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Maintenance & Cleaning Guide

PVDF-coated aluminium cladding panel systems



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PVDF-Coated Aluminium Cladding Panel Systems

Applies to: all ALUCOSUN cladding panel products

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ALUCOSUN panels are finished with PVDF or polyester coatings engineered for low-maintenance facade applications. Regular inspection and cleaning help preserve appearance, support long-term coating performance, and identify water ingress, joint failure, pollution deposits, or other building maintenance issues at an early stage.

This guide applies to ALUCOSUN aluminium composite panels, A2 core panels, 3D lattice core panels, and aluminium solid panels. Actual maintenance practice should consider project location, pollution exposure, building height, and the owner's maintenance programme.



2. Recommended Inspection Schedule

Activity	Frequency	Purpose
Visual inspection	Annual	Identify staining, damage, and joint failure
Panel surface cleaning	Annual minimum	Remove dirt and pollutants
Sealant inspection	Annual	Check cracking, debonding, and ageing
Sub-frame and fastener check	Every 3 years	Identify corrosion, loosening, or abnormal movement
Full facade audit	Every 5 years	Prepare a comprehensive condition report

3. Standard Cleaning Procedure

3.1 Recommended Cleaning Agents

Agent	Dilution	Application	Notes
Warm soapy water	5% soap	Soft cloth / mop	Suitable for all surfaces
Mild alkaline detergent	pH 8-10	Brush or spray	Do not leave on surface over 10 minutes
IPA, isopropyl alcohol	Max. 25% in water	Spot treatment	Grease and adhesive residue
Dedicated PVDF cleaner	As directed	As instructed	Preferred for PVDF coatings



3.2 Cleaning Steps

- Rinse the panel surface with clean water to remove loose dirt and dust.
- Apply cleaning solution with a soft cloth, sponge, or low-pressure sprayer.
- Work from top to bottom in overlapping passes.
- Allow cleaner to dwell for 2-5 minutes; do not allow it to dry on the surface.
- Agitate gently with a soft brush for heavy soiling.
- Rinse thoroughly with clean water. Do not leave detergent residue.
- Dry-wipe with a clean microfibre cloth where water marks are unacceptable.

4. Prohibited Cleaning Methods & Materials

WARNING: Use of the following agents or methods may affect coating warranty eligibility and may cause irreversible damage.

- Abrasive cleaners, scouring pads, wire brushes, or metal brushes
- Bleach, chlorine, or hypochlorite solutions
- Concentrated acids, including HCl, HF, HNO₃, and similar products
- Strong alkalis, including NaOH or ammonia concentrations above 5%
- Strong organic solvents, including acetone, MEK, toluene, and paint thinner
- High-pressure washing above 80 bar
- Steam cleaning directly on coated surfaces
- Any cleaning agent not confirmed by the project maintenance team or ALUCOSUN

5. Specific Stain Treatments

Stain Type	Recommended Treatment	Do Not Use
Atmospheric dirt	Warm soapy water + soft cloth	Abrasives
Bird droppings	Warm water soak 5 minutes, then gentle wipe	Dry scraping
Graffiti	PVDF-safe pH-neutral graffiti remover	Strong solvents
Oil / grease	25% IPA solution + microfibre cloth	MEK, acetone
Rust stains	Oxalic acid 5% max.; rinse immediately	HCl, HF
Silicone sealant	Dedicated silicone remover	Metal tool scraping
Cement / mortar	Approved mild acidic cleaner; rinse immediately	Concentrated acid, HF
Adhesive residue	25% IPA + plastic scraper, then wipe	Metal tools

6. Damage Assessment & Repair

Minor scratches

For coating-only damage that does not reach the metal substrate, use colour-matched touch-up paint supplied or approved by ALUCOSUN. Clean the area, apply a thin coat, and cure according to paint instructions. Full panel replacement may be preferable in highly visible areas.

Deep scratches

If aluminium substrate is exposed, apply a suitable aluminium primer promptly to reduce oxidation risk, then apply colour-matched topcoat. Contact ALUCOSUN for replacement assessment if corrosion is observed.

Panel deformation or delamination

Do not attempt uncontrolled site repair. Record photographs and measurements, then contact ALUCOSUN technical team. Possible causes include incorrect fixing, over-restrained thermal movement, water ingress behind panels, or impact damage.

7. Warranty Maintenance Requirements

Failure to maintain panels according to this guide may affect coating warranty eligibility. Use of prohibited cleaning agents, prolonged retention of aggressive contaminants, or failure to address visible sealant failure within repeated maintenance cycles may be treated as warranty exclusions.

Keep a maintenance log recording cleaning date, agent used, observations, photographs, and remedial actions. ALUCOSUN may request this record when processing warranty claims.

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