

Specification



NZDU00817 Dulux Luxathane R Gloss on New Galvanised 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 ZINC METAL SPRAYED STEEL - MEDIUM TERM SYSTEM Gloss level: Gloss Coating type: Epoxy zinc phosphate primer/Polyurethane gloss Preparation: Clean to AS 1627.1 and lightly abrade

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

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.

ABRADE

Abrade surface thoroughly using an abrasive nylon pad to remove gloss and to provide a suitable key for the coating system to adhere to. Any white rust should be removed by abrasion. Care must be taken so as not to damage the zinc layer. Wash down residues and allow the surface to dry.

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 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, 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 washing with an alkaline detergent, such as Dulux Prep Wash, and rinse with fresh potable water. Repeat until the surface is clean. 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 2003 Part 2.

PREPARE SURFACE

Dry abrasive "brush blast" clean (whip blast) the surface using a non-metallic abrasive such as garnet. The abrasive size and blast pressure shall be such that all zinc corrosion products and other surface contaminants are completely removed and that the surface is lightly profiled to provide a suitable key for the coating system to adhere to but with minimal reduction in the galvanised coating thickness (no more than 10 microns). If the item being painted is not suitable for brush blasting (eg zinc coated, sheet steel cladding) then use non-metallic abrasive sanding pads to remove any existing corrosion and provide a suitable key for coating adhesion. Note that this preparation method is likely to be less effective than brush blasting and should only be used where brush blasting is not suitable.



Specification



Remove all spent abrasive and residual dust using dry compressed air or, preferably, vacuum cleaning prior to application of the coating. Avoid handling blasted galvanised steel with bare hands.

REPAIR

If the zinc coating has been accidentally removed, spot repair all such areas using a zinc rich primer compatible with the coating system.

PRIME

Apply first or primer coat as soon as practical after preparation and before the surface oxidises or becomes re-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 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

Coating System

• 1st Coat Dulux Durepon P14 Primer Undercoat

• 2nd Coat Dulux Luxathane R Gloss

1st Coat — Dulux Durepon	P14 Primer I	Undercoat			
Coat Type 1st Coat		Datasheet NZDU00528 Dulux Durepon P14 Primer Undercoat			
Read the full Datasheet details	at <u>Dulux Dure</u>	epon P14 Primer Underco	at		
Application Methods					
Air Spray 🛉 Airle	ess Spray	🕇 Brush 🕝 Rol	ler		
	Min		Max		Recommended
Dry Film Per Coat (microns)	50		90		75
Durepon P14 datasheet NZ_DC0 2nd Coat — Dulux Luxathar	1952 for more		recoat times will de	pend on which hard	dener is used - please consult the
Coat Type 2nd Coat		Datasheet NZDU00491 Dulux Lu	xathane R Gloss		
Read the full Datasheet details	at <u>Dulux Luxa</u>	athane R Gloss			
Application Methods Air Spray Airle	ess Spray	🕇 Brush 🔭 Rol	ler		
	Min		Max		Recommended



Specification



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	is the area covered by 1 Litre of p	paterial at the specification 'Dr	/ Film Thickness' without a loss to a smooth
and non porous surface.	s the area covered by I Little Of II	iaterial at the specifiaction Dry	7 I IIII THICKIESS WITHOUT A 1055 TO A SHIOOTH

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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.

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.