



# Kent Anti Terrorist Bollard



# Kent Anti Terrorist Bollard

## KATTKFT200

### Description:

The Kent Anti Terrorist Truck PAS 68 flat top bollard is designed to prevent terrorist attacks. The bollard is manufactured from 316L Stainless Steel with a 300mm diameter tube as standard. The bollard is produced with a bright satin finish as standard. The Kent Anti Terrorist bollard is commonly used in embassies, prisons, airports, military bases, retail parks, ATM Machines, police stations and government buildings.

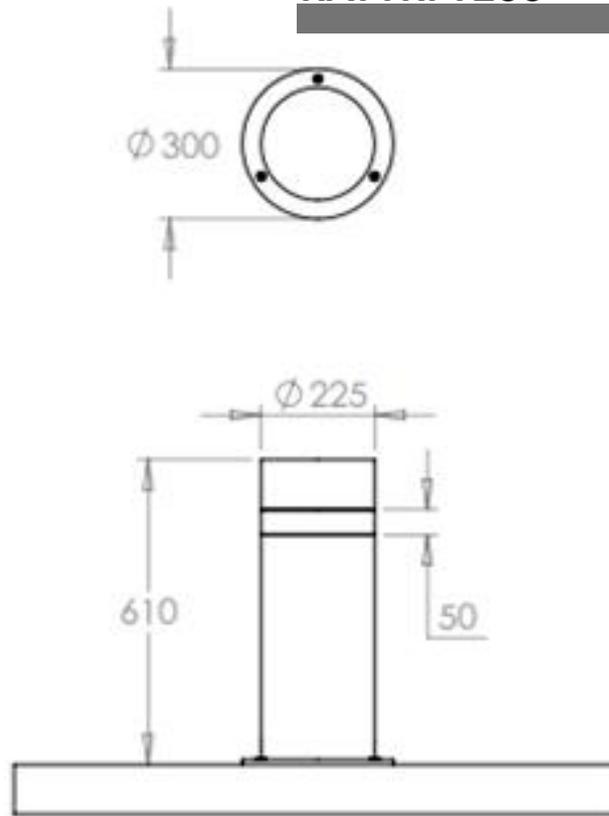
The KATTKFT200 bollard is cast 400mm below ground and this design makes it capable to withstand a 7500kg Truck at 48 km/h (30mph). Alternatively the KARCKFT101 bollard is cast 200mm below ground and is designed to stop a 1500kg car travelling at 48km/h (30mph).

### Features:

- Stops a 7500kg Truck at 48 km/h (30mph)
- Fully complies with BSI PAS68:2007
- Shallow Depth – Only 400mm below ground



# Kent Anti Terrorist Bollard KATTKFT200



Product Dimensions:

Reference	Height	Diameter	Width
Kent Anti Terrorist Truck PAS68 Bollard KATTKFT200	1200mm	300mm	1000mm
Kent Anti Ram Car PAS68 Bollard KARCKFT101	1200mm	300mm	1000mm

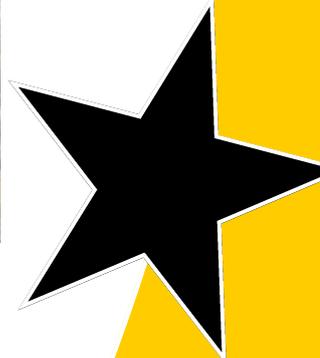
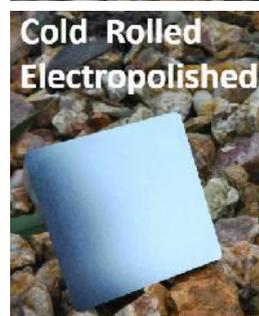
## Stainless Steel Finishing Options

There are several finishing options to choose from when purchasing a Kent Bollard:

**Bead Blasted:** Our Bead Blasting Facility cleans Stainless Steel with a consistent finish throughout. Bead Blasting will leave welded joints and any abnormalities in the steel work with a clean and consistent finish. We also Bead Blast items that have been installed over a number of years that require refurbishment or cleaning

**Satin Finish 320 Grit Polished:** The removable tree grille is similar to the tree grille option except there is an added release mechanism which allows for access to the base of the tree by the removal of the grille.

**Electropolished:** Electropolishing removes surface material, beginning with the high points within the microscopic surface texture. By removing these points, the electropolishing process will improve the surface finish of a metal such as stainless steel, nickel, aluminium and hastelloy, leaving a smoother and more reflective surface.



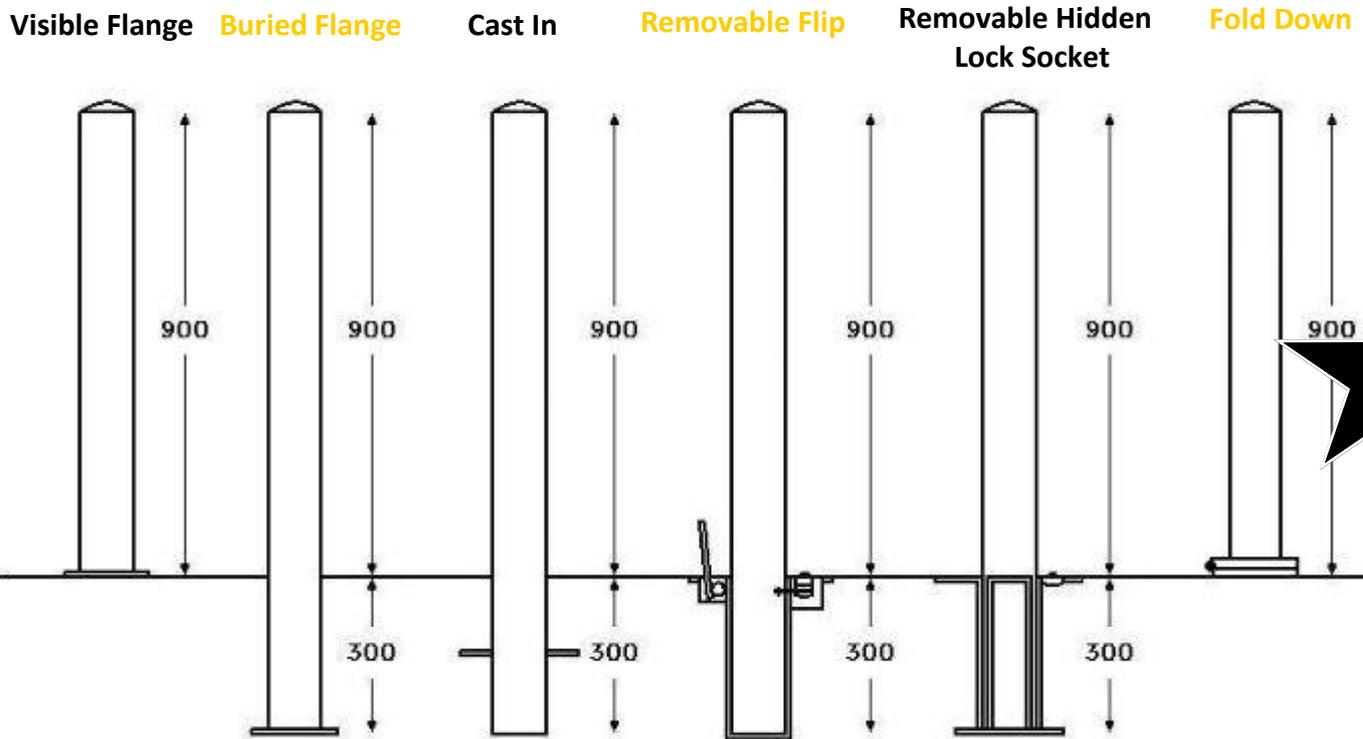
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## Stainless Steel Maintenance

Clean the stainless steel components using warm water with a mild detergent with a non abrasive cloth or sponge. Heavier stains may require the use of a nylon scouring pad or a stainless steel cleaner. To remove paint or graffiti (or light concrete splashes) use a cloth and alkaline or solvent paint strippers according to type of paint. For Satin Finish Stainless try to follow the direction of the grain when cleaning vigorously or polishing. For Bead Blasted Finish use a circular motion. Rust spots or 'tea stains' can occur on the surface of the material, these are normally caused by contamination from ordinary mild steel, particularly in areas where construction work has been undertaken. Where contamination of the stainless has occurred from ordinary mild steel coming into contact with the stainless, use Rust Remover 410. In cases where the surface is severely stained as a result of severe environmental conditions or scratched due to misuse, it may still be possible to restore the original finish using chemicals such as Oxalic Acid solution. There are many stainless steel polishes available to enhance the surface finish. We recommend Mister Stainless Ltd. as a provider for stainless steel cleaning products



## Our Range of Bollards



# Kent Anti Terrorist Bollard KATTKFT200

## Bollard Installation

### Visible Flange:

- Ensure that the surface to which the bollard is mounted is sufficiently strong.
- Position the bollard in the correct location. Mark the holes and drill into the surface.
- Place the bollard directly over the holes and then fix the bollard to the surface using M12 bolts.
- Note that fixings need to be fully embedded in concrete not just the paver blocks.
- Always consult with the engineers specifications—we recommend a minimum of 2 times the root length.

### Buried Flange:

- Cast foundations—always consult with engineers specifications—we recommend a minimum of 2 times the buried root length ( $300\text{mm} \times 2 = 600\text{mm}$ ) and times the bollard diameter (eg  $3 \times 101\text{mm} = 303\text{mm}$ ).
- Once concrete is set follow steps 1-3 as per flange detail above.
- Replace slabs to finish off bollard.

### Cast In:

- Cast foundations—always consult with engineers specifications — we recommend a minimum of 2 times the buried root length ( $300\text{mm} \times 2 = 600\text{mm}$ ) and 3 times the bollard diameter ( $101\text{mm} \times 3 = 303\text{mm}$ ).
- Position your bollard in the correct position ensuring correct height and then prop the stand securely. Fill the hole with concrete up to the level of the underside of the pavement ensuring a good smooth surface finish.
- Remove props, replace the paving slabs and ensure that they are well bedded in.

### Removable Hidden Lock Socket and Removable Flip Lid Socket

- Remove pavement in the location the bollard will be placed. Excavate a hole of minimum  $400\text{mm LxWxD}$ .
- Place socket of bollard into the hole ensuring the top surface of the socket meets the top surface of the pavement.
- Fill the hole with concrete leaving sufficient space for pavement.
- When set finish off pavement around socket and place bollard into the socket.

# Kent Anti Terrorist Bollard KATTKFT200

## Specify:

Kent Anti Terrorist Truck PAS68 Flat Top Bollard KATTKFT200; 1200mm Overall Height; Grade 316L Stainless Steel; Bright Satin Finish; Cast in 400mm Below Ground c/w Machined Groove Reflector Strip 15mm; PAS68:2007 Rated to stop 7500kg Truck at 48Km/h (30mph) ; Installed at 1200mm centres on 1000mm wide x 400mm deep footing.

Used in **EMBASSIES • PRISONS • AIRPORTS • MILITARY**

## Features

- ◆ Stops a 7500kg Truck at 48 km/h (30mph)
- ◆ Fully complies with BSI PAS68:2007
- ◆ Shallow Depth – Only 400mm below ground

## Specify:

Kent Anti Ram Car PAS68 Flat Top Bollard KARCKFT101; 1200mm Overall Height; Grade 316L Stainless Steel; Bright Satin Finish; Cast in 200mm Below Ground c/w Machined Groove Reflector Strip 15mm; PAS68:2007 Rated to stop 1500kg Car at 48Km/h (30mph); Installed at 1200mm centres on 1000mm wide x 200mm deep footing.

Used in **RETAIL PARKS • ATM MACHINES •  
POLICE STATIONS • GOVERNMENT BUILDINGS**

## Features

- ◆ Stops a 1500kg Car at 48 km/h (30mph)
- ◆ Fully complies with BSI PAS68:2007
- ◆ Shallow Depth – Only 200mm below ground

Any of our bollard designs can accommodate Anti Ram and Anti Terrorist except for the Basic Bollard.



# Kent Anti Terrorist Bollard KATTKFT200

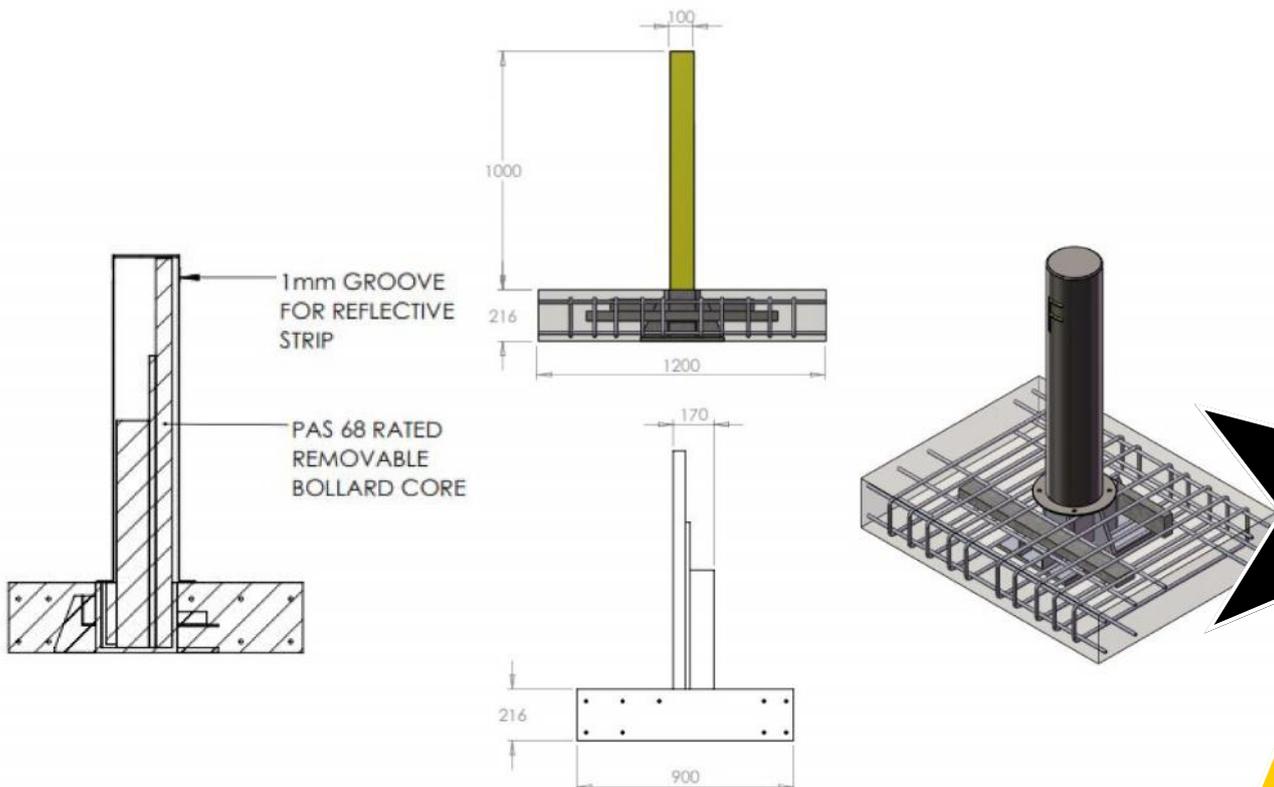
## PAS 68

PAS 68 is the latest Publicly Available Specification for vehicle security barriers. It has become the national standard and the security industry's benchmark for Hostile Vehicle Mitigation equipment, and is the specification against which perimeter security equipment is tested as part of the ongoing research to prevent Vehicle Born Improvised Explosive Device attacks. The PAS 69 complements this specification by providing guidance on the product installation.

PAS 68: *specifies* a classification system for the performance of vehicle security barriers, subjected to a single horizontal impact. It also *identifies* impact test tolerances and vehicle performance criteria which need to be met in order for a product to conform and be granted a classification.

The PAS68 specification defines the vehicle type, test mass and impact speed together with the required measurements, vehicle and test item details that should be recorded and reported. Post impact, and if the test is successful -the VSB stopped and immobilised the test vehicle, then the penetration distance is measured.

The Kent Anti Terrorist Bollard is supported by the PAS 65 removable bollard core which rests in the centre of the bollard and gives it the extra strength to withstand a potential impact with a car or truck. The KATTKFT200 bollard is cast 400mm below ground and this design makes it capable to withstand a 7500kg Truck at 48 km/h (30mph). Alternatively the KARCKFT101 bollard is cast 200mm below ground and is designed to stop a 1500kg car travelling at 48km/h (30mph).



**Kent Anti Terrorist  
Bollard  
KATTKFT200**

