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DATA SHEET

ENV 501 – Powder coating on glass

Substrate material:

GLASS - flat glass

(float glass, single-pane safety glass ESG, satinoglass, etc.)

Component measurements:

Experience up to l = 3,500 mm x w = 2,000 mm x s = 10 mm
 (theoretically up to l = 13,000 mm x b = 3,600 mm x s = 10 mm)
 (in hung condition)

Component weight:

up to 500 kg

Process:

Pre-treatment with subsequent powder coating for interior application

Product description:

Surface pre-treatment and surface coating on a lead-, chromium-, cadmium- and solvent-free basis in facade quality

Properties:

- Very good adherence of powder coating to glass in interiors
- Best mechanical properties
- Cutting and grinding possible after coating
- Opaque and translucent coating possible
- Chromium, lead and cadmium free

Application:

Architectural glazing for interiors, furniture manufacturing, light fixture manufacturing, etc.

Process restrictions:

Metallic powder coatings are not displayed true to the effect (without metallic content) due to the coating on the reverse side of the glass. Process-related size limitation from 3.5 x 2.0m up. The color tone is always seen through the glass.

Glass coloration and -thickness affect the color tone of the powder coating. The color and effect print reproduction therefore differs from powder coating on metals. The masking of glass edges or other areas is done manually. As a result, the masking line is not perfectly straight. If different powder coating companies are used on the same object, color deviations may occur.

Color tones:

- Approx. 180 RAL colors
- RAL design colors
- Glitter Metallic Effects
- Special color tones NCS; Sikkens or according to color samples

Process description:

- **Cleaning**
- Masking of the surface (if desired, also of the edges)
- **Flaming** with special gas mixture
- Thin Film **Adhesive Primer**
- Powder coating
- Curing
- Alternatively: Glitter Metallic Effect as 2nd layer

Assessment of the surface:

The finished coated surface is assessed in accordance with the Association of Window and Facade Manufacturers (Verband der Fenster- und Fassadenhersteller e.V.), VFF leaflet ST.02, status August 2016 (Visual assessment of organically coated surfaces on steel) and delivered in this quality. Additional requirements, including standard requirements or requirements of service specifications, are only valid if they have been explicitly confirmed in writing by ENVIRAL[®].

A visual assessment of the visible side under 3 m assessment distance and out of a 90° assessment angle in diffuse light is **not** permissible for procedural reasons.

Visual inspection of the decorative appearance of the surface and of the uniformity of the uniformity of color and structure is carried out without aids.

- Assessment distance = 3 m for parts in interior areas
- Requirements exceeding the above are only valid if they have been confirmed in writing by ENVIRAL[®].

Suspension:

Support on special fixtures for powder coating the back of the glass.

Quality assurance:

Continuing process control and order-specific quality assurance, destructive and non-destructive

Packaging:

Noppa foam, air cushion film, foliation (optional)

Repair:

Small repairs can be carried out with wet paint or a powder/clear coat mixture on the basis of our data sheet ENV 804 (Repair instructions for minor repairs).

Cleaning: Professional glass cleaning

Sealant adhesion: According to sealant adhesion on powder-coated surfaces of facades, as of 01 / 2021 (compare data sheet ENV 803) - in this case this concerns the back of the glass.

Subject to the performance of own suitability tests:

- Adhesive: OTTOCOLL® M 500 in combination with OTTO Cleanprimer 1226
- Sealant (edge OTTOSEAL® S 121 sealant)

Approvals: Environmental Product Declaration according to ISO 14025 and EN 15804:

EPD-VDL-20160263-IAG1-EN: Polyester powder coating

EPD-VDL-20160264-IAG1-EN: Epoxy powder coating

EPD-VDL-20160265-IAG1-EN: Hybrid powder coating

EPD-GDA-20190070-IBH1-EN: Aluminum profile coated