

Curb-Mounted Skylight Step-Flashing Completion JHA

Worked instructional example

Work and worksite

A roofing crew will complete a compatible VELUX ECL flashing kit on one accepted site-built curb in a shingle roof before a separately planned crew seats the glazed skylight. Underlayment, sill, step and saddle details follow the applicable kit route. The opening remains protected throughout. This fictional learning example describes planned controls and records no actual inspection or authorization.

- The curb, roof material, slope, kit size and shingle exposure are matched to the actual manufacturer requirements. Retrieved ECL guide VAS 452204-0309 is a 2009 edition; verify the applicable supplied instructions and resolve differences before field use.
- Curb and surrounding deck acceptance, roof access and fall protection are established. Guarding or an accepted rated cover protects the opening and fits the flashing sequence; glazing is never assumed to be fall-through protection.
- Skylight roof flashing 238160-24 and flashing work 238160-21 are partial connections. This cycle excludes new openings, curb construction, roof repair, skylight lifting or seating, whole-roof shingling, membrane welding and reliance on sealant as a substitute for kit laps.

Questions before work

- Which kit, curb, roof and shingle details apply, and who resolves a difference between the retrieved and supplied instructions?
- How will opening and roof-fall protection stay effective during every underlayment and flashing stage?
- Who verifies the completed water-shedding details and transfers a protected curb to the separate skylight-setting crew?

Task Hazard Control

1 Accept the curb and compatible flashing route

Hazard: Wrong kit geometry, unsuitable roofing or an incomplete curb can lead to improvised details and exposure at an opening that has not been accepted.

Control: Lead matches accepted curb, slope, shingle exposure and ECL kit to applicable instructions. Resolve supplementary pieces and water/snow details with the technical authority. Compare supplied instructions with the retrieved older edition before assembly. Hold mismatches; do not cut the kit to an invented fit.

Verification: Lead verifies curb release, kit identity and the applicable detail set.

Reasoning: Compatibility determines the water-shedding route before installation begins.

2 Prepare protected access and flashing work positions

Hazard: The open curb, roof edge, sharp metal and loose offcuts can create a fall-through, fall, cut or dropped-object exposure during detailed work.

Control: Check roof and continuous opening protection and verify access to every flashing position. Secure tools, components and sharp offcuts; separate work below. A protection change follows its accepted sequence before access changes. Never step on the future glazing position or an unverified cover.

Verification: Lead verifies each work position, effective opening protection and controlled staging.

Reasoning: Flashing access must be designed around maintained protection.

3 Integrate the curb and roof underlayment

Hazard: Dirty surfaces, reverse laps or an improvised cut can leave a hidden water path; reaching across the curb can also expose a worker to the opening.

Control: From protected positions, prepare accepted dry, clean surfaces without disturbing the curb. Apply prescribed bottom, side and top underlayment and water-shedding integration under the applicable new-construction detail. Maintain opening protection and check layers before concealment. Hold damaged substrate or uncertain transitions for technical disposition.

Verification: Assigned checker verifies surfaces, lap direction and concealed-layer details.

Reasoning: Underlayment defects become harder to identify after metal flashing covers them.

Complete the work and hand over

4 Install sill and interwoven step flashing

Hazard: Exposed fasteners, incorrect step overlap or loosely restrained metal can create water paths and cut the crew as shingles are fitted.

Control: Follow the kit's sill attachment and side step sequence, interweaving with scheduled shingles. Use prescribed attachment positions and pieces; protect hands and keep tools inside safe access. Check clearances and overlaps progressively. Do not replace missing flashing with caulk or penetrate prohibited water-shedding areas.

Verification: Assigned checker verifies sill, step integration and permitted attachment locations.

Reasoning: Each course must connect to the intended drainage path.

5 Complete saddle flashing and inspect the water path

Hazard: A reversed head lap, blocked drainage clearance or nail through saddle flashing can defeat the assembly while the finished roof appears complete.

Control: Install prescribed saddle/head flashing and integrate upper underlayment and shingles. Maintain clearances and avoid prohibited saddle penetrations. Lead checks drainage continuity around the curb, required supplementary details and concealed-stage evidence. Hold discrepancies for correction before releasing flashing readiness for separate glazing.

Verification: Roofing lead verifies completed detail continuity and open technical issues.

Reasoning: The head and side details must shed water into an intact lower path.

6 Hand over the protected curb for separate glazing

Hazard: A completed flashing kit may be mistaken for a finished skylight or a safe walking surface, exposing later workers to the still-open curb.

Control: Clear secured tools and offcuts by the accepted route while maintaining opening protection. Record kit, checks and open issues and transfer the protected curb to the setting lead. Identify separate seating acceptance and later protection-change responsibility; maintain restrictions until next-stage controls are effective.

Verification: Receiving lead confirms opening state, flashing findings and separate setting responsibility.

Reasoning: Flashing completion changes the work stage, not the opening hazard.

Pause and reassess

- Curb, kit, slope, roof material, shingle exposure or supplied guide differs from the accepted detail route.
- Opening protection, roof protection, safe fitting access or secure sharp-metal staging cannot be maintained.
- Damaged substrate, reverse lap, prohibited penetration or missing piece prevents verification of the intended water path.

Improve the controls

Needs improvement: Put the skylight on first and work flashing around it.

More useful: Crew follows the actual ECL-compatible sequence, preserves opening protection and transfers completed flashing to separately planned skylight seating.

Needs improvement: Caulk the gaps and call the flashing finished.

More useful: Roofing lead verifies prescribed pieces, water-shedding laps, attachment positions and clearances before releasing the flashing handoff.

Decisions that change the analysis

Can the crew remove opening protection to reach the saddle?

Only through a separately accepted protection-change method that establishes effective protection before the exposed work position is used. If the current arrangement prevents the kit sequence, stop and resolve the interface with the responsible leads. Neither an uninstalled skylight nor glazing that has been seated without an accepted fall-through protection basis can replace the planned opening controls.

What must the crew record for actual use?

Record curb and roof acceptance, kit and supplementary parts, actual instructions and edition comparison, slope and roofing compatibility, and opening protection. Record concealed underlayment, sill, step and saddle checks, fastener and clearance findings and technical dispositions. Identify unfinished glazing, receiving lead and protection-change responsibility; enter actual results rather than copying a complete flashing acceptance.

Training needs

- Instruction on the actual compatible ECL kit, instruction edition, underlayment integration and sill/step/saddle sequence, including permitted fasteners and required clearances.
- Task instruction on roof and opening protection, sharp flashing and cutting controls, staged detail checks and the separate glazing handoff without treating glass as a cover.

Confirm applicable qualifications and actual training evidence for the people assigned. Related toolbox talks support discussion; they do not establish competence.

References and adaptation

VELUX ECL Curb Mounted Skylight Flashing Instructions, VAS 452204-0309 (2009 edition)
https://locator.veluxusa.com/ng/instruction_manuals/docs/452204-0309-ECL.pdf

VELUX Professional flashing-system compatibility information
<https://pro.veluxusa.com/products/flashing-systems>

OSHA 1926.501 Fall and opening protection
<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.501>

References reviewed October 12, 2026. Use actual equipment and product instructions, project design and site requirements. This original draft supplies no fabricated inspection, signature or approval.