

Cycle Lane Safety and Delineation

Durable and visible bollards and signage for optimal cycle lane safety



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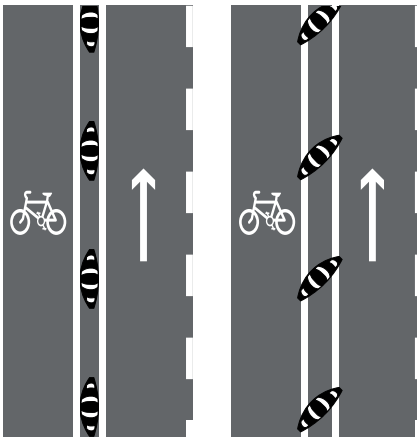
Tiger and Tiger Wand

Robust and innovative separator that gives great visibility. Rounded form for enhanced safety. Available with or without Impact Resistant Wand.

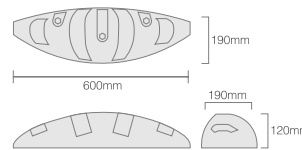
CHARACTERISTICS

- **High visibility day and night**
Due to retroreflective wand.
- **High shock absorption**
Due to flexibility of the material and the absence of sharp edges.
- **High mechanical strength**
Due to structure and design of the material.
- **High resistance to weathering**
Due to the material used.
- **Fast and easy to install**
With 3 x anchor bolts.
- **Installation in different positions**
- **Made using Vulcanized Recycled rubber**

POSITIONING OPTIONS



SPECIFICATIONS



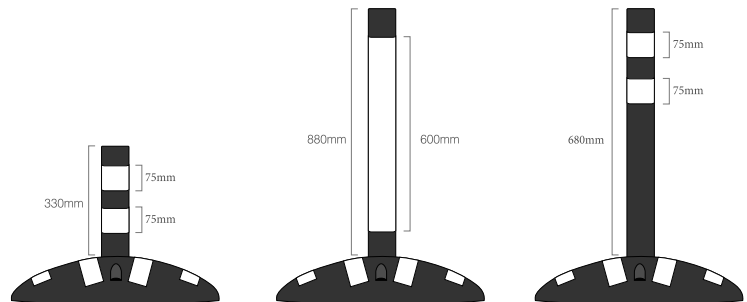
Weight	4.8kg
Length	600mm
Height	120mm
Width	190mm
Colour	Black

TIGER SEPARATOR



WAND VARIATIONS

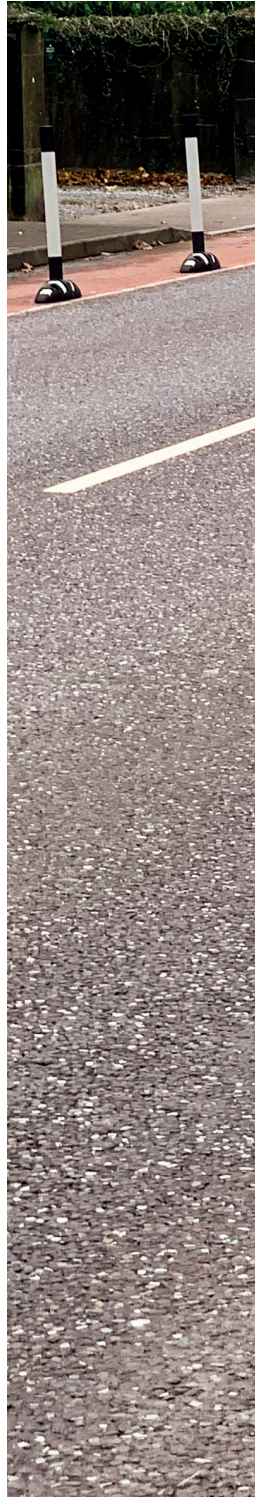
The Tiger Wand combines the Tiger separator and FG300 Impact Resistant Bollards for enhanced cycle lane delineation.



Tiger-Wand 450mm High
Product Ref: Low Level - 2 Hoops

Tiger Wand 1000mm High
Product Ref: High Level/Full Wrap

Tiger Wand: 800mm High
Product Ref: High Level 2 Hoops





MADE FROM
100%
RECYCLED
RUBBER

DESIGNED BY CYCLISTS

TIGER WAND VARIATIONS

1. High Level Tiger Wand with 600mm reflective band
2. Tiger Wands used in conjunction with Hazard bollards for enhanced cycle lane delineation
3. Tiger Wand with low level wand
4. Oblique positioned Tiger Lane Separators without Wand



VeloKerb Cycle Lane Separator

Specially designed to provide safety for cyclists by clearly separating and delineating dedicated cycle lanes.



CHARACTERISTICS

- **High visibility day and night**
Two white vulcanized bands fused to the VeloKerb
- **Quick Installation**
One/Two Piece modules or in straight continuous sections
- **High mechanical strength**
Due to structure & design of the material.
- **High resistance to weathering**
Modular and rugged design offers excellent mechanical resistance
- **Easy fixing to road surface**
2 fixing bolts per 550mm long section Available with delineator post for top mounting.
- **Absorbs energy from vehicle impacts**
- **Can be used on curves/bends in the carriageway**
- **Installation service available from PWS**

DETAILS

VeloKerb Cycle lane separator is specially designed to provide safety for cyclists by clearly separating and delineating dedicated Cycle lanes. Its asymmetric design separates and protects cyclists and helps prevent motor vehicles from crossing into the cycle lane. Its three lateral slopes protect the cyclist in case of collision with the separator. The gentle slope of the VeloKerb on the cycle lane side protects the cyclist if the bicycle accidentally mounts/runs onto it. The higher (vehicle) side of the VeloKerb makes it difficult for motor vehicles to inadvertently cross over into the cycle lane.

AVAILABLE IN TWO WIDTH SECTIONS

- **250mm wide** for regular cycle lanes
- **150mm wide** for when space is at a premium

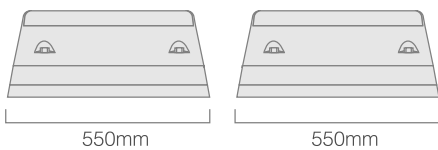
Quick installation

Each **VeloKerb** section x 550mm long is secured to the road surface with 2 No. M12 ground fixing bolts. The sections are quick and easy to install and each section can be installed in minutes. When being installed in a continuous line, tongue and groove connectors on each section help the installer to position the sections together and provides extra stability for the VeloKerb if a vehicle drives over it.

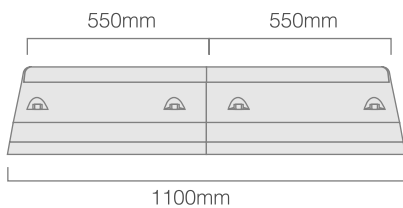


INSTALLATION EXAMPLES

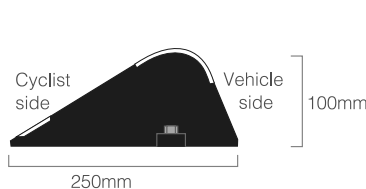
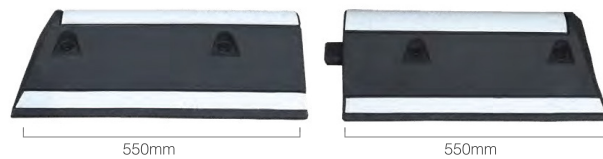
One section installation



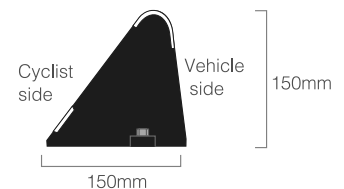
One section installation



SPECIFICATIONS



Weight	5kg
Length	550mm per section
Height	100mm
Width	250mm
Colour	Black with white striping



Weight	5kg
Length	550mm per section
Height	150mm
Width	150mm
Colour	Black with white striping

- **VeloKerb can be used in conjunction with FG300 Impact Resistant Bollards for enhanced cycle lane delineation.**



VeloFlex Screw-In Reboundable Bollards

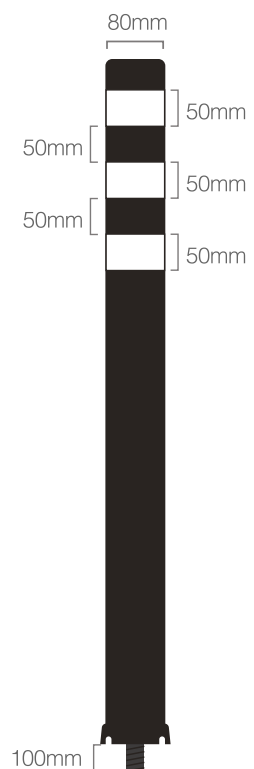
DETAILS

VeloFlex Screw-In Reboundable Bollards are ideal for Cycle Lane delineation. They have a small footprint (80mm) so when installed on the carriageway or footpath take up a minimal amount of space. They are soft and forgiving if a cyclist accidentally collides with the bollard but are also very durable and will survive multiple impacts from

passing vehicles. They are fast and easy to install and this minimises the amount of time the installer working on a live road, thus improving safety for the installation crew. Their ability to survive multiple impacts means they offer exceptional value and will continue to function for extended periods.

KEY FEATURES

- > **Superior visibility**
 For day and night-time viewing
- > **Quick & easy to install**
 Reduces risk to installation personnel
- > **Ideal for urban locations - narrow footpaths & Cycle Lanes**
 Highly Durable & Impact Resistant
- > **Low Maintenance**
- > **Strong, vandal-resistant construction**
- > **Passively Safe**
- > **Wide range of colours available**
 Black, orange, yellow, white, green, blue & grey
- > **Available in various heights**
 450mm, 650mm, 800mm & 1000mm

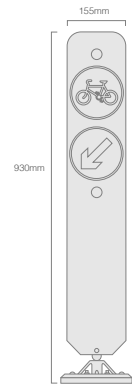


Narrow Hazard Marker Cycle Bollards

DETAILS

The Bollard's narrow width (155mm) coupled with the use of 3M Diamond Grade DG3 Fluorescent reflective sheeting ensures maximum visibility to motorists, cyclists and pedestrians. They are available in a variety of designs and formats, in both single sided and double sided configurations.

They are ideal for delineating Cycle Lanes as their narrow profile coupled with high visibility ensure they provide clear guidance for cyclists. They are quick and easy to install and this minimises the amount of time the installer is working on a live road, thus improving safety for the installation crew. The Bollard's ability to survive multiple impacts means they offer exceptional value and will continue to function for extended periods.



KEY FEATURES

- **Variations**
Available with/without Keep Left Arrow
Available Single or Double Sided
- **Ideal for urban locations/narrow footpaths/cycle lanes**
- **Strong, vandal-resistant construction**
- **Quick & easy to install**
Reduces risk to installation personnel
- **Low Maintenance & Passively Safe**
- **12 Year Delamination Warranty**
3M Bright Yellow Diamond Grade
- **CE Certified**
EN12899(3)-2007



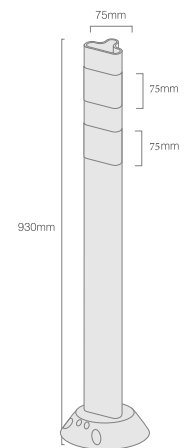
FG300 Flexible Bollards

DETAILS

Designed to complement our existing range of passively safe products, the FG300 is UV stable and highly visible. Coupled with its natural resistance to fuel and oil this makes it the ideal product for use in areas with high traffic volumes.

with our unique kerb system, offering a fast, effective installation to any road surface, whether for temporary or permanent use. They are available in Orange, Black or White. Other colours available on request.

Tested to withstand impacts of up to 100kph/60mph the FG300 can be surface mounted or installed in conjunction



KEY FEATURES

- **Survives Multiple Impacts**
Up to 100km/h
- **Orange, Black or White**
- **Quick Installation**
- **Passively Safe**
EN12767
- **Surface Mounted**
Four Bolts
- **Highly Visible**
- **Low Maintenance**
- **Fast and Easy to install**



City Bollard Roundable

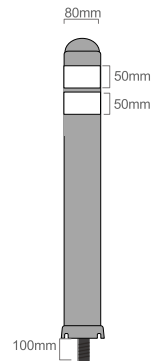
DETAILS

City Bollards are ideal for a wide range of applications where a reboundable bollard is required to provide delineation. They are ideal for cycle lanes, footpaths, car parks or any area where motorists and other road users require delineation. City Bollards have an aesthetic appearance with a domed top, which makes them ideal for urban use in cities, towns and villages.

They have a small footprint so when installed on the carriageway or footpath they take up a minimal amount of

space. They are flexible and reboundable if a cyclist or pedestrian accidentally collides with the bollard - but are also very durable and will survive multiple impacts from passing vehicles also.

They are quick and easy to install and this minimises the amount of time the installer works on a live road, thus improving safety for the installation crew. Their ability to survive multiple impacts means they offer exceptional value and will continue to function for extended periods.



KEY FEATURES

- › 80mm Diameter x 800mm High
- › Flexible – bends on Impact
- › Modern Design
Ideal for Streets & Public Areas
- › Certified Compliant
EN12899-3 (2007)
- › Long-lasting, shock-resistant body is highly durable - Survives Multiple Impacts & Drive-Overs
- › Quick & Easy to Install
- › Extra Strength from special sub-pattern base design
- › Aesthetic Appearance
- › 2 x Reflective Bands x 50mm High Intensity Prismatic (HIP)
- › Band of Reflective Glass Beads at top for Extra Visibility
- › Operating Temperature -20°C to +60°C



PWS Flexi-Bollards Orange & Black

DETAILS

PWS Orange Flexi-Bollards are highly visible Flexible posts which can be used in a wide variety of locations to delineate and demarcate cycling and traffic lanes as well as car parks and pedestrian walkways. They are manufactured using highly robust and UV-stable Polyurethane (PU) and are flexible -they survive multiple impacts by vehicles and repeated drive-overs.

Their bright Orange colour and 4 x White reflective bands provide excellent visibility in both day and night conditions. Quick and easy to install, they are suitable for use on public roads, cycleways, car parks and industrial locations for both indoor and outdoor use

KEY FEATURES

- › Extremely Tough & Flexible TPU Construction
- › Certified Compliant
EN23442:2004 +A1:2009
- › Long-lasting, Shock-resistant body
- › Survives Multiple Impacts & Drive-overs
- › Extra-Strength from special sub-pattern Base Design
- › Aesthetic Appearance
- › Bright Orange Colour is UV Stable and Long-Lasting
- › Also available in black
- › 4 Reflective Bands x 60mm wide
- › Supplied with 3 x Fixing Bolts for Quick & Easy Installation

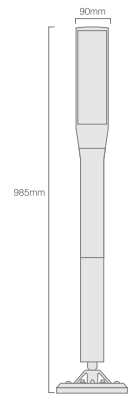


Flat Top Hazard Markers

DETAILS

Flat Top Hazard Markers feature a red high visibility reflector on the front face, with a white reflector on the reverse. Flat Top Hazard Markers are fully impact resistant and will survive multiple impacts, ensuring the Hazard Marker continues to function and provide a clear warning to road users.

They are quick and easy to install and this minimises the amount of time the installer is working on a live road, thus improving safety for the installation crew. Their ability to survive multiple impacts means they offer exceptional value and will continue to function for extended periods.



KEY FEATURES

- **Superior visibility**
Day and night-time viewing.
- **Ideal for urban locations/narrow footpaths/cycle lanes and lay-bys**
- **Strong, vandal-resistant construction**
- **Fast & easy to install**
Reduces risk to installation personnel
- **Low Maintenance**
- **Passively Safe**
- **CE Certified**
EN12899(3)- 2007



Pictor-Cycle Lane Bollards

DETAILS

Available in 150mm and 300mm Diameter variants, Pictor Bollards are ideal for use on Shared Pavements and dedicated Cycle Lanes.

are tested to EN12767 and achieved a passive rating of 100:NE;4.

The Pictor Bollard features single or double sided sign faces designed to inform road users, cyclists and pedestrians. The bollards are abrasion and chip resistant and are available with a steel core or as a reboundable bollard. They

The reboundable version is rotationally moulded using LDPE which makes the bollards flexible on impact, UV resistant and very durable. Their ability to survive multiple impacts means they offer exceptional value and will continue to function for extended periods.



KEY FEATURES

- **Available with Single or Double Sided Sign Face**
- **150mm and 300mm Dia.**
Signface Options
- **168mm Dia x 1330mm High**
- **Ideal for urban locations/narrow footpaths & shared cycle lanes**
- **Strong, vandal-resistant construction**
- **Low Maintenance**
- **Passively Safe**





Orion 150 Bollard

DETAILS

The Orion 150 is an elegant and robust polymer bollard with a 150mm tall reflective band at the top and an optional 20mm reflective band at the base.

They are available in both standard and reboundable variants and are ideal for delineating cycle paths/cycleways, both on and off road.

They are abrasion and chip resistant as well as being resistant to salt spray and uric acid. At their end of life, they are 100% recyclable.

KEY FEATURES

- › **1000mm high x 168mm diameter**
(194mm at the base)
- › **Made from Polyethylene**
Durable and hard-wearing
- › **Colour: Black**
- › **Weight: 5 kgs**
- › **Passively Safe to EN12767**
- › **Available in Bolt Down or Concrete-In root versions**



Pass with Care & Cycle Lane Reflective Signage

DETAILS

PWS Signs are a CE certified traffic sign manufacturer and are accredited to EN12899(1):2007. We offer the full range of traffic signs in accordance with the DoT Traffic Signs Manual, and can also offer bespoke signage to suit particular cycle schemes, including Information, Safety and Map signs.

We offer a Sign Design and Advice service to Customers and all our signs are made using the highest quality materials, including reflective sheetings from 3M.

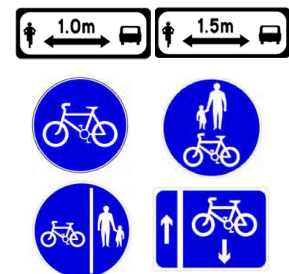
We manufacture sign support posts including galvanised steel Cranked and H-Post supports and also offer a range of Passively Safe Posts

to suit high-speed locations.

We also offer civils works to install traffic signs using our own installation crews and are qualified to act as PSCS including Traffic Management implementation. We offer a countrywide sign installation service on all our cycle lane safety & delineation products.

KEY FEATURES

- **CE Certified**
EN12899(1); 2007
- **Available in Class RA1 or RA2 Reflective Sheeting**
- **Highly Visible**
For both Daytime and Night-time Viewing
- **Signposts available to suit**
- **Installation Service Available**
Countrywide



Solar Powered Sign Pass with Care

DETAILS

The Pass With Care Warning Sign is a Solar Powered Radar Activated display designed to provide a bright visual warning to motorists to take care and allow a suitable overtaking distance when passing cyclists on the carriageway ahead.

The sign is designed in conjunction with the "Stayin' Alive at 1.5" safety initiative from

Safe Cycling Ireland. The sign can easily be configured to display other passing distances such as 1.0m.

In-Built Radar Detection

The in-built radar detects all approaching vehicles and the LED displays in 2 colours - the sign displays a static distance warning of 1.5m with a Double Headed Arrow while

PASS WITH CARE displays in bright Red LED's.

The in built radar also detects and stores data on all passing vehicles including time, date, and vehicle Speed - downloadable via Bluetooth. This provides very useful statistical information such as vehicle speed counts, speed violations and 85th percentile speeds.

KEY FEATURES

- **Single pole mounting**
Passively safe to EN12767
- **Sign size 1200mm x 800mm**
Provide Clear Viewing
- **Automatic Brightness Adjustment**
For All Weather Conditions
- **Data Collection Feature**
Included via Bluetooth
- **Solar Powered**
All Year Round Operation
- **Virtually Maintenance Free**
- **Strong, Vandal-Resistant Construction**
- **Full Installation/Location Advice Service**
- **CE Certified**
EN12899





Cycle Lane Safety and Delineation

info@pwssigns.com

