CarStopper 30 Bollard (Fixed/Removable)

CRASH-RATED PEDESTRIAN & ASSET PROTECTION

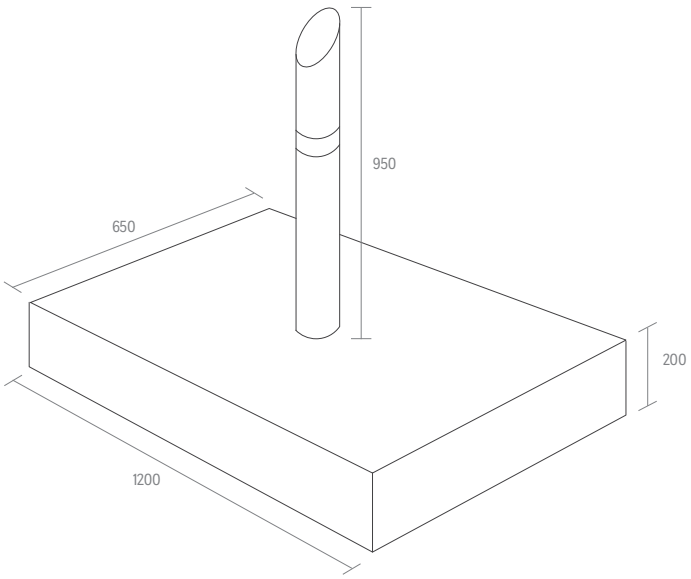
- **Bollard Configuration:** Fixed (pictured, right) or removable
- **Construction:** Spring steel with internal spring mechanism
- **Impact Recovery:** Spring-loaded design allows return towards original position following low-level impacts
- **Finished Height:** 950mm
- **Shroud Diameter:** 114mm
- **Shroud Material:** 316 satin polished stainless steel
- **Shroud Finish Options:** Stainless steel or mild steel
- **Colour Options:** Standard RAL colours available
- **Banding Options:** Black, yellow, red, blue, orange, white or no banding
- **Tested Core Dimensions:** 90(W) x 73(L) x 850(H)mm
- **Bollard Spacing:** 1290mm centres (gives ~1176mm clear between shrouds)
- **Spacing Between Tested Cores:** 1200mm
- **Foundation Depth:** 200mm Concrete
- **Total Excavation Depth:** 250mm
- **Minimum Array:** 1 bollard
- **Installation Configuration:** Single bollard or continuous run



TESTING & COMPLIANCE

- **Crash Tested:** PAS 68:2010
- **Vehicle Performance Classification:** V/1500(M1)/48/90:1.76/0.0
- **Additional Reference:** CEN CWA 16221

Vehicle Test Weight	1,500kg	Vehicle Angle	90 Degrees
Vehicle Class	M1	Vehicle Penetration	1.76m
Vehicle Speed	48km/h	25kg+ Dispersion	0.0m



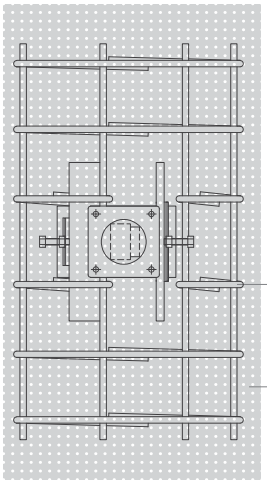
Code	Description	Finished Height (mm)	Shroud Diameter (mm)
1614-001	CarStopper 30	950	114

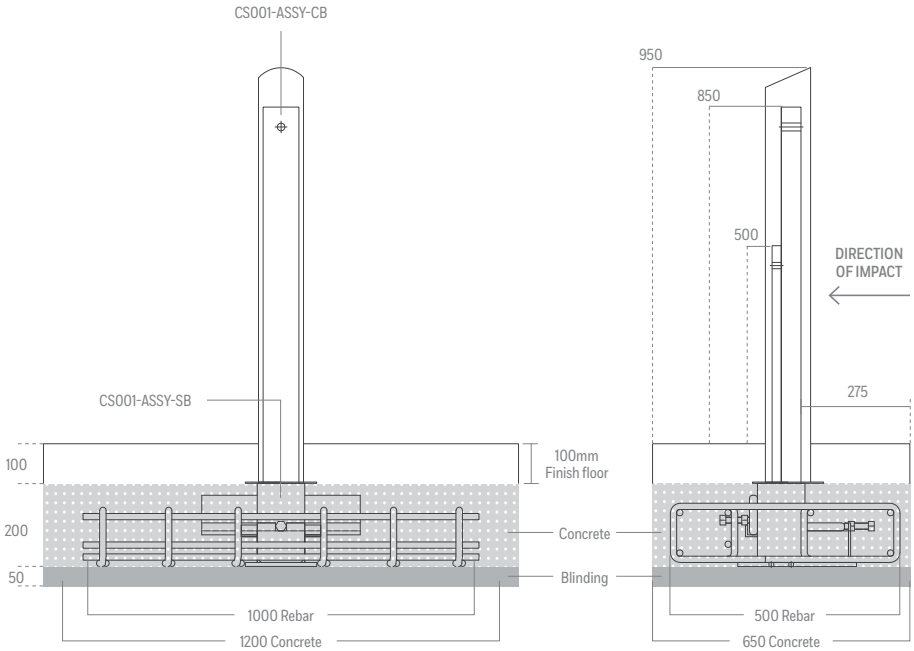
Performance classification and product information based on manufacturer documentation. Installation requirements and final configuration should be confirmed for each project.

VIEW ONLINE

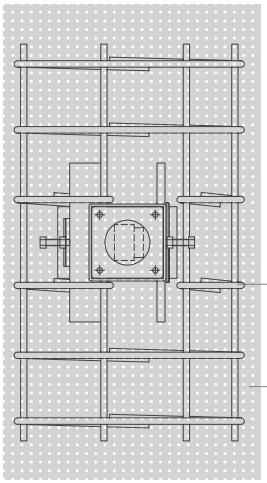
TECHNICAL SPECIFICATIONS | CarStopper 30 Bollards

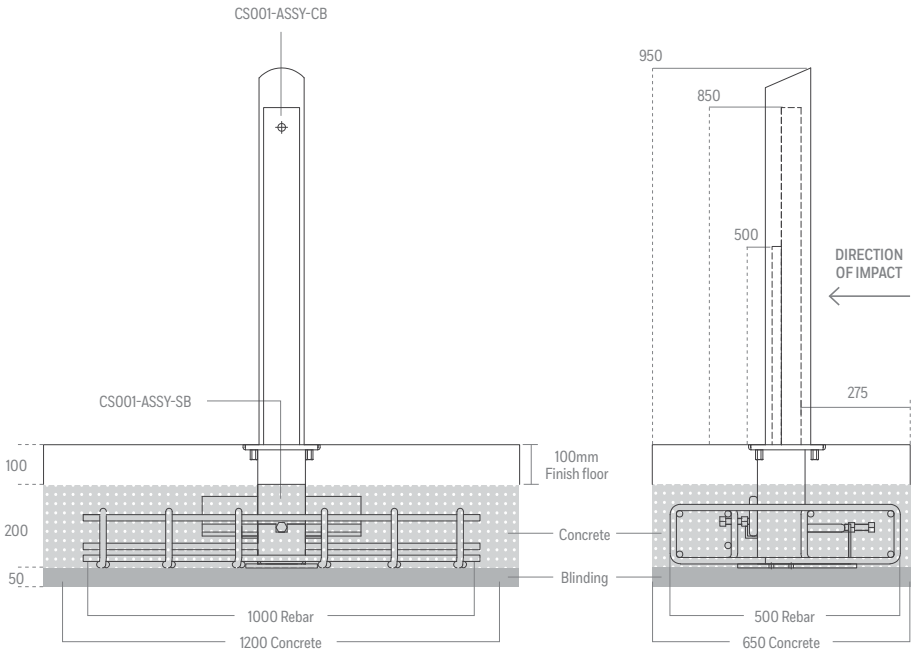
Fixed





Removable





CarStopper 30 Bollard (Removable)

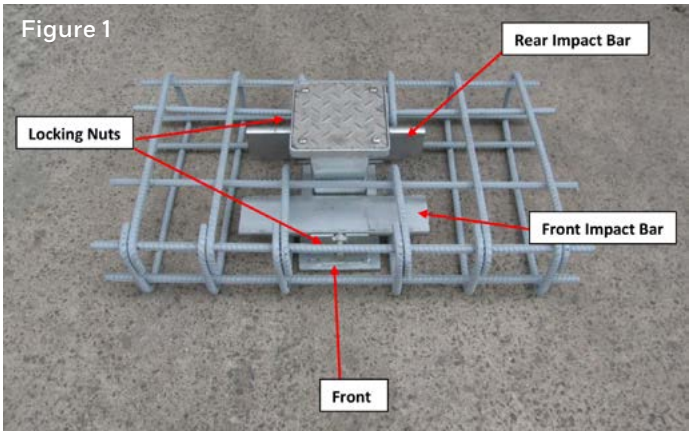
Step 1

Dig out the ground 1200mm (L) x 650mm (W) x 200mm (D). Level off the ground and place the slipper box into the centre of the foundation hole.

Step 2

Place the prebuilt rebar cage over the slipper box and then fit front impact bar (100 x 20 x 400mm) into the centre of the slipper box (see fig. 1). Lock the bar into place with the locking bolts provided, and then fit the rear impact bar into centre of slipper box (100 x 20 x 400mm). Once the impact bar is in place, lock in place with the locking bolts provided. Move the loose rebar centre bars into place (see fig. 10) and wire up.

Figure 1



Step 3

Once the rebar cage is fitted, concrete the slipper box into the foundation using C40/50 concrete with 10mm grit (see fig. 2). Once the concrete has set, remove the slipper box lid (please ensure the inside of the slipper box is clean and free from concrete).

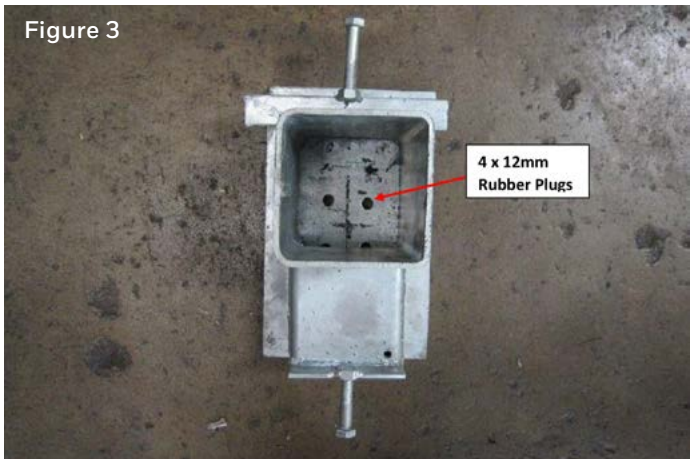
Figure 2



Step 3a (optional)

If required, you can create a water soak away within the slipper box by removing the 4 12mm rubber plugs (see fig. 3). Once removed, drill through the holes 150mm into the concrete.

Figure 3



Step 4

Fit the front post (90 x 50 x 1150mm) with right angle foot on the end into the hollow of the slipper box (see fig. 4). Push with a bar if needed (see fig. 5).

Figure 4



Figure 5



Step 5

Fit the second post (75 x 23 x 800mm) to the back of the front post, followed by the rear packer (100 x 30 x 190mm) (see fig. 6). Follow with side packers (70 x 6 x 190mm) (see fig. 7). If the post needs tightening up, add 1mm shims to the side and rear.

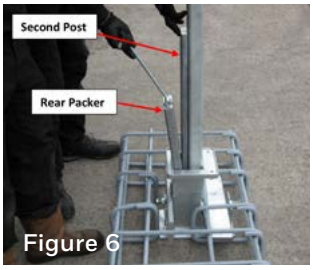


Figure 6

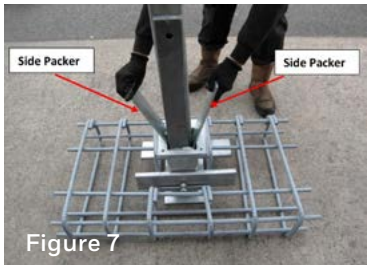


Figure 7

Step 6

Next, add the 100mm paving topping of your choice (eg. brick pavers).

Step 7 (optional)

Fit shroud over post and bolt to top plate with (4) 10mm security bolts (see figs 8 & 9). **To remove the bollards, just carry out the fitting in reverse.**

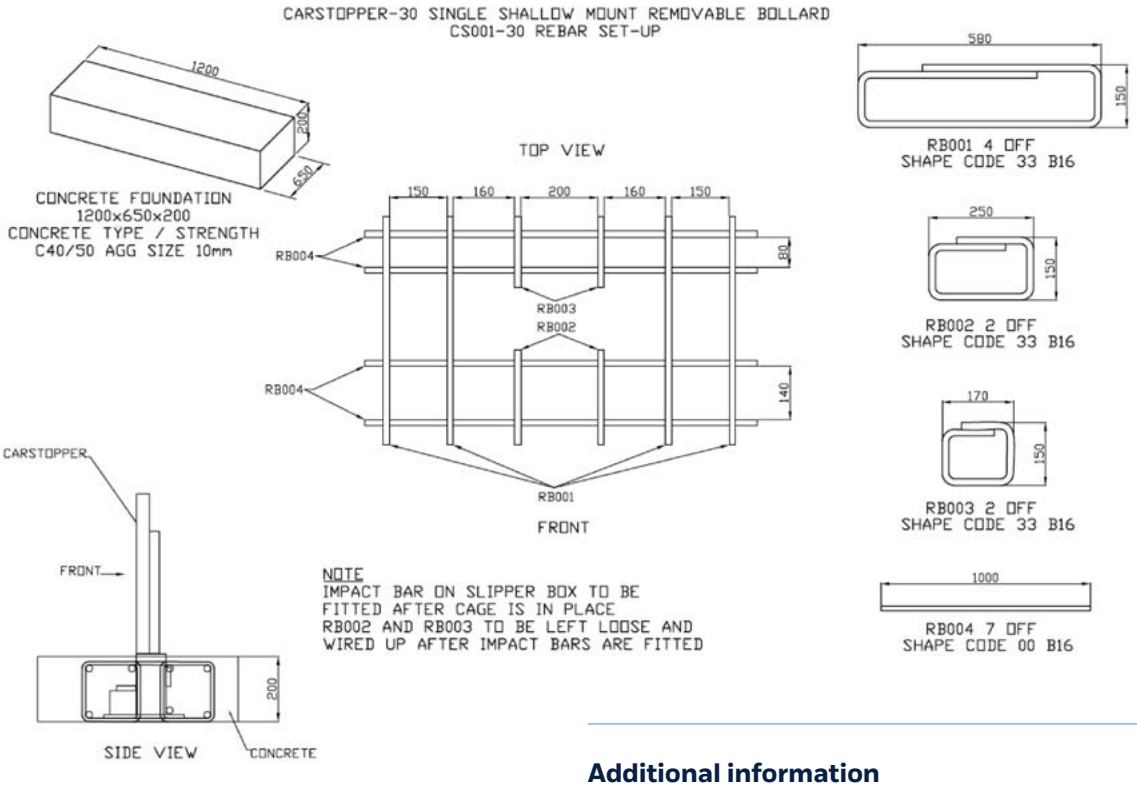

Figure 8


Figure 9

Step 8

Remove the packaging from the shroud. **Note: the shroud will arrive wrapped. We recommend it remains wrapped until the installation is complete to prevent scuffs and scratches.**

Figure 10



Additional information

If concreting around the shroud, ensure a membrane is used to protect the stainless steel.

Note: Do not wash off shrouds with acidic concrete remover.