



## LEXAN® XL10 SHEET

### Product Data Sheet

#### DESCRIPTION

**LEXAN® XL10 sheet** combines the impact strength of LEXAN polycarbonate sheet with a proprietary UV-resistant surface treatment on one side that protects it from weathering. LEXAN XL10 sheet is the only polycarbonate glazing material backed by a ten-year limited warranty against yellowing, loss of light transmission and breakage.\*

Providing long-lasting clarity over a wide range of weather conditions and environments, LEXAN XL10 sheet improves service life and reduces life-cycle material costs. LEXAN XL10 sheet is well suited for all types of vertical glazing and overhead applications such as skylights, covered walkways and barrel vaults.

#### THERMOFORMABLE

XL10 sheet is designed to meet your forming requirements as well as provide you with the performance benefits that you expect from LEXAN XL10 sheet.

#### TYPICAL PROPERTY VALUES\*\*

Property	Test Method	Units	Value
<b>PHYSICAL</b>			
Specific Gravity	ASTM D792	—	1.20
Sound Transmission, STC Rating (36" x 84")	ASTM E9070	—	
@ 0.118"			25
@ 0.177"			29
@ 0.236"			31
@ 0.375"			34
@ 0.500"			34
Light Transmission (Average)	ASTM D1003	%	88
Rockwell Hardness	ASTM D785	—	M70, R118
Chemical Resistance	ANSI Z26.1		Passes
<b>MECHANICAL</b>			
Tensile Strength, Ultimate	ASTM D638	psi	9,500
Tensile Modulus	ASTM D638	psi	340,000
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	340,000
Flexural Endurance @ 1,800 Cycles/Min, 73°F, 50% RH	ASTM D671	psi	1,000
Compressive Strength	ASTM D695	psi	12,500
Elongation	ASTM D638	%	110
Izod Impact Strength, up to 125 mils, Notched	ASTM D256A	ft-lbs/in	12–16
Drop Dart Impact Strength, 1" dia. dart	GE Test***	ft-lbs	
@ 73°F			>200
@ 0°F			>200
<b>THERMAL</b>			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.75 x 10 <sup>-5</sup>
Thermal Shrinkage	GE Test	%	1
Heat Deflection Temperature	ASTM D648	°F	
@ 264 psi			270
@ 66 psi			280
Shading Coefficient	ASHRAE	—	
Clear			1.02
Gray/Bronze			.79
<b>FLAMMABILITY</b>			
Horizontal Burn (Flame Spread), AEB	ASTM D635	in	<1
Ignition Temperature	ASTM D1929	°F	
Flash			873
Self			1,076

\*Request details of limited warranty and maintenance instructions.

\*\*\*Measured by dropping a 5-pound dart (1" dia. tip) from a height of 40 feet.

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\*\*These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local GE Plastics Structured Products representative or the GE Plastics Structured Products Quality Services Department.

(continued on reverse)

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## ENERGY EFFICIENCY

LEXAN XL10 sheet provides up to 25% better thermal insulation than single-pane glass. Double glazing increases the advantage.

## IMPACT RESISTANCE

Virtually unbreakable, LEXAN XL10 sheet has 250 times the impact strength of glass and 30 times that of acrylic.

## WEIGHT

Only 15% the weight of double-pane glass, LEXAN XL10 sheet requires less structural support than either glass or acrylic. Its light weight also results in easier handling and installation, as well as transportation cost savings.

**For more information  
call: (800) 451-3147.**

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## U-VALUE COMPARISON

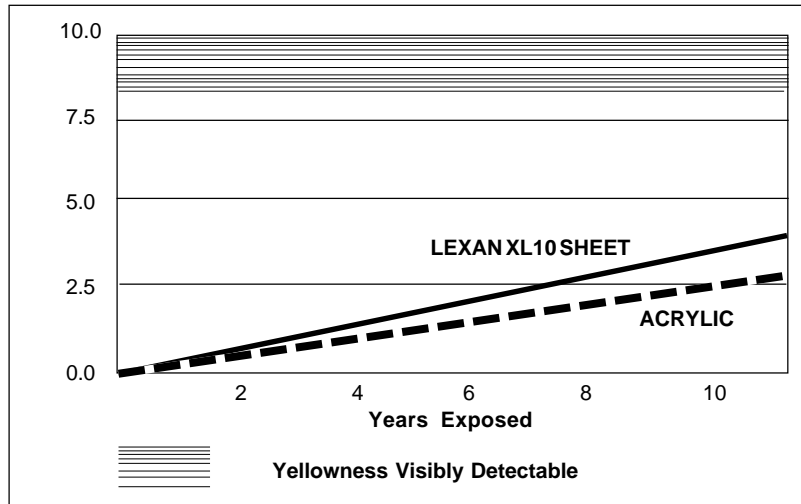
WINTER HEAT LOSS (Btu/hr./sq.ft./°F)			
Thickness	LEXAN XL10 Sheet	Glass	LEXAN Sheet % Advantage Over Glass
.118"	1.05	1.16	10
.177"	1.01	1.15	12
.236"	.96	1.14	16
.375"	.88	1.11	21
.500"	.82	1.09	25
Double Glazed*	.43	.49	12

\*Two 1/4 lites with 1/2" air space.

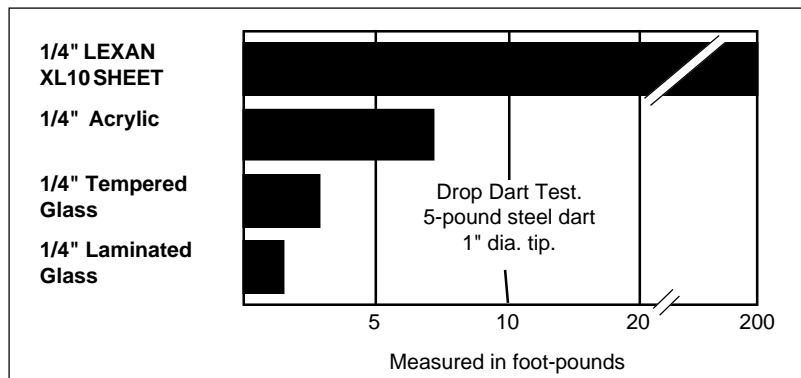
SUMMER HEAT GAIN (Btu/hr./sq.ft./°F)			
Thickness	LEXAN XL10 Sheet	Glass	LEXAN Sheet % Advantage Over Glass
.118"	.97	1.04	7
.177"	.93	1.04	11
.236"	.90	1.04	14
.375"	.83	1.03	19
.500"	.77	1.03	25
Double Glazed*	.43	.56	20

\*Two 1/4 lites with 1/2" air space.

## YELLOWNESS INDEX



## IMPACT RESISTANCE



## WEIGHT (lbs./ft.<sup>2</sup>)

Thickness	LEXAN XL10 Sheet	Glass
.118"	.74	1.60
.177"	1.11	2.40
.236"	1.47	3.20
.375"	2.34	4.80
.500"	3.12	6.40



**GE Structured Products**

General Electric Company  
One Plastics Avenue  
Pittsfield, MA 01201

[www.structuredproducts.ge.com](http://www.structuredproducts.ge.com)

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\* Not connected with the English company of similar name.

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