
5. Interpon D Guarantee

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We operate in a global market: increasingly projects are specified or supported by contractors in several countries outside of the UK.

To ensure guarantee consistency a new guarantee will be offered and referred to as a European/Global guarantee and should be offered by UK applicators for projects both within the UK & globally.

The terms and conditions of this new guarantee for both Interpon D1036 and D2525 are outlined in pages 43-52.

In parallel with this new system, the previous UK guarantee will still be available to all Interpon D approved applicators. This will be referred to as the UK/Local guarantee and can be used at the discretion of the Interpon D approved applicator.

5.1 Classification of Environments

The ability of Interpon D range of Architectural Powder Coatings to protect and decorate aluminium is affected by many environmental factors including location, pollution, contamination, erosion etc. The effect of these factors is exaggerated when the location is hazardous such as a marine or industrial environment.

ISO 12944-2 provides tables of corrosion classes with typical environments for both atmospheric and immersion conditions. These environments are to be interpreted as an indication of the circumstances that the coating system is designed to resist for extended periods.

Corrosion Classes	Typical Exterior Environments	Typical Interior Environments
C1	-	Heated buildings with clean atmospheres e.g. Offices, schools, shops, hotels
C2	Atmospheres with low level of pollution. Mostly rural areas.	Unheated buildings where condensation may occur e.g. depots, warehouses, sports halls
C3	Urban and industrial atmospheres, moderate sulphur dioxide pollution. Coastal areas with low salinity.	Production rooms with high humidity and some air pollution (food processing plants, laundries, breweries, dairies)
C4	Industrial areas and coastal areas with moderate salinity.	Chemical plants, swimming pools, coastal shipyards.
C5-I	Industrial areas with high humidity and aggressive atmosphere.	Buildings or areas with almost permanent condensation and high pollution
C5-M	Coastal and offshore areas with high salinity.	Buildings or areas with almost permanent condensation and high pollution

5.2 UK/Local Guarantee Matrix – Aluminium Substrates

Environment		Interpon D System			
		Interpon D1036	Interpon D2525	Interpon D2525	
Normal C3 Inland		Guarantee Period 30 years all finishes and gloss levels	Requirements' Clean every 12 months	Guarantee Period 40 years all finishes and gloss levels	Requirements' Clean every 18 months
Marine - C4 Coastal	2000m - 5000m from coastline	30 years all finishes and gloss levels	Minimum 60 microns Clean every 12 months	40 years all finishes and gloss levels	Minimum 70 microns Clean every 12 months
	500m - 2000m from coastline	30 years all finishes and gloss levels	Minimum 60 microns Clean every 6 months	40 years all finishes and gloss levels	Minimum 70 microns Clean every 9 months
	50 - 500m from coastline	25 years all finishes and gloss levels	Minimum 60 microns Clean every 3 months	30 years all finishes and gloss levels	Minimum 70 microns Clean every 3 months
	Less than 50m from coastline	Not available		Not available	
Industrial - C5-I	2000m - 5000m from source of pollution	30 years all finishes and gloss levels	Minimum 60 microns Clean every 12 months	40 years all finishes and gloss levels	Minimum 70 microns Clean every 12 months
	500m - 2000m from source of pollution	30 years all finishes and gloss levels	Minimum 60 microns Clean every 6 months	40 years all finishes and gloss levels	Minimum 70 microns Clean every 9 months
	50 - 500m from source of pollution	25 years all finishes and gloss levels	Minimum 60 microns Clean every 3 months	25 years all finishes and gloss levels	Minimum 70 microns Clean every 3 months
	Less than 50m from source of pollution	Not available		Not available	
Swimming Pools	Greater than 2m from edge of pool	25 years all finishes and gloss levels	Minimum 60 microns Clean every 3 months	25 years all finishes and gloss levels	Minimum 70 microns Clean every 3 months
	Less than 2m from edge of pool	Not available		Not available	

Notes: Environmental classification as defined by ISO 12944-2 'Refer to Interpon D Approved Applicator Manual for full explanation of requirements

6. Hazardous Environments

The guarantee is given for coated parts exposed under “normal” environmental conditions; these are locations where the local conditions do not adversely effect to properties of the powder-coated film. This is designated as a C3 environment under the classifications given in ISO 12944 – 6.

Hazardous environments are those areas where the conditions may adversely affect the properties of the powder-coater film; these areas are classified under the following descriptions:

1. Marine Environment – areas that are strongly affected by marine and salt laden atmospheres.
2. Industrial Environment – areas of industrial pollution.
3. Swimming & Leisure Pool Environment – areas enclosing or in close proximity to a swimming or leisure pool.

In the case of these “hazardous” environments additional precautions need to be followed and these are outlined in the sections that follow.

Conformation of Applied Film Thickness for Interpon D Applicators

Test in accordance with:- BS EN 12206-1:2004, Annex C

Interpon D1036

Film Thickness for a Non Hazardous Environment (C3 and Below)

The **average** minimum thickness of the applied coating must be at least 50 microns and not less than 40 microns at any point.

Film Thickness for a Hazardous Environment (C4,C5-I,Swimming Pools)

The average minimum thickness of the applied coating must be at least 60 microns and not less than 50 microns at any point.

Interpon D2525

Film Thickness for a Non Hazardous Environment (C3 and Below)

The **average** minimum thickness of the applied coating must be at least 60 microns and not less than 50 microns at any point.

Film Thickness for a Hazardous Environment (C4,C5-I,Swimming Pools)

The average minimum thickness of the applied coating must be at least 70 microns and not less than 60 microns at any point.

NB: Certain powder coatings require a minimum thickness of 80 microns to ensure full pigment opacity. Always check the Technical Data Sheet.

Please see the Guarantee Matrix for the cleaning requirements

No blisters, craters, pinholes or scratches shall be visible from a distance of 1 metre.

However, note BS EN12206-1:2004 specifies a distance of 3 metres for internal components (as does Qualicoat) and 5 metres for external components. It is recommended that clarification of this point is made with the end user

6.1 Interpon D1036 Hazardous Environments- UK/Local guarantee conditions

The ability of Interpon D1036 range of Architectural Powder Coatings to protect and decorate aluminium is affected by many environmental factors including location, pollution, contamination, erosion etc. The effect of these factors is exaggerated when the location is hazardous such as a marine or industrial environment. Any guarantee, if offered will be considered with prior knowledge of the location and any factors that may affect the life expectancy of the coating.

6.1.1 Marine Environment (C4 Coastal)

A marine environment is any location within 5,000 metres of a coastal shoreline and may also include areas such as estuaries and tidal rivers.

For areas 5,000 – 2,000 metres from the marine environment the following additional precautions must be followed:

Interpon D1036	Change to Terms and Conditions
Minimum Film Thickness	60 microns on all significant surfaces
Non-Significant Surfaces	To receive a light coating of powder (minimum of 25 microns)
Edge Protection	There must be no bare metal edges. All mitres, cut edges and drilled holes to be sealed.
Repair Procedure	All breakage in the film to be repaired within 24 hours.
Cleaning & Maintenance	At least every 12 months.

For areas 2,000 – 500 metres from the marine environment the following additional precautions must be followed:

Interpon D1036	Change to Terms and Conditions
Minimum Film Thickness	60 microns on all significant surfaces
Non-Significant Surfaces	To receive a light coating of powder (minimum of 25 microns)
Edge Protection	There must be no bare metal edges. All mitres, cut edges and drilled holes to be sealed.
Repair Procedure	All breakage in the film to be repaired within 24 hours.
Cleaning & Maintenance	At least every 6 months.

For areas 500 – 50 metres from the marine environment the following additional precautions must be followed:

Interpon D1036	Change to Terms and Conditions
Minimum Film Thickness	60 microns on all significant surfaces
Non-Significant Surfaces	To receive a light coating of powder (minimum of 25 microns)
Edge Protection	There must be no bare metal edges. All mitres, cut edges and drilled holes to be sealed.
Repair Procedure	All breakage in the film to be repaired within 24 hours.
Cleaning & Maintenance	At least every 3 months.

For areas less than 50 metres from the high water level of a marine environment then no guarantee is offered. Under these circumstances you should refer to Akzo Nobel Powder Coatings Ltd.

6.1.2 Industrial Environment (C5-I)

An industrial environment is any location within 5,000 metres of a source of solid, liquid or gaseous airborne pollution that may cause the degrading of the powder coating.

For areas 5,000 – 2,000 metres from the industrial environment the following additional precautions must be followed:

Interpon D1036	Change to Terms and Conditions
Minimum Film Thickness	60 microns on all significant surfaces
Non-Significant Surfaces	To receive a light coating of powder (minimum of 25 microns)
Edge Protection	There must be no bare metal edges. All mitres, cut edges and drilled holes to be sealed.
Repair Procedure	All breakage in the film to be repaired within 24 hours.
Cleaning & Maintenance	At least every 12 months.

For areas 2,000 – 500 metres from the industrial environment the following additional precautions must be followed:

Interpon D1036	Change to Terms and Conditions
Minimum Film Thickness	60 microns on all significant surfaces
Non-Significant Surfaces	To receive a light coating of powder (minimum of 25 microns)
Edge Protection	There must be no bare metal edges. All mitres, cut edges and drilled holes to be sealed.
Repair Procedure	All breakage in the film to be repaired within 24 hours.
Cleaning & Maintenance	At least every 6 months.

For areas 500 – 50 metres from the industrial environment the following additional precautions must be followed:

Interpon D1036	Change to Terms and Conditions
Minimum Film Thickness	60 microns on all significant surfaces
Non-Significant Surfaces	To receive a light coating of powder (minimum of 25 microns)
Edge Protection	There must be no bare metal edges. All mitres, cut edges and drilled holes to be sealed.
Repair Procedure	All breakage in the film to be repaired within 24 hours.
Cleaning & Maintenance	At least every 3 months.

For areas less than 50 metres from an industrial environment no guarantee is offered. Reference should be made to Akzo Nobel Powder Coatings Ltd.

6.1.3 Swimming and Leisure Pools

A hazardous environment is created inside a swimming pool building as a result of high humidity and chemical build up.

The design of the structure should be such as to facilitate easy run off of liquid materials and the avoidance of all water traps. This will ensure there is no build up of concentrated contamination and prevent corrosion cells forming.

Interpon D1036	Change to Terms and Conditions
Film Thickness	60 microns minimum
Non-significant surfaces	Minimum 40 microns
Repair Procedure	All breakage in the film to be repaired within 24 hours.
Edge Protection	There must be no bare metal edges. All mitres, cut edges and drilled holes to be sealed.
Cleaning & Maintenance	All internal coated components must be washed with clean (chemical free) water at least once per week to ensure no chemical build up.