



# Façade smoke-control interface review with life-safety

Review façade smoke-control interface requirements with life-safety systems using an interactive checklist that is commentable and can export as PDF/Excel.

Project:
Date:
Filled by:

## Design and Coordination

1	Verify latest coordinated drawings (IFC, single-line, schematics) match façade smoke-control scope using a document matrix; acceptance: current revision stamped; evidence: revision numbers, approval stamps, and photos of title blocks.
2	Confirm approved cause-and-effect matrix linking fire alarm events to façade actuators using a cross-discipline workshop; acceptance: matrix signed by stakeholders; evidence: signed PDF and meeting minutes.
3	Check interface points list (I/O schedule) for unique tag IDs using a controlled register; acceptance: 100% unique labels, no duplicates; evidence: exported CSV and redlined drawings.
4	Validate responsibilities and response times in a RACI for alarm, command, power, and resets via coordination meeting; acceptance: RACI approved; evidence: signed attendance sheet and issued RACI.
5	Review specification sections for façade actuators, cabling, and interfaces; acceptance: requirements referenced consistently across trades per approved project specifications and authority requirements; evidence: excerpted spec pages and cross-reference log.

## Electrical and Controls Interfaces

6	Verify fire alarm to façade interface relays are dry-contact or supervised as specified using a multimeter; acceptance: correct contact type and rating labeled; evidence: meter readings and relay datasheets.
7	Confirm control wiring polarity, shielding, and segregation from power using visual inspection and continuity tests; acceptance: insulation resistance $\geq 1 \text{ M}\Omega$ at 500 VDC; evidence: IR test logs and cable label photos.
8	Check BACnet/Modbus object mapping between BMS and façade controller with a network scan; acceptance: unique IDs, correct priorities; evidence: screenshots of point lists and trend snapshots.
9	Verify emergency power supply to façade actuators from designated life-safety feeders via panel schedule review; acceptance: correct circuit and breaker labeling; evidence: panel schedule excerpt and equipment photos.
10	Test loss-of-power behavior by isolating supply using a lockable switch; acceptance: device moves to specified safe position within $\leq 60 \text{ s}$ ; evidence: time-stamped video and event log.
11	Validate end-switch feedback from actuators to fire alarm/BMS using a loop tester; acceptance: status changes within specified delay; evidence: alarm history printout and BMS trend.

Mechanical and Smoke Movement	
12	Measure effective smoke vent free area with a tape and manufacturer factors; acceptance: within $\pm 5\%$ of design; evidence: measurement photos and calculation sheet.
13	Confirm actuator force/torque suitability using a calibrated pull scale or torque tool; acceptance: measured values within submittal range; evidence: readings and actuator nameplate photo.
14	Function-test airflow direction using an anemometer and smoke puffer at openings; acceptance: outward flow per design intent; evidence: video, anemometer readings in m/s.
15	Trigger local smoke detection and verify façade opening sequence using approved test gas or magnet; acceptance: signal receipt $\leq 5$ s and correct actuation order; evidence: alarm console timestamps and photos.
16	Coordinate with pressurization systems to achieve specified differential pressure using calibrated manometers; acceptance: pressure meets design setpoint in Pa; evidence: recorded readings and trend plots.

Power and Fail-Safe	
17	Load-test UPS/backup power feeding façade actuators using a resistive load or controlled cycling; acceptance: autonomy supports required stroke cycles; evidence: test duration logs and UPS screenshots.
18	Verify firefighter override and local emergency stops using panel keyswitch tests; acceptance: override has top priority and clear indication; evidence: photos and event records.
19	Inspect cable type, fire rating, and routing for protected paths using visual checks; acceptance: markings match specification; evidence: sheath marking photos and route sketches.
20	Check earthing and bonding continuity for actuator enclosures using a low-ohm meter; acceptance: resistance $\leq 0.5 \Omega$ ; evidence: test sheet and tag numbers.

Testing and Commissioning	
21	Complete pre-functional tests for each façade opening using manufacturer checklists; acceptance: all items pass; evidence: signed pre-functional forms and photos.
22	Run integrated scenario tests (alarm, power loss, reset) using scripted procedures; acceptance: sequence and timings per approved project specifications and authority requirements; evidence: video, trend logs, and sign-offs.
23	Verify alarm annunciation, fault reporting, and reset logic at panels; acceptance: clear messages and reset without unintended actuation; evidence: panel screenshots and alarm reports.
24	Validate BMS trends for key points (commands, feedback, pressures) using 1–10 s intervals; acceptance: accurate timestamps and units; evidence: exported CSV and plotted charts.
25	Check environmental and wind interlocks do not inhibit emergency opening using simulated inputs; acceptance: emergency priority overrides normal interlocks; evidence: test script and controller logs.
26	Confirm restoration to normal after all-clear using timed reset; acceptance: devices return to normal within specified period; evidence: timestamps and BMS status screenshots.

Documentation and Handover	
27	Update as-built drawings and point lists reflecting final tag IDs and wiring; acceptance: revision issued; evidence: PDF/DWG files and transmittal.
28	Compile O&M; manuals including actuator datasheets, maintenance intervals, and test procedures; acceptance: index complete; evidence: table of contents and file links.
29	Prepare for authority witnessing with a closed punch list; acceptance: all actions cleared; evidence: signed pre-witness checklist.
30	Affix durable QR labels to devices linking to this checklist; acceptance: scannable on-site; evidence: scan test screenshots and label photos.

**Comments:**

Filled by:

Signature:

Introduction	How to use this checklist
<p>Review façade smoke-control interface requirements with life-safety systems is essential to ensure that façade actuators, smoke vents, and controls operate in lockstep with fire alarm and building management system logic. This checklist focuses on the integration of façade smoke control, curtain wall automation, and life-safety interfaces, including BMS integration and emergency power strategies. It does not cover structural façade performance or detailed HVAC design; instead, it validates the interface points, cause-and-effect sequences, and evidence needed for commissioning and authority acceptance. By applying clear acceptance criteria—signal timings, pressure outcomes, and fail-safe behaviors—you reduce false releases, conflicting priorities, and unsafe pressure regimes that jeopardize egress. The result is a coordinated, documented pathway from design intent to witnessed performance, per approved project specifications and authority requirements. Use this interactive resource to tick items, attach photos and readings, add comments for clarifications, and export your record as PDF/Excel with embedded QR links for quick field verification.</p>	<p>1. Preparation: gather approved drawings, cause-and-effect matrix, I/O schedules, calibrated tools (multimeter, manometer, anemometer, pull scale), PPE, and confirm outage windows and permits. 2. Open the checklist in interactive mode, select project and area, and preload device tag IDs to align with labels in the field. 3. Execute tests step-by-step; tick items as completed, add time-stamped comments, and attach photos, readings, and screenshots as evidence. 4. Use comment threads to resolve clashes with stakeholders; mention responsible parties and link to meeting minutes or revised matrices. 5. Export the record as PDF/Excel, including photos and logs, then share via QR code for quick onsite retrieval and verification. 6. Sign-Off: capture digital signatures from contractor, commissioning agent, and owner; archive the signed package in the project repository.</p>