

TECHNICAL ADVICE

Care and Maintenance of Powder Coated Surfaces

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Australia

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Dulux powder coatings are the ideal choice for the long term protection of your aluminium and steel projects.

To ensure the life of your asset is maximised and to comply with Dulux warranty requirements, a simple and regular maintenance program must be implemented.





Protect your powder coating from the environment

The frequency of recommended cleaning will vary depending on:

- The environment if it is dry, has minor condensation, has high moisture or has significant contamination (interior); or a city, rural, industrial or coastal environment (exterior)
- The conditions if it is a general or moderate condition (interior) or a mild or severe condition (exterior)

Some of the influencing factors that can impact the life of the powder coating include:

- Ultra violet light from the sun
- Levels of atmospheric pollution including salts, dirt, grime that can all accumulate over time
- Winds carrying airborne debris that can cause erosive wear of the coating e.g. sand causing abrasion
- Change in environmental circumstances e.g. if rural became industrial
- Microclimates e.g. geothermal, alkaline or acidic

Recommended care and maintenance schedule

It is recommended in environments with low salt, low pollutant and urban areas cleaning should take place at a minimum of every twelve months.

In areas where salts, pollutants and high corrosivity levels are prevalent, e.g. beachfront houses or industrial areas, it is recommended a cleaning program should be carried out more frequently at a minimum of every six months.

Sheltered areas can have a higher risk of coating degradation as wind-blown salt and other debris or pollutants may adhere to the surface and not be removed when it rains. These areas may require more frequent cleaning.

If visible pollutants are evident on the surface more frequent cleaning is recommended.

Use the following table which references AS 2312.1, AS 4312 and ISO 9223 to identify the environment, conditions and atmospheric corrosivity categories. To further pinpoint your project this table can be used together with the corrosivity zone maps contained within AS 4312.

Conditions	Corrosivity Zone	Example Environments	Recommended Minimum Cleaning
Mild	C2 Low	Arid, dry, urban, inland, city	Every 12 months
	C3 Medium	Light industrial, geothermal (>500m from source) and inland coastal (mild sea spray zone)	Every 12 months
Severe	C4 High	Sea shore (medium sea spray zone), offshore Islands and or geothermal (<500m from source)	Every 6 months
	C5 Very High	Sea shore (high sea spray zone e.g. surf), offshore Islands	Every 3 months
	C5 Very High	Heavy industrial	Every 3 months
General Interior	C1 Very Low	Dry interiors (homes, offices, shops)	Every 12 months
	C2 Low	Minor condensation (warehouses, sports halls)	Every 12 months
Moderate Interior	C3 Medium	High moisture (dairy and food processing plants, breweries, and commercial laundries)	Every 12 months
	C4 High	Significant contamination (swimming pools)	Every 6 months

How to clean your powder coating

Clean your powder coating in 3 easy steps

Care and maintenance schedules are essential to ensure that the life of your asset is maximised whether the project be a residential, commercial or non-habitable project. Simply follow 3 important steps:

- 1. Carefully remove any loose surface deposits with a wet sponge by gently rubbing.
- 2. Clean by gently rubbing the surface with a soft brush (non-abrasive) and a dilute solution of a mild detergent, e.g. pH-neutral liquid hand or dishwashing detergent in warm water to remove dust, salt and other deposits. For stubborn stains use only recommended solvents on the affected area, e.g. Isopropyl alcohol (IPA) or methylated spirits and rinse off with clean water. Do not use other aggressive solvents.
- 3. Rinse the surfaces with clean fresh water after cleaning to remove all residues.

The Do's & Don'ts of protecting your powder coating

Do	Don't	
✓ Protect all powder coated joinery	× Use aggressive solvents or products applied to the surface ¹	
When building, renovating, plastering or painting around powder coated assets use approved tapes and films in accordance with the manufacturer's instruction.	Do not use turpentine, white spirits, thinners, kerosene, citrus based cleaners or other aggressive solvents or products.	
✓ Remove unwanted paint & sealants	× Rub powder coated surfaces excessively	
Ensure all paint splatters or excess sealant are immediately removed before they dry.	Do not rub powder coated surfaces excessively, especially metallic finishes.	
✓ Use recommended solvents for stubborn stains only	× Allow sunscreen to come into contact with coated surfaces	
Use only Isopropyl alcohol (IPA) or methylated spirits and rinse off with clean fresh water.	It is universally recognised some sunscreens adversely affect powder coated finishes.	
✓ Regularly inspect	× Neglect recommended care and maintenance schedules	
Inspect your powder coating often and clean more regularly if required	To comply with Dulux Alumi Shield™ and Steel Shield™ powder coating warranties the recommended care and maintenance schedules must be adhered to.	
✓ Clean in temperatures below 25°C	× Clean in temperatures above 25°C	
Clean powder coated surfaces when the surface temperatures are below 25°C	Do not clean powder coated surfaces when the temperature is above 25°C	

1. Non approved solvents or products can cause damage that may not be visible immediately and may take up to twelve months to appear.

For full details on Alumi Shield[™] and Steel Shield[™] warranties including terms and conditions: Visit **duluxpowder.com.au/warranties** Or call 13 24 99

Further information

Industry information for the care of windows is available from:

- The Australian Glass and Window Association at agwa.com.au
- The Window and Glass Association of New Zealand at wganz.nz

The following industry standards can be referred to:

- AAMA 609 & 610
- AS 3715

The project: 1 Collins Wharf, Docklands, Victoria Builder: Lendlease Architect: Batesmart Photo credit: Sean McDonald

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Advice line

Our dedicated consultants can help simplify the specification process, saving you time and money by providing the right coating advice for your project.

Australia

Call 13 24 99 or visit duluxpowders.com.au

New Zealand Call 0800 800 975 or visit **duluxpowders.co.nz**

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