

NZDU02191 Dulux Weathershield Semi Gloss on New Galvanised Steel [Exterior]

Scope of Works

DULUX Weathershield X10 Semi Gloss is a 100% acrylic self priming paint for exterior use. Its unique MaxiFlex Stretch Technology gives a tough, flexible finish for long life protection from the extremes of weather.

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 severe, 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.

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

- 1st Coat Dulux Precision All Metal Primer
- 2nd Coat Dulux Weathershield Semi Gloss
- 3rd Coat Dulux Weathershield Semi Gloss

Coating System

1st Coat — Dulux Precision All Metal Primer

Coat Type
1st Coat

Datasheet
NZDU00280 Dulux Precision All Metal Primer

Read the full Datasheet details at [Dulux Precision All Metal Primer](#)

Application Methods

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

	Min	Max	Recommended
Theoretical Spread Rate (m ² /L)	14.8	14.8	14.8
Wet Film Per Coat (microns)	68	68	68
Dry Film Per Coat (microns)	25	25	25
Recoat Time **	2 hours	Indefinite	2 hours

V.O.C. Level
<60g/L

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

Coating Application Details

Brush, roller, conventional and airless spray

Stir contents thoroughly before and during use with a broad, flat stirrer using an upward lifting action.

Brush/Roller: Apply full even coats to the prepared surface.

Conventional/Airless Spray: Suitable for application by conventional or airless spray equipment. If necessary thin with up to 50ml/litre of water.

For Galvanised Iron, Zinalume, Aluminium, Copper, Brass and Stainless Steel apply one coat of Dulux Precision All Metal Primer.

For Steel & Wrought Iron apply two coats of Dulux PRECISION All Metal Primer.

Note: Thinning can reduce the rust inhibiting performance of Dulux Precision All Metal Primer

Do Not Tint

SDS Number
DLXNZ7EN001852

SDS Link
[View SDS Link](#)

2nd Coat — Dulux Weathershield Semi Gloss

Coat Type
2nd Coat

Datasheet
NZDU00242 Dulux Weathershield Semi Gloss

Read the full Datasheet details at [Dulux Weathershield Semi Gloss](#)

Application Methods



	Min	Max	Recommended
Theoretical Spread Rate (m ² /L)	16	16	16
Wet Film Per Coat (microns)	63	63	63
Dry Film Per Coat (microns)	25	25	25
Recoat Time **	2 Hours	Indefinite	

V.O.C. Level
< 60 g/L untinted

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 tinters required for non-factory packaged colours.

Coating Application Details

Brush, roller, conventional and airless spray. Stir contents thoroughly before and during use with a broad flat stirrer, using an upward lifting action.

Brush/Roller

Soak brush or roller in water before starting and use while still slightly damp. Thinning is usually not required.

Airless or Conventional Spray

Suitable for application by all standard spray equipment. Apply wet even coats. If necessary thin with up to 100 ml/litre water to aid atomisation. Under hot or very windy conditions, up to 100 ml/litre of DULUX Hot Weather Thinner may be added to ease application. On previously painted surfaces, apply 2 coats of Weathershield. Some colours may require more than the recommended number of coats to achieve full opacity. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), when painting over contrasting colour, apply 1 coat of Dulux 1Step prep-coat.

Within 1km of sea for galvanised iron, Zincalume

Apply one coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield. Preparation/coating system can vary depending on the quality and conditions of pre-primed timber/fibre cement, Colorbond® & Colorsteel® and tilt-up & precast concrete surfaces. For help and advice, please call Dulux Help & Advice on 0800 800 424 for specific guidance. Check the weather forecast. Do not paint on excessively cold or humid days. Exposure to rain or overnight dew whilst drying may result in the coating being damaged or removed. If painting during the hottest time of the day, cool the surface by hosing before painting and paint on the shady side of the house.

Steel/wrought iron

Apply 2 coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield.

Bare surfaces including brick, masonry, fibre cement, Zincalume

Apply 3 coats of Weathershield.

Galvanised iron

Apply 3 coats of Weathershield. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), apply 1 coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield.

For Zincalume/galvanised iron roofs

Apply 3 coats of Weathershield. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), apply 1 coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield.

Bare unpainted timber

Apply 3 coats of Weathershield. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), for improved resistance to cracking on hardwoods (eg Mt Ash, Oak), apply a coat of Dulux 1Step Prepcoat prior to the application of two topcoats of Weathershield. Professional Painters refer to Duspec Specification Sheets to qualify for guarantee.

SDS Number
DLXNZLEN003378

SDS Link
[View SDS Link](#)

3rd Coat — Dulux Weathershield Semi Gloss

Coat Type
3rd Coat

Datasheet
NZDU00242 Dulux Weathershield Semi Gloss

Read the full Datasheet details at [Dulux Weathershield Semi Gloss](#)

Application Methods



	Min	Max	Recommended
Theoretical Spread Rate (m ² /L)	16	16	16
Wet Film Per Coat (microns)	63	63	63
Dry Film Per Coat (microns)	25	25	25
Recoat Time **	2 Hours	Indefinite	

V.O.C. Level
< 60 g/L untinted

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 tinters required for non-factory packaged colours.

Coating Application Details

Brush, roller, conventional and airless spray. Stir contents thoroughly before and during use with a broad flat stirrer, using an upward lifting action.

Brush/Roller

Soak brush or roller in water before starting and use while still slightly damp. Thinning is usually not required.

Airless or Conventional Spray

Suitable for application by all standard spray equipment. Apply wet even coats. If necessary thin with up to 100 ml/litre water to aid atomisation. Under hot or very windy conditions, up to 100 ml/litre of DULUX Hot Weather Thinner may be added to ease application. On previously painted surfaces, apply 2 coats of Weathershield. Some colours may require more than the recommended number of coats to achieve full opacity. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), when painting over contrasting colour, apply 1 coat of Dulux 1Step prep-coat.

Within 1km of sea for galvanised iron, Zincalume

Apply one coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield. Preparation/coating system can vary depending on the quality and conditions of pre-primed timber/fibre cement, Colorbond® & Colorsteel® and tilt-up & precast concrete surfaces. For help and advice, please call Dulux Help & Advice on 0800 800 424 for specific guidance. Check the weather forecast. Do not paint on excessively cold or humid days. Exposure to rain or overnight dew whilst drying may result in the coating being damaged or removed. If painting during the hottest time of the day, cool the surface by hosing before painting and paint on the shady side of the house.

Steel/wrought iron

Apply 2 coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield.

Bare surfaces including brick, masonry, fibre cement, Zincalume

Apply 3 coats of Weathershield.

Galvanised iron

Apply 3 coats of Weathershield. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), apply 1 coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield.

For Zincalume/galvanised iron roofs

Apply 3 coats of Weathershield. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), apply 1 coat of Dulux All Metal Primer followed by 2 topcoats of Weathershield.

Bare unpainted timber

Apply 3 coats of Weathershield. For Weathershield Chromamax Pigment Bases (True Red, Bold Yellow, Orange, Blue and Extra Bright bases), for improved resistance to cracking on hardwoods (eg Mt Ash, Oak), apply a coat of Dulux 1Step Prepcoat prior to the application of two topcoats of Weathershield. Professional Painters refer to Duspec Specification Sheets to qualify for guarantee.

SDS Number
DLXNZLEN003378

SDS Link
[View SDS Link](#)

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

This Specification is copyright to DuluxGroup (Australia) Pty Ltd and/or DuluxGroup (New Zealand) Pty Ltd (collectively, 'Dulux'). It may not be varied or altered without the prior written consent of Dulux, and if it is, Dulux has no responsibility or liability for those variations.

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.