



Test Façade Mock-Up for Interstory Drift & Recovery

Test façade mock-up for interstory drift accommodation and recovery with an interactive checklist that is commentable and can export as PDF/Excel. Capture evidence and sign off.

Project:
Date:
Filled by:

Pre-Test Documentation & Setup

1	Upload approved protocol and define test responsibilities.
2	Confirm drift ratios (serviceability and ultimate) per approved project specifications and authority requirements; record target ratios (e.g., $\pm 1.5\%$ and $\pm 2.5\%$) and corresponding lateral displacements in millimetres.
3	Verify mock-up frame and strong floor capacity; attach engineer sign-off and photographic evidence of reaction frame anchors and torque markings.
4	Hold pre-test briefing covering safety zones, stop criteria, and communication; record attendee signatures and emergency stop (E-stop) locations.

Instrumentation & Calibration

5	Install LVDTs or laser displacement sensors at drift control points; verify sensor range exceeds 120% of peak displacement; upload installation photos.
6	Calibrate displacement sensors to ± 0.5 mm or better using a traceable gauge block; attach calibration certificates and zero-offset readings.
7	Set data logger sampling rate ≥ 10 Hz; verify time sync across devices to ± 0.1 s; capture screenshot of configuration.
8	Verify actuator stroke, load cell capacity, and rate control; document maximum planned drift speed (e.g., 10–20 mm/s) and perform dry-run to 25% target.

Mock-Up Assembly & Baseline Survey

9	Confirm glazing, gaskets, anchors, and sealants are installed per shop drawings; record batch/lot numbers and curing times for sealants and gaskets.
10	Measure baseline plumb, level, and joint gaps at critical locations with a steel rule/laser; log values (± 1 mm) and upload photos with labels.
11	Mark reference targets on mullions/transoms for visual tracking; apply non-residue tape with unique IDs; photograph each tag in situ.
12	Inspect fastener torques with a calibrated torque wrench; record applied torques and witness-mark fasteners; upload torque tool certificate.

Test Execution: Drift Cycling

13	Execute serviceability drift cycles to the first target ratio; hold at peak for 10–30 s; log peak displacement and actuator force vs. time.
14	During peak displacement, inspect glazing bite and gasket seating using feeler gauges; record minimum bite (mm) and note any disengagement.
15	Return to zero displacement; measure residual offsets at reference targets with a steel rule (± 1 mm); record values and photos.
16	Repeat bidirectional cycles per protocol (e.g., three cycles at each ratio); confirm rate control within $\pm 10\%$ of set speed.
17	Advance to ultimate drift ratio if acceptance met and no stop criteria triggered; capture high-resolution video at ≥ 25 fps for critical joints.

Post-Test Inspection & Recovery

18	After final cycle, allow a 10–15 min recovery period; re-measure plumb/level and joint gaps; record residual drift (mm and % of span).
19	Inspect anchors, brackets, and slip details for permanent deformation or binding; capture close-up photos with scales and note free movement evidence.
20	Check sealant and gasket continuity under magnification; note tears, cohesive/adhesive failures; tag locations on a damage map drawing.
21	Verify operable elements (if included) cycle once post-test; record force-to-operate (N) and note rubbing or misalignment with photos.

Reporting & Sign-Off

22	Export synchronized drift data (CSV) and embed photo/video references with timestamps; attach all calibration certificates and pre-test approvals.
23	Complete acceptance checklist against criteria per approved project specifications and authority requirements; record pass/fail with justifications and signatures.
24	Issue final report with QR-authenticated link to the evidence archive; distribute to client, designer, and contractor representatives.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Test façade mock-up for interstory drift accommodation and recovery establishes a rigorous, field-proven process to verify that curtain wall and cladding assemblies tolerate seismic drift and racking test demands, then return to serviceable alignment. This checklist focuses on mock-up configuration, displacement instrumentation, drift cycling, residual offset measurement, and recovery assessment without delving into unrelated air or water tests. It supports serviceability and ultimate drift ratios, drift cycling rates, and careful observation of glazing, anchors, gaskets, and seals during and after imposed movement. By emphasizing traceable calibrations, synchronized data capture, photographic evidence, and acceptance cues per approved project specifications and authority requirements, teams reduce the risk of brittle failures, glazing fallout, or unsealed joints in real events. The outcome is defensible evidence that the façade can accommodate interstory drift and recover functionally. Use this interactive checklist to assign tasks, tick completions, add comments, and export as PDF/Excel with a secure QR for audit.</p>	<ol style="list-style-type: none"> 1. Preparation: Gather protocol, shop drawings, calibrated sensors, torque tools, data logger, cameras, and PPE. Confirm strong floor availability, actuator capacity, and specimen readiness with documented approvals. 2. Assign Roles: Add team members as collaborators, set due dates, and define approval workflows for instrumentation, execution, inspection, and reporting. 3. Using the Interactive Checklist: Start interactive mode, tick items as completed, attach photos/videos and files, and add time-stamped comments at each step. 4. Data Capture: Upload calibration certificates, drift logs (CSV), and measurement sheets. Use consistent naming and tag evidence to item IDs for traceability. 5. Review: Filter any open comments, resolve conflicts, and verify all acceptance criteria are addressed before proceeding to sign-off. 6. Sign-Off: Collect digital signatures from responsible parties. Generate a summary with pass/fail notes and embedded evidence links. 7. Export & Archive: Export as PDF/Excel and share. Verify the QR authentication link opens the evidence archive for audit.