

Product Data Sheet

Corro-Coat PE-F Façade Series 1403, 1406, 1407 and 1408

Product Description Corro-Coat PE-F Series 1403, 1406, 1407 and 1408 are exterior durable polyester TGIC powder coatings developed primarily to satisfy the requirements for color stability, gloss retention and corrosion protection. Corro-Coat PE-F Series 1403, 1406, 1407 and 1408 provide a uniform flow and finish even after recycling.

Application Areas Primary areas of application are architectural aluminium extrusions and claddings. The overall excellent properties and attractive appearance of Corro-Coat PE-F Series 1403, 1406, 1407 and 1408 make them suitable for application to other ferrous and non-ferrous substrates.

When screen printing or sealants are used, it is advised to run separate trials to ensure compatibility and to meet the required performance criteria.

Pre-treatment The overall quality of the coating system is largely dependent on the type and quality of the pre-treatment. The recommended types of pre-treatment for the most frequently used substrates are:

Aluminium	Chromate conversion
Steel	Zinc phosphate
Zinc coated steel	Zinc phosphate or chromate conversion
Final rinse (deionized)	The last running water from the object should be tested at 20°C. The readings obtained should measure below 30µS/cm.

Suitable chrome-free pre-treatments for Aluminium are also recommended. Due to the variety of chrome-free pre-treatments available today, only the approved systems from Qualicoat and GSB should be used. Detailed advice should be sought from the pre-treatment supplier.

Curing Schedules 20 minutes at 180°C object temperature
15 minutes at 190°C object temperature
10 minutes at 200°C object temperature

Colour Selection Corro-Coat PE-F Series 1403, 1406, 1407 and 1408 are available in a wide assortment of custom-made colours and metallic finishes, including RAL and NCS. Corro-Coat PE-F Series 1408 is also available in the Cool Shades Collection, a selection of colours with heat-reflective properties.

Powder Application Corro-Coat PE-F Series 1403, 1406, 1407 and 1408 are available for Corona or Tribo charging equipment.

Product Warranty Corro-Coat PE-F Series 1403, 1406, 1407 and 1408 are backed by a 10-year product warranty system for exterior application when used on architectural aluminium substrates.

Storage Conditions Keep in a dry cool area. Recommended maximum temperature 25°C. Maximum relative humidity 60%. Under these mentioned conditions, product shelf life is 12 months from production date.

Maintenance Please refer to "Powder Coated Façades' Maintenance" in Part 3 of the "Quality and Warranty" document.

Approvals Please consult your local Jotun Powder Coatings' production unit.

Technical Data

The technical data provided below are typical for Corro-Coat PE-F Series 1403, 1406, 1407 and 1408 applied to 0.8mm chromated aluminium panels (60 to 90 micron film thickness). Typical values when tested have not necessarily been recently revised.

Description	Norm	Series 1403	Series 1406	Series 1407	Series 1408
Gloss*	EN ISO 2813 (60°)	30 ± 5	60 ± 7	77 ± 7	90 ± 10
Adhesion	EN ISO 2409 (2 mm)	Cross-cut rating Gt0 (100% adhesion).			
Impact resistance	EN ISO 6272/ASTM D2794 (impactor diameter 15.9 mm)	More than 23 inch-pounds or 2.5Nm without film cracking.			
Cupping test	EN ISO 1520	Indentation depth in excess of 5mm without film cracking			
Flexibility	EN ISO 1519	Cylindrical Mandrel bending test, passes 5mm Mandrel diameter.			
Film hardness	EN ISO 2815	Indentation resistance according to Buchholz: >80.			
Mortar resistance	EN 12206-1	The mortar must be easy to remove without leaving any residues.			
Drilling, milling and sawing test		No flaking of coating.			
Neutral salt spray resistance	ASTM B117	No blistering or loss of adhesion after 1,000 hours.			
Humidity resistance containing SO ₂	EN ISO 3231 (0.2 l SO ₂)	No infiltration exceeding 1mm on both sides of the scratch after 30 cycles.			
Humidity resistance	EN ISO 6270-2	No infiltration exceeding 1mm on both sides of the scratch after 1000 hours.			
Acetic acid salt spray resistance	ISO 9227	After 1,000 hours testing – maximum 16 mm ² infiltration over a scratch length of 10cm.			
Accelerated weathering	DIN EN ISO 11507 (UVB-313)	Cycle: 4 hours at 50°C UV and 4 hours at 40°C condensation. No chalking, excellent gloss retention and colour stability after 300 hours testing.			
Accelerated weathering	DIN EN ISO 11507 (UVA-340)	Cycle: 8 hours at 60°C UV and 4 hours at 45°C condensation. No chalking, excellent gloss retention and colour stability after 1000 hours testing.			
Natural weathering test	ISO 2810 (South Florida, 27°N)	No chalking, excellent gloss retention and colour stability after 12 months exposure (angle of 5° to South).			
Total Solar Reflectance**	ASTM C 1549	Series 1406, 1407 and 1408: TSR ≥ 0.25			

* If the significant surface is too small or unsuitable for the gloss to be measured with the glossmeter, the gloss should be compared visually with the reference sample (from the same viewing angle).

** Only applicable to Corro-Coat PE-F Series 1406, 1407 and 1408 for the colours featured in the 'Cool Shades Collection'.

Note: The information on this Product Data Sheet is given to the best of the manufacturer's knowledge, based on laboratory testing and practical experience. However, as the product is often used under conditions beyond the manufacturer's control, only the quality of the product itself can be guaranteed. Jotun Powder Coatings reserves the right without notice to alter or change the content of this Product Data Sheet.

Jotun Powder Coatings. Revised May 2011.

THIS PRODUCT DATA SHEET SUPERSEDES ALL PREVIOUSLY ISSUED VERSIONS.