



Test skylight assembly for water-tightness and drainage performance

Test skylight assembly for water-tightness and drainage performance with an interactive checklist that is commentable and can export as PDF/Excel for verifiable, photo-led compliance.

Project:

Date:

Filled by:

Pre-Test Documentation & Safety

1	Review approved drawings, skylight details, and test locations; mark extents on a roof plan and obtain supervisor approval; attach annotated plan and approval signature.
2	Verify weather: no precipitation, wind ≤ 5 m/s, ambient 5–35 °C; photograph anemometer and thermometer readings with timestamps as evidence.
3	Set fall protection, perimeter barriers, and signage; establish a dry interior observation area; upload photos of safety setup and access routes.
4	Protect interior finishes below the skylight with poly sheeting and drip trays; photograph coverage and note responsible party.
5	Perform interior baseline inspection for prior stains or cracks; record moisture meter baseline (wood $\leq 12\%$ MC; gypsum $\leq 1\%$ by weight) and upload photos.

Instrument Calibration & Setup

6	Calibrate inline flow meter and nozzle to 3.5 ± 0.5 L/min at source; record flow/gauge photos and tester initials.
7	Measure and mark nozzle stand-off distance 2.0–3.0 m to test face; photograph tape measurement and roof marks.
8	Confirm weep holes and drainage channels are clear using a probe/borescope; remove debris; before/after photos show unobstructed paths.
9	Place interior moisture sensors/data loggers at corners, joints, and curb; record baseline values and logger IDs.
10	Set video capture with timestamp to record spray angles, distances, and duration; verify framing with a 10-second test clip.

Water-Tightness Spray Test

11	Spray glazing perimeter joints at 90° for 5 min per 1 m length; maintain constant sweep; acceptance: no visible interior water/wetting; upload continuous video.
12	Spray curb-to-roof flashing at 0–45° for 10 min total, focusing upslope edges; acceptance: no ingress; interior sensors rise $\leq 2\%$ MC from baseline.
13	Target fasteners, corner joints, and gasket intersections for 2 min each; acceptance: no damp patches, drips, or trails; capture close-up photos immediately after.
14	During spraying, inspect interior every 60 s with flashlight/IR; record images; acceptance: no temperature anomalies > 2 °C indicating moisture.

Drainage & Weep Function Test	
15	Pour 10 L dyed water evenly along exterior gutter/channel using a graduated container; acceptance: discharge initiates ≤ 10 s and clears ≤ 2 min.
16	Observe weep outlets for continuous flow without pulsing or backflow; capture 60 s video; acceptance: uninterrupted discharge stream.
17	Measure residual ponding 10 min after pour with a depth gauge; acceptance: ≤ 3 mm at any point; photograph gauge readings.
18	Inspect drip edges and cladding below for capillary return; acceptance: dry underside and no streaking; record close-up photos.

Post-Test Inspection & Evidence	
19	Check interior, curb insulation, and ceiling void for damp; acceptance: readings $\leq$ baseline + 2% MC; log meter model, serial, and photos.
20	Verify sealants, gaskets, and flashings show no displacement or tearing; acceptance: continuous contact; upload macro photos at 4 corners and mid-spans.
21	Restore site and confirm all weep paths left unobstructed; document final condition photos and remove interior protection.
22	Compile records: flow rates, spray durations, volumes, sensor logs, and annotated roof plan; attach video links and tester signatures.

Corrective Actions & Retest	
23	If leakage occurs, isolate source with segmented 1–3 min sprays per suspect joint; mark locations on plan and photograph evidence.
24	Execute repairs per approved project specifications and authority requirements; record product data, batch/lot numbers, and installer sign-off.
25	Observe cure times from product literature; schedule and perform retest; acceptance: zero visible ingress and drainage within specified limits.
26	Complete stakeholder review; obtain digital approvals; export PDF/Excel and attach QR-authenticated files to project archive.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
Test skylight assembly for water-tightness and drainage performance to confirm installed units resist driven rain and evacuate water through intended weep paths without interior wetting. This checklist guides field teams through practical water penetration testing, hose spray verification, and drainage performance checks using calibrated tools and clear acceptance criteria. Scope includes exterior skylight frames, curbs, glazing perimeters, sealants, gaskets, and integrated weep/drip elements; it excludes unrelated roofing systems beyond the immediate tie-in. By standardizing flow rates, stand-off distance, spray angles, and timing, you reduce false positives and pinpoint actual failure points. With moisture meters, IR scans, and dye tracing, observations become measurable, repeatable, and defensible. Outcomes include leak-free performance under controlled spray, documented weep functionality, time-to-clear results, and photo/video evidence aligned to drawings. Use this interactive checklist to tick steps, add comments for anomalies, and export PDF/Excel with a QR code for authenticated sharing and archiving.	1. Preparation: Gather calibrated hose/nozzle, inline flow meter, moisture meter, IR camera (optional), depth gauge, dye, probes, PPE, and fall protection. Verify weather limits, protect interiors, and brief the team on roles, test sequence, acceptance cues, and evidence requirements. 2. Using the Interactive Checklist: Start interactive mode, tick each step as completed, and add timestamped comments where anomalies occur. Attach photos, videos, and readings. When finished, export the record as PDF/Excel for submittals and archive. 3. Sign-Off: Capture digital signatures from installer, QA, and owner's rep. Confirm corrective actions (if any) and retest outcomes are logged. Distribute the exported package and verify authenticity via the embedded QR code.