



# TWF Sun Tunnel Retrofit + New Installation

Metal Roofing  
Corrugated and Paneldeck type  
profiles

# Preliminary work - Flashing



1. Fold edge of pleated section to form water check  
*Ideally this fold should be mould into the rise of the corrugation*
2. Remove foam to prevent roofing material from being forced up.

# Framing the opening

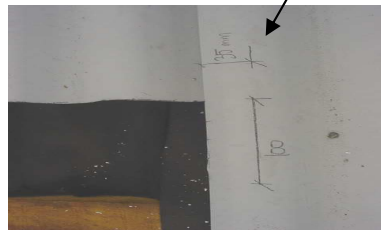
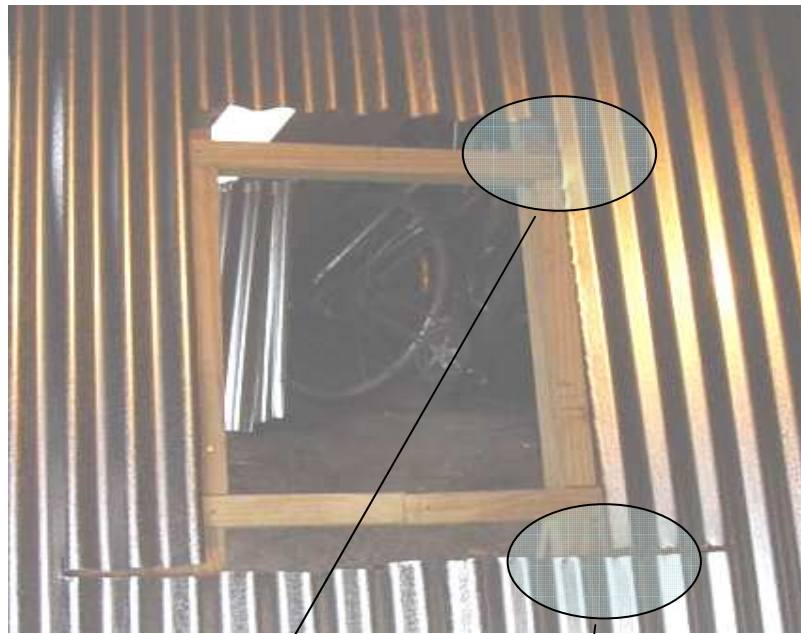


Fit additional batten 660mm above bottom batten, to support top edge of flashing

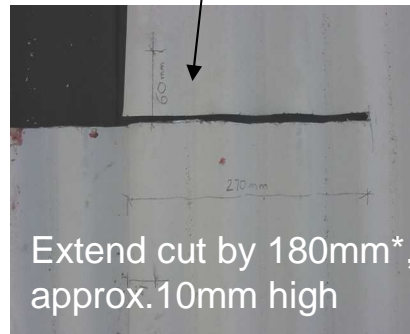


Frame out opening. Width to be 480mm, and length between 460 and 520mm. Provide additional batten approx. 120mm below bottom batten, to support roofing material. (Also place extra side battens for fixing fillets marked yellow)

# Retro-fit method



Over cut top 60-150mm and sides by 30mm max.



Extend cut by 180mm\*, approx. 10mm high

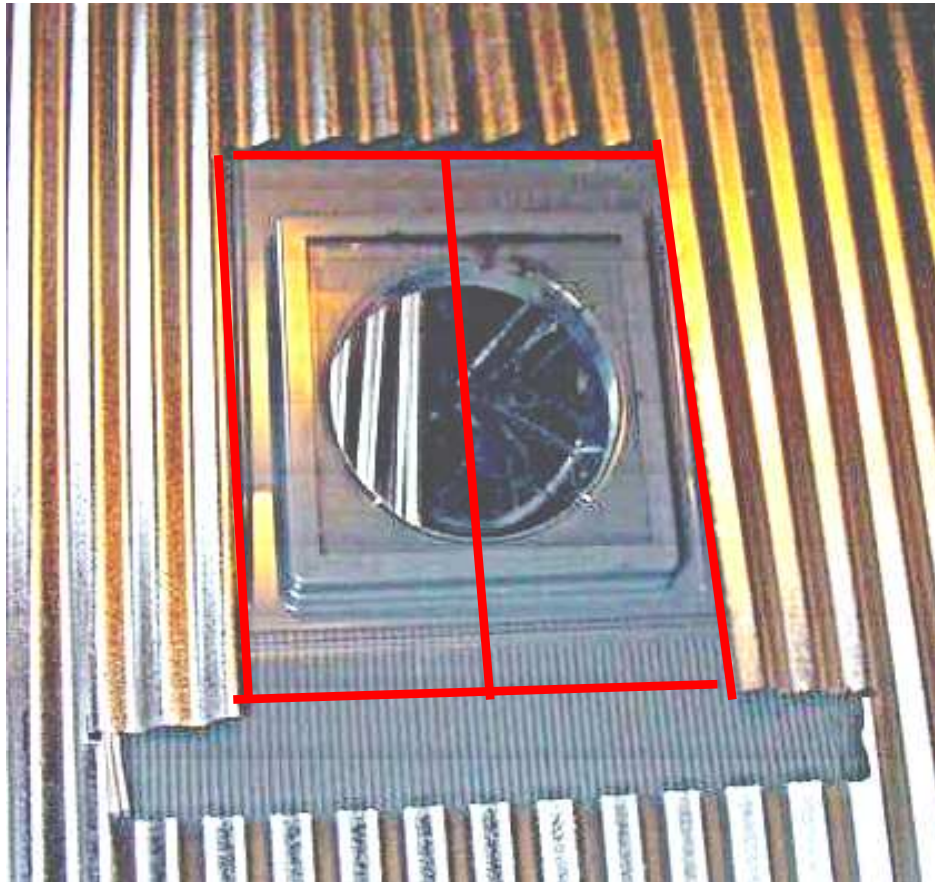
## Positioning of the Suntunnel:

There are no restrictions on where a Suntunnel can be located on the roof, but if you do not have spare roofing material, position the Suntunnel so that you are left with either a one piece cutout or, centered it on the sheet edge of the roofing material so that you end up with 2 near equal sized cut out pieces. fillet pieces can be cut from these later.

Cut roof opening. Over cut width by 10 to 30 mm each side, (preferably cut down a valley in the roofing material), and length by 60-150mm at the top and 80-100mm at bottom.

\*Extend bottom cut by 180mm min each side. Make sure cut finishes on a crest of the roofing material.

# Retro-fit method

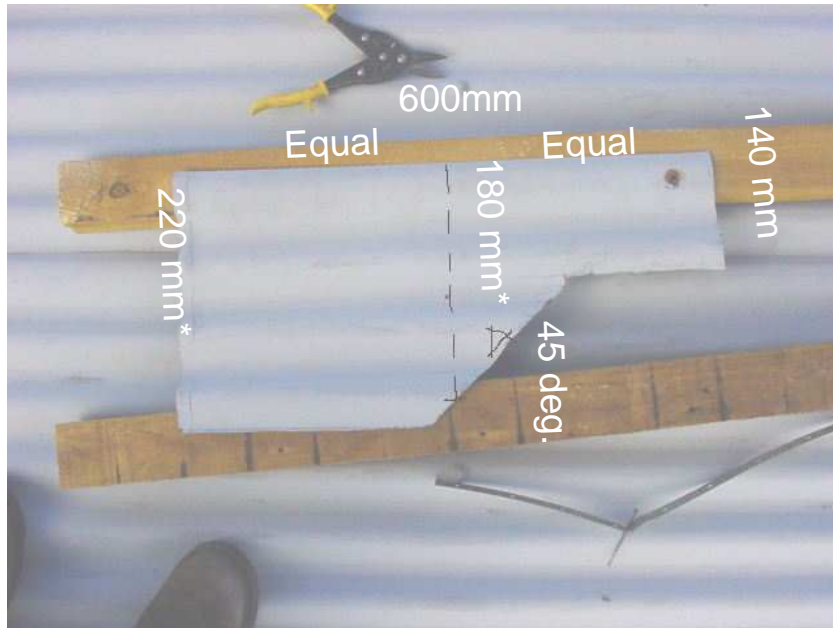


Keep roofing material from cut-out in roof. Use for fillet pieces later.  
Insert Suntunnel with flashing in slots, and push up until lugs on the Suntunnel rest on bottom batten.  
Move Suntunnel sideways until centered on opening. Fix in place.  
Mould bottom apron to suit roofing profile and flatten as much as possible to the sides where apron extends past the cut in the roofing material

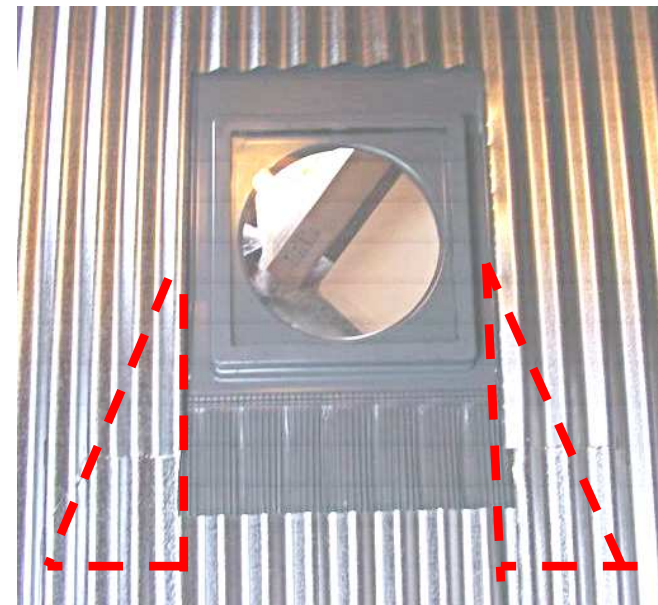
If possible place the Suntunnel in the centre of a sheet

*The off-cut can be used to form 2 fillet pieces shaded in red*

# Weatherproofing the installation



Cut fillet pieces from cut out roofing material to profile show above. Make sure profile along width of fillet pieces matches with side cut profiles.



Insert fillet pieces in side cut and push up as far as possible. (Silicon in corner) Pop-rivet to roofing material above the cuts and fix to roof below the apron section. *Fillet position coloured red*

# New Installation method



The alternative installation can be to remove the sheet where the tunnel will sit and the 2 side sheets. You can then treat the installation the same as a new house.



The middle sheet can be cut to form 2 bottom sheets and one top sheet.

# Side Cover sheets re-fixed



It is possible to determine the Sun Tunnels position to have the iron cut the same down both sides of the Sun Tunnel

*The side sheets can now be re-fixed over the apron and bottom sheets*



Notice the cover sheet iron down the right side is the same as the left side

*The side sheets can now be re-fixed over the apron and bottom sheets*

# Finishing the Installation



Fit flexible tube and fasten with tie. Remove installer



Cut 375mm diameter hole in ceiling and install diffuser. Fix tube to diffuser.



**LET THERE BE LIGHT!!!**

*See the Installation instructions for placing the diffuser to the ceiling*