INTRODUCTION

The two finishes for extruded aluminium commonly available in Australia are powdercoating or anodising. The Finish Features and Comparison table lists the comparisons. For more information refer to the Powder Coating Technical Summary table in this guide, prepared by AAF, Lidco's preferred applicator.

POWDER COATING

Powder coating is the method of applying dry paint in the form of a powder to aluminium. Once oven cured, it becomes a solid and tough coating which adheres to the surface of the aluminium as if it were a 2-pack wet paint.

Powder coatings are available in a multitude of colours, with various lustres, textures and special effects. The extensive range of options make powder coating a versatile and popular choice.

To simplify the selection of powder coat finishes the colour selections offered in the Colorbond Low Sheen range of colours are an ideal choice for residential and commercial building projects. These popular colours are widely used in the building industry and the selection is distinctive enough to provide a generous choice of colours.

In order to minimize any imperfections that regularly occur in the manufacturing, delivery and installation process it is better to select lighter rather than darker colours and a lower sheen finish rather than a glossier one.

ANODISING

An aluminium anodised finish is the result of a controlled formation of an oxide layer, which is much harder, more durable and about a thousand times thicker than the thin oxide layer naturally formed on aluminium. It has excellent tolerance in coastal environments and its appearance proves popular in architecturally designed features as well as window and door suites.

Anodising gives metal extrusions an extremely long life and offers significant economic advantages through maintenance and operating savings. As the finish reacts with the aluminium it is integrated with the underlying aluminium for total bonding and unmatched adhesion.

Colour anodising metal provides depth of colour with a brilliant metallic lustre. There are several different processes which can be undertaken to achieve the desired finish and colour. When specifying a finish it is essential that you consider the application, whether internal or external. When used externally also take into account the weather conditions of the surrounding location.

POPULAR POWDER COAT COLOURS

Popular Standard Colours

- **Pearl White** Gloss
- **White Birch** Gloss
- **Primrose** Gloss
- **Stone Beige** Matt
- **APO Grey** Satin
- **Anotec Silver Grey** Matt
- **Doeskin** Satin
- **Anodic Bronze** Satin
- **Notre Dame** Gloss
- **Custom Black** Matt
- **Hammersley Brown** Satin
- **Monument** Matt or Satin
- **Dark Grey** Matt
- **Charcoal** Satin or Gloss

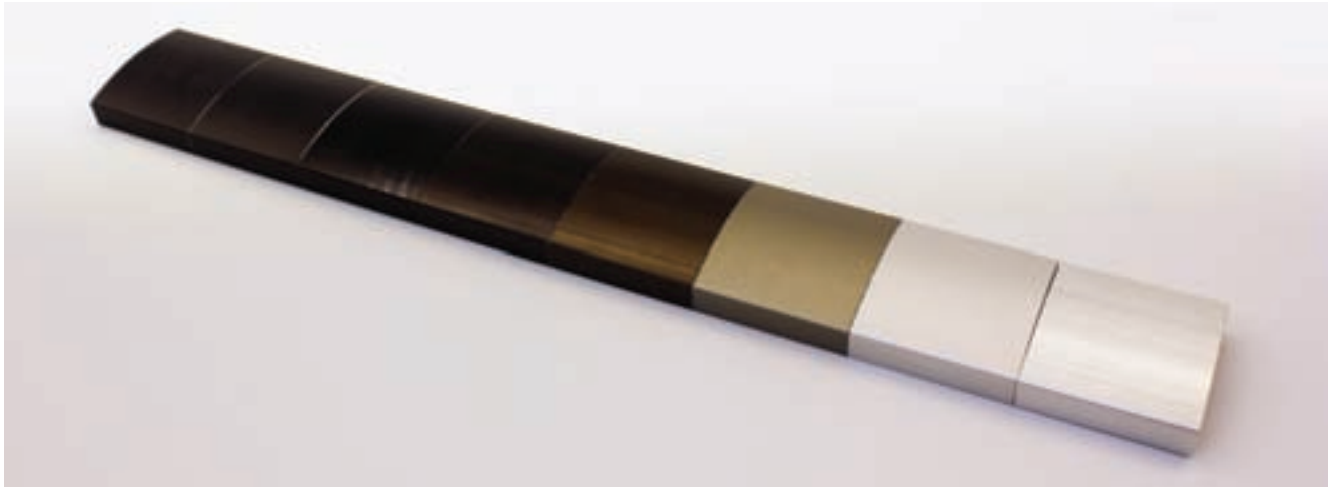
Popular Colourbond® Colours

- **Surf Mist®** Matt or Satin
- **Classic Cream™** Matt or Satin
- **Paperbark®** Matt or Satin
- **Dune** Matt or Satin
- **Sandbank®** Matt or Satin
- **Windspray®** Matt or Satin
- **Ironstone®** Matt or Satin
- **Blue Ridge®** Satin
- **Jasper®** Matt or Satin
- **Pale Eucalypt®** Matt or Satin
- **Wilderness®** Matt or Satin
- **Woodland Grey®** Matt or Satin
- **Headland®** Matt or Satin
- **Manor Red®** Matt or Satin

Popular Pearlescent Colours

- **Citi Pearl®** Pearl Matt
- **Ultra Silver** Pearl Gloss
- **Silver Medalist** Pearl Satin
- **Natural Pearl** Pearl Matt
- **Stormfront** Pearl Matt
- **Charcoal Metallic** Pearl Gloss

POPULAR ANODISED COLOURS



FINISH FEATURES AND COMPARISON

Feature	Anodising	Powdercoating
What is it?	Conversion of outer layer of aluminium substrate by electrochemical process	Application of coloured polymer particles atop aluminium substrate, which is then heat cured
Number of available colours	Up to 30 combinations	Hundreds of options available
Typical abrasive hardness / traffic resistance	Excellent – Extreme	Good – High
Performance in coastal / salt air environments	Exceptional	Good
Why choose?	Modern designer "look" Enhances natural metal lustre	Versatile choice – able to match many other building paint colours
Appearance compliments other materials	Stainless steel, stone, timbers, glass, other natural materials and other metals	Other building products e.g. Colorbond, surface paint colours
Appearance	Clear – translucent, metal lustre often noticeable	Opaque, colour of powder
Lustres available	Matt, satin, bright	Matt, low sheen, satin, gloss
Other surface effects available	Brushed, polished	Metallic, pearlescent
Exterior UV suitability	Some colours external Other colours internal only	Most colours external Few colours internal only
Cost?	Dependant on job size and grade chosen, usually 3-5% of final product	Dependant on job size and grade chosen, usually 3-5% of final product
Weathering properties – external grades	Excellent resistance	Excellent resistance (when suitably pre-treated)
Possible wear rates – non-abrasive	0.0–0.1 um / year	0.3–2.0 um / year
Materials to avoid contact	Alkaline and acid materials, especially at building stage	Strong alkaline, strong acid materials and organic solvents

POWDER COATING TECHNICAL SUMMARY

Powder Products/Manufacturers	Dulux Interpon	Duralloy 272 D610	Duratec 900 D2010	Duratec LX905 D2015	Fluoro FP964 D3000 Fluoromax
Conditions	Coatings Grade	High Durability	Super Durable	Super Durable Enhanced	Ultra Durable
Licensed Applicator Level required to pre-treat and process this powder class		AAF is Licensed to this HD Level	AAF is Licensed to this SD Level	AAF is Licensed to this SDE Level	AAF is Licensed to this UD Level
Building and Location Warranty Pre-approval		Pre-approval Required	Pre-approval Required	Pre-approval Required	Pre-approval Required
Building: No. Floors		1-3 Flrs. & Single Occupancy	Any Number	Any Number	Any Number
Building Code of Australia (BCA) Class		1 or 10	All Classes	All Classes	All Classes
Distance to Saltwater		Greater than 100m	Greater than 10m	Greater than 10m	Greater than 10m
Atmospheric Classifications (AS3715)		Mild, Tropical Only	All Classifications	All Classifications	All Classifications
Suitable substrates		Aluminium Only	Aluminium Only	Aluminium Only	Aluminium Only
Pretreatment, Rinse and Process Control		Qualicoat Approved	Qualicoat Approved	Qualicoat Approved	Qualicoat Approved
Maintenance Requirement		Refer AS3715	Refer AAMA 610	Refer AAMA 610	Refer AAMA 610
AAF Warranty Plus Offering					
Colour & Gloss		Not Offered	10	10 or 15	20
Integrity		Not Offered	10	15	20
Integrity for AAF EverCoat™ Pre-treatment		Not Offered	Extra 5 Years	Extra 5 Years	Extra 5 Years
Performance Specifications					
Pigments and Binders		Organic Pigments	Ceramic Pigments	Ceramic Pigments and High Binder Ratio	Ceramic Pigments and Highest Binder Ratio
Powder Satisfies: Australian Standard		AS3715	AS3715	AS3715	AS3715
American Architectural Manufacturers Associated Standard		AAMA2603	AAMA2604	AAMA2604	AAMA2605
AAMA Test - 45° Florida Exposure		1 Year	5 Year	5 Year	10 Year
AAMA Test - Gloss Retention		N/A	Min. 30%	Min. 30%	Min. 50%
AAMA Test - Colour Retention		N/A	less than 5 Delta E	less than 5 Delta E	less than 5 Delta E
AAMA Tests - Salt spray and Humidity		1,500 hrs	3,000 hrs	3,000 hrs	4,000 hrs