

CONTACT DULUX

For an obligation-free consultation, please contact us.

AUSTRALIA

marketing@duluxprotectivecoatings.com.au

NSW	15 Gow St Padstow 2211	+61 2 9794 9841
NT	Cnr Stuart Hwy & Bombing Rd, Winnellie 0810	+61 8 8947 7011
QLD	1477 Ipswich Rd, Rocklea 4106	+61 7 3867 8470
SA	Unit 3, 107 Sir Donald Bradman Dr, Hilton 5033	+61 8 7071 4000
TAS	393 Westbury Rd, Launceston 7250	+61 3 6341 1778
VIC	1956 Dandenong Rd, Clayton 3168	+61 3 9263 5803
WA	276 Rutland Ave, Welshpool 6106	+61 8 6465 2646

NEW ZEALAND

AUCKLAND	123 Carlton Gore Rd, Newmarket	+64 9 368 2824
WELLINGTON	150 Hutt Park Rd, Lower Hutt	+64 4 576 6400
CHRISTCHURCH	171 Ferry Rd, Christchurch	+64 3 366 5415

PAPUA NEW GUINEA

dulux.lae@dulux.com.pg

Lae	Air Corps Rd, Lae	+675 472 3633
Port Moresby	Spring Garden Rd, Hohola	+675 325 4555

PARCHEM CONSTRUCTION SUPPLIES

sales@parchem.com.au

National 1300 737 787

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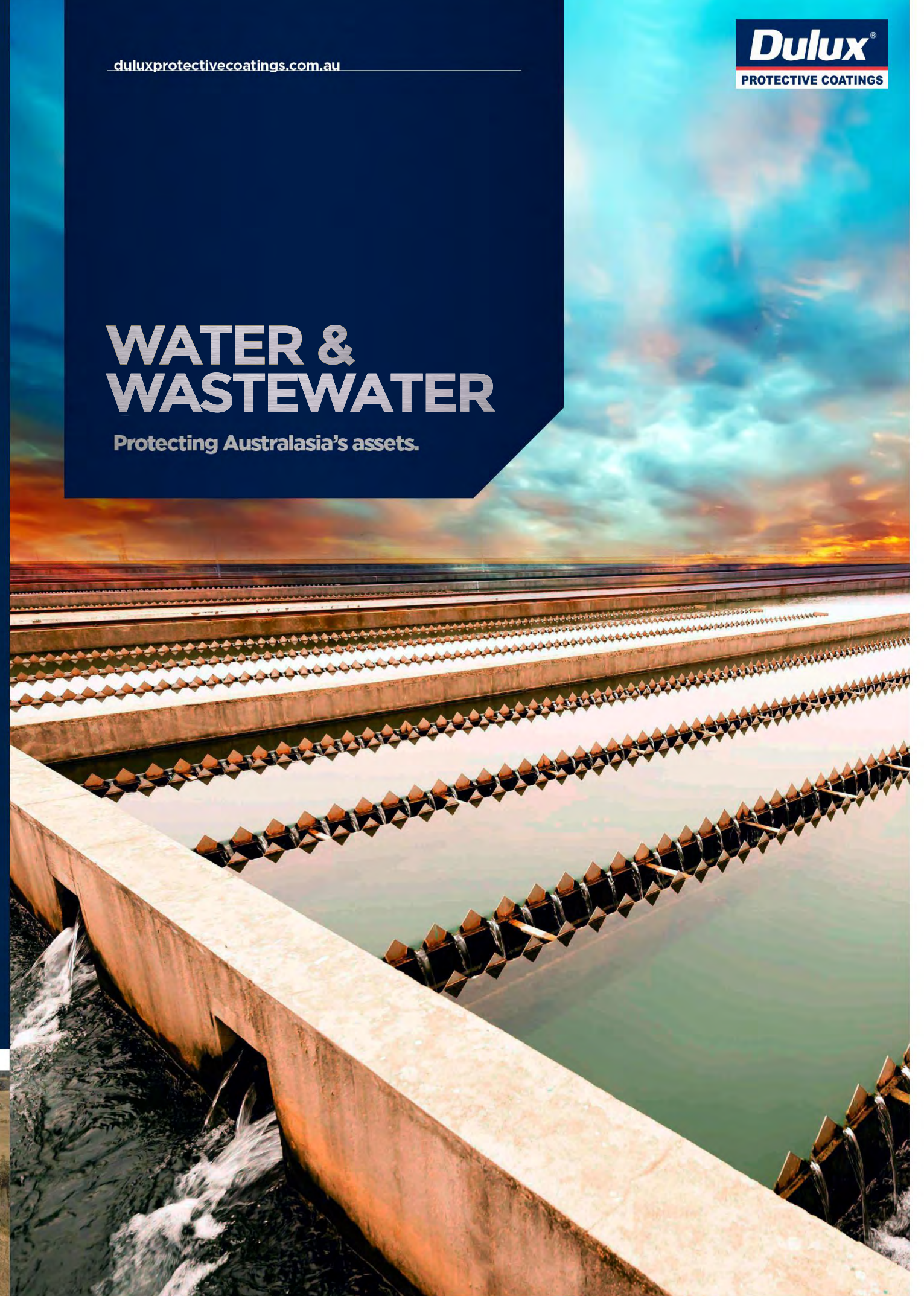
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DuluxGroup (Australia) Pty Ltd (ABN 67 000 049 427)
1956 Dandenong Road, Clayton, 3168, Australia
www.duluxprotectivecoatings.com.au

WATER & WASTEWATER

Protecting Australasia's assets.



PROTECTING AUSTRALASIA'S ASSETS

FOR more than 80 years, Dulux has been here supplying heavy duty coatings systems for complete protection against corrosion, chemical attack, abrasion, and impact damage for the maintenance of asset value and production efficiency.

From reservoir to water waste treatment plant and on to our waterways or to be recycled - Dulux's range includes products designed specifically to withstand the corrosive chemical exposure, impact, and abrasion of the waste water industry.

In addition Australasia's vast, harsh and unique regional conditions, with extremes in UV radiation, high/low temperature deviations, and high coastal exposures call for heavy duty protective coating systems designed specifically for the substrate and environment they are to be used in.

Industries like

- Oil and Gas – both on land and off shore
- Mining and Mineral processing
- Major infrastructure and construction projects
- Power generation and transmission
- Water and wastewater treatment

All have specific needs that require unique coatings solutions.

With our modern, world-class, purpose built research and development laboratories, supported by our Australasian manufacturing bases, our extensive distribution network and our experienced specification consultants and Sales Executives, Dulux Protective Coatings has the people, the products, and the processes to facilitate the supply and application of the right coating systems without delays and with confidence.

Dulux Protective Coatings – We're here across Australasia.

WE'RE HERE



OUR PRODUCTS

The list below is a summary of the protective coatings products included in our Coating Systems specifications in this publication.

The number of products in this guide has been minimised for **simplicity** and **practicality**. Your **DULUX Protective Coatings** Representative may suggest and/or specify other products within our range for your particular coating needs.

PRODUCT	DESCRIPTION	DATA SHEET
PRIMERS		
DULUX Durepon® P14	Zinc phosphate epoxy primer	PC206
DULUX Luxepoxy® 66	Blast primer	PC208
DULUX Zincanode® 304	Inorganic zinc silicate	PC142
DULUX Zincanode® 402	Zinc rich epoxy primer	PC122
INTERMEDIATES		
DULUX Durebild® STE	Surface tolerant high build epoxy	PC237
DULUX Durekem® MPP	Multipurpose phenolic epoxy	PCA20
DULUX Duremax® GFX	High performance glass flake-rich epoxy	PC256
DULUX Duremax® GPE	General purpose epoxy AS4020 (untinted only)	PC255
LININGS AND TOPCOATS		
DULUX Durebild® HSE	Non taint epoxy tank lining AS4020	PC230
DULUX Durebild® TLE	Non taint epoxy tank lining AS4020	PC221
DULUX Flexituff®	Pure polyurea elastomer AS4020	PC390
DULUX Weathermax® HBR	High build UV resistant brushable polyurethane	PC405

The coating system comprising **DULUX Durebild® STE** surface tolerant epoxy primer and **DULUX Weathermax® HBR** polyurethane topcoat has been tested in accordance with AS4548.5 Appendix C & D for use as a concrete **anti-carbonation coating system** and thus provides protection against concrete spalling.

For a comprehensive list of all our products, please visit our website at www.DULUXprotectivecoatings.com.au.



Bottom City Reservoir is a landmark, a public artwork and a functional reservoir overlooking Townsville, Queensland

DISCLAIMER

The technical data contained in this document is given in good faith as being appropriate and reliable at time of issue, but we cannot warrant that it is free from error or that it complete or up to date. This document is intended as a guide only and cannot be expected to cover every microclimate and situation. Use of the information contained herein is solely at your own risk. Any technical advice and/or coating specifications for your particular project must be issued from an appropriate DULUX Protective Coatings Representative.

DULUXGROUP PRODUCTS

Apart from the DULUX Protective Coatings, DULUXGroup also offers a range of other construction products through **PARCHEM Construction Supplies**.



The products below are particularly suited to the water and wastewater industries.

CONCRETE CURING COMPOUNDS	
Water based acrylic curing compound - conforms to AS3799.	Concure® A99
Water based wax emulsion, curing compound - conforms to AS3799.	Concure® WB30
CONCRETE REPAIR	
Patch repair mortars with very low shrinkage	Renderoc® Range
High performance mortars with superior biogenic corrosion resistance.	Sewpercoat® Range
GROUTING	
General purpose, high flow, shrinkage compensated grout - (gaps 10 mm to 100 mm thickness).	Conbextra® GP
Formulated anti-wash out specialist grout for underwater grouting applications.	Conbextra® UW
JOINT FILLER BOARD	
Non-absorbent, semi-rigid, polyethylene joint filler.	Stiffjoint
Medium density, closed cell polyethylene backing rod range.	Expandafoam®
JOINT SEALANTS - HORIZONTAL, TRAFFICABLE	
Tough, abrasion resistant, one-component, polyurethane joint sealant.	Emer-Seal® PU40
JOINT SEALANTS - VERTICAL	
Highly chemical resistant, fast cure, durable, one-component joint sealant.	Emer-Seal® CR
High MAF, two-part, polyurethane joint sealant for water retaining structures.	Emer-Seal® 200
Highly flexible, large joint capable, chemically resistant, joint bandage membrane system.	Emer-Band®
WATERPROOFING SYSTEMS	
Fast setting, cement based permanent mortar to plug running water leaks.	Vandex® Plug
Surface applied, cement based render, waterproofing barrier for positive and negative water pressure applications.	Vandex® BB75-Z
WATERSTOPS	
High expansion butyl bentonite based hydrophilic waterstop	Superswell® 47B
Centrally and externally placed, PVC waterstop profiles for use in cast in-situ concrete	Supercast® PVC Waterstops
Premium grade, water swellable, waterstop range for use in cast in-situ concrete.	Hydrotite®
Gun applied, water-swellable, waterstop paste.	Leakmaster®

For information on any of any of the above products please call **PARCHEM Construction Supplies** on 1300 737 787.

MAINTENANCE

Our coating systems for maintenance are convenient and simple. Both **DULUX Durebild® STE** surface tolerant epoxy primer and **DULUX Weathermax® HBR** polyurethane are suitable for brush and roller application, and the high solids formulation assists in achieving specified film thicknesses in fewer coats than conventional equivalents.

CONCRETE EXTERNALS - ANTICARBONATION COATING

Preparation: Whip abrasive blast

1st coat **DULUX Durebild® STE** @ 125µm

2nd coat **DULUX Weathermax® HBR** @ 100µm

CONCRETE INTERNALS - 100% POLYUREA LINING

Preparation: Whip abrasive blast

1st coat **DULUX Durebild® STE** @ 125µm

2nd coat **DULUX Flexituff®** @ 2500µm

CONCRETE INTERNALS - EPOXY LINING

Preparation: Ref. AS1627.4, Sa 3

Spot prime **DULUX Durebild® HSE** @ 100µm

1st coat **DULUX Durebild® HSE** @ 250µm

2nd coat **DULUX Durebild® HSE** @ 250µm

STEEL EXTERNALS - UV RESISTANT COATING

Preparation: Ref. AS1627.4, Sa 2 ½

Spot prime **DULUX Zincanode® 402** @ 75µm

1st coat **DULUX Durebild® STE** @ 150µm

2nd coat **DULUX Weathermax® HBR** @ 100µm

STEEL INTERNALS - 100% POLYUREA LINING

Preparation: Ref. AS1627.4, Sa 3

1st coat **DULUX Durebild® STE** @ 125µm

2nd coat **DULUX Flexituff®** @ 2500µm

STEEL INTERNALS - EPOXY LINING

Preparation: Ref. AS1627.4, Sa 3

Spot prime **DULUX Durebild® HSE** @ 100µm

1st coat **DULUX Durebild® HSE** @ 250µm

2nd coat **DULUX Durebild® HSE** @ 250µm

While the above coating systems been used on existing water and wastewater treatment plants across Australasia and present a handy guide, a personal visit from a DULUX Protective Coatings Technical Representative and detailed, customised protective coating specifications will ensure that your facility will be well protected.



DULUX Protective Coatings Personnel at Werribee Treatment Plant

BEFORE YOU START!

COATING SPECIFICATIONS

Your coating specifications should be quite specific with regard to surface preparation method, product name, application method, and minimum dry film thickness of each coat. This way, the contractor knows exactly what the job will involve, and allows him to quote accurately.

Detailed maintenance specifications can be complicated and time consuming, and outsourcing this work can be a costly exercise. If you engage the services of a DULUX Protective Coatings Representative, however, our services are free and obligation-free.



Engineers at the Eastern Treatment Plant

Using your DULUX Protective Coatings Representative's specifications will help achieve the following outcomes:

1. Economical solutions – you save time and money
2. Fairer tenders – conforming tenders create a level playing field for your contractors
3. Easier choice of contractor – your selection process becomes simpler when comparing tenders based on the same set of specifications
4. More control over what you get – your DULUX Representative can work with your contractor to ensure that the correct products are supplied, and in sufficient quantity, to do the job properly
5. On-site support – Your DULUX Representative offers on-going assistance to you and your maintenance crew.
6. A durable asset protection system that will be functional and easy to maintain.
7. All coating systems specified for holding potable water fulfill AS4020

Contact your local DULUX Protective Coatings Representative today for an obligation-free site visit and tailor-made maintenance schedules to protect your assets.



WATER TREATMENT INDUSTRIES

LOCAL EXPERTISE AND EXPERIENCE

At every stage of water and waste water treatment, from catchment, purification, storage, distribution, sewerage, screening, aeration, fermentation, sedimentation, biosolids removal, disinfection to release, DULUX Protective Coatings has over 80 years experience in total asset protection.

Treatment plants suffer many forms of corrosion, such as pitting from water condensation, embrittlement from hydrogen exposure, and stress corrosion cracking from sulphides. Corrosion is exacerbated by the oxidising chemicals used in the water treatment process.



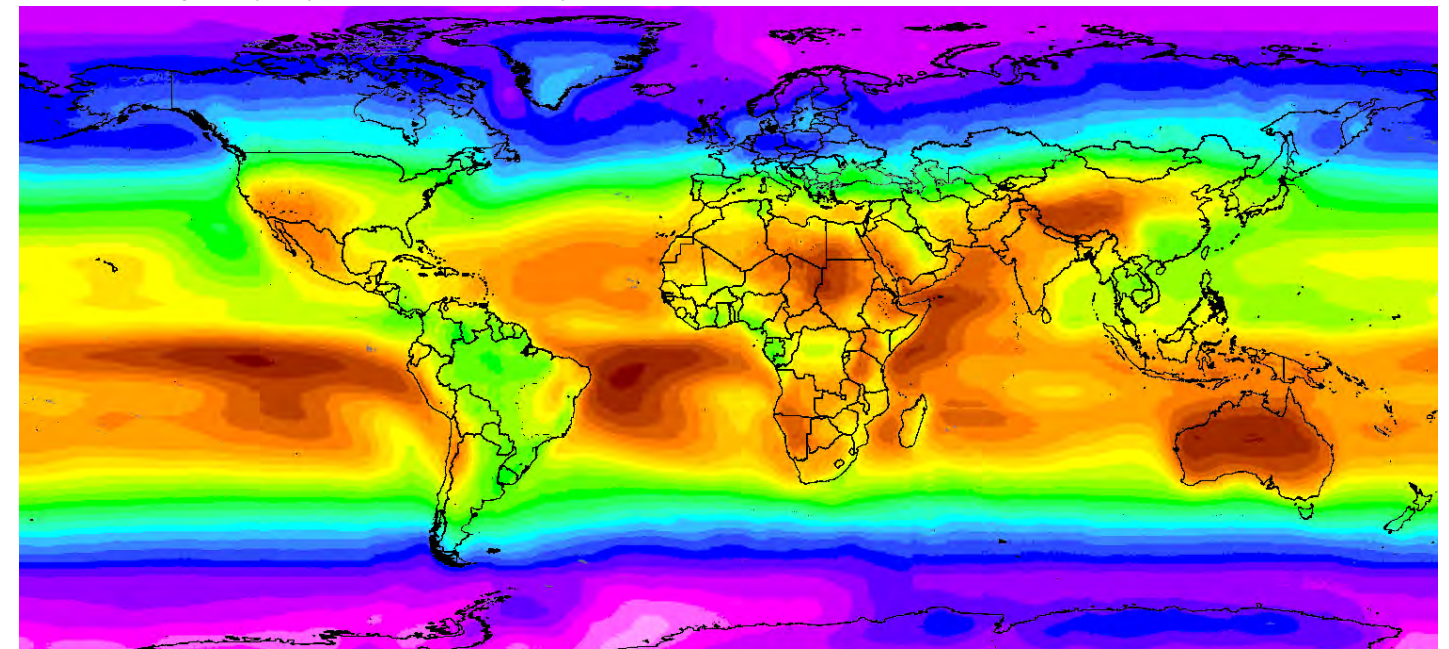
Pakenham tank before refurbishment

Poorly protected reinforced concrete is attacked by acid gases produced by wastewater and treatment processes, which corrode the reinforcing steel that spall the concrete.

On all externals subject to Australasian levels of UV exposure, temperature fluctuations and corrosive atmospheric chemicals, high performance protective coatings providing corrosion protection and carbonation resistance are essential to protect against corrosion, degradation and spalling to minimise downtimes, prolong asset life, and maintain asset value.

IS AUSTRALASIA PARTICULARLY HARSH?

Many coating types are readily attacked by the extreme UV radiation of Australasia. While many protective coatings are tested in exposure sites such as Florida, DULUX Protective Coatings are tested in the significantly harsher conditions in Allunga, Queensland. (see World Map of Averaged Solar Radiation below). Therefore, coatings that have passed overseas testing simply may not perform adequately here.



Realized by Michel Albuissou, Mireille Lefèvre, Lucien Wald. Edited and produced by Thierry Ranchin. Date of production: 23 November 2006. Centre for Energy and Processes, Ecole des Mines de Paris / Armines / CNRS. Copyright. Ecole des Mines de Paris / Armines 2006. All rights reserved. This map is derived from http://www.soda-is.com/img/map_ed_13_world.pdf



Averaged Solar Radiation 1990-2004 ©Mines ParisTech / Armines 2006
http://www.soda-is.com/img/map_ed_13_world.pdf

STEEL SURFACE PREPARATION

A protective coating system life to first maintenance is greatly affected by the thoroughness of surface preparation before coating application. The surface must be completely cleaned of all mill scale, rust, oily deposits, dust, salts and unsound coatings. Furthermore, the surface must be roughened sufficiently to create a key for the coating system to bond to. The greater the surface profile, the greater the surface area in direct contact with the primer, and the better the bond. This is also important if using a zinc-rich primer, as the zinc metal has greater contact with roughened steel and therefore offers better galvanic corrosion protection.



Contractor abrasive blast cleaning a steel component

NEW STEELWORK

Where steel is to be immersed, the following surface preparation must be carried out.

Remove all surface contamination such as oil, grease, dirt, acid or alkali etc. by cleaning to AS1627.1. Test in accordance with AS3894.6 methods A&D to ensure that all salts have been removed to the required tolerances. Grind off all rough welds, and remove all weld spatter or slag. Grind sharp edges down to at least 2 mm radius. All surfaces to be coated are to be dry abrasive blast cleaned to AS1627.4 Class 3, White Metal. Remove all spent abrasive and residual dust by using dry compressed air, sweeping with a clean brush or vacuum cleaning prior to application of the coating. Avoid handling blasted steel with bare hands. The surface must be inspected prior to coating application to ensure neither surface defects nor contamination exist, otherwise rectification is required before any coating is applied.

Apply initial coating within a four hour period after blasting, or before any surface deterioration or contamination occurs. Welds, bolts, bolt holes, and all edges must be stripe coated with primer before application of full coat of primer.

EXISTING STEELWORK

The condition of existing coatings and substrates can vary widely, so to can the appropriate surface preparation required. Your best first step is to call a DULUX Protective Coatings Representative for a site inspection. He or she will capture your needs in photographs and survey reports, and provide you with tailor-made surface preparation clauses appropriate for the area and coating specifications required.

While the method can vary, the outcome must be the same when cleaning and preparing steel for painting: the surface must be sound, clean, defect-free, and uniformly rough to maximise coating adhesion.



Spot abrasive blast cleaning on Mount Ridley Potable Water Tank Vic

Thorough surface preparation is crucial to the performance of a coating system. Make sure your applicator has all the right equipment to remove and contain all rust, deteriorated coatings and residues from all surfaces to be painted. Such equipment may include, but is not limited to: spot abrasive blaster (wet or dry), Bristle Blaster®, ultra high pressure water jet, or power sander.



Bristle Blaster® in action



Spot abrasive blast cleaning on Werribee Water Tank Vic

RUST CONVERTERS

Rust converters and other chemical pretreatments are definitely not recommended, as they do not remove rust – they simply chemically convert rust into what seems to be a firmer substance. But rust converters generally fall short in their claims to provide a sound substrate for new coating systems to adhere to. Please refer to Standards Australia AS2312.1:2014 for more information.



7 BIOLOGICAL TREATMENT - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

7 BIOLOGICAL TREATMENT - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durekem® MPP @ 150µm
 2nd coat DULUX Durekem® MPP @ 150µm

7 BIOLOGICAL TREATMENT - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

7 BIOLOGICAL TREATMENT - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durekem® MPP @ 150µm
 2nd coat DULUX Durekem® MPP @ 150µm

8 DISINFECTION TANKS - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

8 DISINFECTION TANKS - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Flexituff® @ 2500µm

8 DISINFECTION TANKS - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

8 DISINFECTION TANKS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durebild® HSE @ 250µm
 2nd coat DULUX Durebild® HSE @ 250µm

9 TREATED WATER PIPES - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durebild® TLE @ 125µm
 2nd coat DULUX Durebild® TLE @ 125µm

10 WATER STORAGE TANKS - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

10 WATER STORAGE TANKS - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Flexituff® @ 2500µm

10 WATER STORAGE TANKS - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

10 WATER STORAGE TANKS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durebild® HSE @ 250µm
 2nd coat DULUX Durebild® HSE @ 250µm

11 BIOSOLIDS VESSELS - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Flexituff® @ 2500µm

11 BIOSOLIDS VESSELS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durepon® P14 @ 50µm
 2nd coat DULUX Flexituff® @ 2500µm

12 WALKWAYS, HANDRAILS - STEEL

Preparation: Ref. AS1627.4, Sa 2.5 (75-100 µm profile)
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

GUIDE FOR WASTEWATER TREATMENT PLANTS

The following is intended as a guide only. For your project's total asset protection, please call your DULUX Consultant.

1 SEWERS, WET WELLS AND MANHOLES - CONCRETE

Preparation: Whip abrasive blast

- 1st coat DULUX Durebild® HSE @ 250µm
- 2nd coat DULUX Durebild® HSE @ 250µm

2 PUMPING STATION - STEELWORK

Preparation: Ref. AS1627.4, Sa 2 ½

- 1st coat DULUX Zincanode® 402 @ 75µm
- 2nd coat DULUX Durebild® STE @ 150µm
- 3rd coat DULUX Weathermax® HBR @ 100µm

3 EQUALISATION TANKS - CONCRETE EXTERNALS

Preparation: Whip abrasive blast

- 1st coat DULUX Durebild® STE @ 150µm
- 2nd coat DULUX Weathermax® HBR @ 100µm

3 EQUALISATION TANKS - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.

- Filler DULUX Luxepoxy Filler
- 1st coat DULUX Durebild® STE @ 150µm
- 2nd coat DULUX Flexituff® @ 2500µm

3 EQUALISATION TANKS - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½

- 1st coat DULUX Zincanode® 402 @ 75µm
- 2nd coat DULUX Durebild® STE @ 150µm
- 3rd coat DULUX Weathermax® HBR @ 100µm

3 EQUALISATION TANKS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3

- 1st coat DULUX Durepon® P14 @ 50µm
- 2nd coat DULUX Flexituff® @ 2500µm

4 SCREENING BINS - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½

- 1st coat DULUX Zincanode® 402 @ 75µm
- 2nd coat DULUX Durebild® STE @ 150µm
- 3rd coat DULUX Weathermax® HBR @ 100µm

4 SCREENING BINS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3

- 1st coat DULUX Durepon® P14 @ 50µm
- 2nd coat DULUX Flexituff® @ 2500µm

5 DISTRIBUTION PIPES - CONCRETE EXTERNALS

Preparation: Whip abrasive blast

- 1st coat DULUX Durebild® STE @ 150µm
- 2nd coat DULUX Weathermax® HBR @ 100µm

5 DISTRIBUTION PIPES - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.

- Filler DULUX Luxepoxy Filler
- 1st coat DULUX Durebild® TLE @ 125µm
- 2nd coat DULUX Durebild® TLE @ 125µm

5 DISTRIBUTION PIPES - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½

- 1st coat DULUX Zincanode® 402 @ 75µm
- 2nd coat DULUX Durebild® STE @ 150µm
- 3rd coat DULUX Weathermax® HBR @ 100µm

5 DISTRIBUTION PIPES - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3

- 1st coat DULUX Durebild® TLE @ 125µm
- 2nd coat DULUX Durebild® TLE @ 125µm



6 CLARIFIERS - CONCRETE EXTERNALS

Preparation: Whip abrasive blast

- 1st coat DULUX Durebild® STE @ 150µm
- 2nd coat DULUX Weathermax® HBR @ 100µm

6 CLARIFIERS - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.

- Filler DULUX Luxepoxy Filler
- 1st coat DULUX Durebild® STE @ 150µm
- 2nd coat DULUX Flexituff® @ 2500µm

6 CLARIFIERS - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½

- 1st coat DULUX Zincanode® 402 @ 75µm
- 2nd coat DULUX Durebild® STE @ 150µm
- 3rd coat DULUX Weathermax® HBR @ 100µm

6 CLARIFIERS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3

- 1st coat DULUX Durepon® P14 @ 50µm
- 2nd coat DULUX Flexituff® @ 2500µm

CONCRETE SURFACE PREPARATION

Concrete is an extremely variable surface to paint – it may harbour moisture, laitance, efflorescence, form oils, release agents, stains, oily deposits, or dust. The final concrete strength can vary widely from the designed concrete strength due to overwatering, overworking, or poor curing techniques. Defects such as honeycombing, mortar splashes, gouges or shrinkage cracks will need immediate patching, while concrete spalling will need major rectification work.

Concrete must be clean, sound and dry before any protective coating system is applied.



Mount Martha Potable water tank

NEW CONCRETE

Green concrete has high moisture content and is very highly alkaline. Concrete must be fully cured for 28 days as per AS 2311 "Painting of Buildings" before application of coatings. Off form concrete should be installed as per AS3610 "Control of Concrete Surface – Formwork" and AS 3850.2 "Tilt Up Concrete & Pre Cast Elements for use in Buildings".

Remove grease, form oils and release agents with DULUX **AcraTex 400/4 Tiltwash** applied by airless spray or a low pressure knapsack spray unit as per the Tiltwash data sheet. Rinse clean with fresh potable water – if the surface beads, repeat the Tiltwash process. Shiny surfaces should be roughened by sweep blasting. Embedded steel such as nails, chair legs or tie wires lying close the surface should be picked out and the concrete repaired with a low shrink repair mortar such as PARCHEM **Renderoc HB40** (refer to your PARCHEM Consultant). Ensure that the surface is dry, clean and free from contaminants before painting. Remove laitance, the powdery layer that appears on concrete. This is cement dust, lime and sand fines and must be removed by sweep blasting or other mechanical means.

Check the moisture level of the concrete; observe any condensation that appears on the underside of a 200 micron polyethylene plastic sheet (45 cm x 45 cm) taped firmly onto the surface and left for 12 to 16 hours. If condensation is present, or the concrete looks dark and wet underneath the plastic, it is unsuitable to paint. Allow the concrete to dry out and recheck. If there is an ongoing moisture problem, consult an engineer for advice on rectifying the moisture. Even low level moisture moving through concrete exerts considerable hydrostatic pressure, causing applied coatings to blister off.



Concrete structures at Whitsunday Wastewater Treatment plant

EXISTING CONCRETE

Clean to remove all dirt, dust, efflorescence, laitance, powdery deposits and all other surface contaminants using a suitable cleaning agent and rinsing clean with high pressure water blast. Treat mould growth with a suitable mould treatment after the substrate has been pressure washed.

Inspect existing coating for deterioration. Check coating adhesion using the standard crosshatch test (refer AS 1580.408.4-1993: Paints and related materials - Methods of test - Adhesion (cross-cut)).

Remove all existing coatings exhibiting poor adhesion, cracking, peeling, or flaking by MBX® Bristle Blaster®, power sanding, scraping, wire brushing, or grit blast to leave a clean surface. Feather edges of the surrounding sound paint to completely remove visual ridges and remove debris. Any major design faults leading to structural failure must be corrected prior to repainting.

Horizontal surfaces can be shot or track blasted or diamond ground to remove all unsound material and provide a key for the new coating system.



Gippsland Water Vic

GUIDE FOR POTABLE WATER CATCHMENT AND TREATMENT

The following is intended as a guide only. To provide total asset protection including tailor made and detailed specifications for your plant, please call your DULUX Protective Coatings Technical Consultant.



1 PUMPING STATION - STEEL EXTERNAL

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

2 FLOCCULATION TANK - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

2 FLOCCULATION TANK - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Flexituff® @ 2500µm

3 DISTRIBUTION PIPES - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

3 DISTRIBUTION PIPES - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® TLE @ 125µm
 2nd coat DULUX Durebild® TLE @ 125µm

3 DISTRIBUTION PIPES - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

3 DISTRIBUTION PIPES - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durebild® TLE @ 125µm
 2nd coat DULUX Durebild® TLE @ 125µm

4 SETTLING TANK - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

4 SETTLING TANK - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durepon® P14 @ 50µm
 2nd coat DULUX Flexituff® @ 2500µm

4 SETTLING - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

4 SETTLING - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Flexituff® @ 2500µm

5 CLARIFIERS - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

5 CLARIFIERS - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Flexituff® @ 2500µm

5 CLARIFIERS - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

5 CLARIFIERS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durepon® P14 @ 50µm
 2nd coat DULUX Flexituff® @ 2500µm

6 DISINFECTION - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

6 DISINFECTION - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler
 1st coat DULUX Durebild® HSE @ 100µm
 2nd coat DULUX Durebild® HSE @ 250µm
 3rd coat DULUX Durebild® HSE @ 250µm

6 DISINFECTION - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

6 DISINFECTION - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durebild® HSE @ 250µm
 2nd coat DULUX Durebild® HSE @ 250µm

7 POTABLE WATER PIPES - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durebild® TLE @ 125µm
 2nd coat DULUX Durebild® TLE @ 125µm

8 POTABLE WATER TANKS - CONCRETE EXTERNALS

Preparation: Whip abrasive blast
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Weathermax® HBR @ 100µm

8 POTABLE WATER TANKS - CONCRETE INTERNALS

Preparation: Whip abrasive blast. Fill voids with epoxy filler.
 Filler DULUX Luxepoxy Filler
 1st coat DULUX Durebild® STE @ 150µm
 2nd coat DULUX Flexituff® @ 2500µm

8 POTABLE WATER TANKS - STEEL EXTERNALS

Preparation: Ref. AS1627.4, Sa 2 ½
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

8 POTABLE WATER TANKS - STEEL INTERNALS

Preparation: Ref. AS1627.4, Sa 3
 1st coat DULUX Durebild® HSE @ 250µm
 2nd coat DULUX Durebild® HSE @ 250µm












9 WALKWAYS, HANDRAILS - STEEL

Preparation: Ref. AS1627.4, Sa 2.5 (75-100 µm profile)
 1st coat DULUX Zincanode® 402 @ 75µm
 2nd coat DULUX Durebild® STE @ 150µm
 3rd coat DULUX Weathermax® HBR @ 100µm

PIPELINE COLOUR CODING

STANDARD PIPELINE IDENTIFICATION COLOURS

Standards Australia References: AS 1345 and AS 2700

Water	G21 Jade	
Steam	N24 Silver Grey	
Oils, flammable liquids	X53 Golden Tan	
Gases	Y44 Sand	
Acids & alkalis	P23 Lilac	
Air	B25 Aqua	
Other Liquids	N61 Black	
Fire Services	R13 Signal Red	
Electric Power	X15 Orange	
Communication	N14 White	
Dangerous Materials	Y14 Golden Yellow + Black	
Fresh Water & Foodstuffs	B24 Harbour Blue	