

## NZDU02249 Dulux Metalshield FD Enamel Gloss on Painted Non-Ferrous Metals [Exterior]

### Scope of Works

DULUX Metalshield® FD Enamel dries very rapidly when compared to other typical enamels. Its rapid dry properties are favoured in application shops where short down times mean savings in time and money.

### Substrate and Substrate Preparation

#### Substrate Notes

This is a generic non-ferrous metal substrate. Please see the respective substrate for: steel, galvanised steel, precoated sheet steel. Other specialty metal substrates may also not be covered by this substrate.

#### ALUMINIUM & ALLOYS

Aluminium and its alloys rapidly oxidise on exposure, forming a chemically inert, protective layer that protects the metal from further corrosion.

Aluminium and its alloys may be extremely smooth or contaminated with greases, oils and foreign matter leading to poor paint adhesion and reduced lifetime. Careful cleaning and thorough abrasion of the surface must be carried out prior to painting to ensure maximum coating performance.

#### ANODISED ALUMINIUM

Anodising is an electro-chemical process which physically alters the surface of the metal to produce a very smooth, tough, dense, invisible oxide layer on the surface. The aluminium surface is 'passivated' and sealed and therefore unable to bond with any organic coating, including powder coatings unless proper surface preparation is carried out to ensure adequate adhesion of the applied finish.

#### COPPER

Copper metal has a dull brown metallic lustre but will oxidise to the familiar chalky green patina often seen on copper domes on heritage buildings. This green patina must be completely removed prior to painting.

#### BRASS

Brass is an alloy (blend) of copper and zinc. Brass can be polished to a bright, shiny, lustrous metallic dark gold appearance but is prone to tarnishing (surface corrosion), particularly on contact with skin, and therefore should not be handled with bare hands. Brass is very smooth and may be coated with oils leading to poor paint adhesion and reduced lifetime. Careful cleaning and thorough abrasion of the surface must be carried out prior to painting to ensure maximum coating performance.

#### BRONZE

Bronze is an alloy (blend) of copper and tin and has a shiny, lustrous brown metallic appearance that is prone to tarnishing (surface corrosion) to a dusty green patina with time. Bronze is generally quite smooth and may be contaminated with oils leading to poor paint adhesion and reduced lifetime. Careful cleaning and thorough abrasion of the surface must be carried out prior to painting to ensure maximum coating performance.

#### Substrate Preparation Notes

##### ASSESS SUITABILITY

Inspect to determine the degree of deterioration of existing coatings. Identification of the existing coating is also very helpful in determining the repaint system. Check coating adhesion using the cross-cut adhesion test, carried out in various locations.

##### CLEAN SURFACE

Degrease surface with an alkaline detergent, such as Dulux Prep Wash, and rinse with fresh potable water until free of residue. Repeat until the surface is clean. Alternatively, the surface can be cleaned by water blasting.

##### ABRADE SURFACE

Abrade surface to remove gloss and chalkiness, to achieve a smooth, even, sound surface and to provide a good key for the new coating system. Ensure all dust is removed. Complete removal of heavy chalky buildup may require wire brush or power tool cleaning back to sound paint layers before sanding. Feather edges of the surround sound paint. Ensure all dust is removed prior to continuing.

##### PRIME

Apply a suitable primer to any bare metal areas as soon as possible, to reduce the risk of corrosion.

##### ADDITIONAL NOTES

- The existing coating must be sound and firmly adherent to the substrate. Cross-hatch adhesion testing must be carried out prior to applying this coating system.
- The existing painted surface can be solvent sensitive. The nominated primer should therefore be applied to a "test area" prior to work commencing to ensure that the new coatings will not adversely affect the old coatings. If 'frying' or 'wrinkling' occurs then an alternative system will need to be employed.

##### INDUSTRIAL

##### ASSESS SUITABILITY

Inspect to determine the degree of deterioration of existing coatings. Identification of the existing coating is also very helpful in determining the repaint system. Check coating adhesion using the cross-cut adhesion test, carried out in various locations. Refer to relevant sections of AS 1580.408.4

#### CLEAN SURFACE

Degrease surface with an alkaline detergent, such as Dulux Prep Wash, and rinse with fresh potable water until free of residue. Repeat until the surface is clean. Refer to relevant sections of AS1627.1.

#### ABRADE SURFACE

Abrade surface to remove gloss and chalkiness, to achieve a smooth, even, sound surface and to provide a good key for the new coating system. Ensure all dust is removed. Complete removal of coatings that failed the adhesion test may require wire brush or power tool cleaning back to sound paint layers before sanding. Feather edges of the surround sound paint. Ensure all dust is removed prior to continuing. Refer to relevant sections of AS1627.2.

#### PRIME

Apply a suitable primer to any bare metal areas as soon as possible, to reduce the risk of corrosion.

#### Coating System Summary

- 1st Coat Dulux PREP WASH
- Spot Primer Dulux Metalshield Etch Primer
- 2nd Coat Dulux Metalshield FD Enamel Gloss
- 3rd Coat Dulux Metalshield FD Enamel Gloss

#### Coating System

##### 1st Coat — Dulux PREP WASH

Coat Type <b>1st Coat</b>	Datasheet <b>NZDU00398 Dulux PREP WASH</b>
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Read the full Datasheet details at [Dulux PREP WASH](#)

#### Application Methods



**Brush**

	Min	Max	Recommended
Theoretical Spread Rate (m <sup>2</sup> /L)	<b>6</b>	<b>12</b>	
Recoat Time **	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

Meets ECNZ V.O.C. Requirements?

**Not Applicable**

#### Coating Application Details

Apply by broom or brush. Or by garden sprayer.

1. Add one part Dulux Prep Wash concentrate to one part water in a clean plastic bucket and mix well.
2. Test on a small inconspicuous area at recommended dilution to determine effectiveness and strength required.
3. Apply diluted Dulux Prep Wash solution to walls/roof/trim with a broom/brush or garden sprayer. Leave the solution on the surface until mould and mildew stains disappear or soften (approximately 10 minutes), avoiding allowing the solution to dry out. Scrub vigorously.
4. Rinse off the surface with water using a high pressure or garden hose and allow surface to dry. Surface may be slippery while wet (roof). Stubborn stains may require longer time, more vigorous scrubbing, or additional treatment. Severely stained surfaces may need a power washer, or treatment with undiluted Dulux Prep Wash concentrate.

SDS Number  
**000000022880**

SDS Link  
[View SDS Link](#)

##### Spot Primer — Dulux Metalshield Etch Primer

Coat Type <b>Spot Primer</b>	Datasheet <b>NZDU00526 Dulux Metalshield Etch Primer</b>
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Read the full Datasheet details at [Dulux Metalshield Etch Primer](#)

Application Methods

 Air Spray  Airless Spray  Brush  Roller

	Min	Max	Recommended
Theoretical Spread Rate (m <sup>2</sup> /L)	<input type="text"/>	<input type="text"/>	<input type="text" value="8"/>
Wet Film Per Coat (microns)	<input type="text" value="125"/>	<input type="text" value="190"/>	<input type="text" value="125"/>
Dry Film Per Coat (microns)	<input type="text" value="10"/>	<input type="text" value="15"/>	<input type="text" value="10"/>
Recoat Time **	<input type="text"/>	<input type="text"/>	<input type="text" value="10"/>

Meets ECNZ V.O.C. Requirements?  
**Not Applicable**

**2nd Coat — Dulux Metalshield FD Enamel Gloss**

Coat Type  
**2nd Coat**

Datasheet  
**NZDU00511 Dulux Metalshield FD Enamel Gloss**

Read the full Datasheet details at [Dulux Metalshield FD Enamel Gloss](#)

Application Methods

 Air Spray  Airless Spray

	Min	Max	Recommended
Theoretical Spread Rate (m <sup>2</sup> /L)	<input type="text"/>	<input type="text"/>	<input type="text" value="8.5"/>
Wet Film Per Coat (microns)	<input type="text"/>	<input type="text"/>	<input type="text" value="105"/>
Dry Film Per Coat (microns)	<input type="text"/>	<input type="text"/>	<input type="text" value="40"/>
Recoat Time **	<input type="text" value="6 Hours"/>	<input type="text" value="Indefinite"/>	<input type="text"/>

Meets ECNZ V.O.C. Requirements?  
**Not Applicable**

**3rd Coat — Dulux Metalshield FD Enamel Gloss**

Coat Type  
**3rd Coat**

Datasheet  
**NZDU00511 Dulux Metalshield FD Enamel Gloss**

Read the full Datasheet details at [Dulux Metalshield FD Enamel Gloss](#)

Application Methods

 Air Spray  Airless Spray

	Min	Max	Recommended
Theoretical Spread Rate (m <sup>2</sup> /L)	<input type="text"/>	<input type="text"/>	<input type="text" value="8.5"/>

Wet Film Per Coat (microns)			105
Dry Film Per Coat (microns)			40
Recoat Time **	6 Hours	Indefinite	
Meets ECNZ V.O.C. Requirements? <b>Not Applicable</b>			

**Coating System Notes**

\* Theoretical Coverage is the area is the area covered by 1 Litre of material at the specifiaction 'Dry Film Thickness' without a loss to a smooth and non porous surface.

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The correct colour or colour match is the responsibility of the applicator. Colours will change over time and Dulux does not guarantee that the same colour newly mixed will match a colour applied earlier which has been subjected to weathering or other change elements. No product colour is guaranteed against colour change.

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**WHERE LEAD MAY BE PRESENT:** The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS/ NZS 4361 Parts 1 and 2 and Worksafe Australia or New Zealand guidelines.