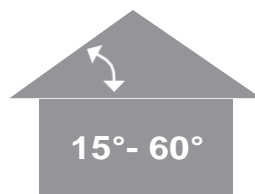


Installation Instructions of Hometech Fakro Roof Windows EHN Flashing

Suitable for corrugated, concrete tile
and pressed metal tile roof types



For roofs with minimum pitch 15°
and maximum pitch 60°

IMPORTANT: Read ALL installation instructions before commencing installation.

Note: These instructions are intended to be read in conjunction with the manufacturer's customized installation guides included in the product packaging.

Hometech FAKRO
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Version 3
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Hometech FAKRO

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PLEASE NOTE: Special Instructions for different roof profiles are found at the rear of these instructions – please read before proceeding to install.

Hometech FAKRO roof windows are typically sold supply only. However, this product must be installed by either Hometech certified installers or by other competent persons. In many cases a building consent will be required and installation will be subject to council requirements. Please note, that Hometech FAKRO recommend you read all instructions prior to installation. Commencement of installation is considered confirmation that you have received and read all installation material. Hometech provides technical support for installation, but takes no responsibility for workmanship of others, nor responsibility for leaking of the roof windows, if the product has not been installed to these manufacturer's installation instructions. Hometech has an installation service that can be provided for a fee, quoted before commencement of the installation of the roof windows.

New Zealand Installation Instructions for Fitting Roof Windows to Rafters

- 1) The FAKRO roof windows must be installed to roofs with a minimum pitch of 15° and maximum 60°.
- 2) The roof window must be installed above a complete row of tiles for concrete or pressed metal. On a new corrugated roof, install the roof window above a horizontal lap. In the case of corrugated sheets, it is recommended that the upper edge of the sheet be cut or flattened at an angle so that there are no sharp edges which could tear the lead flashing.
- 3) The following distances should be maintained between the frame and roofing material.

Below the lower edge:

- 90 -120mm for concrete tiles (Fig 2).
- 90 -120mm for corrugated sheets (Fig 2).
- 70 - 80mm for pressed metal roofs eg. Decrabond

Along the sides: 40mm.

Above the upper edge: 50 - 80mm (Fig 1).

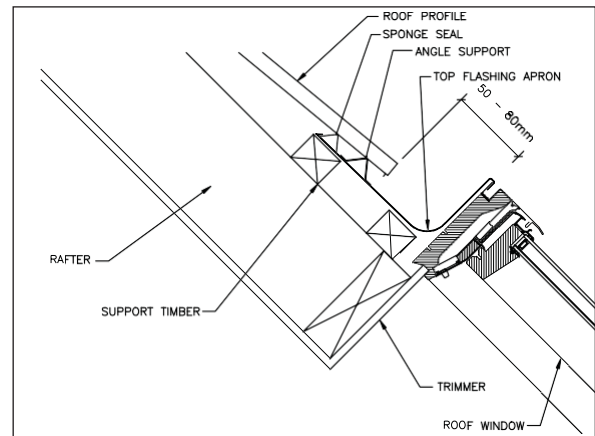


Fig 1

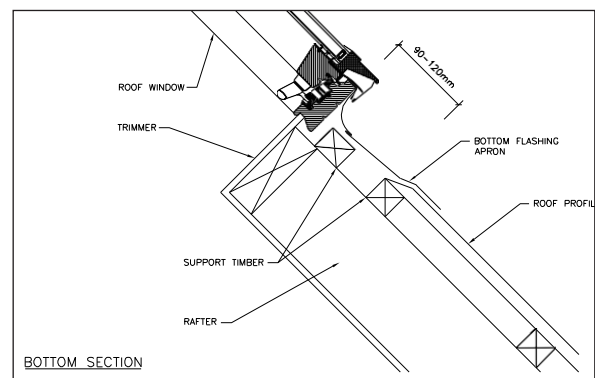


Fig 2

- 4) The roof window rests on and is installed to the rafters with four metal angles. The optimal distance between the rafters should approximate the width of the roof window, but may be 10 to 50mm wider than the width of the roof window (e.g. for a 550mm wide roof window, the optimal distance between the rafters is between 560 and 600mm) (Fig 4). If the roof has different rafter spacing, horizontal trimmers may be needed.

MANDATORY REQUIREMENT ON NEW BUILDS: To adhere to NZ Code E2/AS1 for roof penetrations, the edge of roofing penetrations over 200mm wide shall be supported in either direction with additional treated H1.2 framing, using 50mm wide timber depth to equal purlin depth.

When retro fitting roofs additional framing will be required to support roofing. Ref Fig 1 & 2.

- 5) Mark the roof window opening on the roofing foil and cut out the battens over the opening. Cut out an opening in the foil leaving a 100mm flap along each of the edges in order to later wrap the roof window frame with them.
- 6) Cut off the battens/purlins or the roof boards in the area where the roof window is to be installed, leaving an opening with its width equal to the width of the roof window 10mm to 50mm and its length equal to the length of the roof window 10mm to 120mm (see Fig 5).

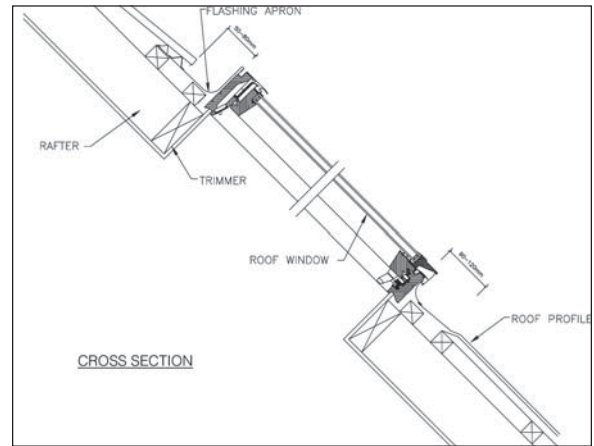


Fig 3

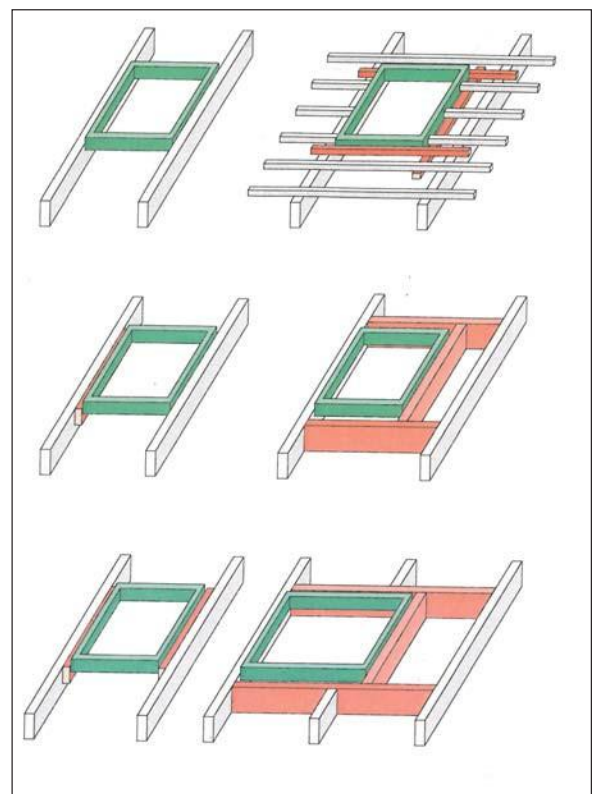


Fig 5

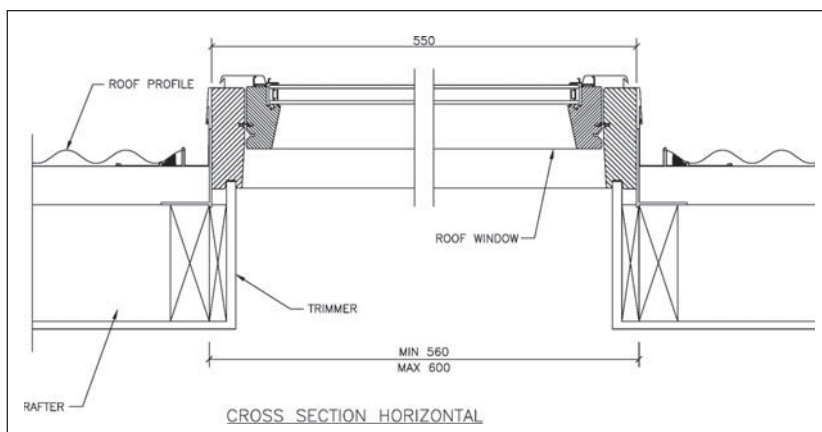


Fig 4

7) Remove the wooden protection slats from the frame (Fig 6).

8) Take out the sash from the frame. To do this, rest the bottom edge of the roof window frame on the floor and tilt it slightly. Open the roof window and turn the sash to the angle of approximately 150°. One person should hold the frame and the sash in this position; the other must press in the push button in the hinge pins (Fig 7). Then remove the sash in the way indicated by the arrows. While taking out the sash make sure that the pins slide out from both hinges simultaneously. Failing to slide out both pins simultaneously may damage the hinges!

9) Screw the metal angles (included in the assembly kit) to the sides of the roof window frame approximately 100mm from the corners (so that they miss the battens/purlins). The groove N should line up with the top of the purlins for concrete and corrugated iron roofing; groove V for pressed metal tile e.g. Decrabond (Fig 8).

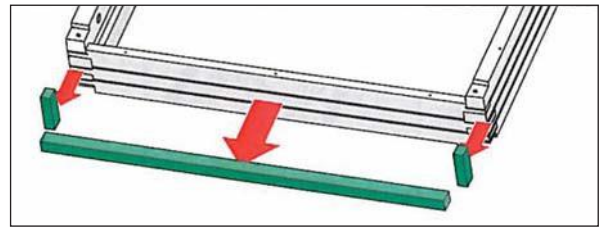


Fig 6

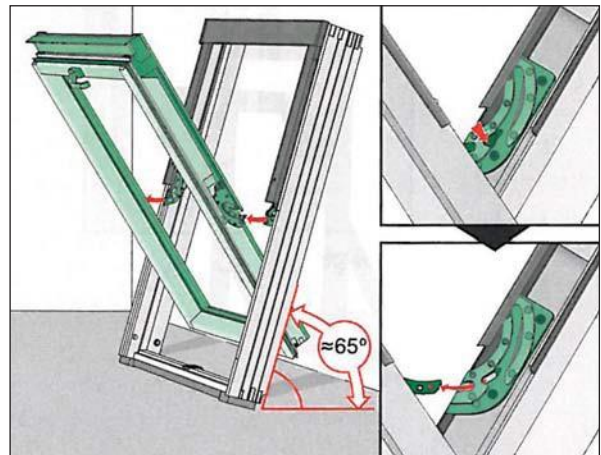


Fig 7

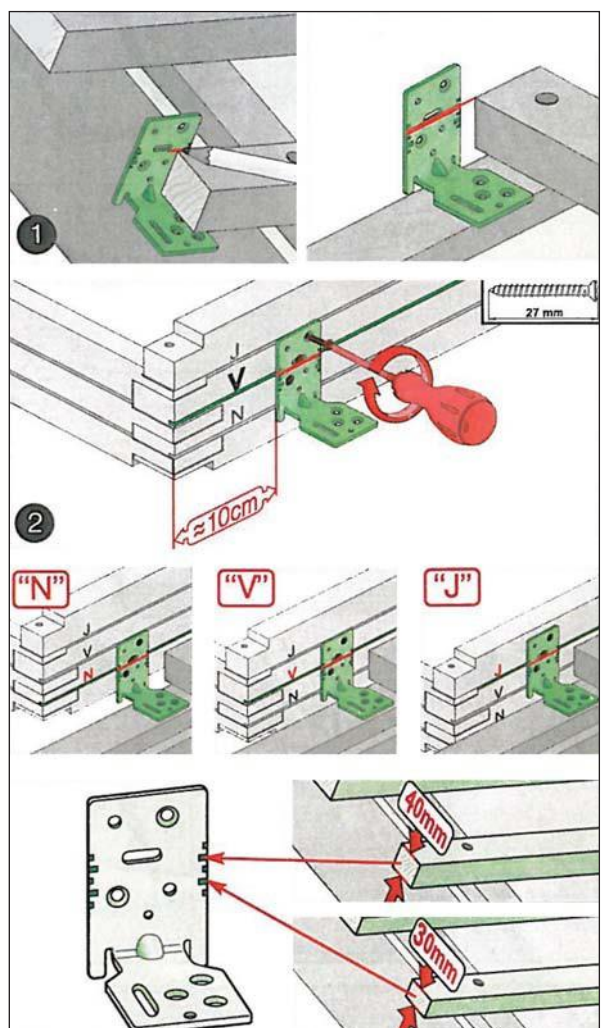


Fig 8

10) Place the frame in the prepared opening in the roof. Rest the metal angles on the rafters, (Fig 8) and check if the appropriate groove covers the upper surface of the batten. Using a spirit level check at the bottom if the frame is placed horizontally. Put one of the supplied wedges under one of the angles if it is required (Fig 9). Screw only the bottom angles to the rafters.

11) Reconnect the sash to the frame: standing inside the room and holding the sash horizontally, slide the protruding sash hinge pins into the frame hinges from the outside. It is essential to slide in both pins simultaneously; the push button is automatically released when the window is closed (Fig 10).

12) Open the roof window slightly and check if the gap between the bottom edge of the frame and the bottom edge of the sash is even along its whole length. If it is not, put a plastic wedge (included in the assembly kit) under the upper left or right hand side metal angle (where the gap is narrower) (Fig 11).

13) Close the roof window and check if the vertical gaps between the sash and the frame are equal along their whole length. If they are not, slightly move the upper part of the frame left or right. Fix the upper metal angles to the rafters.

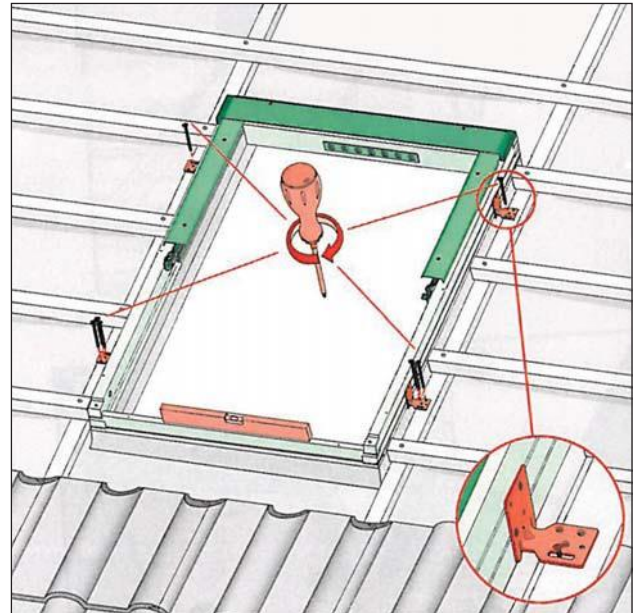


Fig 9

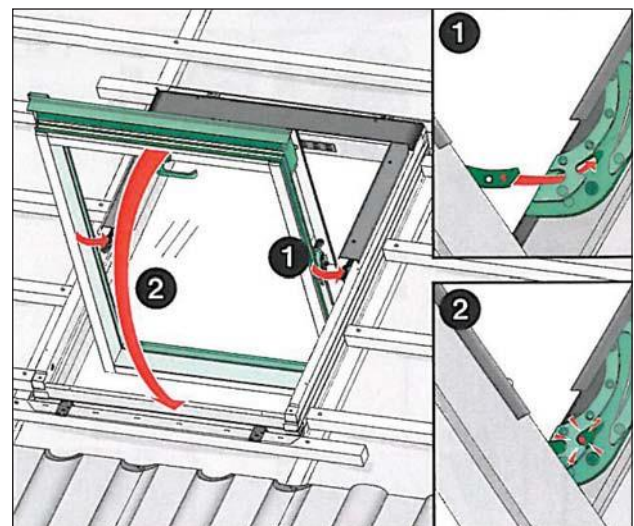


Fig 10

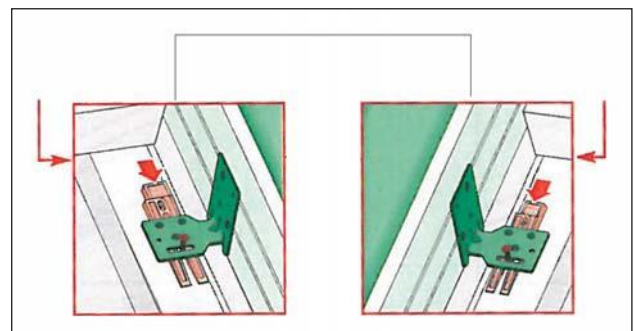


Fig 11

Instructions for Fitting Flashing

14) The H-type flashings for profiled roofing consists of:

- 1) side flashing element,
- 2) gutter – not required for New Zealand conditions.
- 3) bottom flashing element,
- 4) top flashing element,
- 5) sponge seals,
- 6) metal straps
- 7) bottom profile

15) Position on the bottom flashing (3) on the roof surface. After positioning the bottom flashing, nail it to the frame side on its upper edge (Fig 13).

16) Put on the bottom flashing (7) covering the bottom part of the frame (Fig 14) and screw it to the frame. Use only stainless-steel wood screws. Remove the paper strip protecting the Bitumous layer underneath the element. Press the lead apron to shape it and stick it to the roof surface.

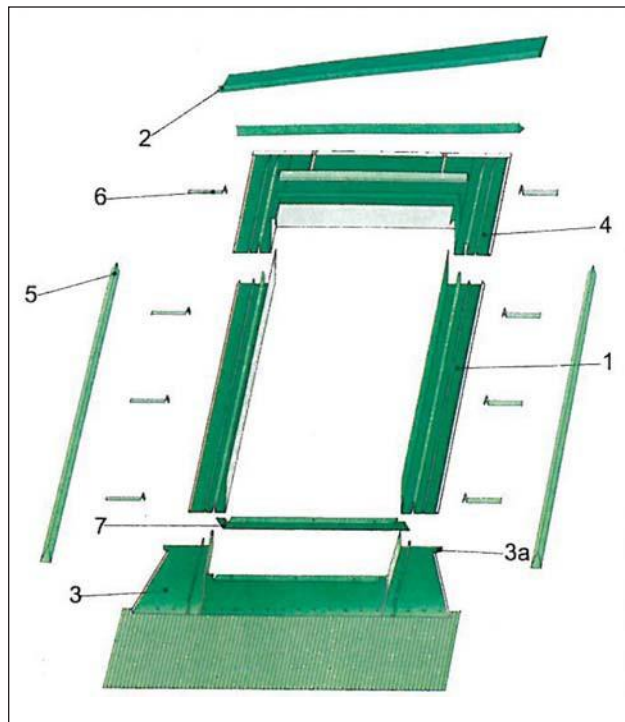


Fig 12

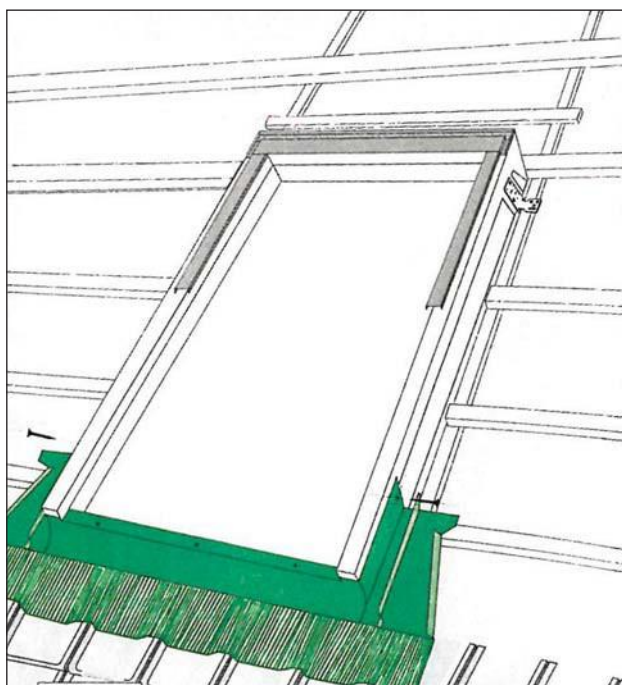


Fig 13

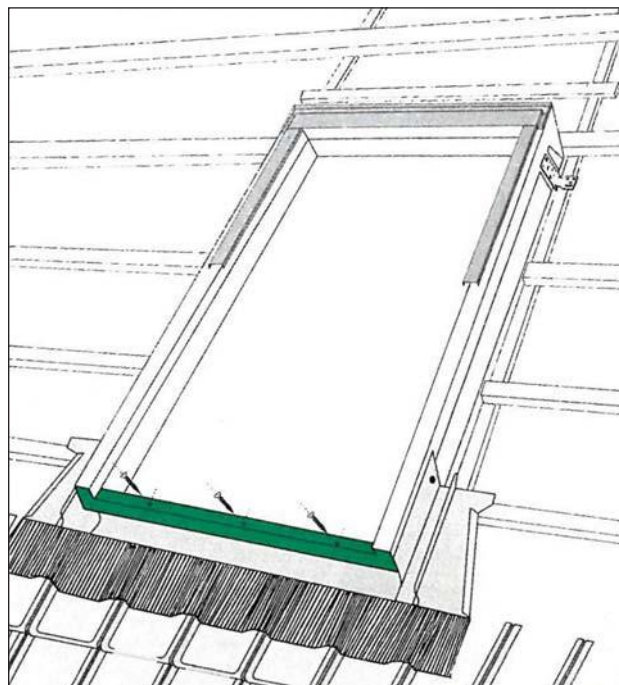


Fig 14

- 17) Position the side flashing (1). Nail them to the frame sides and battens using the metal straps (6). Join the bottom flashing with the side flashing pieces using (3a) (Fig 15).
- 18) Slide on the flashing covering the frame sides and screw them to the frame. Put on the top flashing (4), nail it to the battens using the metal straps and screw it to the frame side (Fig 16).
- 19) In order to ensure wind-tightness stick the self-adhesive sponge-seal (5) to the flashing and cut them to fit the shape of the gap. Put the missing roofing materials in place keeping the required distance from frame.

NOTE: On lower pitch roofs, 15 – 20°, place a small bead of silicone between flashings, where they overlap and between apron and metal frame at the bottom of the window.

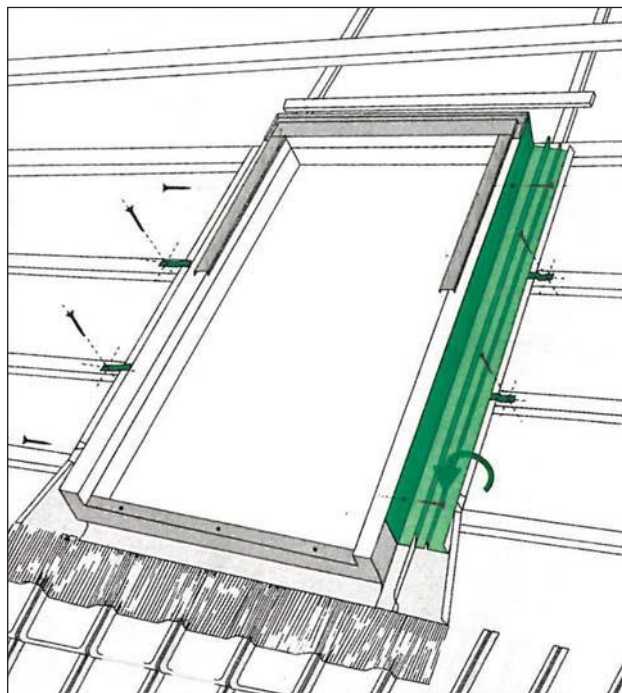


Fig 15

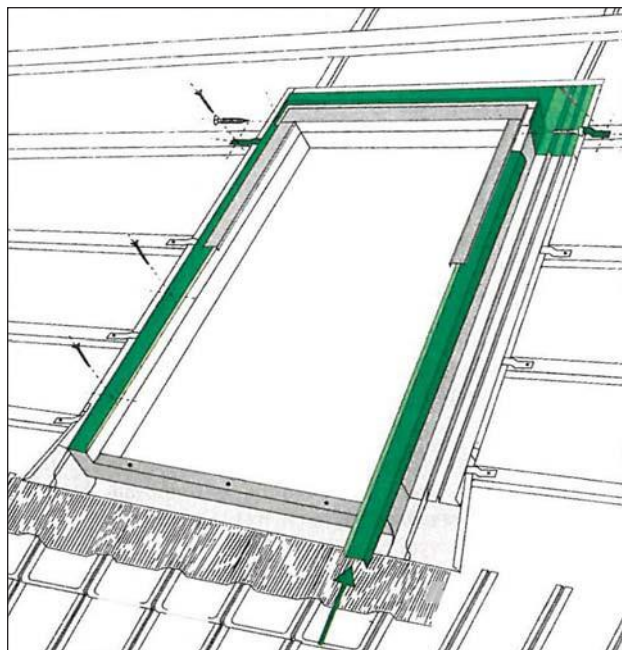


Fig 16

Special Instructions for New Long Run Roofs

Refer to general installation instructions and mandatory requirements on pages 1-5.

- 20) See Fig 16: Fit the bottom sheet of iron, first making sure it is 90-120mm away from the bottom edge of the skylight timber frame (see Fig 2).
- 21) Cut the top edge of the bottom sheet of iron 25mm and fold down where the mat laps over the iron, to allow the mat to sit flat on the iron. Note: It is important to do this, to prevent creating a catchment area. Ensure there are no jagged edges that may rip the mat (Fig 18).
- 22) The top of the purlins, line up with groove marked "N" on the roof window frame (Fig 20). Insert flashings as per instructions on page 6.
- 23) The bottom mat is designed to partially lay under the side sheets of iron. If possible allow sheets to run down the side of skylight, down, over and past the mat. Finish placing sheets around skylight (Fig 17).

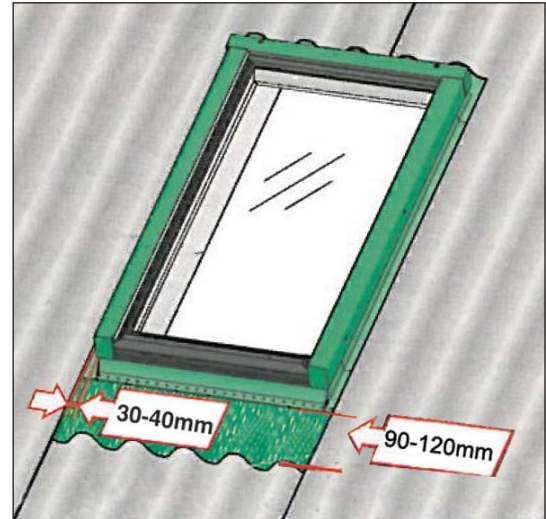


Fig 17

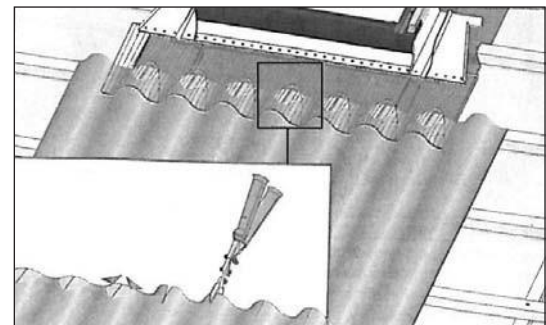


Fig 18

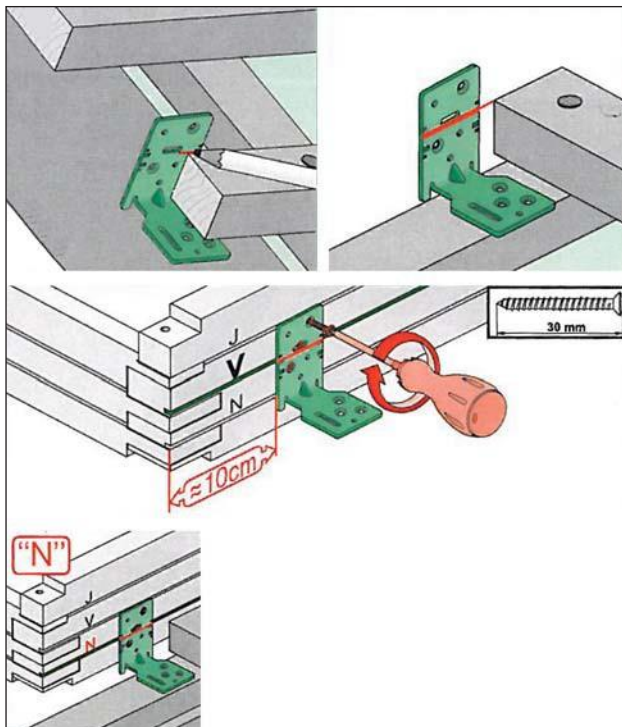


Fig 19

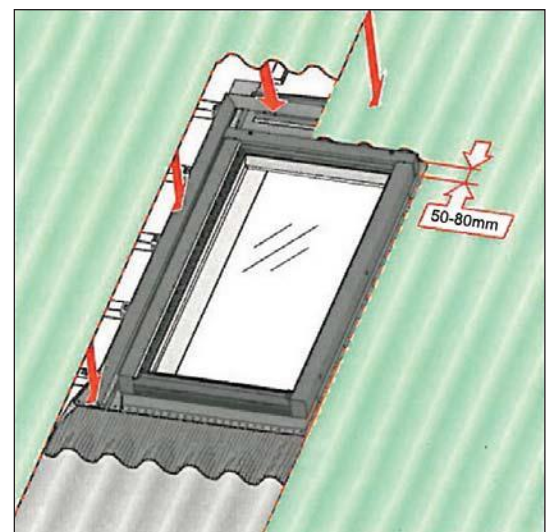


Fig 20

Special Instructions for Concrete Tile Roofs

Refer to general installation instructions and mandatory requirements on pages 1-5.

- 24) See Fig 1: The roof window must be installed above a complete row of tile. Make sure there is a gap of 90mm between skylight frame and the row of tiles. You will need to chamfer the top of the bottom row of tiles, where the mat laps over the tiles, to allow the mat to sit flat on the tiles (Fig 21). This is important to help prevent a catchment forming that may cause leaking.

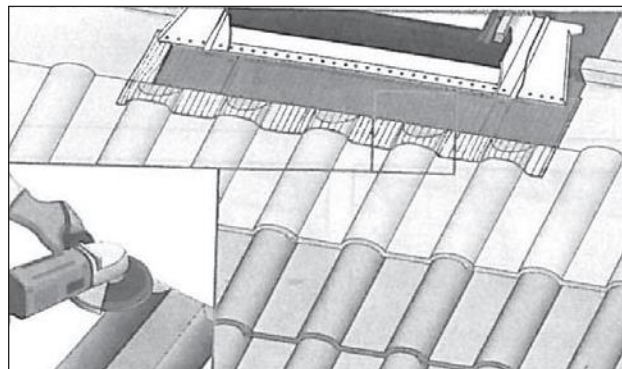


Fig 21

- 25) The top of the batten/purlin lines up with groove marked "N" on the roof window frame (Fig 22).

- 26) Insert flashings as instructions on page 6.

- 27) Proceed to place and cut tiles around flashings (Fig 23).

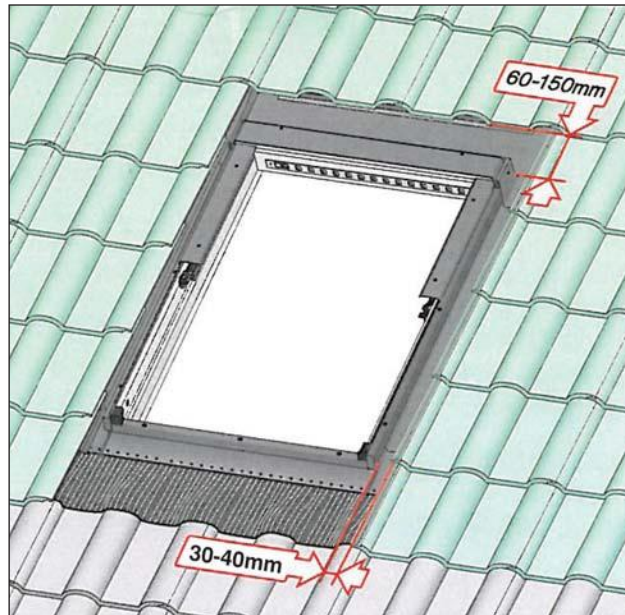


Fig 23

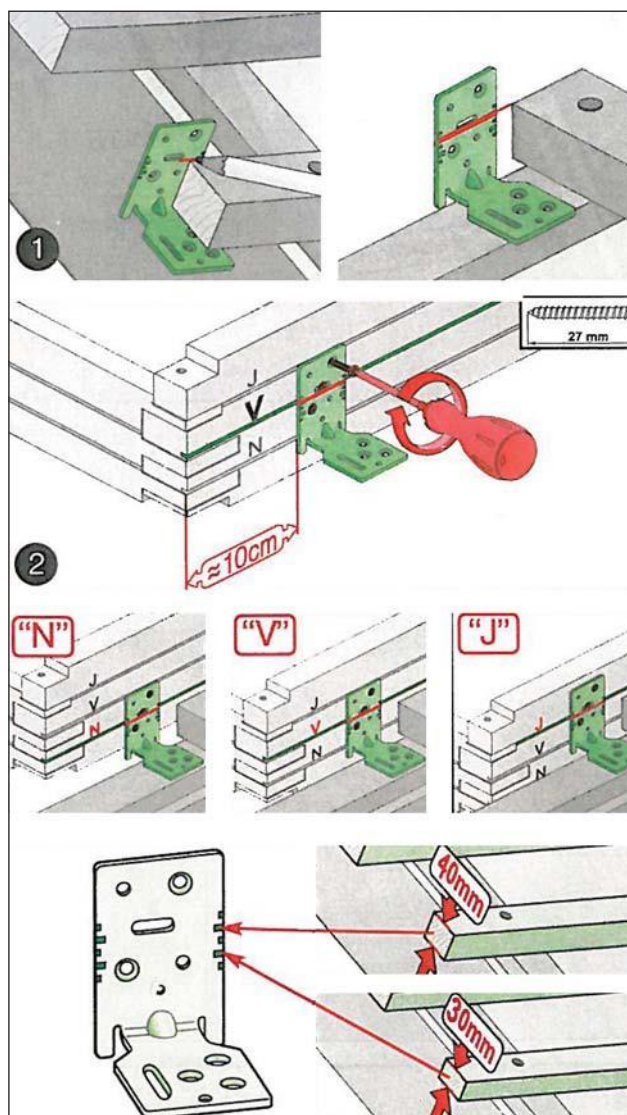


Fig 22

Special Instructions for Existing Iron Roofs

Refer to general installation instructions and mandatory requirements on pages 1-5.

- 28) Cut the roofing material as shown in the diagram (cut line). Provide clearance as shown (see Fig 24). Overcut the lower cut, 210mm long, at the bottom two corners as shown. This allows the mat to pass through the metal sheet. NOTE: Ensure the bottom two cuts finish on the high point of the roofing profile shown in Fig 24 - A and B. Ensure the roof window frame is 90-120mm from the lower cut line.
- 29) Remove the sheets of iron for later re-positioning.
- 30) Trim the roof framing to accommodate the roof window as per earlier instructions. A batten will be required under the iron where the bottom mat laps over the lower section of roofing material, to stop the iron sagging. Refer page 2.
- 31) Cut the top edge of the bottom sheet of iron 25mm and fold down where the mat laps over the iron, to allow the mat to sit flat on the iron.

Note: It is important to do this, to prevent creating a catchment area. Ensure there are no jagged edges that may rip the mat.

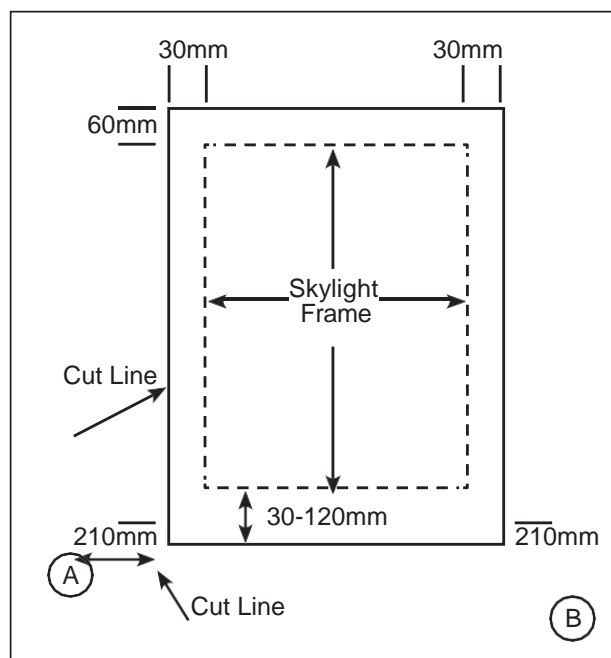


Fig 24

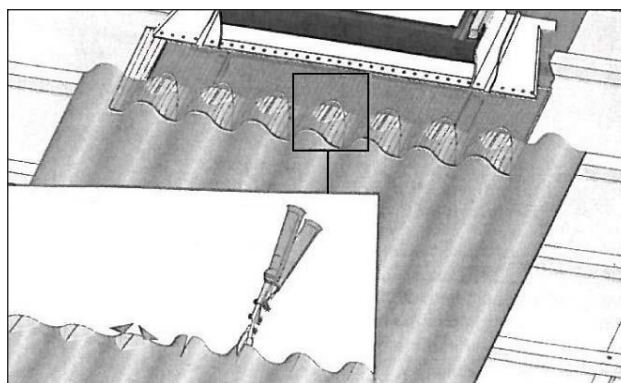


Fig 25

32) Fit the flashing system as detailed above. The top of the purlin lines up with groove marked "N" on the frame (Fig 26).

33) Re-fit the roofing material (Fig 27).

NOTE: With an existing corrugated roof, you may have to secure the top flashing (4) to the frame before placing the roof window frame in position.

34) See Fig 27: Two roofing material fillets need to be made to the dimensions shown in Fig 27, one left hand – one right. These can be made from the piece of roofing iron cut out for the skylight. Use the same color iron as the roof off cuts. The fillets are designed to slide hard up under each corner. The point "X" must be on a high point of the profile of the roof. Ensure no ragged edges that may cause the mat to rip. They can then be attached at the bottom edge to the roof with pop rivets. The iron that goes over the fillet can then be pop riveted to the fillet to hold it down. Do not screw or pop rivet through skylight flashing.

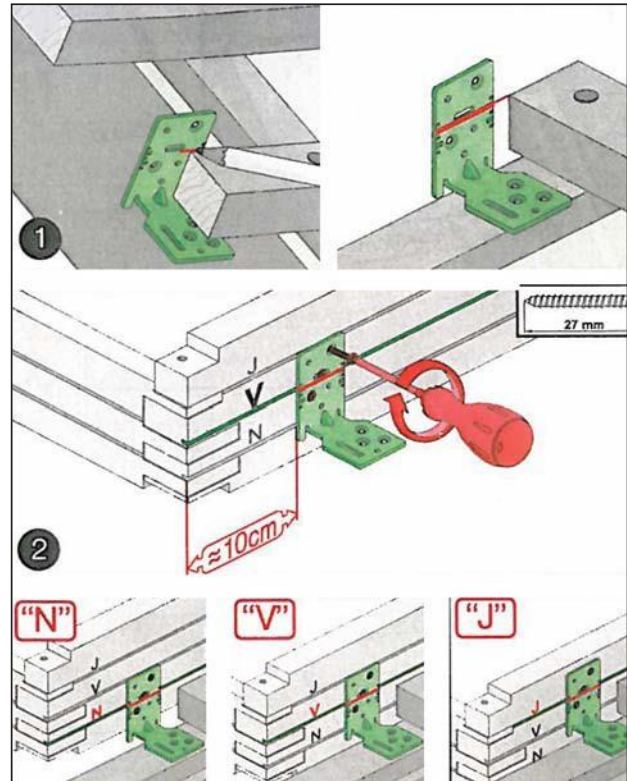


Fig 26

NOTE: Silicone over the pop rivets. These fillets are required to weatherproof the skylight – failure to carry out this function may cause leaking.

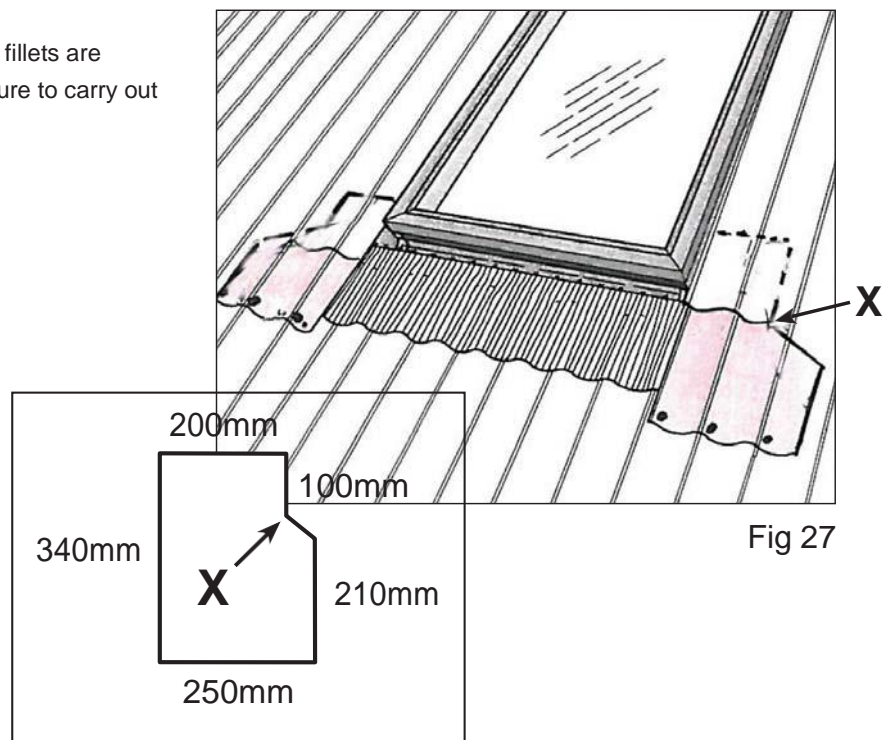


Fig 27

Special Instructions for Metal Tile Roof

Refer to general installation instructions and mandatory requirements on pages 1-5.

- 35) See Fig 28: A rebate needs to be formed in the tile battens. Cut a rebate 25mm in depth and 125mm in length.

Trim roof framing - refer pages (2-4) (9-10)

NOTE: Extra timber will be required to strengthen the weakened tile battens. Ensure the skylight frame is at least 60mm from complete row of tiles.

- 36) The top of the battens must line up with your groove marked V shown on the skylight frame (Fig 29).

- 36) Proceed to fit flashings as instructions on page 6.

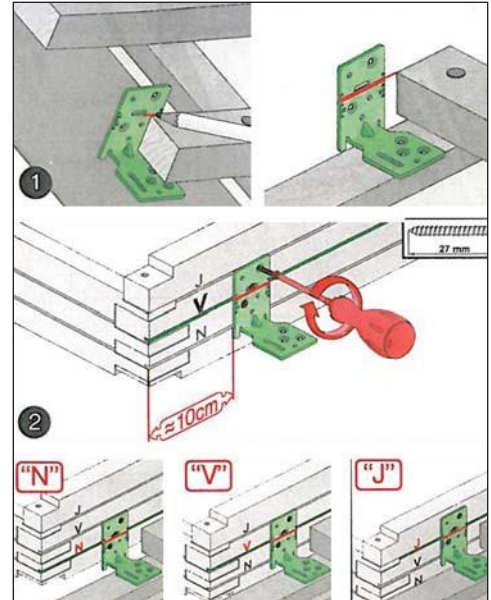


Fig 29

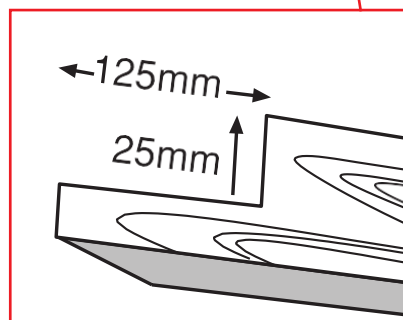
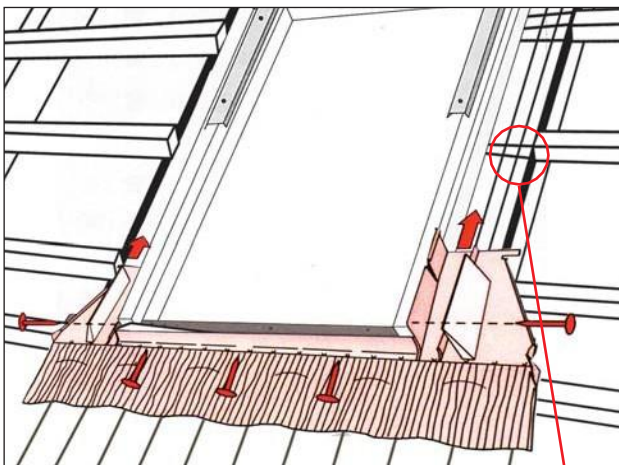
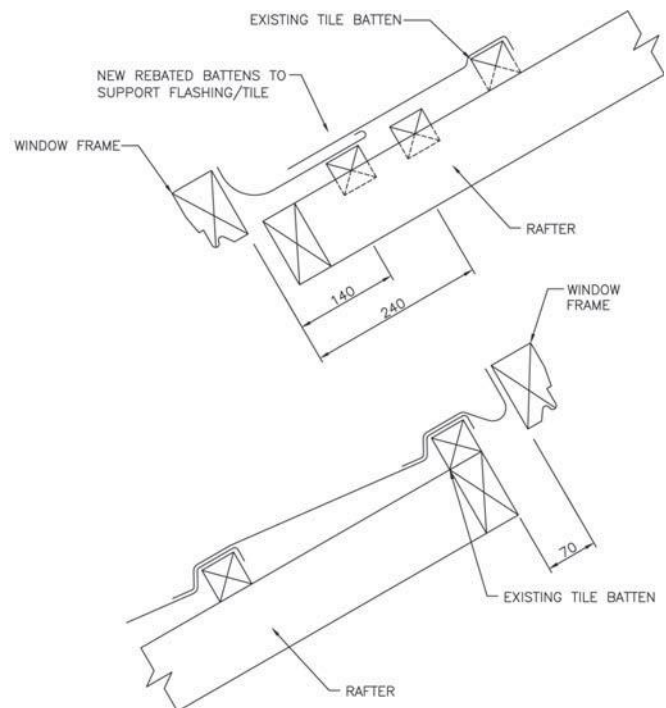


Fig 28



OPENING ROOF WINDOWS CROSS-SECTION
FOR DECRA/PRESSED METAL TILES

Decrabond & Pressed metal tiles roof windows

Refer to general installation instructions and mandatory requirements on pages 1-5.

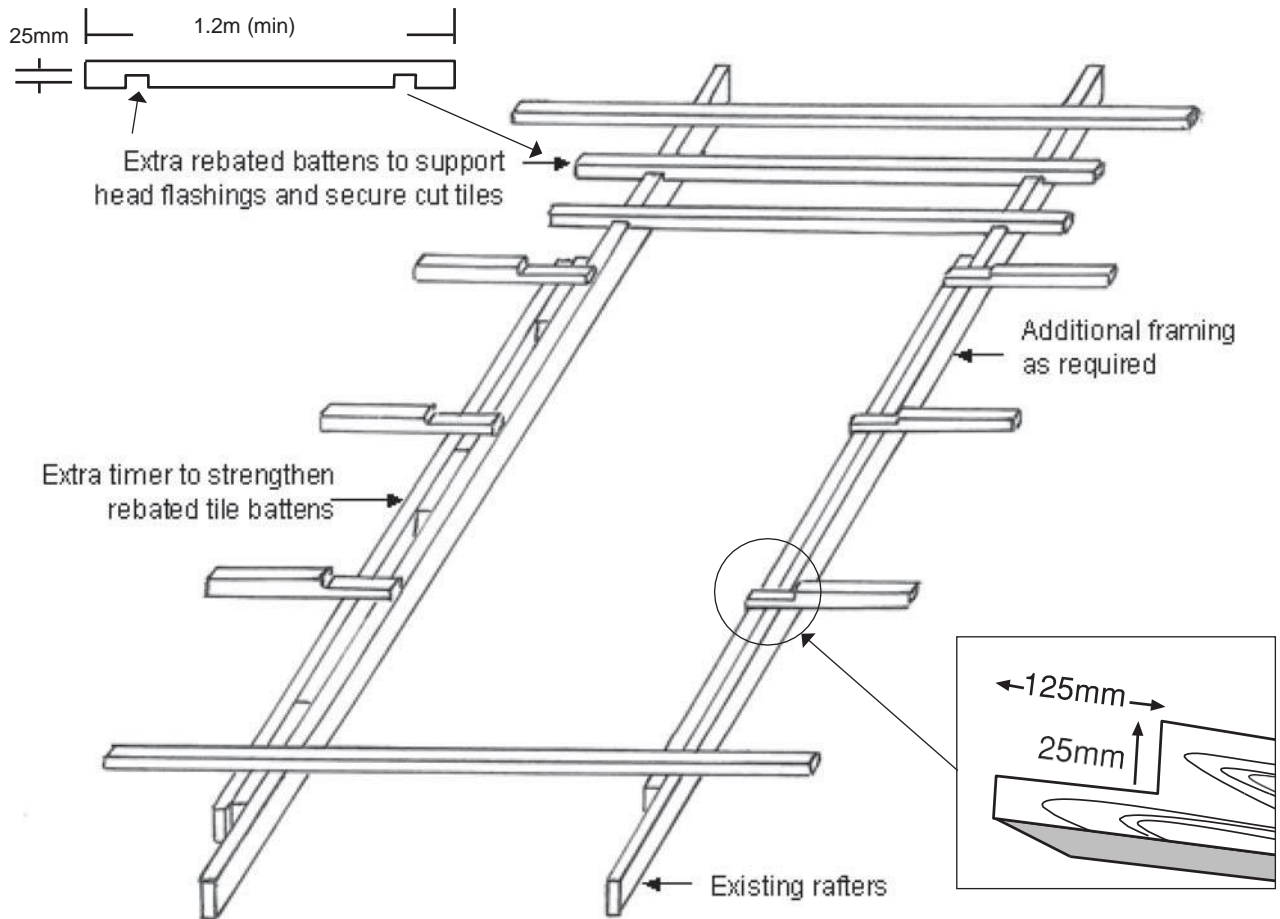
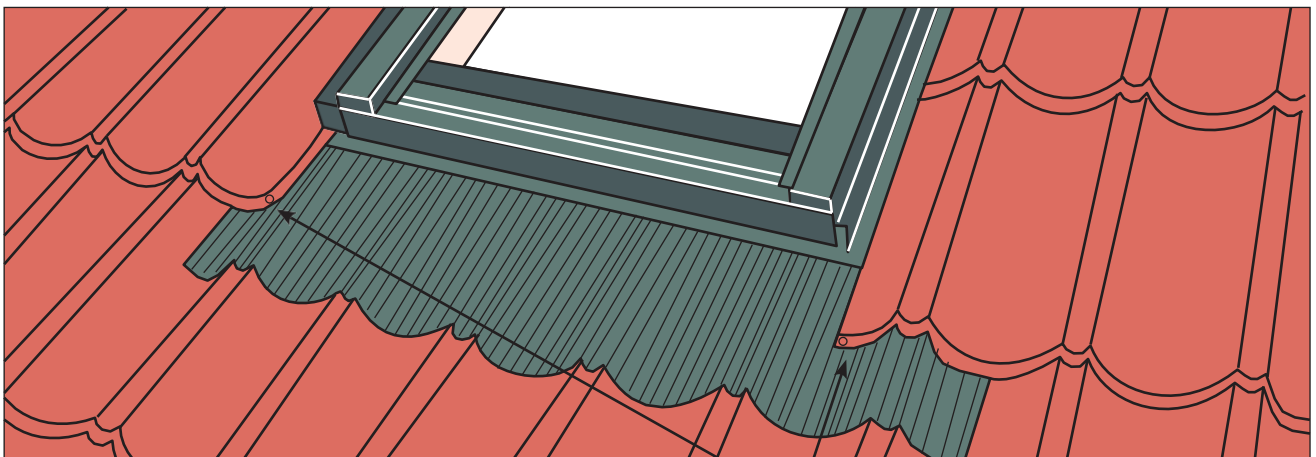


Fig 30



Fixing tile through front at this point may be required on lower pitched roofs (15-20°).