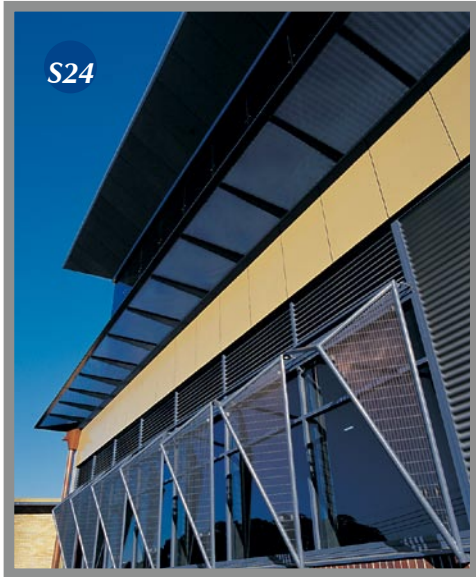




There are a host of commercially available surface finishes to coat, colour, enhance and protect aluminium. The most common are powder coating, anodising and fluoropolymer organic coating (PVDF). Hi-Light recommend all of these processes for our range of aluminium products.

POWDER COATING

The most commonly used of surface finishes, powder coating is available in a large range of colours and with commercially available surface integrity warranties of up to 15 years.



Shore Grammar School, North Sydney, NSW, HA403 grating with CHS framing

Advantages

- Uniformity of colour.
- Widely available.
- Good protection properties against wear and tear.
- Minor surface damage can be readily touched up with colour matched aerosols.
- Environmentally less polluting than anodising.
- Anti-graffiti system available.

Disadvantages

- Can be chipped.
- Softer surface than anodising.
- Irregular coating thicknesses between flat surfaces and edges.

Hi-Light screens are to be powder coated in accordance with AS3715. Precautions should be taken with powder coating to avoid the effects of Faraday Caging, a lack of paint thickness caused by electrostatic blowback from restricted forms.

To avoid the possibility of mismatch with adjacent materials always nominate the powder manufacturer, the warranty system (with duration) and the colour (with its code number) when specifying powder coating. (Extended lead times and a cost premium will apply when specifying from a master palette or a non-stock warranty powder coating system)

ANODISING

An etching process that provides a hard-wearing surface, anodising offers a limited range of colours with commercially available surface integrity warranties up to 25 years. The vast majority of all anodising is clear anodising which provides a clean sharp finish to aluminium and a relatively uniform appearance.

Advantages

- Excellent protection properties against wear and tear.
- Provides a sharp clean appearance.
- Relatively uniform thickness of depth of finish.
- Will not chip flake or peel.
- Good resistance to salt air corrosion (25µm depth for maximum protection).

Disadvantages

- Lack of uniformity of colour.
- Difference in colour may occur at welds.
- Difficult to match gloss levels when restoring damaged areas or jig marks with touch up paint.
- Limited number of applicators and colours.
- Process and materials are environmentally more polluting than powder coating.

Hi-Light screens are to be anodised in accordance with AS1231. Care should be taken to minimise the appearance of jig marks on visible surfaces.

When specifying anodising always nominate a minimum 20µm depth of coating, the colour and company name of the anodiser to minimise the possibility of mismatch with adjacent materials. (Company name of anodiser not required for standard clear anodising).

Special Note: With both powder coating and anodising some coating colours may exhibit rapid colour degradation under ultra-violet exposure and should **NOT** be specified for external use. Check with your coating product manufacturer before specifying.



Rushcutters Bay Hotel, Sydney, NSW, HC753 grating, **DAN019** outrigger and **DAN023** nosing.



S26

PVDF

Advantages

- a high-quality, softer setting wet paint.
- excellent colour retention.
- uniformity of colour.
- minor damage is readily touched up.
- suited to 20-year warranty requirements on large-scale commercial projects.

Disadvantages

- softer surface than powder coating and anodising.
- relatively high initial cost.

**Energy Australia Substation
Cockle Bay, NSW.**
SS203/60 louvre façade with structural channel framing and door hardware.

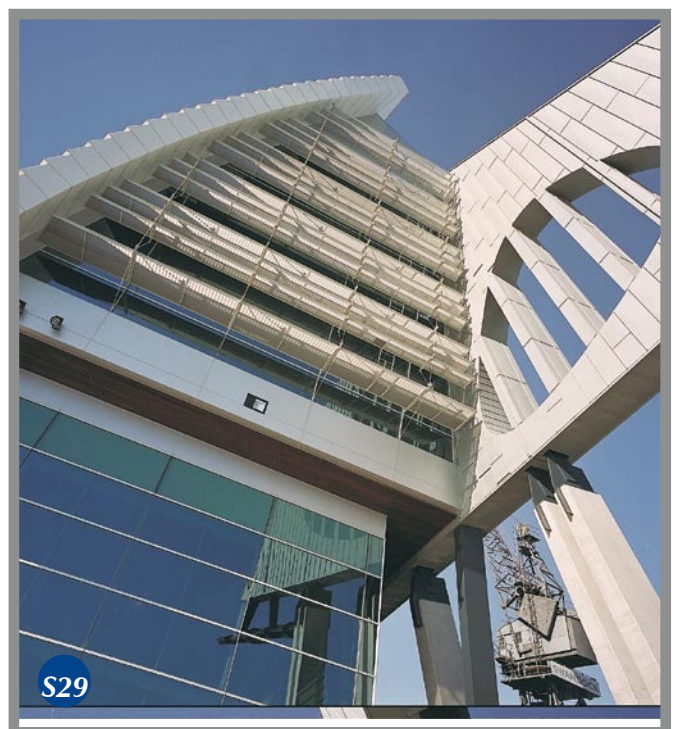


S27



S28

Neville Bonner Building, Brisbane, Qld. – SS203/60 louvre tiered panels supported by structural “T” section frame.



S29

WA Maritime Museum, Fremantle WA HA403 grating with hinged access panels supported by structural framing.