

Material Data: Film Products

Material Choices for Bright View Diffuser Products



Bright View diffusers are available on a variety of materials, including film, semi-rigid, and rigid sheets to meet most lighting needs. Optical performance is nearly identical for the various materials.

	PET (standard)	UV PET	Semi-Rigid Polycarbonate (PC)
Usage	Excellent for indoor LED applications	UV resistant for LED or Fluorescent	Low cost solution for downlights, PAR, panels, etc.
Nominal Thickness	.175 mm	.125 mm	.250 / .500 / .750 mm
	.007 in	.005 in	.010 / .020 / .030 in
Bend Radius†	0.5 in	0.5 in	1.5 / 1.5 in / 2.25 in
UV Resistance color change UVA (2400K)/m ²)	$\Delta a^* = -2.1$	$\Delta a^* = -0.4$	$\Delta a^* = -4.0$
	$\Delta b^* = 8$	$\Delta b^* = 1.7$	$\Delta b^* = 21$
Temperature Range	-34°C – 80°C	-34°C – 80°C	-34°C – 80°C
UL-94 Flammability Rating of substrate material*	VTM-2	N/A	V-2

Optional wet-out resistant surfaces are available upon request for Light Guide Plate and other applications

† Bend Radius values are at room temperature operation. Bend radius should increase as temperature increases, contact Bright View application engineer for further information.

* UL Rating is for substrate material as provided by substrate vendor. Yellow cards for these substrates are available. Bright View diffusers have not been tested or rated by UL. Bright View applies a thin (approx. 50 micron) coating to these substrate materials. Please call a Bright View applications engineer to discuss your material needs.



Applications Engineering

Bright View is an agile company with a commitment to rapid prototyping and fast turnaround on standard or custom parts. Application engineers are available to help select the right diffuser solution including optical performance, material choice, environmental requirements, and aesthetics. Please contact sales@brightviewtech.com.

Typical values. Specifications are subject to change without notice.

Material Data: Rigid Products

Material Choices for Bright View Diffuser Products



Bright View diffusers are available on a variety of materials, including film, semi-rigid, and rigid sheets to meet most lighting needs. Bright View rigid sheet products are constructed by laminating a thin film to a rigid sheet.

	Acrylic (PMMA) General Purpose (RAXX)	Polycarbonate General Purpose (CGXX)	Polycarbonate Sign Grade (CSXX)
Usage	Highest Efficiency UV Resistant	Impact Resistant	Impact Resistant UV Resistant
Nominal Thickness	1.5 / 2 / 3 mm	1.5 / 2 / 3 mm	3 / 6 mm
	.060 / .080 / .120 in	.060 / .080 / .120 in	.120 / 0.240 in
UV Resistance typical color change UVA (2400KJ/m ²)	$\Delta a^* = -1.6$ $\Delta b^* = 6.8$	$\Delta a^* = -2.0$ $\Delta b^* = 16.0$	$\Delta a^* = -1.0$ $\Delta b^* = 6.0$
Temperature Range	-34°C - 60°C	-34°C - 80°C	-34°C - 80°C
UL-94 Flammability Rating of substrate material*	HB	HB	HB
Glow-Wire Flammability Rating of substrate material* (IEC 60695-2-12) GWFI	N/A	800 °C (1.5 mm) 850 °C (≥ 2.0 mm)	850 °C
Outdoor Weatherability	F1	F1	F1

* UL Rating is for substrate material as provided by substrate vendor. Yellow cards for these substrates are available. Bright View diffusers have not been tested or rated by UL. Please call a Bright View applications engineer to discuss your material needs.



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