

## TECHNICAL SPECIFICATIONS

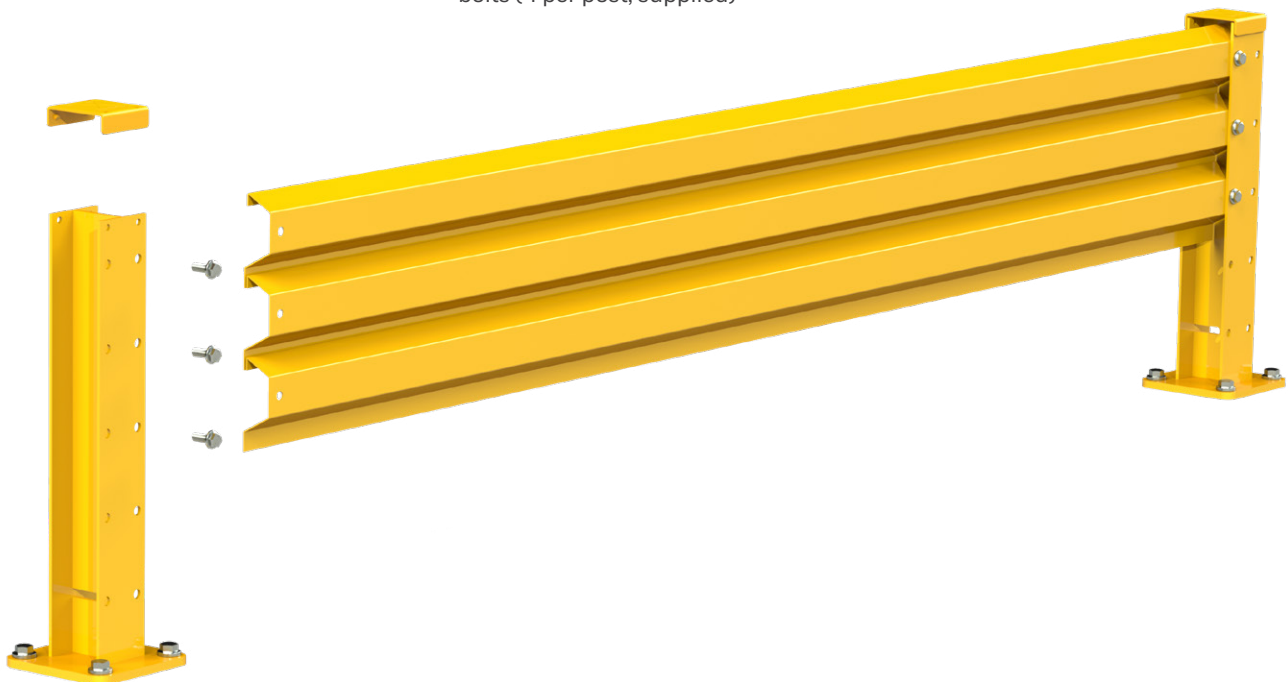
## ForkSafe® Barrier System

# ForkSafe® 600-A

### ASSET PROTECTION

- **Height:** 600mm
- **Number of Rails Per Bay:** 1 set (1 set = 3 rails)
- **Rail Lengths:** 1200mm, 2400mm
- **Finish:** Galvanised with yellow powdercoat finish

- **Post Material:** Steel — 5mm and 8mm wall thickness
- **Rail Material:** Steel — 2mm wall thickness
- **Connector:** M12 x 30mm 8.8 high tensile bolt
- **Fixings:** M12 x 100mm concrete screw bolts (4 per post, supplied)


**5.78**
**kJ**


3313-001



3310-026



3310-005



3310-006

### OPTIONS

| Code     | Description                                     | Height (mm) | Rail Length (mm) | Finish      |
|----------|-------------------------------------------------|-------------|------------------|-------------|
| 3310-026 | 600-A Starter Bay                               | 600         | 1200             | Galv/Yellow |
| 3310-005 | 600-A Starter Bay                               | 600         | 2400             | Galv/Yellow |
| 3310-006 | 600-A 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  |
| 3313-037 | ForkSafe Post Cap                                |           | Yellow, HDPE |
| Fixings  |                                                  |           |              |
| 3313-036 | Flanged Purlin Bolt & Nut, M12 x 30mm, 8.8, Galv |           |              |
| 1911-016 | M12 x 100mm Concrete Screw                       |           |              |



VIEW IMPACT CALCULATOR



VIEW VIDEO



VIEW ONLINE

**TECHNICAL SPECIFICATIONS**

**ForkSafe® Barrier System**

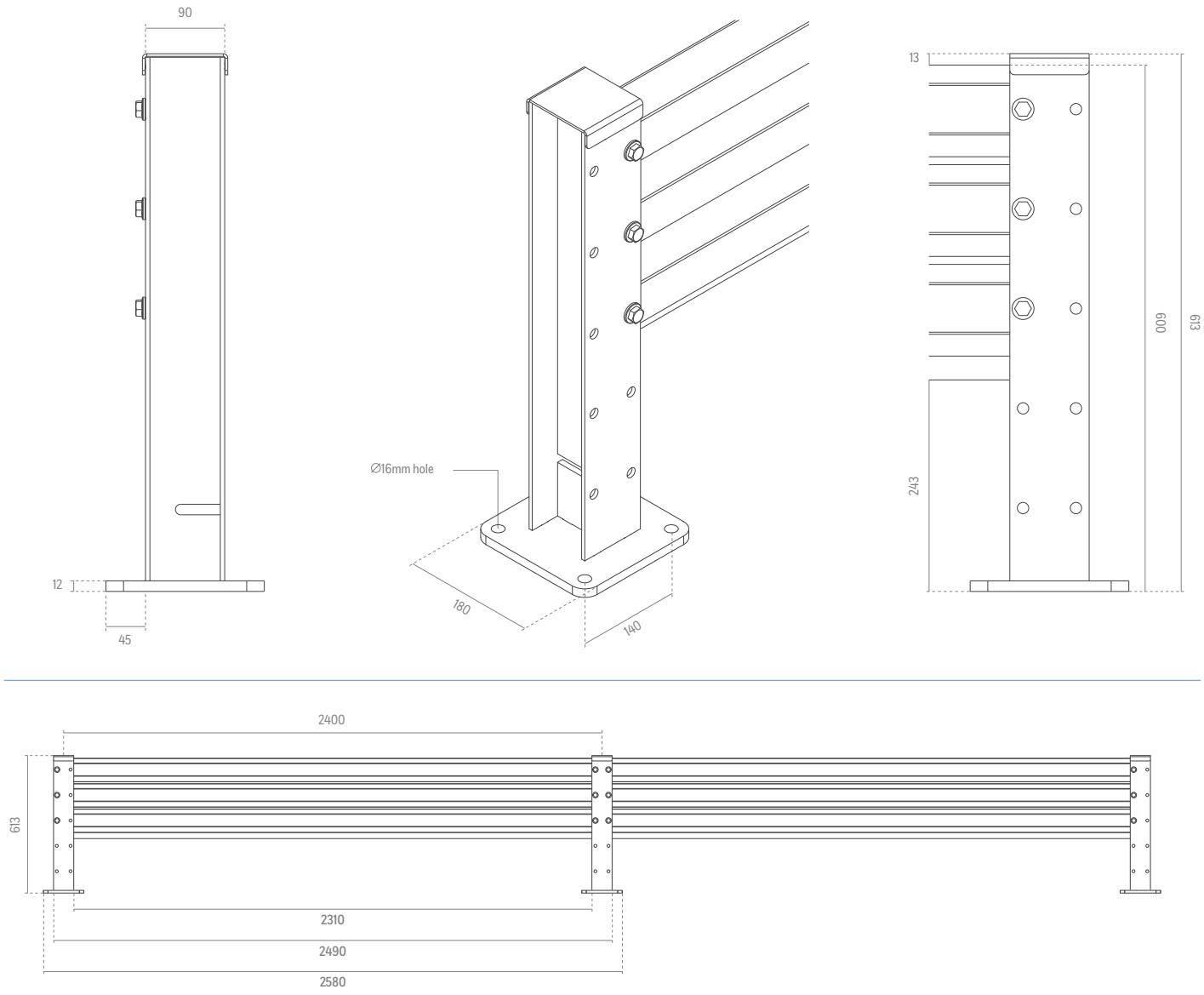
**ForkSafe® 600-A**

ASSET PROTECTION



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# ForkSafe® 600-A

ASSET PROTECTION



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## CERTIFICATION

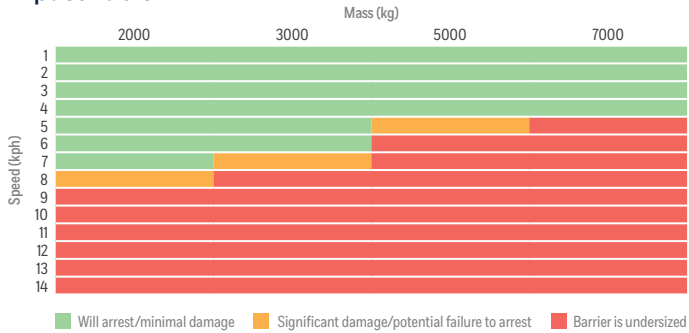
- Impact simulation tested — **stops 7T at 4.6km/h**
- Meets AS/NZS 1170.1 Section 3.8 — Type F 30kN
- Tested in compliance with PAS13 (certification available on request)

## IMPACT SIMULATION

### Barrier Details

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

### Impact Table



### Forklift and Load Details

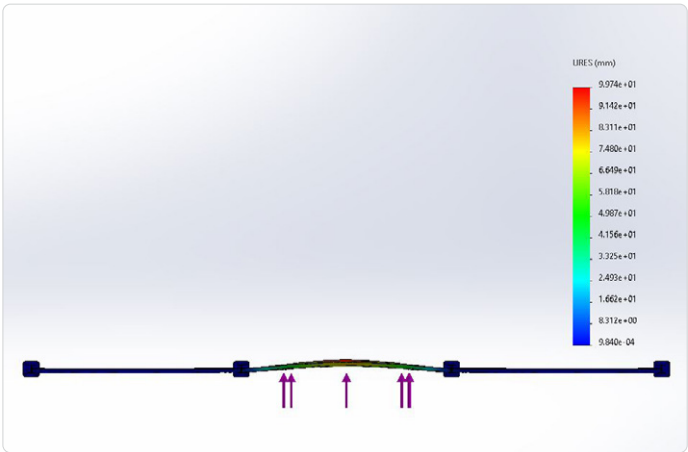
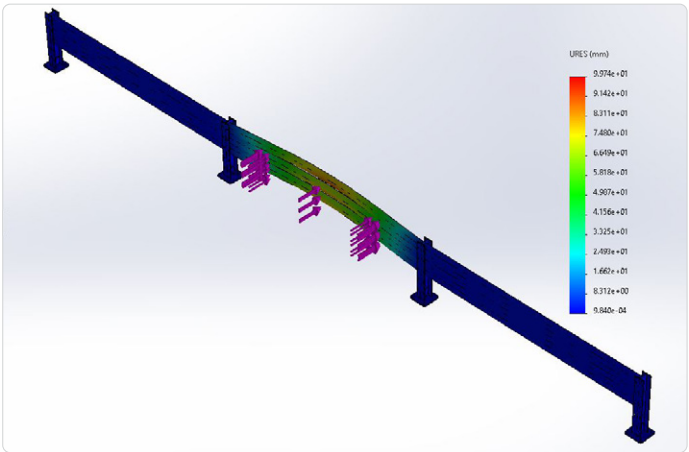
|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Mass of Forklift and Speed 90 Degrees | 4 Tons @ 6.3 km/h                   |
| Mass of Forklift and Speed 25 Degrees | 11.4 Tons @ 4km/h                   |
| Impact Region                         | Centre of all rails, 1.5m wide area |
| Height from Ground                    | 300mm                               |
| Concrete Strength                     | 31 MPa minimum                      |
| Energy                                | 5780 Joules                         |

### Methodology

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

### Results

|                     |           |
|---------------------|-----------|
| Deflection Expected | 99mm      |
| 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:

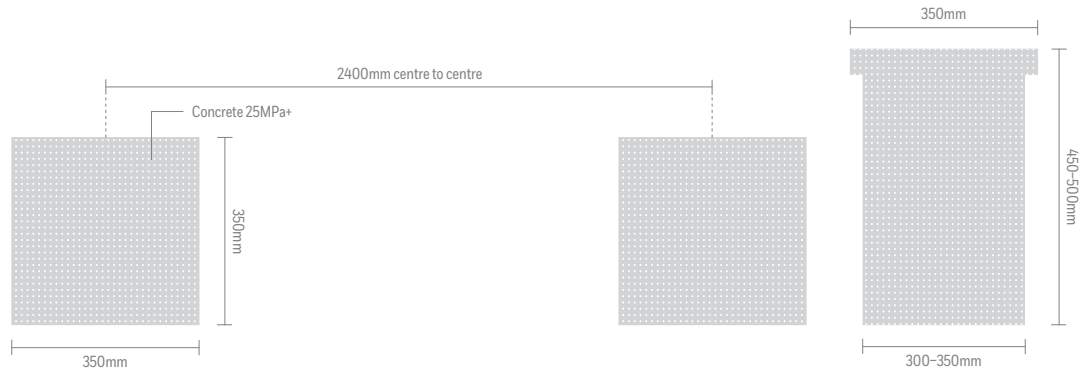
- ➔ Ensure the barrier is straight and square with the handrail before tightening — accurate alignment is essential for proper fit.



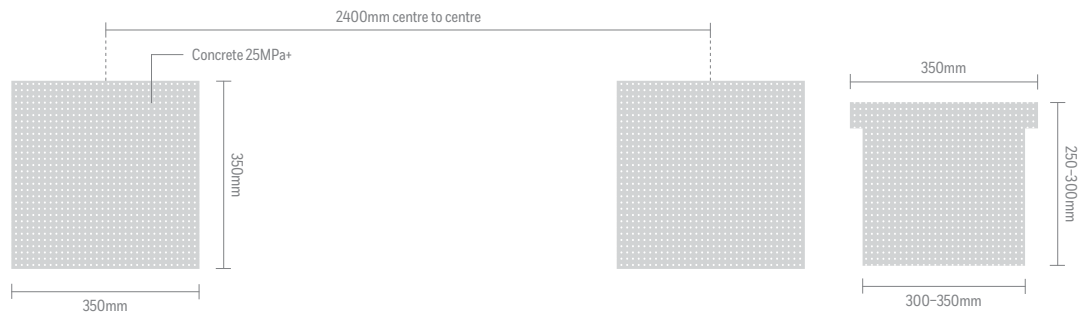
▲ Secure handrail with socket screws

# Footing Details for Barrier Installation on Asphalt

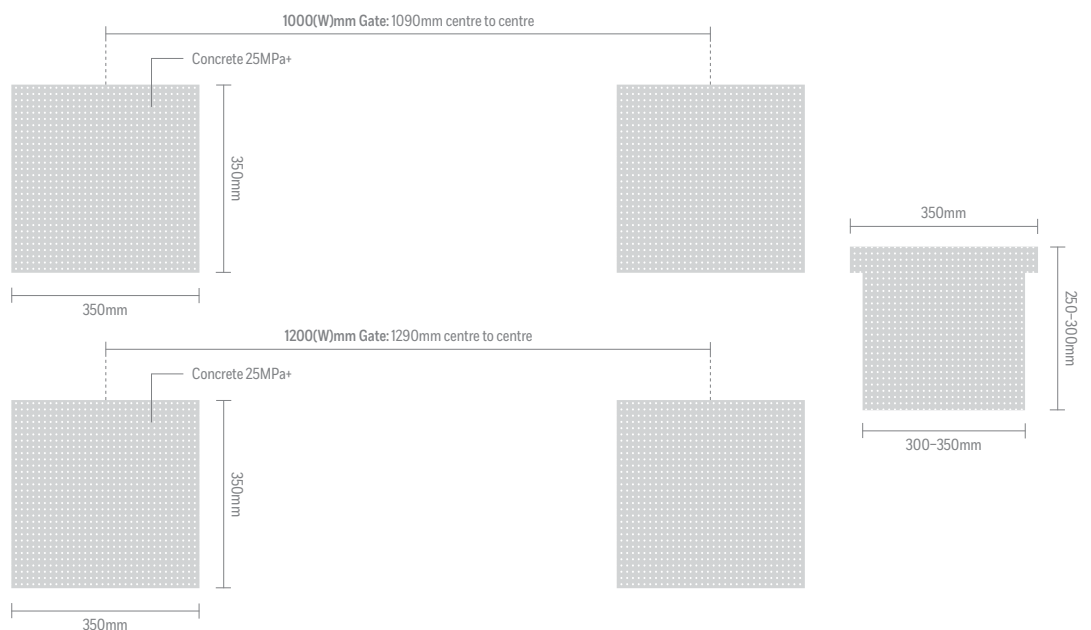
## FOR FORKSAFE BARRIERS



## FOR PEDSAFE HANDRAIL



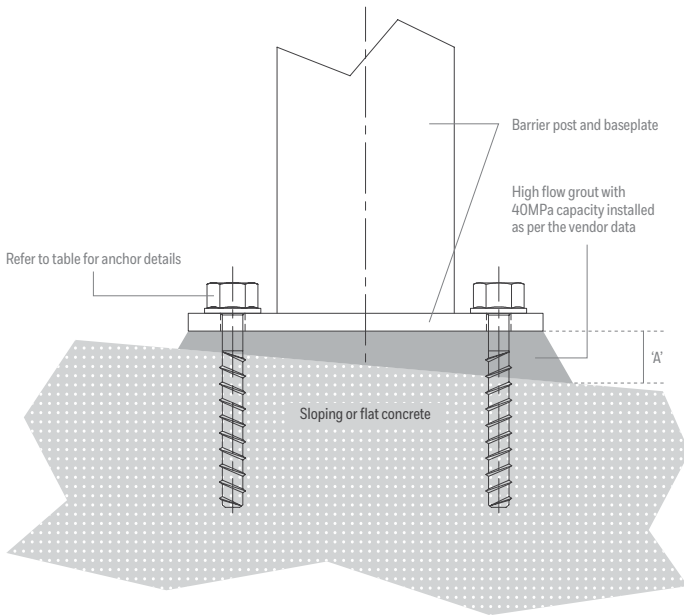
## FOR PEDSAFE GATES



# 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                 |

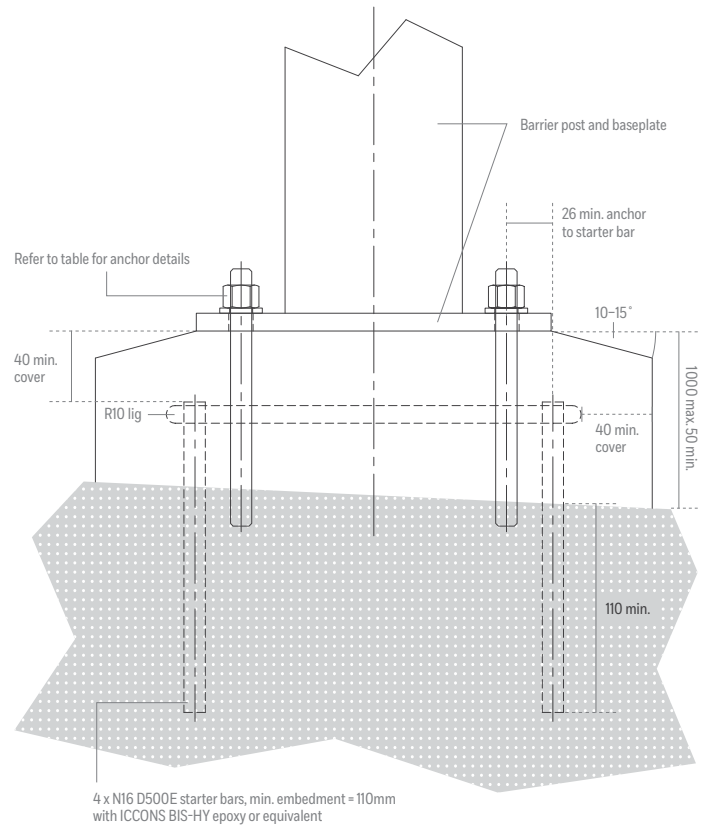
Note: All loading and geometry as per vendor data; M16 screw anchor may be used instead of M16 as long as length is achieved.

### 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.

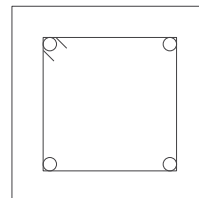
### TYPICAL PLINTH DETAIL



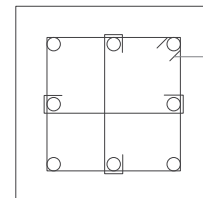
### Plinth Details

| 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.