

## High quality extruded polycarbonate sheets

Monogal (Plazcarb) Polycarbonate extruded sheet is a very durable sheet that has high impact resistance. Monogal is stronger, usable in a higher temperature range and has better light transmission than many kinds of glass. Half the weight of glass and virtually unbreakable, Monogal sheets meet the stringent demand of applications such as heavy machinery, automotive, safety and construction, skylights and flat or curved glazing for architectural applications. A special co-extruded layer is provided on one or both sides for enhanced long term weather resistance.



## Features and Benefits

- Virtually unbreakable
- High impact resistance
- High clarity & light transmission
- UV protective layer - 1 or 2 side
- High flame resistant
- Half the weight of glass
- Easy to machine, handle and install

## Applications

- Glazing
- Roofing and windows
- Wind shields
- Noise reduction barriers
- Street furniture
- Lighting and signage
- Thermoforming, vacuum forming
- Fabricated parts



## Monogal (Plazcarb) High quality polycarbonate solid sheets

General Properties	Method	Units	Value
Density	ASTM D 792	g/cm <sup>3</sup>	1.2
Light transmission (Depending on thickness)	ASTM D 1003	%	81 - 90
Refractive index	ASTM D 542		1,585
<b>Mechanical</b>			
Tensile Strength at yield	ASTM D 638	PSI	9,300
Tensile Modulus	ASTM D 638	PSI	335,620
Elongation at break	ASTM D 638	%	>100
Flexural Strength	ASTM D 790	PSI	13,450
Flexural Modulus	ASTM D 790	PSI	338,690
Rockwell hardness	ASTM D 785	M-scale	70
Impact resistant - Izod Notched @0.125"	ASTM D 256	ft.lbs/in	18
<b>Thermal</b>			
Heat Deflection Temperature under load of 264 PSI	ASTM D 648	°F	270
Vicat softening temp (50N)	ASTM D 1525	°F	290
Coefficient of Thermal conductivity	ASTM D 177	BTU-in/hr-ft <sup>2</sup> • °F	0.2
Coefficient of linear thermal expansion - parallel	ASTM D 696	in/in °F	3.8 • 10 <sup>5</sup>
Flammability**	UL-94	class	HB to V0
<b>Electrical</b>			
Volume Resistivity	ASTM D 257	Ω • cm	8.2 • 10 <sup>15</sup>
Surface Resistivity, dry	ASTM D 257	Ω	6 • 10 <sup>15</sup>
Dissipation Factor 1Mhz	ASTM D 150		0.009
Dissipation Factor 100Hz	ASTM D 150		0.0006

### DIMENSIONS

Thickness: 0.027" to 0.590"  
 Width: 39.37" to 84.25"  
 Length: 19.68" to 236.22"

All sheets are also available cut to size, according to customer requirements.

### COLORS

**Transparent:** clear, brown, smoke brown, grey, smoke grey, blue, light green

**Translucent:** Opal, diffuser

**IR Block:** green, silver, pearl

**Opaque:** black, blue

### TYPES

**Monogal PC solid GP** No UV protective layers

**Monogal 1UV\*** PC solid, 1 side UV protective layer

**Monogal 2UV\*** PC solid, 2 sides with UV protective layers

**Monogal F** PC solid, fire retardant improved, 1 or 2 sides UV protective layer

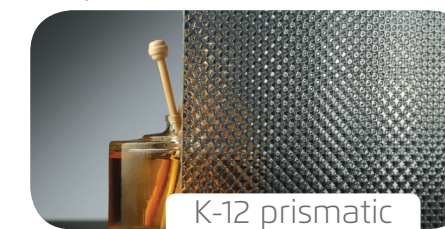
**Monogal Pax** Excellent formability, easy machining, for low temp applications, opaque

**Monogal Embossed** (on 1 side)

**Monogal TOP** thin optical sheet

**Monogal LED** for LED illumination

**Monogal AG** - Anti-Glare surface, 2 sides UV protective layers



K-12 prismatic



G-Tech

### Embossed sheets

Pattern	Thickness	Width	Length
Lizard	0.067" - 0.197"	39.37" - 80.71"	19.68" - 236.22"
G-Tech	0.067" - 0.197"	39.37" - 80.71"	19.68" - 236.22"
K 12	0.110" - 0.197"	23.62" - 59.05"	19.68" - 236.22"
Pinspot	0.110" - 0.197"	23.62" - 59.05"	19.68" - 236.22"
Cracked ice	0.110" - 0.197"	23.62" - 59.05"	19.68" - 236.22"
Non reflect	0.039" - 0.118"	49.21"	19.68" - 236.22"
Aqua	0.067" - 0.197"	23.62" - 59.05"	19.68" - 236.22"

\* **10 Year Limited Guarantee** Monogal (Plazcarb) sheets are guaranteed for 10 years for light transmission and stability of mechanical properties as detailed in our guarantee.

\*\* **Flammability** for Monogal Standard Grade: UL-94 HB (0.03" to 0.39") - Monogal F Grade: HL-94 V0 (from 0.08" to 0.5")