



Test Façade Bracket Proof Loading & Deformation Acceptance

Test façade bracket proof loading and deformation acceptance with an interactive checklist—commentable steps, on-site evidence capture, and quick export as PDF/Excel for approvals and compliance.

Project:

Date:

Filled by:

Pre-Test Controls & Approvals

1	Confirm latest approved drawings, bracket model/capacity, and test location match the submittal; record drawing number, bracket ID, and location tag; attach identifying photos. Acceptance: matches approved project specifications and location plan.
2	Verify substrate strength/condition via recent compressive tests, pull-out data, or inspection report; note report ID and date; attach document. Acceptance: substrate capacity and condition per approved project specifications.
3	Check anchor type, diameter, embedment, and spacing against submittal; record anchor lot/batch numbers; capture borescope or depth gauge photo of embedment. Acceptance: anchors as specified with required embedment.
4	Confirm approved risk assessment, method statement, and work permit are in force; record approval references and expiry; obtain supervisor signature. Acceptance: documents approved and valid.
5	Establish exclusion zone, edge protection, and fall arrest where required; place barriers and warning signage; photograph setup. Acceptance: controlled area maintained for full test duration.

Instrumentation & Calibration

6	Verify hydraulic jack and load cell capacity exceed target proof load; check calibration certificates are within validity; attach certificates. Acceptance: calibration current per approved project specifications.
7	Inspect and zero LVDTs/dial gauges; confirm range and resolution adequate for expected displacement; secure mounts; attach zero reading photo. Acceptance: instruments zeroed and stable.
8	Set up data logger with synchronized time and sample rate suitable for the test (e.g., ≥ 1 Hz); verify storage; capture setup screenshot. Acceptance: logger operational with sufficient memory.
9	Perform a dummy load check ($\approx 5\text{--}10\%$ target) to confirm stable readings; record load and displacement trace; attach photo or plot. Acceptance: stability within acceptable range per approved project specifications.

Test Setup & Fixture Installation

10	Install reaction frame/rig aligned with the bracket's load axis; verify with digital level/laser; photograph alignment. Acceptance: misalignment within allowable tolerance per approved project specifications.
11	Protect adjacent façade elements with pads/blankets and isolate finishes from rig contact; document protection. Acceptance: no direct contact or abrasion risk to finishes.
12	Attach approved adapter to the bracket without introducing eccentricity; tighten using calibrated torque wrench; record torque applied and adapter ID; photo. Acceptance: full seating and torque within specified range.
13	Install two displacement gauges (primary and orthogonal) to capture vertical and lateral movement; record gauge positions and gauge length; photo. Acceptance: rigid mounting with no slippage.
14	Seat the system by applying a small preload, then zero all instruments; record baseline over 60 s; attach baseline screenshot. Acceptance: baseline drift within acceptable limit per approved specifications.

Proof Load Application

15	Increase load in 25% increments up to target proof load; hold each increment for ≈ 60 s; log load and displacement continuously. Acceptance: no sudden slips or abnormal jumps observed.
16	At target proof load, maintain a sustained hold per approved project specifications (record duration); document stable load within tolerance; capture gauge/plot photo. Acceptance: target maintained without distress.
17	Continuously observe bracket, anchors, and substrate for cracks, rotation, or audible distress; photograph close-ups at each increment and at peak. Acceptance: no visible damage or rotation beyond limits.
18	If displacement trend exceeds predefined alarm threshold, stop loading and unload safely; record reason, maximum load, and readings; notify engineer. Acceptance: no exceedance of alarm threshold per specifications.
19	Confirm load path does not transfer unintended forces to adjacent panels or fixings; add strain markers or auxiliary gauges if required; photo. Acceptance: no unintended load transfer evidenced.

Deformation Measurement & Acceptance

20	After unloading to zero, record permanent set relative to baseline; document average of final readings; attach photo of gauge. Acceptance: permanent deformation within permissible limit in approved project specifications.
21	Extract maximum displacement at each increment and at proof load from logger; attach data file and plot. Acceptance: transient displacement within serviceability limits per approved specifications.
22	Verify achieved peak load versus target proof load; record peak value and percentage; cross-check with calibrated device certificate. Acceptance: $\geq 100\%$ of target without failure.
23	Record ambient conditions (temperature, humidity, wind) and time of test; note any factors affecting readings; attach weather screenshot. Acceptance: conditions within ranges allowed by specifications.

Post-Test Restoration & Records	
24	Retighten bracket fasteners to specified torque using calibrated wrench; record torque values and tool ID; photo of wrench reading. Acceptance: torque within specified range; no fastener damage.
25	Remove rig; reinstate protections, sealants, and finishes; clean area; take post-test close-up photos. Acceptance: no damage or staining to façade elements.
26	Label bracket with Accepted/Rejected status and unique test ID; affix QR linking to report; photograph label in place. Acceptance: label durable and scannable.
27	Compile report with photos, plots, readings, calibration certificates, and signatures; upload to project system; share with stakeholders. Acceptance: approvals captured per approved project specifications and authority requirements.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
Test façade bracket proof loading and deformation acceptance verifies that installed façade support brackets can safely sustain their specified proof load with acceptable displacement and no damage. This on-site proof load test, sometimes called façade anchor testing or in-situ bracket verification, combines controlled loading with precise deformation measurement to deliver clear pass/fail outcomes. The checklist focuses on a single bracket assembly at a time, covering pre-test verification, instrumentation setup, load application, deformation capture, acceptance review, and post-test restoration. By maintaining alignment, recording actual loads, and monitoring displacements, you avoid hidden overstress, cracked substrates, slipped anchors, and untraceable results. Successful execution provides defensible evidence for quality assurance and compliance per approved project specifications and authority requirements. Use this interactive checklist to tick each step, add comments for any deviations, and export your complete record as PDF/Excel with an embedded QR code for authenticated sharing.	1. Preparation: assemble hydraulic jack, load cell, gauges/LVDTs, data logger, torque wrench, adapters, protection pads, PPE, approvals, and current drawings. Verify calibrations and ensure safe access with exclusion zones and edge protection. 2. Open the interactive checklist on your device, select the project and test location ID, and scan or attach calibration certificates and method statement for quick reference during execution. 3. Execute each step in sequence, ticking items as you complete them. Enter measured loads/displacements, add time-stamped photos, and use comments to note deviations or site conditions affecting results. 4. Use the progress view to confirm no required fields are missing. Request immediate supervisor or consultant input through tagged comments before moving to the next phase. 5. Generate an export as PDF/Excel including photos, plots, calibration certificates, and location metadata. Review the document on-screen with stakeholders and correct any gaps before sign-off. 6. Capture digital signatures from contractor, quality manager, and consultant. The system locks the record and associates it with the unique test ID for traceability. 7. Archive the signed report in the project system and apply the QR code label at the bracket. Anyone can scan to authenticate the record and view the final status.