

Snowy Technical Standards

SHL-GEN-123

Protective Coatings

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1. Executive Summary

All surfaces of structures and equipment, other than those specifically excluded, must be finished with an appropriate coating system which will provide the necessary protection against corrosion, with minimal maintenance, for the design life of the structures and equipment.

This Technical Standard specifies the minimum coating requirements which apply for use on maintenance applications and minor projects at Snowy Hydro sites and assets.

The excluded surfaces are:

- Plated metals or metals specifically finished for appearance including bronze, brass, copper and stainless steel (except when required for piping identification).
- Aluminium (except where specifically required for appearance).
- Fair-faced brickwork, stonework, artificial stone, and exposed aggregates.
- Off-form concrete finishes.
- Sprayed vermiculite.
- Inside the box columns are totally sealed by welding.
- Surfaces to be embedded in concrete must be free of loose material but must not be coated (unless otherwise specified).
- Non-corrodible surfaces except as directed.
- High temperature applications

Coating specifications for high criticality plant and major project works, where corrosion protection is required, shall be prepared using a risk based approach, and approved by the relevant asset specialist.

Surfaces to be coated must be prepared in accordance with coating manufacturers specifications and relevant Australian Standards. If the surface is suspected to have been previously coated with lead based paint then QP24-61 should be followed to determine if coating removal is considered 'lead risk work' and all necessary controls followed.

All new coatings **must not** contain lead, coal tar or chromium based anticorrosive additives.

Galvanising to the appropriate Australian Standard is acceptable for corrosion protection.

The general guide for preparation and paint details are shown in Table 1 below:

Table 1: SHL general guide for surface preparation and paint details

Surface	Surface Preparation	1 st Coat	2 nd Coat	Inspection Requirement
Previously Painted.	Degrease, wash and dry. Remove loose paint. Lightly abrade. Remove all signs of corrosion.	Alkyd Primer	Alkyd Gloss	Visual
Galvanised.	Degrease, wash and dry. Lightly abrade.	Alkyd Primer	Alkyd Gloss	Visual
Subject to total immersion in water.	Abrasive blast to AS 1627.	Epoxy Primer	High Build Epoxy	Qualified inspector
Subject to total immersion in oil.	Abrasive blast to AS 1627.	Epoxy Primer	High Build Epoxy	Qualified inspector
Stainless Steel	Power Tool	Alkyd Primer	Alkyd Gloss	Visual

Generally coatings shall be colour coded in accordance with Table 2 shown below. For other applications AS 1345 or AS 1318 shall be used.

Table 2: SHL colour coding requirements for general coatings

Service	AS 2700 Colour	Colour Code Std
Pipework and Conduits		
Oil	X53 Golden Tan	AS 1345
Water	G21 Jade	AS 1345
Air	B25 Aqua	AS 1345
Natural Gas	X31 Raffia	AS 1345
Diesel Fuel	X53 Golden Tan	AS 1345
Liquefied Petroleum Gas - Liquid Lines - Vapour Lines	X31 Raffia B25 Aqua	AS 1345 AS 1596
Electrical (General), unless specified PVC or galvanised conduit may remain unpainted.	X15 Orange	AS 1345
Transformers	N42 Storm Grey	Snowy Selection
Fire protection pipes & valves	R13 Signal Red	AS 1345
Hydraulic Equipment	N42 Storm Grey	Snowy Selection
Communications	White or Galvanised Conduit	
Waste Water - Sewage	Black	AS1345
Miscellaneous Equipment		
Moving parts	Y15 Sunflower	AS 1318
Low pipes, doorways, obstacles etc	Y15 Sunflower	AS 1318
General equipment	N53 Blue Grey or as agreed	Snowy Selection
External (excluding within KNP) and all internal handrails, guardrails, steps and stairways	Y15 Sunflower	AS 1318
SHL assets and infrastructure within KNP - External handrails, guardrails, steps and stairways	Grey tones, (see Section 4. Environmental Requirements below).	Snowy Selection
Fire equipment floor markings	R13 Signal Red	AS 1345
Electrical control facia boards	T63 Teal (Green)	Snowy Selection

Service	AS 2700 Colour	Colour Code Std
Internals of Electrical and Hydraulic Cubicles (includes electrical backing boards)	N14 White	Snowy Selection
External colour for Electrical and Hydraulic Cubicles – Outdoor	Grey tones, (see Section 4. Environmental Requirements below).	Snowy Selection
External colour for Electrical and Hydraulic Cubicles - Indoor	N42 Storm Grey or Stainless Steel	Snowy Selection
Accumulators which have Nitrogen filled bladders	N63 Pewter	Snowy Selection
Site Drains and Pits		
Stormwater pits and drains	B25 Blue (Fish Symbol)	Snowy Selection
Oily water pits and drains	X53 Golden Tan	Snowy Selection

2. Scope

This Snowy Standard covers the requirements for surface preparation, priming, painting and protective coating protection of metalwork, and colour coding requirements for general use on Snowy Hydro sites and Assets. It also addresses galvanising of iron and steel surfaces for use on Snowy Hydro sites and Assets.

3. Applicable Standards

Table 3: Applicable Standards

AS Reference	Title
AS 150.408.5	Paints and Related Materials – Methods of Test – Adhesion – Pull-off Test
AS 1192	Electroplated Coatings – Nickel & Chromium
AS 1318	SAA Industrial Safety Colour Code
AS 1319	Safety Signs for the Occupational Environment
AS 1345	Identification of the Contents of Pipes, Conduits and Ducts
AS 1580	Paints and related materials - methods of test (all parts)
AS 1627.0	Metal Finishing – Preparation and Pre-Treatment of Surfaces – Method Selection Guide
AS 1627.4	Metal Finishing – Preparation and Pre-Treatment of Surfaces – Abrasive Blast Cleaning
AS 1627.9	Metal Finishing – Preparation and Pre-Treatment of Surfaces – Pictorial Surface Preparation Standards for Painting Steel Surfaces.
AS 1790	Electroplated Coatings – Cadmium on Iron or Steel
AS/NZS 2312	Guide to the Protection of Iron and Steel Against Exterior Atmospheric Corrosion
AS/NZS 2310	Glossary of Paint and Painting Terms
AS/NZS 2311	Guide to the painting of buildings
AS/NZS 2312	Guide to the Protection of Iron & Steel Against Exterior Atmospheric Corrosion
AS 2648.1	Underground Marking Tape – Non-detectable tape
AS 2700	Colour Standards for General Purposes
AS 3640	Workplace Atmospheres – Method for Sampling and Gravimetric Determination of Inspirable Dust
AS 3715	Metal finishing - Thermoset powder coating for architectural applications of aluminium and aluminium alloys
AS 3730.6	Guide to the properties of paints for buildings - Solvent-Borne-Interior/exterior full gloss enamel
AS/NZS 3750	Paints for steel structures (all parts)
AS 3894.0	Site Testing of Protective Coatings – Introduction and List of Test Methods

AS Reference	Title
AS 3894.1	Site Testing of Protective Coatings – Non-conductive Coatings – Continuity Testing – High Voltage (“brush”) Method.
AS 3894.3	Site Testing of Protective Coatings – Determination of Dry Film Thickness
AS 3894.4	Site Testing of Protective Coatings – Assessment of Degree of Cure
AS 3894.5	Site Testing of Protective Coatings – Determination of Surface Profile
AS 3894.6	Site Testing of Protective Coatings – Determination of Residual Contaminants
AS 3894.10	Site Testing of Protective Coatings – Inspection Report – Daily Surface and Ambient Conditions
AS 3894.12	Site Testing of Protective Coatings – Inspection Report – Coating
AS/NZS 4020	Testing of products for use in contact with drinking water
AS 4100	Steel Structures
AS 4352	Tests for coating resistance to cathodic disbonding
AS 4361.1	Guide to Lead Paint Management – Industrial Applications
AS/NZS 4534	Zinc and Zinc/Aluminium –Alloy Coatings on Steel Wire
AS/NZS 4680	Hot Dip Galvanized (zinc) Coatings on Fabricated Ferrous Articles
AS/NZS 4792	Hot Dip Galvanized (zinc) Coatings on Ferrous Hollow Sections, Applied by a Continuous or Specialized Process
AS/NZS ISO 9001	Quality Management Systems
BS 1133	Packaging Code
ISO 8501	Preparation of steel substrates before application of paint and related products - Visual assessment of surface cleanliness

4. Specific Environmental Requirements for Assets in Kosciuszko National Park

External colour and finish requirements apply to SHL assets and infrastructure within Kosciuszko National Park (**KNP**). These must be adhered to, to ensure compatibility with the existing surroundings, and to lessen the visual impact of operations in remote and outlying areas.

The Snowy Management Plan Environmental Management Plan (**SMP EMP**) for SHL Hydro Scheme operations sets out the following requirements:

- [SMP EMP chapter 05](#), Historic Heritage, Annexure D, section 5. Painting
 - Surfaces should only be painted where this is required for preservation and maintenance, for example, in the case of metal structures associated with dams
- [SMP EMP chapter 14](#), Landscape, Annexure E: Visual Amenity Plan
 - Design the new structure or external refurbishment to be compatible with the particular surroundings and uses, where practicable
 - Compatibility- Things to consider to improve compatibility with the surrounding area-
 - (1) colour;
 - (2) structure or asset construction material;
 - (3) protrusions;
 - (4) screening from the surrounding area; and
 - (5) access requirements.

Guidelines for painting external and visible features in KNP:

- Colouring and coating of external finishes should only be considered where required to assist integration with certain settings and to increase life expectancy of materials.
- Ensure colours and finishes are consistent and generally blend with the range of existing infrastructure currently in operation across the SHL Scheme.
- Ensure that colour selection is aimed at making facilities visually recessive. Colour choice should be **limited to tones of grey only**. Selection to be based on surrounding setting, e.g. light tones for open areas, darker tones for enclosed or heavily shaded areas.
- **Avoid** the use of highly visible colours such as yellow, orange and red.
- Where possible, **avoid** shades of green and brown as they are difficult to match with surrounding landscape colours, especially when subject to fading
- Ensure materials and/or finishes do not impact on the natural environment, and use low or non-toxic coatings where possible
- Minimise requirement for recurring maintenance, especially in remote areas
- Ensure high vandal resistance, or capability for renewal of coatings (e.g. repainting)

Preferred Colours and Finishes

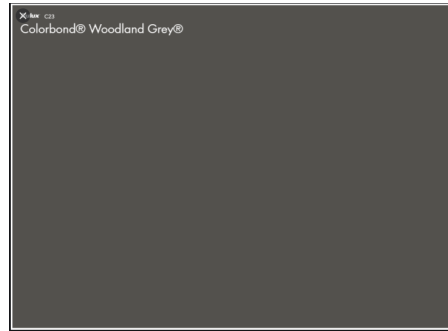
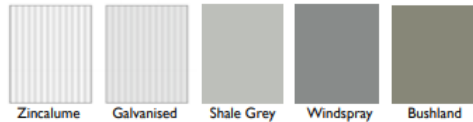
Steel

Dulux Ferrodor



External colour range

- Range of grey colours and finishes available for corrugated steel
- Selection based on tonal variations in surrounding setting e.g. light tones for open areas and dark tones for enclosed areas



Additional information can be found in the following documents:

- [SMP EMP Chapter 5 \(Historic Heritage, Annexure D, Section 5. Painting\)](#)
- [SMP EMP Chapter 14 \(Landscape, Annexure E: Visual Amenity Plan\)](#)
- [National Parks and Wildlife Service, Park Facilities Manual 10, Protective Coatings](#)
- [Environmental Standards Handbook : Section 9](#)

5. Technical Requirements

Materials

Solvents and Thinners

Solvents, thinners and other additives must be of the kind, quality and quantity as recommended by the coating manufacturer.

Safety Data Sheets (SDS) must be supplied with all solvents, thinners, and additives.

Paint/coatings

Primers, sealers, undercoats and topcoats must be compatible with each other. All coatings in a system must be from the same coating manufacturer. Paint products shall be supplied from reputable manufacturers. Snowy Hydro may request additional information on, or samples of procedures and/or products from the Supplier of the paint products.

Each coat must be of a different tint for inter-coat differentiation.

The coating manufacturer's requirements for mixing, thinning, straining, induction time, pot life and recoat interval must be strictly followed unless a higher standard is required by the Specification, or by the recommendations of AS 2312.

All paint must be delivered to the point of use in unopened, sealed containers clearly labelled with the product name, batch number and use-by-date and accompanied by application instructions and Material Safety Data Sheets.

The top coat of all coatings must be gloss.

Coating Thickness

Water and oil Immersed

Where paint is applied to areas immersed in water, the coating system must have a minimum dry film thickness of 500 micron.

Other surfaces.

Where paint is applied to surfaces other than water immersion applications, the minimum dry film thickness shall be as recommended by the manufacturer.

Paint Colour Coding

All painting shall be performed in accordance with Snowy Hydro's colour coding system. The colour coding has different colours for pipework carrying air, water and oil, moving parts and stationary parts, electrical devices, etc, and painting shall not proceed on any component without the approval of the colour by Snowy Hydro. Refer to Table 2 above for further details.

Generally coatings shall be colour coded in accordance with the following. For other applications AS 1345 or AS 1318 shall be used.

Surface condition and preparation

Prior to surface preparation, all surfaces must be treated as defined below where applicable:

- Review relevant site documentation and/or test representative surfaces/layers for lead paint prior to undertaking any paint removal/abrasive works to ensure required safety and environmental controls and management are put in place. Refer to QP24-61.
- Contamination such as oil, grease, salts or dirt must be removed by an appropriate method in accordance with AS1627.1.
- Contamination such as weld spatter, slag, fumes and flux residues must be completely removed. This must be done by washing with fresh water followed by chipping and blast cleaning.
- Surfaces must be free of imperfections such as pinholes; rough contour and undercut of weld seams and laminations in plate.
- All corners and edges of plates, stiffeners and brackets, etc. must be de-burred and sanded to have edge radii of not less than 2.0 mm to ensure good adhesion and coverage of paint.
- Coated surfaces containing embedded dust, overspray or dry spray must be sanded smooth prior to the application of further coatings.
- Abrasive blast clean in accordance with AS 1627.4 to achieve a surface profile in accordance with the respective coating manufacturer's recommendation. Ensure any grit used for abrasive blasting is contained and collected for appropriate waste disposal in accordance with SHL procedures QP24-19 Storage Transport and Disposal of Hazardous Waste and/or QP25-15 Waste Management.

Coating Application Specifications

All paint shall be mixed, applied and cured according to the paint manufacturer's latest written instructions. All products shall be mixed to a homogeneous consistency prior to application.

All surfaces must be prime coated as soon as practicable after the appropriate surface preparation and before any contamination of the surface occurs.

General preparation and paint details are shown below (to be used as a guide only):

Surface	Surface Preparation	1 st Coat	2 nd Coat	Inspection Requirement
Previously Painted.	Degrease, wash and dry. Remove loose paint. Lightly abrade. Remove all signs of corrosion.	Alkyd Primer	Alkyd Gloss	Visual
Galvanised.	Degrease, wash and dry. Lightly abrade.	Alkyd Primer	Alkyd Gloss	Visual
Subject to total immersion in water.	Abrasive blast to AS 1627.	Epoxy Primer	High Build Epoxy	Qualified inspector
Subject to total immersion in oil.	Abrasive blast to AS 1627.	Epoxy Primer	High Build Epoxy	Qualified inspector
Stainless Steel	Power Tool	Alkyd Primer	Alkyd Gloss	Visual

All grit and abrasive material must be in accordance with AS 1627.4. Ensure any grit used for abrasive blasting is contained and collected for appropriate waste disposal in accordance with SHL procedures QP24-19 Storage Transport and Disposal of Hazardous Waste and/or QP25-15 Waste Management.

Alternatives coating may be used with the approval of Snowy Hydro Technical Specialist.

Workmanship

When completed the film applied in each coat must be free from sagging, blisters, craters, pinholes and other defects.

Damaged areas are to be touched up to achieve a finish as good as the original paintwork otherwise the whole section must be repainted. Repairs will be consistent with the manufacturer's recommendations.

Touch up" colour must be visually compatible with the original colour. Patchy appearance must not be acceptable.

Ambient conditions

The conditions for coating application shall be as follows:

Condition	Requirement
Dew Point	No moisture or water is to be present on the surface to be coated from one hour prior to coating application through to one hour after the coating application is completed.
Relative Humidity	Coating application must cease immediately the relative humidity exceeds 85% or goes outside the coating manufacturer's recommended humidity range.
Surface Temperature	The acceptable surface temperature for painting generally ranges from 10°C to 40°C. Painting must not continue if the temperature is expected to go outside the acceptable range during the application and drying period.
Wind Speed and Direction	Coating application must cease immediately if the wind speed and direction results in potential deposition of contaminants onto the surface or overspray contamination of other work cannot be controlled.

Galvanising & Electroplating

All galvanising shall be by the hot dip process in accordance with the appropriate Standard (AS/NZS 4534, AS/NZS 4680, & AS/NZS 4792).

All parts to be galvanised shall be acid pickled in accordance with AS 1627 – Part 5, with all material likely to resist attack by the pickling liquid removed beforehand.

Electroplating shall be nickel plus chromium plating in accordance with AS 1192 or zinc plating in accordance with AS 1790.

Working, fabrication and deburring of work must, where practicable, be carried out prior to galvanising or electroplating.

Abrasive grit blast clean in accordance with Appendix 1 - Quality, heading "Care of surfaces".

Care must be taken to prevent hydrogen damage to high tensile and high carbon steels during the pickling process.

The thin tightly adhering slag produced by welding process must be removed completely.

Where the galvanising coating has been damaged prior to Practical Completion, it shall be repaired in accordance with the appropriate clauses of the relevant Australian Standards (AS/NZS 4534, AS/NZS 4680, & AS/NZS 4792).

Appendix 1 - Quality

The following quality requirements may be used as a guide for ensuring appropriate tests and records are kept during the coating process.

Samples

All painting or coating materials may be sampled by SHL and subjected to testing in accordance with the relevant parts of AS 1580.

Inspection and Testing

An Inspection and Test Plan (ITP) must be prepared and carried out sufficient to ensure that the preparation of surfaces to be coated, the application of coatings and the coating materials conform to the requirements of the specification.

The testing of the standard of surface preparation and of the coating quality must include, but not be limited to:

- surface profile of the abrasive blast in accordance with AS/NZS 3894.5
- level of surface cleanliness in accordance with AS/NZS 3894.6
- measurement of the total dry film thickness of the cured coating in accordance with AS 3894.3.
- high voltage spark testing in accordance with AS 3894.1. Where defects are identified in the coating, these shall be marked and repaired by local patching by reinstating the full coating system in accordance with this specification and the manufacturer's written instructions.
- effectiveness of cure in accordance with AS 3894.4

The Inspection and Test Plan must contain:

- Mandatory Hold and Witness Points that are required by statutory authorities
- Hold and Witness Points for the Contractor to verify work performed by employees and subcontractors.
- As a minimum, Hold (H) or Witness (W) points requiring attendance by the Superintendent as follows:

Activity Requiring Inspection or Test	Frequency	H or W
Surface Preparation prior to priming (or galvanising/electroplating)	At Commencement	H
	At Each Stage	W
Application of Top-Coats (or galvanising/electroplating)	At Commencement	H
	Subsequent Stages	W
Dry Film Thickness Measurement	At completion of each stage	W
High voltage spark testing	At completion of each stage	W

The measurement of dry film thickness (DFT) must be made in accordance with AS 3894.3. In the event that the specified minimum thickness is not achieved, additional coats must be applied until the required thickness is obtained.

Care of surfaces

Equipment and work areas must be kept clean and surrounding areas must be adequately protected from overspray and paint droplets by suitable covering and masking.

Exposure of the uncured paint film to frost, rain, fog, condensation or dust must be prevented.

Wind, dust and air pollution create unfavourable conditions for coating applications. These hazards must be avoided or controlled by the use of suitable covers and screens or coating application must cease until conditions are again favourable.

Where blast cleaning is specified as an option, all grit sensitive surfaces such as seals, journals, bearings etc. must be completely protected against damage and/or entry of grit by suitable masking and fitting of protective guards. Any equipment, which may be affected by the use of blast cleaning and especially bearing units, must not be grit blasted.

Prevention of damage and reinstatement of damaged coatings

Care must be taken in loading, transport, unloading, stacking and erection of equipment or steel work to avoid damage to paintwork. All slings, ropes and chains employed for such, must be rubber sheathed or similarly covered. No equipment or steelwork must be stacked directly on other equipment or steelwork or on the ground.

Any damage to coatings on any equipment must be made good.

All damaged, burnt and degraded coatings must be completely removed, exposing a clean substrate or a coating free of imperfections. All edges of damaged coatings must be feathered back as necessary to achieve a smooth uninterrupted surface.

The patches of new paint must overlap the old paint by at least 50 mm except for inorganic zinc coatings and etch primers, which must not overlap existing top coats.

Recoating affected areas in the same or equivalent manner to that originally specified.

Appendix 2 - Painting Systems Guide – For Project Work

The following is a **guide** to assist in the selection of a protective coating system for specific project work (as opposed to maintenance and minor projects covered by the Standard).

Values of Dry Film Thickness (DFT) specified are minimum values for each coat and may need to be increased for particular paint brands.

The coating system to be used must be reviewed by a protective coatings consultant and approved by the relevant Asset Specialist.

Protective Coating Systems – Details

Service/Coating	Description	DFT
For the painting of steelwork, platework and piping, subject to permanently dry environments.	Blast: AS 1627, Class 2½ Profile: 50-60 µm 1st coat Epoxy Zinc Phosphate Primer Top coats Recoatable Acrylic	75 60 135
For new and maintenance steel up to 90°C where rapid cure is required. For painting of carbon steel chequered plate (both sides). Care should be taken to ensure a non-slip surface. (Rapid cure versions acceptable)	High pressure washdown Blast: AS 1627, Class 2½ 1st coat Epoxy zinc phosphate primer Top coats High Build High Solids Epoxy	75 400 475
For the coating of tanks, vessels and piping up to a temperature of 540°C.	Blast: AS 1627, Class 2½ Profile: 50-60 µm 1st coat Inorganic Zinc Silicate Top coat Either Butyl Titanate or Heat Resistant Silicone in 2 coats	75 50 125
For the painting of stainless steel tanks, vessels, piping and ducting up to 90°C.	High pressure washdown Blast: Uniform dense profile Profile: 20-30 µm 1st coat Epoxy Mastic (Aluminium)	125 125
For the painting of carbon steel in contact with soils or concrete and for internal tank lining. Coatings for potable water. Coatings for oil immersion.	Blast: AS 1627, Class 3 Profile: 50-60 µm 1st coat 2 coats High Solids Epoxy.	500 500
For painting of electrical switchboard equipment in dry, sheltered controlled environments.	Blast: AS 1627, Class 2½ or Mechanical Clean: AS 1627, Class 2 Profile 40 µm 1st coat Zinc Rich Single Pack Primer	50

	Top coats Thermosetting Polyester Powder Coat	60
	Total	110
For the painting of piping, tanks, vessels & ducting operating at temperatures up to 200°C (dry heat) and for use with or without insulation covering.	High pressure washdown Blast: AS 1627, Class 3 Profile: 50-70 µm Coats 2 coats Two Part Phenolic Modified Hot Surface Epoxy Coating	250
	Total	250
For painting of new exposed steel stacks and ducting operating at temperatures up to 600°C.	Blast: AS 1627, Class 3 Profile: 50-60 µm Coats 3 coats Aluminium Metal Spray 1 Seal coat of Butyl Titanate or Heat Resistant Silicon in two coats	225 50
	Total	275
For lagged or insulated high temperature pipework from 95°C to 540°C.	Blast: AS 1627.4, Class 2 or AS 1627.2 Class 2 Coats 2 coats High Temperature Graphite Coating	75
	Total	75
For the painting of stainless steel tanks, vessels, piping and ducting up to 120°C.	High pressure washdown Power tool clean to AS 1627.2 or whip blast Profile: 25 µm 1st coat Two Part Epoxy Mastic Aluminium Top coats Recoatable Acrylic	125 75
	Total	200

Follows is a summary of coating systems for selected service.

General Steel Coatings

Description	First Coat	Top Coats	Total DFT
General steel non-critical mild dry areas	Epoxy Zinc Phosphate	Recoatible Acrylic	135

Steel In Wet Environments Including Immersion

Description	First Coat	Top Coats	Total DFT
Internal tank lining, process and potable water, and oil.	High Solids Epoxy	High Solids Epoxy	500

Recoating Galvanised Steel Surfaces

Description	First Coat	Top Coats	Total DFT
Galvanised steel dry	Epoxy Zinc Phosphate	Recoatible Acrylic	135
Galvanised steel dry	Epoxy Zinc Phosphate	Siloxane	200
Galvanised steel wet	Epoxy Zinc Phosphate	High Build High Solids Epoxy or Siloxane	475/375
Galvanised steel wet	Epoxy Zinc Phosphate	High Build High Solids Epoxy	375

Buried & Embedded Steel

Description	First Coat	Top Coats	Total DFT
Steel in contact with soils – concrete	High Solids Epoxy	High Solids Epoxy	500

Miscellaneous

Description	First Coat	Top Coats	Total DFT
Non skid floor plate	Epoxy Zinc Phosphate	High Build High Solids Epoxy	475
Proprietary equipment (optional top coat)	Epoxy Zinc Phosphate	Epoxy Mastic	325
Proprietary equipment (previously painted by supplier) upgrade coating system	Epoxy Mastic	Recoatible Acrylic	185
Proprietary equipment powder coat	Zinc Rich Single Pack Epoxy	Polyester Powder	110

Steel Subject To High Temperature

Description	First Coat	Top Coats	Total DFT
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New and maintenance steel to 90°C	Epoxy Zinc Phosphate	High Build High Solids Epoxy	475
Steel up to 540°C	Inorganic Zinc	Butyl Titanate or Heat Resistant Silicone	125
Stainless steel to 90°C	Epoxy Mastic		125
Maintenance painting piping, tanks etc to 200°C dry heat with or without insulation	Phenolic Epoxy		250
New steel stacks and ducting to 600°C	Aluminium Metal Spray	Aluminium Metal Spray + Butyl Titanate or Heat Resistant Silicon	275
High temperature lagged pipework	High Temperature Graphite		75
Stainless steel tanks etc to 120°C	Epoxy Aluminium	Recoatable Acrylic	200