



# NZDU03775 Dulux Weathershield Low Sheen on New Steel [Exterior]

# Scope of Works

DULUX Weathershield X10 Low Sheen Acrylic 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 which must be removed.

#### CASTIRON

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 It has little use today and has been replaced by mild steel.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.

**Coating System Summary** 

Dulux Precision All Metal Primer

• 1st Coat

- 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.

## • 2nd Coat Dulux Weathershield Low Sheen • 3rd Coat Dulux Weathershield Low Sheen **Coating System** 1st Coat — Dulux Precision All Metal Primer Coat Type Datasheet 1st Coat NZDU00280 Dulux Precision All Metal Primer Read the full Datasheet details at <u>Dulux Precision All Metal Primer</u> Application Methods Roller Air Spray **Airless Spray** Brush Recommended Min Max Theoretical Spread Rate (m²/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 Meets ECNZ V.O.C. Requirements? <60g/L **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, 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 Link SDS Number DLXNZ7EN001852 View SDS Link

NZDU00231 Dulux Weathershield Low Sheen

Datasheet

2nd Coat — Dulux Weathershield Low Sheen

Coat Type

2nd Coat





Application Methods			
Air Spray 🛉 Airless	s Spray	Roller	
	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	16	16	16
Wet Film Per Coat (microns)	63	63	63
Dry Film Per Coat (microns)	24	24	24
Recoat Time **	2 Hours	Indefinite	
V.O.C. Level  <45 g/L untinted  Coating Application Details		accordance to the stated Manuals. The TVOC con of the known VOC value	ontent (TVOC) values are calculated in d methodology within Green Star Technical tent is theoretically calculated as the sum to s of the product's raw material components the base paint plus additional low VOC tinte
when painting over contrasting co Steel/wrought iron Apply 2 coat of Dulux All Metal Pri Bare surfaces including brick, ma Apply 3 coats of Weathershield. Galvanised iron	lour, apply 1 coat of Dulux 1Ste mer followed by 2 topcoats of V sonry, fibre cement, Zincalume	p prepcoat. Veathershield.	w, Orange, Blue and Extra Bright bases),
apply 1 coat of Dulux All Metal Prin	mer followed by 2 topcoats of V		ow, Orange, Blue and Extra Bright bases),
For Zincalume/galvanised iron ro Apply 3 coats of Weathershield. For apply 1 coat of Dulux All Metal Prin	or Weathershield Chromamax P		ow, Orange, Blue and Extra Bright bases),
improved resistance to cracking or of Weathershield. Professional Pair on excessively cold or humid days	n hardwoods (eg Mt Ash, Oak), Iters refer to Duspec Specificati . Exposure to rain or overnight of f the day, cool the surface by ho	apply a coat of Dulux 1Step Prep on Sheets to qualify for guaranted dew whilst drying may result in th osing before painting and paint o	ow, Orange, Blue and Extra Bright bases), f -coat prior to the application of two topcoat e. Check the weather forecast. Do not paint e coating being damaged or removed. If n the shady side of the house. Stir contents
<b>Brush/roller</b> Soak brush or roller in water before	e starting and use while still slig	htly damp. Thinning is usually not	required.
	s, up to 100 ml/litre of Dulux Ho		ith up to 100 ml/litre water to aid atomisatio d to ease application. On previously painted
surfaces, apply 2 coats of weather	silield.		





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3rd Coat — Dulux Weathershield Low Sheen						
Coat Type 3rd Coat	Datasheet NZDU00231 Dulux Wo	eathershield Low Sheen				
Read the full Datasheet details at <u>Dulux Weathershield Low Sheen</u>						
Application Methods						
Air Spray Airless Spray 📅 Brush 🚏 Roller						
	Min	Max	Recommended			
Theoretical Spread Rate (m²/L)	16	16	16			
Wet Film Per Coat (microns)	63	63	63			
Dry Film Per Coat (microns)	24	24	24			
Recoat Time **	2 Hours	Indefinite				
V.O.C. Level <45 g/L untinted		Meets ECNZ V.O.C. Requirements? Yes Total Volatile Organic Content (TVO accordance to the stated methodols Manuals. The TVOC content is theo of the known VOC values of the pro These materials include the base par required for non-factory packaged of	ogy within Green Star Technical retically calculated as the sum total duct's raw material components. int plus additional low VOC tinter			

# Coating Application Details

Brush, roller, conventional and airless spray

# 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. 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 prepcoat.

### 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 Prep-coat prior to the application of two topcoats of Weathershield. Professional Painters refer to Duspec Specification Sheets to qualify for guarantee. 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. Stir contents thoroughly before and during use with a broad flat stirrer, using an upward lifting action.

### Brush/rolle

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.

 SDS Number
 SDS Link

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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.

#### Disclaimer

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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.