

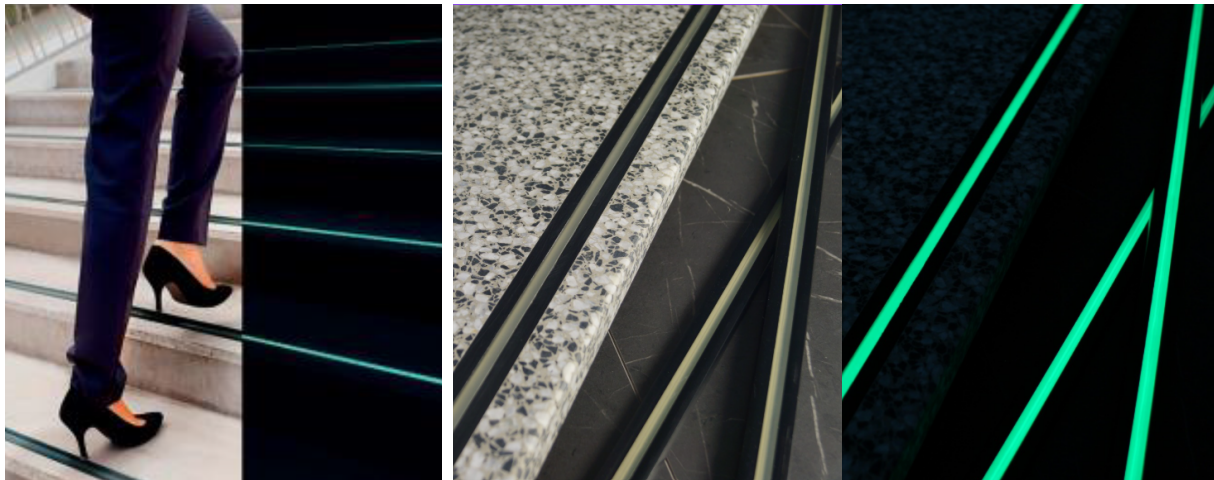
## Manufacturer

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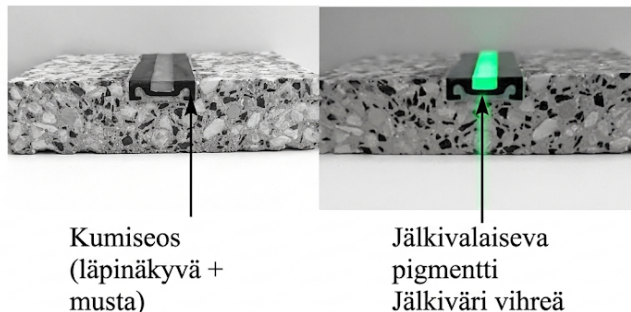
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# TECHNICAL DATA SHEET

## GW0091N Stair nosing pre-cast model



Koko: mm (lxkxp)  
30x10x 1100



## 1. PRODUCT DESCRIPTION AND APPLICATIONS

- **Intended use:** A photoluminescent contrast strip designed for concrete stairs in public buildings. A recommended solution for improving evacuation safety and accessibility.
- **Installation method:** The strip is positioned in place already at the stair factory during the casting of the step. The finished step requires no further processing or additional measures on-site during the installation phase.
- **Functionality:** The black body of the product acts as a highly distinct contrast stripe. The integrated photoluminescent pigment charges from light and glows green in the dark, providing guidance without the need for electricity.
- **Extendability:** The product can be easily extended into continuous, long sections using separate extension pieces. The joint is rigid and keeps the strip perfectly straight during the casting process.

## 2. DIMENSIONS AND DELIVERY FORMAT

- **Dimensions (Width x Height x Length):** 30 x 10 x 1100 mm.
- **Structure:** Composite material (flexible black PVC body and an integrated TPU luminous part).

## 3. MATERIAL PROFILES AND TECHNICAL PROPERTIES

### A. Black Body (ToppProfile T1698)

- **Material number:** 90075E
- **Description:** Flexible PVC compound.
- **Stabilization and plasticizers:** Ca/Zn stabilized, DEHT/DOTP (phthalate-free).
- **Certificates:** REACH Regulation 1907/2006 and RoHS3 Directive 2015/863.

| Property                 | Test Method  | Result | Unit              |
|--------------------------|--------------|--------|-------------------|
| Specific gravity         | ISO/R 1183   | 1.22   | g/cm <sup>3</sup> |
| Hardness (15 sec @ 23°C) | ISO/R 868    | 70     | Shore A           |
| Thermal stability        | EN ISO 182-1 | 20     | min               |

### B. Transparent Luminous Part

- **Material number:** 9408000
- **Description:** Polyether-based thermoplastic polyurethane (TPU).
- **Certificates:** REACH Regulation 1907/2006 and RoHS Directive 2015/863.

| Property                    | Test Method              | Result      | Unit              |
|-----------------------------|--------------------------|-------------|-------------------|
| Specific gravity            | ASTM D-792               | 1.22        | g/cm <sup>3</sup> |
| Hardness (5 sec)            | ASTM D-2240              | 87 +/- 3    | Shore A           |
| Elongation at break         | ISO/R 527 (@ 500 mm/min) | 290         | %                 |
| Tensile strength            | ASTM D-412               | 7500        | PSI               |
| Operating temperature range | -                        | -45 ... +40 | °C                |

### C. Extension Pieces / Connectors

- **Material number:** 92078
- **Description:** Rigid PVC compound.
- **Color:** Transparent, bluish tint.
- **Stabilization:** Tin-stabilized system.
- **Certificates:** REACH Regulation 1907/2006 and RoHS3 Directive 2015/863.

| Property                    | Test Method    | Result | Unit              |
|-----------------------------|----------------|--------|-------------------|
| Specific gravity            | ASTM D-792     | 1.32   | g/cm <sup>3</sup> |
| Vicat softening temperature | ISO EN 306 B50 | 74     | °C                |
| Thermal stability (200°C)   | ISO EN 182-1   | >20    | min               |

#### 4. PHOTOLUMINESCENT PROPERTIES

Light performance measurements were conducted in accordance with the official DIN 67 510 Part 1 standard. The product charges automatically from ambient artificial light or daylight.

- **Sample pre-illumination:** E = 999.4 lx.
- **Light attenuation in the dark:**
  - Luminous intensity immediately upon darkness (0 min): 7550 mcd/m<sup>2</sup>
  - Luminous intensity after 2 minutes: 1122 mcd/m<sup>2</sup>
  - Luminous intensity after 10 minutes: 226.2 mcd/m<sup>2</sup>

**Exact attenuation table:**

| Time (min) | Luminous intensity (mcd/m <sup>2</sup> ) | Time (min) | Luminous intensity (mcd/m <sup>2</sup> ) |
|------------|------------------------------------------|------------|------------------------------------------|
| 0          | 7550                                     | 4.5        | 519.3                                    |
| 0.5        | 3271                                     | 5          | 466.8                                    |
| 1          | 1999                                     | 5.5        | 423.5                                    |
| 2          | 1122                                     | 7          | 330.3                                    |
| 3          | 772                                      | 9          | 253.4                                    |
| 4          | 583.4                                    | 10         | 226.2                                    |

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