



Review façade material compatibility before design release

Review façade material compatibility before design release with our interactive checklist; fully commentable and ready to export as PDF/Excel for compliant, durable façades.

Project:

Date:

Filled by:

Metals and Finishes Compatibility

1	Review all contacting metals against a galvanic series for the project environment; method: compatibility matrix and exposure category assessment; acceptance: dissimilar metals isolated with non-conductive separator ≥ 1 mm; evidence: signed matrix, detail markups, separator product datasheet.
2	Confirm anodized aluminium is not in contact with wet cementitious materials; method: detail review and finish schedule; acceptance: separation tape or primer specified at all interfaces; evidence: annotated drawings and manufacturer guidance excerpt.
3	Calculate differential movement from thermal expansion for $\Delta T = 60$ K; method: CTE-based movement calculation; acceptance: joints/slides accommodate calculated movement + 10% margin; evidence: calculation sheet with reviewer signature.
4	Verify stainless steel fasteners with aluminium panels avoid bimetallic attack; method: fastener schedule review; acceptance: A2/A4 stainless with isolating washers or sleeves; evidence: fastener specification highlight and supplier compatibility letter.

Sealants, Gaskets, and Adhesives

5	Confirm sealant-to-substrate adhesion and staining resistance; method: manufacturer lab data or field adhesion test on actual substrates; acceptance: adhesion ≥ 0.7 MPa, no staining after 14 days; evidence: test report and labeled test photos.
6	Identify required primers and verify compatibility with finishes; method: datasheet cross-check; acceptance: primer type and application window documented by lot number; evidence: datasheets, primer lot records, and application notes.
7	Check joint design vs sealant movement capability; method: joint sizing calculation for -10 to 40 °C; acceptance: in-service joint width at 20–80% of nominal; evidence: calculation summary and detail references.
8	Verify gasket material with UV and temperature exposure; method: datasheet review for EPDM/silicone; acceptance: UV resistant ≥ 10 years, service -30 to 80 °C; evidence: manufacturer declaration and cut sheet.
9	Confirm adhesive compatibility with insulation and membranes; method: solvent and plasticizer check; acceptance: solvent-free when contacting polystyrene, peel strength ≥ 1.0 N/mm; evidence: lab data and adhesive selection record.

Membranes, Insulation, and Moisture Control

10	Prevent plasticizer migration between bituminous membranes and elastomers; method: material pairing review; acceptance: separation fleece ≥ 200 g/m ² specified; evidence: detail markup and product datasheet.
11	Size vapour control layer to avoid interstitial condensation; method: hygrothermal calculation; acceptance: Sd value documented with seasonal profiles; evidence: calculation summary signed and referenced on drawings.
12	Verify insulation and cavity barriers are part of a tested compatible assembly; method: system matching; acceptance: manufacturer evidence of tested combination for substrates and fixings; evidence: system letter and classification reports.
13	Check thermal break plates at brackets for chemical and thermal stability; method: datasheet review; acceptance: no softening at 80 °C, water absorption per datasheet limits; evidence: product data and calculation reference.
14	Confirm façade tapes with anodized aluminium; method: adhesive system check; acceptance: acrylic-based tapes only, overlap ≥ 100 mm, pressure-rolled; evidence: tape datasheet and detail note.

Fire, Smoke, and Thermal Performance

15	Validate firestop sealants/boards with adjacent substrates; method: manufacturer tested configuration review; acceptance: same substrate types and joint sizes as tested; evidence: test certification and assembly identification.
16	Confirm insulation reaction-to-fire when bonded or coated; method: classification review; acceptance: A1/A2 where required, adhesives/coatings do not downgrade rating; evidence: classification report and compatibility note.
17	Check intumescent materials with adjacent paints and sealants; method: aging compatibility review; acceptance: no plasticizer leaching, no tack after 168 h at 70 °C; evidence: lab data or manufacturer letter.
18	Assess dark coatings on thin aluminium for thermal effects; method: solar gain simulation; acceptance: peak surface temperature ≤ 80 °C or design accommodates expansion; evidence: analysis screenshot and note.

Fasteners, Anchors, and Accessories

19	Verify sealing washers and EPDM with stainless steel; method: material compatibility check; acceptance: no sulfur bloom or embrittlement; evidence: manufacturer compatibility statement and sample photos.
20	Control contact corrosion at anchors into carbon steel; method: coating specification review; acceptance: hot-dip galvanizing ≥ 85 μ m or stainless steel; evidence: coating certificates and inspection plan.
21	Isolate brackets from treated timber or wet mortar; method: interface detailing; acceptance: non-absorbent shim ≥ 2 mm continuous; evidence: detail markup and product cut sheet.

Documentation and Approvals	
22	Compile datasheets, SDS, compatibility letters, and calculation outputs; method: controlled folder index; acceptance: filenames standardized, links on drawings; evidence: exported index PDF and repository link per approved project specifications and authority requirements.
23	Complete material pairings matrix covering 100% of façade details; method: cross-reference by detail ID; acceptance: no gaps; evidence: signed matrix PDF attached to design release.
24	Hold design release gate review; method: multidisciplinary sign-off meeting; acceptance: checklist 100% complete, actions closed, approvals recorded; evidence: digital signatures and QR-authenticated export.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
Review façade material compatibility before design release is the critical gate that prevents costly rework and premature failures. This façade materials compatibility check focuses on how metals, sealants, gaskets, membranes, coatings, and fixings interact across the envelope. By conducting a thorough envelope interface review before drawings are frozen, teams mitigate galvanic corrosion, chemical attack, plasticizer migration, staining, loss of adhesion, and thermal or moisture traps. The checklist targets cladding system compatibility at contact points, bonded joints, interfaces with fire-stopping, and transitions to glazing and roofing. It standardizes evidence from manufacturer guidance, lab data, and calculations, ensuring selections meet performance criteria per approved project specifications and authority requirements. Outcomes include durable assemblies, fewer RFIs, faster submittal approvals, and a clear audit trail for sign-off. Use this interactive tool to assign actions, attach photos, record product data, and capture approvals. Start in interactive mode to tick, add comments, and export PDF/Excel with a QR-secured record.	1. Preparation: Gather drawings (elevations, sections, details), finish schedules, product datasheets, SDS, manufacturer compatibility letters, movement and hygrothermal calculations, and exposure category notes. 2. Preparation: Assign roles for metals, sealants, membranes, fire, and fixings; set review deadlines aligned to the design release gate. 3. Using the Interactive Checklist: Start interactive mode, select a detail ID, tick items as verified, and attach evidence (photos, calculations, letters). 4. Using the Interactive Checklist: Add comments to flag risks, request vendor confirmations, or document agreed isolators, primers, and joint dimensions. 5. Using the Interactive Checklist: Filter by grouping (e.g., Sealants, Membranes) to track closure rates and assign corrective actions with due dates. 6. Sign-Off: When 100% complete, capture digital signatures from the façade engineer, architect, and QA lead; export to PDF/Excel with a QR-authenticated record. 7. Sign-Off: Distribute the export to stakeholders and archive with the drawing issue set for traceable, auditable design release.