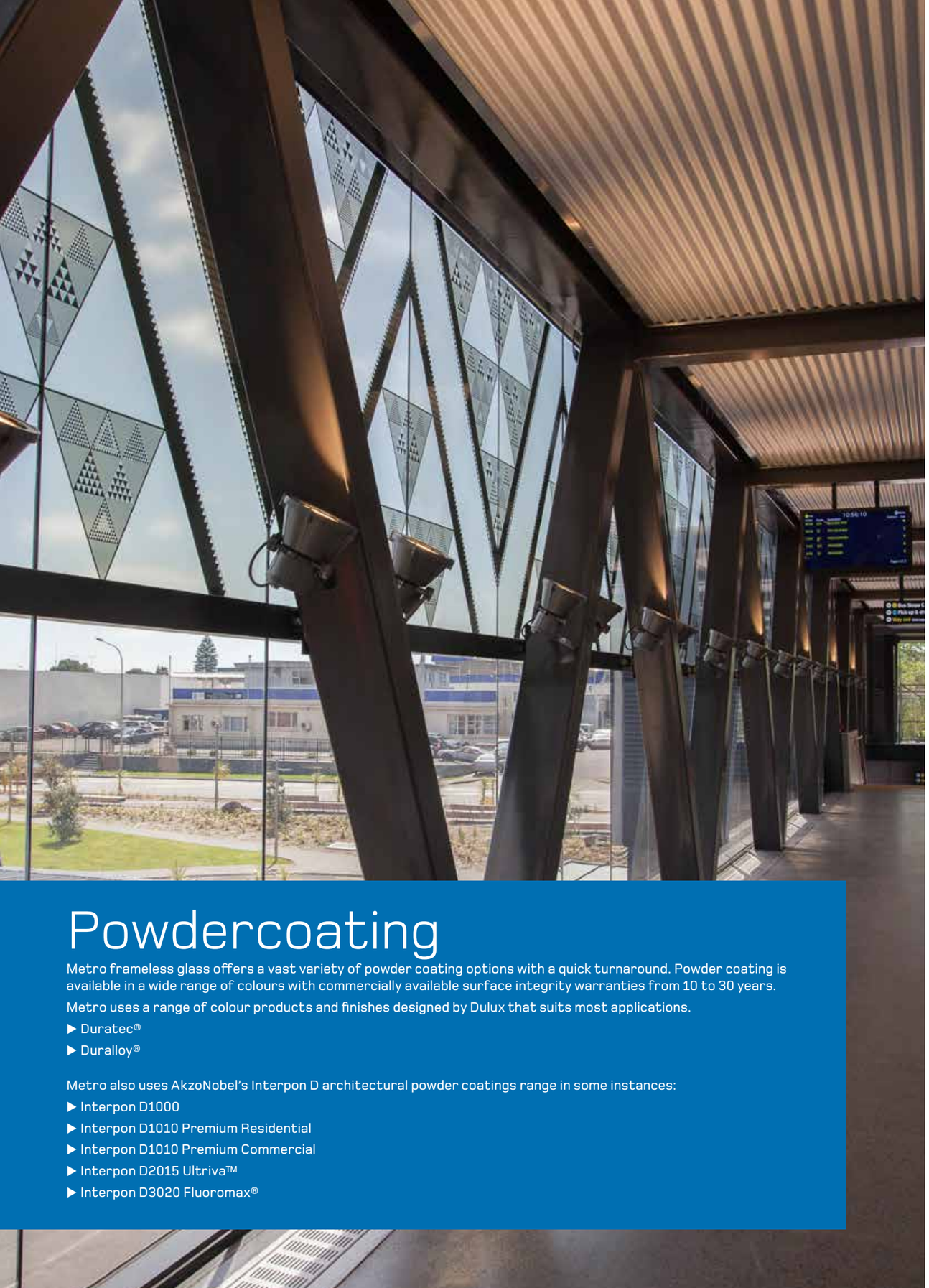

Powdercoating

Metro frameless glass offers a vast variety of powder coating options with a quick turnaround. Powder coating is available in a wide range of colours with commercially available surface integrity warranties from 10 to 30 years.

Metro uses a range of colour products and finishes designed by Dulux that suits most applications.

- Duratec®
- Duralloy®

Metro also uses AkzoNobel's Interpon D architectural powder coatings range in some instances:

- Interpon D1000
- Interpon D1010 Premium Residential
- Interpon D1010 Premium Commercial
- Interpon D2015 Ultriva™
- Interpon D3020 Fluoromax®

POWDER COATING MATERIALS

Specification – the correct product for each situation		
Project	**Environment**	**Recommended Project**
Multistorey Prestigious	Standard	Duratec®
Multistorey Commercial or Industrial	Marine	Duratec®
Multistorey Commercial or Industrial	Standard	Duratec®
Multilevel Building under 3 levels	Marine	Duratec®
Multilevel Building under 3 levels	Standard	Duratec® or Duralloy®
Educational-School Single Level	Marine	Duratec®
Educational-School Single Level	Standard	Duralloy® or Duratec®
Residential	Marine	Duratec®
Residential	Standard	Duralloy®

DURATEC® POWDER COATING

20 YEAR QUALITY WARRANTY* DURATEC® POWDERCOAT RANGE

Formulated to meet:
AS 3715-2002, AS 4506-2005 and AAMA 2604.

Duratec® is a thermosetting TGIC free powder coating designed specifically for architectural applications where colour and gloss retention is critical. Duratec® is formulated with advanced polyester resin technology and high performance pigments to conform to the performance requirements of AAMA 2604. It has superior gloss and colour retention compared with standard polyester powder coatings. Duratec® has been developed for use on architectural aluminium, including window and door frames, panel work and other exterior metal features on commercial buildings.

- Supported by a 20 year durability warranty* on pre-treated architectural aluminium when applied by a Dulux Registered Applicator
- Suitable for developments further than 10 metres from salt water
- Durable polyester
- Excellent colour retention
- Smooth film appearance
- Hard wearing/serviceable finish

Architectural Aluminium Applications

Surface Preparation for Architectural Aluminium

In accordance with AS 3715-2002 Metal finishing – Thermoset powder coating for architectural applications of aluminium and aluminium alloys or AAMA 2604 – Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminium Extrusions and Panels.

How to Specify for Architectural Aluminium

Example – (Dulux Duratec® St. Elmo's Fire 9007208K) to meet AAMA 2604. Product must be applied by a Dulux Registered Aluminium Applicator and must offer 20 year durability warranty.

Other Metal Applications

Surface Preparation for Other Metal Substrates

In accordance with AS 4506-2005 Metal finishing – Thermoset powder coatings. Refer to Table 2.1 for appropriate pre-treatment for various substrate metal surfaces such as Steel (Bright, Semi Bright), Steel (Zinc Coated) and Stainless Steel. The appropriate pre-treatment option will vary according to atmospheric classification as set out in AS 4506-2005 Metal finishing – Thermoset powder coatings (Appendix G).

How to Specify for Other Metal Substrates

Example – Powder Coating of (Components to be coated) (Atmospheric Classification) (Substrate) with (Dulux Duratec® St. Elmo's Fire 9007208K) to meet AS4506-2005. Compliance to this standard must be demonstrated through provision of a certificate from the coating applicator outlining the relevant, "atmospheric classification, substrate and method of chemical or mechanical surface preparation".

*Subject to the terms and conditions of the relevant product warranty. Please contact your local Dulux representative or Customer Service Team for further details.

DURALLOY® POWDER COATING

Formulated to meet:
AS 3715-2002, AS 4506-2005 and AAMA 2603.

Duralloy® is a tough thermosetting powder coating that exhibits decorative and durable characteristics suitable for a broad range of interior and exterior product applications where excellent overall performance is required. Duralloy® has been formulated especially for residential developments and buildings that are up to 3 floors from the ground.

- Supported by a 10 year durability warranty* on pre-treated architectural aluminium when applied by a Dulux Registered Applicator.
- Suitable for developments further than 100 metres from salt water.
- Extensive colour and gloss range available.
- Guaranteed performance on appropriately pre-treated aluminium.
- Excellent colour retention.

Architectural Aluminium Applications

Surface Preparation for Architectural Aluminium

In accordance with AS 3715-2002 Metal finishing – Thermoset powder coating for architectural applications of aluminium and aluminium alloys or AAMA 2603, Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminium Extrusions and Panels.

How to Specify for Architectural Aluminium

Example – (Dulux Duralloy® LSG Matt Ironsand 9158096M) to meet AAMA 2603. Product must be applied by a Dulux Registered Aluminium Applicator and must offer a 10 year durability warranty.'

Other Metal Applications

Surface Preparation for Other Metal Substrates

In accordance with AS 4506-2005 Metal finishing – Thermoset powder coatings. Refer to Table 2.1 for appropriate pre-treatment for various substrate metal surfaces such as Steel (Bright, Semi Bright), Steel (Zinc Coated) and Stainless Steel. The appropriate pre-treatment option will vary according to atmospheric classification as set out in AS 4506-2005 Metal finishing – Thermoset powder coatings (Appendix G).

How to Specify for Other Metal Substrates

Example – Powder Coating of (Components to be coated) (Atmospheric Classification) (Substrate) with Dulux Duralloy® LSG Matt Ironsand 9158096M) to meet AS4506-2005. Compliance to this standard must be demonstrated through provision of a certificate from the coating applicator outlining the relevant, "atmospheric classification, substrate and method of chemical or mechanical surface preparation".

*Subject to the terms and conditions of the relevant product warranty. Please contact your local Dulux representative or Customer Service Team for further details.

OUR MATERIALS

Which Grade of Stainless Steel Should I choose?

There are many different grades of Stainless Steel. The most common are 304 and 316. However, Metro also supply some items in 2205.

Type of Stainless Steel	Stainless Grade	Features and Benefits	Useful For	In Action
Austenitic	304	A general purpose grade. It is commonly used because it offers reasonable corrosion resistance and is reasonably priced.	A variety of applications, including interior and non-costal exterior applications which are hidden from sight (as may tea-stain)	Interiors, Non Costal Exterior.
Austenitic	316	Sometimes referred to as the 'Marine Grade' because of its excellent corrosion resistance (Better than 304)	Boat and marine applications, and exterior near the coast (within 5km)	Marine environments.
Duplex	2205	Duplex Stainless Steel – High strength properties and greater corrosion resistance.	Situations requiring high strength and resistance to corrosion cracking.	Marine Environments, Critical Engineering applications.

Note: The key word with Stainless Steel is that it is stain 'less' but not completely corrosion-proof as is commonly thought. Regular care and maintenance schedules need to be maintained to keep product looking good and performing at its best.

- This information is provided as a Guide Only. Metro does not accept liability for the application of this information.

Why is stainless steel corrosion resistant?

Stainless steel is a solid metal and is not just a coating applied to steel. The chromium in the stainless steel combines with oxygen in the normal environment to form a 'Chromium Oxide' or a passive film layer on the surface. This protects the iron in the steel from being attacked by corrosive agents (i.e. salt) and creating rust.

ELECTRO PLATING / POLISHING

Electroplating is primarily used to change the surface properties of an object (such as abrasion and wear resistance, corrosion protection) it may also be used to build up thickness on undersized parts.

Electopolishing is an electrochemical process that removes material from a metallic item, reducing the surface roughness by levelling micro-peaks and valleys, improving the surface finish. It is used to polish, passivate, and deburr metal parts. It is often described as the reverse of electroplating. Electro polishing or passivating (forms of acid treatment) improves corrosion resistance. All stainless steel products can be electro polished upon request.