SEAT INSERTS AND UMBRELLA PANELS

Landscape Forms' seat inserts and umbrella panels are made from high-performance colored premium quality polycarbonate.

FINISH AND COLORS

All surfaces are protected with an abrasion resistant coating that is proven to withstand long term effects of UV exposure. The coating system is engineered to produce a translucent effect.

IMPACT RESISTANCE

Polycarbonate is amorphous meaning it lacks a distinct crystalline structure which is shapeless. This property gives polycarbonate its exceptional mechanical properties, impact resistance, toughness and dimensional stability. Polycarbonate holds up so well under impact not because it is hard and unyielding, but because it is flexible and gives slightly under pressure without breaking. Polycarbonate has an excellent memory so it returns to its original shape.

UL FLAMABILITY RATING

Horizontal Burn Classification UL94 H-B Rating. Vertical Burn Classification UL9034 V-O and V-2 Rating

MAINTENANCE

Landscape Forms' Polycarbonate panels may be cleaned by gently washing with mild detergent in a lukewarm water solution using a soft cotton cloth. Rinse well with clean water and wipe dry with a soft cotton cloth.

SAMPLES

To receive a sample, contact the Landscape Forms Sales/Service team at 800.521.2546.

MECHANICAL PROPERTIES:

Property	Test Method	Units	Value
PHYSICAL			
Specific Gravity	ASTM D792		1.20
Refractive Index @ 77 ° F	ASTM D542A		1.586
Light Transmission (Average), 1/8" Disk	ASTM D1003	%	88
Rockwell Hardness	ASTM D785		M70
Abrasion Resistance, Taber Abrader, CS-17 Wheel	ASTM D1044	mg/1,000 cycles	10
Water Absorption, Equilibrium, 24 hrs	ASTM D570	%	0.15
@ 73°F			0.35
@ 212°F			0.58
MECHANICAL			
Tensile Strength	ASTM D638	psi	
At Yield			9,000
Ultimate			9,500
Tensile Modulus	ASTM D638	psi	345,000
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	345,000
Flexural Endurance @ 1,800 cycles/min, 73°F, 50% RH	ASTM D671	psi	1,000
Compressive Strength	ASTM D695	psi	12,500
Compressive Modulus	ASTM D695	psi	345,000
Elongation	ASTM D638	%	110
Poisson's Ratio			0.37
Izod Impact Strength	ASTM D256A	ft-lbs/in	
Notched @ 1/8"			12 -to- 16
Unnotched @ 1/8"			60 (no failure)
Tensile Impact Strength, S-Type Specimen			225 -to- 300
Shear Strength			
At Yield			6,000
Ultimate			10,000
Shear Modulus	ASTM D732	psi	114,000
Deformation Under Load @ 4,000 psi	ASTM D621	%	
@ 73°F			0.2
@ 158°F			0.3

MECHANICAL PROPERTIES:

Test Method	Units	Value	
ASTM D696	In/in/°F	3.75 x 10-5	
ASTM C177	Btu.in/hr.ft2.°F	1.35	
	cal/gm/°C	0.30	
ASTM D648	°F		
		270	
		280	
ASTM D746	°F	-211	
ASTM D150			
		2.96	
		3.17	
ASTM D257	ohm-cm	8.2 x 1016	
ASTM D150		0.0009	
		0.01	
ASTM D495	sec		
		10 -to- 11	
		120	
ASTM D635	in	<1	
	ASTM D696 ASTM C177 ASTM D648 ASTM D746 ASTM D150 ASTM D257 ASTM D150 ASTM D495	ASTM D696	ASTM D696