NZDU00769 Dulux Luxathane R Gloss on New Steel [Exterior]

Scope of Works

DULUX LUXATHANE® R is a full gloss, two component acrylic polyurethane which displays the advantage of being recoatable with minimum surface preparation. EXTERIOR STEEL - PUR4 - LONG TERM SYSTEM Gloss level: Gloss Coating type: Epoxy zinc rich primer/Intermediate/Polyurethane gloss Preparation: Abrasive blast to AS 1627.4 Class 2.5

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 It has little use today and has been replaced by mild steel.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
CLEAN
Remove all surface contamination such as oil, grease or dirt by washing with an alkaline detergent, such as Dulux Prep Wash, and rinse with fresh potable water.

PREPARE SURFACE
Surface shall be power tool cleaned, to remove all rust, weld flux and mill scale, back to clean, corrosion-free metal, and to provide a suitable key for the coating system. Remove all residual loose matter resulting from the cleaning process by brush, vacuum, or clean, compressed air.

PRIME
Apply a suitable, corrosion-inhibiting primer to any bare metal areas as soon as possible, before the surface oxidises or becomes contaminated.

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, degrease and remove all surface contaminants in accordance with AS1627.1 with a free-rinsing, alkaline detergent, such as Dulux Prep Wash. Wash with fresh potable water and ensure that all soluble salts are removed in accordance with AS 3894.6 methods A&D.

PREPARE SURFACE
Grind all sharp edges with a power tool to a minimum radius of 2 mm. Power tool clean welds to AS1627.2 Class 2 to remove roughness. Remove filings, preferably by vacuum or compressed air. Abrasive blast clean all steel surfaces to be painted in accordance with AS1627.4 to visual standard AS1627.9 Class 2.5 (equivalent to ISO8501-1, Sa 2.5: Very Thorough Blast-Cleaning). Use a non-metallic medium that will generate a surface profile of 35 to 65 microns (as tested to AS3894.5 Method A.)

PRIME

Commence application within 4 hours of abrasive blast cleaning or before surface becomes contaminated, otherwise repeat abrasive blasting step. Stripe coat welds, bolts, boltholes and all edges with primer before application of full primer coat nominated in the Coating System section of the specification.

TREATMENT OF ON SITE WELDING
1. Remove weld spatter.
2. Power tool clean welds to AS1627.2 Class 2 to remove roughness. Remove filings, preferably by vacuum or compressed air.
3. Prime welds immediately with the nominated primer before contamination can reoccur. Ensure that the primer overlaps the sound adjacent coating by not less than 25mm or greater than 50mm.
4. Apply intermediate and topcoats over the primed welds to match the surrounding coating system, overlapping the sound adjacent coating by not less than 25mm or greater than 50mm.

Coating System Summary

- 1st Coat — Dulux Zincanode 402 Matt
- 2nd Coat — Dulux Duremax GPE Semi Gloss
- 3rd Coat — Dulux Luxathane R Gloss

Coating System

1st Coat — Dulux Zincanode 402 Matt

Coat Type	Datasheet
1st Coat	**NZDU00463 Dulux Zincanode 402 Matt**

Read the full Datasheet details at Dulux Zincanode 402 Matt

Application Methods

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

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	8	6	6.4
Wet Film Per Coat (microns)	125	165	155
Dry Film Per Coat (microns)	60	80	75
Recoat Time **	5 Hours	Indefinite	

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

2nd Coat — Dulux Duremax GPE Semi Gloss

Coat Type	Datasheet
2nd Coat	**NZDU00488 Dulux Duremax GPE Semi Gloss**

Read the full Datasheet details at Dulux Duremax GPE Semi Gloss

Application Methods

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

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			5.8
Wet Film Per Coat (microns)			175

Dry Film Per Coat (microns)			125
Recoat Time **	8 Hours	4 Weeks*	

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

3rd Coat — Dulux Luxathane R Gloss

Coat Type	Datasheet
3rd Coat	**NZDU00491 Dulux Luxathane R Gloss**

Read the full Datasheet details at Dulux Luxathane R Gloss

Application Methods

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

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			9.2
Wet Film Per Coat (microns)			110
Dry Film Per Coat (microns)			50
Recoat Time **	16 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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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.