



TECHNICAL PAINT SERVICES

PROFESSIONAL SYSTEMS FOR STEEL SUBSTRATES

Introduction:

This document is designed to provide guidance with the painting of steel surfaces for professional tradesmen.

Painting Steel:

The painting of steel poses particular problems for the professional applicator. The selection of the correct coating system is critically important if the applicator wishes to maximise performance and life expectancy. In worst case scenarios, the selection of an inappropriate coating system can result in complete failure!

Correct system selection requires the applicator to make two basic assessments:

1) The nature of the environment:-

Obviously, the systems that would be required for painting the Village Hall railings out in the countryside where the corrosive intensity of the environment is relatively low, would not be the same as those for painting an offshore industrial structure where the corrosive intensity of the environment is going to be extremely high.

Environments are graded in terms of corrosive intensity in accordance with ISO 9223 as follows:

C1 Very Low

Inside heated buildings with clean atmosphere.

C2 Low

Areas with low levels of pollution and a dry climate. Rural areas and the inside of unheated buildings.

C3 Medium

Urban and light industrial atmospheres with moderate levels of sulphur dioxide pollution.

C4 High

Industrial areas and coastal areas with moderate salinity.

C5 Very High

Extreme industrial areas and coastal or offshore facilities with high salinity.

2) The condition of the substrate and the degree of preparation that can be undertaken:-

If the substrate is previously painted and in good condition then it is likely to require a different system to a substrate that is for instance, previously unpainted and rusting very badly.

Additionally, a substrate that can be prepared by abrasive blast cleaning to a very high degree of cleanliness is likely to warrant an alternative approach in terms of coating selection to a substrate that can only be wired brushed.

The following standards apply:

Abrasive blast cleaning in accordance with BS7079 Part A:

SA3 White Metal

SA2.5 Near White Metal

SA2 Commercial Blast

Manual preparation in accordance with BS7079 Part C:

ST3 Very Thorough Manual Preparation

ST2 Thorough Manual Preparation

Most specifications will call for SA2.5 when abrasive blast cleaning is required and ST3 when manual preparation is required.

Technical Paint Services produce an extensive range of systems that are designed and manufactured for use on steel substrates, see below.

STEEL (Mild)	Marked*	C1 & C2 Corrosive Intensity only.
	RP10	Chlorinated Rubber Primer, Grey & Light Cream
	R10	Chlorinated Rubber
	E27*	100% Acrylic Emulsion
	A30	Floor Finish Alkyd
	AG30	Contract Grade Floor Finish Alkyd
	R34	Chlorinated Rubber Floor Finish
	R35	Chlorinated Rubber Floor Finish, Anti-Slip
	H44	Heat Resisting High Temperature
	H45	Heat Resisting Medium Temperature
	A49	Amel Lead Free Paint
	AMP49	Amel Anti Corrosive Metal Primer
	AU49	Amel Lead Free Undercoat
	X85	Mordant Solution
	A109	Synthamel
	AU109	Synthamel Undercoat
	R1007	Acrylated Rubber system
	RP1007	Acrylated Rubber Metal Primer
	RU1007	Acrylated Rubber Undercoat
	WBP1030*	Water Based Surface Primer
	A1040	High Build Multi Surface Paint
	AF1045	Farm Oxide Mid-Sheen Paint
	AFPM1045	Metallic Metal Primer

In summary, every Technical Paint Services product has an associated Technical Data Sheet and a Material Safety Data Sheet; these can be found on our website in our “Products”, “Coverage” and “Information” pages.

Please look at these Data Sheets for each product you are using and also consider the environment in which you will be working, both internally and externally. Remember that during cooler weather, curing and drying are as important as application. Good planning and management will help enormously; very often it makes good sense to leave a project until warmer weather arrives.

To be certain of the right choice of product as well as the correct use and application instructions, please email or call us on **01202 295570** before placing an order. 06 2021