



the Rooflight Company

Installation manual for



the Conservation Rooflight®

+ the Studio Rooflight and Escape and Access.

(i) Important: Please read prior to installation

This guide is intended to assist building contractors and homeowners in receiving, handling and installing the Conservation Rooflight in a manner that will ensure its longevity, provide adequate structural support, give full weathertightness, and provide the most thermally-efficient and attractive finishes.

We strongly recommend that the installation instructions are read and followed closely.

The following is a summary of the information contained in this booklet.

<u>Subject</u>	<u>Applicable to</u>	<u>Page no.</u>
1 - Receipt, inspection & handling of rooflights on site.	all rooflights	3
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3 - Basic framing plan derivation for Cold roof construction.	cold roof	5
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Do it once - do it right.
Read & follow the installation instructions.

Diagram 1

Cross section through rooflight

Receiving:

Upon receiving a Conservation Rooflight remove its packings and coverings and inspect it for damage. Do this immediately, irrespective of whether the unit is to be installed immediately or later.

If a delivery driver is unwilling to wait for this inspection to occur, sign his paperwork: "goods received but unchecked", and note the condition of the packing in a space on the receipt note, such as: "one package evidently damaged", "packings appear intact", as appropriate. Never simply sign a receipt note without either inspecting the goods or qualifying your acceptance of them if you are not allowed time to inspect them properly.

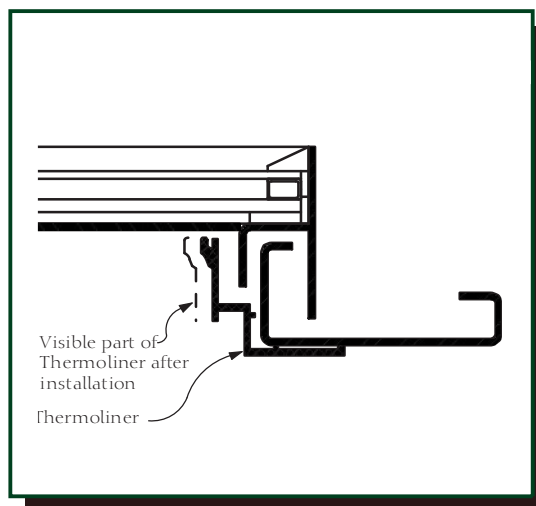
Inspection:

Check that the glass is unbroken or otherwise damaged.

Check the metal surfaces of the rooflight on all sides for signs of damage. If there are one or two minor scuffs or chips to the paintwork these can normally be treated on site with a touch-up kit available from ourselves. Any damage to the protective coatings should be treated irrespective of where the damage is located.

If the rooflight has been significantly damaged in transit please contact our Customer Services section as soon as possible.

Check the Thermoliner lining for damage. This is situated in a protected part of the rooflight and is unlikely to suffer damage to its visible surfaces. As the Thermoliner is PVCu and does not rely upon a coating for corrosion resistance, only the parts of the Thermoliner visible upon installation require inspection. See the diagram below.



FRAMINGS

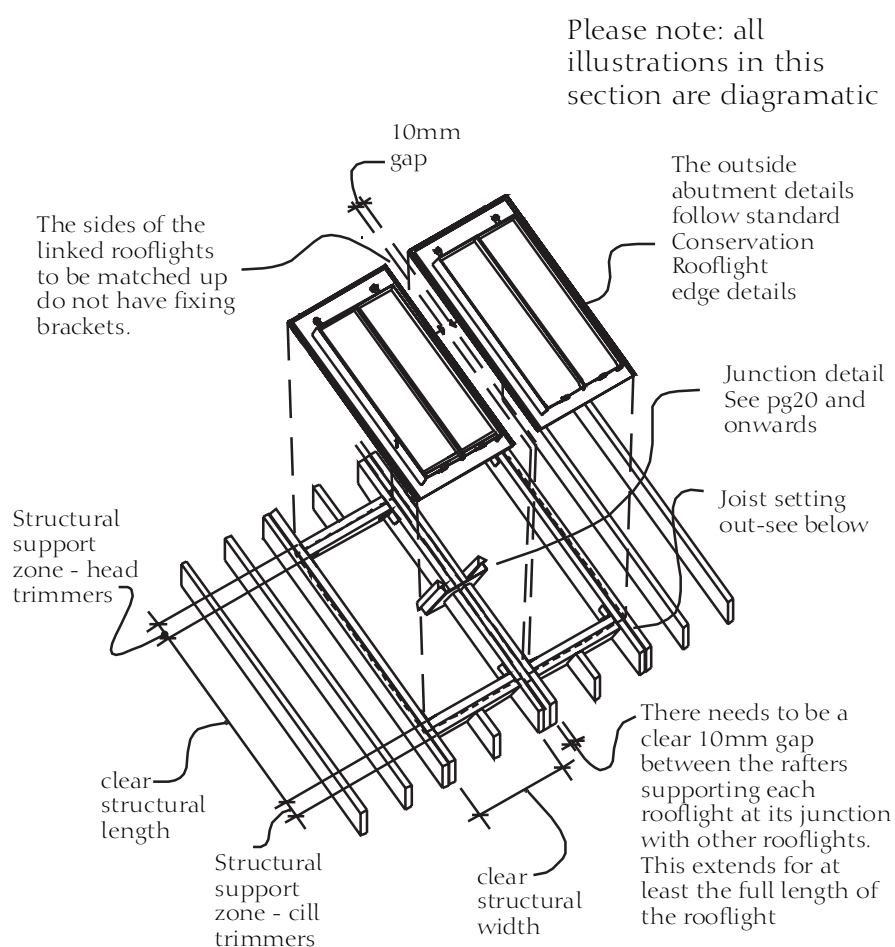
All Studio Linked Rooflights are installed on top of supporting rafters.

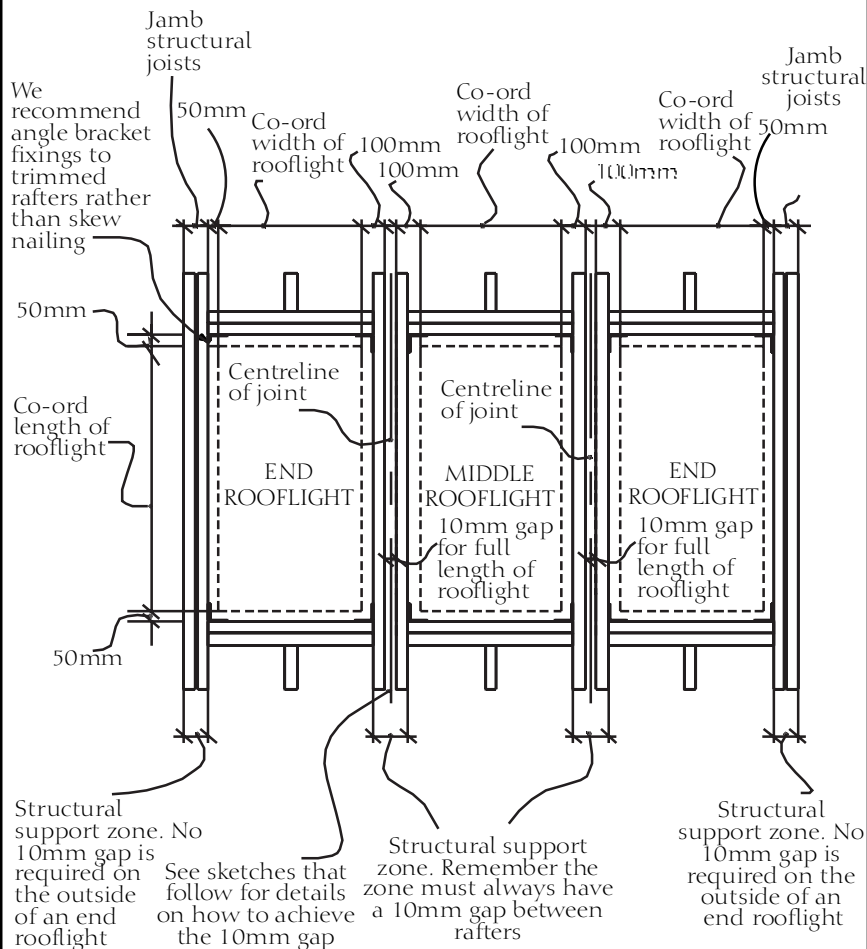
The supporting rafters are shown doubled-up here, but the size of the rafters that make up the "structural support" zone to the sides, head and cill of the rooflight will vary according to the circumstances of the installation such as rafter size, spacing, angle and span, the type of rooftile used, and the rooflight size.

In view of the above, sizing of the supporting structural rafters should be undertaken by the rooflight installer or a structural consultant.

We are able to supply the all-up weight of all of our rooflights to assist in any calculations necessary.

The rafter spacings recommended on the following pages place the rafters in such positions as to facilitate direct fixing of the rooflight into the structural supports themselves - not via noggin's or other devices.





NOTE: We assume 50mm wide rafters in these diagrams

SUMMARY FOR END ROOFLIGHTS

Clear structural WIDTH = (co-ord width of rooflight) + (150mm)
- (width of rafter used on studio-linkage side)

Clear LENGTH between trimmers = co-ord length + 100mm

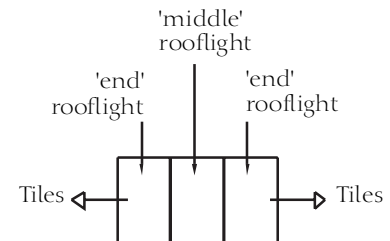
SUMMARY FOR MIDDLE ROOFLIGHTS

Clear structural WIDTH = (co-ord width of rooflight) + (200mm)
- (2 x width of rafter used on joint sides)

Clear LENGTH between trimmers = co-ord length + 100mm

DERIVING THE FRAMING DIMENSIONS FOR STUDIO LINKED ROOFLIGHTS - MULTIPLE ASSEMBLIES

With a larger assembly of studio-linked rooflights some rooflights are "middle" units with slightly different setting out dimensions and some are 'end' units which are as previously described.



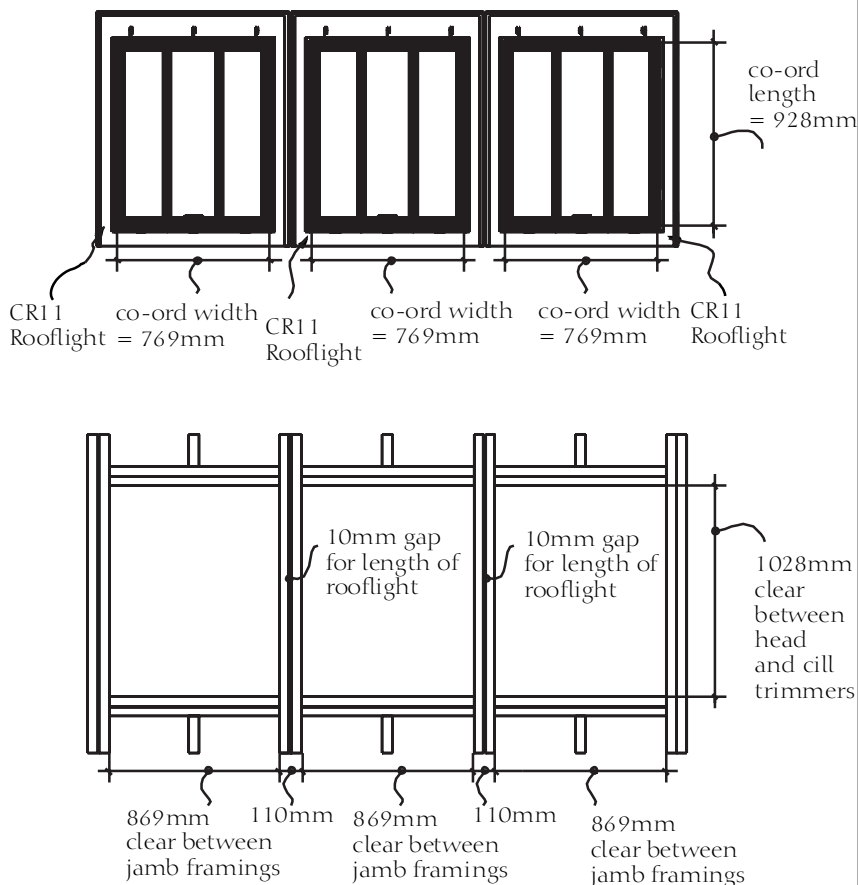
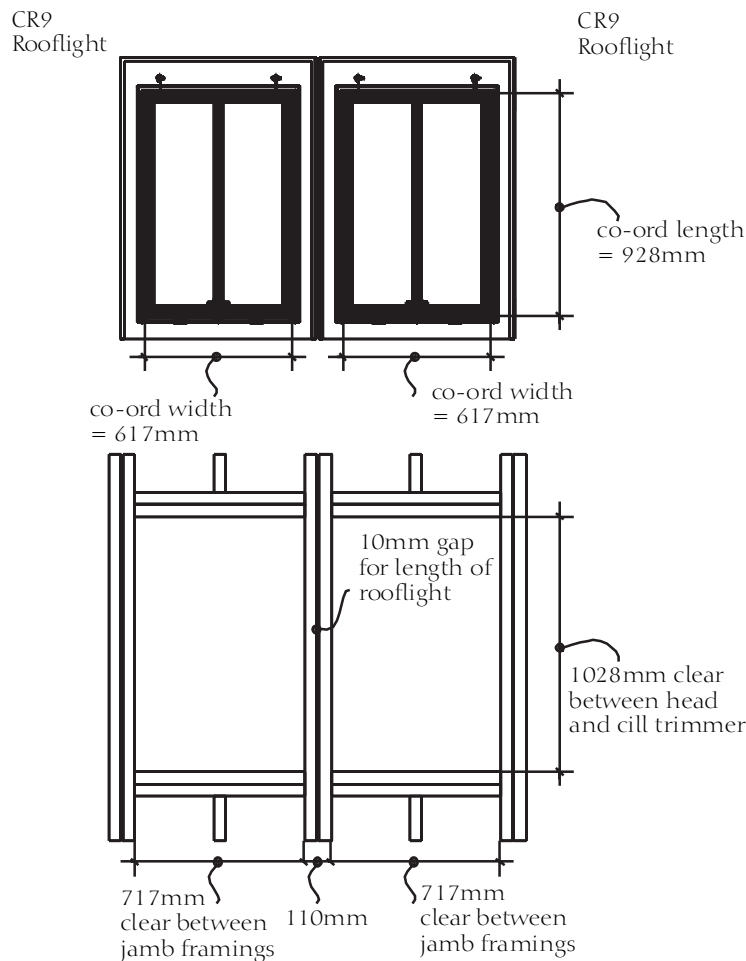
The structural support rafters on the joint side of the rooflights can be any width up to a maximum of 60mm. The 10mm clear gap for the length of the rooflight needs to be maintained irrespective of the structural member width. We assume 50mm wide rafters in these diagrams.

Our framings show two no 50mm wide rafters on the linkage point.

SUMMARY

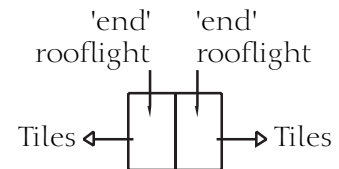
With Studio-linked rooflights it is best to make a diagram of the rafter layout and have this to hand rather than try to keep dimensions in memory. Either make your own layout using the dimensions given here (filling in the appropriate Co-ordinating dimensions as necessary) or ask us to provide one.

The following examples show how studio linkage dimensions are derived in practice. We assume 50mm wide rafters are used in these examples.



EXAMPLE 1:

The accompanying diagram shows how to obtain a framing plan for two studio-linked Conservation Rooflight CR9's. We assume rafter widths to be 50mm in this example.

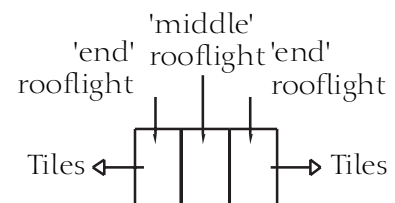


Clear struct WIDTH
 = co-ord width + 150mm - width of
 rafter used on joint side
 = 617mm + 150mm - 50
 = 717mm

Clear struct LENGTH
 = co-ord length + 100mm
 = 928mm + 100mm
 = 1028mm

EXAMPLE 2:

The accompanying diagram shows how to obtain a framing plan for three studio-linked Conservation Rooflight CR11's. We assume rafter widths to be 50mm in this example.

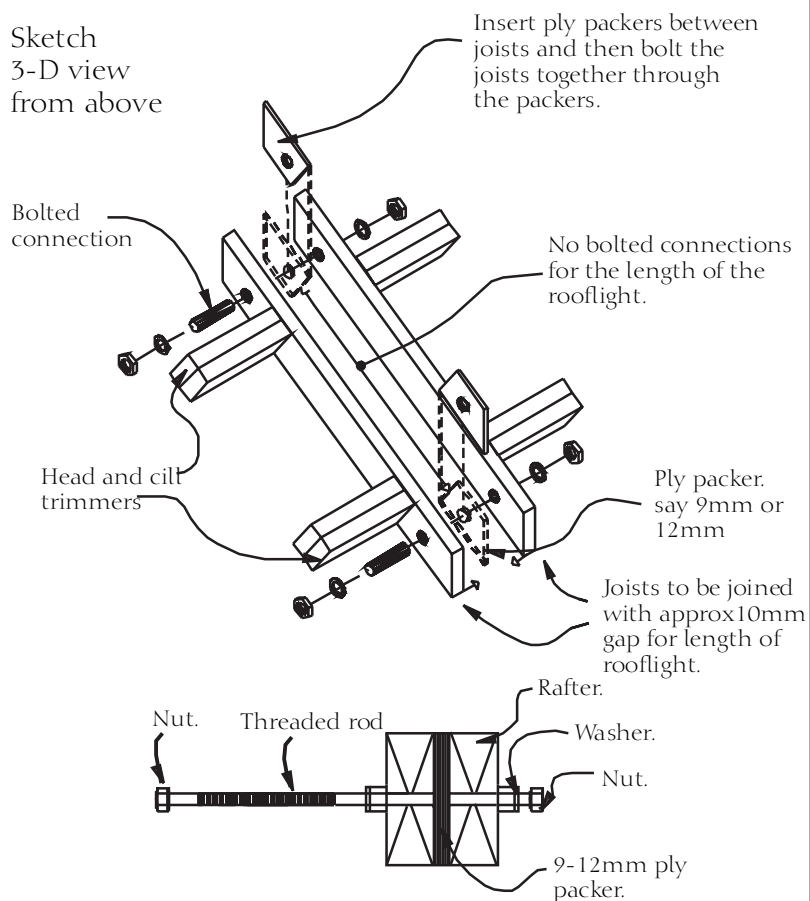


Clear struct WIDTH of middle rooflight
 = co-ord width + 200mm - (2 x width
 of rafter used on joint side)
 = 769mm + 200mm - (2 x 50mm)
 = 869mm

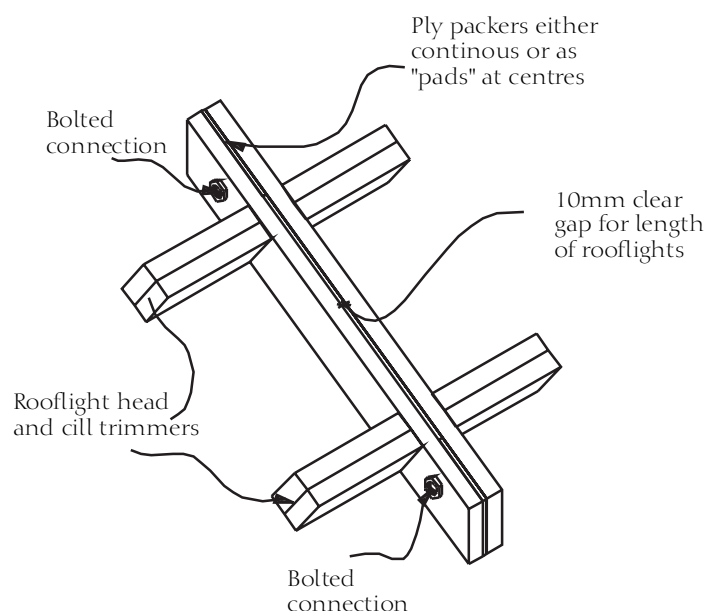
Clear struct WIDTH of end rooflight
 = co-ord width + 150mm - width of
 rafter used on joint side
 = 769mm + 150mm - 50mm
 = 869mm

Clear struct LENGTH
 = co-ord length + 100mm
 = 928mm + 100mm
 = 1028mm

Sketch
3-D view
from above



Sketch Section



HOW TO ACHIEVE THE 10MM CLEAR GAP TO THE JOIST SETS BETWEEN STUDIO-LINKED ROOFLIGHTS.

Ply packers between the rafters will achieve the desired result.

Because of the available sizes of ply, the likely gap will be either 9mm or 12mm. Either will be acceptable.

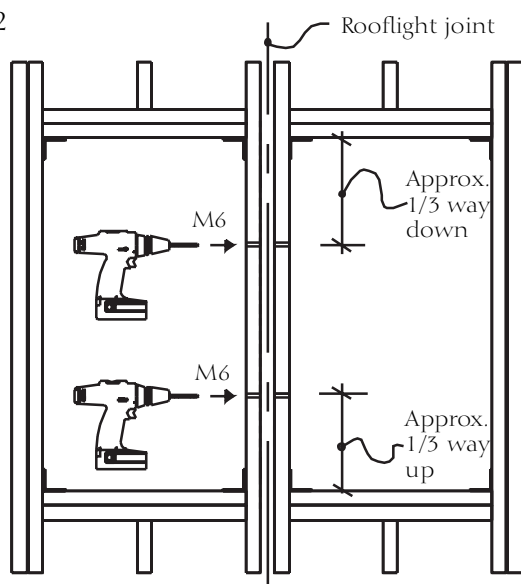
As the paired rafters cannot be bolted together for the length of the rooflights to be linked, consult a structural consultant if necessary to verify that the structural support offered by such an arrangement will be sufficient to provide support to the linked rooflights.

The resulting construction satisfies the criteria for the doubled joists under rooflight-to-rooflight joints.

6 Framing & lining details for the Conservation Rooflight®

Studio-Linked

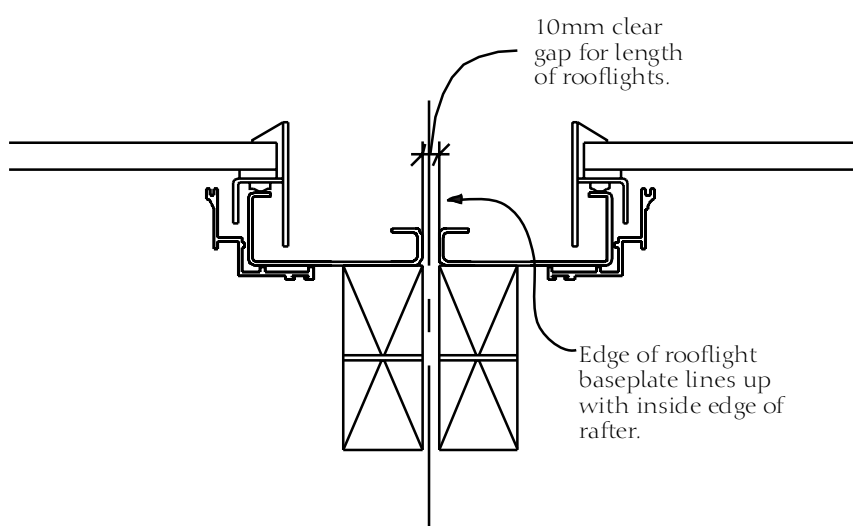
Step 2



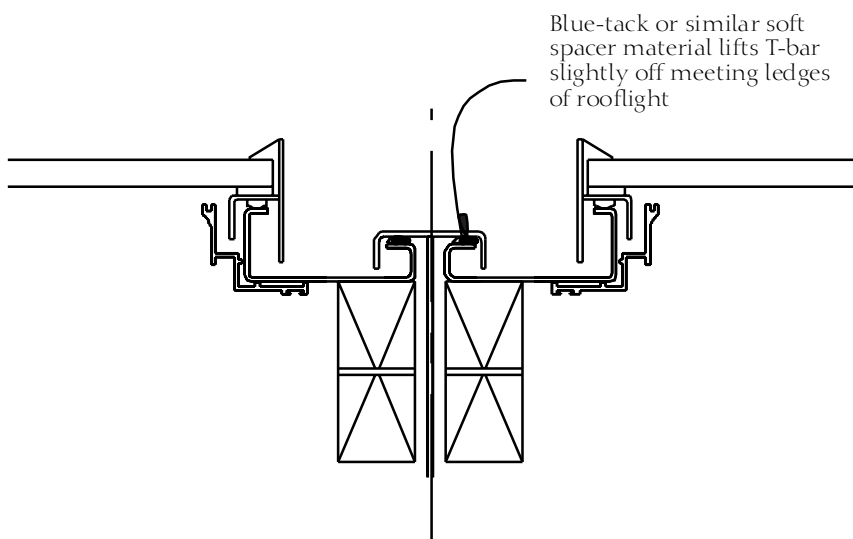
STUDIO LINKED ROOFLIGHTS - INSTALLATION SEQUENCE

The sequence of installation of a studio rooflight is important. Installation should be carried out as follows.

1. Install the substructure/ framings as described previously in this section.
2. Pre-drill fixing holes for the linkage T-bars through the supporting rafters at the rooflight joint. The holes should be drilled on the centreline of the rafters. M6 clearance diameter should be sufficient. For most installations drill at least two holes - one towards the rooflight head and one towards the rooflight cill. Three holes may be required for longer rooflights.



3. Install the rooflight units to the framing structure, fixing them in place via coachscrew fixings to the perimeter fixing brackets. The meeting sides of the rooflights to be linked should line up with the inside edges of the support rafters as shown.

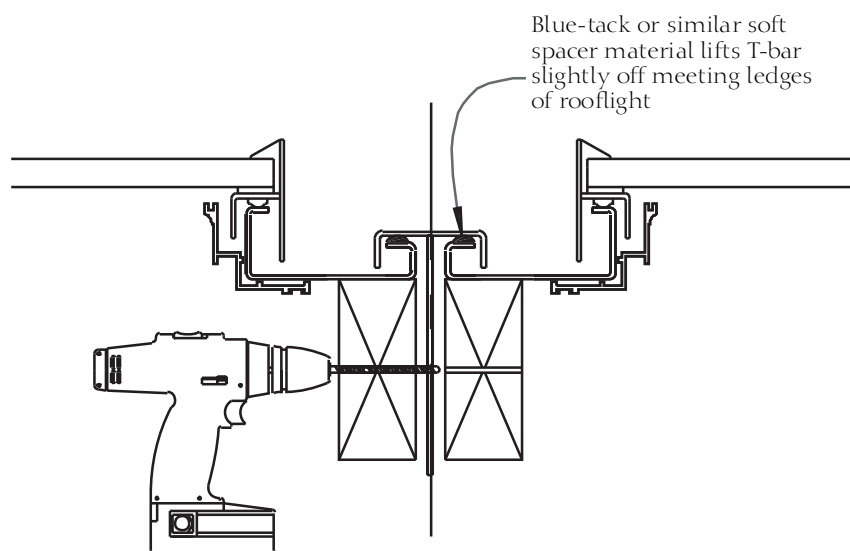


4. Dry-fit the linkage T-bar into the 10mm gap. Use a soft spacer material such as blu-tack to lift the T-bar off the meeting edges of the rooflights slightly.

6 Framing & lining details for the Conservation Rooflight®

Studio-Linked

Step 5



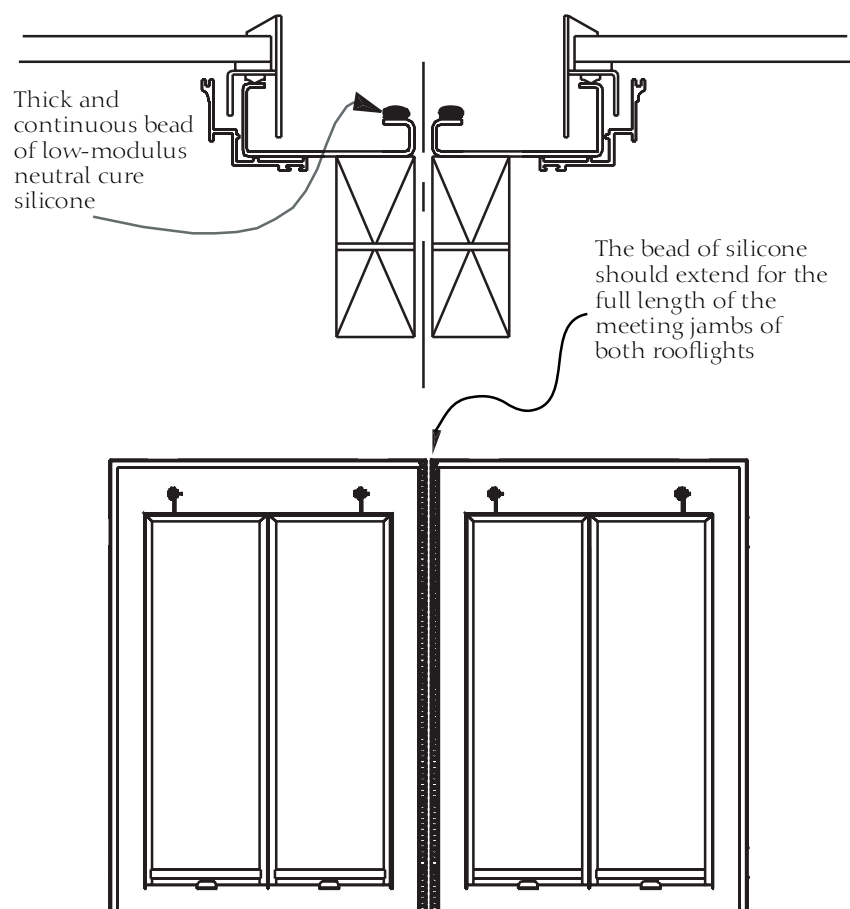
5. Drill 7mm diameter holes through the long leg of the tee bar using the pre-drilled holes in the support rafters as a guide.

6. Remove the T-bar and discard the soft spacer material. Enlarge the holes in the long leg of the T-Bar to 8mm diameter using a larger drill bit.

Treat the newly drilled holes with a cold galvanise paint such as "Galvafruid" in accordance with the manufacturers directions.

Wait for the cold galvanise to set completely before proceeding.

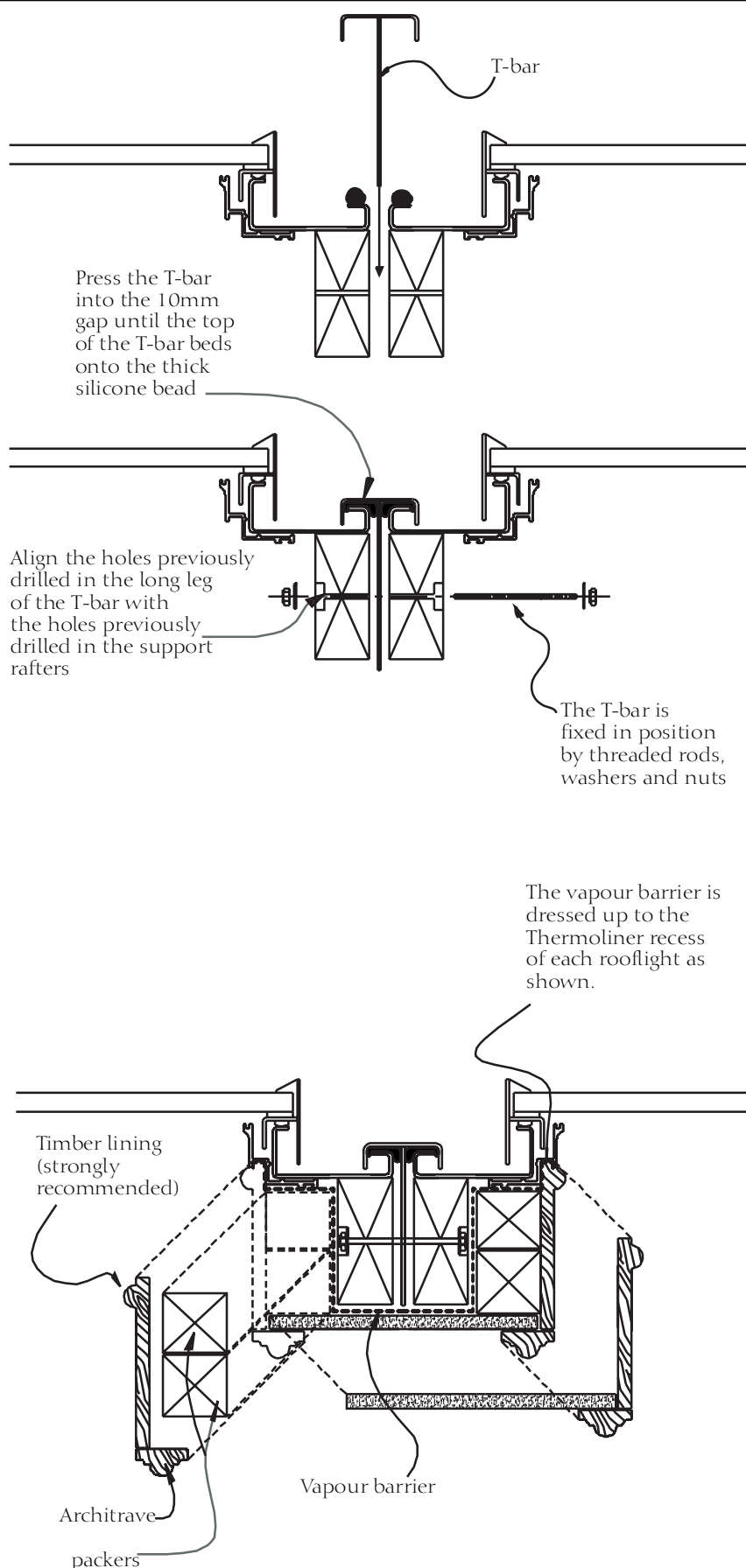
Step 7 SECTION THROUGH LINKAGE JOINT



7. Apply a thick and continuous bead of silicone sealant to the top edges of the meeting jambs of the rooflights to be linked. First ensure that the surfaces to which the silicone is to be applied are clean, dry and free from grease and loose particles. Squeeze a thick and continuous bead of low modulus neutral cure silicone for the complete length of each meeting jamb to the top edge of the rollover of each meeting jamb. Ensure that there are no gaps in the silicone bead.

6 Framing & lining details for the Conservation Rooflight®

Studio-Linked

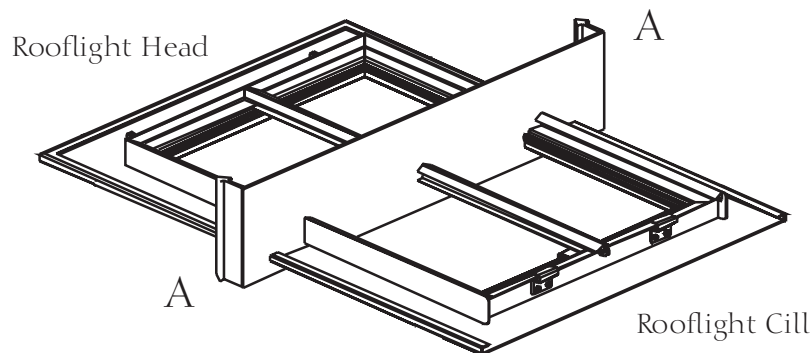


8. Reinstall the T-bar to the 10mm gap pushing it firmly down onto the thick silicone beading until the holes in the long leg of the T-bar align with the pre-drilled holes in the rafters. Pass an M6 threaded rod through the holes and complete the T-bar installation by adding stainless steel washers and nuts to each end of the threaded rod, tighten and cut away the excess rod. We recommend countersinking the T-bar fixing nuts in order to give a flat surface to fix subsequent packers and linings to.

9. Installation of linings to the rooflight opening is important to achieve optimal thermal performance of the rooflight. We strongly advise that linings be installed as detailed here.

A vapour barrier material is installed as shown and held in place by packers and timber linings.

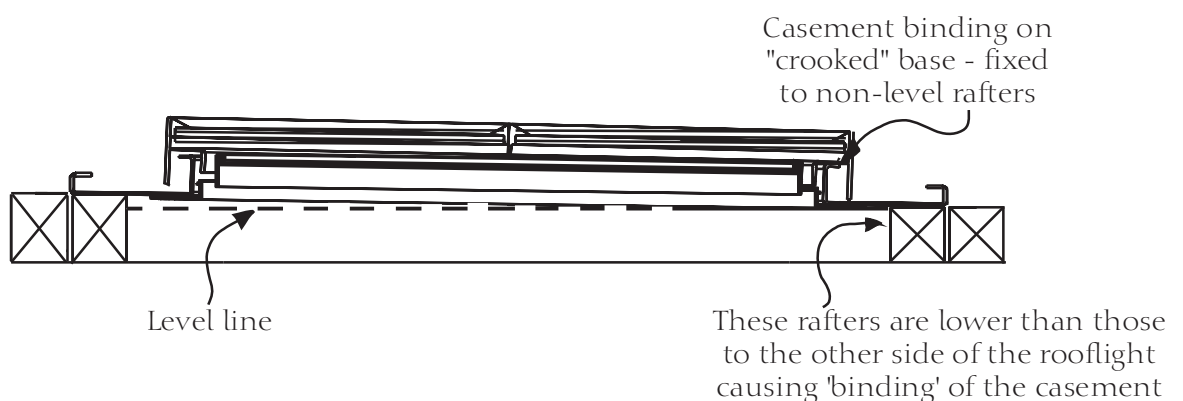
We strongly recommend timber linings in lieu of plasterboard or MDF on account of its superior appearance and durability.



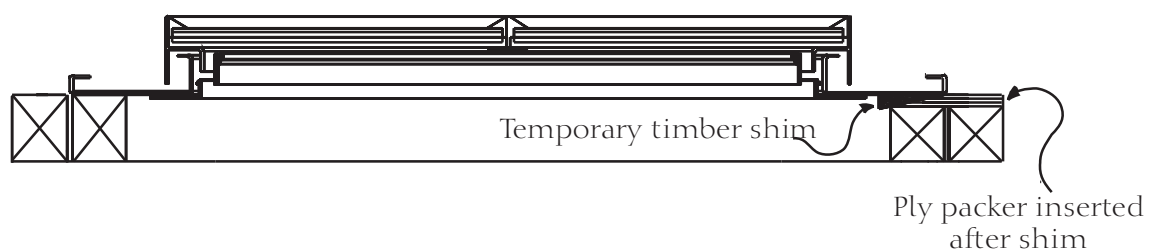
Levelling of Conservation Rooflight assemblies will normally be required in order to ensure that the rooflight casement opens without binding. Binding can occur when rooflights are fixed to rafters which are not level with each other, as is frequently the case with older buildings. In such cases levelling of the rooflight base unit with shims and packers will be required prior to fixing the rooflight to its final position.

To test the levelling of the base unit, open and close the casement section and note whether binding occurs. If binding does occur push shims home between the roof rafters and the rooflight base unit alternately to both jambs until the rooflight operates without binding. Then pack between the rooflight base and rafters continuously with a ply packer of appropriate thickness, and remove the shims.

Cross section AA showing rooflight assembly before levelling



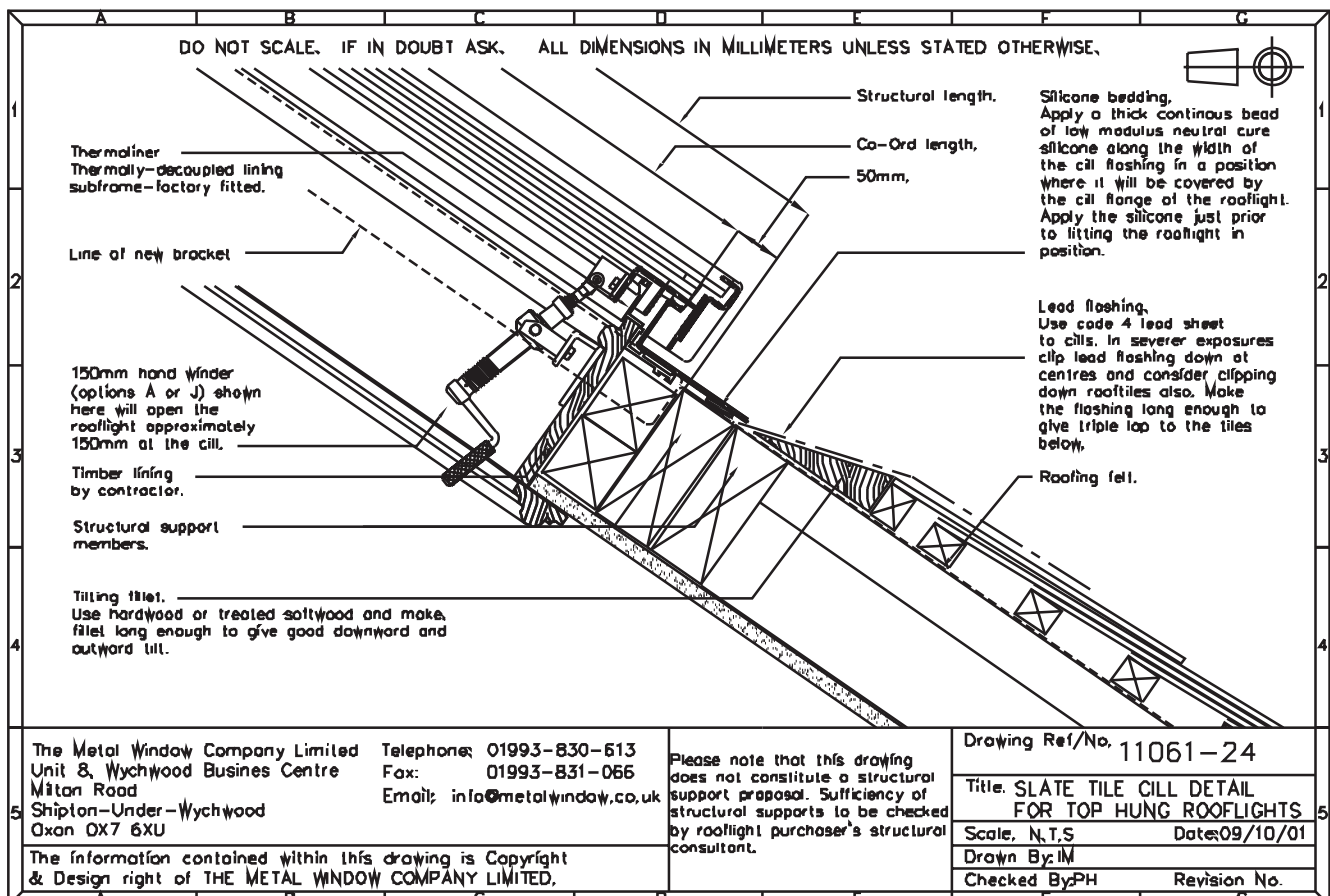
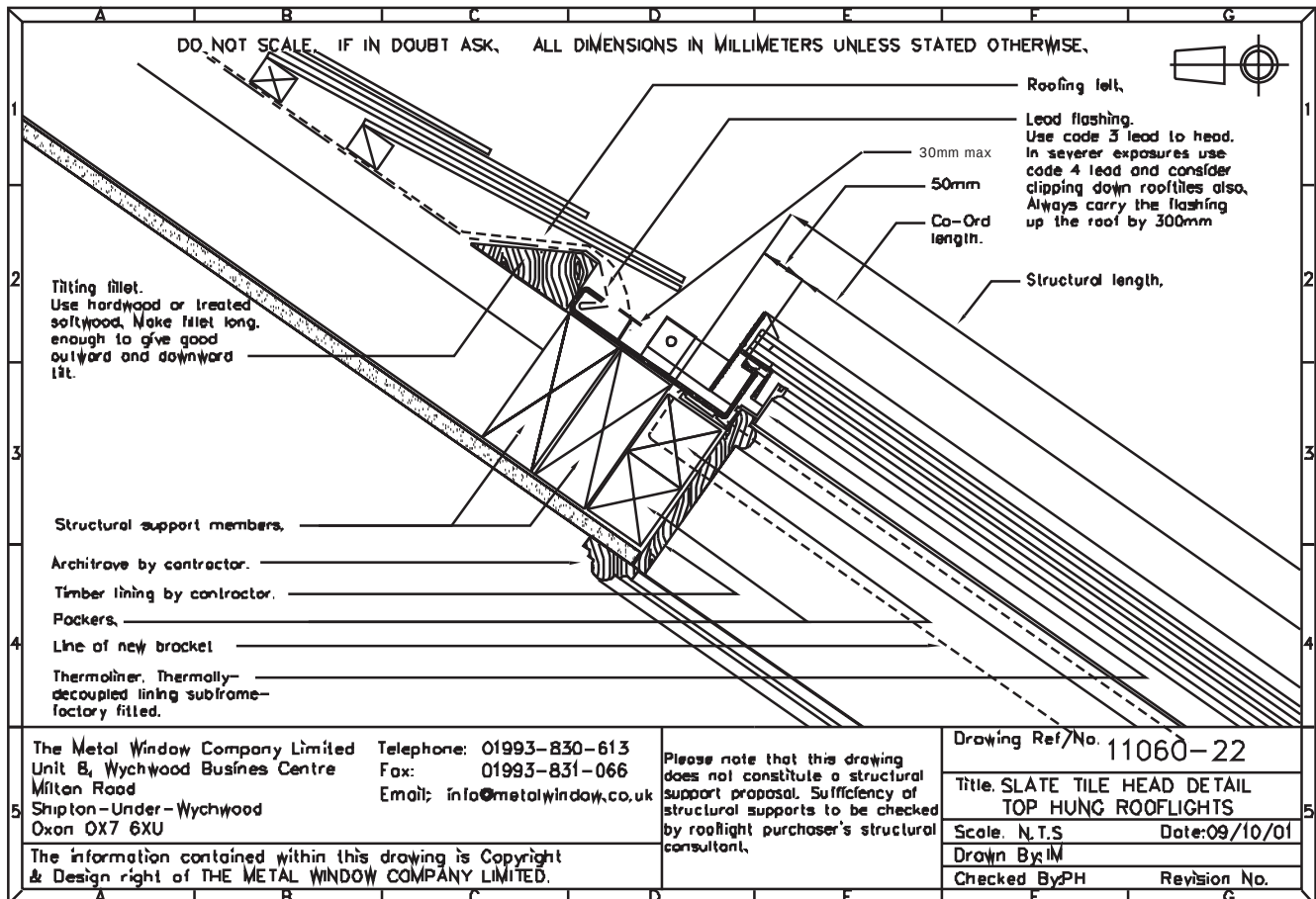
Cross section AA showing rooflight assembly after levelling



8 Tile abutment details for the Conservation Rooflight®

Cold Roof

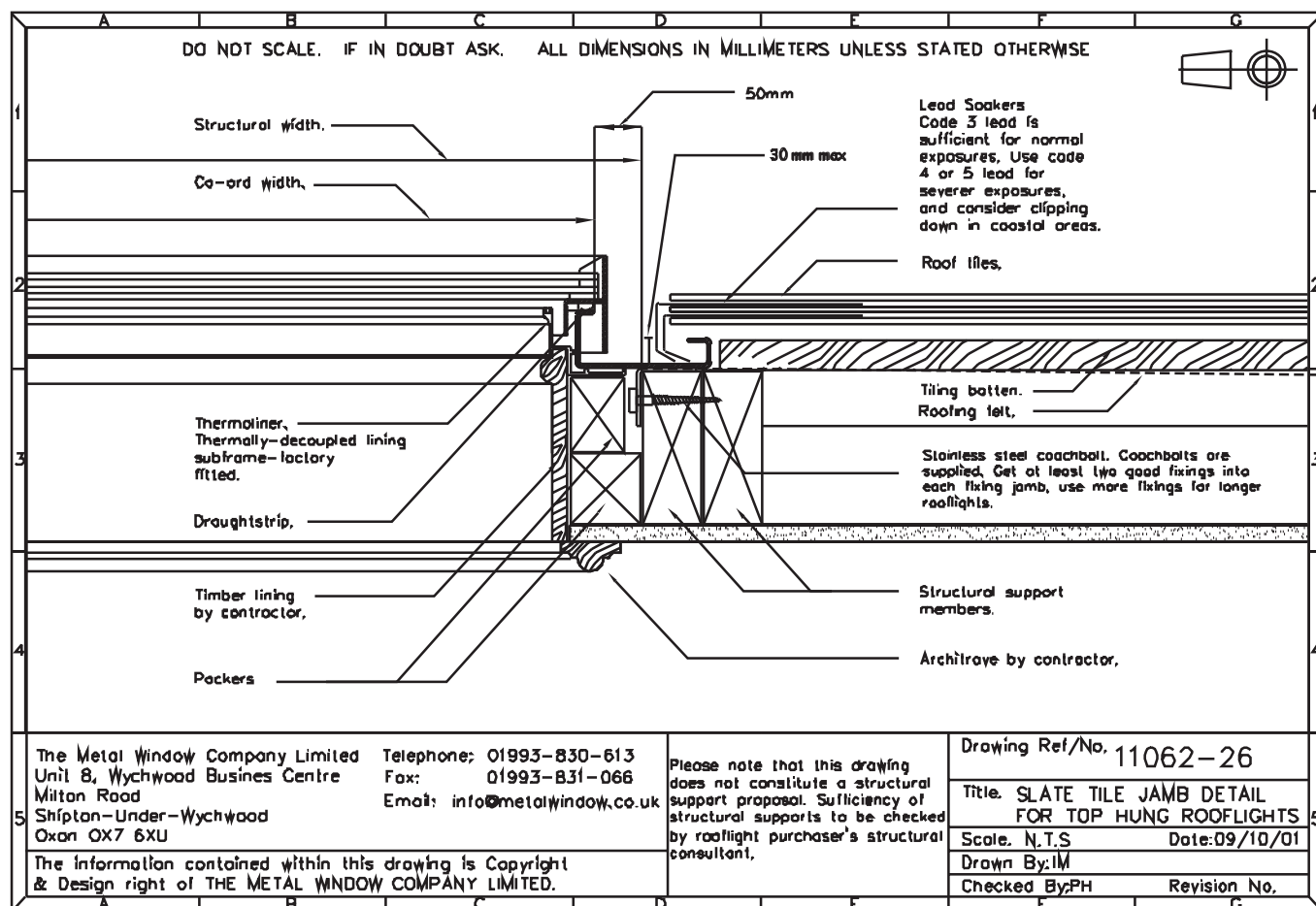
Details for use with slate tiles - standard.



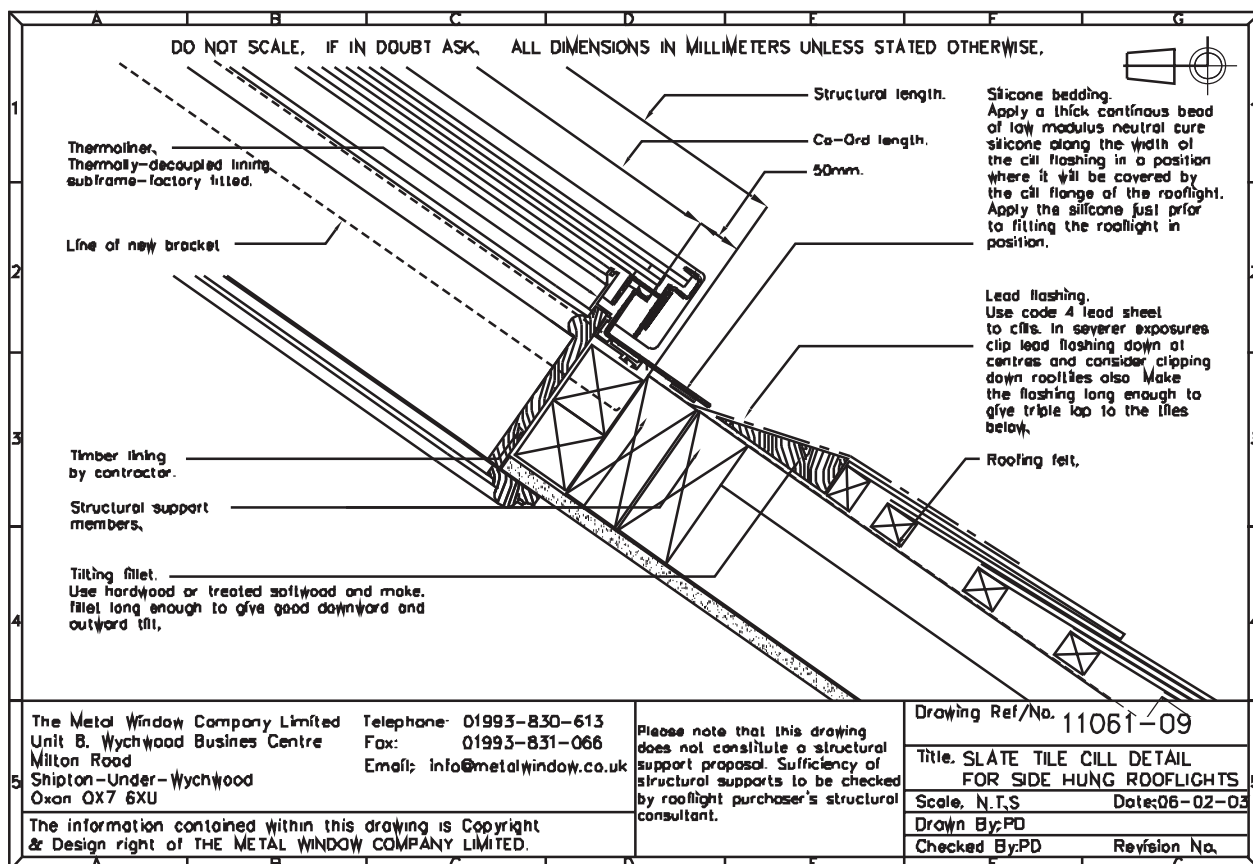
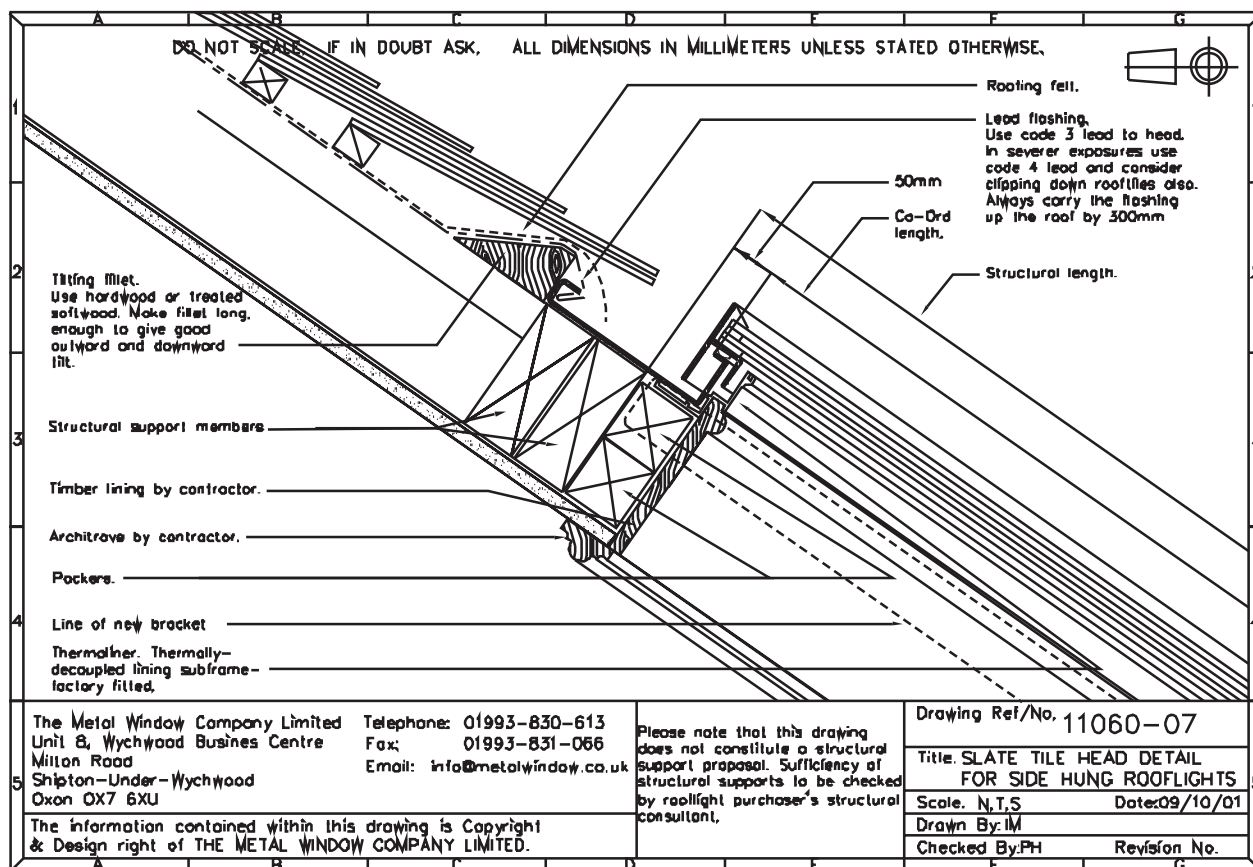
8 Tile abutment details for the Conservation Rooflight®

Cold Roof

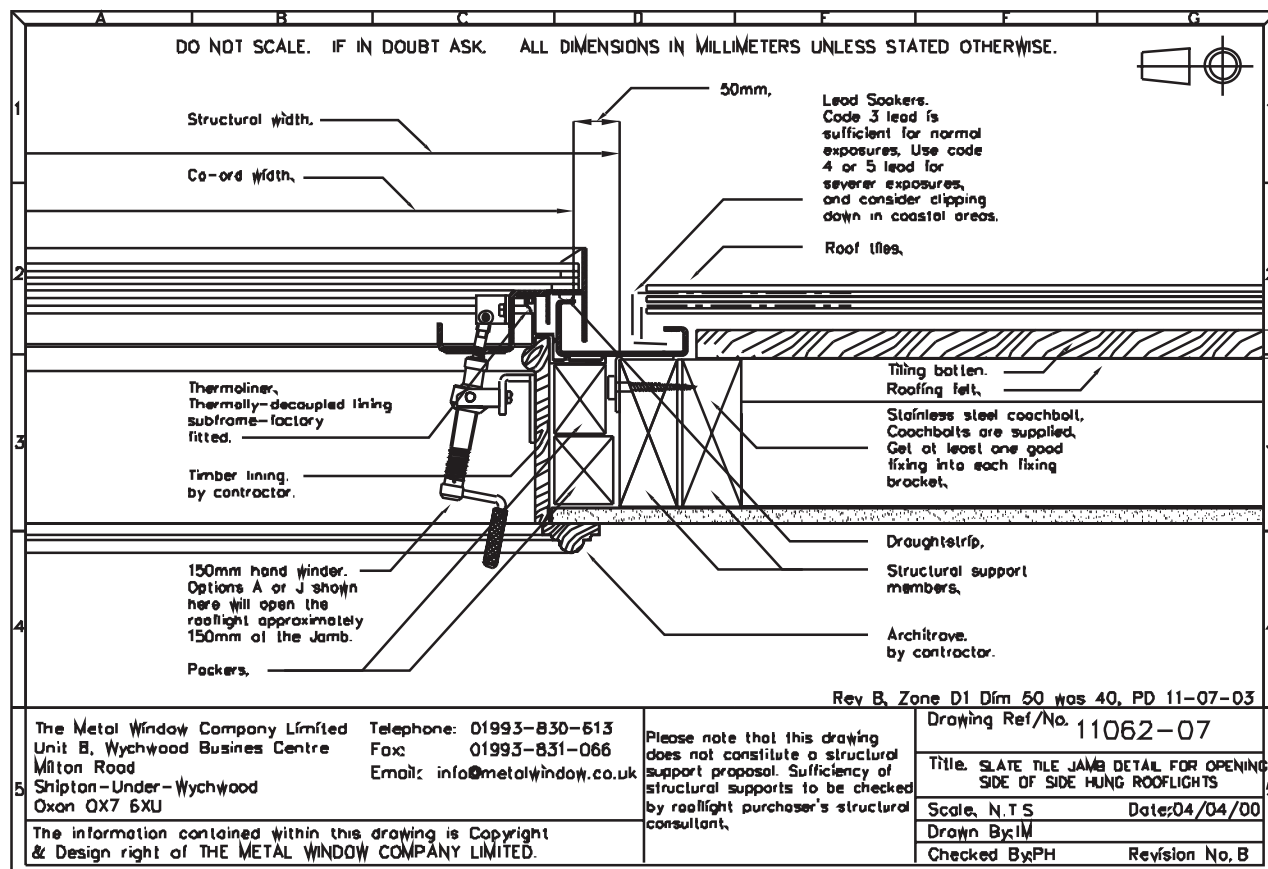
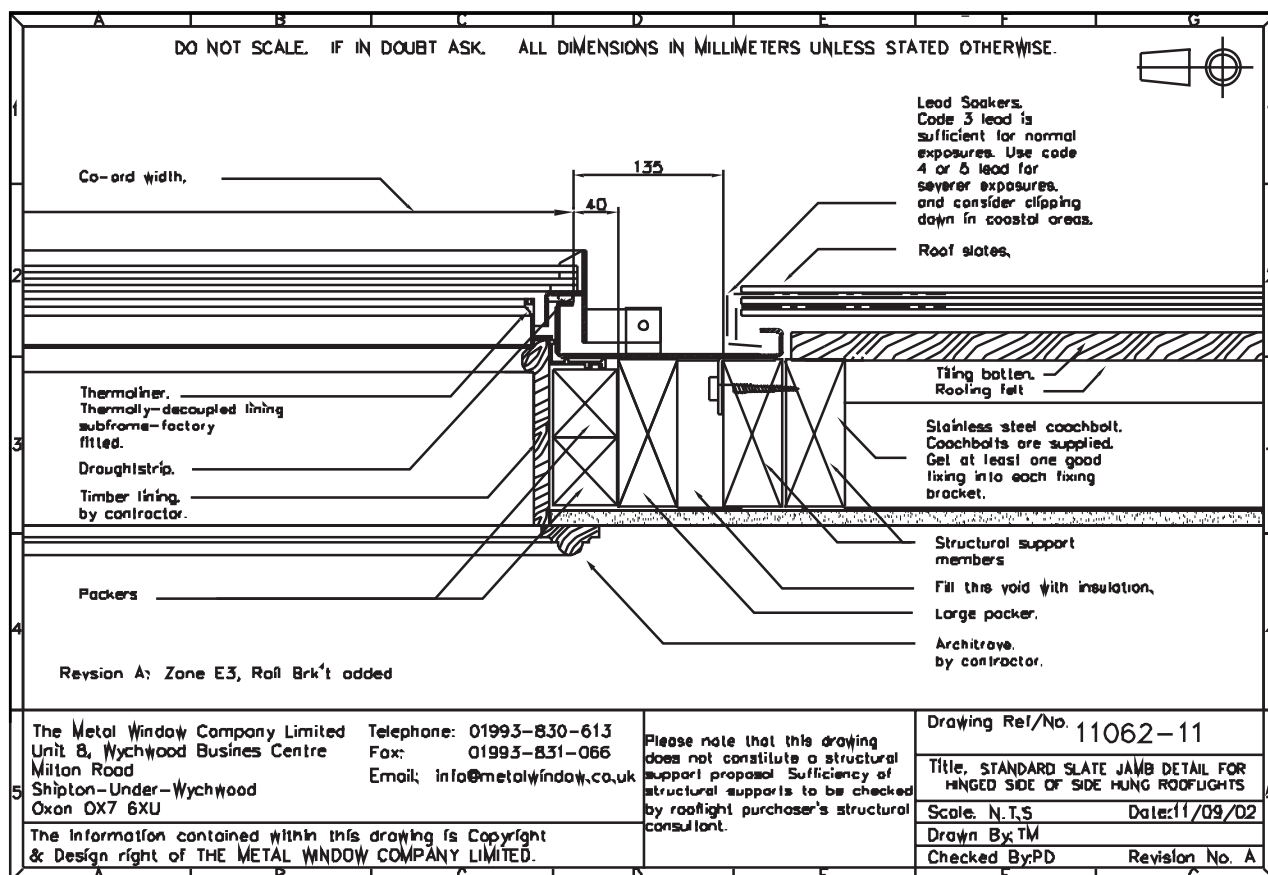
Details for use with slate tiles - standard.



Details for use with slate tiles.



Details for use with slate tiles.



Upon completing installation of the Conservation Rooflight®
don't forget....

1. To remove the labels from the rooflight used during shipping
2. To clean the rooflight before handing it over to the user
3. To test the operation of the ironmongery i.e. open and close the rooflight to its fullest extent
4. To give this manual to the user as it may be of assistance to them at some time in the future
5. If you have any difficulties or queries you can always contact us, we will be happy to assist.



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In the interest of continuous product development it may be necessary to
amend specifications without alteration to technical literature.

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Unit 8
Wychwood Business Centre
Milton Road
Shipton-under-Wychwood
OX7 6XU

Tel: 01993 830613
Fax: 01993 831066
Email:
info@therooflightcompany.co.uk
www.therooflightcompany.co.uk