



Procurement & Direct Sourcing Center · China
Foshan · Guangzhou · Shenzhen

Field Sourcing & Inspection Checklist for Aluminium Composite Panels (ACP)

A comprehensive 25-point technical audit and quality compliance document for project managers and engineers before cargo dispatch.

Project Name:	_____	Supplier / Factory:	_____
Location / City:	Foshan / Guangdong, China	Inspection Date:	____ / ____ / 2026
Purchase Order (PO):	_____	Lead Inspector:	_____

Stage 1: Factory Audit & Legal Commercial Verification

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
1	Unified Social Credit Code (USCC) Verification: Check the business license on China's NECIPS database to confirm "Manufacturing" status, ensuring they are an actual factory and not a trading broker.	☐	☐	
2	Physical Factory Location Check: Use Baidu Maps satellite imagery and match official registration records with the actual site of extrusion and PVDF coating lines in Foshan/Nanhai.	☐	☐	
3	Quality Management System Check: Verify the validity of ISO 9001:2015 registration on the IAF CertSearch global database under the registered manufacturer's name.	☐	☐	
4	In-House Production Capabilities: Confirm the manufacturer possesses a continuous PVDF coating line and	☐	☐	

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
	in-house aluminum skin extrusion facilities to secure full control over raw material quality and colors.			

Stage 2: Technical Specifications & Product Quality Check

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
5	Individual Aluminium Skin Thickness: Measure front and back aluminum layer thicknesses using a micrometer to verify they meet the 0.40mm or 0.50mm specification (avoiding 0.30mm for exterior use).	☐	☐	
6	Total ACP Sheet Thickness: Inspect that the composite sheet's total thickness is precisely 4.0mm (or 6.0mm for custom structural orders) with a tolerance limit of ± 0.1 mm.	☐	☐	
7	Aluminium Alloy Grade Compliance: Inspect raw material mill test certificates to ensure the use of corrosion-resistant alloys AA3003 or AA5005 rather than unstable recycled scrap.	☐	☐	
8	Front Protective Coating (Fluorocarbon PVDF): Verify 2-layer or 3-layer PVDF coating system application (dry film thickness ≥ 25 microns) to secure long-term color and UV stability.	☐	☐	
9	Color Code & RAL Matching: Inspect panel colors under a standardized D65 daylight source box to confirm a 100% exact match to the approved project RAL/Pantone color card.	☐	☐	
10	T-Bend & Coating Flexibility Test: Perform field 180-degree bending tests on random samples to confirm that no cracking, crazing, or paint peeling occurs on the outer surface.	☐	☐	

Stage 3: Fire Resistance & Local GCC Building Codes Compliance

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
11	Core Material Fire Rating (Core Type): Verify the use of mineral-filled fire-retardant cores classified as A2 or B1 (FR Core) for structural mid/high-rise builds; prohibit standard flammable PE cores.	☐	☐	
12	Accredited Fire Test Reports: Check actual fire laboratory certificates issued by third parties (such as SGS, Intertek, or Exova) under EN 13501-1 (A2-s1, d0) or ASTM E84 / NFPA 285 standards.	☐	☐	
13	Saudi SABER Portal Compliance: Ensure the factory completes all necessary Product Certificate of Conformity (PCoC) and Shipment Certificate of Conformity (SCoC) requirements inside the Saudi Customs platform.	☐	☐	
14	GCC Civil Defence Approvals: Confirm the product brand and the specific factory site are registered and officially approved by civil defense authorities in the target market (e.g., UAE, Qatar, Kuwait).	☐	☐	

Stage 4: Technical Quality Control During Production

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
15	Surface Integrity Visual Inspection: Check the entire batch for any surface irregularities, blistering, scratching, dents, pinholes, ripples, or chromatic deviations.	☐	☐	
16	Peel Strength Adhesion Test: Conduct a 180-degree peel strength test to ensure the adhesion level between the aluminum skin and the mineral core meets ASTM D903 standards (≥ 7.0 N/mm).	☐	☐	
17	Protective Film Specifications: Check that a high-density protective plastic peel-off film (thickness ≥ 80 microns) is	☐	☐	

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
	applied to the front face to secure panels from installation damages.			
18	Dimensional Length and Width Accuracy: Randomly measure batch sheet sizes to verify dimensions match the technical drawing (acceptable variance: Length $\pm 3\text{mm}$, Width $\pm 2\text{mm}$ max).	☐	☐	
19	Diagonal Squareness Tolerance: Ensure the sheet's diagonal measurements are balanced and within standard limits (maximum diagonal deviation $\leq 5\text{mm}$) to guarantee clean structural installation.	☐	☐	

Stage 5: Packaging, Palletization & Sea Shipping Safety

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
20	Wooden Crates & Palletization Quality: Secure panels inside fully enclosed, heavy-duty wooden crates lined with structural foam and cardboard edge guards; avoid loose sheet packaging.	☐	☐	
21	Fumigation Certificates & IPPC Seal: Verify that all wooden pallets and packing materials contain visible IPPC stamp marks indicating proper heat-treatment/fumigation.	☐	☐	
22	Shipping Mark and Crate Labelling: Affix clear, water-resistant shipping labels on all sides of the crates detailing client ID, container number, color codes, dimensions, and total pieces.	☐	☐	
23	Moisture and Vapor Barriers: Seal wooden boxes with complete heavy-gauge plastic film wraps to secure panels from moisture or salty air oxidation inside the shipping container.	☐	☐	

#	Technical Audit & Inspection Item	Verified	Defect	Inspector's Field Notes
24	Container Loading & Security Lashings: Balance the weight of crates evenly inside the container and apply robust steel/nylon bindings to secure crates from moving during ocean transport.	☐	☐	
25	Independent Pre-Shipment Inspection (PSI): Ensure a third-party audit agency (such as SGS or Bureau Veritas) conducts final on-site batch verification before clearing the final 70% payment.	☐	☐	

Inspector's Declaration and Field Sign-off

We, the undersigned field inspectors and quality auditors, declare that we have performed all field tests, visual inspections, and dimension verifications on random samples in strict compliance with AQL sampling standards. Based on the findings, we recommend:

- ☐ **Approved for Dispatch:** The inspected batch complies with all project drawings and technical requirements. Export process can proceed.
- ☐ **Conditionally Approved:** Minor correctable defects found as noted above. Factory must rectify and provide picture confirmation before loading.
- ☐ **Rejected:** Major non-compliance detected. Factory must reproduce/replace the defective sheets and submit for a complete re-inspection.

Authorized Quality Inspector (On behalf of Client):

Name: _____

Signature: _____

Factory Quality Representative (China Factory):

Name: _____

Signature & Seal: _____