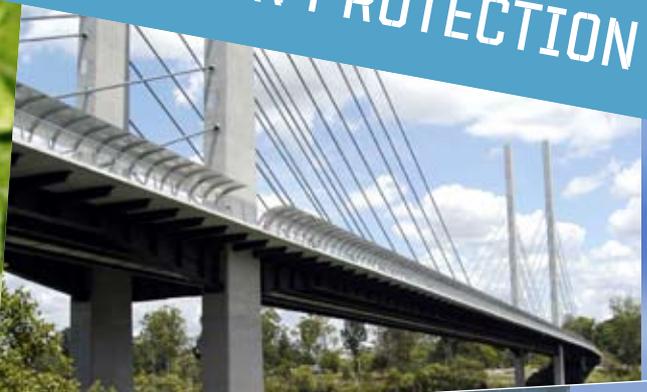


SUSTAINABLE CORROSION PROTECTION

MORE THAN
JUST PAINT



DULUX® PROTECTIVE COATINGS COMMITMENT

Environmental sustainability is a core element of the **Dulux® Protective Coatings** business philosophy, with the move away from solvents and towards water-based and higher solids alternatives. Achieving **Ecologically Sustainable Design** is top priority, but the issues regarding our environment, and how our building designs can affect it, are complex.

ESSENTIAL FEATURES

Choosing the right coating system to achieve the **best environmental outcome** for a project requires consideration of **all significant ecological impacts**, both short term and long term.

ESSENTIAL ESD INDICATOR 1: TOTAL IMPACT ON THE ENVIRONMENT

- **Many VOC's** are biologically toxic and/or destroy the ozone layer that protects us from UV radiation, although many less harmful **VOC's occur naturally**¹ (eg **monoterpenes** from pine trees, **isoprene** from deciduous trees, **eucalyptus oil**, **citrus oil**, and **ethanol** from fruit). Causing **greater concern than VOC's** is the release of **Hazardous Air Pollutants (HAP's)** which pose a far **greater ecological threat**.
- **Total emission** of greenhouse contributors should be considered – **not just within buildings** but also spray shops and building sites as **all emissions** enter our upper atmosphere.
- Beware of **alternative** corrosion protection processes that consume and produce significant quantities of **corrosive acid** and **chromate wastes**, as well as **metal vapour** and other **HAP's** into the **atmosphere**. **These** produce large amounts of **solid waste**, including **dust** which can become airborne and present inhalation hazards.²

ESSENTIAL ESD INDICATOR 2: LONGER PROTECTION FOR EXTENDED BUILDING DESIGN LIFE

- Common building materials **rapidly degrade** in coastal, industrial and CBD areas excessive rectification costs if protected inadequately³. Protective coatings add to the **sustainability** of a building by **significantly extending its service life**.

ESSENTIAL ESD INDICATOR 3: TOTAL EMBEDDED ENERGY

- The **total energy** required in raw material mining and subsequent processes could be greatly reduced by **high-performance coating formulations** that **maximise their longevity**. The **longer** a coating lasts, the less pressure placed on our **natural resources**.
- Beware of **alternative** corrosion protection based on a 'zero VOC'. **High thermal energy inputs** are required throughout the multi-step process, involving hot chemical pre-treatments through to **dipping in molten zinc**.
- **Zinc-rich coatings** require no corrosive chemical pre-treatments, only fast surface preparation and rapid spray painting, all at **room temperature**.
- **High performance protective coatings** reduce **maintenance** and thus total energy input.
"Worth doing, worth Dulux®."



DULUX® AQUAGALV®

Dulux Aquagalv is a waterborne, heavy-duty two-pack, self-curing inorganic zinc silicate primer. The high level of **zinc metal** in **Aquagalv** offers particularly high corrosion resistance, superior to hot dip galvanizing* particularly in coastal and severe marine environments. The service life and aesthetics can be further enhanced with suitable topcoats.

Aquagalv provides **very long-term galvanic corrosion protection** on all types of steelwork, especially structural, even in **corrosive coastal areas**.

Specially formulated for projects adhering to stringent ESD (ecologically sustainable design) guidelines, the total **VOC** level of **Aquagalv** is less than **10 g/l**, and is applied and cured at room temperature.

When fully cured, **Aquagalv** has an exceptionally hard surface that resists damage during transport.

Its **low VOC levels, minimal thermal energy inputs, nil corrosive chemical surface treatments** and **superior corrosion protection*** make **Aquagalv** the ideal green alternative to hot dip galvanising.

* According to Australian Standard AS2132:2004

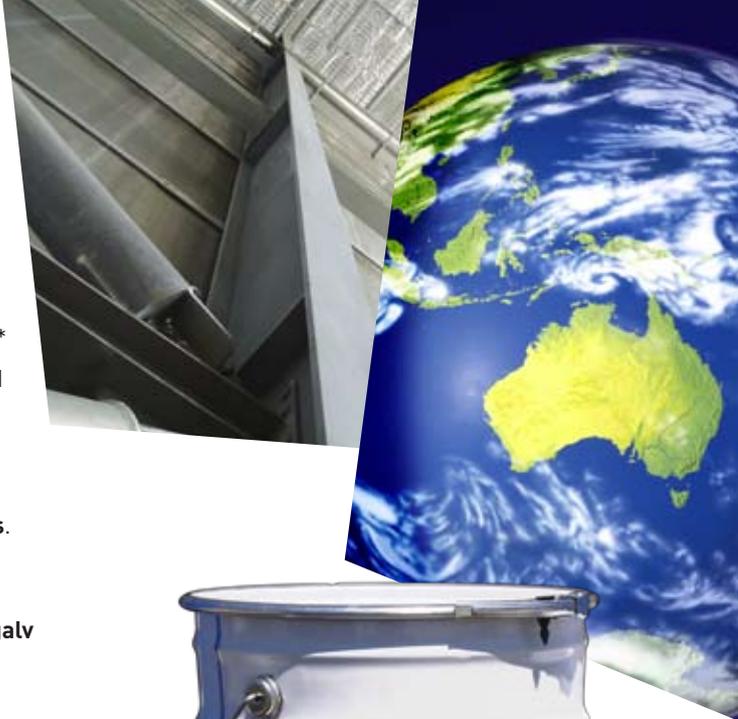
DULUX® LUXAFLOOR ECO₂®

Dulux Luxafloor ECO₂ is a two-pack, waterborne epoxy floor coating for interior use.

Luxafloor ECO₂ is designed for medium foot and wheel traffic conditions where solvent odour may be a concern. The total VOC level of **Luxafloor ECO₂** is less than **10 g/l** and has **virtually no odour**, making it suitable for projects where stringent indoor air quality standards must be maintained, such as the refurbishment of hospitals, aged care facilities and schools.

Luxafloor ECO₂ can be used in projects constructed within ESD guidelines. The fast dry characteristics of **Luxafloor ECO₂** allows up to three coats to be applied in a single day, and ready for light traffic in a day or two.

Design versatility with **Luxafloor ECO₂ Clear** allows you to specify one of the standard colours in the Luxafloor range, then specify a propriety vinyl flake for a dramatic, seamless effect. The flakes are sealed with Luxafloor Clear to provide an easily cleanable surface.



DULUX® PROTECTIVE COATINGS SUSTAINABLE PRODUCTS REFERENCE GUIDE

Features & Benefits	Dulux® Aquagalv®	Dulux® Luxafloor ECO ₂ ®
Very low VOC; < 10g/l, most suitable for ESD compliant projects.	✓	✓
Low odour and easy water wash-up.	✓	✓
Extremely tough.	✓	✓
Good chemical resistance when cured.		✓
Abrasion resistant once cured. Resists damage during transportation.	✓	
Contains high level of zinc metal for maximum corrosion protection in marine + coastal environments.	✓	
Easily top-coated and maintained.	✓	✓
Conforms to AS2312:2004 System "IZS2 & IZS3".	✓	
Easy to apply - excellent application by brush, roller, conventional or airless spray.		✓
Suitable for variety of applications and substrates.		✓
Dries quickly, can apply multiple coats in a day.		✓
Optional Luxafloor Aggregate for slip resistance.		✓
Excellent adhesion to concrete.		✓
Available in Clear and range of factory colours.		✓

GREEN SPECIFICATIONS

When it comes to specifying coating systems for projects being designed within Green Star guidelines or you simply wish to minimise impact on the environment, call your Dulux Consultant. Many of our Consultants actively and regularly attend environmental conferences, seminars and training sessions, and can help you to specify the most **environmentally responsible** coating systems for your project.

For more information, please contact the Dulux Protective Coatings Technical Consultant in your state.

DULUX® IS A MEMBER OF THE GREEN BUILDING COUNCIL OF AUSTRALIA



An Australian Government Initiative

¹ More than a change of color: Autumn foliage may affect air quality, climate. www.ucar.edu/communications/staffnotes/0110/foilage.html

² Emission Estimation Technique Manual for Galvanizing www.npi.gov.au/handbooks/approved_handbooks/pubs/galvanising.pdf

³ Srikanth Venkatesan, "Evaluation of distress mechanisms in bridges exposed to aggressive environments" www.2006conference.crcci.info/docs/CDProceedings/Proceedings/P101_Venkatesan_R.pdf