

### Product Properties

LONGLITE MEGA HS2 products generate excellent luminous densities even at low ambient light conditions. Therefore they are designed for glow in the dark escape way guidance systems as well as for other photoluminescent markings particularly in traffic tunnels. The choice of materials and the construction of the product itself are based on the special circumstances in traffic tunnels, such as low ambient light conditions, environmental influences, dirt refusal, cleaning friendliness as well as mechanical and chemical permanence.

Photoluminescent plates of the quality LONGLITE MEGA HS2 are available with a uniform glow in the dark surface as well as with pictograms, distance or text information.

### Dimension

LONGLITE MEGA HS2 can be produced in the dimensions 100 x 100 mm to max. 1200 x 600 mm. The technical properties are independent of the dimensions.

### Carrier Material

- Stainless steel 1.4404, width 1 mm or 0,6 mm
- Aluminium width 1,5 mm

### Construction

Primer:	White, highly reflecting primer based on polyester. Color place (conditions 10°C / D65): L* 92,53 a* - 0,95 b* 1,16
Photoluminescent Layer:	High-Performance low lux pigment in very resistant highly transparent acrylic material.
Low Lux Pigment:	Strontium aluminate ( $SrAl_2O_4:Eu,Dy$ ) with special low lux properties, chemical inert, with a heat resistance >1000°, BAGT 95276
Protection Varnish:	High transparent, chemical resistant and dirt-unfriendly protection varnish which allows an easy cleaning of the product.

### Fire Behaviour

All materials used for the production of LONGLITE MEGA HS2 are free of PVC and radioactive components. Due to the choice of materials and the high heat resistance, neither toxic nor aggressive smoke should be developed.

**Cleaning**

Cleaning with water is recommended 2 to 3 times annually. Alkaline cleaning agents (pH <10) can be used. High pressure cleaners and non-metallic brushes can be used. If using cleaning agents post rinse is recommended.

**Photo luminescent Density**

With activation according to the optimal test method for traffic tunnels the following photoluminescent densities are generated

Type of lamp	AURA LL-18W-840
Exposure Time	60 minutes
Illumination	25 lx

<b>minutes</b>	2	5	10	20	30
<b>mcd/m<sup>2</sup></b>	342	200	122	70	45

**Testresults**

- Lumious Density: The tolerance of the lumious density is -5% / + 20%
- Blow Firmness: Falling test with a 6.2kg iron rod with circular cracking ø 30mm from a height of 0.5m on a base of hard wood: deformation of the board, but no damage or chipping off of the layers.
- Flexibility: 30° bending of a board with a radius of 20mm: no separation or chipping off of the layers
- Cleaning Resistance:
  - Laying into an alkaline cleaning agent during 24 hours: no visible changes.
  - High pressure cleaning: 130bar from a distance of 1m: no chipping off or damaging of the layers
- Heat Resistance: from - 40 °C to + 80 °C: durable permanence  
 test at +150 °C for 1 hour: no visible changes

**Installation:**

LONGLITE MEGA HS2 products can either be glued or screwed to the tunnel wall. In case of fixing the plates with screws, the use of stainless steel screws in combination with acid resistant plastic base disks is strongly recommended to avoid galvanic bridges.

All Information on this data sheet is based on today's technical knowledge.