# Solar Bottle Light Bulb

Step-By-Step Assembly Guide - English

#### **Instructions**

**1** Cut a 10 x 10 inches of corrugated galvanised iron roof sheeting and remove sharp edges.

**2** At the centre of the *sheet* (on top of a corrugation) draw 2 concentric circles (the outer with circumference of the PET bottle & the inner 1cm smaller).

**3a** Cut a hole in the sheet following the line of the small, inner, circle.

**3b** Draw 40 radial lines between the hole and the outer, larger, circle – cut along these lines to create 32 tabs.

**3c** Bend each tab at 90 degrees that it is perpendicular to the sheet. This creates a lock/seal.

**4** Sand/scratch the surface of the bottle where it will be in contact with the roofing iron (1/3 from top)

**5a** Insert the bottle into roofing sheet through the lock until the tabs are touching the scratched/sanded surface.

**5b** Apply sealant liberally around the top and bottom of the joint between the bottle and the roofing sheet. Spread and smooth ensuring the entire joint is well covered.

**5c** Wait for the sealant to dry thoroughly.

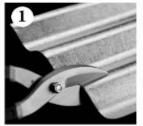
**6** Add 10ml of bleach to the bottle then completely fill the bottle with water. And screw on the bottle cap tightly.

#### **Tools & Materials**

- Hammer
- Chisel
- Tin snips
- Sand paper
- Permanent marker
- Corrugated roofing sheet
- Large clear PET bottle with lid
- Bleach
- Water
- Rubber Sealant



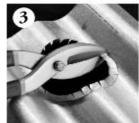




























# Solar Bottle Light Bulb

Step-By-Step Assembly Guide - English

### Instructions

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- **1** Select location for light the draw a circle the same size as the bottle before cutting around the circle creating a hole.
- **2** Apply external sealant liberally around the hole from the top and bottom and smooth.
- **3** Place rubber sealant around the bottom edge of the sheet that holds the bottle light bulb and insert the bottle into the hole. Make sure the bottle lid is facing upwards. Ensure the corrugations are well aligned and secure.

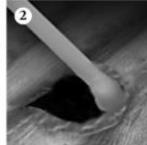
- **4** Drill 4 holes on each side of the bottle through both layers of roof sheeting. Place/tighten rivets in these holes.
- **5** Apply external sealant liberally along all sides of the roof sheet to prevent leakage. Also cover the rivets with sealant.
- **6** Place protective plastic tube over the bottle cap and cover with external sealant.

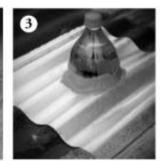
- Hammer
- Chisel
- Sheet metal cutter

**Tools & Materials** 

- Cordless drill
- Rivet gun
- Permanent marker
- Solar Bottle Light Bulb (complete)
- External Rubber Sealant
- Plastic tube
- Rivets

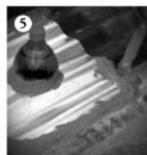


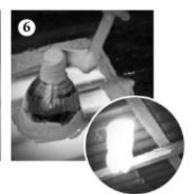




Your solar bottle light bulb has now been successfully installed. Enjoy having access to up to 55 Watts of free light in your home everyday.







My Shelter Foundation



