

INSTALLATION INSTRUCTION

(Please see separate instruction for Konus and Konus Signal Bollards below)

We recommend installing our bollards using a steel pipe.

The depth of the foundation can be between 1 metre to a minimum of 55 cm where surface conditions allow but only if the impact can be absorbed without the foundation becoming misaligned.

If you choose to reduce the depth of the foundation it is important that extra concrete is cast around the pipe to compensate for the shorter length. The more concrete around the pipe the higher the impact force can be absorbed without misaligning the pipe.

Bollards can be installed in any surface.

We recommend using steel installation pipe. (Please see table below)

Installation pipe increases the functioning of the bollard and its flexible strengths.

1. Prepare your foundation (recommended Ø200mm x maximum 1000mm depth)
 - We recommend an opening of approximately 200 mm diameter.
 - The recommended depth of foundation is approximately 1000mm but in order to avoid the risk of drilling into wires, pipes or large obstructions it is possible to reduce the depth from 1000mm to a minimum of 550mm, but only if the impact can be absorbed without the foundation becoming misaligned. If you choose to reduce the depth of the foundation it is important that extra concrete is cast around the pipe (see drawing below) to compensate for the shorter length. The more concrete around the pipe the higher the impact force can be absorbed without misaligning the pipe It is imperative that the foundation has a minimum depth to endure the forces of impact and ensure that the bollard will raise to upright position after a collision.
2. Secure installation pipe in to the foundation.
3. Fill the foundation with gravel/sharp sand to a level that will achieve the required bollard height above the ground.
4. Slot bollard in to installation pipe and secure with sharp sand.

The recommended installation pipes (please note diameter sizes may vary by up to 5mm)

BOLLARD	FLANGED INSTALLATION PIPE			STRAIGHT INSTALLATION PIPE			LOCKABLE INSTALLATION PIPE		
	Height (mm)	Diameter (mm)	Thickness (mm)	Height (mm)	Diameter (mm)	Thickness (mm)	Height (mm)	Diameter (mm)	Thickness (mm)
Diamond	640	168.3	3	Not recommended			500	160	3
Standard	640	206	3	Not recommended			Not recommended		
Standard LED	640	206	3	Not recommended			Not recommended		
Classic	640	208	3	Not recommended			Not recommended		
Universal	640	159	3	Not recommended			500	150	3
Universal Signal	640	159	3	Not recommended			500	150	3
Flexifoot	Not recommended			640	159	3	500	150	3
Modern	640	208	3	Not recommended			Not recommended		
Konus Signal	Konus bollard does not require installation pipe, it is simply bolted to the ground through supplied flange using through bolts. The bolt length depends on the substrate								
Konus									

INSTALLATION INSTRUCTIONS KONUS AND KONUS SIGNAL BOLLARD

Konus bollard does not require installation pipe, it is simply bolted to the ground through supplied flange using through bolts.

- Determine the position of the bollard. Foundations should be a good, flat, strong concrete.
- Place the steel flange over the bollard and slide down.
- Use the drill holes in the flange as a template and drill bolt holes.
- Bolt the bollard and flange in place, 6 bolts are required per bollard. (The bolt length depends on the substrate)

