

# Interpon Guidelines

Maintenance & Repair Guide for Architectural powder coating

PRODUCT RANGE	NAME	MANUFACTURED TO	USE	AVAILABLE TO	FOR APPROVED	PROJECT GUARANTEE FOR APPROVED APPLICATORS	WARRANTY PERIOD	COMMENT
D1000	ALU Range			All Powder Coaters	YES	NO		Specially formulated polyester based powder coatings designed as a mid market range for the exterior environment
D1025	ANP Range	SANS 1796:2013	Durability	All Powder Coaters	YES	YES	15	Specially formulated for use on architectural aluminium and designed for the exterior environment, giving excellent durability, weather resistance and colour retention.
D2525	O Rango			Approved Applicators	NO	YES	25	Ultra-durable powder coatings, for use on architectural aluminium. Providing new levels of weathering resistance D2525 surpasses the performance of leading architectural powders & offers significantly higher gloss retention and resistance to colour change combined with maximum film integrity to ensure long term cosmetic and functional protection.
D3000	D3000		Architectural	Approved Applicators for D3000	NO	YES	30	Not promoted in RSA

# Interpon D Cleaning and Maintenance Guidelines



#### **Introduction**

Maintaining the good looks of your powder coated products is just like caring for your car – and is a smart way to protect your investment. Over time with exposure to the elements, powder coatings may show signs of weathering such as loss of gloss, chalking and slight colour change. A simple regular clean will minimise the effects of weathering and will remove dirt, grime and other build-up detrimental to all powder coatings.

For any particular region or territory, there may be local regulations or local requirements to be met in order to achieve conformance to certain published quality labels or standards. It is the users' responsibility to be aware of such standards.

Records of all cleaning schedules and frequencies shall be kept and maintained and made available to AkzoNobel if requested. **Failure** to comply with the recommended cleaning schedule will nullify any warranties.

#### **Cleaning coated surfaces**

Cleaning should start at the time the products are installed, ensuring that construction materials such as concrete, plaster and paint splashes are removed before they have a chance to dry. Failure to remove these materials at this early stage will require the use of aggressive cleaning materials and techniques with potential damage to the powder coated surface.

#### Method

The best method of cleaning of **Interpon D** products is by regular washing of the coating using a solution of warm water and non-abrasive, pH neutral detergent solution. Surfaces should be thoroughly rinsed after cleaning to remove all residues. All surfaces should be cleaned using a soft cloth or sponge or nothing harsher than a soft natural bristle brush. Cleaning of powder coated sections can be conveniently carried out at the same time as window cleaning.

If the project is subject to any hazardous unusual environmental factors, or is close to salt water, an estuary or marine environments then Akzo Nobel must be consulted on an individual project basis.

Renovation can be required in the case of heavy soiling (due to lack of maintenance). It is then recommended to consult a specialized company.

# Cleaning guide

#### **Cleaning products**

Before cleaning, attention must, without exception be paid to the cleaning agent's datasheet and the applicable guidelines of the various associations:

GRM

Qualicare

**AMRAL** 

Usual maintenance can be done using water with mild detergent (pH 5 to 8).

If the atmospheric pollution has resulted in heavy soiling of the coating, some stains or marks may require stronger domestic products. In such cases, they should always be diluted, and small inconspicuous test areas cleaned first.

In no circumstance should any abrasive cleaner or polish, or any cleaner containing ketones, esters be used. The frequency of such cleaning will depend on many factors including:

- > The geographical location of the building
- > The environment surrounding the building, i.e., marine, swimming pool, industrial, or a combination of these environments etc.
- Levels of atmospheric pollution
- Prevailing wind
- > Protection of the building by other buildings
- > Possibility of airborne debris (e.g., sand/dust etc.) causing erosive wear of the coating.
- ➤ If the environmental circumstances change during the lifetime of the building (e.g., rural becomes industrial)

## Cleaning guide

#### **Frequency**

The frequency of such cleaning will depend on many factors including:

- · The geographical location of the building
- The environment surrounding the building, i.e., marine, swimming pool, industrial, or a combination of these environments etc.
- · Levels of atmospheric pollution
- · Prevailing wind
- Protection of the building by other buildings
- Possibility of airborne debris (e.g., sand/dust etc.) causing erosive wear of the coating.
- If the environmental circumstances change during the lifetime of the building (e.g., rural becomes industrial)

### The powder coating chemistry

The frequency of cleaning depends in part on the standard of appearance that is required and also the requirements to remove deposits, which could, during prolonged contact with either the powder film or the metal substrate, (if exposed) cause damage.

Sheltered areas can be more at risk of coating degradation than exposed areas. This is because wind-blown salt and other pollutants may adhere to the surface and will not be cleaned away with rainfall. These areas should be inspected and cleaned if necessary on a more regular basis.

Records of all cleaning schedules and frequencies shall be kept and maintained and made available to Akzo Nobel if requested. The Akzo Nobel cleaning frequency specifications are shown below:

# **Cleaning frequency**

Climate	Description	Temperate and Arid			Tropical		
Environment		D1000 series	D2000 series	D3000 series	D1000 series	D2000 series	D3000 series
Normal - C3 Inland		12 months	18 months	24 months	9 months	15 months	18 months
	2000 to 5000m from coastline	12 months	18 months	24 months	9 months	15 months	18 months
Marine - C4 Coastal	500 to 2000m from coastline	6 months	9 months	12 months	6 months	6 months	9 months
Marine - 64 Goastai	50 to 500m from coastline	3 months	6 months	9 months	3 months	3 months	3 months
	Less than 50m from coastline	Not available	Not available	Not available	Not available	Not available	Not available
	2000 to 5000m from source of pollution	12 months	18 months	24 months	9 months	15 months	18 months
Industrial CF	500 to 2000m from source of pollution	6 months	9 months	12 months	6 months	6 months	9 months
Industrial – C5	50 to 500m from source of pollution	3 months	6 months	9 months	3 months	3 months	6 months
	Less than 50m from source of pollution	Not available	Not available	Not available	Not available	Not available	Not available
Swimming Pool	Greater than 2m from edge of pool	3 months	3 months	3 months	3 months	3 months	3 months
	2m from edge of pool	Not available	Not available	Not available	Not available	Not available	Not available

**Table: Global Cleaning Recommendations** 

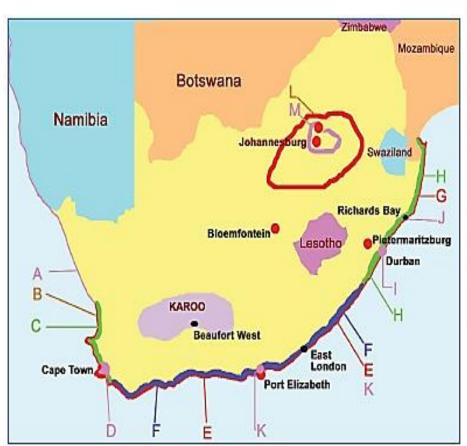


### **Climate**

Type of Climate	Temperature Range	Highest Temperature with RH ≥95%
Temperate	-33°C to 35°C	25°C
Arid Warm Arid Extremely Warm Arid	-20°C to 40°C 3°C to 55°C	27°C 28°C
Tropical	5°C to 40°C	33°C

Note for more detailed definitions of environment and climate please refer to ISO9223

### **Corrosion Classification**



Code	Goographic Area	Distance from Ocean	Description	ISO Category	Comments
A	Namibia and NW Cape shore-line	To 5 km	Desert shore-line and coastal fog zone	Above C5	N. of Olifants River
В	W. Cape Adantic shore-line	To 3 km	Arid shore-line with fog or strong winds	Above C5	False Bay to Olifants River
С	W. Cape coastal	To 5-15 km	Coastal area	C4	To range of fall-out of salt aerosols
D	W. Cape urban	To 25 km	Coastal urban/industrial	C5	Cape Town and surrounds
Ε	S. and E. Cape shore-line	To I km	Temperate shore-line	CS	Distance from ocean varies with terrain
F	S. and E. Cape and Natal south coastal	To 5-10 km	Temperate coastal	C4	Distance from ocean varies with terrain
G	KZN shore-line	To 4 km	Subtropical shore-line	Above C5	KZN to Maputo
н	KZN coastal	To 15-25 km	Sub-tropical coastal	C4	
1	Durban urban	To 10 km	Urban and industrial, inland of shore-line	Upper C5	Amanzimtoti to Durban North
J	Richards Bay	To 15 km	Urban and industrial, inland of shore-line	Lower C5	
K	Coastal cities	To 10-15 km	Industrial and heavy traffic areas	Lower C5	Areas of Port Elizabeth, East London, Pinetown
L	Highvold general area		Rural and suburban areas	C3	
М	Highweld urban and industrial	•	High-traffic urban, or close to heavy industry	C4	East Rand, areas of Pretoria, Witbank



## Cleaning of brick & concrete

#### **Chemical Cleaners**

The cleaning solutions used on both brick and concrete contain strong chemicals that can cause damage to the powder-coated surface. All exposed powder-coated surfaces should be fully protected.

If any such solutions or chemicals come in contact with the powder-coated surface, wash immediately with copious amounts of water. Prolonged exposure can cause discolouration of the film, loss of gloss and damage to the coating surface.

#### **Abrasive Blasting**

The cleaning of concrete or brick by using abrasive shot blasting must be carried out in such a way that all structures coated with powder coating must be fully protected.

The abrasive medium will strip the powder coating from the metal substrate.

Only protective tape with a low tack and approved by the suppliers of the protective tape for use on Powder Coatings should be used.

#### **Low Tack Tapes**

These tape should be removed after a period not exceeding six (6) months. If further protection is required new tape should be applied. Any residue from the tape should be removed as soon as possible.

Do not use scrapers, abrasive papers or similar items to clean the area as this may damage the surface of the powder coating.

Water and a small amount of mild detergent may be used to clean the surface of the powder coating.

Where it is absolutely necessary a small amount of white spirit may be used followed by cleaning with water and mild detergent.

Do not under any circumstances use strong solvents or solutions containing:

Chlorinated Hydrocarbons

**Esters** 

**Ketones** 

Abrasive cleaner or polish

**Disclaimer:** The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

### Interpon D Repair guide

# **AkzoNobel**

#### **D2000 Series**

#### Introduction

Damage to the Interpon D2525 Range of Powder Coatings may be caused during transportation, installation or as a result of the action of other trades (e.g., scaffold damage) on site.

For on-site rectification of small damaged areas Interthane 990 (gloss) or Interthane 990SG (semi-gloss) Acrylic Polyurethane, matched for colour and gloss to the appropriate Interpon D2525 Range shade, should be used.

Where damage has exposed the metal, the prepared metal <u>only</u> should be primed with Interprime 160 Etch Primer. Please see the relevant data sheet for thinning ratios and drying times.

#### Method 1:

Minimum requirements to repair small isolated areas (approx.5-6cm ) and scratch damage

- ➤ Clean all surfaces to be painted with Interplus 546 Cleaner/Degreaser or equivalent by applying liberally using a clean lint-free cloth and wipe dry using lint-free cloths physically removing all sealants and mastics, etc.
- Abrade all areas to be coated with abrasive paper, up to 320 grade, if necessary, to ensure a suitable keyed surface, ready to be coated, then wipe clean using lint free tac rags.
- > Apply by brush to exposed metal surfaces only one thin coat of Interprime 160 Etch Primer and allow to dry for two hours.
- Apply by brush or spray one coat of the relevant Topcoat, matched to shade and gloss.



### Repair procedure cont.

Method 2: Minimum requirements to repair larger areas of damage

- Mask all surrounding surfaces of the damaged areas to the edge of the panel or a suitable breakline.
- ➤ Clean all surfaces to be coated with Interplus 546 Cleaner/Degreaser or equivalent, by applying liberally using a lint free cloth, and wipe dry using lint free cloths, physically removing all sealants and mastics etc.
- Abrade all areas to be coated with abrasive paper, up to 320 grade, if necessary, to ensure a suitable keyed surface, ready to be coated, then wipe clean using lint free tac-rags.
- > Apply by brush or spray to the exposed metal surface only one thin coat of Interprime 160 Etch Primer and allow to dry for two hours.
- > Apply a minimum of 50 microns Interthane 990 (gloss) or Interthane 990SG (semi-gloss) Acrylic Polyurethane, matched to shade and gloss, as detailed in the Interthane 990 (gloss) or Interthane 990SG (semi-gloss) Acrylic Polyurethane Data Sheet.



### Repair procedure cont.

**Method 3:** Minimum requirements for complete re-sprays on site.

#### **Substrate Preparation**

- Clean all surfaces using Interplus 546 Cleaner/Degreaser or equivalent and physically remove all sealant and mastics products. Degrease all areas to be abraded using lint-free cloth. Inspect and remove all mastic sealant adjoining any surface to below 4mm of metal edges.
- Apply protective masking to unaffected areas as required.
- Mechanically abrade to sound substrate. Drilled holes to be countersunk and butt joints to be filled, the surface should taper on the side for filling.
- ➤ Abrade mechanically or by hand using 60/80 abrasive paper areas to receive filling media.
- ➤ Clean down with vacuum or air, thoroughly degrease with Interplus 546 Cleaner/Degreaser or equivalent areas to be filled, physically removing any sealant mastics etc, where necessary.
- Mix the components of the filling media as specified in the manufacturers recommendations and apply directly to the substrate. Work the material to remove any trapped air and finish to profile shape. Allow to fully curing as per manufacturers recommendations.
- Abrade with 80 abrasive paper to correct profile whether by hand or mechanical action. Repeat items (f) and (g) if required. Clean down after each operation to remove dust and debris.
- Abrade all areas coated with abrasive paper up to 320/400 grade, if necessary, to ensure a suitable keyed surface, ready to be coated, then wipe clean using lint free tac-rags.
- De-mask and clean down.



### Repair procedure cont.

### Recoating

- Mask unaffected areas prior to painting. Degrease using Interplus 546 Cleaner/Degreaser and lint-free cloth and remove all dust.
- > Apply one spray coat of Interprime 160 Etch Primer to any areas of exposed metal. Allow curing as recommended and lightly key surface. Remove all debris and tac-rag surface.
- Apply Interthane 990 (gloss) or Interthane 990SG (semi-gloss) Acrylic Polyurethane to a minimum dry film thickness of 40 microns allow to flash off and cure as detailed in the Interthane 990 (gloss) or Interthane 990SG (semi-gloss) Acrylic Polyurethane Data Sheet.
- > De-mask, clean down and remove debris, etc.
- > Re-apply sealant/mastic on required areas.
- Present finished painted areas for inspection and approval of client.

Interthane 990 and Interthane 990SG colour matched to Interpon D2525 Range shades and glosses and data sheets are available from International – Protective Coatings. Other rectification material systems and method statements are available. For further information refer to Akzo Nobel. However, these method statements are for information only and an "Approved Repair Applicator" must carry out any Rectification or Repairs that are carried out to the Interpon D Range Coating. For details call your local Interpon D Range Helpline.

The above information and repair methods/statements etc. are intended for guidance only. It is the client's responsibility to ensure that the products to be used are fit for purpose. For additional information contact your local Helpline.

Repair paints may weather at different rates to the original powder coatings.

### **International Paint distributors**

AREA	SUPPLIER	CONTACT NUMBER	
Northern KZN	Paint Centre Zululand	035 787 1772	
Southern KZN	Shave Paint & Hardware	031 702 6315	
Central Johannesburg	Shave Paint & Hardware	011 826 1816	
Nelspruit	Mega paint	013 753 2060	
Klerksdorp	Klerksdorp Mining Supply	018 484 1592	
Eastern Cape	JF Paints Astro Paints	054 332 4573 021 510 4542	