



Powder Coating

Polyester RAL Colours

Product Code	Per product
Colour	RAL
Gloss Level	smooth glossy 80 – 95* smooth semi gloss 65 – 75* smooth matte 20 – 35*
Specific Gravity	1.2-1.7 g/cm ³ depending on pigmentation
Stoving Schedule	
Film Thickness	60-80 microns depending on colour and gloss
Heat Stability	Dependent on type. Heat resistant versions of these products can be formulated
Coverage	At 60 µm film thickness: 9.8-13.8 m ² /kg depending on specific gravity

Introduction

The RAL stock range is a polyester powder coating recommended for use in both interior and exterior applications. Meets the full requirements of BS6496/7. Our attention to particle size control and formulation ensures optimum transfer efficiency.

Storage and Handling

Store in dry, cool conditions, preferably below 25°C. Shelf life under these conditions will be approx 12 months. For full information on handling this product type, refer to individual Safety Data Sheet and the 'Code of Safe Practice' issued by the British Coatings Federation.

Pre- treatment

Conversion coating is essential in all cases. The metal must be thoroughly degreased with alkaline or acid cleaner. The conversion coating shall be applied by treatment with a solution of chromate or chromate/phosphate ions as active ingredients.

Application Guidelines

'Qualicoat' approved powder coatings are suitable for use with all known electrostatic powder spraying equipment designed for thermosetting powder application

Curing Conditions

Smooth glossy | Rough texture glossy

Substrate temp	Min curing time	Max curing time
200°C	7 minutes	12 minutes
190°C	10 minutes	25 minutes
170°C	20 minutes	40 minutes

Smooth semi gloss

Substrate temp	Min curing time	Max curing time
200°C	7 minutes	14 minutes
185°C	13 minutes	26 minutes
170°C	20 minutes	40 minutes

Smooth matte | Fine texture matt

Substrate temp	Min curing time	Max curing time
200°C	10 minutes	15 minutes
180°C	17 minutes	25 minutes
170°C	20 minutes	30 minutes

Film Properties

Adhesion	ISO2409:1992 (2mm)	Gt 0
Indentation	ISO2815:1973	Min 80
Mandrel bend test	ISO1519:1995 (5mm)	5 mm
Impact resistance	ASM D2794	No cracking or detachment
Kesternich	ISO3231:1993	No change
Acetic Acid Salt Spray	ISO9227:1990 (1000hrs)	Max 16mm ² over 10cm length of scribe
Accelerated Weathering	ISO1 1341-1994	Loss of gloss max 50% of original value
Weathering	ISO2810:1974	Residual gloss >50% of original (min)
Resistance to Mortar	ASTM B3260 (24hrs)	No residue after removal
Resistance to boiling water	2 hrs deionised water	No defects or detachment
Condensed water	DIN50017:1982	No blistering
Sawing, Milling, Drilling		No cracking or chipping
Cupping Test	ISO 520: 1995	5mm

Health & Safety

We recommend all users of powder coatings to refer to the Code of Safe Practice: Application of Powder Coatings by Electrostatic Spraying (published by the British Coatings Federation of Great Britain Ltd) and our appropriate Health & Safety Data Sheet (available on request).