



Secure your Steelshield® Warranty by following six simple steps*

1. DESIGN CONSIDERATIONS
2. CORROSIVE ENVIRONMENT
3. SUBSTRATE PREPARATION
4. PRODUCT SYSTEM CHOICE
5. REQUEST A SPECIFICATION
6. WARRANTY





1. Design Considerations

Dulux® Powder Coatings are an ideal choice for long term protection of a wide range of fabricated mild steel items.

It is vital that corrosion protection of the item to be coated is considered in the early stages of design. The design should allow the item to be prepared for coating correctly and that the minimum thickness of the specified coating can be achieved.

Equally, good design will avoid sections in which water and foreign matter will lodge, as these areas may result in premature failure of the coating system.

In order to qualify for a Steelshield® Warranty the item to be coated shall be designed and fabricated in accordance with the requirements set out in *AS/NZS 2312:2002, Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings. Section 3.3 Design.*

The following design elements shall be avoided: narrow crevices, poor air circulation, depressions, sharp edges and corners, ledges, intermittent welding, undrained flat surfaces, unsealed hollow sections, flat surfaces in loose contact where moisture may be drawn in between them by capillary action.



2. Corrosive Environment

In order to determine the appropriate coating system for a Steelshield® Warranty the corrosive environment of the coated item must be determined in accordance with *AS4312-2008 Atmospheric corrosivity zones in Australia.*

ISO 9223 CATEGORY	CORROSIVITY	STEEL CORROSION RATE MICRONS PER YEAR	EXAMPLE OF TYPICAL ENVIRONMENT
C1	very low	<1.3	dry indoors
C2	low	1.3-25	arid urban inland
C3	medium	25-50	coastal or industrial
C4	high	50-80	sea-shore (calm)
C5	very high	80-200	sea-shore (surf, heavy industrial)

Classification of corrosivity zones determined by the rate of corrosion of mild steel when influenced by both macro-climatic and micro-climatic factors such as, time of wetness, exposure to airborne salts, industrial pollutants, shelter from rain and regular washing.



3. Substrate Preparation

Mild steel substrates shall be prepared as follows:

1. Wash and degrease all surfaces to be coated in accordance with AS1627.1 with a free-rinsing, alkaline detergent, in strict accordance with the manufacturer's written instructions and all safety warnings.
2. Wash with fresh potable water and ensure that all soluble salts are removed in accordance with AS 3894.6 methods A&D.
3. Grind all sharp edges with a power tool to a minimum radius of 2mm.
4. Power tool clean welds to AS1627.2 Class 2 to remove roughness. Remove filings, preferably by vacuum or compressed air.

5. 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.)

In situations where it is not possible to prepare your item on all surfaces as described above, for long term protection against corrosion it is strongly recommended whenever possible, that an alternative substrate such as, aluminium be considered.

Failure to suitably prepare your mild steel substrate may void your Steelshield® Warranty.



4. Product & System Choice

Depending on the corrosivity zone in which the coated item will be located, a coating system capable of qualifying for a Steelshield® Warranty is required. Typically a compliant system consists of either Dulux Zincshield® 2 powder coating primer only, or in combination with Dulux®, E-Prime™ powder coat primer (refer to the matrix on the back page for examples of typical coating systems which achieve a Steelshield® Warranty) in combination with a U.V resistant top coat.



5. Request a Specification

Our dedicated and knowledgeable specification consultants can help simplify the specification process, saving you time and money by ensuring you achieve the best coating specification for the job:

- Provision of documented project specific specifications.
- Written confirmation of your project's eligibility for a Steelshield® Warranty.
- Design, coating system and colour advice.
- Recommendation of suitably qualified applicators.



6. Warranty

In addition to the performance related measures and other terms and conditions of the Steelshield® Warranty, there are some preliminary steps that must be undertaken to qualify for a Steelshield® Warranty, these include:

- Prior to the commencement of the project, a Dulux® representative must be advised that Dulux® powder coating materials will be used on the nominated project and a performance warranty will be required.
- Project specific specification documentation (see step 5 above), meeting all Dulux® requirements, must be developed and issued by Dulux® for the project.
- The applicator must make available their quality control documents and purchase invoices to be able to substantiate that Dulux® products were used throughout that specific part of the project and were applied in accordance with the nominated

Dulux® endorsed specification and the coating schedules. It is the responsibility of the Builder/Owner to ensure that the applicator follows the correct application procedure.

- A detailed inspection and declaration is required to be undertaken by a suitability qualified person once all installation/erection work is complete to the specified standard. Furthermore, regular inspection, cleaning and any required touch up work will be required to maintain the Steelshield® Warranty.
- All coating products (and related items or services) supplied by Dulux® have been paid for in full.

Your Dulux® Powder Coating representatives are always happy to provide you with all the advice required to help you qualify for a valid Steelshield® Warranty.





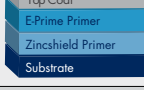

Genuine powder coating warranties for steel substrates.

- Corrosion warranties up to 10 years.
- Supported by Dulux® the brand you can trust.

Using the table below select the corresponding corrosion category.

Review the maximum warranty period.

Selecting the pre-treatment and coating system.

AS4312 2008 & ISO 12944	DESCRIPTION OF ENVIRONMENT		MILD STEEL CORROSION RATE MICRONS PER YEAR	CORROSION WARRANTY YEARS	ABRASIVE BLASTING AS1627.4.2:2005 CLASS SA 2.5
C1	Very low	Environments typically found inside heated or air conditioned buildings with clean atmospheres	< 1.3	10 Year	
C2	Low	Includes dry, rural areas, remote from the coast or sources of pollution and interior environments where some condensation may occur.	1.3-25	10 Year	
C3	Medium	City, industrial and coastal environments with moderate sulphur dioxide and salt exposure, interior environments with high moisture levels.	25-50	5 Year	
C4	High	On the coast extending up to one kilometre inland and aggressive industrial environments, interior environments include significant moisture and contamination, such as, indoor swimming pools.	50-80	5 Year	
C5	Very high industrial	Aggressive industrial areas where the environment may be acidic with a PH of less than 5	80-200	5 Year	
C5	Very high marine	This category is offshore and on the beachfront in regions of rough seas and surf beaches.	80-200	5 Year	

Note:

- Substrates include, Mild Steel, Bright/Semi Bright Steel, Black Steel and Blue Coated Steel.
- To establish if your project is suitable for a warranty, all projects must be approved by Dulux prior to commencement of coating.
- Items to be coated must be planned and designed in accordance with AS/NZS 2312:2002 Section 3.

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To make a claim under the warranty, please contact Dulux Powder Coatings the details shown on the back of this brochure and provide details of your claim. You must show proof of purchase and bear all expenses incurred in making a claim. The benefits of this warranty are in addition to other rights and remedies under any applicable law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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Terms and conditions apply in order to qualify for a Steelshield® Warranty, please see www.duluxpowders.com.au or contact your Dulux Powder Coating representative on 132 499 for further details.

