

Jotun Super Durable 2901 WEF B SHR

PRODUCT DESCRIPTION

This lead-free TGIC-free powder coating is specifically designed as a base coat for Powder-on-Powder wood-look alike decoration. When decorated with Jotun Super Durable 2902 WEF T SMO topcoat, the coating system is designed to emulate a wood effect decoration that provides long-lasting protection to projects and building components by maintaining excellent gloss retention, colour stability and corrosion protection. This powder allows efficient application and provides uniform flow and appealing finish even after recycling. This product is certified according to Qualicoat Class 2 and has weathering performance in line with AAMA 2604.

This product contributes to the Green Buildings Standard credits. Please see section Green Building Standards.

Application areas

This product is highly recommended to meet gloss retention and colour stability requirements. Primary areas of application are architectural aluminium extrusions and claddings. Other substrates may be used. Please consult your local Jotun Powder sales representative.

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

POWDER PROPERTIES

Property	Standard	Result
Specific gravity	Calculated	Max. 1.5 g/cm ³

Storage

Keep in a dry cool area. Maximum temperature 25 °C. Maximum relative humidity 60 %. If stored longer than 12 months a quality test must be performed.

APPLICATION

Pretreatment

The overall performance of the coating system is largely dependent on the nature of the substrate and the type and quality of the pretreatment. For optimal results, it is recommended to follow the pretreatment supplier's instructions and recommendations.

The recommended types of pretreatment for the most frequently used substrates are:

Substrate	Pretreatment
Aluminium	Chromate conversion
Final rinse (deionized)	The last running water from the object should be tested at 20 °C. The readings obtained should measure below 30 µS/cm.

Suitable chrome-free pretreatment for aluminium is also recommended. Due to the variety of chrome-free pretreatments available today, only the approved systems from Qualicoat and GSB should be used. Detailed advice should be sought from the pretreatment supplier.

Powder application

Partial curing

The system is cured using partial cure regimes for Jotun Super Durable 2901 WEF B SHR.

Partial cure of the base coat is recommended to enhance inter-coat adhesion between base coat and topcoat following below schedule.

The most suitable partial cure time of base coat Jotun Super Durable 2901 WEF B SHR at temperature selected from the given table is recommended to be defined by a practical experiment.

Curing schedule	Object temperature	Time
Partial cure	90°-130°C	3-5 minutes

The time and temperature will depend on several factors that includes (but not limited to) object thickness, curing oven efficiency, heat-up rate, type of substrate, etc. This will help optimize the best decorative and functional performance, considering differences in objects and curing ovens. Please consider contacting your nearest Jotun office for further details. That will help to secure the best decorative and functional performance, considering differences in coated objects and curing ovens.

If base coated substrates are partially cured, the application of a topcoat must take place no later than 16 hours at the same site after the application of this product. The shortest possible interval is recommended otherwise the risk of contamination is high.

Recommended film thickness (µm): 60-80

Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

Colour

The product is available in a wide variety of RAL colours. Additional colours can be made upon request.

Gloss

EN ISO 2813 (60°) 12±5 (when full cured)

Finish

Fine texture

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).

PERFORMANCE

The technical data provided below are typical for this product when applied as follows:

Substrate	Chrome-free treated aluminium panels
Substrate thickness (mm)	0.8
Film thickness (µm)	60-80 (when fully cured)

Typical values when tested.

Property	Standard	Result
Adhesion	EN ISO 2409	Cross-cut rating Gt0 (100 % adhesion)
Impact resistance*	EN ISO 6272 /ASTM D2794 (impactor diameter 15.9 mm)	Passes 2.5 Nm without detachment after tape pull test.
Cupping test*	EN ISO 1520	Passes 5 mm indentation without detachment after tape pull test.
Flexibility*	EN ISO 1519	Passes 5 mm cylindrical mandrel bend test without detachment after tape pull test.

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.
Humidity resistance containing SO₂.	ISO 22479 Method B (0.2 l SO ₂) ISO 4628-2	No infiltration exceeding 1 mm on both sides of the scratch after 24 cycles.
Humidity resistance	EN ISO 6270-2 ISO 4628-2	No infiltration exceeding 1 mm on both sides of the scratch after 1000 hours
Acetic acid salt spray resistance	ISO 9227 ISO 4628-2	After 1000 hours testing – maximum 16 mm ² infiltration over a scratch length of 10 cm.
Accelerated weathering	ISO 16474-3	Cycle: 4 hours at 50 °C UV and 4 hours at 40 °C condensation. No chalking, excellent gloss retention and colour stability after 600 hours testing.
Xenon Arc Accelerated Weathering	ISO 16474-2 Method A	Cycle: 102 minutes dry at 38 °C and 18 minutes water spray under UV. 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 36 months exposure (angle of 5 ° to South).
Fire classification	EN 13501-1	Class A2-s1-d0
Flame Spread Index	ASTM E84	Class 1 or A
Smoke Development Index	ASTM E84	Class 1 or A

* According to Qualicoat Class 2 test procedures.

Approvals

This product is certified according to Qualicoat Class 2 and has weathering performance in line with AAMA 2604. Qualicoat: P-1396 (TH), P-1110 (TR), P-1456 (AE), P-1831 (SA)



Additional information

This product may be backed by a 25-year Product Performance Guarantee when applied on extruded architectural aluminum substrate. For further information please contact your local Jotun representative.

Sustainability

Powder coating is applied in air-and-powder mix in a strictly controlled factory process using electrostatic gun and a high temperature curing oven to create film. Virtually no VOCs are released in the process compared to traditional liquid paints. Unused or oversprayed powder can be recycled with minimal wastage. In addition, all Jotun Powder Coatings' products do not contain intentionally added lead.

Green Building Standards

This product contributes to Green Building Standard credits by meeting the following specific requirements:

LEED®v4.1 (2020) / LEED®v4 (2013)

MR credit: Building product disclosure and optimization

- Material Ingredients, Option 2: Material Ingredient Optimization, International Alternative Compliance Path - REACH optimization: Fully inventoried chemical ingredients to 100 ppm and not containing substances on the REACH Authorization list – Annex XIV, the Restriction list – Annex XVII and the SVHC candidate list.

- Environmental Product Declarations. Product-specific Type III EPD (ISO 14025;21930, EN 15804).

SS Credit: Heat Island Reduction (ASTM E 1980)

- Option 1: Nonroof and Roof

1.2.a: High-reflectance roof (Steep-sloped roof)

1.2.b: High-reflectance roof (Low-sloped roof)

- Option 2: Parking under Cover

The following colours of the Cool Shades Collection comply with:

Arc: 1.1;1.2.a;2

Couronne: 1.2.a;2

Dayspring: 1.1;1.2.a;2

Equinox: 1.1;1.2.a;2

Meridian: 1.1;1.2.a;1.2.b;2

Sepia: 1.1;1.2.a;2

Starfall: 1.1

Sun path: 1.1;1.2.a;1.2.b;2

BREEAM® International (2021) / BREEAM® International (2016)

- Mat 01: Product-specific Type III EPD (ISO 14025;21930, EN 15804).

Certified according to Qualicoat Class 2 and has weathering performance in line with AAMA 2604.

BREEAM® NOR (2012/2016)

- Mat 1.3/01: Product specific type III EPD (ISO 14025, ISO 21930, EN 15804).

- Mat 1.5/01: This product Safety Data Sheet confirms that the product does not contain any substances on the Norwegian A20 list.

The EPDs are available at www.epd-norge.no

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.