

Specification, the requirements of the 15th Edition of the Qualicoat Specification for Liquid and Powder Organic Coatings on Aluminium for Architectural Applications (1st September 2017).

POWDERTECH (CORBY) LIMITED. EVOLUTION™ RANGE OF FINISHES.

Test report PRA 77780-327a. November 2018

<u>Test procedures</u>		<u>Results</u>		
Appearance – Visual Assessment	PASS	All samples showed no excessive roughness, runs, blisters, inclusions, craters, dull spots, pinholes, pits scratches or other unacceptable flaws		
Dry Adhesion – ISO 2409:2013	PASS	All samples were classified with an adhesion rating of 0 (edges of the cuts are completely smooth; none of the lattice squares is detached.)		
Wet Adhesion – Qualicoat v15 Section 2.4.2	PASS	All samples were classified with an adhesion rating of 0 (The edges of the cuts are completely smooth; none of the squares of the lattice is detached.)		
Cupping Test – ISO 1520:2006	PASS	All samples showed no signs of coating detachment		
Bend Test – ISO 1519:2011	PASS	All samples showed no signs of cracking or detachment of the coating		
Impact Test – ISO 6272-2:2011	PASS	All samples showed no signs of cracking or detachment of the coating		
Resistance to Humid Atmospheres Containing Sulphur Dioxide – ISO 3231:1998	PASS	<u>Infiltration from the scribe ≤1mm</u> All samples showed no infiltration exceeding 1 mm on either side of the scribe	<u>Blistering Assessment</u> All samples showed no blistering in excess of 2 (S2) on the coating	<u>Visual Colour Assessment</u> All samples showed no change in the colour of the coating
Acetic Acid Salt Spray Resistance – ISO 9227:2018	PASS	<u>Infiltration from the scribe</u> <u>Area ≤16mm²</u> All samples showed no infiltration with area >0 mm ² from the scribe	<u>Infiltration from the scribe Length ≤4mm</u> All samples showed no infiltration with length >4mm from the scribe	<u>Blistering Assessment</u> All samples showed no blistering more than 2 (S2) on the coating
Resistance to Mortar – EN 12206-1 (paragraph 5.9)	PASS	The mortar was easily removed from all samples without leaving any residues		
Constant Climate Condensation Water Test – ISO 6270-2:2005	PASS	<u>Infiltration from the scribe</u> All samples showed no infiltration exceeding 1 mm on either side of the scribe	<u>Blistering Assessment</u> All samples showed no blistering more than 2 (S2) on the coating	
Accelerated Weathering Test (Xenon Arc Exposure)– ISO 16474-2:2013	PASS	Mean ΔE of all panels. 1.46. Min ΔE 0.59. Max ΔE 2.57 of any set of readings.		
Resistance to Sawing, Milling and Drilling – Qualicoat v15 Section 2.18	PASS	All samples showed no signs of cracking or chipping after sawing, milling and drilling the coated panels.		
Filiform Corrosion Test – ISO 4623-2:2016	PASS	<u>Infiltration from the scribe</u> L (Longest Filament) ≤4mm Longest filament 2mm	<u>Infiltration from the scribe</u> M (Average Length of Filaments) ≤2mm Average length ≤2mm	<u>Number of Filaments ≤20</u> Maximum = 4