

# 715(6) Architecture Coatings Class I (RW)

Review : July 2019

## 1 DESCRIPTION

A **POLYESTER** thermosetting powder coating TGIC free. Specially designed for architectural applications where high outdoor durability is required.

71-5 Architecture Coatings comply with the **QUALICOAT** requirements for durable architectural powder coatings **Class I**. Available in different gloss levels, finishes and colours.

### Benefits:

- Excellent UV and weathering resistance.
- Outstanding gloss retention and resistance to colour change.
- Mechanical and abrasion resistance.
- Corrosion resistance.
- Chemical resistance.
- Water condensation resistance.
- Resistance to humid atmospheres containing sulphur dioxide.

### Uses:

- For architectural aluminium components like windows, façade frames and doors.
- Any other applications where an excellent outdoor durability and colour and gloss retention are required, like decorative metal railings, metal roofs, wall panels, curtain walls, louvers, elevator components, storefronts, metal-framed skylights, garden furniture, cabinets, industrial equipment etc.

## 2 APPROVALS

**QUALICOAT** is the quality label for powder coatings and liquids on aluminium or aluminium alloy for architectural applications.

License Number	Class	Gloss	Finishes	Additional	Family covered *
P-0324	I	Gloss	Smooth		RWB 71590(1); RWBT 715V0(1)
P-0421	I	Satin	Smooth	Metallic	RWS 715(6)92; RWSZ-BND 715B2; RWSZ 715M2; RWST 715V2
P-1403	I	Matt	Smooth		RWM 71593(4); RWM 7159L; RWMT 715V3(4); RWMT 715VL
P-1527	I	Matt	Textured		RWMX 715T3(4)

\*(W: Polyester without TGIC / B: Gloss / S: Satin / M: Matt / T: Transparent / Z: metallic particle / BND: Bonded / X: Textured)

**QUALISTEELCOAT (QSC)**: All CIN Qualicoat licences are approved as topcoat for QSC system licenses **PE-0113** and **PE-0114** over the primer RPSP 71P02 Series to protect and decorate galvanized steel. The system is classified as **C5-H** (very high corrosivity) for high durability (15-25 years).

**UL: Organic Coatings for Steel Enclosures for Outdoor Use Electrical Equipment (UL1332)**. Polyesters TGIC free with high gloss (60-100 %) comply with the UL homologation (RWB 71590 Series). The metallic, transparent, and textured coatings are not included. (Baking schedules 15'/180°C to 10'/210°C. Minimum thickness 60 µm)

The coating provides protection against atmospheric corrosion at least to that provided by a hot dipped mill galvanized coating meeting the G90 coating designation in ASTM A653.

We recommend that the technical data sheet is periodically checked to ensure that it is the most recent version. CIN guarantees that its products conform to the specifications as detailed in the respective technical data sheets. CIN cannot under any circumstances be held responsible for the consequences of technical information given prior to or after purchase of products. This is merely of an advisory nature, given in good faith and to the best of its knowledge, and based on current technical know-how. Claims can only be accepted for products which have manufacturing defects or which do not conform to the purchase order. CIN will, at its discretion, either replace the defective goods or reimburse the customer. CIN cannot accept responsibility for any other loss or damage. All sales are subject to our general terms and conditions of sales that we advise should be read carefully.

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**3 PROPERTIES**

<b>Gloss (60°) (EN ISO 2813) GU *</b>	Matt: 0-30 / Satin :31-70 / Gloss 71-100 (To structured finish and highly metallic does not apply, then visually)
<b>Density (g/cc) :</b>	1,2 to 1,9
<b>Particle size (EN ISO 13320)</b>	Average diameter 35-54 µm
<b>Recommended Thickness</b>	Minimum 60 µm
<b>Coverage</b>	9 to 13 m <sup>2</sup> /kg at 60 µm
<b>Type of application</b>	Corona /Tribo**
<b>VOC</b>	0,00-0,29% (Percentage by weight)
<b>Curing cycle</b>	<p><b>RWB 71590(1); RWBT 715V0(1); RWS 71592; RWSZ-BND 715B2; RWSZ 715M2; RWST 715V2; RWM 71593(4); RWMT 715V3(4); RWMX 715T3(4):</b></p> <p>12'-20' at 180°C / 8'-15' at 200°C</p> <p><b>RWM 7159L and RWMT 715VL :</b></p> <p>10'-15' at 200°C / 8'-12' at 215°C</p> <p><b>RWS 71692 (Low curing)</b></p> <p>10'-15' at 160°C / 6'-8' at 180°C</p>
<b>Storage Stability</b>	<p>24 months for gloss and satin coatings 18 months for matt type RWM 71593(4) 12 months for matt type RWM 7159L</p> <p>In a sealed bag when stored in a dry place, preferably at temperatures below 30°C.</p>

(\*) Within this series of products there can be gloss level variations of up to 5 G.U. from that specified. This is normal and does not affect the final product quality.

(\*\*) Check the specific product technical data sheet.

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**4 TESTS**

**Tests conditions:** All tests are carried out under laboratory conditions, in degreased 0.8 mm aluminium panels (AA5005), at 60 µm, cure accordingly with the respective family curing cycle.

MECHANICAL RESISTANCE		
Properties	Tests	Results
Adhesion (EN ISO 2409)	Adhesive tape 2 mm square	0
Bending (ISO 1519)	Mandrel (5 mm)	No cracking or detachment
Impact test (EN ISO 6272-2)	1 kg at 25 cm on reverse side	No cracking or detachment
Cupping test (EN ISO 1520)	Erichsen	Minimum 5 mm
Hardness (EN ISO 2815)	Buchholz	Minimum 80
Sawing, milling and drilling		The coating shall not crack or chip
CORROSION RESISTANCE		
Acetic Salt Spray resistance (ISO 9227)	Maximum infiltration of 16 mm <sup>2</sup> over 10 cm scratch and a maximum individual infiltration length of 4 mm, after 1000 hours exposure.	
Boiling Water/Pressure Cooker (EN 13438)	No defects, detachment or blistering in excess of 2 (2) according to ISO 4628-2	
Mortar Test (EN ISO 12206-1)	Easy to remove after 24 h without leaving any residues.	
WEATHERING		
Natural Weathering Exposure in Florida (EN ISO 2810)	Gloss retention greater than 50% after 12 months exposure. Colour difference ΔE according to Qualicoat Specifications Appendix A7	
Accelerated Weathering Suntest (ISO 16474-2)	Gloss retention greater than 50%, after 1000 hours exposure Colour difference ΔE according to Qualicoat Specifications Appendix A7	
Resistente to humid atmospheres containing sulphur dioxide (ISO 3231)	No infiltration exceeding 1 mm on the side of the scribe , no change in color or blisters in excess of 2 (S2) according to ISO 4628-2	
Constant climate condensation water test (ISO-6270-2)	No blistering in excess of 2 (S2) according to ISO 4628-2. The maximum infiltration at the cross is 1 mm.	

**5 HEALTH, SAFETY AND THE ENVIRONMENT**

It is important to read the label on the container and the product MATERIAL SAFETY DATA SHEET (MSDS).

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