

## Shaped LED Board (rigid foam)

The **hansen Shaped LED Board** is a compact light source designed for backlighting acrylic, banner or similar translucent materials.

For example, it can be used for the illumination of channel letters, banners or for ceiling lights in lifts, etc.

The base consists of a rigid foam board with hardened surfaces. Grooves and recesses milled into the board accommodate the LEDs and connecting wires, which are embedded in transparent artificial resin after installation.

The recesses for the LEDs are made according to customer drawings or after approval by the customer. The outer shape as well as any necessary cut-outs or fixtures are also made to customer specification.

The LEDs are operated in series connection by a constant current power supply.



General data:	
Type of connection	Series connection
Power supply unit	<b>hansen</b> converter type C.../...
LED variants	Standard (0.1 W, 25/50 mA) Power (0.32 W, 100 mA)
Degree of protection	IP65
Class of protection	II
Ambient temperature range	-25°C to +65°C
Conformity	CE, RoHS
Material thickness	10 mm
Max. dimensions	1,000 x 2,800 mm

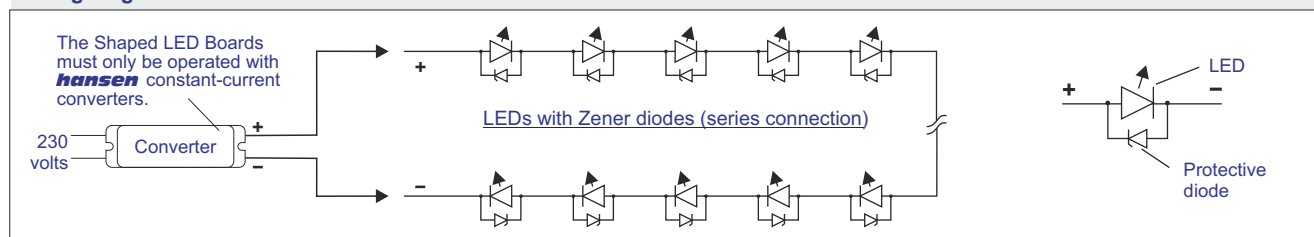
Photometric data – luminous flux of the LEDs		
Light colour	Standard	Power
White 3,000 K	6.4 lm	21.5 lm
White 4,000 K	6.0 lm	19.9 lm
White 5,000 K	5.1 lm	18.2 lm
White 6,500 K	4.8 lm	16.7 lm
Blue (463–471 nm)	1.0 lm	3.5 lm
Green (516–534 nm)	2.2 lm	16.0 lm
Red (612–624 nm)	5.2 lm	9.6 lm
Yellow (583–592 nm)	4.8 lm	
Amber (600–609 nm)	5.2 lm	

Note: Tolerance of the photometric data: +/- 10%

Material properties – transparent potting compound:	
Two-component potting compound, polyurethane (PUR)-based	
Shore A hardness	70 +/-5
Shore D hardness	< 30
Service temperature	-40 °C to +90 °C
Dielectric strength	70 kV/mm (VDE 0303 Part 2)
UV resistance	Resistant
Thermal expansion	0.12 mm/m 1/k to 0.21 mm/m 1/K
Reaction to fire	Building material class B2, Class 3, TP(b)

Material properties – rigid foam boards:	
Manufacturing process	Co-extruded PVC foam board
Material thickness	6 mm, 10 mm
Weight	6 mm: 4.1 10 mm: 6.7 (kg/m <sup>2</sup> )
Dielectric strength	12 kV/mm (VDE 0303 T 21)
UV-resistance	Resistant
Thermal expansion	0.8 x 10 <sup>-4</sup> K <sup>-1</sup> (ISO 11359-2)
Reaction to fire	Building material class B2 (DIN 4102)

### Wiring diagram:



Alle values refer to an ambient temperature of +25°C.



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