



Test façade precast joints for watertightness after sealing

Test façade precast panel joints for watertightness after sealing using our interactive checklist—commentable steps and evidence capture, then export as PDF/Excel for secure sign-off.

Project:
Date:
Filled by:

Pre-test Conditions & Safety

1	Verify sealant cure per manufacturer data sheet; perform a tack/elasticity check. Acceptance: fully cured, no surface tack. Evidence: photos of joints, TDS excerpt, cure date recorded.
2	Record weather: no rain, wind speed ≤ 3 m/s, ambient 5–35 °C. Tools: anemometer and thermometer. Evidence: readings with timestamp in log.
3	Set exclusion zone at ground and work level with barriers and signage. Acceptance: perimeter ≥ 2 m from façade. Evidence: site photos showing barriers.
4	Confirm PPE and fall protection: harness, lanyard, anchor points inspected ≤ 12 months. Evidence: tag photos and access permit.

Equipment Calibration & Setup

5	Inspect hose, nozzle, and gauge; ensure tight connections and consistent spray cone (100–150 mm at 300 mm). Evidence: pre-test spray photo against target card.
6	Calibrate pressure at the nozzle to 200 ± 25 kPa using an inline gauge. Acceptance: within range before and during test. Evidence: gauge photo/video with timestamp.
7	Verify flow rate 3.5–5.5 L/min using a 60 s bucket test. Adjust valve as required. Evidence: measured volume and time recorded with photo.
8	Fit a spacer or mark to maintain 300 ± 25 mm standoff from the joint. Evidence: measurement photo of spacer or tape mark at nozzle.

Test Area Preparation

9	Select a joint segment ≤ 3 m between discontinuities; label with unique ID on tape and drawing. Evidence: marked-up elevation drawing and segment photo.
10	Protect adjacent non-test openings and electrical fixtures with polyethylene and tape. Acceptance: sealed edges, no overspray paths. Evidence: protection photos.
11	Position interior observer with flashlight, towels, and a moisture meter; confirm radio contact. Record baseline moisture reading near joint. Evidence: reading in log.
12	Place clean trays or absorbent sheets below interior sill lines without blocking drains. Evidence: interior setup photo.

Hose Spray Execution	
13	Start continuous video with timestamp and segment ID visible. Acceptance: unbroken footage for full test duration. Evidence: video file reference.
14	Hold nozzle perpendicular to joint at 300 ± 25 mm and traverse at 150 ± 25 mm/s. Evidence: video shows standoff and pace against a ruler/timer.
15	Maintain pressure 200 ± 25 kPa at nozzle; log readings every 30 s. Acceptance: within range $\geq 95\%$ of time. Evidence: log entries and gauge photos.
16	Spray from lowest point upward with 50% overlap. Duration: ≥ 5 min per ≤ 3 m segment. Evidence: timer photo and video coverage.
17	Dwell an additional 30 s at corners, terminations, anchors, and visible defects. Evidence: annotated photos of locations and dwell times in log.

Post-Test Inspection & Documentation	
18	Interior observer records any water penetration (drops, streaming, damp lines). Acceptance: zero penetration beyond interior surface. Evidence: photos and moisture readings.
19	Inspect exterior sealant for adhesion loss, blisters, voids, or cracks after test. Acceptance: none observed. Evidence: close-up photos with scale.
20	Record ambient, wind, and water temperature ($10\text{--}30$ °C) immediately after test. Tools: thermometer, anemometer. Evidence: readings with timestamp.
21	Complete test log: segment ID, duration, pressure, flow, conditions, result (pass/fail). Obtain supervisor and QA signatures. Evidence: signed digital form.

Rectification & Retest	
22	If failure occurs, mark exact ingress point, remove defective sealant, clean, re-prime if required, and reseal per manufacturer instructions. Evidence: repair report and photos.
23	Allow full cure per product data, then retest same segment using identical parameters. Acceptance: pass with zero interior leakage. Evidence: retest video and log.
24	Archive all records (drawings, logs, photos, videos) with a QR code link; share with stakeholders per approved project specifications and authority requirements.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Test façade precast panel joints for watertightness after sealing to verify the sealed joints prevent water penetration under controlled spray. This checklist focuses on a calibrated hose spray test, often called a water spray or hose test, applied to precast cladding joints on the building envelope. It excludes laboratory methods and pressurized chamber testing, remaining field-oriented and repeatable. You will confirm sealant cure, control environmental conditions, set pressure and flow at the nozzle, and document outcomes. The aim is to detect leaks at vertical and horizontal panel joints, terminations, and transitions without damaging finished work. Following these steps reduces call-backs, protects interiors, and provides defensible quality records per approved project specifications and authority requirements. Use this interactive checklist to assign roles, add comments, capture photos and readings, and export results to PDF or Excel with a secure QR code for sign-off.</p>	<p>1. Preparation: Gather hose, calibrated inline pressure gauge, flow measurement bucket, timer, anemometer, thermometer, moisture meter, radios, PPE, barriers, and protection materials. Confirm access equipment and sealant cure per product data. 2. Open the checklist in interactive mode and select the elevation and segment IDs to be tested. Invite team members and assign roles (spray operator, interior observer, recorder). 3. At each step, tick completion, enter readings (pressure, flow, wind, temperature), and attach photos or short videos. Use comments to flag issues or request clarifications in real time. 4. Use the timer within the app to control dwell and traverse duration. Keep the app open while filming, then upload file references and timestamps to the related step. 5. When a defect is found, switch to issue mode, add location notes on the elevation markup, assign corrective actions, and set a retest date linked to the same segment ID. 6. On completion, generate a summary with measurements, photos, videos, and outcomes. Obtain digital signatures from the supervisor and QA representative directly within the checklist. 7. Export the report as PDF/Excel and share with stakeholders. Use the embedded QR code to authenticate the record and provide quick access to the full evidence set.</p>