

TECHNICAL ADVICE

Care and Maintenance of Powder Coated Surfaces

DGL
INTERNATIONAL

**POWDER
COATINGS**



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DGL 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 DGL 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 interior condition or a mild or severe exterior condition

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.

Please note that the atmospheric corrosivity zone can be superseded for some commercial projects, e.g. airports and manufacturing sites, due to localised influencing factors such as:

- Levels of atmospheric pollution including salts, dirt, and grime that can all accumulate over time.
- Winds carrying airborne debris that can cause erosive wear of the coating e.g. sand causing abrasion.

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 chemicals on 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, insect spray or other aggressive solvents.
✓ 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 DGL Alumi 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 a comprehensive overview of DGL Alumi Shield™ warranties visit dglpowders.com/warranties

Further information

The following industry standards can be referred to:

- AAMA 609 & 610
- AS 3715

Advice

Our dedicated consultants can help simplify the specification process, saving you time and money by providing the right coating advice for your project. Simply visit dglpowders.com/contact-us

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