

Dulux Powder Coatings Electro®

AU_DP01900

Product Code	906 Line
Approval	Meets AS3715, BS6496, AAMA2603, AAMA2604

Description

Electro® are a range of unique anodised look finishes, designed to subtly change in appearance as light conditions alter in the day, delivered with warranty grade advanced super durable polyester thermosetting powder.

Ideal for warranty grade applications over:

- Architectural aluminium including perforated and expanded aluminium
- Steel (mild), bright/semi bright steel, black steel and blue steel

Electro® can also be used on the following metals but these are not warranted:

- Galvanised steel, stainless steel, zincalume and non ferrous metals

Electro® is supported by Alumi Shield™ and Steel Shield™ warranties* when applied by a Dulux Accredited Powder Coater to the warranty specification on recommended project types and conditions.

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

Dulux Electro is formulated to meet: AAMA 2603 and AAMA 2604 as well as Australian standard AS 3715.

Features And Benefits

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| <ul style="list-style-type: none"> • Super Durable Polyester Thermosetting Powder • Alumi Shield™ warranty - 20 Year Aluminium Durability and 15 Year Aluminium Colour Warranty • Steel Shield™ warranty - Up to 10 Year Steel Corrosion Warranty and 15 Year Steel Colour Warranty • Alternative colour range to anodising • No solvents or emissions & TGIC free • Formulated to meet: AS 3715, AAMA 2603 and AAMA 2604 | <ul style="list-style-type: none"> • Guaranteed performance on appropriately pre-treated aluminium and steel* • Excellent colour retention • Super durable finish • On trend anodised flat finish • Less waste and pollution to the environment & reduced risk to health • Good flow out |
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Uses

Electro® has been developed as an alternative to anodised finishes for use on a wide range of metal substrates including, most architectural aluminium applications such as window and door system, louvres, balustrades, sunshades, perforated screen, curtain walls, shop fronts, furniture and shelving.

It is ideal for:

Exterior projects (All BCA Classes)

- All commercial buildings
- All residential buildings
- Non-habitable

Interior projects (All BCA Classes):

- All commercial buildings
- All residential buildings
- Non-habitable

Precautions And Limitations

Electro® is only available in solid and pearl colours which meet Dulux Powder Coatings pigmentation criteria. Strong, bold colours may not necessarily meet these criteria and should be referred to Dulux Powder Coatings before specifying.

As a result of possible wide application variations and stoving conditions, some products and colours may show variation between Dulux Powder Coatings prepared samples and production applied material. Therefore, it is the applicator and/or their customer's responsibility to ensure the product conforms to their requirements.

For optimum performance ensure recommended dry film thickness is obtained. Some light colours require increased film thickness average to achieve optimal consistency.

Not recommended for use in highly corrosive environments such as severe marine or industrial locations.

Not recommended for components which are exposed to constant temperatures exceeding 120°C.

Not recommended for post-forming.

Performance Guide			
Exterior Durability	Excellent resistance to weathering, providing extended protection for aluminium	Salt	Excellent salt spray resistance over pre-treated aluminium. (3000 hours ASTM B117)
Heat Resistance	Excellent resistance to 120°C continuous service conditions	Water	Excellent resistance to 38°C/100% humidity for 3000 hours on pre-treated aluminium
Solvent	Resistant to alcohol and white spirits.	Abrasion	Abrasion Excellent resistance to abrasion. Abrasion Coefficient > 20 (ASTM D968)
Acid	Resistant to spills of dilute acid. Avoid contact	Alkali	Resistant to spills of dilute alkali. Avoid contact

Typical Properties			
Gloss Level	5-20% at 60°	Coverage	8 - 10m ² /kg corresponds to 80um cured film thickness
Shelf Life	12 months when stored below 25°C/dry conditions	Colour	A limited range of stock and made to order solid & pearl colours
Meets GBCA VOC Requirement?	<p>Yes. Dulux Powder Coatings:</p> <ul style="list-style-type: none"> • Contain no harmful volatile organic solvents • Free of heavy metal pigments such as lead, cadmium, arsenic & mercury • Proven low temperature curing technology • Produced with stringent Safety, Health & Environmental policies and standards • Developed with consideration of life cycle analysis, to guide our suppliers and the materials we use • Manufactured in facilities where significant energy and resources employed in production, are measured with aggressive reduction targets in place • Produced and used with minimal waste <p>Consequently, Dulux ® Powder Coatings are a prime consideration for projects where air quality standards have been set, such as 4, 5 & 6 Green Star Rating Projects.</p>		
Film Build (microns)	Recommended 80um, range 60-120µm (NB Flat White: 90 - 120µm)	Clean Up	Dust or vacuum loose powder. Avoid use of compressed air
Application Method	Electrostatic Spray. Recommended 70KV.	Specific Gravity	1.3 - 1.7
Flexibility	Limited < or = 80 inch/lb	Pencil Hardness	Min H
Cross Hatch Adhesion	No removal	Chemical Resistance	<p>Mortar Resistant</p> <p>White Spirits Resistant</p> <p>Ethanol Resistant</p> <p>Xylene Methyl Slight softening/limit contact</p> <p>Ethyl Ketone Softens/avoid contact</p> <p>Ethyl Acetate Softens/avoid contact</p>
Cure Schedule	<p>Metal Temperature (°C)</p> <p>200</p> <p>210</p>	<p>Time (minutes)</p> <p>10 Mins</p> <p>8 Mins</p>	<p>Comments</p> <p>Metal temperature</p> <p>Metal temperature</p>

Application Guide	
Surface Preparation	<ul style="list-style-type: none"> Surfaces should be prepared according to AS1627.6-2003 Section 3 to achieve a conversion coating corresponding to Class 1. chemical supplier recommendations should also be adhered to, as appropriate. Suitable pre-treatment includes: Aluminium - Chrome chromate (refer AS1627.6-2003 Section 3)
Application Procedure And Equipment	<ul style="list-style-type: none"> Electrostatic spray. Light colours may require a higher minimum film build for optimum coverage and colour consistency. Theoretical spreading rate at recommended film thickness: A coverage rate of 8 - 10m²/kg corresponds to 80 microns cured film thickness assuming no loss. Practical spreading rates will vary due to such factors as method and conditions of application and surface profile and texture. Applied by Dulux Accredited Powder Coater with equipment and control systems to enable correct metal pre-treatment and control of the application and stoving as set out in the Applicators Manual. 1a) For fluidised bed, ensure uniform fluidisation of powder. Fluidised powder should resemble "simmering liquid". Aged or compacted powder may require pre-conditioning for several minutes to fluidise evenly. 1b) For box feeders, ensure probe is fully inserted in powder and operated as per manufacturer's recommendations. Box feeders are not suitable for the application of pearlescent & metallic finishes. 2 Apply by electrostatic spray. 3 Cure as per recommendations outlined above. Metal temperatures in excess of 210°C should be avoided due to the possibility of colour change or thermal degradation of the polymer. 4 Test for cure of the coating by contact with a drop of Corsol PGMA for 30 seconds. Surface should be wiped dry and immediately checked for softening. Only slight surface softening should occur.

Care And Maintenance
<p>PACKAGING PRE INSTALLATION Attention to packing is essential for powder coaters and fabricators to ensure that all powder coated sections are received in good condition. When packing powder coated assets, it is recommended that:</p> <ul style="list-style-type: none"> Sections must be adequately cooled prior to packing; the metal temperature must not exceed 40°C on packing. Appropriate protective wrapping is recommended prior to packing to avoid damage during transport. If protective tapes are used, ensure that the tape will remain removable following transport, fabrication and installation and not irreversibly mark or damage the coating. Tapes should be used in accordance with the manufacturer's instructions and only remain in contact for the minimum amount of time. Packed metal should be kept away from sunlight or moisture to avoid coating defects. <p>CARE & MAINTENANCE POST INSTALLATION 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 should be implemented. Simply follow 3 important steps:</p> <ol style="list-style-type: none"> Carefully remove any loose surface deposits with a wet sponge by gently rubbing. 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. Rinse the surfaces with clean fresh water after cleaning to remove all residues. <p>This cleaning advice and the recommended minimum cleaning schedule for your project can be found in the Dulux Powders Care and Maintenance Brochure. For more information simply download our Care and Maintenance brochure from duluxpowders.com.au/tech-advice</p> <p>WARNING: In some cases, strong solvents recommended for thinning various types of paints and also for cleaning up mastics/sealants are harmful to the extended life of the powder coated surface. These solvents should not be used for cleaning purposes and will render the warranty void if used. If paint splashes or sealants/mastics need to be removed then the following solvents can be used safely: Methylated Spirits, Ethyl Alcohol, Isopropanol.</p>

Health And Safety			
MSDS Number	000000022803	Safety Precautions	<p>Safety Precautions The MSDS is an integral part of using this product as it contains information on the potential health effect of exposure, personal protective equipment needed and other relevant SH&E information. For detailed information, refer to product label and the current Chemical Data Sheet available through Sales and Customer Service Offices. Phone: Australia: 13 24 99</p>
In the case of emergency, please call 1800 033 111			

Transport And Storage			
Package Weight	20 Kg	Shipment Name	Not dangerous goods. No special transport requirements
Flash Point	N/A	UN Number	N/A
Dangerous Goods Class	N/A	Package Group	N/A

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