

## Dulux Durebild STE - PC237 Two Pack Epoxy

AUDI1109





<b>Specifications</b>	Approved to APAS 2977 AS/NZS 3750.1 Tested in accordance with AS4548.5 Appendix C & D for use as a concrete anti-carbonation coating system when used with Weathermax® HBR.
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<b>Description</b>	DUREBILD® STE has been developed specifically for Australasian 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 steel where blasting is impractical or not allowed.
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<b>Features And Benefits</b>	
<ul style="list-style-type: none"> <li>▪ HIGH PERFORMANCE SURFACE TOLERANT MAINTENANCE COATING</li> <li>▪ SUPERIOR SURFACE WETTING PROPERTIES</li> <li>▪ EXCELLENT BARRIER TO CORROSION</li> </ul>	<ul style="list-style-type: none"> <li>▪ CAN BE APPLIED OVER A WIDE RANGE OF WELL ADHERED AGED COATINGS</li> <li>▪ SELF PRIMING FINISH AVAILABLE IN A WIDE RANGE OF COLOURS</li> <li>▪ EXCELLENT BRUSH AND ROLLER CHARACTERISTICS</li> </ul>

<b>Uses</b>	The high surface tolerance of DUREBILD® STE makes it suitable for a wide range of substrates. It can also be used for new work and 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 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 bloom-free cold cure hardener.
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<b>Performance Guide</b>			
<b>Weatherability</b>	Will yellow with time and chalk on exterior exposure. Neither yellowing nor chalking detracts from the protective properties of the coating. Use a weatherable topcoat if required for appearance.	<b>Salts</b>	Excellent resistance to neutral and alkali salts. Durebild STE Aluminium not recommended for contact with alkaline salts.
<b>Heat Resistance</b>	Up to 120°C dry heat.	<b>Water</b>	Excellent resistance to fresh and salt water. Durebild STE tinted colours and Aluminium not recommended for immersion.
<b>Solvents</b>	Resists splash and spillage of most hydrocarbon solvents, refined petroleum products & most alcohols.	<b>Abrasion</b>	Good when fully cured.
<b>Acids</b>	Suitable for splash and spillage of mild acids. Durebild STE Aluminium not recommended for acidic conditions.	<b>Alkalis</b>	Excellent resistance to neutral and alkali salts. Durebild STE Aluminium not recommended for alkaline conditions.

Typical Properties			
<b>Classification</b>	Surface Tolerant Epoxy	<b>Finish</b>	Semi gloss
<b>Colour</b>	White, N35 Light Grey, Golden Yellow, Black, Aluminium, a full range of tinted colours and MTO factory made colours.	<b>Components</b>	2
<b>Flash Point</b>	41°C	<b>Pot Life</b>	90 Minutes (4 litre kit, 25°C)
<b>Shelf Life</b>	12 months	<b>Mixing Ratio (V/V)</b>	4:1
<b>Thinner</b>	Epoxy Thinner 920-08925	<b>Suitable Substrates</b>	Prepared rusty steel, aged tightly adhering coatings, prepared concrete, CFC, aluminium and galvanised steel.
<b>Line/Shade</b>	<ul style="list-style-type: none"> <li>• 775-38678 N35 Light Grey</li> <li>• 775-39141 Golden Yellow</li> <li>• 775-50585 Black</li> <li>• 775-50570 Aluminium</li> <li>• 775-63001 White/Light Base</li> <li>• 775-63002 Deep Base</li> <li>• 775-63003 Clear Base</li> <li>• 976-84539 Standard Hardener</li> <li>• 976-84685 Cold Cure Hardener</li> </ul>	<b>Primers</b>	Zincanode® 402 (mild steel only)
<b>Product Code</b>	PC 237		
<b>Application Methods</b>	 Air Spray  Airless Spray  Brush  Roller		
<b>Application Conditions</b>		<b>Min</b>	<b>Max</b>
	<b>Air Temperature</b>	10°C	45°C
	<b>Substrate Surface Temperature</b>	10°C	45°C
	<b>Relative Humidity</b>	85%	
	<b>Solids By Volume</b>	84	
		<b>Min</b>	<b>Max</b>
	<b>Wet Film Per Coat (microns)</b>	120	250
	<b>Dry Film Per Coat (microns)</b>	100	210
	<b>Recoat Time (min)</b>	14 Hours	4 Weeks
	<b>Theoretical Spread Rate (m<sup>2</sup>/L)</b>	8.3	4
<b>Typical Properties Notes</b>	*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying. 1If the maximum overcoat interval is exceeded then the surface <b>MUST</b> be abraded to ensure maximum intercoat adhesion.		

**Hardener Details**

**Hardener Title** DUREBILD STE WITH STANDARD HARDENER

	Coating Thickness (microns)			Application Conditions (°C)		
	Min	Max	Recommended	Min	Max	Max
<b>Wet Film per Coat</b>	120	250	150	<b>Air Temp.</b>	10°C	45°C
<b>Dry Film per Coat</b>	100	210	125	<b>Substrate Surface Temp.</b>	10°C	45°C
				<b>Relative Humidity</b>		85%
				<b>Concrete Moisture Content</b>		10%

**Solids By Volume** 84% (White/Light Bas)      **V.O.C. Level** <230 g/L      **Pot Life** 90 Minutes (4L kit)

\*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying. 1If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion.

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** DUREBILD STE WITH COLD CURE HARDENER

	Coating Thickness (microns)			Application Conditions (°C)		
	Min	Max	Recommended	Min	Max	Max
<b>Wet Film per Coat</b>	120	250	150	<b>Air Temp.</b>	5°C	45°C
<b>Dry Film per Coat</b>	100	210	125	<b>Substrate Surface Temp.</b>	5°C	45°C
				<b>Relative Humidity</b>		85%
				<b>Concrete Moisture Content</b>		10%

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

\*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying. 1If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion. 1NOTE: Figures shown are for non-immersion conditions. When used for immersion conditions the maximum overcoat interval is 3 days. The coating MUST be fully cured and completely solvent free prior to being placed under immersion conditions. Refer to PRECAUTIONS section. Use of fast or low temperature hardeners may result in increased yellowing and a reduction of gloss level.

Temperature	Humidity	Touch	Handle	Full Cure	Recoat Min	Recoat Max
5° C	50%	14 Hours	28 Hours	7 Days	28 Hours	4 Weeks
10° C	50%	13 Hours	24 Hours	7 Days	24 Hours	4 Weeks
15° C	50%	12 Hours	18 Hours	7 Days	18 Hours	4 Weeks
25° C	50%	6 Hours	9 Hours	7 Days	9 Hours	4 Weeks

# TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

# A spreading rate of 0.00sq. 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. To overcoat after the maximum time has elapsed, either with itself or with another product, may require the surface to be abraded in order to ensure adequate adhesion. \* When used for immersion conditions the maximum overcoat interval is 3 days.

**Typical Systems**

**Typical System** STEEL - Very high corrosivity (AS2312.1 Cat C5) System PUR5  
**Preparation Guide** Abrasive blast clean AS1627.4 Class 2.5

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
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1st Coat	Zincanode 402	6.4	155	75
2nd Coat	DUREBILD®STE	6.7	150	200
3rd Coat	Weathermax HBR	7.0	145	100
<b>Minimum System DFT</b>				<b>375</b>

**Notes** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

#### Typical System STEEL - Medium Corrosivity (AS2312.1 Cat C3) System ACC1

**Preparation Guide** Abrasive blast clean AS1627.4 Class 2.5

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
1st Coat	Durebild STE - PC237	6.7	150	125
2nd Coat	Acrathane IF	7.5	135	55
<b>Minimum System DFT</b>				<b>180</b>

**Notes** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

#### Typical System STEEL MAINTENANCE

**Preparation Guide** Power tool clean AS1627.2 St 3 or abrasive blast AS1627.4 Class 2

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
Spot Primer	Durebild STE - PC237	6.7	150	125
1st Coat	Durebild STE - PC237	6.7	150	125
2nd Coat	Weathermax HBR	7.0	145	100
<b>Minimum System DFT</b>				<b>350</b>

**Notes** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

#### Typical System STEEL - IMMERSION

**Preparation Guide** Abrasive blast clean AS1627.4 Class 3.0

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
1st Coat	Durebild STE - PC237	6.7	150	125
2nd Coat	Durebild STE - PC237	6.7	150	125
<b>Minimum System DFT</b>				<b>250</b>

**Notes** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

#### Typical System ALUMINIUM

**Preparation Guide** Clean, degrease and abrade surface

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
1st Coat	Durebild STE - PC237	6.7	150	125
2nd Coat	Weathermax HBR	7.0	145	100
<b>Minimum System DFT</b>				<b>225</b>

**Notes** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

#### Typical System GALVANISED STEEL

**Preparation Guide** Degrease and whip blast

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
1st Coat	Durebild STE - PC237	6.7	150	125
2nd Coat	Durebild STE - PC237	6.7	150	125
3rd Coat	Weathermax HBR	7.0	145	100
<b>Minimum System DFT</b>				<b>350</b>

**Notes** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

#### Typical System GALVANISED STEEL

**Preparation Guide** Degrease and whip blast

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
1st Coat	Durebild STE - PC237	6.7	150	125
2nd Coat	Ferreko No 3	6.0	170	100
3rd Coat	Ferreko No 3	6.0	170	100
<b>Minimum System DFT</b>				<b>325</b>

**Notes** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

#### Typical System CONCRETE

**Preparation Guide** Remove release agents and other surface contaminants

Coat	Product	Spread Rate (m <sup>2</sup> /L)	WFT (micron)	DFT (micron)
1st Coat	Durebild STE - PC237	6.7	150	125

1st Coat	Weathermax HBR	7.0	145	100
			<b>Minimum System DFT</b>	225
<b>Notes</b> If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT				

**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. Degrease with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer's written instructions and all safety warnings. Abrasive blast clean to a minimum of AS1627.4 Class 2.5. Immersed steel: Abrasive blast cleaned to AS1627.4 Class 3. Remove all dust by brushing or vacuum cleaning. Steel where abrasive blast cleaning is not viable: Rust, mill scale, oxide deposits and old paint films on metal surfaces must be removed by power tool cleaning according to AS1627.2. Coating performance is proportional to the degree of surface preparation.

Galvanised steel: Round off all rough welds, sharp edges and zinc dags and remove weld spatter. Clean surface in accordance with AS1627.1. Whip blast, taking care not to damage the galvanising layer. Remove all dust by vacuum cleaning.

Concrete: Concrete should be at least 28 days old before coating. Remove all laitance, form release, curing compounds, oil, grease and other surface contaminants. Fill any large cracks or voids using Luxepoxy® Filler.

**Application Guide**

<b>Application Method</b>	Mix each can thoroughly using a power mixer until the contents are uniform. Ensure bases have been tinted to the correct colour before use. DULUX ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF 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 use.
<b>Brush/Roller</b>	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.
<b>Conventional Spray</b>	Thinning is not normally required, however a small amount (5% or less by volume) of Dulux® Epoxy Thinner (920-08925) can be added to aid atomisation.  Typical Set-up Graco Delta Gun: 1.8mm (239542) Pressure at Pot: 70-100 kPa (10-15 p.s.i.) Pressure at Gun: 380-410 kPa (55-60 p.s.i.)
<b>Airless Spray</b>	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® Epoxy Thinner (920-08925) may be added to aid application.
<b>Precautions</b>	This is an industrial product designed for use by experienced Protective Coating 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® Australia. 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 5°C 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 light 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 25°C. The coating MUST be fully cured and solvent free prior to being place under immersion conditions. For best results in water immersion conditions replace Dulux® Epoxy Thinner (920-08925) with Dulux® CR Reducer (965-63020). Do not use Cold Cure Hardener when priming galvanised steel as delamination can occur. The use of fast or low temperature hardeners may result in increased yellowing and a reduction of gloss level. Note that Durebild® STE Aluminium finish is not a decorative coating and colour variations will occur due to different application techniques. Aluminium containing colours are not recommended for acidic and alkaline conditions.
<b>Clean Up</b>	Clean all equipment with Dulux® Epoxy Thinner (920-08925) immediately after use.

**Overcoating**

Degrease with Gamlen CA 1 according to the data sheet. Test adhesion of existing coating by standard cross hatch adhesion test. If the coating fails, remove it. High-pressure water wash at 8.3 to 10.3 MPa (1,200-1,500 p.s.i.) to remove chalk and dust. Abrade surface to provide a good key for the new coating. Epoxies must be abraded if recoated outside the recoat window.

Health And Safety	
<b>Safety Precautions</b>	Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au
<b>Storage</b>	Store as required for a flammable liquid Class 3 in a bunded area under cover. Store in well-ventilated area away from sources of heat or ignition. Keep containers closed at all times.
<b>Handling</b>	As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.
<b>Using</b>	Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spraying, users must comply with their respective State Spray Painting Regulations.
<b>Flammability</b>	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO2 or dry chemical powder. On burning will emit toxic fumes.
<b>Welding</b>	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.
<b>In the case of emergency, please call 1800 033 111</b>	

Transport And Storage			
<b>Packaging</b>	Available in 4 litre and 15 litre packs	<b>Transportation</b>	1.73 kg/litre (Average of components)
Dangerous Goods Part A			
<b>Class</b>	3	<b>UN Number</b>	UN 1263
Dangerous Goods Part B			
<b>Class</b>	8,3	<b>UN Number</b>	UN 2734

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