

POLYCARBONATE PANELS

Our corrugated polycarbonate sheets are specifically designed for roof light and sidelight applications. They offer a remarkable blend of strength and impact resistance, along with exceptional optical clarity and light transmission. This lightweight material is perfect for various uses, including industrial, agricultural, horticultural, leisure, and DIY projects that demand highperformance features. These polycarbonate roof lights can either create complete roof coverings or be integrated into any corrugated metal roofing and cladding system.

SAMPLE PACKAGES AVAILABLE

Classic Aq Panel Cattle Barn

The durable and lightweight nature of polycarbonate panels makes them an ideal choice for constructing cattle barns. Their transparency allows for natural light to flood the interior, creating a healthier and more comfortable environment for the animals.



BENEFITS:

- ENERGY SAVING
- HIGH NATURAL LIGHT TRANSMISSION
- OPTICALLY CLEAR
- DAMAGE AND IMPACT RESISTANT
- LIGHTWEIGHT AND EASY TO HANDLE
- WEATHER RESISTANT
- CO-EXTRUDED UV PROTECTION
- EXCELLENT FIRE PERFORMANCE
- CHEMICAL RESISTANCE

APPLICATIONS:

- BARNS
 - FARM BUILDINGS STORAGE FACILITIES CATTLE SHEDS
 - BARNDOMINIUMS
 - CHICKEN COOPS
- HOG BARNS
- GREENHOUSES

RECREATIONAL BUILDINGS

MANUFACTURING FACILITIES

POLYCARBONATE PANEL OPTIONS

Corrugated polycarbonate sheet combining strength and impact resistance with high optical clarity and light transmission. Use as a complete roof covering or incorporate into any corrugated metal roofing and cladding system.

Classic Ag Panel

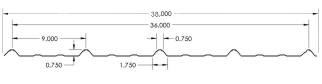
Color	Light Transmission	Solar Heat Gain	Lengths Available	Reference #
Clear	88%	0.84	8', 10', 12', 14', 16', 20'	7612
Soft White	73%	0.54	8', 10', 12', 14', 16', 20'	7634
Opal	46%	0.54	8', 10', 12', 14', 16'	7613
Solar Grey	20%	0.30	8', 10', 12', 14', 16', 20'	7632

Support Centers: 30^{5/16"} (770mm)

Sheet Width: 38" (963.5mm)

Coverage Width: 36" (914.4mm)

Thickness: 1/32" (0.8mm)

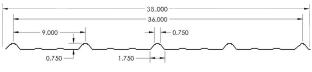


9" On Center

Heavy-Duty Classic Ag Panel

Color	Light Transmission	Solar Heat Gain	Lengths Available	Reference #
Clear	88%	0.84	12'	76121002
Opal	46%	0.54	12'	76131002

Support Centers: 35^{5/16"} (990mm) Sheet Width: 38" (963.5mm) Coverage Width: 36" (914.4mm) Thickness: 3/64" (1.2mm)



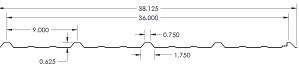
9" On Center

Pro Panel II

Color	Light Transmission	Solar Heat Gain	Lengths Available	Reference #
Clear	88%	0.84	8', 10', 12'	7618
Opal	46%	0.54	12'	7619
Solar Grey	20%	0.30	12'	7620

Support Centers: 27^{9/16"} (700mm)

Sheet Width: 38^{1/8"} (968.2mm) Coverage Width: 36" (914.4mm) Thickness: 1/32" (0.8mm)

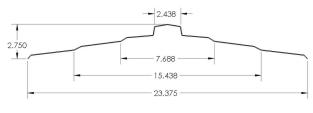


9" On Center

Ridge Cap

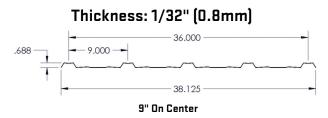
Color	Light Transmission	Solar Heat Gain	Lengths Available	Reference #
Clear	88%	0.84	10'	76070000
Soft White	73%	0.54	10'	76071000
Opal	46%	0.54	10'	76070001

Support Centers: As per roof sheet Sheet Width: 23^{3/8"} (593.9mm) Coverage Width: 23^{3/8"} (593.9mm) Thickness: 3/64" (1.2mm)



C	CD2000					
	Color	Light Transmission	Solar Heat Gain	Lengths Available	Reference #	
	Clear	88%	0.84	12'	7630	
Support Centers: 21-29" (533-737mm) Sheet Width:38 ^{1/8} " (968.6mm)						

Coverage Width: 36" (914.4mm)





POLYCARBONATE PANEL OPTIONS

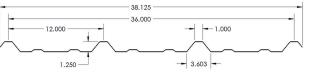
Commercial Grade, R-Panel

Color	Light Transmission	Solar Heat Gain	Lengths Available	Reference #
Clear	88%	0.84	12'	7614
Opal	46%	0.54	12'	7615

Support Centers: 46" (1170mm) Sheet Width: 381/8" (968.2mm)

Coverage Width: 36" (914.4mm)

Thickness: 1/32" (0.8mm)



12" On Center

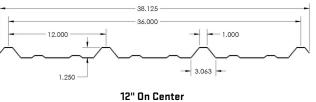
Heavy-Duty, R-Panel

Color	Light Transmission	Solar heat Gain	Lengths Available	Reference #
Clear	88%	0.84	12'	7616
Opal	46%	0.54	12'	7617

Support Centers: 59" (1500mm) Sheet Width: 381/8" (968.2mm)

Coverage Width: 36" (914.4mm)

Thickness: 1/16" (1.6mm)



POLYCARBONATE PANEL SPECS

Properties	Test Method	Value	Units
	Mechanical Properties		
Tensile strength at yield	ASTM D 638	>62	MPa
Tensile strength at break	ASTM D 638	>72	MPa
Elongation at yield	ASTM D 638	7	%
Elongation at break	ASTM D 638	150	%
Modulus of elasticity	ASTM D 638	>2300	MPa
	Physical Properties		
Density	ASTM D 792	0.043	lb/in ³
Refractive Index	ASTM D 542	1.586	
Water absorption in standard atmosphere	ASTM D 570	0.15	%
Mold shrinkage	ASTM D 955	0.5-0.7	%
	Thermal Properties		
Heat Distortion Temperatures			
-Method B (0.45 MPa) annealed	ASTM D 648	293	Fahrenheit
-Method A (1.81 MPa) annealed	ASTM D 648	287.6	Fahrenheit
-Method A (1.481 MPa) annealed	ASTM D 648	257	Fahrenheit
Specific heat	ASTM D 2766	1.25	kJ/kg.K
Thermal conductivity	ASTM C 177	0.2	W/K.m
Coefficient of thermal expansion	ASTM D 696	68	m/m.Kx10 ⁻⁶



POLYCARBONATE PANEL CARE

STORAGE & SHEET PREPARATION:

- Store sheets flat and indoors, UV-protected side out.
- Cut with a fine-tooth saw at a shallow angle.
- Optimal sheet lengths are up to two purlin spacings, max 4m. Install with corrugation vertical and roofs at a minimum 5° slope.

THERMAL MOVEMENT & FIXING:

- Polycarbonate expands/contracts with temperature changes.
- Drill oversized holes (6mm larger for sheets up to 2m, plus 3mm for each additional meter).
- Avoid overtightening to prevent damage.
- Remove dust when drilling into fiber cement and use sealing tapes per guidelines.

FINISHING:

- Use compatible sealants and light-colored accessories.
- Optimal sheet lengths are up to two purlin spacings, max 4m.

SAFETY:

• Employ safe working methods and appropriate safety equipment. Do not walk on Polycarbonate Panels.

CLEANING:

- Clean sheets periodically with lukewarm water and mild soap.
- Rinse and dry with a soft cloth, avoiding scrubbing, steam cleaning, and harsh chemicals.
- Do not use abrasive materials or overly alkaline cleaners.





RIDGE CAP SUPPORT BRACKETS

62110000 RIDGE CAP SUPPORT BRACKET



62110002 RIDGE CAP SUPPORT BRACKET-EXT.





Heavy-Duty, R-Panel - Clear

Greenhouse Application Heavy-Duty R-Panel sheets are robust, lightweight, and easy to install, minimizing the need for frequent, expensive repairs. Enhance natural daylight for crop growth or provide a pleasant environment for livestock with various solar-controlling tints. By maximizing natural light, you can decrease reliance on artificial lighting, leading to lower operating costs and reduced energy consumption. Additionally, the co-extruded UV protection layer blocks over 98% of harmful UV rays, safeguarding both plants and animals from the sun's detrimental effects.



