

# Kent Dome Top Bollard



## KENT DOME TOP BOLLARD (KDT-101-3)

The Kent Dome Top Bollard is manufactured from Grade 316L Stainless Steel, 101mm diameter with a 3mm thick wall. As standard the bollards finish is Satin Finish 320 Grit polished.

The standard length is 1200mm, with 300mm being cast below ground, giving 900mm above ground. There are three methods of installation for these bollards, they can be cast into concrete, they can be removable by installing a retention socket or they surface mounted by using a baseplate.

### Features:

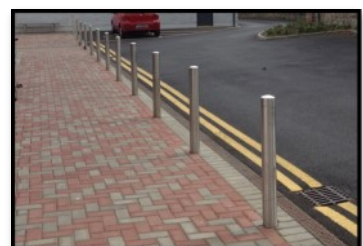
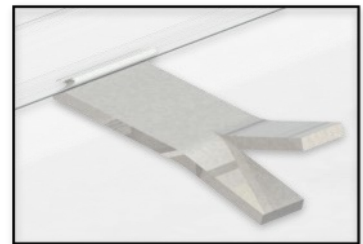
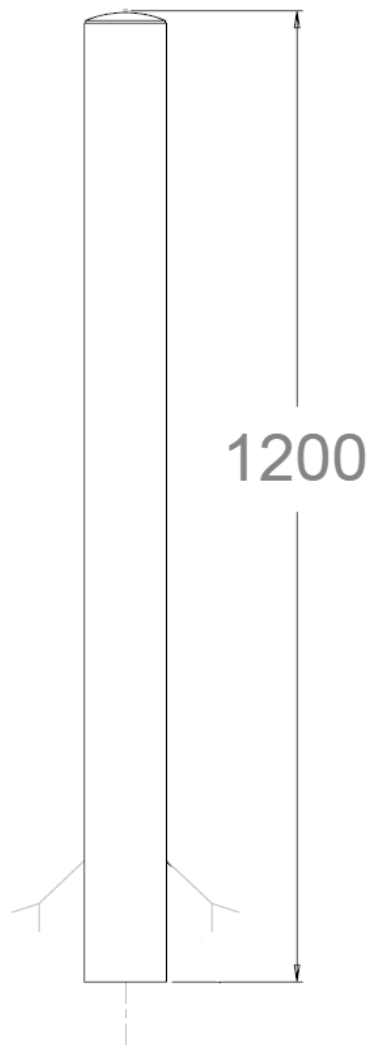
- Can be either cast in, removable or surface mounted.
- 1200mm overall height, 900mm above ground level
- Grade 316 stainless steel as standard
- Optional reflective strips



### Dome Top Bollard—Cast In

The Cast in version of these bollards are supplied with sprags for securing the bollards in the concrete foundation.

For installation details see page 6



Product Code	Diameter	Height (Above GL)	Thickness
Kent Dome Top Bollard—KDT101-3-CI	101mm	900mm	3mm
Kent Dome Top Bollard—KDT114-3-CI	114mm	900mm	3mm
Kent Dome Top Bollard—KDT141-3-CI	141mm	900mm	3mm
Kent Dome Top Bollard—KDT168-3-CI	168mm	900mm	3mm

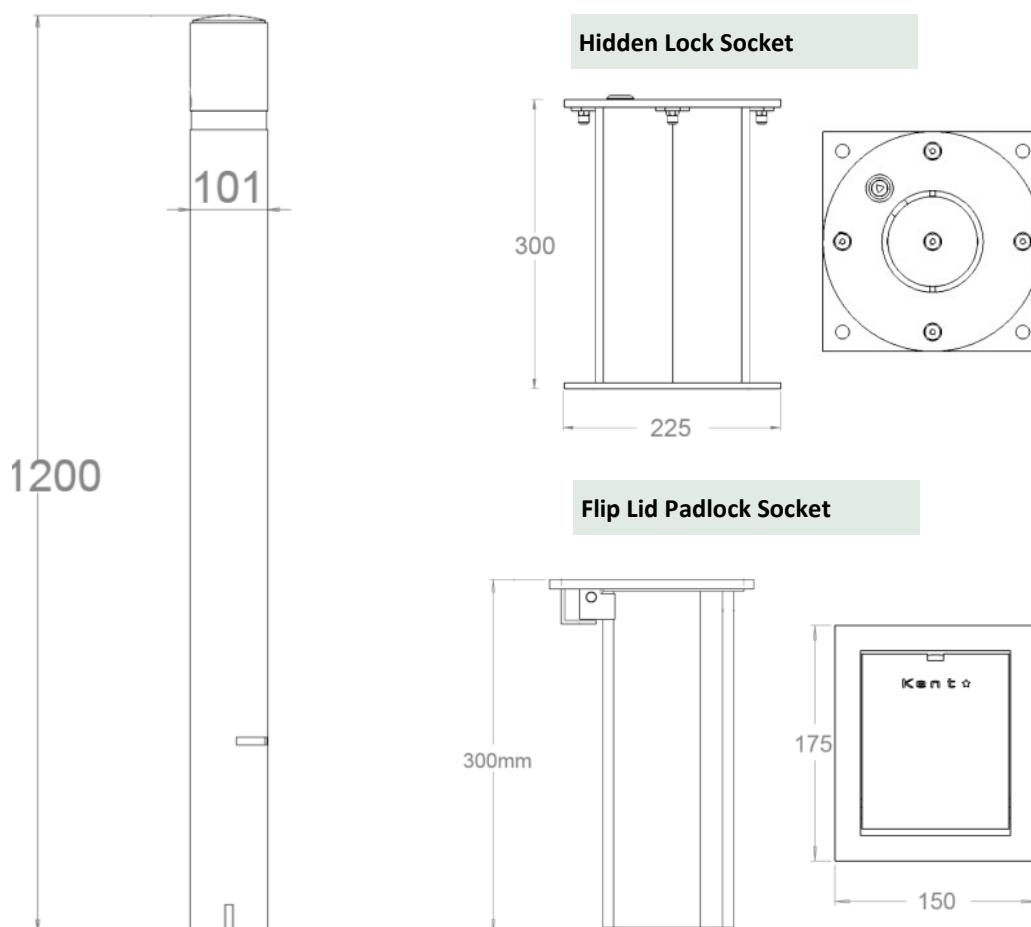
### Dome Top Bollard—Removable

Removable bollards are supplied with a retention socket. The two most common sockets are our Hidden lock sockets or our Flip lid padlock socket.

**Hidden Lock Socket:** has a 225mm diameter (or square) x 8mm top plate with a 6mm heelproof slot. When the bollard is dropped into place it can be locked in place with the Pawl Latch which is locked by the user using a triangular key.

**Flip lid Padlock Socket:** The bollard comes with a lug so when the socket lid is up and the bollard is in place the user can use a padlock to secure the bollard.

We keep stock of these sockets to allow for the quick completion of ground works while the bollard is being manufactured.

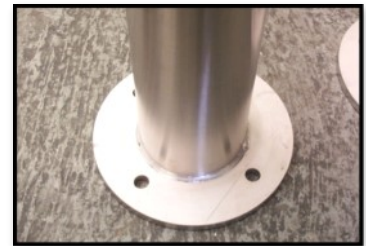
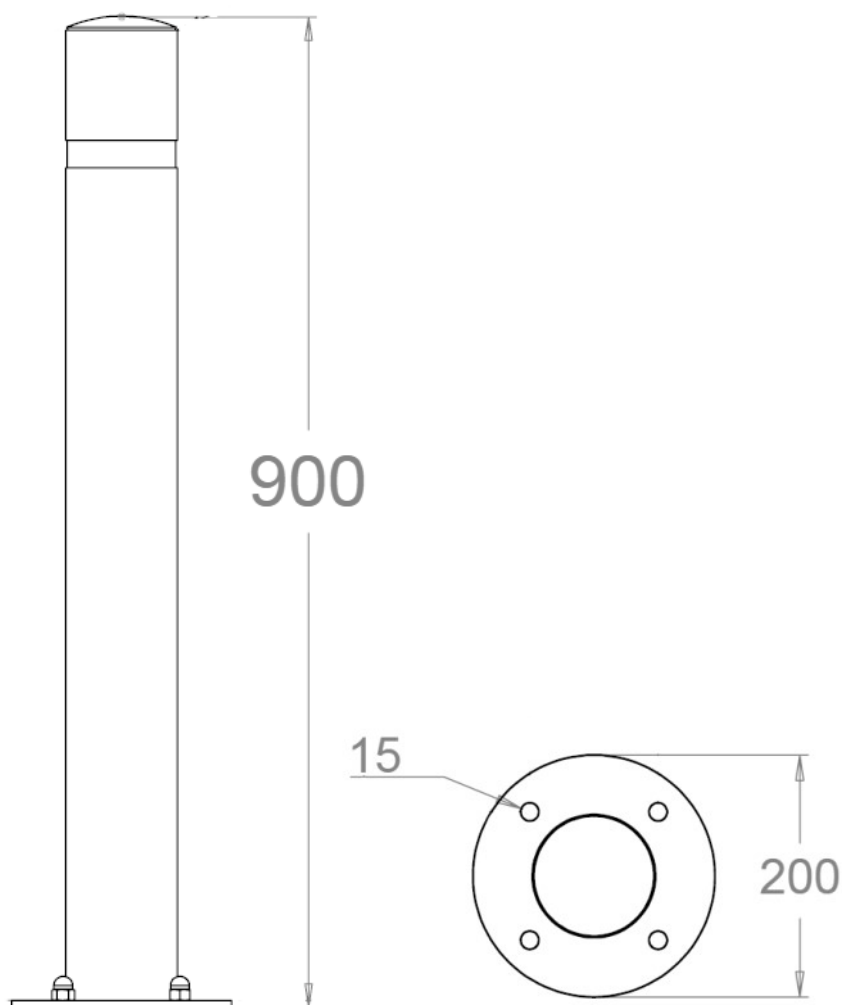


Product Code	Diameter	Height (Above GL)	Thickness
Kent Dome Top Bollard—KDT101-3-RS	101mm	900mm	3mm
Kent Dome Top Bollard—KDT114-3-RS	114mm	900mm	3mm
Kent Dome Top Bollard—KDT141-3-RS	141mm	900mm	3mm
Kent Dome Top Bollard—KDT168-3-RS	168mm	900mm	3mm

### Dome Top Bollard—Surface Mounted

The Surface mounted Dome top bollard has an overall height of 900mm and comes with a circular 200mm baseplate that has four 15mm diameter holes to allow the bollard to be mechanically fixed by chemical anchors to the pre installed concrete pad.

The length of the bollard can be extended to accommodate below paving fixing.



Product Code	Diameter	Height (Above GL)	Thickness
Kent Dome Top Bollard—KDT101-3-SM	101mm	900mm	3mm
Kent Dome Top Bollard—KDT114-3-SM	114mm	900mm	3mm
Kent Dome Top Bollard—KDT141-3-SM	141mm	900mm	3mm
Kent Dome Top Bollard—KDT168-3-SM	168mm	900mm	3mm

## Bollard Add-ons

### Stick on Reflective Strips

Reflective strips provide enhanced visibility in poor lighting conditions and assists with the detection of the bollards for vehicles. The strips are typically supplied as 15mm or 25mm wide however variations are also available. These can also be supplied in a range of colours.



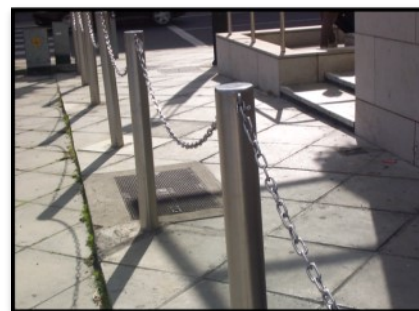
### Recessed Reflective Strips

Similar to the stick on reflective strips, there is a machined 1.5mm deep groove in the bollard for the strip to sit flush into. This makes it more difficult for the strips to be removed from the bollards.



### Eye Bolts for chains

Eye bolts can be installed on bollards on request to allow customers to connect bollards using chains— (We recommend using stainless steel chains as using mild steel will lead to bimetallic contamination)



### Powdercoated

Bollards can be powdercoated to standard RALs on request



## Specification

### **Bollard Diameter**

101mm  
114mm  
141mm  
168mm

### **Specify:**

Kent Dome Top Bollard KDT101-3-CI; 1200mm Overall Height (900mm above ground), 101mm Diameter; 3mm thick wall; Grade 316L Stainless Steel; Satin finish 320 grit polished; 15mm recessed reflective strip; Cast in w/ Fishtails

### **Installation:**

Cast in (CI)  
Removable (RS)  
Surface Mounted (SM)

### **Reflective Strip:**

15mm  
25mm

### **Application:**

Stick on  
Recessed



## Recommended Installation Methods

### Cast In Bollards:

Cast foundations—always consult with engineers specifications — we recommend a minimum of 2 times the buried root length (300mm x 2 = 600mm) and 3 times the bollard diameter (101mm x 3 = 303mm).

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 Bollards:

Remove pavement in the location the bollard will be placed. Excavate a hole of minimum 400mm LxWxD, again use consulting engineers specification.

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

### Surface Mounted Bollards:

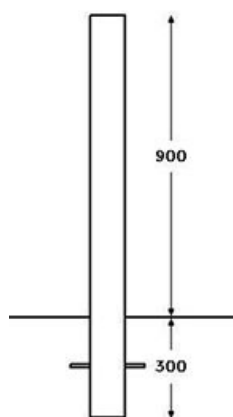
Ensure that the surface to which the bollard is mounted is sufficiently strong.

Position the bollard in the correct location. Mark the holes and drill into the surface.

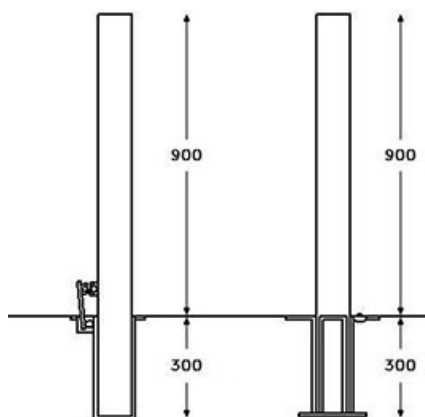
Place the bollard directly over the holes and then fix the bollard to the surface using M12 x 135mm Chemical Anchors with dome nuts (We can supply the necessary fixings on request).

Note that fixings need to be fully embedded in concrete not just the paver blocks.

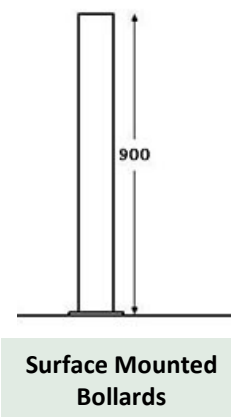
Always consult with the engineers specifications—we recommend a minimum of 2 times the root length.



Cast In Bollards



Removable Bollards



Surface Mounted Bollards

### Maintenance of Stainless Steel

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 use a cloth and Alkaline or solvent paint strippers according to type of paint. In the case of a bead blasted finish, where abrasive cleaning is required, always use a random circular rubbing action with a cloth.

In the case of brushed finishes the surface consists of uniform fine 'scratches' running in one direction so where abrasive cleaning is required always use a straight back and forward rubbing action in the direction of the grain using soap and warm water.

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. Such stains can be removed using Rust Remover 410.

In cases where the surface is severely stained because 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.



## Installed Projects

### **GAA Development Centre, Dublin—Ireland**

Dome Top bollards with a 101mm diameter and cast into concrete



### **Leatherhead, Mole Valley District—UK**

114mm diameter bollards with a 25mm yellow recessed reflective strip, a powdercoated metallic black body with a polished top. The bollards were supplied along with a range of matching litter bins, power bollards and notice boards



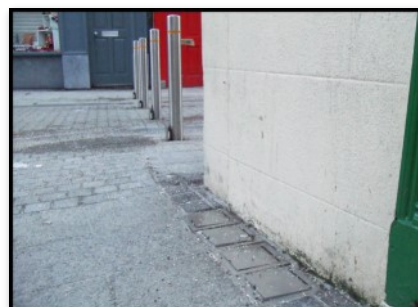
### **Aviva Stadium, Dublin—Ireland**

114mm diameter removable flat top bollards with hidden lock sockets. Over one hundred bollards were installed around the main stadium for the Irish rugby and soccer teams home stadium.



### **Wexford Town, Wexford—Ireland**

101mm diameter removable dome top bollards with a 25mm recessed reflective strip and flip lid padlock socket. The customer in this instance purchased double the amount of sockets to have a location to store the bollards when removed from primary location.



## Testimonials

### PARSONS

Parsons International Limited  
P.O. Box 2091, Doha, Qatar • Tel: (+974) 4405-6644 • Fax: (+974) 4437-7434 • www.parsons.com

Kent Stainless  
Arklow, Wexford  
Ireland 5 January 2012

Attention : Mr. Shane Curtin & Michael Harley  
Project : Lusail Construction Package 1 - CPI  
Subject : CPI, Kent Stainless, Lusail City, Qatar

Dear Shane & Michael,

I am writing to express my thanks for the works delivered by Kent Stainless to the Lusail Project in Doha. Your willingness to work with the client, designers and contractors to finalise the specialist detailing, produce the shop drawings and samples has been second to none and has added significant value to the project.

The in-house engineering completed by Kent Stainless and the knowledge and advice given to finalise the design was outstanding. All the products delivered to date have been fully compliant and of the highest quality.

Finally, your frequent presence on site and customer focus has enabled this technically difficult package of works to be finalised in the shortest possible time.

We hope to see you again on future projects.

Yours Sincerely

Patrick McCormack  
Parsons CPI

*"The In-house engineering completed by Kent Stainless and the Knowledge and advice given to finalise the design was outstanding"*

- Parsons

### SKANSKA

For the attention of: Michael Hurley

Kent Stainless  
Arklow  
Wexford  
Ireland

Our ref: MW/002/02012  
Your ref:

29 March 2012

Dear Michael,

Ref: Letchworth Garden City, Manholes, Grilles, Drainage & Tree Pit Frames

With reference to Letchworth Garden City, we were delighted to work on such a prestigious award winning scheme. The choice of subcontractor and suppliers was crucial to us delivering such a high standard & Kent Stainless were instrumental in this.

As with all our projects during the last 5 years Kent delivered promptly and with the right quality - thanks for your help & keep up the good work.

The client and the main contractor both were delighted with the quality of the work supplied by Kent Stainless. You showed great flexibility and your quality was right first time again.

Yours faithfully,

for and on behalf of  
Skanska Infrastructure Services

Matt Wincott

Skanska Construction UK Ltd T/A  
Skanska Infrastructure Services  
Mail  
Maple Cross House  
Dunham Way  
Maple Cross  
Ratcliffe-on-Soar  
Nottingham NG12 5DF  
Phone +44 (0)1823 776668  
Fax +44 (0)1823 425593  
Web www.skanska.co.uk  
Reg. In England  
Reg. No. 121458  
Registered Office: Maple Cross House,  
Dunham Way, Maple Cross, Ratcliffe-on-Soar,  
Nottingham, NG12 5DF.

*"The client and the main contractor both were delighted with the quality of the work supplied by Kent Stainless"*

- Skanska



DIRECTOR OF SERVICES  
CORPORATE AFFAIRS & ROADS  
ADDW

15<sup>th</sup> January 2010

Mr. Stephen Roche,  
Kent Stainless,  
Arklow,  
Wexford,  
Ireland.

RE: Wexford Main Street Regeneration

Dear Stephen,

Thanks for your help with the designs of manholes and gully covers for Wexford Main Street. We invested heavily in the new paving works and to break up the beautiful stonework with solid cast covers would have been a real shame. The solutions you provided with recessed covers in stainless steel with laser engraving blended in perfectly with the look and feel we wanted to portray for the street.

Because of the engineering know-how you provided and flexibility in design, we will certainly return to Kents for further work. We were delighted to find an Irish manufacturer could provide all solutions, and even better a Wexford based engineering firm.

Yours faithfully,

  
Adrian Doyle,  
Director of Services,  
Corporate Affairs & Roads

e-mail: adrian.doyle@wexfordcoco.ie  
tel: 053 9176400

100 Years of Community Service  
Cuid Míne ag soláthar seirbhíse don phobal

*"Because of the engineering know-how you provided and flexibility in design, we will certainly return to Kents for further work"*

- Wexford County Council



**Kent Stainless Ltd**

Ardcavan, Wexford, Ireland, Y35 CRW2

**TEL NO:** +353 53 9143216

**UK FREEPHONE:** 0800 376 8377

**FAX:** +353 53 9141802

**WEB:** [www.kentstainless.com](http://www.kentstainless.com)

**EMAIL:** [info@kentstainless.com](mailto:info@kentstainless.com)



**Kent**  
STAINLESS