



AVACE

PERFORMANCE COATINGS

Tel: 01384 400355

Fax:01384 400340

sales@avace.co.uk



PERFORMANCE COATINGS

Test Results

Sample panels of RAL 7012 matt, RAL 7040 matt and RAL 9006 matt metallic were processed through Express Aluminium architectural powder plant and coated to a film thickness of 48-68 microns, the panels were tested for mechanical performance , acetic acid salt spray and hot salt spray.

Mechanical Results

Adhesion:	UNI EN ISO 2409:1996	Pass Gt0
Pencil Hardness:	ASTM D3363-00	H-2H
Impact:	ASTM D2794-93	>2.5Nm
Bend:	UNI EN ISO 6860:1996	5mm
Erichsen:	UNI EN ISO 1520:1995	>5mm no detachment or cracks
Buchholz Hardness:	UNI EN ISO 2815:1998	>80

Acetic Acid Salt Spray ISO 9227: 1990

RAL7040 Matt					
Time	No. of Blisters at scribe	Size	Surface Corrosion	Adhesion at Scribe	
250 Hrs	0	0	0	0-1mm	
500 Hrs	1	<1mm	0	0-1mm	
750 Hrs	1	<1mm	0	0-1mm	
1000 Hrs	micro blisters along edge of scribe	<1mm	0	<1mm	

RAL9006 Matt					
Time	No. of Blisters at scribe	Size	Surface Corrosion	Adhesion at Scribe	
250 Hrs	0	0	0	0-1mm	
500 Hrs	1	<1mm	0	0-1mm	
750 Hrs	1	<1mm	0	0-1mm	
1000 Hrs	micro blisters along edge of scribe	<1mm	0	<1mm	

RAL7012 Matt					
Time	No. of Blisters	Size	Surface Corrosion	Adhesion at Scribe	
250 Hrs	0	0	0	0-1mm	
500 Hrs	1	<1mm	0	0-1mm	
750 Hrs	micro blisters along edge of scribe	<1mm	0	0-1mm	
1000 Hrs	micro blisters along edge of scribe	<1mm	0	<1mm	

All three products passed the Acetic Acid Salt Spray tests with <1mm corrosion creep from the scribe and no surface corrosion through the body of the coating. Microblistering did occur along the edge of the scribe but did not exceed 1mm in size.



PERFORMANCE COATINGS

Hot Salt Spray ASTM B117 (Cabinet & Humidity temp 35c)

RAL9006 Matt						
Time	Gloss Level	No. of Blisters	Size	Surface Corrosion	Adhesion at Scribe	Cross Hatch
250 Hrs	27%	0	0	0	0	Gt0
500 Hrs	27%	0	0	0	0	Gt0
750 Hrs	27%	0	0	0	0	Gt0
1000 Hrs	27%	0	0	0	0	Gt0

RAL7012 Matt						
Time	Gloss Level	No. of Blisters	Size	Surface Corrosion	Adhesion at Scribe	Cross Hatch
250 Hrs	35%	0	0	0	0	Gt0
500 Hrs	35%	0	0	0	0	Gt0
750 Hrs	35%	0	0	0	0	Gt0
1000 Hrs	35%	0	0	0	0	Gt0

All three products passed the Hot Salt Spray tests with no corrosion creep from the scribe and no surface corrosion through the body of the coating. Cross hatch adhesion tests after completing the 1000 hours showed Gt 0 will no loss of adhesion using the tape method ASTM D 1654. No change in gloss was noted before and after testing ISO 2813.