

NZDU02009 Dulux Weathershield Semi Gloss on New 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 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 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 It has little use today and has been replaced by mild steel.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 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
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Read the full Datasheet details at [Dulux Precision All Metal Primer](#)

Application Methods



	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
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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, Zincalume, 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
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2nd Coat — Dulux Weathershield Semi Gloss

Coat Type 2nd Coat	Datasheet NZDU00242 Dulux Weathershield Semi Gloss
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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 tinter 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 Precoat prior to the application of two topcoats of Weathershield. Professional Painters refer to Duspec Specification Sheets to qualify for guarantee.

SDS Number

SDS Link

DLXNZLEN003378

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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



Air Spray



Airless Spray



Brush



Roller

	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 tinter 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.

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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.

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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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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.