



REVERT BOLLARDS

REVERT BOLLARD RANGE

Bollards that bounce back

The Revert range of bollards are manufactured from a unique reinforced polymer composite material, which allows the bollard to bend on impact but **revert** (hence the product name) to its original form thanks to its elastic memory and hollow shape. The combination of resistance to impact and flexibility makes the Revert range both safe and durable - they are virtually indestructible and will not degrade with weathering. Revert bollards are therefore ideal for situations where bollards are vulnerable to repeated vehicular impacts, offering a safer and more cost effective solution compared with using, and regularly replacing, more conventional material bollards. The unique characteristics and features of the Revert bollard range are:

- Highly rigid, yet flexible on impact
- Non-corrosive and UV stable
- Withstands 200-490kg loads (subject to type) and 100-1500 repeated knockdowns
- Performs in temperature range -20° to 60° C
- 16 standard styles, each with the option of a removable version
- Available in a wide range of standard colours and with reflective bands on most models

Click the image above to watch a video of the Revert bollard being tested, or visit:

<http://www.furnitubes.com/product/revert-bollard>



The upright bollard pre-impact....



is flexible when struck....



bending as the wheel is driven over....



to the point it folds over on itself....



rebounding as the wheel passes over....



before reverting to its original form



REVERT BOLLARD RANGE

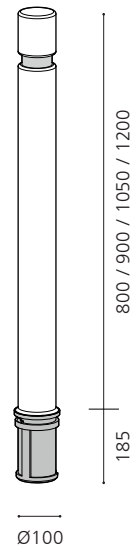
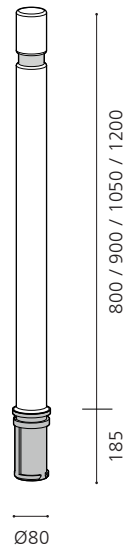
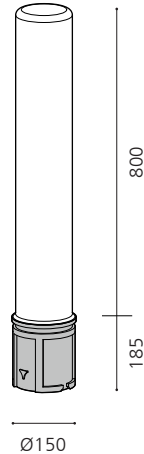
Applications

Visually, a Revert bollard looks much the same as any bollard in other materials - a fairly substantial, rigid and tough roadside feature - so drivers will not deliberately want to strike them with their vehicles. Unlike with other bollards though, in the event of impact the bollard simply deflects or bends, so reducing the likelihood of serious injury and / or damage. A Revert bollard also allows emergency vehicles to simply drive over them, potentially reducing access time compared with unlocking a conventional steel or iron bollard. The Revert is a sensible choice for any situation where a bollard suffers repeated damage, such as around parking bays, in shared space and pedestrian zones where the road alignment is undefined, and at width restriction entrance points to car parks and private land.



Revert bollards can be concreted directly into the ground and will perform satisfactorily within an adequate foundation. Bollards can also be supplied for fitting into an F1 series socket, enabling it to be removed should temporary unobstructed access be required. The advantage of a removable bollard and socket is that a new bollard (perhaps a different style or colour) can be fitted in the future, without the need for any additional groundworks.

REVERT BOLLARD RANGE



RENDHAM 100

Polymer composite bollard

REV 010610

660mm a/g, rooted bollard

REV 010710

770mm a/g, rooted bollard

REV 010910

900mm a/g, rooted bollard

REV 011010

1050mm a/g, rooted bollard

OPTIONS:

Removable bollard with F1 socket
Base plated / bolt down bollard
Reflective bands

RENDHAM 150

Polymer composite bollard

REV 02015

800mm a/g, rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective tape

REPTON 80

Polymer composite bollard

REV 030808

800mm a/g, rooted bollard

REV 030908

900mm a/g, rooted bollard

REV 031008

1050mm a/g, rooted bollard

REV 031208

1200mm a/g, rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective bands

REPTON 100

Polymer composite bollard

REV 030810

800mm a/g, rooted bollard

REV 030910

900mm a/g, rooted bollard

REV 031010

1050mm a/g, rooted bollard

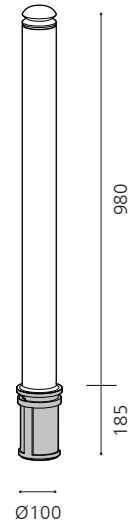
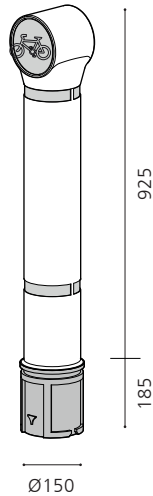
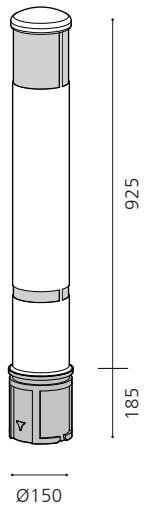
REV 031210

1200mm a/g, rooted bollard

OPTIONS:

Removable bollard with F1 socket
Base plated / bolt down bollard
Reflective bands

REVERT BOLLARD RANGE



RENTON

Polymer composite bollard

REV 050915

Rooted bollard pre-fitted with reflective bands

OPTIONS:

Removable bollard with F1 socket
Reflective band colours

RENTON

Polymer composite bollard

REV 060915 S

Rooted bollard pre-fitted with reflective bands and D.f.T. cycle logo

OPTIONS:

Removable bollard with F1 socket
Base plated / bolt down bollard
Reflective band colours
Alternative signplate

REDHILL

Polymer composite bollard

REV 070910

Rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective bands

RENEWICK

Polyurethane Elastomer

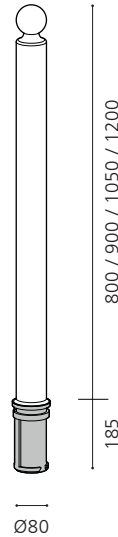
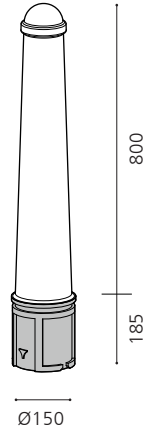
REV 080910

Rooted bollard

OPTIONS:

Removable bollard with F1 socket

REVERT BOLLARD RANGE



REDDITCH

Polymer composite bollard

REV 091010

Rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective bands

REDNAL

Polymer composite bollard

REV 100815

Rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective bands

RETFORD 80

Polymer composite bollard

REV 110808

800mm a/g, rooted bollard

REV 110908

900mm a/g, rooted bollard

REV 111008

1050mm a/g, rooted bollard

REV 111208

1200mm a/g, rooted bollard

OPTIONS:

Removable bollard with F1 socket
Base plated / bolt down bollard
Reflective bands

RETFORD 100

Polymer composite bollard

REV 120808

800mm a/g, rooted bollard

REV 120908

900mm a/g, rooted bollard

REV 121008

1050mm a/g, rooted bollard

REV 121208

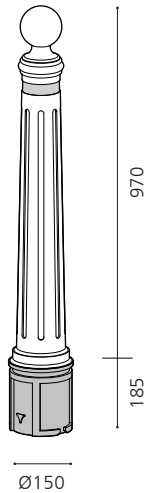
1200mm a/g, rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective bands



REVERT BOLLARD RANGE



REASBY

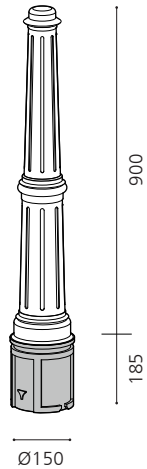
Polymer composite bollard

REV 130915

Rooted bollard

OPTIONS:

Removable bollard with F1 socket
Base plated / bolt down bollard
Reflective bands



REDCAR

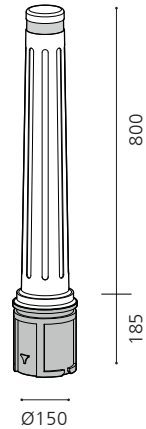
Polymer composite bollard

REV 140915

Rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective bands



RESTON

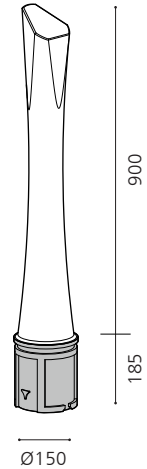
Polymer composite bollard

REV 150815

Rooted bollard

OPTIONS:

Removable bollard with F1 socket
Reflective bands



REDDING

Polymer composite bollard

REV 160915

Rooted bollard

OPTIONS:

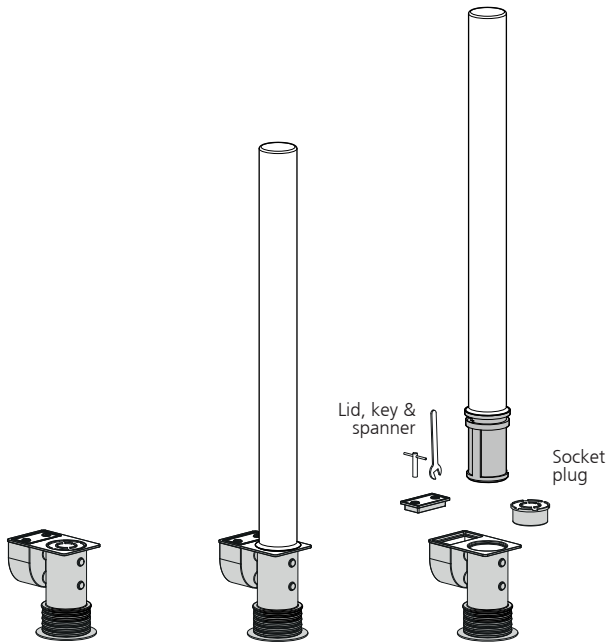
Removable bollard with F1 socket
Base plated / bolt down bollard
Reflective bands

REVERT RANGE - REMOVABLE BOLLARDS

F1 series sockets

Revert bollards can be used in conjunction with the appropriate F1 series socket to allow them to be removed for planned access. 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. Features of the socket / operation include:

- Neat flush-fitting solution constructed in heavy duty cast steel
- Inserting / removing the bollard takes a few minutes, so may not be suitable for emergency routes or if bollard is removed frequently
- Circular bollard root 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



Closed socket

Secured bollard

Bollard removal

BOLLARD	SOCKET SIZE		
	Ø80mm	Ø100mm	Ø150mm
RENDHAM 100		•	
RENDHAM 150			•
REPTON 80	•		
REPTON 100		•	
RENTON			•
RENTON SIGN			•
REDHILL		•	
RENWICK		•	
REDDITCH		•	
REDNAL			•
RETFORD 80	•		
RETFORD 100		•	
REASBY			•
REDCAR			•
RESTON			•
REDDING			•

Table showing bollard / socket size compatability

Operation

Insert the bollard root into the open socket and tighten 2 no. bolts in the locking chamber (spanner supplied) onto the sides of the root. 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.

Socket dimensions

The plan dimensions of the socket varies according to the aperture size into which the bollard root is inserted - if these dimensions are important to you please contact us for details. For all sockets, the below ground socket root is typically 300mm deep.



REVERT RANGE - SPECIFICATION & INSTALLATION

General specification

Revert bollards are manufactured in a reinforced polymer composite and are CE marked - an indicator of the product's compliance with EU legislation. All products are available in the full range of RAL colour references, though only certain colours may be available from stock. Colour is integral to the moulding, not a post-manufacture paint application. A variety of reflective tape options are offered to improve the visibility of the bollards in a highway situation.

Performance test results

The following tests have been undertaken to determine passive safety performance:

Head Injury Criterion (HIC) Test

- Test speed: 40kph
- Result: 460
(1000 is irreversible injury)

Chest Simulation Impact Test

- Test speed: 35kph
- Result: cushions Impact, no serious injury

Environmental issues

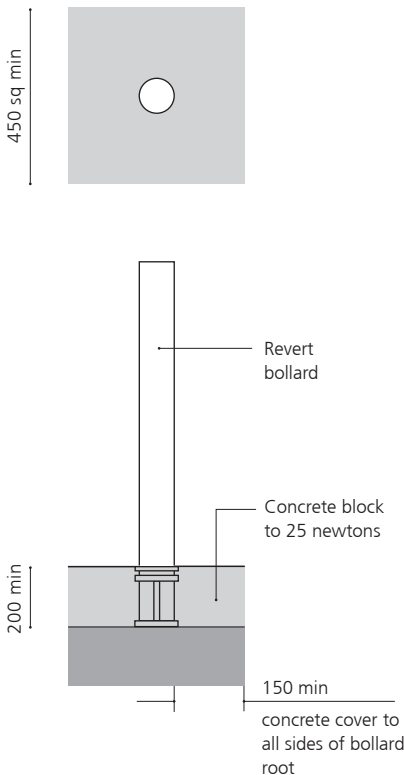
The Revert range of bollards has less environmental impact than typical metal bollards, based on:

- Less materials used
- Less energy input in manufacturing
- Lighter, so lower transportation impacts
- Lower installation impacts as no replacement of damaged products
- Fully recyclable

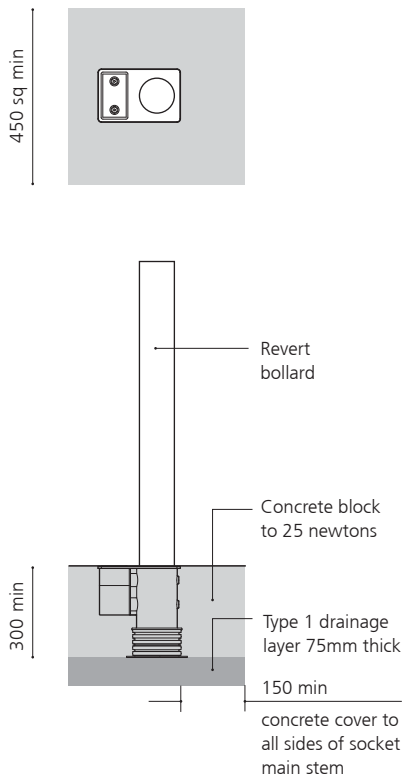
Installation details

All models in the Revert range weigh less than 6kg, so can be comfortably handled by one person. With a short root of less than 200mm, the foundation can also be shallow and typically lie above any service routes. For the bollard to perform as designed, i.e. to absorb impact and return to its original form, it is important that it is supported in an adequate foundation. Shown here are the minimum recommended requirements for concrete foundation block for fixed and removable bollards in a typical installation in normal ground conditions. It is also possible to install the bollards into a core-drilled hole, and fix with a suitable mortar. We recommend that 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.

FIXED BOLLARD



REMOVABLE BOLLARD: F1 SERIES SOCKET



REVERT BOLLARDS



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

www.furnitubes.com/brochures



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