



SOLATUBE®

DAYLIGHTING SYSTEMS

Installation Instructions

Solatube Ø 35 cm square
flat roof ECO flashing

Enjoy daylight

Contents

1. Product Overview	4
1.1 Parts	4
2. Installation Steps	5
2.1 Step 1 – Flat roof flashing.....	5
2.2 Step 2 – Fit the flashing insulator.....	5
2.3 Step 3 – Mount the flat roof flashing.....	6
2.4 Step 4 – Install top tube assembly	6
2.5 Step 5 – Adjust top tube angle (if required).....	7
2.7 Step 7 – Install LightTracker flex	8
2.8 Step 8 – Install RayBenders flex	9
2.9 Step 9 – Fit the roof domes.....	9
2.10 Step 10 – Attach the bottom tube to the transition box.....	10
2.11 Step 11 – Fit the insulation lens.....	10
2.12 Step 12 – Attach the brush seal	11
2.13 Step 13 – Install the lower tube section/s.	11
2.14 Step 14 – Fit the transition box	12
2.15 Step 15 – Natural Effect Lens	12
2.16 Step 16 – Remove protective film from transition box.....	12

Version

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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 | 9. Metal transition box |
| 2. Inner dome acrylic | 10. Brush seal |
| 3. Top tube assembly | 11. Flat roof flashing |
| 4. Bottom tube assembly | 12. Roll of aluminium tape |
| 5. LightTracker flex | 13. 6 x Aluminium tape strips |
| 6. 2 x Raybenders flex | 14. 5 x Roof dome screws |
| 7. Natural Effect Lens | 15. Flashing insulator |
| 8. Insulation lens | |

4 Please note: Insulation material is not included and is to be sourced separately.

2. Installation Steps

2.1 Step 1 – Flat roof flashing

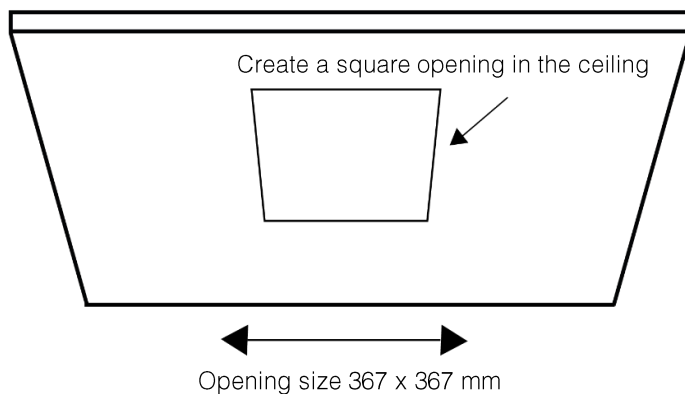
Determine where you want to install the Solatube from the inside and mark the position through the roof.

Note: Consider the roof construction and any electrical wires or pipes which may be hidden within the roof void.

1. Roof: Create a circular opening with a diameter of between Ø 370 - Ø 380 mm through the roof construction only.

2. Ceiling: Create a 367 x 367 mm square opening in the ceiling for the square ceiling diffuser.

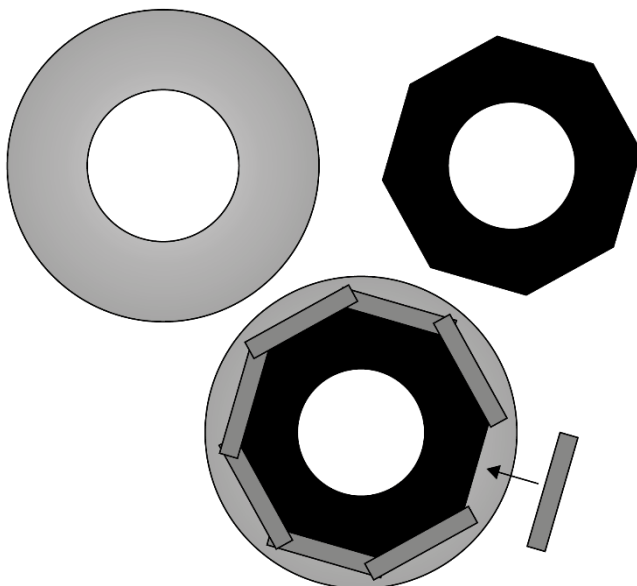
Please note: The recessed ceiling diffuser option requires an opening of 345 x 345 mm square.



2.2 Step 2 – Fit the flashing insulator

Stick the flashing insulator onto the underside of the roof flashing with the strips of aluminium tape provided. Ensure that the insulator is properly taped and centered in position.

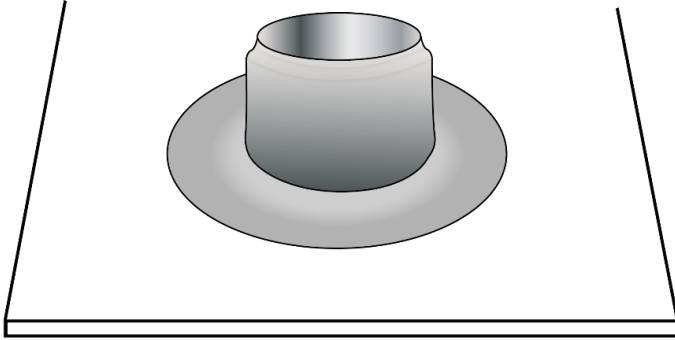
Note: The flashing insulator is important to prevent thermal bridging.



2.3 Step 3 – Mount the flat roof flashing

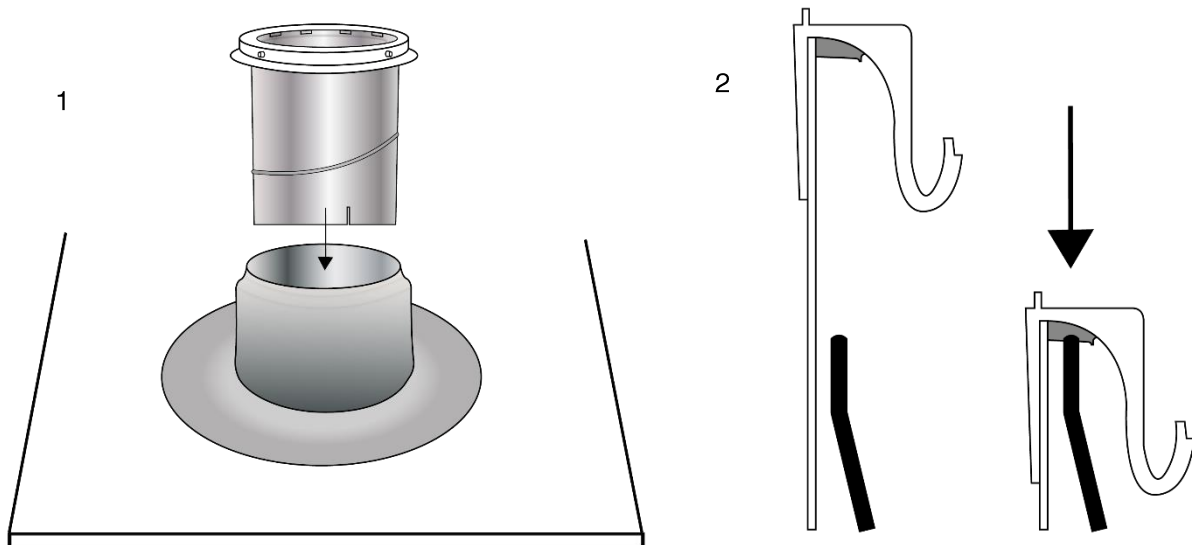
Note: It may be necessary to degrease the flashing prior to installation.

Centre the roof flashing over the opening created in the roof and secure the flashing down with suitable screws (not supplied). Apply the appropriate roofing material over the flange of the flashing, ensuring a watertight seal.



2.4 Step 4 – Install top tube assembly

If required, adjust the integral angle within the top tube assembly (see below). Seal all external tube seams including the angle by applying tape over the seams on the outside of the tube. Carefully push the top tube assembly down through the roof flashing and flashing insulator until the transparent dome ring is correctly seated down onto the top lip of the flashing as shown below.



Note: The insulator is designed to fit tightly around the outside of the tube, so you may have to stretch the insulator with your finger tips to allow the tube to fit through.

Fix the dome ring onto the roof flashing using the dome screws, 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.

2.5 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.

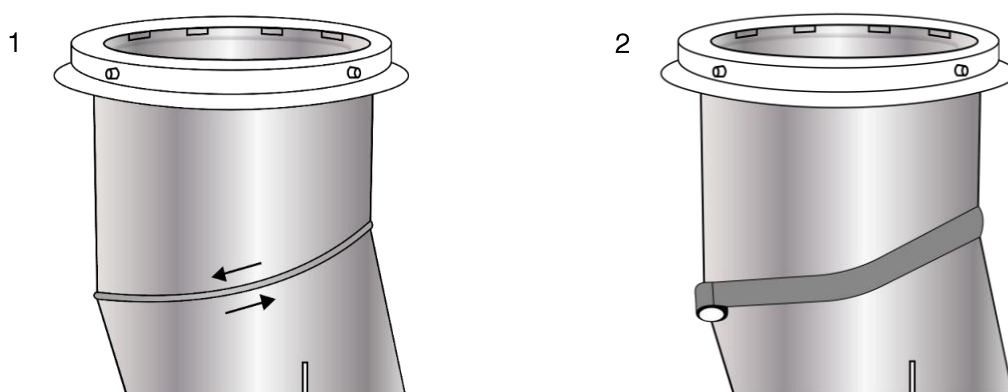
How to adjust the integral angle: Carefully peel back the protective film inside the tube from along the angle seam.

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.



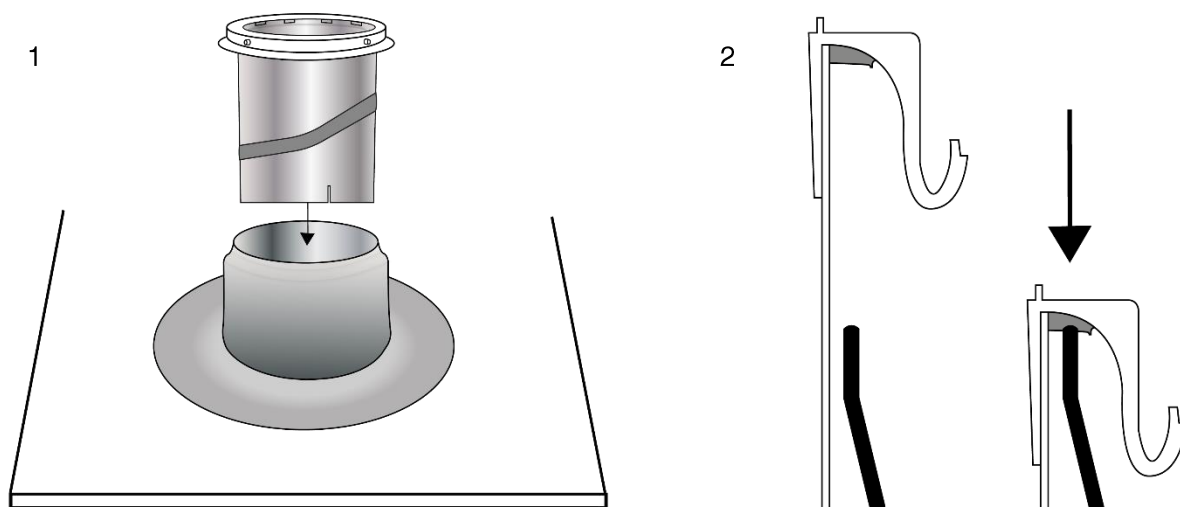
Now remove the transparent protective film from the inside of the top tube assembly.

2.6 Step 6 – Install top tube assembly

If required, adjust the integral angle within the top tube assembly (see below). Seal all external tube seams including the angle by applying tape over the seams on the outside of the tube. Carefully push the top tube assembly down through the roof flashing and flashing insulator until the transparent dome ring is correctly seated down onto the top lip of the flashing as shown below.

Note: The insulator is designed to fit tightly around the outside of the tube, so you may have to stretch the insulator with your finger tips to allow the tube to fit through.

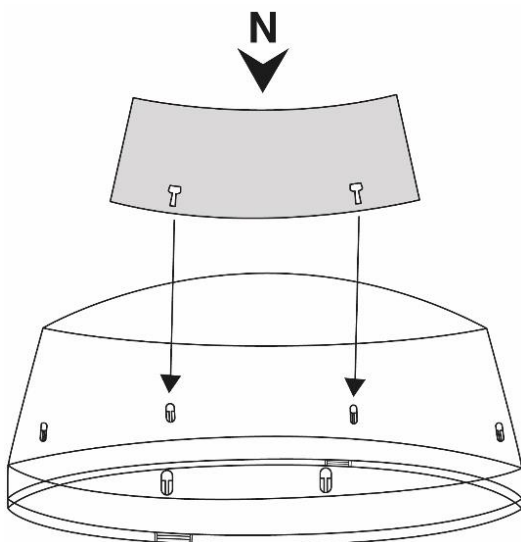
Fix the dome ring onto the roof flashing using the dome screws, screwed through the four grey spacers from the outside in. The screws will pierce through the flashing and the inside of the reflective tubing. Be careful not to overtighten the screws as this may cause damage to the dome ring.



2.7 Step 7 – Install LightTracker flex

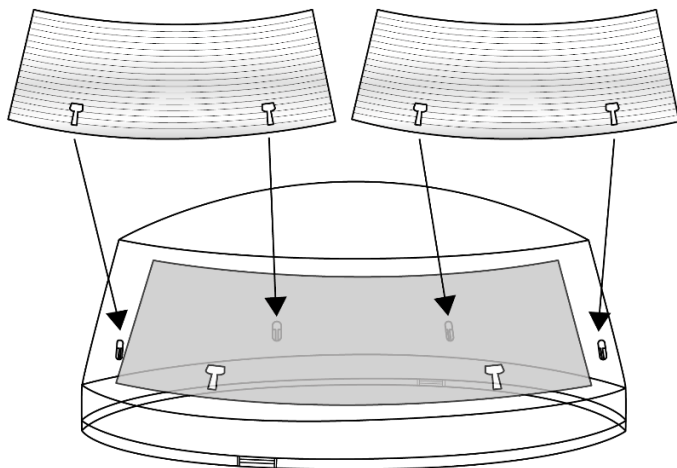
Place the dome upside down on a soft clean surface. Fit the LightTracker flex (this is the mirrored insert) with the reflective side facing inwards. Align the holes in the LightTracker over the corresponding tabs inside the dome and slide the LightTracker flex downwards to secure it in place.

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.

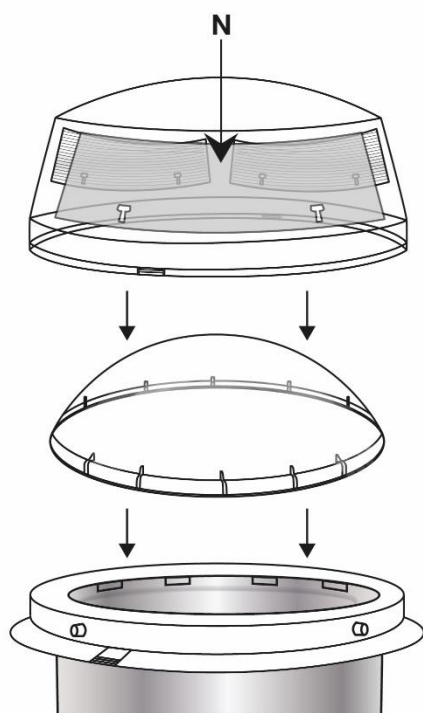


2.9 Step 9 – Fit the roof domes

Align the inner dome on to the dome ring and snap it in place using the 4 snap closures. Then place the flex roof dome over the inner dome and snap it in place using the 4 snap closures. Ensure that all four connecting points on both the inner and outer domes are properly engaged.

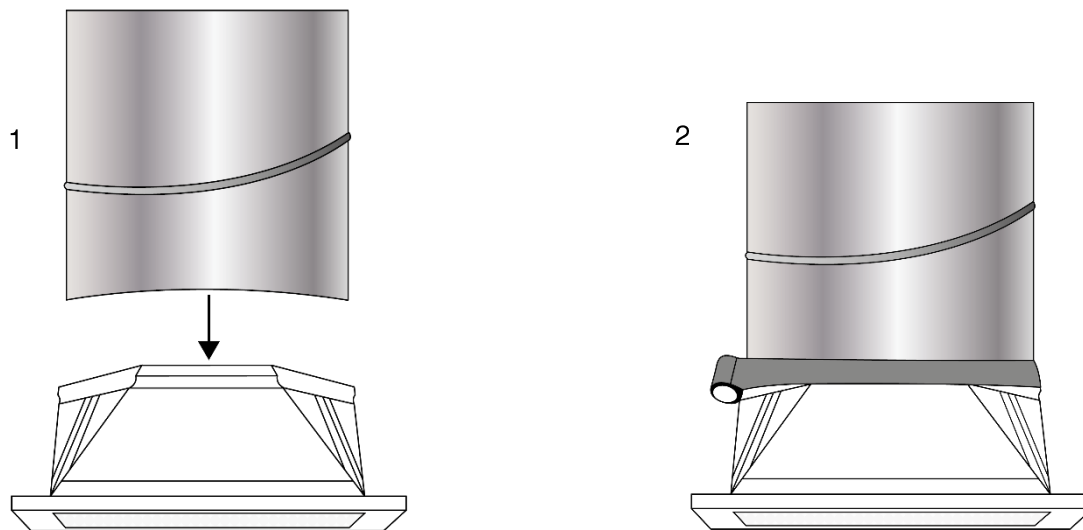
Important: Fit the dome with the LightTracker flex on the **north** side (facing south).

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.



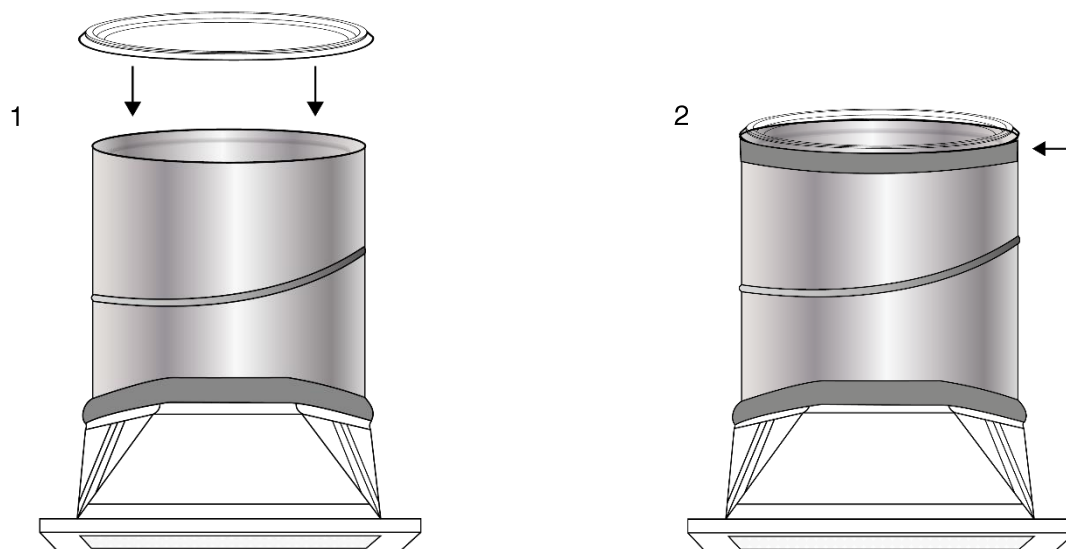
2.10 Step 10 – Attach the bottom tube to the transition box

Fit the bottom tube down onto the top of the transition box and tape into place with the aluminium tape provided as shown below.



2.11 Step 11 – Fit the insulation lens

Fit the insulating lens down onto the top of the bottom tube assembly and tape the outer edge of the lens to the outside of the tube with aluminium tape as shown below.

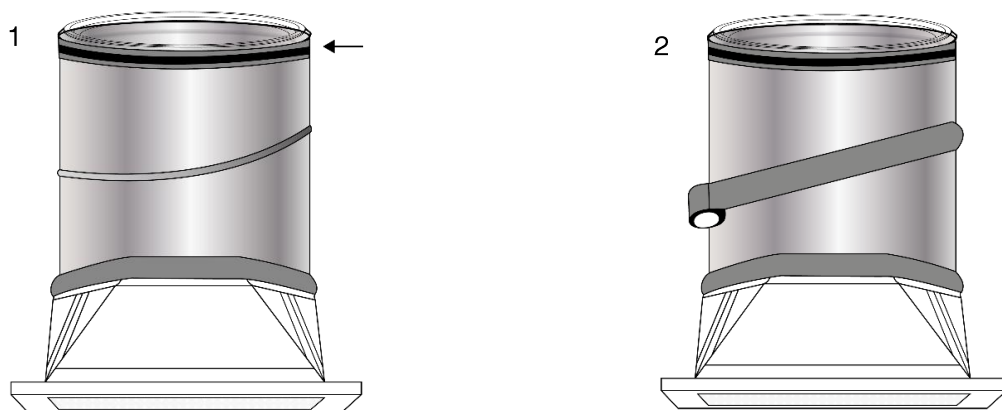


2.12 Step 12 – Attach the brush seal

Stick the brush seal strip around the outside of the bottom tube assembly, 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.

Seal all external tube seams including the angle by applying tape over the seams on the outside of the tube.

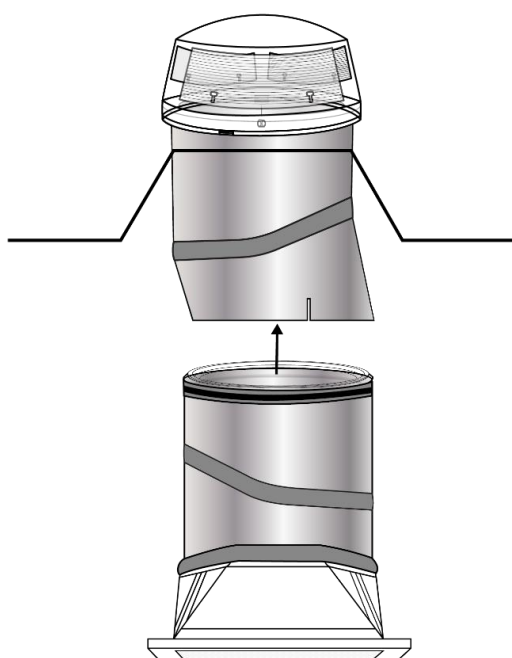


Note: The exterior of the tube within the roof void must be wrapped with insulation material ($U = 0.04$ etc) sourced separately.

2.13 Step 13 – Install the lower tube section/s.

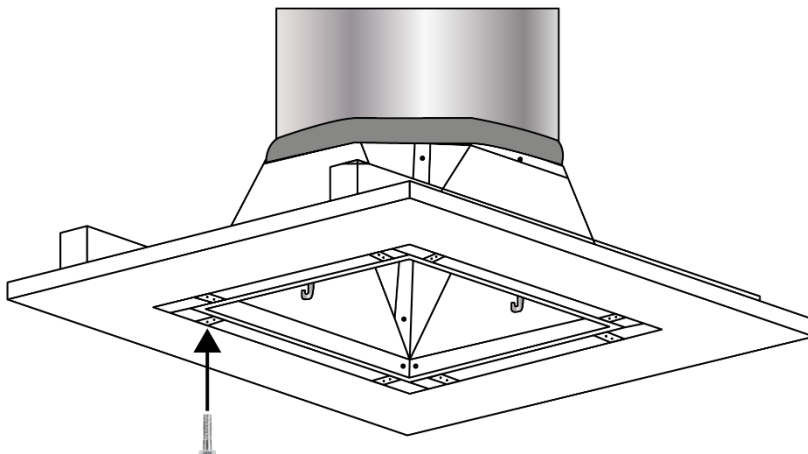
Push the end of the tube with the brush sealing strip applied up through the ceiling opening and up into the top tube assembly. Slide the tube from below through the recess in the ceiling.

Remember to remove the protective linings of the inside of the tube sections.



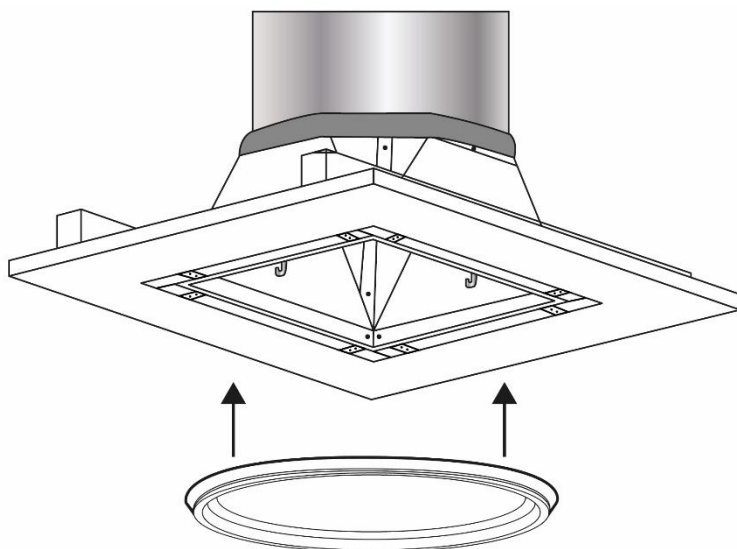
2.14 Step 14 – Fit the transition box

Fit and fix the transition box into the ceiling with suitable screws.



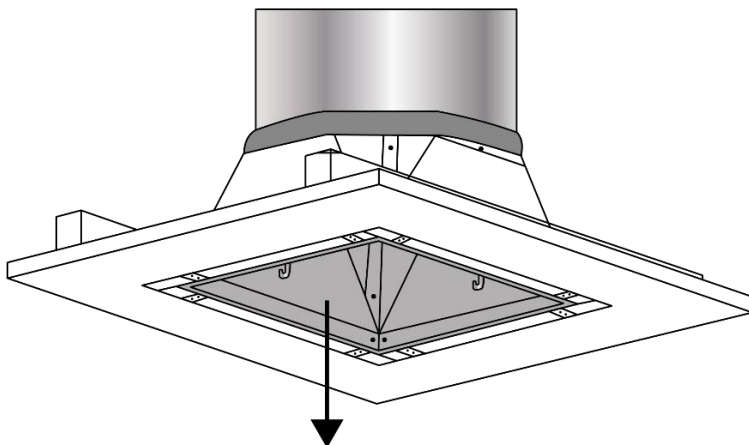
2.15 Step 15 – Natural Effect Lens

Push the Natural Effect Lens up into place inside the transition box as shown below.



2.16 Step 16 – Remove protective film from transition box

Remove the protective film from the inside of the transition box.



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

