

degussa.
Röhm Plexiglas



For Round-the-Clock Attention

*Extra Slim, Bright and Evenly Illuminated
Light Boxes with PLEXIGLAS® GS 1002*

For Undivided Attention

Luminous pictures exert a magical fascination. The stained glass windows of historical churches – the light boxes of the Middle Ages, so to speak – offer impressive proof of this fact. Unfortunately, they were only effective during the day because they depended on daylight. Modern signage systems have their own light source. Advertising messages printed on translucent film are back-lit, and thus retain their eye-catching effect around the clock. More and more designers of illuminated advertising signs therefore use light boxes as a form of presentation.

Light boxes have to comply with high demands to provide the best possible promotional effect. These include:

- uniform illumination
- no visible contours of light sources
- slimness
- high luminous intensity
- neutral color

Extra Slim Light Boxes

Back-lit displays are often very thick because the lamps have to be installed at a large distance behind the illuminated motif.

PLEXIGLAS® GS 1002, a range of special, highly transparent acrylic sheets, is edge-lit. This enables the construction of extremely slim, compact luminous panels with high light output. The neutral-colored diffuser particles with special diffusion behavior embedded in the material ensure uniform light distribution without influencing the color.

Fabricating the Easy Way

These sheets are just as simple to handle as conventional transparent PLEXIGLAS®. The protective film applied at our factory is only removed before installation and therefore provides maximum protection against mechanical damage during fabrication. PLEXIGLAS® GS 1002 is ready for installation after being cut to size. Edge polishing additionally improves the effect.



Specialist for All Sizes

In order to obtain maximum luminous efficacy combined with excellent illumination, PLEXIGLAS® GS 1002 is provided in a variety of grades.

PLEXIGLAS® GS 1002 L

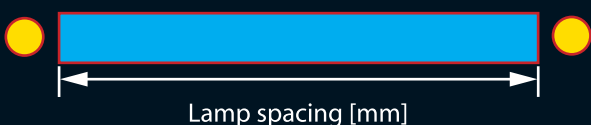
PLEXIGLAS® GS 1002 L was developed for illumination on both sides with lamps spaced at 300 to 600 mm and illumination on one side at a lamp spacing of 150 to 300 mm. This material is specially adapted for illumination of posters sized DIN A1 to DIN A4.

PLEXIGLAS® GS 1002 XL

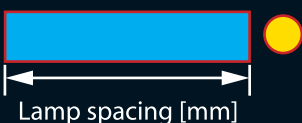
PLEXIGLAS® GS 1002 XL was developed for illumination on both sides with lamps spaced at 600 to 1300 mm. PLEXIGLAS® GS 1002 XL is therefore eminently suited for illuminating CityLight posters.

PLEXIGLAS® GS 1002 CM

Optimized luminous panels tailored to customer needs (Custom-Made), for any size and any number of lamps. With PLEXIGLAS® GS 1002 CM, your creativity need know no bounds.



Lamp spacing [mm]	Recommended GS 1002 grade	Recommended thickness [mm]
300 to 600	L	6 and 8
600 to 1300	XL	8, 10 and 12
custom-made	CM	depending on radiant surface



Lamp spacing [mm]	Recommended GS 1002 grade	Recommended thickness [mm]
150 to 300	L	6 and 8
300 to 650	XL	8, 10 and 12
custom-made	CM	depending on radiant surface

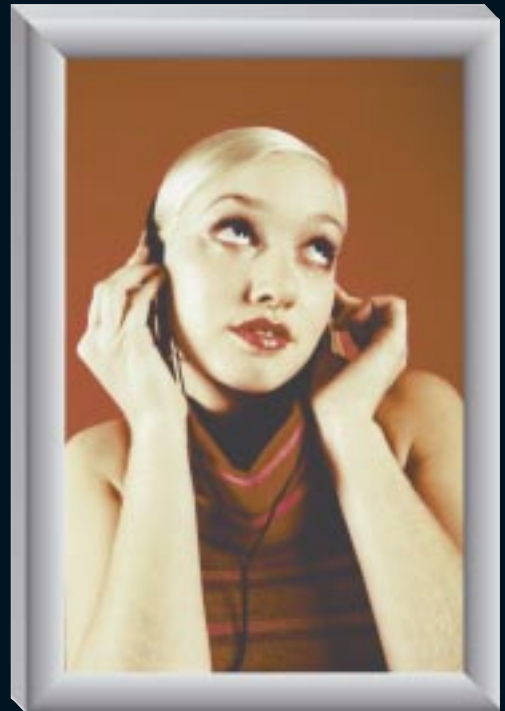
The Right Size for Every Application:



PLEXIGLAS® GS 1002 CM



PLEXIGLAS® GS 1002 XL



PLEXIGLAS® GS 1002 L

PLEXIGLAS® GS 1002 XL

PLEXIGLAS® GS 1002 L

PLEXIGLAS® GS 1002 CM

PLEXIGLAS® GS 1002

Tips for the Construction of Light Boxes

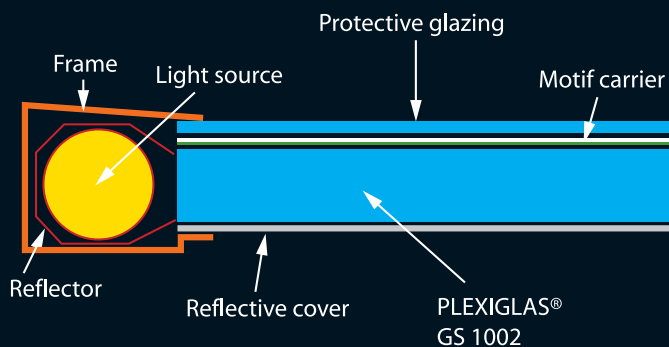
PLEXIGLAS® GS 1002 uniformly distributes the light entering through its edges and emits it again over the entire surface with the highest possible optical output ratio. The brightness of a luminous display therefore depends largely on the power and number of light sources employed, as well as on the size of the edge surface (thickness of the chosen PLEXIGLAS® GS 1002 sheet).

The distance between the light source and the edge of the PLEXIGLAS® GS 1002 sheet must be as small as possible so that plenty of light directly enters the sheet. An ideal distance is 1 to 3 mm.

The light source can be provided with a reflector to ensure that a maximum amount of light enters the edges (see drawing).

Edges that are not lit should be covered with reflective material such as adhesive tape.

The luminous displays can be installed with one or two radiant surfaces. If only one side is light-emitting, a strongly reflective cover should be provided on the back.



The lit edges should have smooth surfaces. Edge polishing improves light entry via the edge. The motif carrier should be made of light-diffusing material so as to distribute the light exiting the PLEXIGLAS® GS 1002 sheet uniformly towards the observer. Printable film is suitable as a motif carrier, but paper can also be used.

Practically all types of glazing are suitable for protecting the motifs, particularly anti-reflective PLEXIGLAS SATINICE® AR or tough, impact-resistant PLEXIGLAS RESIST®.

PLEXIGLAS® GS 1002 is available in the standard size of 3050 x 2030 mm. From 10 mm thickness, the size is 3000 x 2000 mm. Cut-to-size sheets, also with polished edges, can be supplied on request.

PLEXIGLAS® GS 1002

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Certified to DIN EN ISO 9001 (Quality)
and DIN EN ISO 14001 (Environment)

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PLEXIGLAS SATINICE
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