NZDU00648 Dulux Quantum FX Gloss on Painted Galvanised Steel [Interior]

Scope of Works

DULUX QUANTUM® FX is a premium quality, gloss, metallic, twopack acrylic polyurethane that offers a range of brilliant modern tinted colours. Designed for locations requiring visual impact, whilst maintaining aesthetics, it achieves amazing results.

Substrate and Substrate Preparation

Substrate Notes

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

GALVANISED STEEL (Zinc Coated Steel, Galvanised Iron)
Galvanised steel has been coated with a layer of zinc, either by dipping in molten zinc/zinc alloy, sprayed with molten zinc metal or electrodeposition of zinc. The zinc layer provides galvanic corrosion protection in much the same way that zinc rich primers do, by corroding in preference to the steel with which it is in contact. New galvanised iron, zinc and zinc-alloy surfaces should be examined for flux residues, light roll-forming oils, and foreign matter, all of which must be removed. Surfaces that show white rust or other corrosion products should be cleaned and treated appropriately. Zinc and zinc-alloy coated surfaces must not be primed with alkyd based paints due to a chemical reaction between the zinc and the alkyd resin.

Galvanised steel can be difficult to paint and protect because of the highly reactive nature of galvanising, particularly in coastal and chemical environments.

In many circumstances superior corrosion protection and superior compatibility with topcoats can be achieved by the use of Dulux zinc-rich, two-pack primer on mild steel instead of hot dipped galvanising. Please consult a Dulux Protective Coatings representative for specific requirements.

ZINC METAL SPRAY
Steel sprayed with molten zinc metal. The zinc layer provides corrosion protection in much the same way as hot dipped galvanised steel. There are fewer limitations on the size of objects that can be coated than with hot dip galvanisation, however, the porosity of the resulting surface will be higher.

Substrate Preparation Notes

DOMESTIC
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 SUBSTRATES
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. If the rust is serve, remove all paint, zinc coating and rust with abrasive blast cleaning, power wire brush or power tool cleaning. 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.

INDUSTRIAL
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. A clean surface is indicated when the rinsing water wets out the surface instead of beading on the surface. Refer to relevant sections of AS1627.1.

ASSESS SUITABILITY
Ensure that all coatings are tightly adhering to the substrate by crosshatch adhesion test - if existing coating fails adhesion test, it must be removed.

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 remove gloss and chalkiness, to achieve a smooth, even, sound surface and to provide a good key for the new coating system. Dust off. Complete removal of heavy chalky buildup may require wire brush or power tool cleaning back to sound paint layers before sanding.

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 SUBSTRATES
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. If the rust is serve, remove all paint, zinc coating and rust with abrasive blast cleaning to AS1627.4 Class 2 or power wire brush or power tool cleaning or as appropriate to AS1627.2 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 Durebild® STE Semi Gloss
• 1st Coat	Dulux Quantum FX Gloss
• 2nd Coat	Dulux Quantum Clearcoat Gloss

Coating System

Spot Primer — Dulux Durebild® STE Semi Gloss

Coat Type	Datasheet
Spot Primer	**NZDU00482 Dulux Durebild® STE Semi Gloss**

Read the full Datasheet details at Dulux Durebild® STE Semi Gloss

Application Methods

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

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			6.7
Wet Film Per Coat (microns)			150
Dry Film Per Coat (microns)			125
Recoat Time **	14 Hours	4 Weeks*	

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

1st Coat — Dulux Quantum FX Gloss

Coat Type	Datasheet
1st Coat	**NZDU00524 Dulux Quantum FX Gloss**

Read the full Datasheet details at Dulux Quantum FX Gloss

Application Methods

Airless Spray

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			8.2
Wet Film Per Coat (microns)			120
Dry Film Per Coat (microns)			55
Recoat Time **	7 Hours	Indefinite	

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

2nd Coat — Dulux Quantum Clearcoat Gloss

Coat Type	Datasheet
2nd Coat	**NZDU00525 Dulux Quantum Clearcoat Gloss**

Read the full Datasheet details at Dulux Quantum Clearcoat Gloss

Application Methods

Airless Spray

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			9.5
Wet Film Per Coat (microns)			100
Dry Film Per Coat (microns)			45
Recoat Time **	7 Hours	Indefinite	

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

Coating System Notes
* Theorectical 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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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.