

Dulux Durebild® STE Semi Gloss

NZDI0906





Specifications	APAS 2977
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Description
Surface Tolerant High Build High Solids Epoxy Coating

Features And Benefits	
<ul style="list-style-type: none"> • Superior Surface Wetting Prop. • High Build Barrier Coating • Excellent Brush/Roller Application • High Degree of Surface Tolerance 	<ul style="list-style-type: none"> • Suitable for surfaces where only minimal surface prep is possible • Extended corrosion protection • Ideal maintenance coating • Can be applied over a wide range of well adhered, aged coatings

Uses
<p>DUREBILD® STE has been developed specifically for New Zealand conditions using the latest epoxy technology. It is principally used as a high performance maintenance coating over hand, power tool or high-pressure water cleaned surfaces where blasting is impractical or not allowed. This coating can also be used for new work and where required as an intermediate coat. Untinted DUREBILD® STE is ideal for fresh and salt-water immersion over abrasive blast cleaned steel. It provides excellent protection against the splash and spillage of a wide range of chemicals. DUREBILD® STE can be topcoated with a wide range of coating types and is available with a cold cure hardener that is bloom free.</p> <p>Tested in accordance with AS4548.5 Appendix C & D for use as a concrete anti-carbonation coating system when used with Weathermax® HBR.</p>

Performance Guide			
Weatherability	Epoxy coatings may yellow with time. On exterior exposure some chalking may also occur. This will not detract from the protective properties of the coating. Use a weatherable topcoat if required for appearance.	Salts	Excellent resistance to neutral and alkali salts (except Aluminium).
Heat Resistance	Up to 120°C dry heat.	Water	Excellent in fresh/salt water immersion. Tinted colours & Aluminium not recommended for immersion.
Solvents	Resists splash/spillage of most hydrocarbon solvents, ref.petroleum products and common alcohols.	Abrasion	Good when fully cured.
Acids	White/Colours are suitable for splash/spillage of mild acids. Aluminium not recommended for acid.	Alkalis	Suitable for splash and spillage of strong alkalis. Do not use Aluminium in alkali conditions.

Typical Properties			
Classification	SURFACE TOLERANT EPOXY	Finish	Semi Gloss
Colour	White, Selected factory made colours and a full range of tinted colours.	Components	2
Flash Point	40 C	Pot Life	90 minutes @ 25°C
Shelf Life	12 months minimum @ 25C	Mixing Ratio (V/V)	4 pt A : 1 pt B by volume
Thinner	Prothinner 400	Suitable Substrates	Prepared rusty steel. Aged tightly adhering coatings. Prepared concrete, aluminium and galvanised steel
Line/Shade	<ul style="list-style-type: none"> • 775-line (Part A) • 976-84539 (Part B) 		
Application Methods	 Air Spray  Airless Spray  Brush  Roller		
Application Conditions		Min	Max
	Air Temperature	10	45
	Substrate Surface Temperature	10	45
	Relative Humidity	0	85
	Solids By Volume	84	
		Min	Max
	Wet Film Per Coat (microns)		Recommended 150
	Dry Film Per Coat (microns)		125
	Recoat Time (min)	14 Hours	4 Weeks*
	Theoretical Spread Rate (m²/L)		6.7

Hardener Details

Hardener Title STANDARD HARDENER

	Coating Thickness (microns)			Application Conditions (°C)		
	Min	Max	Recommended	Min	Max	Max
Wet Film per Coat			150	Air Temp.	10	45
Dry Film per Coat			125	Substrate Surface Temp.	10	45
				Relative Humidity	0	85
				Concrete Moisture Content	<10%	

Solids By Volume 84 **V.O.C. Level** <230 g/L **Pot Life** 90 minutes (4L, 25C)

Drying characteristics at 125 microns dry film thickness

Temperature	Humidity	Touch	Handle	Full Cure	Recoat Min	Recoat Max
10 C	50%	14 Hours	36 Hours	7 Days	36 Hours	4 Weeks
15 C	50%	10 Hours	24 Hours	7 Days	24 Hours	4 Weeks
25 C	50%	6 Hours	14 Hours	7 Days	14 Hours	4 Weeks

Hardener Title COLD CURE HARDENER

	Coating Thickness (microns)			Application Conditions (°C)		
	Min	Max	Recommended	Min	Max	Max
Wet Film per Coat			150	Air Temp.	5	45
Dry Film per Coat			125	Substrate Surface Temp.	5	45
				Relative Humidity	0	85
				Concrete Moisture Content	<10%	

Solids By Volume 84% **V.O.C. Level** <210g/L **Pot Life** 60 Minutes (4L, 25 C)

Drying characteristics at 125 microns dry film thickness

Temperature	Humidity	Touch	Handle	Full Cure	Recoat Min	Recoat Max
15 C		10 Hours	24 Hours	7 Days	24 Hours	4 Weeks

TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

A spreading rate of 6.7sq. meters per litre corresponds to 125 microns dry film thickness assuming no losses. Practical spreading rates will vary depending on such factors as method and condition of application and surface roughness

Hardener Section Footer

These figures are given as a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying. If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion. Use of fast or low temperature hardeners may result in increased yellowing and a reduction of gloss level. * When used for non-immersion conditions. Refer to PRECAUTIONS section for overcoating intervals and requirements for immersion service.

Surface Preparation

STEEL

Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Rust, millscale, oxide deposits and old paint films on metal surfaces should be removed by hand or power tool (AS1627.2 St 3) cleaning as a minimum. Coating performance is proportional to the degree of surface preparation and abrasive blast cleaning to a minimum AS1627.4 Class 2 is preferred for more severe environments. Immersed steel must be prepared to AS1627.4 Class 3.

CONCRETE

Remove all laitance, form release, curing compounds, oil, grease and other surface contaminants. Diamond grind, track or light shot-blast to provide suitable profile. Remove all dust by vacuum cleaning. Fill any large voids exposed using Luxepoxy Filler. Cement based substrates should be at least 21 days old before coating.

Application Guide

Application Method	Stir each can thoroughly until the contents are uniform. Use of a power mixer is recommended. Ensure bases have been tinted to the correct colour before use – DULUX ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF AN INCORRECT COLOUR. Mix the contents of both packs together thoroughly using a power mixer and allow to stand for 10 minutes. Box all containers before use to ensure colour consistency. Remix thoroughly before using.
Brush/Roller	Apply even coats of the mixed material to the prepared surface. When brushing and rolling additional coats may be required to attain the specified thickness.
Conventional Spray	Thinning is not normally required, however a small amount (5% or less by volume) of Dulux Prothinner 400 can be added. Typical Set-up Graco Delta Gun: Pressure at Pot: Pressure at Gun: 1.8m (239543) 65-100 kPa (10-15 p.s.i.) 385-420 kPa (55-60 p.s.i.)
Airless Spray	Standard airless spray equipment such as a Graco 45:1 or 56:1 Xtreme with a fluid tip of 17–21 thou (0.43-0.53mm) and an air supply capable of delivering 550-690 kPa (80 -100 psi) at the pump. Thinning is not normally required but up to 50ml/litre of Dulux Pro Thinner 400 may be added to ease application.
Precautions	This is an industrial product designed for use by experienced Protective Coatings applicators. Where conditions may require variation from the recommendations on this Product Data Sheet contact your nearest Dulux representative for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the express written consent of Dulux New Zealand. Freshly mixed material must not be added to material that has been mixed for some time. Do not apply at temperatures below 10°C when using Standard hardener or below 5C when using Cold Cure hardener. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. When used with a white or pastel colour the Cold Cure hardener will impart a yellow tone that will darken with time. When used for immersion conditions the maximum overcoat interval is 3 days at 25C. The coating MUST be fully cured and solvent free prior to being placed under immersion conditions. Do not use as a primer over galvanised steel when using Cold Cure hardener as delamination can occur. Use of fast or low temperature hardeners may result in increased yellowing and a reduction of gloss level. Note the Aluminium finish is not a decorative coating and colour variations will occur due to different application techniques. Aluminium containing colours are not recommended for acid and alkaline conditions.
Clean Up	Prothinner 400 (965-63021)

Overcoating

Aged coating should be tested for lifting by a method suitable to the coating thickness, for example 'X' cut or crosshatch methods. If it lifts, remove it. The surface must be free of oil, grease and other contaminants.

If the coating has exceeded the maximum recoat interval then abrade the surface.

High-pressure water blast at 1,200 - 1,500 p.s.i. to remove loosely adhering chalk and dust.

Health And Safety	
Safety Precautions	# Read Data Sheet, Material Safety Data Sheet and any precautionary labels on containers.
Storage	Store as required for a flammable liquid Class 3b in a bunded area under cover. Store in well-ventilated area away from sources of heat or ignition. Keep containers closed at all times
Handling	Use with good ventilation and avoid inhalation of spray mists and fumes. When spray painting, users should comply with the provisions of the respective Health & Safety in Employment Regulations. As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Always wash hands before smoking, eating, drinking or using the toilet.
Using	For detailed information refer to the Product Data Sheet, and the Material Safety Data Sheet available from Dulux Sales and Customer Service offices.
Flammability	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE.
Welding	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.
In the case of emergency, please call 0800 734 607	

Resistance Guide		
Chemical	Permanent Exposure	Intermittent Exposure

Transport And Storage			
Dangerous Goods Part A			
Class	3b	UN Number	1263
Dangerous Goods Part B			
Class	8	UN Number	2734

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