



**SOLATUBE**<sup>®</sup>  
DAYLIGHTING SYSTEMS

## Installation Instructions

Solatube Ø 25 cm round  
slate / plain tile roof flashing

*Enjoy daylight*

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## Version

29-07-2020

## Safety Information

- Always observe the safety instructions for the materials and tools to be used.
- Always wear the appropriate personal protective equipment (gloves, safety goggles etc.)
- We would suggest that any roof works is completed by an experienced roofer.
- Always have any electrical works carried out by a certified electrician.
- Please note that the installation works is carried out at your own risk.

**Guarantee**

Non-electrical Solatube® components are covered by a 10 year manufacturer's warranty against any manufacturing defects. Please retain the original proof of purchase to validate the product warranty. Any costs associated to the installation of any replacement parts covered under the warranty remain at the expense of the purchaser. Our terms and conditions are available upon request.

**Disclaimer**

Techcomlight Limited expressly disclaims any liability for any unexpected additional expense arising as a result of condensation or any water damage resulting from condensation, installation not in accordance with Techcomlight Limited's installation guide/s or any other external influences beyond the control of Techcomlight Limited. Techcomlight cannot be held liable for damage to structures caused as a result of making openings and installing Solatube® systems. Techcomlight assumes no responsibility or obligation for the failure of an architect, contractor, installer or building owner to comply with all applicable laws, ordinances, building codes, energy codes, fire and safety codes and requirements, and adequate safety measures.

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## 1. Product Overview



### 1.1 Parts

- 1. Flex roof dome
- 2. Top tube assembly
- 3. Bottom tube assembly
- 4. 5 x roof dome screws
- 5. Brush seal
- 6. Roofing sealant

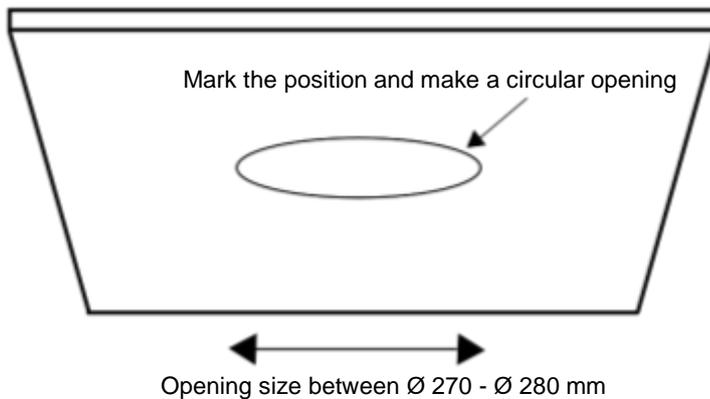
- 7. LightTracker flex
- 8. 2 x Raybenders flex
- 9. Natural Effect Lens
- 10. Slate / plain tile roof flashing
- 11. Roll of aluminium tape

## 2. Installation Steps

### 2.1 Step 1 – Determine roof and ceiling positions

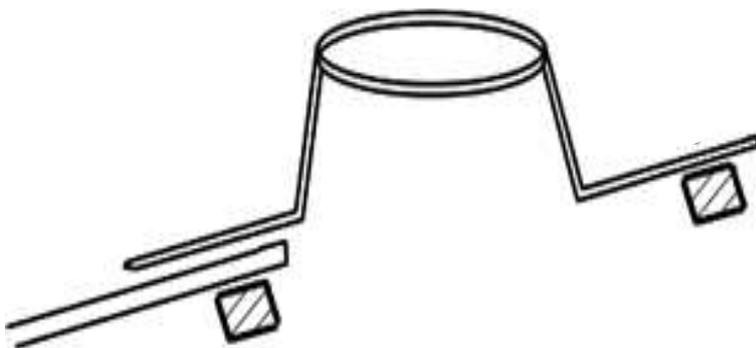
Determine where you want to install the Solatube from the inside and mark the position through the roof and the ceiling.

A circular opening with a diameter of between  $\varnothing 270$  -  $\varnothing 280$  mm will be required through the ceiling.



### 2.2 Step 2 – Prepare the roof flashing location

Locate the marked roof position externally and remove sufficient tiles to allow you to place the top and aperture of the flashing onto the roof battens, leaving sufficient tiles at the bottom edge to allow the flashing to overlap sufficiently onto the tiles below. Double-check that no rafters or obstructions lie behind the proposed tube position as shown below. The tile pattern & size of tile will determine how many tiles need to be replaced and/or cut to size.

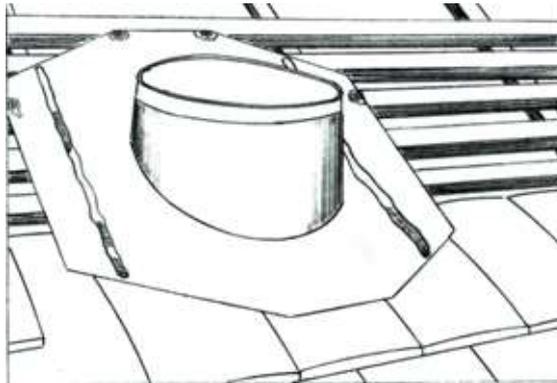


### 2.3 Step 2.3 – Create the roof flashing opening

Place the flashing to one side. Centre the top tube assembly over the mark previously made and mark around the outside circumference onto the felt.

Place the top tube assembly safely and securely to one side. Neatly cut the roof felt and, if necessary, any obstructing batten(s) across the diameter of the circular flashing up-stand. Replace the flashing over the hole and temporarily insert the top tube assembly into the up-stand and felt to check clearance and, if necessary, to rotate the angle in the top tube assembly towards the bottom tube assembly in the ceiling.

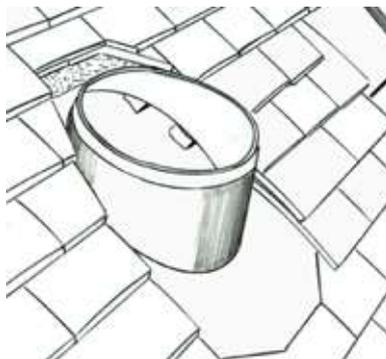
Apply a bead of sealant on the tiles that will be covered by the bottom edge of the flashing. Secure the top of the flashing to the appropriate tile batten with appropriate fixing screws (sourced separately). Use a small amount of sealant to cover each screw head and press the bottom edge of the flashing onto the bead of sealant below. Apply a bead of sealant across the top and down the sides of the flashing onto which the tiles / slates will be re-laid (see diagram below).



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### 2.4 Step 2.4 – Replace tiles / slates around the flashing

Re-lay and fix the tiles to the sides and top of the flashing ensuring there is a 40mm gap behind the flashing up-stand to allow the top tube assembly, dome ring and dome to be inserted into the flashing up-stand – note you may need to trim the tiles to achieve this. Ensure all tiles are firmly in position and the roof is fully watertight as shown below.

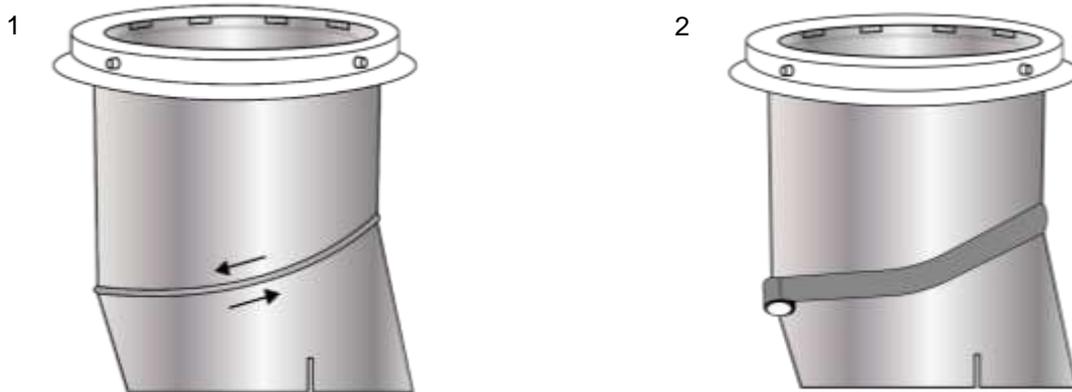


### 2.4 Step 5 – Adjust top tube angle (if required)

If required, the integral angle within the top tube assembly can be rotated to create an angle from 0 to 30 degrees to compensate for the pitch of the roof.

**How to adjust the integral angle:** Carefully peel back the protective film inside the tube from along the angle seam.

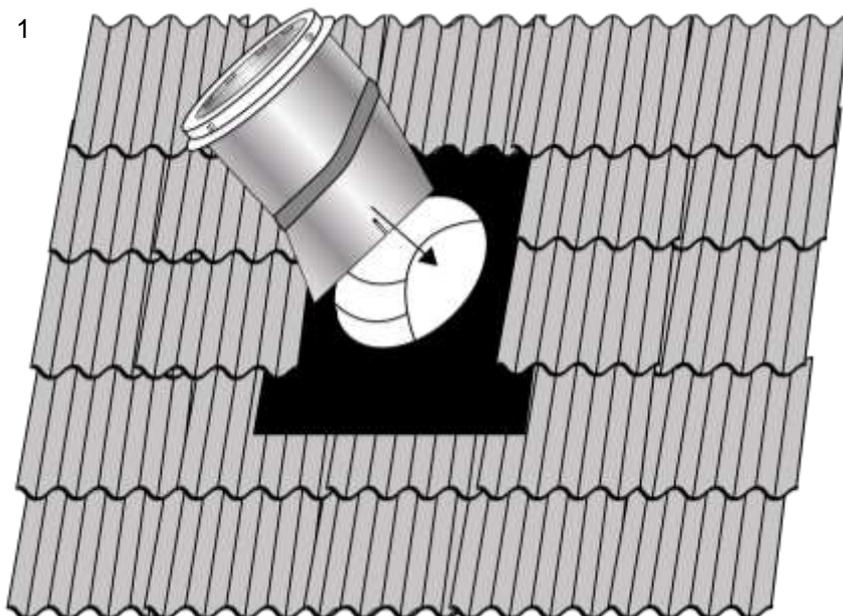
Grasp the top tube with two hands, just below the adjustable angle seam (diagonal). Use your thumbs and index fingers to rotate the angle section as required. Adjust the angle so that the top tube assembly aligns with the bottom tube assembly. Once the angle is correctly set, carefully apply tape to the outside of the tube over the tube seams and around the angle.



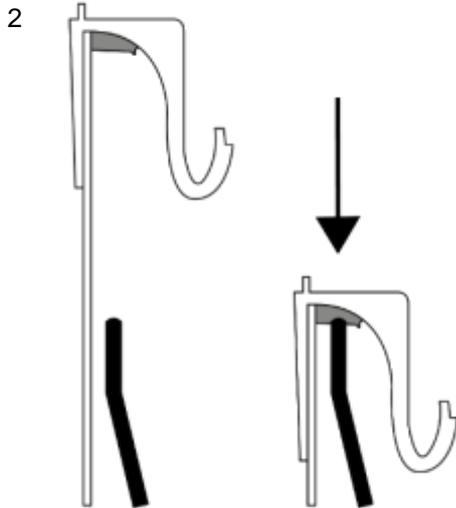
Now remove the transparent protective film from the inside of the top tube assembly.

### 2.6 Step 6 – Install the top tube assembly

Carefully insert the top tube assembly down through the roof flashing until the transparent dome ring is correctly seated down onto the top lip of the flashing as shown below.



Fix the dome ring onto the roof flashing using the dome screws provided, screwed through the four grey spacers from the outside in. The screws will pierce through the flashing and the inside of the reflective tubing. Be careful not to overtighten the screws as this may cause damage to the dome ring.

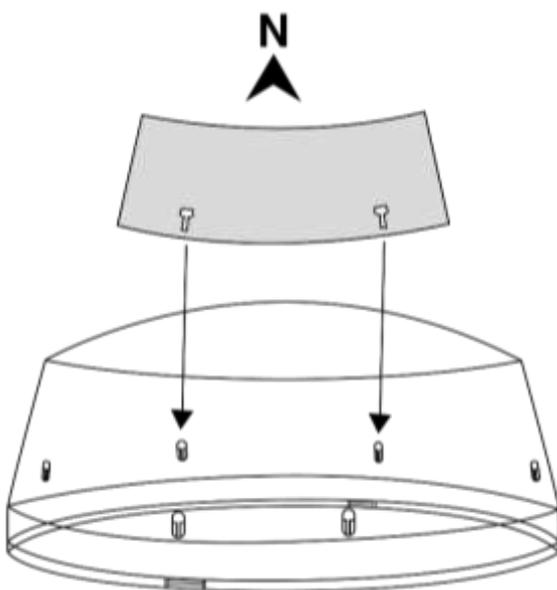


Now remove the transparent protective film from the inside of the top tube assembly.

### 2.7 Step 7 – Install LightTracker flex

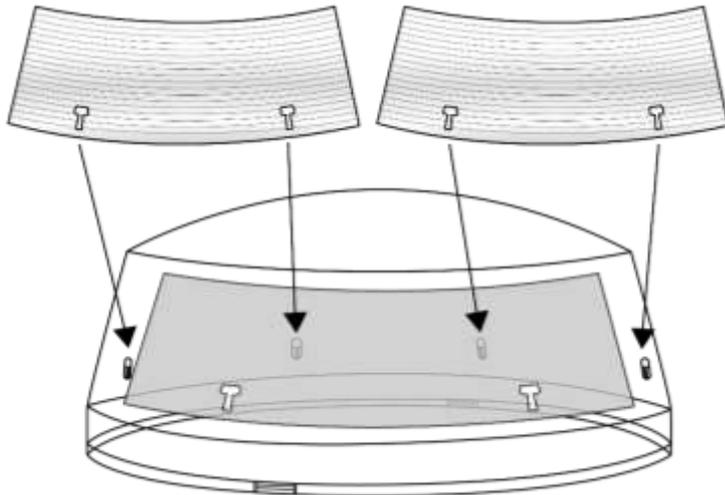
Place the dome upside down on a soft clean surface. Fit the LightTracker flex (this is the mirrored insert) with the reflective side facing inwards. Align the holes in the LightTracker over the corresponding tabs inside the dome and slide the LightTracker flex downwards to secure it in place.

**Note:** If the sunlight from the south is blocked, do not mount the LightTracker flex in the dome!



### 2.8 Step 8 – Install RayBenders flex

Fit the two RayBenders flex inserts (these are the transparent ribbed insert) onto the remaining tabs inside the dome with the smooth sides facing inwards and the ribbed sides against the dome. Align the holes in the RayBenders with the corresponding tabs inside the dome and slide the RayBenders downwards to secure them in place.

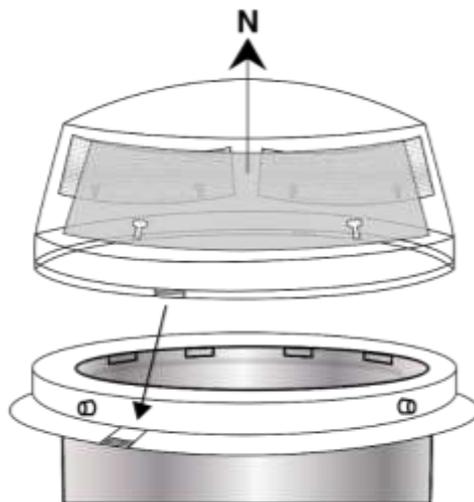


### 2.9 Step 9 – Fit the roof dome

Snap the dome onto the dome ring using the 4 snap closures. Ensure that all four connecting points are properly engaged.

**Important:** Fit the dome with the LightTracker flex on the north side (facing south).

**Tip:** If you want to remove the dome again, insert the end of a wide screwdriver into the opening of the snap fasteners and pry it off one by one from below.

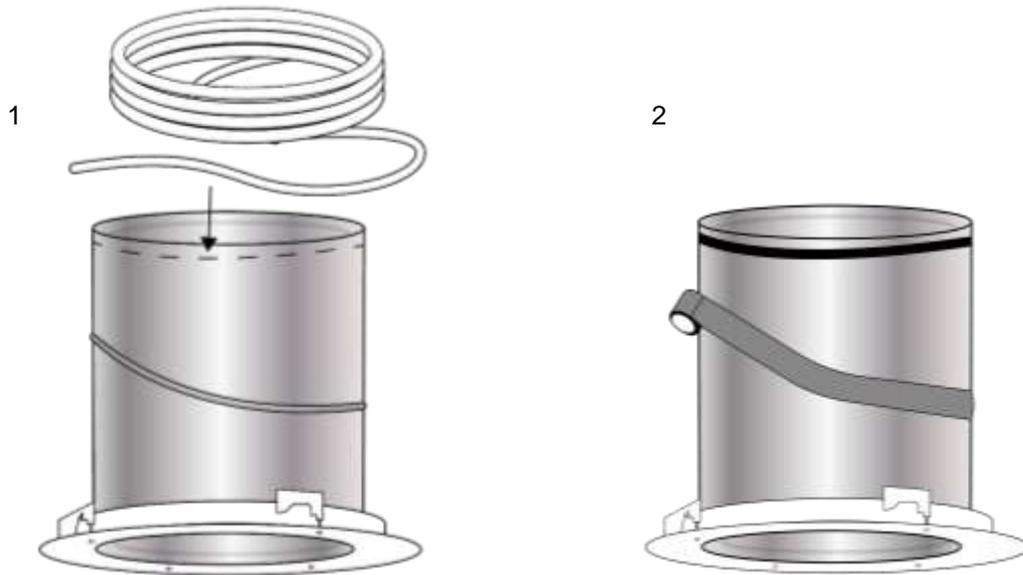


### 2.10 Step 10 – Attach the brush seal

Stick the brush seal strip around the outside of the bottom tube assembly or uppermost extension tube, just below the top of the tube as shown below. Using the entire sealing strip, wrap the strip around the tube keeping the rings tightly together as shown.

**Note:** if additional extension tubes are being used this operation must be performed around the top of the uppermost extension tube.

Once the angle is correctly set, carefully apply tape to the outside of the tube over the tube seams and around the angle.



### 2.11 Step 11– Install the bottom tube assembly

If required, adjust the adjustable angle within the bottom tube assembly as previously shown. Seal all external tube seams including the angle by applying tape over the seams on the outside of the tube.

Prior to installing the bottom tube assembly carefully apply tape apply to the outside of the tube over the tube seams and around the angle.

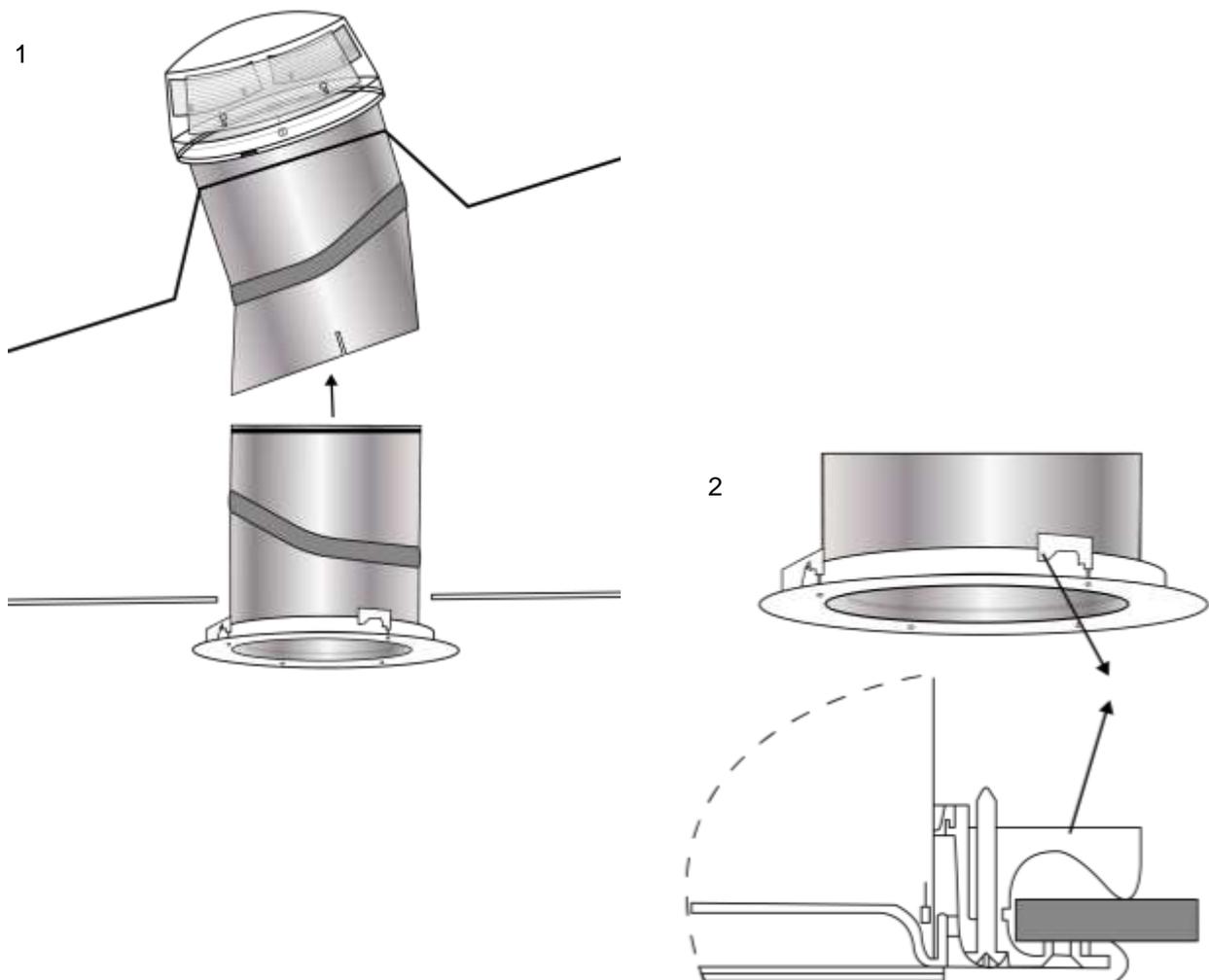
Carefully push the bottom tube assembly up through the opening created in the ceiling and up into the inside the top tube assembly, until the ceiling ring is flush with the ceiling.

**Tip:** Make sure that the mounting clips on the ceiling ring are in a ‘closed’ position so that they fit through the ceiling opening.

Tighten the four fixings screws within the ceiling ring which will engage the mounting clips, tightening them down onto the ceiling to clamp the bottom tube assembly in place.

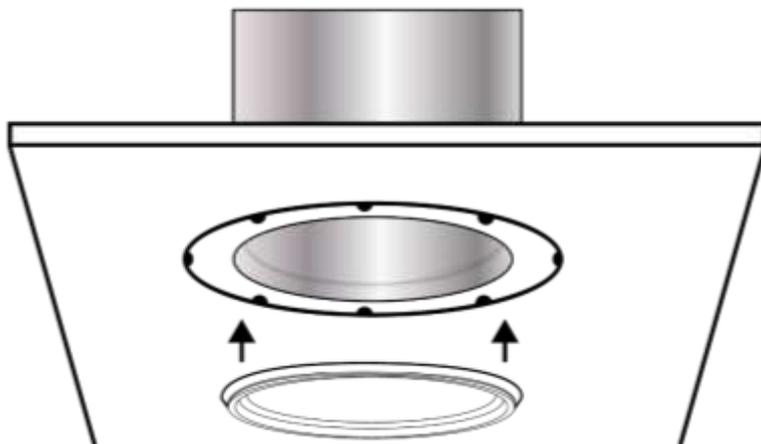
Alternatively, if the mounting clips cannot be used (for example with a concrete finish or a double boarded ceiling), or if the ceiling ring does not fit tightly enough, it can be fixed with screws through the pre-defined fixing points moulded into the ceiling ring. The pre-defined fixing points in the ceiling ring must be pre-drilled for the screws prior to being fixed in this way.

Now remove the transparent protective foil from the inside of the bottom tube assembly.



### 2.12 Step 12 – Fit the Natural Effect Lens

Press the Natural Effect Lens with the clear plastic tab facing downwards securely into the recess between the reflective tube and the plastic ceiling ring. The Natural Effect Lens can be easily removed if required by carefully pulling down on the clear plastic tab.



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Please see the separate instructions for the installation of the ceiling diffuser.

