POLYVANTIS

UNIQUE TRANSLUCENT SOLUTION FOR LED AND LIGHTING FIXTURES

WITH LEXAN™ DLCW DIFFUSER SHEET



LEXAN™ SHEET

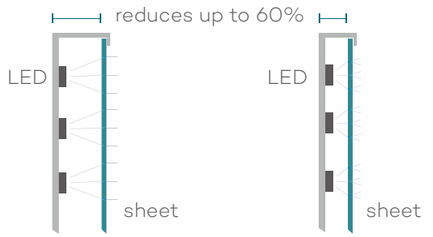


NEW LEXAN™ DLCW (Diffused Light Cool White) is a translucent polycarbonate sheet with unique light diffusing properties, mainly designed for LED and conventional lighting ffxtures. It provides high light transmission (LT) and high hiding power (DLD) through a combination of optimized surface texture and advanced diffuser technology. The sheet has a matte ffnish on one side and a polish ffnish with masking fflm on the other side.

MAIN CHARACTERISTICS:

- Reduces customer construction and lowers installation and operation costs
- Allows placement of LED's closer to the diffuser, which saves valuable design space & costs
- Has exceptional light transmission which results in fewer required overall LED's
- Architectural design freedom
- High light diffusion and LED hiding power
- High impact strength for damage prone areas
- Increases the light uniformity throughout the lens
- Enhances uniformity with projected light

LIGHT BOX CONSTRUCTION:



Standard PC sheet **LEXAN DLCW sheet**

HIDING POWER:



Standard PC sheet **LEXAN DLCW sheet**

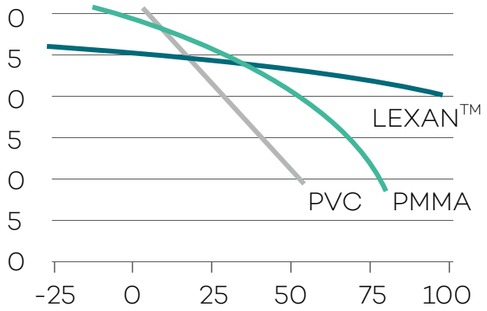




APPLICATIONS:

- Lighting fixtures:
  commercial, industrial, institutional, retail, mass transportation and parking garages
- Lit displays
- Menu boards
- Skylights
- Flat signs
- Formed production signs
- Privacy partitions:
  offfces, restaurants, exhibitions and schools

LEXAN™ DLCW SHEET PERFORMANCE AT ELEVATED TEMPERATURE:



Flexural modulus in N/mm^2 x100

OPTICAL PERFORMANCE (LT/DLD*):

Grade		.040"	.060"	.118"	.125"
DLCW-1G9A3862X: 85% LT	%LT /DLD*	85/23	85/26	85/27	85/28
DLCW-1G9A3863X: 75% LT	%LT /DLD*	75/35	75/33	75/33	75/30
DLCW-1G8A3864X: 65% LT	%LT /DLD*	65/70	65/60	65/60	65/60

*Degree of light diffusion (DLD): angle at which half of the luminance of the incident light is observed. Higher DLD, better hiding power. Typical values listed.

PRODUCT FEATURES:

- Lightweight
- UL flammability – HB: File nr E121562, UL F1 rating suitable for outdoor applications
- Thermoformable
- Tighter cold bending vs. acrylic sheet
- Minimum bending radius:
  LEXAN DLCW Polycarbonate sheet = 100*thickness
  Acrylic sheet = 125*thickness
- LEXAN DLCW sheet maintains its form and impact strength over a wide temperature range
- Excellent retention of impact strength
- Excellent retention of stiffness (does not droop at high temperatures)
- Retains 85% of its room temperature flexural modulus at 82°C (180°F), outperforms PMMA (Acrylic) and PVC

AVAILABILITY:

- Gauges: .040" to .125" (1 - 3.2 mm)



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