



resimac Ltd. 

Repair

Protect

Upgrade

Corrosion Protection Systems Guide



Corrosion Protection - Product Selector Guide

		501 CRSG	501 CRXL	502 FESF	506	508 UVPU	509/ 510 MCU	530 HA 100	532 Heat Sill	555
Product Characteristics	Epoxy	☑	☑	☑	☑			☑		
	Polyurethane					☑	☑			
	Silicone								☑	
	Acrylic									☑
	Solvent Free	☑	☑	☑				☑		
	Solvent Based				☑	☑	☑		☑	
	Water Based									☑
	Single Pack						☑	☑	☑	☑
	2 Component	☑	☑	☑	☑	☑				
	UV Stable					☑			☑	☑
Curing	<2hrs						☑	☑		☑
	<8hrs	☑		☑						
	>8hrs		☑		☑	☑			☑	
Wet Film Thickness	<150 microns					☑	☑		☑	
	150-350 microns	☑	☑	☑	☑			☑		
Surface Preparation	Manual				☑			☑		
	Mechanical ST2/3	☑	☑	☑	☑	☑	☑	☑		☑
	Hydro-blasted	☑		☑	☑		☑	☑		☑
	Abrasive Blast SA2.5	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Damp Tolerant	☑		☑	☑		☑			
Temperature Resistance	Dry 90°C									☑
	Dry 130°C				☑	☑	☑			
	Dry 200°C	☑	☑	☑						
	Dry 240°C							☑		
	Dry 500°C								☑	
Typical Applications	Bridges	☑	☑	☑	☑	☑	☑			☑
	Concrete Structures	☑	☑	☑	☑	☑	☑			☑
	Pipework/ Pipelines	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Pipelines	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Process Equipment	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Railings	☑	☑	☑	☑	☑	☑			
	Structural Steel	☑	☑	☑	☑	☑	☑			☑

BS EN ISO 12944 Classification of Resimac Products

Corrosive Category	Exterior	Interior
C4 HIGH	Industrial areas and Coastal area with moderate salinity	Rooms and areas with high humidity, low risk of chemical vapour and splash, for example, swimming pools, chemical production
C5-I VERY HIGH (INDUSTRIAL)	Industrial areas with high humidity and aggressive atmosphere	Buildings and areas with almost permanent condensation and with high pollution
C5-M VERY HIGH (MARINE)	Coastal and offshore areas with high salinity	Buildings and areas with almost permanent condensation and with high pollution

C4 High Coating Solutions

Surface Prep	Standard	Primer	No of Coats	DFT per coat (microns)	Top Coat	No of Coats	DFT per coat (microns)	Total DFT system	Expected Design Life to first maintenance
Mechanical	ST2-ST3	506 Aluprime	2	100	508 UVPU	1	100	300	17-20 YEARS
Mechanical	ST2-ST3	501 CRSG	1	350	508 UVPU	1	100	450	20 YEARS
Hydroblast	ST3	555 Resinox	1	300	555 Resinox	1	300	600	15-17 YEARS
Abrasive Blast	SA2.5	506 Aluprime	2	100	508 UVPU	1	100	300	20-25 YEARS
Abrasive Blast	SA 2.5	501 CRSG	1	350	508 UVPU	1	100	450	25-30 YEARS

C5-M Very High Coating Solutions

Surface Prep	Standard	Primer	No of Coats	DFT per coat (microns)	Top Coat	No of Coats	DFT per coat (microns)	Total DFT system	Expected Design Life to first maintenance
Mechanical	ST2-ST3	506 Aluprime	2	100	508 UVPU	1	100	300	15 YEARS
Mechanical	ST2-ST3	501 CRSG	1	350	508 UVPU	1	100	450	15-17 YEARS
Hydroblast	ST3	555 Resinox	1	300	555 Resinox	1	300	600	10-15 YEARS
Abrasive Blast	SA2.5	506 Aluprime	2	100	508 UVPU	1	100	300	15-20 YEARS
Abrasive Blast	SA 2.5	501 CRSG	1	350	508 UVPU	1	100	450	20 YEARS
Abrasive Blast	SA 2.5	501 CRSG	1	350	508 UVPU	2	100	550	25 YEARS

Application of 530 HA100 to hot surfaces ranging from 100°C to 240°C

Surface Prep	Surface temperature	Product	No of Coats	DFT per coat (microns)	Total DFT system	Expected Design Life to first maintenance
Manual	100°C - 130°C	530HA100	4	100	400	5 YEARS
Manual	130°C - 160°C	530HA100	4	100	400	4 YEARS
Manual	160°C - 200°C	530HA100	4	100	400	3 YEARS
Manual	200°C - 240°C	530HA100	4	100	400	2 YEARS
Mechanical	100°C - 130°C	530HA100	3	100	300	8 YEARS
Mechanical	130°C - 160°C	530HA100	3	100	300	7 YEARS
Mechanical	160°C - 200°C	530HA100	3	100	300	6 YEARS
Mechanical	200°C - 240°C	530HA100	3	100	300	5 YEARS
Hydroblast	100°C - 130°C	530HA100	3	100	300	10 YEARS
Hydroblast	130°C - 160°C	530HA100	3	100	300	9 YEARS
Hydroblast	160°C - 200°C	530HA100	3	100	300	8 YEARS
Hydroblast	200°C - 240°C	530HA100	3	100	300	7 YEARS

Corrosion Protection - Product Specifications

	501 CRSG	501 CRXL	502 FE SF	506 Aluprime	508 UVPU	509/ 510 MCU	530 HA 100	532 Heatsil 500	555 Resinox
Compressive strength Tested to ASTM D 695	649kg/cm ² (9,200psi)	649kg/cm ² (9,200psi)	649kg/cm ² (9,200psi)	n/a	n/a	n/a	n/a	n/a	n/a
Corrosion Resistance Tested to ASTM B117	5000 hours	5000 hours	5000 hours	5000 hours	5000 hours	5000 hours	5000 hours	5000 hours	5000 hours
Flexural Strength Tested to ASTM D790	522kg/cm ² (7,200psi)	522kg/cm ² (7,200psi)	522kg/cm ² (7,200psi)	n/a	n/a	n/a	518kg/cm ² (7,350psi)	518kg/cm ² (7,350psi)	n/a
Hardness Shore D to ASTM D785	80	80	80	80	78	78	86	86	n/a
Slump Resistance	Nil at 400 microns	Nil at 400 microns	Nil at 400 microns	Nil at 150 microns	Nil at 150 microns	Nil at 100 microns	Nil at 350 microns	Nil at 90 microns	Nil at 500 microns
Tensile Shear Adhesion Tested to ASTM D1002	194kg/cm ² (2750psi)	194kg/cm ² (2750psi)	194kg/cm ² (2750psi)	195kg/cm ² (2770psi)	195kg/cm ² (2770psi)	n/a	197kg/cm ² (2800psi)	n/a	194kg/cm ² (2750psi)
Volume Capacity cc per kg	640	657	657	892	705	735	705	735	800
Base density gm per cm ³	1.78	1.75	1.75	1.15	1.51	n/a	n/a	n/a	n/a
Activator density gm per cm ³	1.05	1.03	1.03	1.02	1.03	n/a	n/a	n/a	n/a
Mixed product density gm per cm ³	1.56	1.52	1.52	1.12	1.42	1.359	1.4	1.359	1.25
Dry heat resistance (°C)	200	200	200	120	130	120	240	500	90
Mixing ratio by volume	2.4:1	2.1	2.1	4:1	4:1	n/a	n/a	n/a	n/a
Mixing ratio by weight	4:1	3.5:1	3.5:1	4.5:1	5.5:1	n/a	n/a	n/a	n/a

Resimac Limited

Unit B, Park Barn Estate

Station Road, Topcliffe

Thirsk, North Yorkshire

YO7 3SE

UNITED KINGDOM

Tel: +44 (0) 1845 577498

Email: info@resimac.co.uk

Web: www.resimacsolutions.com