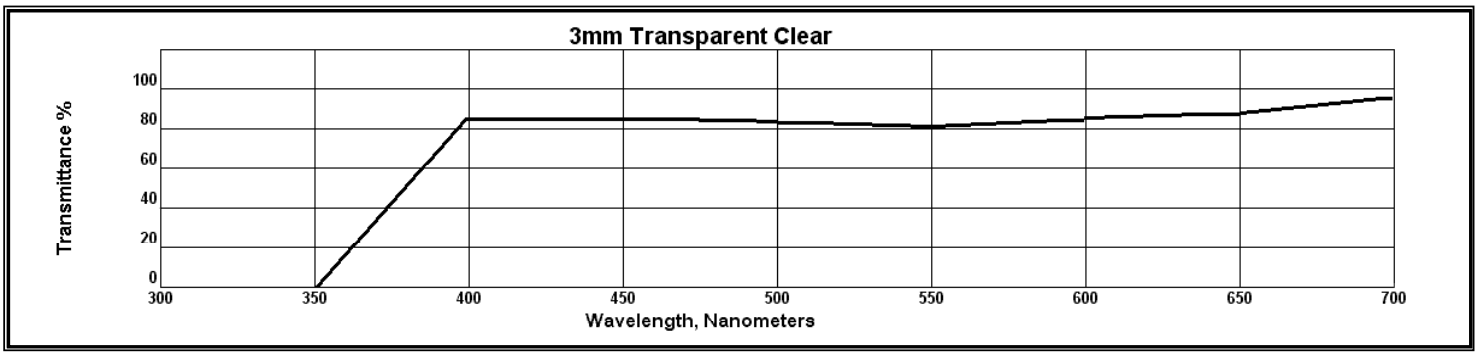

Light Transmission Analysis

By allowing up to 90% of solar energy and 88% of visible light through, clear Polycarbonate sheet is an excellent glazing material for uses designated to maximize solar gain. Tinted Polycarbonate should be substituted for requirements where shading or privacy is required.

Hardness

Polycarbonate coated with static dissipative NOXTAT SDG™ will perform on the pencil hardness scale at 2B, clearly the hardest coating available today.

Solvent Resistance

Solvent resistance of the test surfaces was determined using ASTM D 1308 (3.3.3 Spot Test, Covered). The solvent was placed on the substrate surface and immediately covered with a watch glass. Solvents were repeatedly applied to keep them in contact with the surface. Tests were conducted at 77°F (25°C).

The surface was examined at intervals of 1,4,8 and 16 hours for signs of attack such as blistering, peeling, or discoloration. The test was terminated at 16 hours. The table indicates the time at which the visual attack of the surface becomes evident.

Solvent	Time to Visual Attack (hours)		
	NOXTAT™	Lexan® 9030	Margard® FMR
Acetone	> 16	< 1 min	< 1 min
Chlorine Bleach	> 16	> 16	> 8
Fantastic®	> 16	> 16	> 16
Gasoline	> 16	> 16	> 4
Methanol	> 16	> 16	> 16
Methyl Ethyl Ketone	> 16	< 1	< 1
Methylene Chloride	> 16	< 1 min	< 1 min
10% Sodium Hydroxide	> 16	< 1	> 1 min
40% Sulphuric Acid	> 16	> 16	< 1

Stain Resistance

Stain resistance of the test surfaces was determined using ASTM D 1308 (3.3.3 Spot Test, Covered). The stain was applied to the substrate surface (a saturated one inch piece of tissue paper was used for the liquid stains) and immediately covered with a watch glass. The test was conducted at 122°F (50°C).

The stain was allowed to remain in contact with the surface for 16 hours. At the end of this period excess stain was removed with dry tissue. The degree of staining was observed and recorded based on a scale of 0 to 5 where 0 represents no staining and 5 represents severe staining. The table shows results of this evaluation.

Stain	Degree of Staining		
	NOXTAT™	Lexan® 9030	Margard® FMR
DuPont Yellow Dye N (#4957)	0 - 1	0 - 1	2
Ink (blue/black)	0	0	0 - 1
Ketchup	0	0	0
Kiwi® Cordovan Shoe Polish	0	0	1
Mustard	0	1	2 - 3
1% Potassium Permanganate	0 - 1	0	2 - 3
Tincture of Iodine	2 - 3	5	3 - 4