NZDU01140 Dulux Aquanamel Semi Gloss on Painted Non-Ferrous Metals [Exterior]

Scope of Works

DULUX Aquanamel Semi Gloss is a premium quality water based interior and exterior acrylic enamel, that dries to a tough finish. This product is so resistant that common marks are able to be removed virtually without trace. It resists knocking, chipping and yellowing and is highly recommended for walls, doors, architraves, timber trim and skirting boards as an alternative to enamels, and is ideal for bathrooms, kitchens and laundries.

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 1 Step Prep Water Based Primer Sealer Undercoat
- 2nd Coat — Dulux Aquanamel Semi Gloss
- 3rd Coat — Dulux Aquanamel Semi Gloss

Coating System

1st Coat — Dulux PREP WASH

Coat Type	Datasheet
1st Coat	**NZDU00398 Dulux PREP WASH**

Read the full Datasheet details at Dulux PREP WASH

Application Methods

Brush

Broom Garden sprayer

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	6	12	
Recoat Time **	n/a	n/a	n/a

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	SDS Link
000000022880	**View SDS Link**

Spot Primer — Dulux 1 Step Prep Water Based Primer Sealer Undercoat

Coat Type	Datasheet
Spot Primer	**NZDU00432 Dulux 1 Step Prep Water Based Primer Sealer Undercoat**

Read the full Datasheet details at Dulux 1 Step Prep Water Based Primer Sealer Undercoat

Application Methods

Air Spray **Airless Spray** **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			**14**
Wet Film Per Coat (microns)			**71**
Dry Film Per Coat (microns)			**31**
Recoat Time **	**2 Hours**		

V.O.C. Level	Meets ECNZ V.O.C. Requirements?
< 40g/L untinted	**Not Applicable**

Coating Application Details

Brush, roller, conventional or airless spray.
ROLLER: Using a medium nap roller apply a full even coat direct from the container and finish by light parallel strokes with a dry roller.
Stir contents thoroughly before and during use.
AIRLESS/CONVENTIONAL SPRAY: Suitable for application by all standard spray equipment. If necessary thin with up to 100ml per litre of water to aid atomisation.
BRUSH: Wet brushes with water prior to use to avoid clogging. Apply a full even coat direct from the container.
When painting exterior surfaces, ensure topcoat is applied no more than one week after application.

SDS Number	SDS Link
DLXNZLEN002997	**View SDS Link**

2nd Coat — Dulux Aquanamel Semi Gloss

Coat Type	Datasheet
2nd Coat	**NZDU00233 Dulux Aquanamel Semi Gloss**

Read the full Datasheet details at Dulux Aquanamel Semi Gloss

Application Methods

Air Spray **Airless Spray** **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	**16**	**16**	**16**
Wet Film Per Coat (microns)	**63**	**63**	**63**
Dry Film Per Coat (microns)	**22**	**22**	**22**
Recoat Time **	**2 Hours**	**Indefinite**	

V.O.C. Level	Meets ECNZ V.O.C. Requirements?
<53 g/L inclusive of Dulux Low VOC tinter.	**Yes** Total Volatile Organic Content (TVOC) values are calculated in accordance to the stated methodology within Green Star Technical Manuals. The TVOC content is theoretically calculated as the sum total of the known VOC values of the product's raw material components.

	These materials include the base paint plus additional low VOC tinter required for non-factory packaged colours.

Coating Application Details

* Some colours may require more than the recommended number of coats to achieve full opacity.
Stir contents thoroughly before and during use with a broad flat stirrer using an upward lifting action.

Brush, roller or HVLP spray

Brush/Roller
Brush- Dulux Professional brushes are recommended.

Apply evenly, dividing area into patches about 50-60 square centimetres. Paint one patch at a time working back into previously applied paint.

Finally lay off each patch with light vertical strokes again lapping lightly into previously painted patches.

On wall areas use a 5-9mm nap synthetic roller to achieve the smoothest finish.

Generally thinning is not recommended, however, under hot conditions DULUX Hot Weather Thinner should be added to improve application performance to maximum of 50 ml per litre.

Airless/Conventional Spray
Suitable for application by conventional or airless spray equipment. Up to 100mL/L of water may be added for application by conventional spray, up to 30mL/L of water for airless spray, and up to 5mL/L for HVLP spray, to aid atomisation.

Wagner recommendation: F230 Aircoat recommended.
Tip: 211 for archs and trim, 411 for doors
Pressure: 1100 PSI
1-1.5 at the bar at the gun

Graco recommendation: Air Assisted Airless.
Tip: 210 or 310
Pressure: 1100 PSI

SDS Number	SDS Link
DLXNZLEN003191	**View SDS Link**

3rd Coat — Dulux Aquanamel Semi Gloss

Coat Type	Datasheet
3rd Coat	**NZDU00233 Dulux Aquanamel Semi Gloss**

Read the full Datasheet details at Dulux Aquanamel Semi Gloss

Application Methods

Air Spray **Airless Spray** **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	16	16	16
Wet Film Per Coat (microns)	63	63	63
Dry Film Per Coat (microns)	22	22	22
Recoat Time **	2 Hours	Indefinite	

V.O.C. Level	Meets ECNZ V.O.C. Requirements?
<53 g/L inclusive of Dulux Low VOC tinter.	**Yes** Total Volatile Organic Content (TVOC) values are calculated in accordance to the stated methodology within Green Star Technical Manuals. The TVOC content is theoretically calculated as the sum total of the known VOC values of the product's raw material components. These materials include the base paint plus additional low VOC tinter required for non-factory packaged colours.

Coating Application Details

* Some colours may require more than the recommended number of coats to achieve full opacity.
Stir contents thoroughly before and during use with a broad flat stirrer using an upward lifting action.

Brush, roller or HVLP spray

Brush/Roller
Brush- Dulux Professional brushes are recommended.

Apply evenly, dividing area into patches about 50-60 square centimetres. Paint one patch at a time working back into previously applied paint.

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Airless/Conventional Spray
Suitable for application by conventional or airless spray equipment. Up to 100mL/L of water may be added for application by conventional spray, up to 30mL/L of water for airless spray, and up to 5mL/L for HVLP spray, to aid atomisation.

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Tip: 211 for archs and trim, 411 for doors
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Graco recommendation: Air Assisted Airless.
Tip: 210 or 310
Pressure: 1100 PSI

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Coating System Notes

* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness. ** Recoat times are quotes for 25°c and 50% relative humidity, these may vary under different conditions.

Disclaimer

Unless Dulux has provided you with a customised, project-specific specification, this Duspec+ document does not represent that any particular product or product system will be suitable for your project.

Any information provided in this Duspec+ is given in good faith and is believed by Dulux to be correct at the time of publication. Products and coating systems can be expected to perform as indicated in this Duspec+ document, provided the substrate is in good condition, the coatings are applied by a suitably experienced and skilled applicator, and the preparation, application and maintenance is followed strictly as set out in this Duspec+ document, and as recommended on the applicable Dulux Product Data Sheet and Safety Data Sheets for the relevant products (available from www.duspecplus.co.nz). Climatic conditions at application time can affect Duspec+ documentation suitability and product performance.

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.

Where any liability of Dulux in respect of this Specification cannot by law be excluded, Dulux's liability is limited, as permitted by law and at Dulux's option, to resupply of the relevant products or services or to reimbursing the cost of those products or services.

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.