7.3. Roof windows

Roof windows offer a view to the outside and a stylish, contemporary appearance on inside and on the outside. Roof windows feature insulating glass and offer the best energy and thermal efficiency.

Mounting Styles. There are several ways to mount your the windows, depending on the requirements and the roofing materials. If there is asphalt or fiberglass shingles, a self-flashing or curb-mounted roof window could be chosen. The wood curb roof windows integrate a wood curb with the roof window and require flashing.

If the roof is cement or clay tiles, wood shake, slate, or another high-profile roofing, a curb-mounted roof window should be used. These roof types will require a site-built curb and flashing.

Glass. All roof windows should feature insulating glass. Glass options include clear, bronze, and a Low-E coating or argon gas-filled glass. Clear glass offers a view of the day or evening sky. Bronze glass filters sunlight for a softer effect, while still providing a view. Low-E coating offers energy efficiency, reduces heat gain, and filters UV rays.

Venting or Non-Venting. Non-venting roof windows provide light and passive solar energy. Venting windows are open to create a cooling updraft on hot days or to remove excess humidity from areas like kitchens and baths.

Roof windows / skylights installation

Locate roof opening

Based on the size of your roof window or skylight identify the appropriate location. Cut an observation hole (1) to determine the optimum position, obstructions etc. (2) consider positioning in relation to:

-Roofing material (refer to step 2a and 2b)

-Rafters and inside conditions.

Prepare and cut roof opening

Level, square and mark (3).

From the crawl space, remove all ceiling insulation, electrical wires, etc. from above the ceiling opening. Using the ceiling joist as a guide, locate the two bottom corners of the ceiling opening and plumb up to the roof deck to locate the bottom of the roof rough opening. Now mark the rough opening.

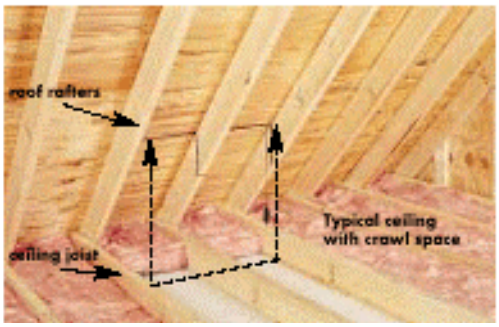
Cut rough opening (4).

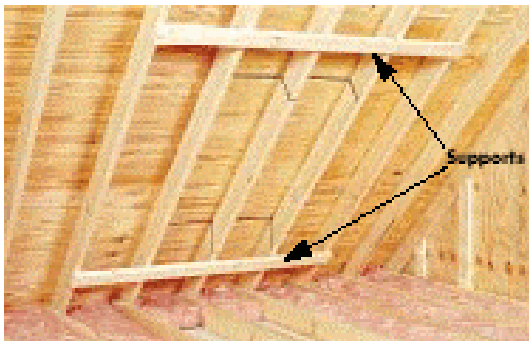
Drive nails up through the roof deck at all four corners of your measured opening. Nails should go through to the outside of the roof. From the roof, remove shingles from around the rough opening to expose roof deck. Save old shingles for reuse when flashing. Snap hackled line on the roof deck between corner nails to mark the rough

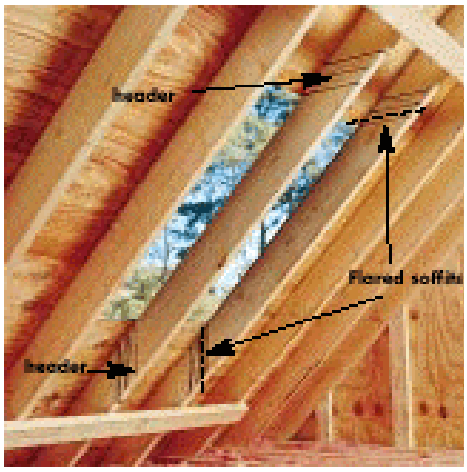
opening. Make sure the rough opening is level and square. Cut and remove the roof deck at chalk lines.

*Cutting the roof rafters (if necessary)**

If rafters are cut, each one must be supported and braced from underside of roof. Supports must be left in place until headers are installed. Mark cutting lines on rafters as indicated below. Center rafter(s) should be cut at an angle so the headers will run flush with the flared soffits. Cut and remove the center rafter(s).



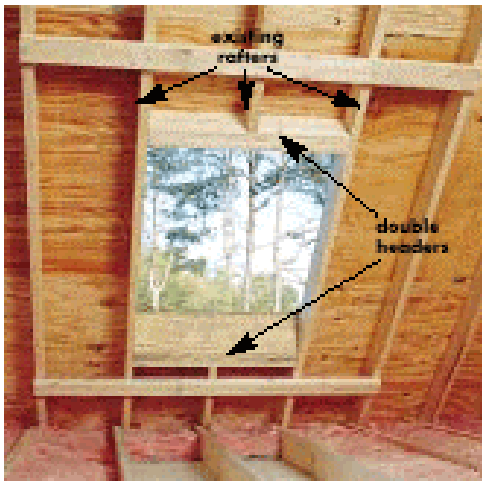




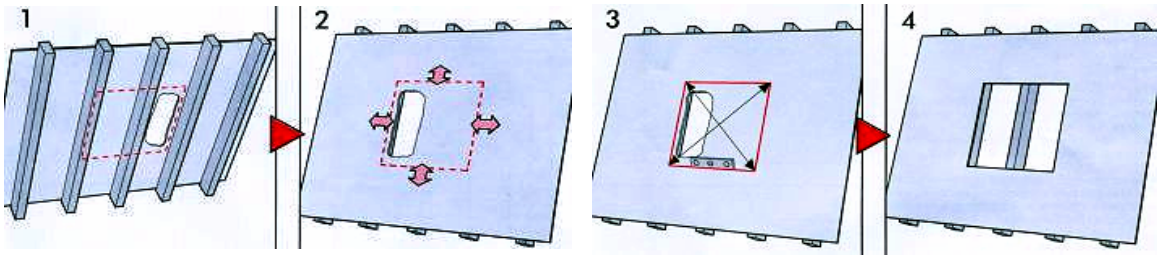
* Roof trusses should not be cut without consulting local building codes, local ordinances, and engineering requirements. If there is a problem cutting trusses, choose a size that will fit between trusses.

Framing the rough opening

The rough opening is determined by the size of the roof window / skylight. See precise rough openings on the dimensions chart. Install headers based on the position of the roof window / skylight finish groove and the interior finish material and leave an appropriate gap for

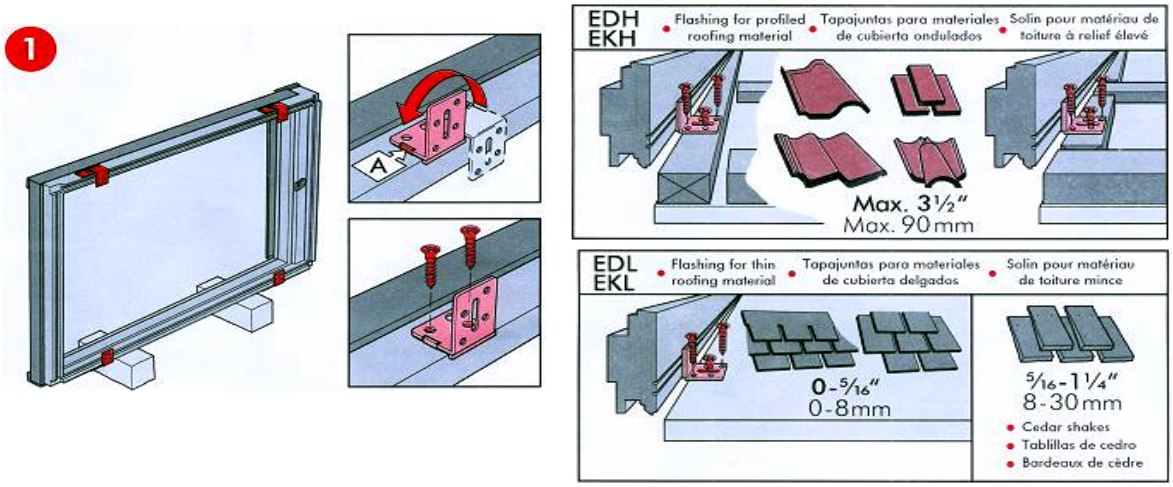


tolerances. If you've had to cut a rafter, double the headers. Framing on the roof is now complete.



Securing mounting brackets to the roof window / skylight

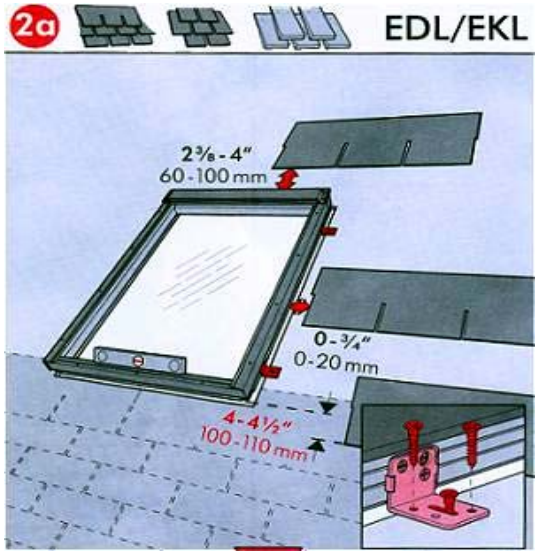
Bend the brackets over. Insure they align at point A. Secure them to the frame with two screws provided.

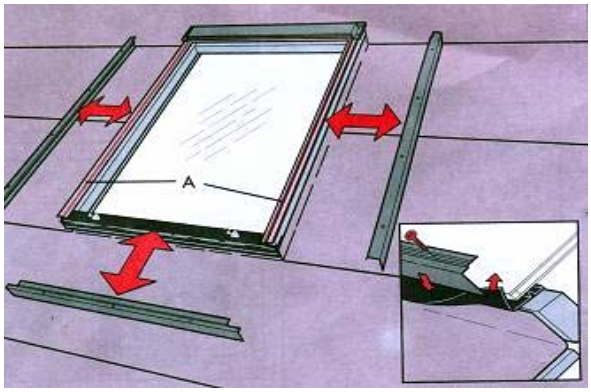


Positioning the roof window / skylight to the roof.

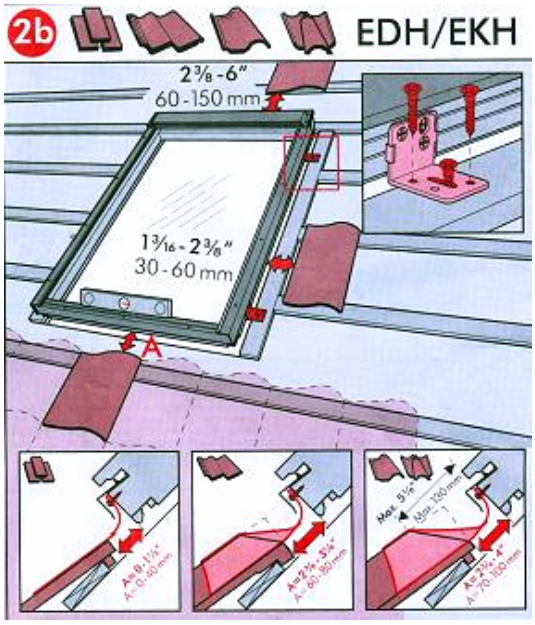
Position skylight on the roof, taking account of roofing material and appropriate flashing, as detailed. Check for level. Attach each bracket to the roof with three screws. Insure that the brackets are supported by the rafters.

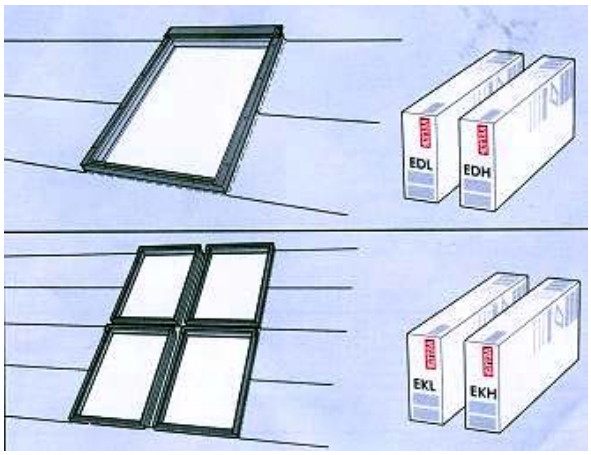
- Thin roofing material





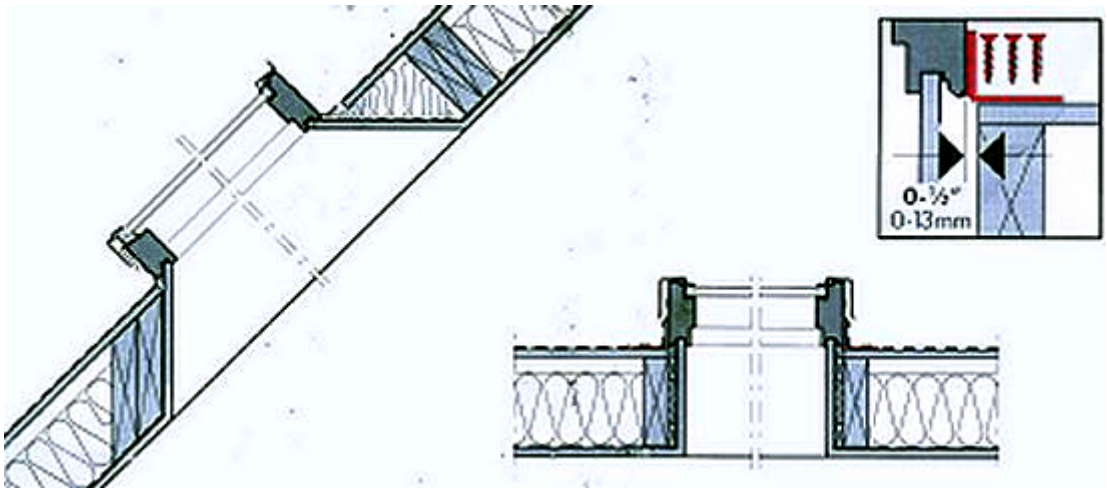
- Profiled roofing material

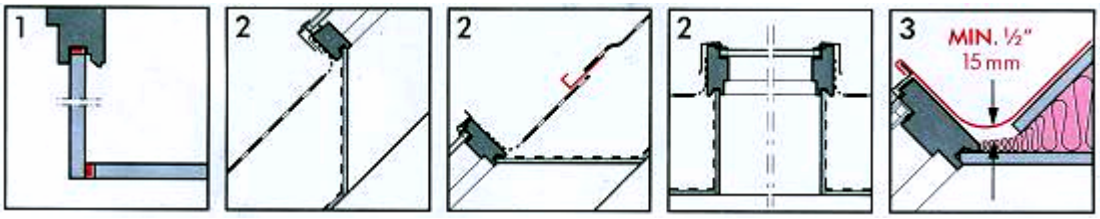




Details of the roof window / skylight installation

Take cares to insure a tight joint between the finish grooves and finish material and at ceiling finish (1). Details showing treatment of vapor open underlayment and of over-skylight drainage and attachment of vapor barrier to finish groove (2). Insulate around the roof window / skylight to prevent heat losses, air infiltration and condensation. Use either rigid or batt insulation. Distance between flashing and insulation must be min. 0,5"/15mm everywhere (3).


0-1/8"
0-13mm


1
2
2
2
3
MIN. ½"
15 mm