



## **In-Ground Removable Bollard**

<b>Specifications</b>	
<b>SKU</b>	BOLRSL90M
<b>Material</b>	Hot Dip Galvanised Steel
<b>Colour</b>	Powder Coated Yellow with Class 1 Red Reflective Tape
<b>Dimensions:</b>	<b>Diameter:</b> 90mm <b>Height:</b> 1200mm Total (900mm above ground, 300mm below ground) <b>Wall Thickness:</b> 3mm
<b>Item Weight</b>	8.3kg (without sleeve)
<b>Accessories</b>	Sleeve: Supplied 230mm high (below ground), 105mm diameter (145mm diameter inc. hinge) Padlock: Padlock x 1 Key included

### **Tools Required:**

- Post hole digger or shovel
- Concrete or concrete mix and water
- Spirit Level
- Shovel
- Measuring Tape
- Trowel

### **Installation:**

1. Determine exactly where the bollard will be placed and mark your installation positions. If you are installing more than one bollard, it is a good idea to mark the ground and use a string line to ensure that you have a straight line to assist you with the correct placement of your bollards.

2. Mark the ground at the centre point of where the bollard will sit. Your aim is to make sure that the centre of the hole is also the centre of the bollard.

3. Dig a hole in the gravel or dirt. The width of your hole should be the diameter of the bollard sleeve and the hole should be minimum 300mm deep (the hole depth will vary depending on the substrate.)

4. Prepare the concrete according to manufacturer's instructions.

5. Place the bollard into the hole and use your level to ensure that it is vertical.

6. It is advisable to place some crushed rock or gravel at the bottom of the hole to act as drainage in the event of water seepage.

7. Shovel the concrete around the base of the bollard, moving the concrete and packing it down around the bollard as you fill the hole to surface level.

8. Ensure the surface of the concrete around the bollard is flat to eliminate any trip hazards by using a trowel to smooth off the surface.

9. Observe the cure time of the concrete, usually 48 hours, to complete the bollard installation. You may want to protect the bollard from interference in this time.

### **Note: For Installation in Pre-Existing Concrete Surfaces**

We highly recommend you engage a professional core driller to complete the installation. Enquire about our installation services



**Technical Drawing**

