

TECHNICAL SPECIFICATIONS

ForkSafe® Barrier System

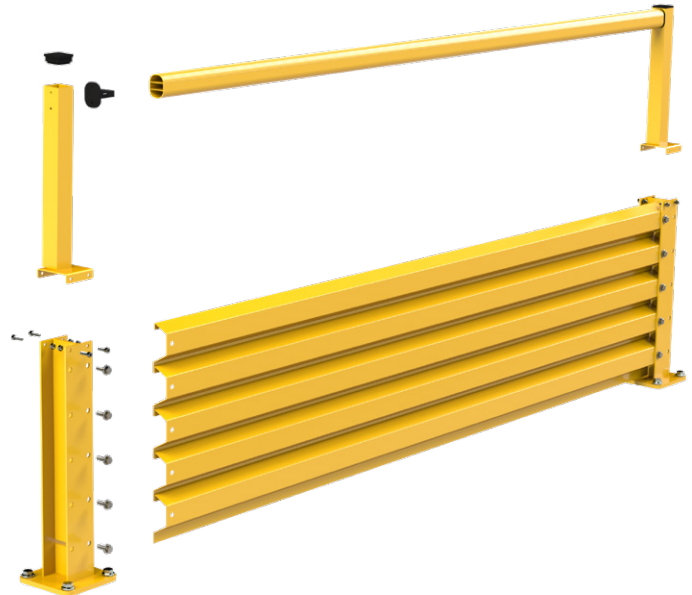
ForkSafe® 600-D

WALKWAY PROTECTION

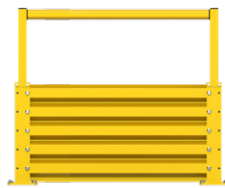
- **Height:** 1060mm
- **Number of Rails Per Bay:** 1 set (1 set = 3 rails)
- **Rail Lengths:** 1200mm, 2400mm
- **Finish:** Yellow powdercoat finish
- **Post Material:** Galvanised steel – 5mm and 8mm wall thickness
- **Rail Material:** Galvanised steel – 2mm wall thickness
- **Hand Rail Material:** Aluminium – 2mm wall thickness, gusseted
- **Connector:** M12 x 30mm 8.8 high tensile bolt
- **Fixings:** M12 x 100mm concrete screw bolts (4 per post, supplied)
- **Post Size:** 90 x 90mm 'I' beam type section with Crumple Zone Technology
- **Base Plate:** 180 x 180mm square, 12mm thick, 4 x Ø16mm anchor holes
- **Caps:** Black plastic.



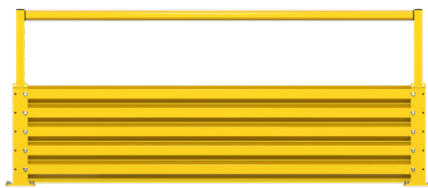
14.70



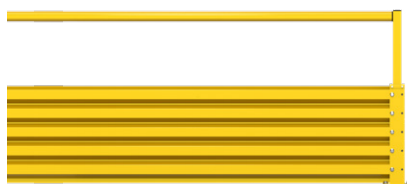
3313-001



3310-013



3310-017



3310-014

OPTIONS

Code	Description	Height (mm)	Rail Length (mm)	Finish
3310-013	600-D Starter Bay	600	1200	Galv/Yellow
3310-017	600-D Starter Bay	600	2400	Galv/Yellow
3310-014	600-D Add-On Bay	600	2400	Galv/Yellow
3313-001	ForkSafe 90° Corner (incl. 6 x Fixing 3313-036)			Galv/Yellow

COMPONENTS

Code	Description	Size (mm)	Finish
3211-033	ForkSafe Post	600(H)	Galv/Yellow
3312-011	ForkSafe Rail	2400(L)	Galv/Yellow
3212-019	ForkSafe Rail	1200(L)	Galv/Yellow
3211-035	ForkSafe Post Extension	440(H)	Galv/Yellow
3320-058	PedSafe Hand Rail	2340(L)	Yellow
3320-079	PedSafe Hand Rail	1140(L)	Yellow
3320-063	PedSafe Post Cap, 50 x 50mm for 2.5mm Wall		Black, Plastic
3320-061	PedSafe Rail End Cap		Black, Plastic
Fixings			
3313-036	Flanged Purlin Bolt & Nut, M12 x 30mm, 8.8, Galv		
3320-062	Tek-screw, 14g x 25mm (Fine thread)		
1911-016	M12 x 100mm Concrete Screw		
1911-055	M8 x 20mm Button Head Socket Screw, Stainless Steel 304		
1911-056	M8 Nyloc Nut, Stainless Steel 304		



VIEW IMPACT CALCULATOR



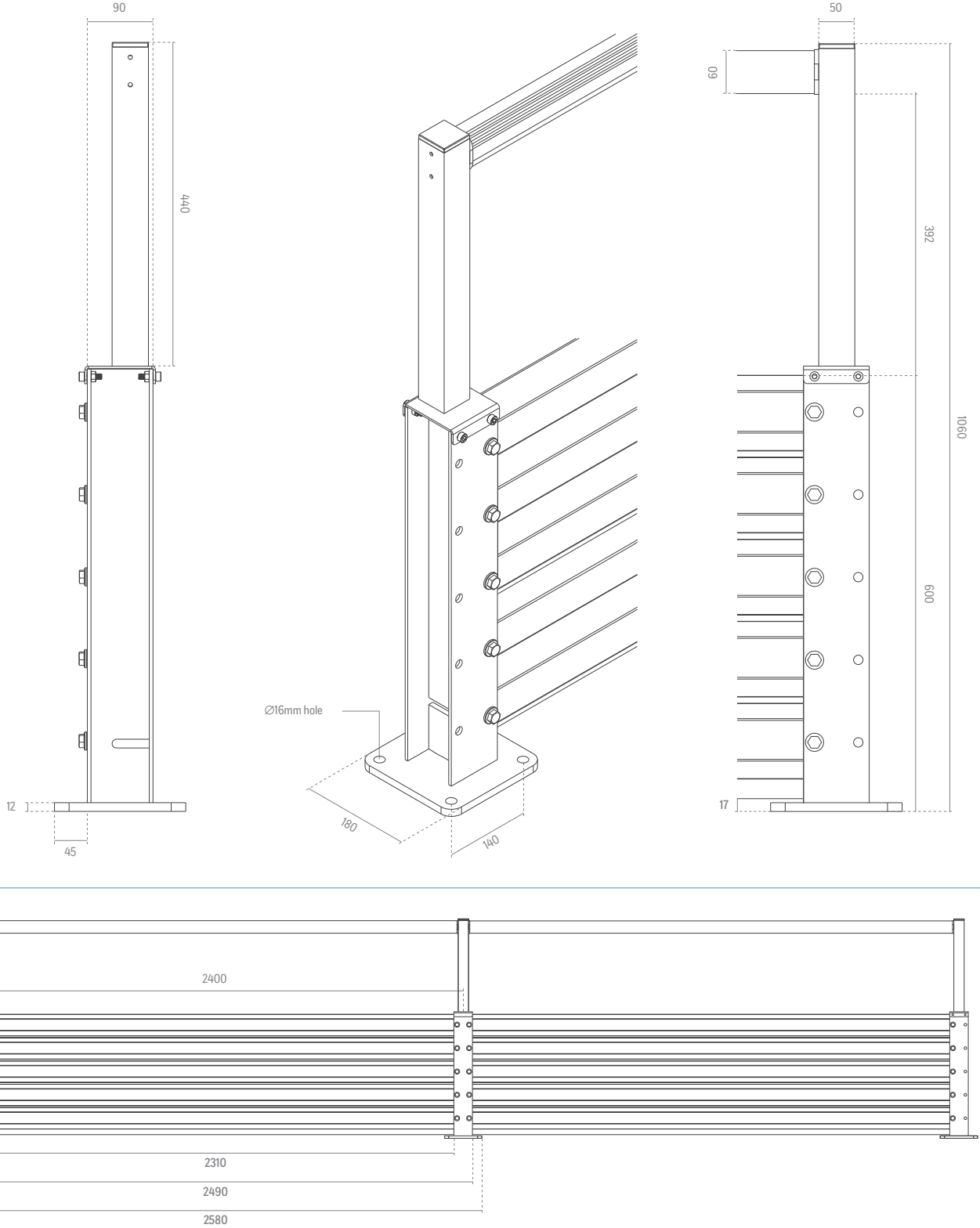
VIEW VIDEO



VIEW ONLINE

TECHNICAL SPECIFICATIONS**ForkSafe® Barrier System**

ForkSafe® 600-D

WALKWAY PROTECTION**14.70****kJ****10**
YR
WARRANTY**PAS13**
Tested &
Certified
FOR SAFETY BARRIERS

ForkSafe® 600-D

WALKWAY PROTECTION



14.70 kJ

10 YR WARRANTY



CERTIFICATION

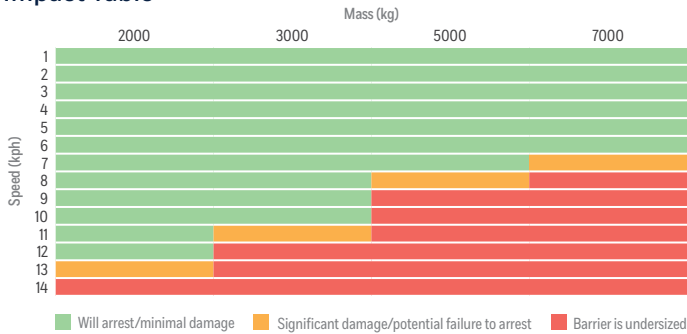
- Impact simulation tested – stops 7T at 7.4km/h
- AS/NZS 1170.1 Section 3.8 – Type F 30kN
- Tested in compliance with PAS13 (certification available on request)

IMPACT SIMULATION

Barrier Details

Barrier Type	ForkSafe 600-D
Barrier Height	600mm
Bay Length	2400mm centres
Number of Rails Per Bay	1 set (1 set = 5 rails)
Number of Bays	3

Impact Table



Forklift and Load Details

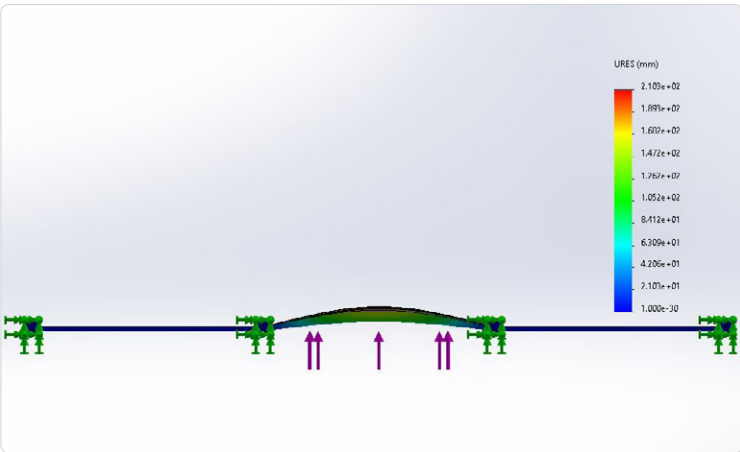
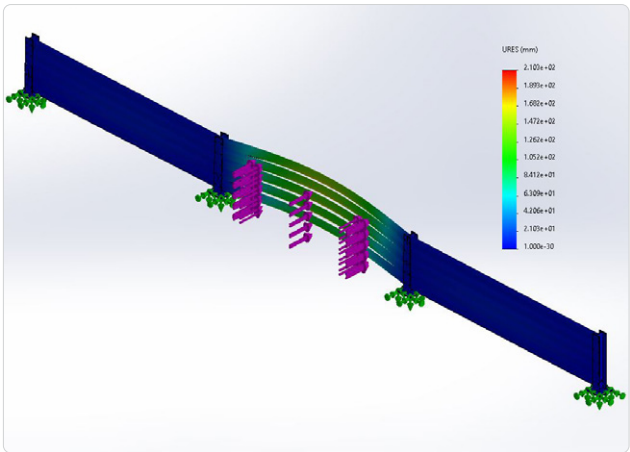
Mass of Forklift and Speed 90 Degrees	4 Tons @ 9.8km/h
Mass of Forklift and Speed 25 Degrees	45.4 Tons @ 3.2km/h
Impact Region	Centre of all rails, 1.5m wide area
Height from Ground	72mm
Concrete Strength	31 MPa minimum
Energy	14700 Joules

Methodology

Model	von Mises Plasticity Model
Study Type	Linear static structural
Angle of Impact	90 Degrees

Results

Deflection Expected	210mm
Deformation	Permanent



How to Install ForkSafe® Barriers

APPLIES TO 400-A, 600-A/C, 950-A/C, 1800-A, 2200-A*



▲ Run a string line from the first to last post



▲ Insert rails into posts and secure with bolts



▲ Mount posts with concrete screws

1 Establish a Reference Point

- ➔ Identify a reference point from a wall or corner where the barrier run will begin.
- ➔ Position the first post to mark the start of the run.
- ➔ Run a string line from the first post to the end of the run.

2 Positioning the Posts

- ➔ Lay out the posts approximately in their intended positions, ensuring correct spacing (either 2.4m or 1.2m).
- ➔ Install 2–3 purlin rails and secure the bolts finger-tight.
- ➔ Continue down the run, repeating the process while verifying spacings.
- ➔ Adjust as needed, as the slotted holes allow for slight movement.

3 Anchoring the Posts

- ➔ Anchor the first post by leveling and shimming it as necessary.
- ➔ Use concrete screws to secure it, ensuring the dust is cleared from the hole before tightening.
- ➔ Set exact spacing for the second, third, and subsequent posts to maintain alignment.
- ➔ Secure each post with concrete screws in a star or diagonal pattern, keeping all posts level and straight.

4 Corners

- ➔ Use the corner post as a reference point when starting a new run.
- ➔ Tighten the purlin bolts securely on the corner plates.
- ➔ Align the next post accordingly.
- ➔ If the corner must be positioned in a specific location, adjust accordingly before anchoring.

5 Adjusting Rail Lengths

- ➔ Rails come in standard 2400mm and 1200mm lengths, however they can be cut to size on site.
- ➔ Treat cut edges with zinc-rich/ rust-inhibiting yellow paint to prevent rust.

***For Barriers with Handrails: 600-B/D, 950-B/D**

Follow the same procedure, with one critical addition:

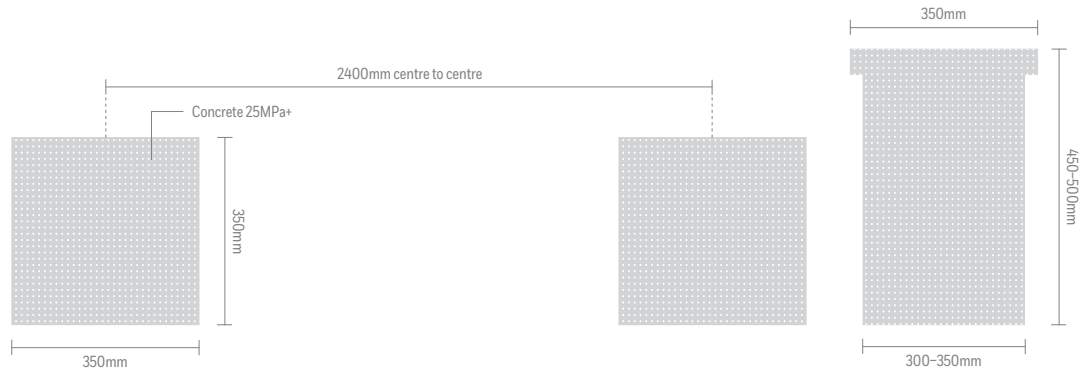
- ➔ Ensure the barrier is straight and square with the handrail before tightening — accurate alignment is essential for proper fit.



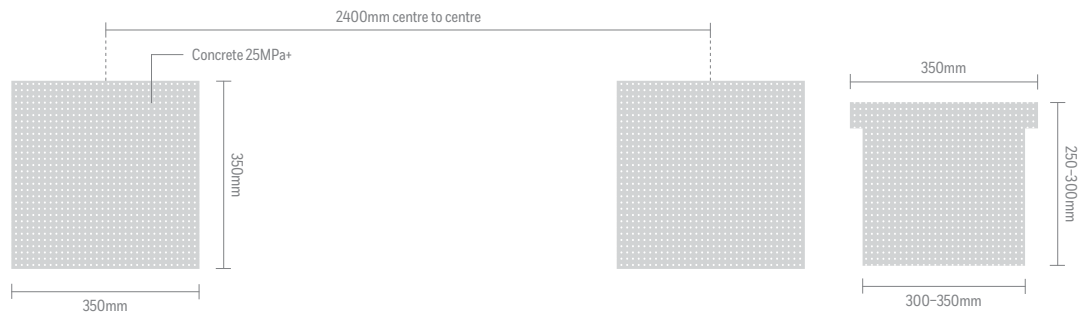
▲ Secure handrail with socket screws

Footing Details for Barrier Installation on Asphalt

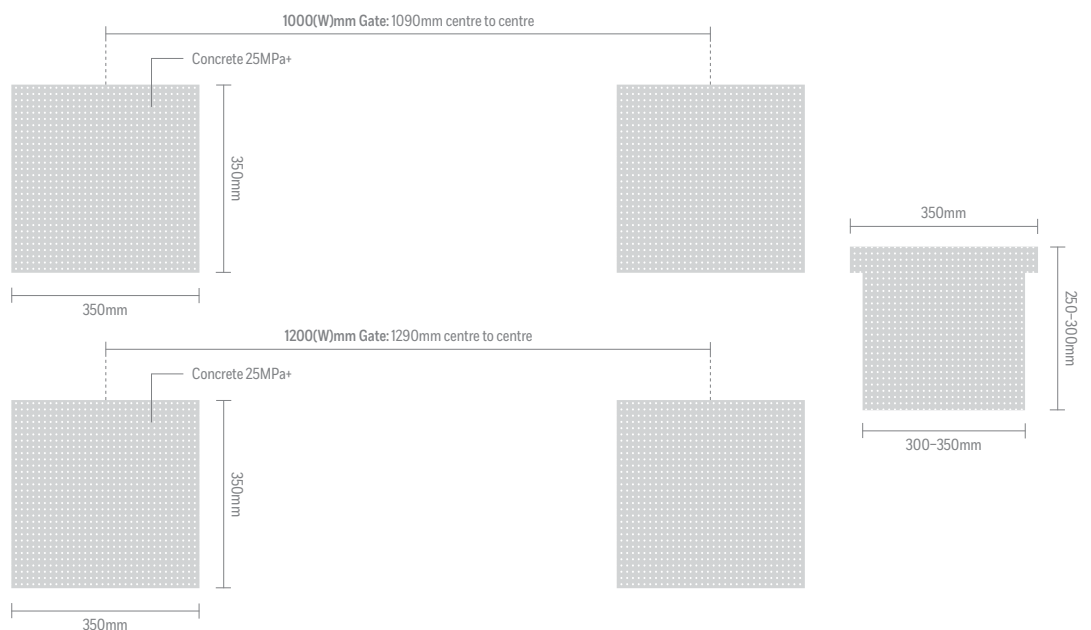
FOR FORKSAFE BARRIERS



FOR PEDSAFE HANDRAIL



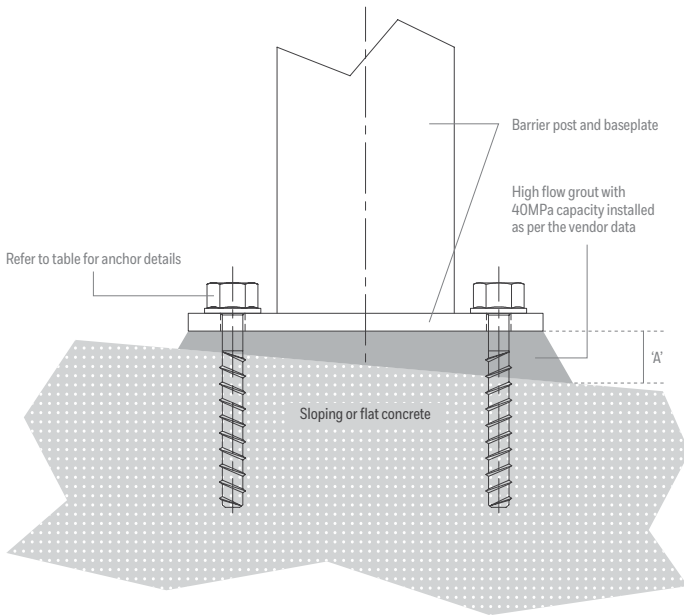
FOR PEDSAFE GATES



How to Install Barriers on Uneven Surfaces

GROUT & PLINTH DETAILS

TYPICAL GROUT DETAIL



Anchor Details

Item	Anchor Type	Embedment (mm)	Grout Thickness 'A' (mm)	Anchor Length (mm)
ForkSafe Barriers	M12 Screw Anchor	75	1-20	100
	M12 Screw Anchor	105	21-48	150
Boplan	M12 Through Bolt	80	1-6	100
	M12 Screw Anchor	75	7-15	120
	M16 Screw Anchor	80	16-60	150
Pedestrian Barriers & Gates	M12 Screw Anchor	75	1-20	100
	M12 Screw Anchor	105	21-45	150
	M12 Screw Anchor	105	46-95	200
Mezzanine Gates	M10 Screw Anchor	50	10	75

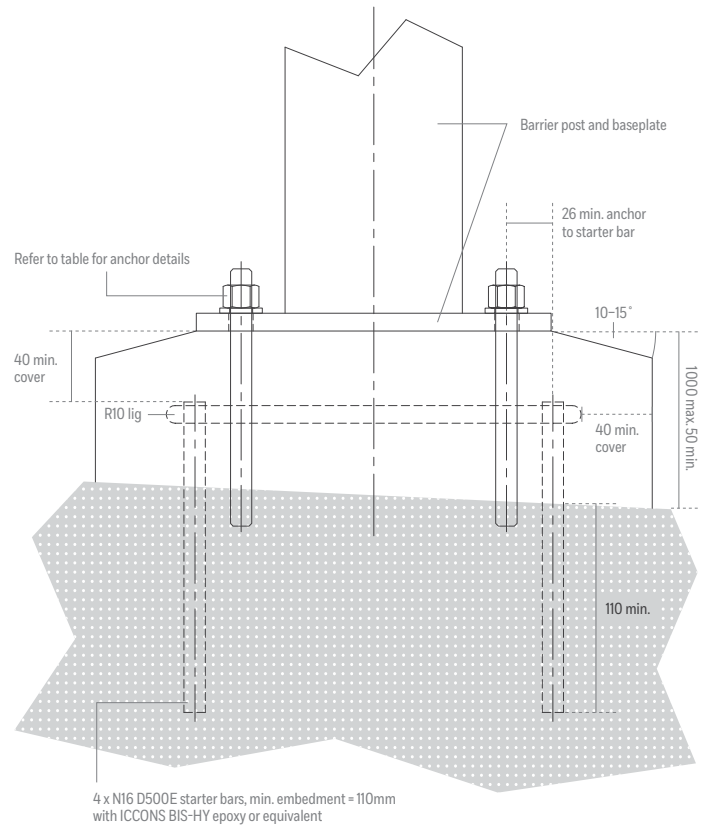
Note: All loading and geometry as per vendor data; M16 screw anchor may be used instead of M16 as long as length is achieved.

Barrier Details

Item	Item Types
ForkSafe Barriers	400-A, 600-A/B/C/D, 950-A/B/C/D, 1800-A, 2200-A
Boplan	TB260, TB260 Double, TB260 Plus, TB260 Grill, TB260 Double Plus, TB400, TB400 Double, TB400 Plus, TB400 Grill, TB400 Double Plus, HP Plus, HP Grill, HT Tunnel Free Standing, HT Tunnel Wall Fix, Flip 200F Plus, DG250F, DG250R
Pedestrian Handrails	PedSafe 1000-A
Pedestrian Gates	PedSafe Pause Gate, DockSafe Lift Up Gate, Dock-Pro Bi-Fold Gate
Safety Gates	201, 202, 203, 204, 205, 206

Note: All loading and geometry as per vendor data.

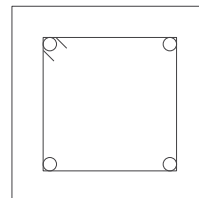
TYPICAL PLINTH DETAIL



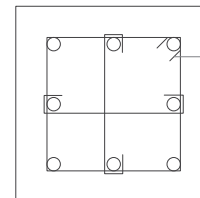
Plinth Details

Plinth Size (mm)	Starter Bar Size	No. of Starter Bars	No. of Ligs
Up to 280x280	N16	4	1
Up to 400x400	N16	8	2 (Up to 300x300 only 1 lig)

4-Bar Ligature Layout



8-Bar Ligature Layout



60mm bend radius and 70mm extension to all hooks

Note (applies to all):

- Plinth concrete to be minimum 40MPa
- If grout thickness noted in typical baseplate grout detail is exceeded use plinth details
- Rhinostop systems use plinth detail.