NZDU00983 Dulux Aquanamel Semi Gloss on Painted Steel [Interior]

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 steel or iron substrate. Please see the respective substrate for: non-ferrous metals, galvanised steel, precoated sheet steel. Other specialty metal substrates may also not be covered by this substrate.
Uncoated ferrous metal is very unstable and will readily react with water and oxygen to form oxides (rust). The presence of salts will speed up rust formation.
Millscale is a shiny, bluish iron oxide produced by heat and pressure during manufacture and is often mistaken for shop primer or clean steel. Millscale is very difficult to remove by hand and should be abrasive blast cleaned off. The presence of millscale is responsible for a significant proportion of coating failures.

MILD STEEL
Mild steel contains less than 0.25% carbon. New mild steel surfaces should be inspected for millscale, rust, sharp edges, burr marks and welding flux, forming or machine oils, salts, chemical contamination or mortar splashes on them, all of which which must be removed.

CAST IRON
Cast iron is a carbon-steel alloy containing substantial amounts of graphite (usually above 2.5%) which has been cast and therefore does not contain welds.

BLACK STEEL
Ferrous metal partially protected by a thin outer layer of black iron oxide (Magnetite). Rust protection offered with black steel is minimal and is often treated with an oil coating during manufacture to inhibit the rust process.

WROUGHT IRON
A historic grade of iron, with a low carbon content (0.1-0.25%) but significant levels of impurities. It has little use today and has been replaced by mild steel.

Substrate Preparation Notes

DOMESTIC STEELWORK
CLEAN
Remove all surface contamination such as oil, grease or dirt by alkaline detergent solution wash, such as Dulux Prep Wash, using stiff bristle brush if necessary, and rinse with fresh potable water. Repeat until the surface is clean. Alternatively, the surface can be cleaned by water blasting.

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.

REPAIR OF SURFACE DEFECTS
Remove all coatings that had failed adhesion test, or that are cracking, peeling, flaking or otherwise unsound by sanding, power sanding, scraping, wire brushing or burning off as appropriate. Where coating is removed back to a well-adhered, hard edge, feather the edges of the coating to remove visual ridges. Remove all residual loose matter resulting from the cleaning process by brush, vacuum, or clean, compressed air.

ABRADE SURFACE
Where the existing coating passes adhesion test, abrade surface to thoroughly de-gloss the surface and to provide a suitable surface for re-coating. Ensure all dust is removed prior to continuing.

PRIME
Spot prime all bare metal with an appropriate, corrosion-inhibiting primer as soon as possible, before the surface oxidises or becomes contaminated. Overlap onto the sound adjacent coating by 25 to 50 mm.

RUST AFFECTED STEEL
1. Remove any loose or flaking coating back to a hard edge by scraper or power tool. Feather back all edges to remove ridges. Abrade surface of remaining coating to provide a suitable surface key for adhesion of the new coating system.
2. Using wire brush or power tool cleaning methods as appropriate, clean all bare metal surfaces and rust-affected areas. Remove filings, preferably by vacuum or compressed air. Ensure that the surface is clean, corrosion-free and dry immediately prior to application of primer coat.
3. Spot prime all bare metal with an appropriate, corrosion-inhibiting primer as soon as possible, before the surface oxidises or becomes contaminated.

INDUSTRIAL

CLEAN
Wash and degrease all surfaces to be coated in accordance with AS1627.1 with a free-rinsing, alkaline detergent, such as Dulux Prep Wash. Wash with fresh potable water to remove all detergent, salts and residues are removed. Refer to AS 3894.6 methods A&D.

ASSESS SUITABILITY
Perform adhesion test as described in relevant sections of AS 3894.9. If existing coating fails adhesion test, it must be removed.

REPAIR AND PREPARATION OF SURFACE
Abrade the surface to remove gloss and chalkiness, to achieve a smooth, uniform surface and to provide a good key for the new coating system. Dust off. Complete removal of heavy chalky build-up may require wire brush or power tool cleaning back to sound paint layers before abrading.

PRIME
Spot prime all bare metal with an appropriate, corrosion-inhibiting primer as soon as possible, before the surface oxidises or becomes contaminated. Overlap onto the sound adjacent coating by 25 to 50 mm.

RUST AFFECTED STEEL
1. Remove any loose or flaking coating back to a hard edge by scraper or power tool. Feather back all edges to remove ridges. Abrade surface of remaining coating to provide a suitable surface key for adhesion of the new coating system.
2. Using wire brush or power tool cleaning methods as appropriate, clean all bare metal surfaces and rust-affected areas in accordance with AS/NZ 1627:2 Class 2. Remove filings, preferably by vacuum or compressed air. Ensure that the surface is clean, corrosion-free and dry immediately prior to application of primer coat.
3. Spot prime all bare metal with an appropriate, corrosion-inhibiting primer as soon as possible, before the surface oxidises or becomes contaminated. Overlap onto the sound adjacent coating by 25 to 50 mm.

Coating System Summary

- Spot Primer — Dulux Luxaprime Zinc Phosphate
- 1st Coat — Dulux Aquanamel Semi Gloss
- 2nd Coat — Dulux Aquanamel Semi Gloss

Coating System

Spot Primer — Dulux Luxaprime Zinc Phosphate

Coat Type	Datasheet
Spot Primer	**NZDU00507 Dulux Luxaprime Zinc Phosphate**

Read the full Datasheet details at Dulux Luxaprime Zinc Phosphate

Application Methods

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

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			**6**
Wet Film Per Coat (microns)			**165**
Dry Film Per Coat (microns)			**75**
Recoat Time **	**24 Hours**	**Indefinite**	

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

1st Coat — Dulux Aquanamel Semi Gloss

Coat Type	Datasheet
1st 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
<53 g/L inclusive of Dulux Low VOC tinter.

Meets ECNZ V.O.C. Requirements?
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
DLXNZLEN003191

SDS Link
View SDS Link

2nd Coat — Dulux Aquanamel Semi Gloss

Coat Type
2nd Coat

Datasheet
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
<53 g/L inclusive of Dulux Low VOC tinter.

Meets ECNZ V.O.C. Requirements?
Yes

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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.

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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.