.70kg    |
| MSBW                    | 65   | 8.10kg    |
| MOF                     | 65   | 5.30kg    |
| RAIL –<br>Standard Duty | 65   | 6.51 kg/m |
| RAIL –<br>Heavy Duty    | 65   | 7.90 kg/m |

Weights based on wall thickness of 3.6mm  $\,$ 



#### **Bends & Closures**

| Туре    | N.B. | Weight |
|---------|------|--------|
| SB, SBA | 32   | 1.8kg  |
| SB, SBA | 25   | 1.4kg  |
| SB, SBA | 20   | 0.9kg  |
| СВ      | 32   | 2.8kg  |
| СВ      | 25   | 2.2kg  |
| СВА     | 32   | 2.8kg  |
| СВА     | 25   | 2.2kg  |

#### **Rails & Kickplates**

| Туре              | Weight   |
|-------------------|----------|
| 32 N.B. Rail      | 3.2 kg/m |
| 25 N.B. Rail      | 2.5 kg/m |
| 20 N.B. Rail      | 1.6 kg/m |
| 100 x 6 Kickplate | 4.8 kg/m |

The above weights for rails and bends are based on medium gauge pipe.

#### **Ordering Information**

#### **Important When Ordering**

- 1. Nominate duty of stanchions (standard or heavy duty).
- 2. Specify finish required for stanchions (galvanised or untreated).
- 3. Nominate type of stanchion (see codes in this brochure).
- 4. State top rail and mid-rail sizes required in nominal bore pipe sizes.
- 5. If kickplate mounting bracket is required, nominate handing and dimension "C" (refer to page 7). Note: Right-hand location of kickplate is standard and will be supplied on RH unless otherwise nominated.
- 6. If stanchions are offset type, state "O" dimension from selection table on page 5.
- 7. If stanchions are angled type, specify angle of elevation.
- 8. If stanchions are to be drilled one side only, nominate handing.
- Any variations to normal stanchions should be noted and drawing supplied.
- 10. Supply list of all joiners and split pins, rails, kickplates, etc.

Information contained in this brochure is supplied in good faith and with the view to assist the user in the correct selection of our products. While every care is taken to ensure that the information contained in this brochure is correct, no warranty is made nor is any condition expressed or implied. As the use of products sold is beyond our control, a condition of purchase is that the purchaser accepts responsibility for ensuring that products purchased are suitable for the intended use. NEPEAN Building & Infrastructure is committed to continual product improvement and therefore reserves the right to change details and designs without notice. © NEPEAN Building & Infrastructure, September 2013.