

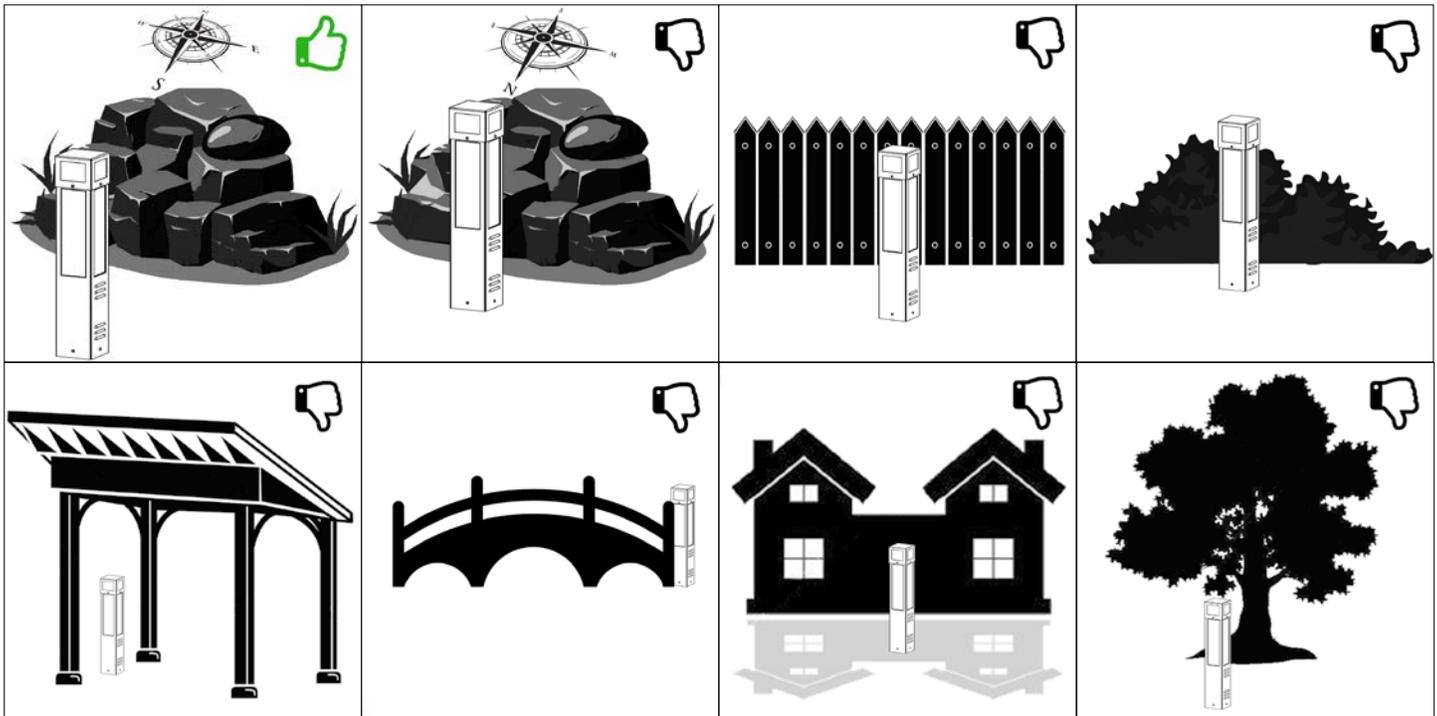
# INSTALLATION MANUAL

## SB40 COMMERCIAL SOLAR BOLLARD



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### 1.1 FACTORS AFFECTING AUTONOMY:

The bollard must be installed in an open area **without** nearby structures or dense vegetation that could favor solar module shading. Please make sure that the distance between the bollard and the elements (e.g. fences, bushes, trees, posts, buildings or structures) is sufficient to avoid the long shadows created by the low winter sun. Use a compass to determine the sun's path and reduce shading effects.

Other factors affecting autonomy are: sunshine below the monthly averages, very low ambient temperature, snow accumulation and your local sunshine data.

### 1.2 HANDLING

Battery must be removed prior to handling the solar bollard. **The bollard should never be manipulated when the battery is connected and inside the unit.** Use the quick connect/disconnect cable to remove the battery before handling.

### 1.3 STORING

If you wish to store the battery, the battery needs to be charged in order to prevent permanent damage. When stored, the battery should be recharged every 6 months. The battery must be stored at 20°C room temperature to prevent damage.

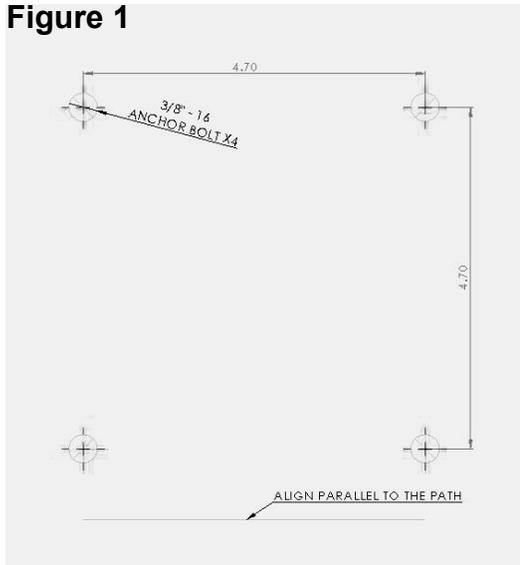
### 1.4 DAY-NIGHT TRANSITION

The SB40 solar bollard uses the solar panel to detect day and night periods. The night transition requires a very low brightness level for 5 continuous minutes. This constraint prevents false night transitions that could be caused by storm clouds in the evening. If the solar module is covered with snow, the solar module voltage may be too low and may cause light synchronization errors. If the light works erratically, make sure the solar module is clear from debris or snow. The light automatically corrects synchronization errors within 24 hours.

### 1.5 DEEP DISCHARGE PROTECTION

This protection significantly increases battery lifespan. This protection also prevents permanent damage to the battery caused by very deep discharges during cold weather. **When the battery reaches a 50% state of charge, the battery is automatically disconnected from the system until it's state of charge reaches 85% i.e. about 1 day of sunshine in summer and about 4 days of sunshine in winter.**

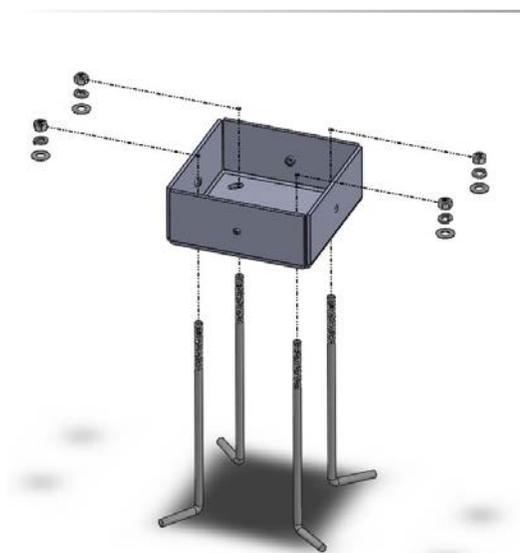
Figure 1



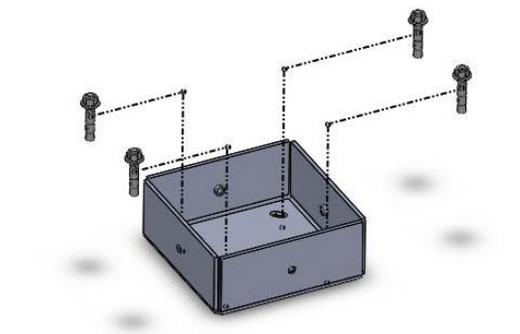
### STEP 1 Installation instruction of the anchor bolts for the mounting base:

Using the bolt pattern at the end of this document, adjust anchor bolts so there is 1" thread length above the concrete pour top line in order to properly accept the bollard mounting base.

**Important:** Align the bolt pattern parallel to the path as shown in figure 1.



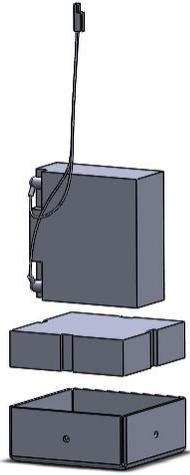
OR



### STEP 2 Bollard mounting base installation

Place the mounting base onto the bolts and use the supplied 3/8" hardware (flat washer, lock washer and nut) to secure in place.

Note: Anchor bolts or expansion bolts **are not** supplied. Only 3/8" flat washers, lock washers and nuts are supplied.



### STEP 3 Battery padding and battery

Place the supplied battery padding and the battery into the mounting base as shown in the figure.



### STEP 4 Battery connection

Having the bollard main body assembly in close distance to the mounting base/battery, make the battery connection using the quick-connect cables.



### STEP 5 Complete the installation

Place the bollard main body assembly over the mounting base, as shown in the figure, and use the supplied hardware to secure into place.

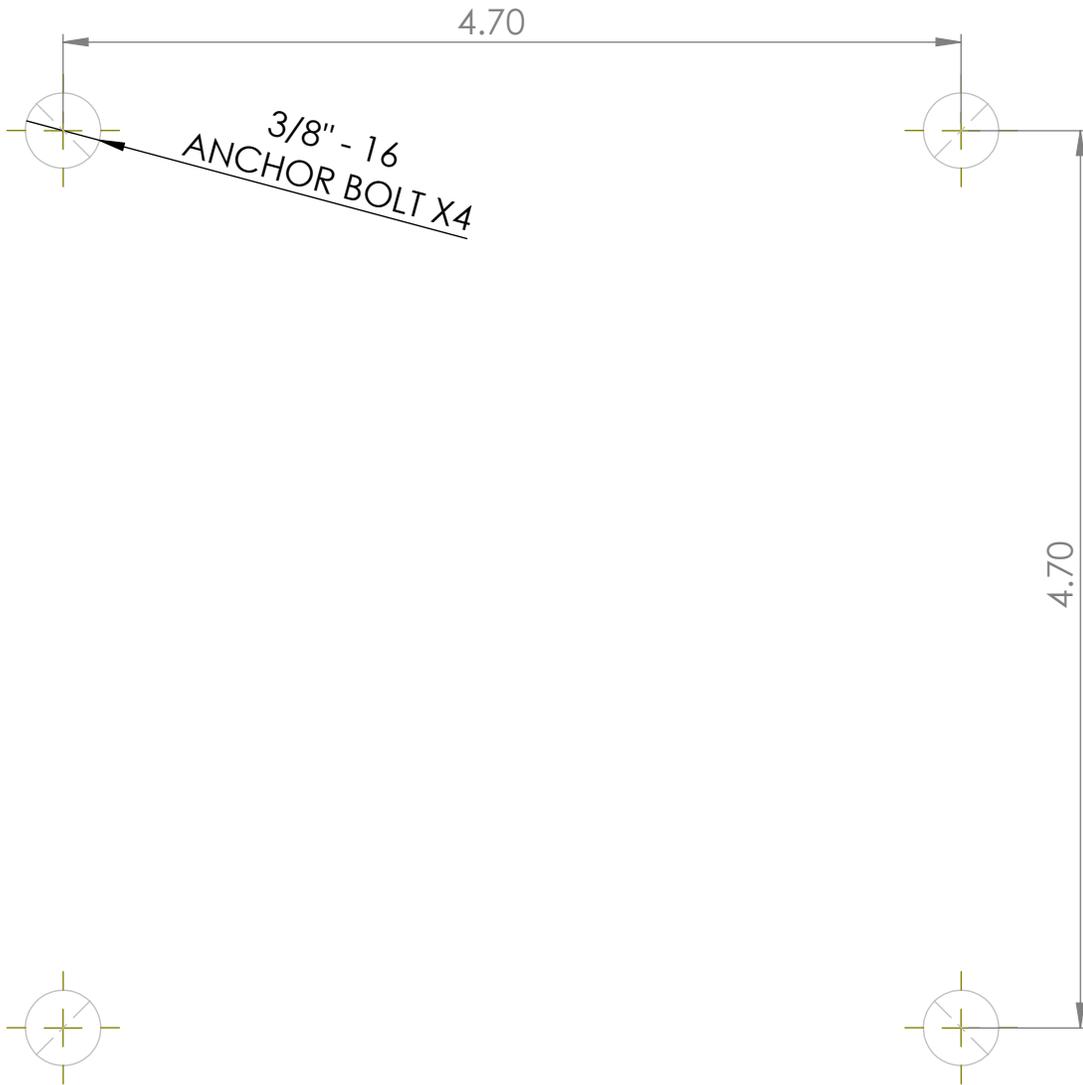
**Important:** Make sure not to pinch the battery cable or connector. Make sure to properly clear the battery terminal boots protectors when sliding the main body part over the base.

**Note:** The ventilation vents should be on the opposite side to the path.

2

1

PLEASE SELECT "ACTUAL SIZE" IN YOUR PRINT MENU FOR A REAL SIZE TEMPLATE AND DOUBLE CHECK THE MEASUREMENTS FOR ACCURACY.



B

B

A

A

ALIGN PARALLEL TO THE PATH

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 THE INFORMATION CONTAINED IN  
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 PROPERTY OF SOLAR VISION. ANY  
 REPRODUCTION IN PART OR AS A  
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DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 ANGULAR: ±1  
 TWO PLACE DECIMAL ±0.6"  
 THREE PLACE DECIMAL ±0.31"  
 HOLES: ±0.05"

MATERIAL:  
 FINISH:  
 DO NOT SCALE DRAWING

|              | NAME | DATE      |
|--------------|------|-----------|
| DRAWN        | JFOL | 15 MAY 19 |
| CHECKED      |      |           |
| ENG APPR.    |      |           |
| MFG APPR.    |      |           |
| Q.A.         |      |           |
| COMENTAIRES: |      |           |

# SB40 ANCHOR BOLT PATTERN

|                  |                     |              |
|------------------|---------------------|--------------|
| SIZE<br><b>A</b> | DWG. NO.<br>SB40-02 | REV.<br>0    |
| SCALE:1:1        | WEIGHT:             | SHEET 3 OF 3 |

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