



Inspect Curtain Wall Perimeter Sealant & Backer Rod

Inspect curtain wall perimeter sealant and backer rod installation with an interactive checklist that's commentable and export as PDF/Excel, ensuring compliant joints and documented QA.

Project:
Date:
Filled by:

Documentation & Approvals

1	Confirm approved submittals list sealant type, color, movement class, and compatible backer rod size; verify against drawings and specifications; capture approved stamps and data sheets as evidence.
2	Record sealant and backer rod lot numbers and expiry dates; photograph packaging labels; acceptance: products match approved submittals per project specifications and authority requirements.
3	Verify installer qualifications and mock-up approval; collect training certificates and signed mock-up results; evidence: photos of mock-up and approval date within project timeframe.
4	Confirm measuring devices (thermo-hygrometer, IR thermometer, depth probe/calipers) have calibration within 12 months; photograph calibration tags; acceptance: valid calibration dates recorded.

Substrate Preparation

5	Measure joint width and alignment with digital calipers over 1 m segments; acceptance: width uniform within ± 2 mm; record five readings minimum per elevation and attach photos.
6	Clean joint flanks by vacuum and oil-free compressed air; perform white-cloth wipe test; acceptance: no visible dust transfer; evidence: before/after photos and wipe cloth image.
7	Check substrate moisture and temperature; acceptance: substrate temperature ≥ 3 °C above dew point, ambient 5–40 °C; record RH %, ambient/substrate temps, and dew point calculations.
8	Confirm primer requirement from manufacturer; if required, mask edges and apply with brush/dauber; acceptance: continuous, uniform film; observe minimum/maximum recoat window; photo evidence with timestamps.

Backer Rod Installation

9	Select compatible backer rod (closed/open-cell as specified); acceptance: diameter 25–50% larger than joint width; evidence: packaging photos and measured sample with calipers.
10	Install backer rod using roller/probe without stretching; acceptance: compression 25–35%, uniform depth within ± 2 mm; record probe depth readings at 1 m intervals.
11	Prevent three-sided adhesion; where depth is insufficient for rod, install bond breaker tape; acceptance: continuous tape coverage; evidence: macro photos before sealant placement.
12	At corners and transitions, butt-join backer rod without gaps; acceptance: no overlaps, no tears, continuous support; evidence: close-up photos at each corner.

Sealant Application	
13	Verify sealant within shelf life and properly conditioned; acceptance: no skinning, separation, or granularity; evidence: batch numbers, expiry, and cartridge/nozzle photos.
14	Mask edges to control bead width; gun sealant from deepest point outward to avoid trapping air; acceptance: filled void-free; evidence: in-process photos showing continuous flow.
15	Tool bead within open time using a rounded tooling stick; acceptance: concave profile, two-sided adhesion only, surface free of pinholes; bead width ± 2 mm; depth per manufacturer (typically 2:1 width:depth, max 12 mm).
16	Remove masking before skin forms; acceptance: clean arrises with no smearing; evidence: photo sequence of tape removal and finished edge.

Detailing & Interfaces	
17	Verify continuity at mullion end dams, spandrels, and anchor penetrations; acceptance: uninterrupted seal with water-shedding laps ≥ 10 mm; macro photos required.
18	Check movement joints: clear of debris/restraints and sized for design movement; acceptance: sealant movement class meets design; evidence: design note and product label photo.
19	Confirm compatibility at dissimilar materials; apply required primers/bond breakers; acceptance: no staining/bleed; evidence: manufacturer compatibility letter or data sheet excerpt.

Quality Assurance & Records	
20	Perform simple field adhesion verification per manufacturer method; acceptance: predominantly cohesive failure ($\geq 90\%$) or per specification; evidence: cut/peel test photos and notes.
21	Log ambient and substrate conditions at start, mid, and end of shift; acceptance: within manufacturer limits throughout; attach instrument screenshots or readings.
22	Identify and mark defects: voids, bubbles, sags > 2 mm in 300 mm; rework per manufacturer; evidence: punch-list with before/after photos.
23	Verify cure after 24–72 h using thumb-twist/needle probe; acceptance: tack-free and firm per data sheet; record time-to-cure and photos.
24	Complete sign-off with digital signatures; archive checklist, photos, lot data; export PDF/Excel and share QR-authenticated link.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Inspect curtain wall perimeter sealant and backer rod installation with a structured, field-ready approach that controls risk and documents outcomes. This checklist focuses on perimeter joints at curtain wall interfaces, including weatherseal continuity, silicone or hybrid sealants, polyethylene backer rod, primer requirements, and bond breaker tape where needed. You will verify substrate readiness, joint geometry, movement capability, and correct two-sided adhesion to prevent leaks, staining, premature failure, and air or water infiltration. Clear acceptance cues, measurable tolerances, and photo evidence help avoid rework while aligning with manufacturer instructions and per approved project specifications and authority requirements. Use this guide during pre-closure inspections, progressive checks, and final punch-walks to confirm sealant depth, bead finish, and interface detailing at corners, end dams, and penetrations. Start in interactive mode, tick each step, add comments for nonconformities, and attach photos, readings, and lot data. When complete, export your commentable report as PDF/Excel and share a QR-secured link.</p>	<p>1. Preparation: Gather drawings, approved submittals, manufacturer data sheets, and mock-up results. Bring thermo-hygrometer, IR thermometer, calipers/depth probe, vacuum, oil-free air, masking, primers, backer rod, and PPE (gloves, eyewear, fall protection). Confirm access equipment is safe and tagged. 2. Using the Interactive Checklist: Open the project, start interactive mode, and select the area/elevation. Tick items as you inspect, attach photos and readings, and reference lot numbers. Add comments for nonconformities and assign actions with due dates. 3. Capture Evidence: Record ambient/substrate conditions at intervals, log measurements, and photograph critical interfaces (corners, penetrations, end dams). Include packaging labels, calibration tags, and close-ups of bead profile and primer coverage. 4. Resolve Nonconformities: Use comments to request corrective actions, re-inspect after rework, and link before/after photos. Note acceptance criteria met (tolerances, continuity, adhesion) and update status to closed. 5. Sign-Off: Obtain digital signatures from installer, inspector, and GC/owner rep. Export the commentable report as PDF/Excel and distribute the QR-authenticated link for archiving and authority review.</p>