TECHNICAL INFORMATION



PLEXIGLAS®

PLEXIGLAS[®] LED Pure White WH52

Product

These translucent cast acrylic sheets have been specially developed for backlighting with LEDs, such as in illuminated signs.

PLEXIGLAS® LED for backlighting Pure White WH52 appears brilliantly white in daylight and when not illuminated. In darkness and with backlighting switched on, PLEXIGLAS® LED Pure White WH52 shows the well-known good light-diffusing properties along with balanced light transmission (see Fig. 1).

Particularly in signage, shopfitting, and trade-show booth construction, the combination of LEDs and PLEXIGLAS® LED scores with maximum efficiency and excellent lighting technology. Advertising is often illuminated around the clock, so energy-saving designs are becoming increasingly important. PLEXIGLAS® LED, backlit with advanced LED technology, consumes less energy than conventional fluorescent or neon lamps and is also low-maintenance. Only with the right choice of material can the potential of LEDs be fully exploited.

PLEXIGLAS[®] LED Pure White WH52 is distinguished by its optimized radiant white color impression when not illuminated. This is evident in a direct comparison with other white translucent grades for backlighting (see Fig. 2).

Particularly when illuminated with cold white light (6500K), PLEXIGLAS® LED Pure White WH52 has a sophisticated, upscale appearance. This means that illuminated signs catch the eye by both night and day.



Properties

In addition to the known and well-proven properties of $\mathsf{PLEXIGLAS}^{\texttt{0}},$ such as:

- very high weathering resistance
- easy processability
- 100 % recyclability

PLEXIGLAS[®] LED Pure White WH52 has the following special features:

- · brilliantly glowing white in reflected light
- no LED hot spots, thanks to optimized light diffusion
- 44 % light transmission

Applications

Due to these special properties PLEXIGLAS® LED Pure White WH52 is particularly suitable for:

- signage
- shopfitting and trade-show booth construction
- special-effect light walls in architecture







Fig. 1: Good light diffusion properties without visible hot spots from the LEDs $% \left({{\rm LED}} \right)$

Processing

PLEXIGLAS[®] LED Pure White WH52 is processed in the same way as standard PLEXIGLAS[®].

The following guides to processing of PLEXIGLAS® are available:

- Machining PLEXIGLAS® (no. 311-1)
- Forming PLEXIGLAS® (no. 311-2)
- Joining PLEXIGLAS® (no. 311-3)
- Fabricating tips for PLEXIGLAS® solid sheets (no. 311-5)

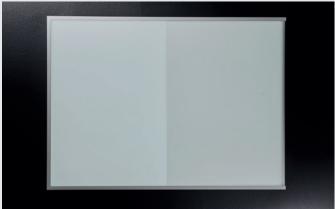


Fig. 2: Comparison of white tone by daylight (not illuminated) normal translucent white in signage (right): PLEXIGLAS® LED Pure White WH52 (left)

Delivery Forms

PLEXIGLAS[®] LED for backlighting Pure White WH52 can be supplied ex stock in thicknesses of 3 and 5 mm.

PLEXIGLAS® LED for Backlighting

Color	Grade	Transmission $\tau_{_{D65}}$
Pure White	WH52	44 %

The sizes available are listed in the PLEXIGLAS® Sales Handbook. Please contact us.

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