

## Alesta AP, SD, UD

### Cleaning and Maintenance Guidelines

#### Introduction

Powder coated surfaces need to be cleaned and maintained regularly to ensure that the decorative and protective properties of the coating are retained over time.

If the coating is not cleaned properly - or is not cleaned on a regular basis - deposits are able to build up on the surface and prolonged contact could cause damage to the coating. This may include surface defects (such as corrosion) and loss of decorative effect (for example staining, chalking).

Correct cleaning is therefore essential to the long term performance of the coating and is a condition of Axalta Architectural Warranty.

#### Building and Component Design

Successful cleaning depends on component design, installation and ease of access:

- Coated components should not contain water or dirt traps
- Where possible, design should be optimized to reduce levels of soiling
- Water/dirt run-off across visually significant surfaces should be avoided
- Consideration should be given to ease of access for regular cleaning throughout the life of the coating

#### Cleaning of Powder Coated Surfaces

Normal cleaning should be carried out by regular washing with clean water containing a mild detergent:

- The surface to be cleaned should be cool, not hot (preferably below 25°C)
- Surfaces should be rinsed first with cold running water to remove grit and loose deposits
- Cleaning should be performed using a soft cloth or sponge
- The detergent should have a pH in the range of 5-8 and must be diluted and

used in accordance with the manufacturer's recommendations

- The temperature of the diluted detergent should not exceed 25°C
- The detergent should only be allowed to remain in contact with the coating for the minimum time necessary to enable effective cleaning. This should not exceed 1 hour
- Immediately after cleaning, the surface should be rinsed thoroughly with clean cold running water and then dried using a soft cloth
- Strongly acidic or alkaline cleaners must not be used
- Abrasive cleaners may cause scratching or other surface damage and must not be used under any circumstances
- Commercial cleaning agents may cause damage to the coating and should be tested for suitability before use

Normal cleaning may not be sufficient to remove certain non-water soluble materials. Examples include grease, oil, silicone sealant and residue from adhesive or protective tapes. In such cases:

- Isopropanol or White Spirit may be used (not turpentine substitute)
- It is strongly recommended that a small non-visible area is tested before use
- Other solvents - or cleaning materials containing solvents - must not be used
- Solvents comprising or containing ketones, esters, aromatic or halogenated hydrocarbons must not be used under any circumstances
- Any remaining residue should be removed by cleaning with mild detergent and rinsing (as above).

Cleaning of textured, metallic or pearlescent powder coated surfaces should be carried out with special care. It is strongly recommended that a small non visible area should be tested first.

Particular care should be taken with high pressure cleaning equipment to avoid damage to the coating.



Excessive rubbing should be avoided. Polishing is not recommended as it may result in changes to the appearance of the coating, in particular for special finishes (metallic, textured, matt etc.).

In case of severe soiling, a soft brush may be used but it should be tested beforehand to ensure that there is no risk of scratching the powder coated surface.

**Cleaning Frequency**

The need for such cleaning depends on many factors including:

- The geographical location of the building
- The environment surrounding the buildings, i.e marine, industrial, alkaline/acidic etc
- Levels of atmospheric pollution
- Direction of prevailing wind
- Possibility of airborne debris for example:
  - sand causing erosive wear of the coating
  - metallic particles (for example from railway lines) causing staining of the coating
- Protection by surrounding buildings

The guidelines in the following table should be used to assess the severity of the environment and select the appropriate cleaning frequency <sup>1</sup> based on whichever factor (UV radiation or pollution) is the most severe <sup>2</sup> according to ISO 12944

**Additional Advice**

Further information may be sought from associations including:

- Qualicoat (Recommendations for Care of Coated Aluminium)
- GSB International e.V (Cleaning of Aluminium Surfaces)
- Aluminium Centre, Advisory and Information Service (D-40003 Düsseldorf)
- German Institute for Quality Assurance and Certification e.V (RAL-GZ 632, Cleaning and Protection Facade and Monument)
- American Architectural Manufacturer’s Association (AAMA) U.S.A., (AAMA 609 & 610-15 Cleaning Procedures)

**Table 1: Severity of Environment**

Environment <sup>1</sup>	UV Radiation	Pollution <sup>2</sup>	Cleaning frequency		
			Alesta AP	Alesta SD	Alesta UD
Normal	<1500 kWh/m <sup>2</sup>	Urban and industrial areas, moderate sulphur dioxide pollution. Coastal areas with low salt content.	12 months	18 months	24 months
Severe	<2200 kWh/m <sup>2</sup>	Industrial areas and coastal areas with moderate salt impact.	6 months	12 months	18 months
Hazardous	>2200 kWh/m <sup>2</sup>	Industrial areas with high humidity and aggressive atmosphere. Coastal and offshore areas with high salt content.	3 months	6 months	9 months

**Disclaimer**

The advice herein is provided by Axalta Coating Systems and is applicable to our Alesta and Teodur powder coating products. It is based upon our own experience but does not in any way constitute a warranty.

The implementation of the cleaning and maintenance process remains entirely the responsibility of the final user who must also ensure that it meets his or her own specific requirements.

