

CAST IRON BOLLARDS

CAST IRON BOLLARDS



INTRODUCTION

Choice, stock and special adaptations

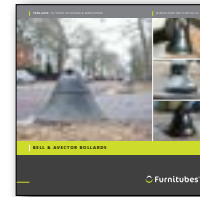
Cast iron bollards have been used as boundary markers in our towns and cities for many centuries, and in more recent times as an effective means of segregating pedestrians and vehicles on our increasingly busy streets. Cast iron bollards are manufactured using traditional founding techniques, giving a distinctive surface finish derived from the sand face of the moulds, and is a process that is particularly suited to creating intricate three dimensional detailing. Furnitubes offers a range of 9 bollards that have been extensively throughout the UK for many years. In addition to the primed finish standard fixed bollards available from stock, we are able to offer the further services / adaptations:

- **Painting and highlighting**

Single colour top coat painting, highlighting to enhance decorative features and reflective tape to improve the visibility of a bollard

- **Removable bollards**

Adapted bollards with a choice of 2 socket types, to allow removal of a bollard where temporary access is required

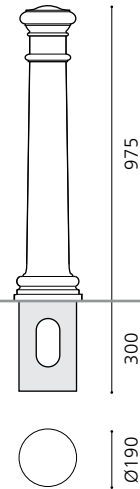
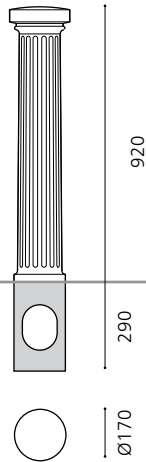
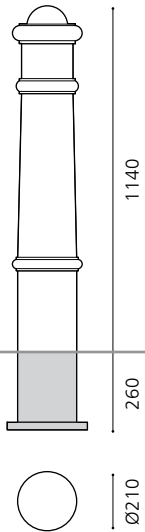


Bell Traffic Bollards

Details of the Bell traffic-calming bollards are included in their own brochure.



CAST IRON BOLLARDS



CANNON

CAN500

Cast iron bollard
Weight: 90kg

OPTIONS:

Cast aluminium removable,
lifting weight: 45kg

DORIC

DOR520

Cast iron bollard
Weight: 55kg

OPTIONS:

Cast aluminium removable,
lifting weight: 25kg

MANCHESTER (ROUND BASE)

MAN536RB

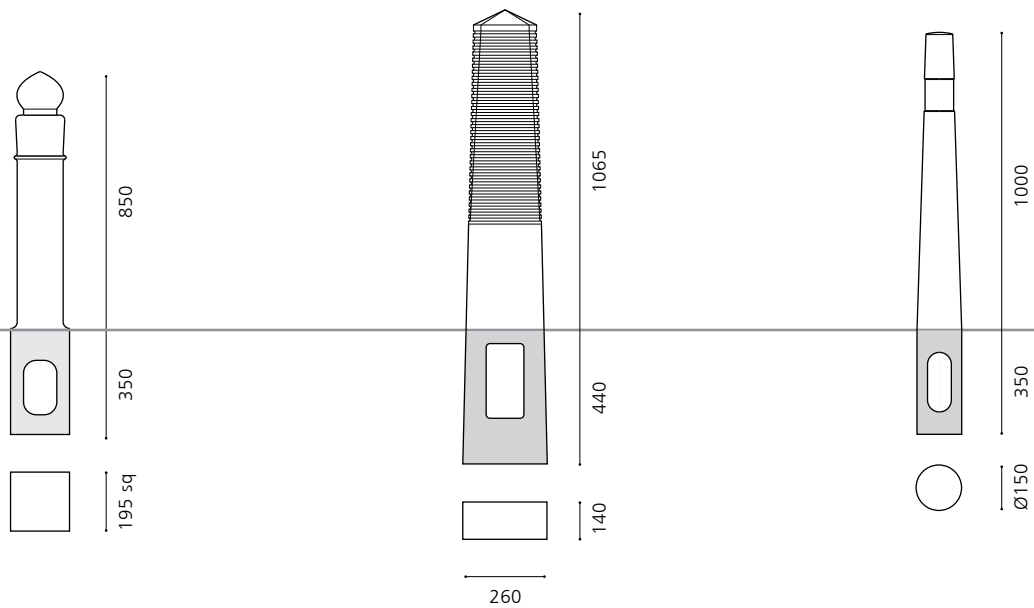
Cast iron bollard
Weight: 52kg

OPTIONS:

Cast aluminium removable,
lifting weight: 25kg



CAST IRON BOLLARDS



BRIGHTON

BRN707

Cast iron bollard
Weight: 60kg

OPTIONS:
Cast aluminium removable,
lifting weight: 25kg

CITY

CIT538

Cast iron bollard
Weight: 100kg

OPTIONS:
Cast aluminium removable, lifting weight: 30kg
Sign plinth 200 x 120mm

CAPITAL

CAP100

Cast iron bollard
Weight: 35kg

OPTIONS:
Cast aluminium removable,
lifting weight: 16kg



CAST IRON BOLLARDS - SPECIFICATION & INSTALLATION

General specification

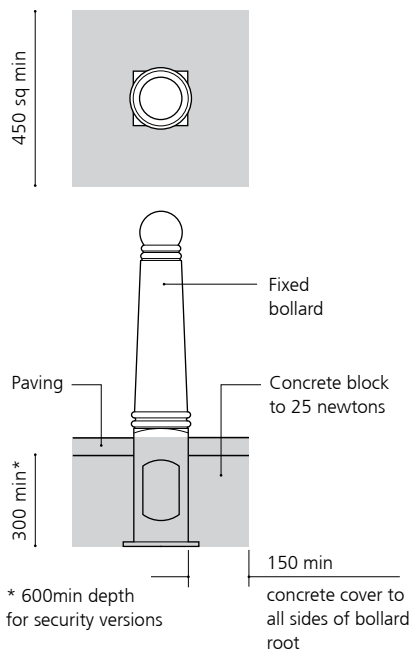
All bollards are supplied in grey cast iron as standard, but can be cast in ductile iron for improved tensile strength if required. Removable bollards are cast in grey iron or aluminium, depending on their weight - refer to individual bollard specifications for details. Standard finish is painted to primer coat, for on-site application of top coats. If preferred, bollards can be supplied to finished top coat, including painting of decorative rings, although this will add to the delivery lead time and any damage to the paint surface will require touching up on site.

Installation details

It is important that bollards have a suitable foundation so that they remain firmly in place if they are knocked at any time. Shown below are the minimum recommended requirements for concrete foundation blocks for fixed and removable bollards in typical installations in normal ground conditions. Particular attention should be paid to the following:

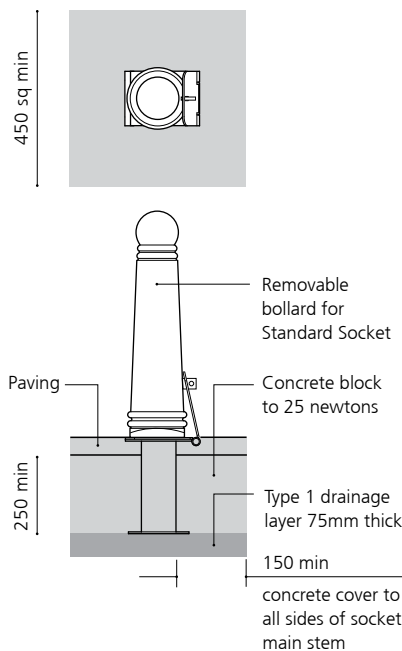
- Set the bollard at the depth / height as shown in the specific bollard illustration
- Ensure concrete penetrates through the below-ground apertures (where applicable) into the internal void of the bollard up to ground level

FIXED BOLLARD

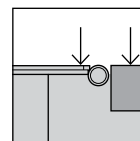


The professional advice of a highway / civil engineer should be sought if there are any queries regarding the ground conditions or doubts over the suitability of the foundation.

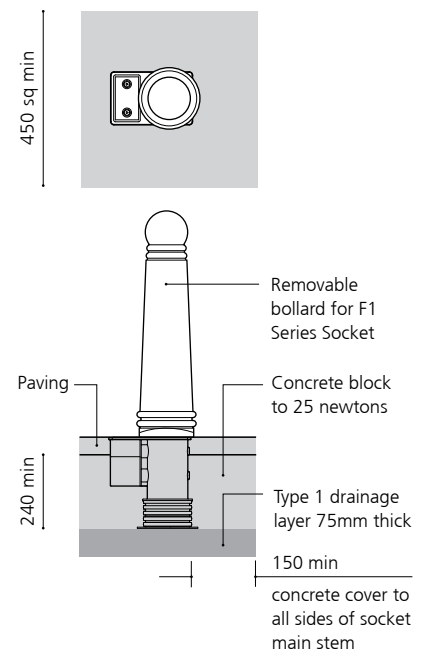
REMOVABLE BOLLARD: STD SOCKET



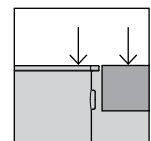
Ensure hinge plate is flush to ground level in closed position



REMOVABLE BOLLARD: F1 SERIES SOCKET



Ensure socket edge is flush to ground level



CAST REMOVABLE BOLLARDS

Removable bollards

Within a continuous line of fixed bollards there is often a requirement for a number of removable bollards to allow for occasional vehicular access. Most of our decorative bollards are available as removable versions, with smaller models available in cast iron and larger bollards in cast aluminium to reduce the lifting weight (cast aluminium is around 60% lighter than cast iron).

We offer two types of removable bollards - for use with **Standard** or **F1 Series** sockets - the features and operation of which should be considered in detail to determine which is the most suitable product for your application. For both options, a durable galvanised steel spigot is fitted to the base of the casting for locating into the ground socket.

Standard sockets

- Simple economic solution using galvanised mild steel socket
- Ease of operation is convenient for situations where bollard needs to be removed quickly and / or frequently, such as emergency access routes
- Hasp fitted to bollard passes through slot in socket hinge plate for locking with an FB14 padlock (please order separately) or similar
- Hinged cover plate sits flush to finished ground level when closed but is not designed to be driven over - therefore most suited to short term removal situations
- Bollard, socket and padlock only - no further loose parts
- Loose fit of square bollard spigot locating in circular socket means bollard is not 100% rigid (but can't be removed if locked)



F1 series sockets

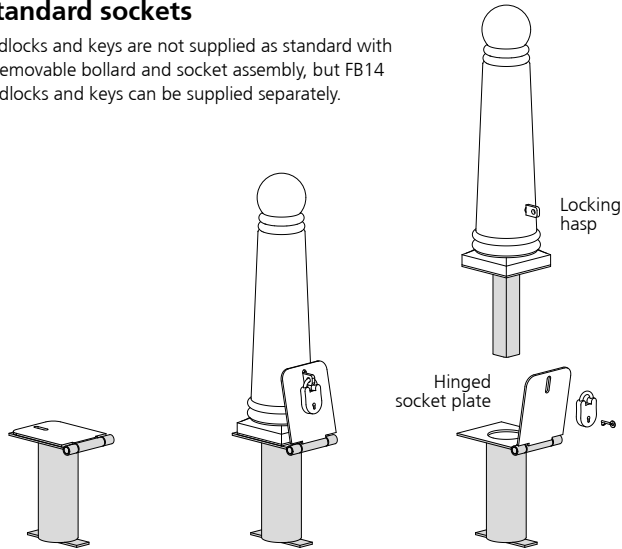
- Neat flush-fitting solution constructed in heavy duty cast iron, steel and hard-wearing plastics
- Takes longer (than standard socket) to insert / remove bollard, so may not be suitable for emergency vehicular routes or when bollard needs to be removed frequently
- Circular bollard spigot locates in circular socket with locking bolts to fully rigidify the bollard
- Separate plug supplied for inserting into socket when bollard is removed
- Socket designed and tested to withstand vehicular over-run up to 12.5 tonnes point loading



CAST REMOVABLE BOLLARDS

Standard sockets

Padlocks and keys are not supplied as standard with a removable bollard and socket assembly, but FB14 padlocks and keys can be supplied separately.



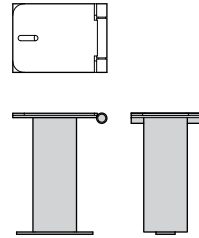
Closed socket

Secured bollard

Bollard removal

Operation

The base of the socket should be cleared of any build up of debris which could prevent the bollard spigot from being inserted to its full depth. Fold back the hinge plate and insert the bollard into the open socket in the orientation shown, rotate the plate over the locking hasp and secure the bollard to the socket with an FB14 padlock or similar. On removing the bollard, check there is no debris on the top face of the socket before lowering the hinge plate into the closed position. If installed correctly, the plate will be flush with the surrounding paving so as not to present a trip hazard. Socket hinges should be lubricated regularly to ensure continued smooth operation.

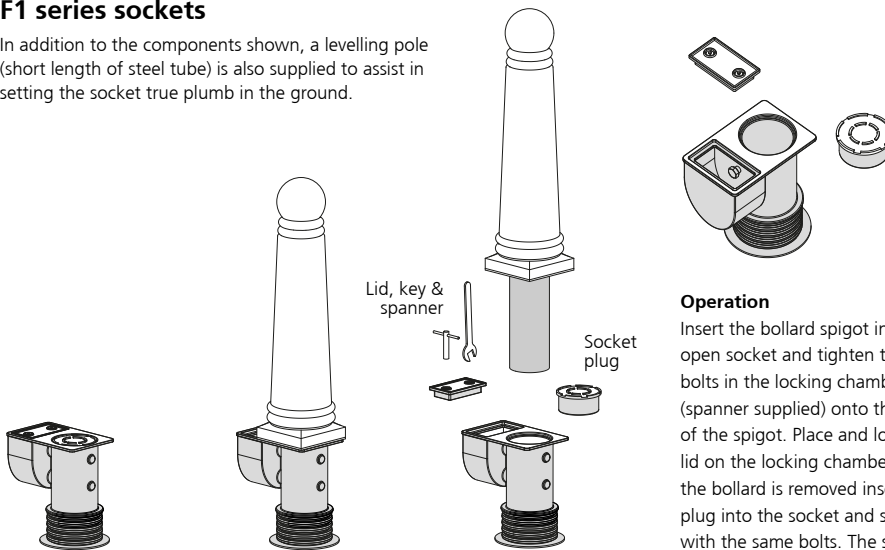


Dimensions

The plan dimensions of the socket hinge plate depend on the bollard type, size & shape at ground level - if these dimensions are important to you please contact us for details. For all sockets, the below ground socket root is typically 320mm deep.

F1 series sockets

In addition to the components shown, a levelling pole (short length of steel tube) is also supplied to assist in setting the socket true plumb in the ground.



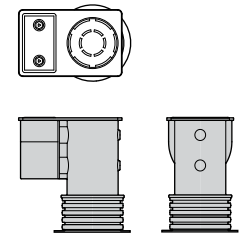
Closed socket

Secured bollard

Bollard removal

Operation

Insert the bollard spigot into the open socket and tighten the 2no. bolts in the locking chamber (spanner supplied) onto the sides of the spigot. Place and lock the lid on the locking chamber. When the bollard is removed insert the plug into the socket and secure with the same bolts. The socket should be flush with the ground if installed correctly.



Dimensions

The plan dimensions of the socket depend on the bollard type, size & shape at ground level - if these dimensions are important to you please contact us for details. For all sockets, the below ground socket root is typically 300mm deep.

CAST IRON BOLLARDS - COLOURS



Painting and highlighting

Although we recommend that bollards are supplied in a primed finish (as pre-painted products are likely to suffer damage during installation), we recognise that site painting may be difficult in some situations, for example due to the weather conditions at the time of installation or because the public have access to the site. This situation can be compounded if the bollards are painted in more than one colour. If requested, we are able to offer a full painting service using our in-house spray booth facilities, to the details provided in the General Specification section of the bollards brochure. Decorative rings and caps can be highlighted as requested. If a painted surface is damaged prior to or during installation we are able to supply touch-up paint for localised on-site repairs.

Reflective tape

Bollards are generally sited to delineate vehicular routes and to segregate pedestrians and traffic. It is important therefore that bollards are visible to drivers, particularly in low light and night-time conditions. If supplied pre-painted, we are also able to apply reflective banding on many of our products. The Capital bollard in particular has a dedicated parallel-sided recess designed specifically for the application of reflective tape. Alternatively we can supply reflective tape for on-site application after painting. Our standard tape is to Class 1 specification and is therefore colour-fast, highly resistant to corrosion and weather, and has excellent adhesion properties. Standard colours available are red, white, yellow, blue, orange and green.



CAST IRON BOLLARDS WITH SIGNAGE

D.f.T. Signage

Department for Transport signage, particularly parking regulations, is often displayed on high level steel posts, whose sole function is to display the small sign plate. The abundance of such signposts can significantly contribute to unnecessary visual clutter in the street scene. Where decorative bollards are being used for delineation / segregation purposes, they can often also be employed for displaying traffic regulation signage. Sign plates can be fitted in a variety of ways - from the simple application of reflective self-adhesive signs onto a bollard surface, to rigid sign plates on purpose-designed mountings. Please contact us to discuss the feasibility and options for applying traffic regulation signage to any of our cast iron bollards.



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View or download other product e-brochures at the following link:

www.furnitubes.com/brochures



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