

71S Architecture Coatings Class II (RW-D)

Review : July 2019

1 DESCRIPTION

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

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

Benefits:

- Excellent UV and weathering resistance.
- Outstanding gloss retention and resistance to colour change.
- Mechanical an 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, garde, 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-1404	II	Matt	Textured		RWMXD 71ST3(4)
P-1427	II	Satin	Smooth		RWSD 71S92

*(W: Polyester without TGIC / S: Satin / M: Matt / X: Textured / D: Superdurable)

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 classify as **C5** (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 (RWSD 71S92 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.

71S Architecture Coatings Class II (RW-D)

Review : July 2019

3 PROPERTIES

Gloss (60°) (EN ISO 2813) GU *	Matt: 0-30 / Satin :31-70 (To structured finish and highly metallic does not apply, then visually)
Density (g/cc) :	1,2 to 1,5
Particle size (EN ISO 13320)	Average diameter 35-54 µm
Recommended Thickness	Minimum 60 µm
Coverage	9 to 13 m ² /kg at 60 µm
Type of application	Corona /Tribo**
VOC	0,00-0,29% (Percentage by weight)
Curing cycle	RWMXD 71ST3(4) 15'-20' at 180°C / 10'-15' at 200°C RWSD 71S92 15'-20' at 180°C / 10'-15' at 200°C
Storage Stability	18 months for RWMXD 71ST3(4) 24 months for matt type RWSD 71S92 In a sealed bag when stored in a dry place, preferably at temperatures below 30°C.

(*) 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.

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.

71S Architecture Coatings Class II (RW-D)

Review : July 2019

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 detachment following the tape pull adhesion test
Impact test (EN ISO 6272-2)	1 kg at 25 cm on reverse side	No detachment following the tape pull adhesion test
Cupping test (EN ISO 1520)	Erichsen	Minimum 5 mm. No detachment following the tape pull adhesion test
Hardness (EN ISO 2815)	Buchholz	Minimum 80
CORROSION RESISTANCE		
Acetic Salt Spray resistance (ISO 9227)	Maximum infiltration of 16 mm ² 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 : After 1 year: At least 75% / After 2 years: At least 60% /After 3 years: At least 50 % Colour difference: After 3 years ΔE according to Qualicoat Specifications limits described in Appendix A7	
Accelerated Weathering Suntest (ISO 16474-2)	Gloss retention at least 90%, after 1000 hours exposure Colour difference: Not greater than 50%of the limits prescribed in 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 to 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).