

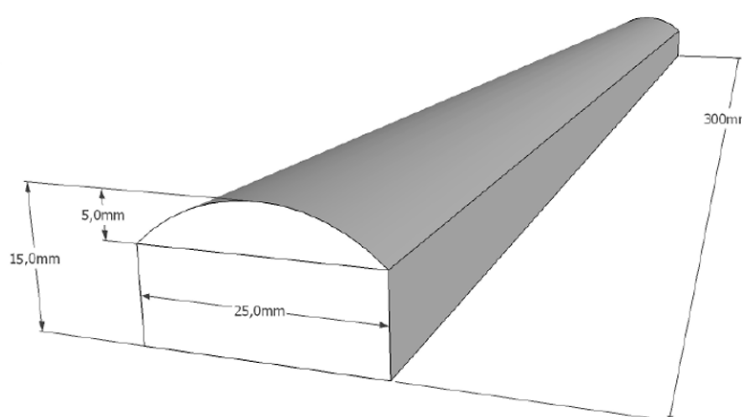
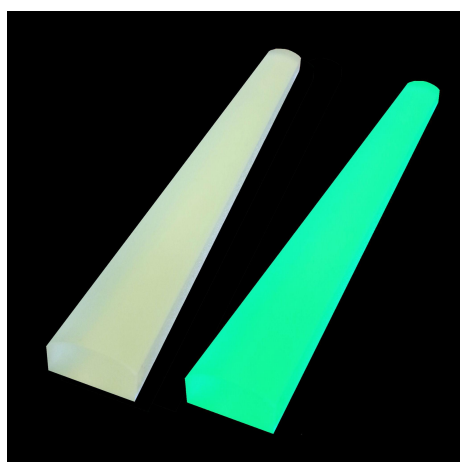
Manufacturer

Glowway Oy Ltd
Ohdakkeentie 2
06100 Porvoo
Finland

Tel: +358 10 328 7838
info@glowway.com
www.glowway.com
VAT no. FI21396956

TECHNICAL DATA SHEET

GW0001 Photoluminescent Glass Rod



1. PRODUCT DESCRIPTION AND APPLICATIONS

- **Intended use:** A photoluminescent guidance rod designed for floor-level guidance and routing in public and private buildings. Developed to improve the visibility of walkways both under normal conditions and in emergency situations, such as power outages.
- **Accessibility and warning function:** The product supports building accessibility requirements. The rod features a raised profile from the floor surface, functioning as a tactile indicator. Visually impaired individuals can detect and follow the line using either footwear or a white cane.
- **Functionality and lifecycle:** The product operates entirely ecologically without electricity or an external power source. The integrated high-performance pigment charges automatically from ambient artificial or daylight and glows green in the dark. Indoors, the product retains its pigment and photoluminescent performance for up to 25 years.

2. DIMENSIONS AND COMPATIBILITY

- **Dimensions:** 25 mm x 15 mm x 300 mm (width x height x length).
- **Installed profile height:** When installed correctly in the designated installation channel, the rod remains 5 mm above the finished floor surface, creating a tactile raised profile.
- **System compatibility:** The glass rod is designed to be embedded into the floor structure using a separate mounting channel made of acid-proof steel, product code GW0042.

3. MATERIAL PROFILE AND VISUAL PROPERTIES

- **Base material:** Optiwhite glass.
- **Surface finish:** Etched, opaque opal surface.
- **Product color in daylight:** Green.
- **Photoluminescent color in the dark:** Green.
- **Photoluminescent performance and classification:** According to official measurements by the SP Technical Research Institute of Sweden (incl. DIN 67510-1 and ISO 16069), Glowway glass products are classified in the highest PSPA Class D category. Official averages:
 - **After 2 minutes:** 1534 mcd/m²
 - **After 10 minutes:** 338 mcd/m²
 - **After 60 minutes:** 44.1 mcd/m²
 - **Light attenuation time (down to 0.3 mcd/m²):** 3097 minutes

4. MECHANICAL PROPERTIES AND CERTIFICATES

- **Impact resistance (average):** 6200 N / 632 kg
- **Flexural strength (average):** 76.1 N/mm²
- **Fire rating:** Euroclass A1 (applies generally to Glowway glass products).

5. STRUCTURAL PROVISIONS AND DESIGN REQUIREMENTS

- **Installation groove in the floor:** The installation groove or slit cut into the floor must be 30 mm wide and at least 15 mm deep to provide the required space for the mounting channel and adhesive compound.
- **Recommended adhesive compound:** High-quality, elastic polymer adhesive and sealant (e.g., Würth polymer adhesive).
- **Installation gap (Movement joint):** When several rods are installed consecutively to form a continuous long line, a gap of approximately 2 mm must be left between them.
- **Sealing and cleaning during installation:** The groove and the gaps in the channel must be carefully filled with adhesive to prevent floor washing water, moisture, or dirt from penetrating under the indicators and the mounting channel. Excess extruded compound must be wiped off immediately during installation with a damp cloth and, if necessary, a cleaning fluid (e.g., Marinol 100).
- **Site scheduling:** It is recommended to install the glass products into their channels only at the very final stage of the construction project, after all heavy work and machinery have left the site, to ensure the glass surface is not damaged or soiled during construction.

6. CLEANING, MAINTENANCE AND CHEMICAL RESISTANCE

- **Permitted cleaning agents:** Warm water and neutral general cleaning agents with a pH value between 6 and 8 should be used for regular cleaning. Cleaning agents must be used in accordance with the manufacturer's operating and safety instructions. The product has been tested and certified against standard dirt in accordance with the ISO 10545-14 standard.
- **Prohibited chemicals:** Under no circumstances should hydrofluoric acid or its derivatives be used for cleaning, as they will irreversibly corrode and destroy the glass surface.

Surface-roughened and etched products should also not be treated with hydrochloric acid or citric acid solutions.

- **Mechanical restrictions:** The use of abrasive cleaning pads, scouring powders, or wire brushes is strictly prohibited. They scratch the glass and grind down the roughened opal surface, thereby degrading the tactile properties of the product.
- **Maintenance agent prohibitions:** The use of floor maintenance agents or waxes that leave a film is prohibited, as they fill the microstructure of the surface and can impair the surface properties.
- **Pressure washing:** Although the glass rod itself can withstand heavy mechanical stress, the use of a pressure washer is not recommended. Strong localized water pressure can damage the elastic seams between the channel and the rod, allowing moisture to penetrate under the structure.

ALL RIGHTS RESERVED. This document is the property of Glowway Oy Ltd and may not be copied, disclosed to a third party, or used for any other unauthorized purpose without the written permission of Glowway Oy Ltd.