Bollards
X-Last Standard






Applications: Footways, Cycle Routes, Car Parks, Architectural, Town Centres

The NAL X-Last Bollards are an innovative range of bollards with unique properties which make them both highly resistant and very flexible, ensuring they are a durable, maintenance free bollard. With a passively safe rating of NE4, Head Injury Criteria and Chest Simulation impact tests, X-Last are one of the safest bollards available. Their high resistance and rigidity make them the ideal choice in preventing vehicles from entering prohibited zones such as pedestrian footpaths and cycleways. Their flexibility enables them to return to their original shape and position even after the most severe impact. Compared to metal bollards that can cause serious harm to pedestrians and damage to vehicles, the X-Last range offers minimal risk of injury. They are manufactured from a non-corrosive material and therefore require zero maintenance expenditure.

Advantages

- Virtually indestructible bollard
- Non-corrosive and durable material
- High resistance yet flexible
- Withstands over 1000 impacts
- Wide range of colours and styles
- Coloured material as opposed to paint
- Fits in Retention Socket enabling future change

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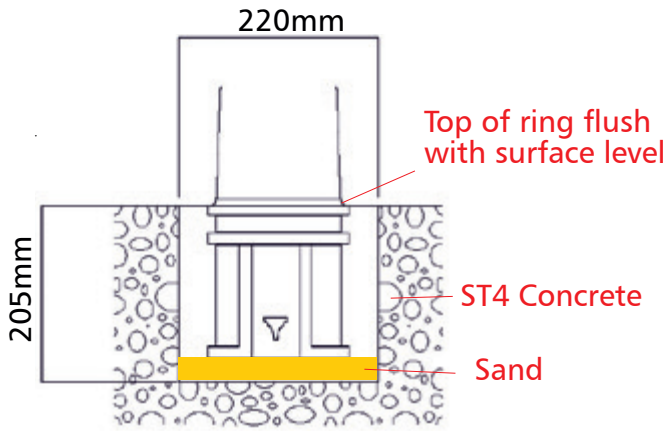
Generic X-Last bollard specification

Bollards must be manufactured from Elastomeric Polymer with the base colour impregnated within the polymer material.
Top colours will be painted using elastic coatings.
Bollards must be UV, abrasion, moisture and weather resistant.
Bollards must be passively safe to EN12767 - Classification NE4.
Bollards must be HIC Tested with a maximum value of 600.
Bollards must withstand a min of 320kgs force before folding to 90 degrees of their upright position.
Bollards must be able to withstand multiple impacts without any loss of strength.
Bollards must have the ability to perform as above with temperatures ranges from -20 to 60 degrees Celsius.
All reflective banding must be to EN12899-1 Class RA2.
Bollards root must be a maximum of 190mm in depth.
Bollards must be supplied with cast in, bolt down or NAL retention socket installation options.
All Bollards must be provided to the above specification by NAL Ltd or an equally approved manufacturer.



Concrete In Root

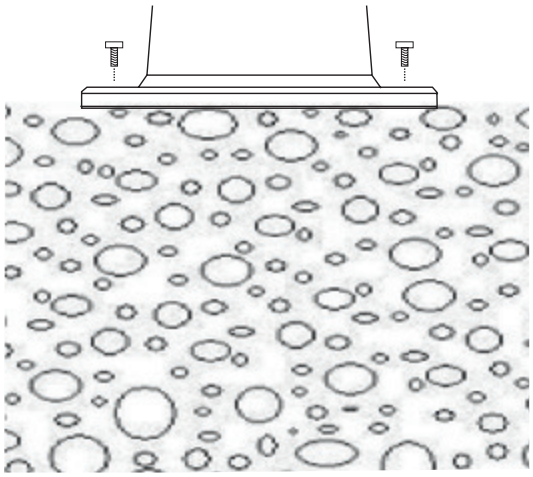
Excavate or core drill a minimum foundation size of:
Solid Ground
170x170x205mm deep
Loose Ground
450x450x450mm deep

Add a sand bedding for bollard to sit on

Place bollard centrally in foundation and pour ST4 concrete, using a level ensure bollard is vertical. Allow enough depth for any finishing surface.

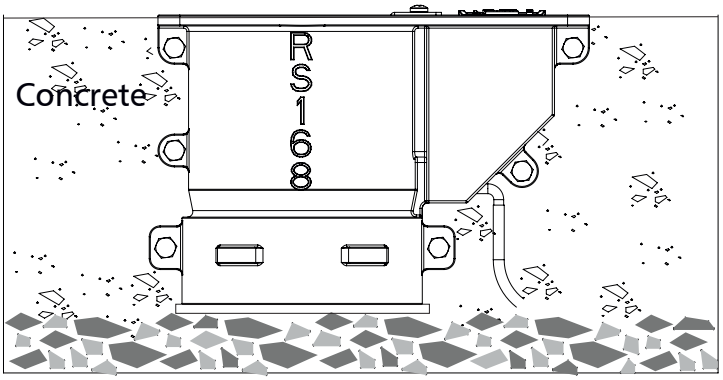
Important
Do not allow concrete to enter the bollard

Ensure the top of the ring is flush with finished surface level.



Bolt Down Flange Plate

Use M12 bolts for bolting down to good concrete base.
Length of bolt is dependent on ground conditions.



Retention Socket Install

Please refer to RS168 data sheet.

Foundation size:
Solid Ground
450x450x225mm deep
Loose Ground
600x600x225mm deep

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