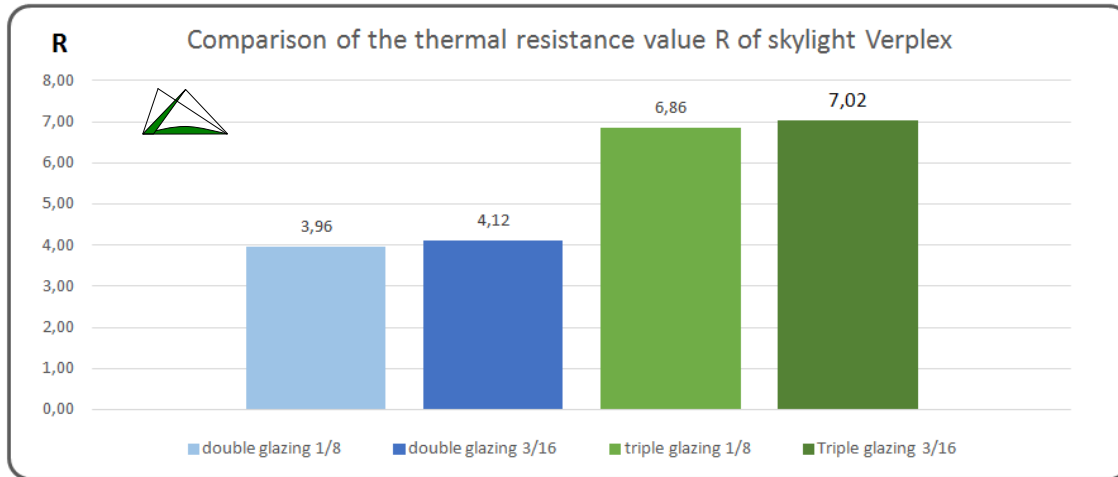


Comparison of the thermal resistance value R Verplex Plastics skylights

The index **value of R** varies depending on the thickness of the acrylic used, number of walls, double or triple domes and the opening of the skylight.
The greater the resistance of a component, the less it leaves losing heat.



The R-value is calculated in consideration of the opening of skylights (Not in consideration of the square foot surface of the skylight)

Thickness: The acrylic sheet used in the fabrication of domes can be **1/8 "- 3/16" or 1/4 "** depending on the skylight format.

Thermal glass

Performance insulation glazing with the PPG Glass Compounds 3mm glass and interlayer 12.7mm

	R Factor	Solar gain	Transmitted light
DOUBLE GLAZING UNIT			
2 clear glass lights + air	2.0	0.75	81%
1 clear and 1 Low-E glass lights + arg on	3.6	0.68	79%
TRIPLE GLAZING UNIT			
3 clear glass lights + air	3.1	0.67	74%
2 clear and 1 Low-E glass lights + argon	5.3	0.61	71%
1 clear and 2 Low-E glass lights + argon	6.9	0.55	69%

PERFORMANCE COMPARISONS

What is LEXAN® Sheet?

LEXAN polycarbonate is the most versatile engineering thermoplastic available today. When LEXAN resin is extruded into sheet form by General Electric, this material offers breakage resistance far beyond glass and other glazing materials.

Durability. Virtually unbreakable, LEXAN sheet's impact strength is 250 times stronger than glass, 30 times stronger than acrylic for added protection against vandalism, burglary and the weather.

Clarity. LEXAN sheet offers excellent clarity approaching that of glass.

Weatherability. Hailstones, fierce winds and snow loads are no match for super-tough LEXAN sheet. And many LEXAN sheet products are UV stabilized for protection against yellowing; LEXAN XL sheet offers a 5-year limited warranty.

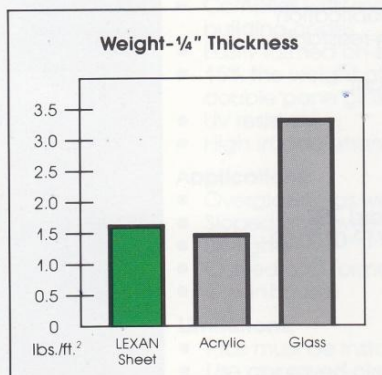
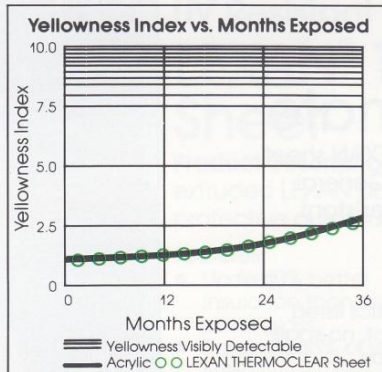
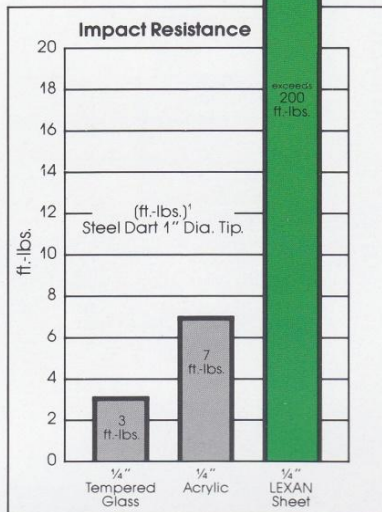
Abrasion resistance. All glazing materials — including glass — will scratch. However, LEXAN sheet offers products like LEXAN MR5, which features a proprietary high-mar-resistant, MARGARD coating to deliver added abrasion resistance approaching glass.

Energy efficiency. LEXAN sheet products provide up to 16% better thermal insulation than glass. Up to 40% greater energy efficiency is possible if you specify LEXAN THERMOCLEAR sheet.

Light weight. LEXAN sheet's lighter weight results in significant advantages in transportation, handling and installation — and fewer structural supports.

Design flexibility. Since LEXAN sheet can be cold-formed to tighter radii than glass or acrylic, it lends itself to more intricate and unique designs.

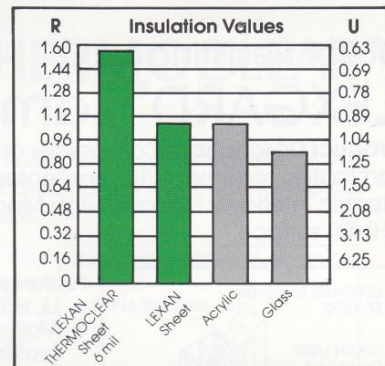
(1) Measured using 5 lb. falling steel ball (11 ft. max. tower height).
(2) Building Officials and Code Administrators International, Inc.
(3) Southern Building Code Congress International, Inc.
(4) International Congress of Building Officials.
† This classification applies to Light Transmitting Applications, e.g., glazing, skylights, light diffuser lenses, sign faces, etc. It does not apply to interior finish applications, such as ceiling tile, wallscoting, wall panels, etc.



Significant Cost Savings

At first glance, glass and acrylic may seem less costly than LEXAN sheet. But when it comes to a quick payback and longer service life, it's no contest: Wherever breakage, security or safety concerns exist, LEXAN sheet is the cost-performance choice.

- LEXAN sheet virtually eliminates replacement costs due to breakage.
- LEXAN sheet requires less structural support than glass, for reduced material costs.
- LEXAN sheet can be cold-formed on site, to cut fabrication expenses.
- LEXAN sheet provides superior insulation properties, for big energy savings.



Organization	Building Code	LEXAN Sheet	Acrylic
BOCA(2)	Basic	CC-1	CC-2
SBCC(3)	Standard	CC-1	CC-2
ICBO(4)	Uniform	CC-1	CC-2