# Glasdon Solar Signmaster<sup>™</sup> INSTALLATION INSTRUCTIONS

Ensure that all relevant personnel read the points listed within this leaflet and that a copy is given to staff involved with the installation and maintenance of this product. Glasdon recommends that a full Health and Safety analysis is carried out prior to installation.

# **KIT CONTENTS:**

#### ITEM 1 - Bollard

- ITEM 2 Cover Cap
- ITEM 3 Screw M10 x 100mm
- ITEM 4 Cover Cap Lock Washer
- ITEM 5 Washer M10 x 50mm
- ITEM 6 Spacer
- **ITEM 7** Battery Chamber

#### TOOLS INCLUDED:

Allen Key 6mm

## **EQUIPMENT REQUIRED:**

- Chalk [for marking out]
- Portable Stone Saw
- Jack Hammer or Digging Bar
- Spade

- Trowel

- Spirit Level

- x 4
- x 4
- x 1

х1

x 4

x 4

x 4

- Concrete Mix [Quick setting concrete QC10]
- Safety Equipment [Hard hat, eye protection, ear

2

3

5

**DIAGRAM NOT TO SCALE** 

х1

x 1

x 1

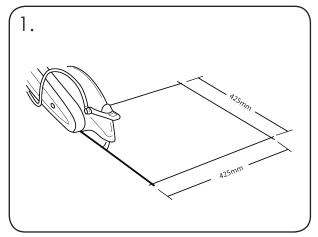
x 1

x 1

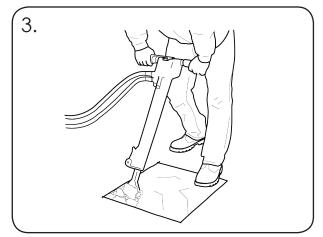
defenders, hi-visibility clothing]

x 1

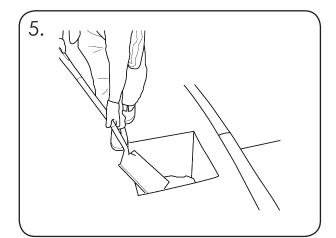
## INSTALLATION INSTRUCTIONS



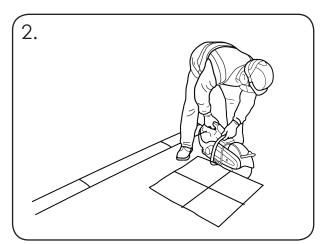
Mark out the hole for the Battery Chamber with chalk - 425 x 425mm minimum. Use the stone saw to trace the chalk outline [shallow to start] into the tarmac/concrete surface.



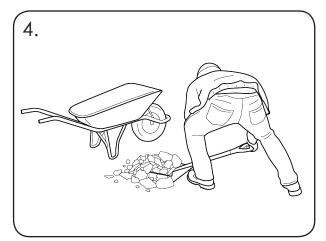
Use the jack hammer or digging bar to break up the top layers of material.



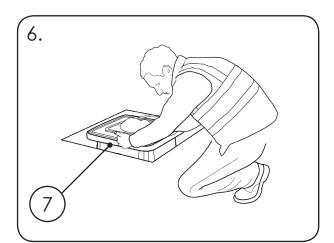
Continue digging until the hole reaches the required 310mm depth. Use the spade to square up the walls of the hole.



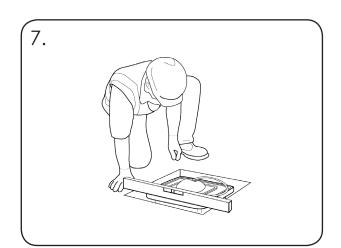
Retrace the slots, cutting through using the full depth of the saw blade. It may be useful to split the square pad by cutting it into quarters to allow it to be broken up easily.



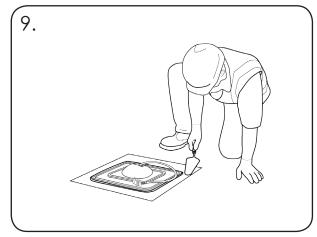
Use the spade to remove the broken up material.



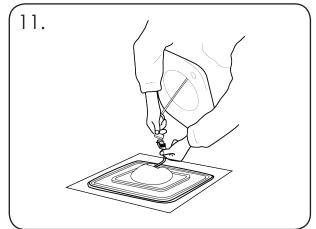
Once the hole is deep enough, place the Battery Chamber (ITEM 7) into the hole. The edge of the Chamber should be as close to level with the surrounding ground surface as possible.



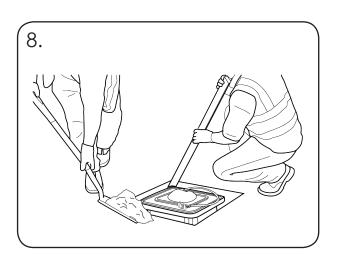
Use a spirit level to ensure the Chamber is level within the hole. If necessary, pack material underneath the chamber to bring it level. Prepare the concrete mix.



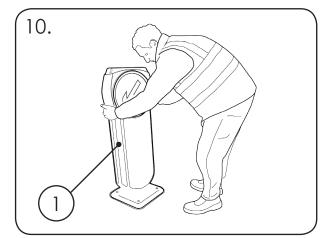
Use a trowel to carefully level and dress the concrete around the Chamber. NOTE: Place the four screws (ITEM 3's) into the fixing holes to prevent concrete entering the threads.



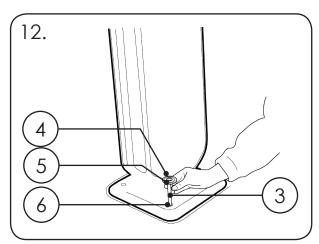
Remove the protective bag from the cable connection plug attached to the Chamber. Plug the connections for the Chamber and Bollard together. You should see the sign face flash 'on' briefly.



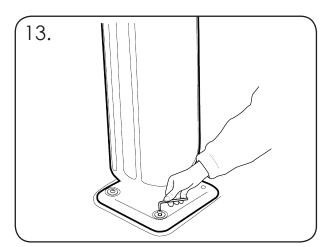
Start pouring concrete around the Chamber. Use a spade to shovel and a length of timber or a trowel to pack the concrete down the sides of the Chamber.



Place the Bollard (ITEM 1) on top of the Chamber. Remove the protective bag from the cable connection plug.



Slot a cover cap lock washer (ITEM 4) followed by a 50mm washer (ITEM 5) onto one of the M10 screws (ITEM 3). Place one of the spacers (ITEM 6) into one of the ground fixing holes in the bollard foot. Place the assembled fixing through the bollard [through the spacer]. Repeat for the three remaining fixings.



Tighten each ground fixing a little by hand first to ensure they are all engaged with the thread in the fabricated fixing bars attached to the Chamber. Then use the Allen key provided to tighten the ground fixing screws.



To test, cover the solar panel and Light Dependent Resistor [top of the bollard] for approximately 10 seconds. The sign face should illuminate.

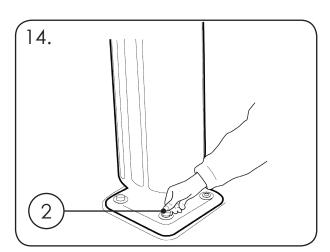
#### INSTALLATION COMPLETE.

**IMPORTANT NOTE:** PLEASE ENSURE THAT ALL RELEVANT PERSONNEL READ THE POINTS LISTED WITHIN THIS LEAFLET AND THAT A COPY IS GIVEN TO STAFF INVOLVED WITH THE INSTALLATION AND MAINTENANCE OF THIS PRODUCT. **SAFETY NOTE:** PLEASE REFER TO 'THE MANUAL HANDLING OPERATIONS REGULATIONS 1992' DURING HANDLING.

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- A planned maintenance schedule or regular inspection is recommended, replacing components as necessary.
- Replacement components are available direct from GLASDON.
- GLASDON cannot be held responsible for claims arising from incorrect installation, unauthorised modifications or misuse of the product.
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Push the four cover caps (ITEM 2's) over the lock washers until they 'click' into place.



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