

 **Macrolux**<sup>®</sup>

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**IQ RELAX**  
**POLYCARBONATE SHEETS**

HIGH PERFORMANCE

## General Description

Macrolux® IQ-Relax is made from polycarbonate resin and coextruded into lightweight heat reflective panels. These panels are designed to reflect the solar energy while still letting in natural light. Macrolux® IQ-Relax are manufactured with state-of-the-art technology.

IQ-Relax polycarbonate multi wall offers high thermal insulation without sacrificing natural light. These Macrolux® IQ-Relax panels are coextruded with an advanced additive technology that adapts to weather conditions and helps maintain a comfortable temperature inside your structure. During summer months, IQ-Relax reflects heat and solar energy while in the winter it keeps in the heat.

Macrolux® IQ-Relax reduces significant energy costs, is virtually unbreakable, offers high light transmission and supports environmental sustainability.

## Advantages

- Excellent thermal insulation.
- UV coextruded protection.
- High natural light transmission.
- Light-weight.
- Virtually unbreakable.
- High impact resistance.
- Fire rated as self-extinguishing.
- Maintains structural integrity up to 248 degrees Fahrenheit.

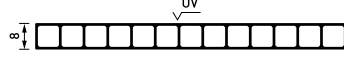

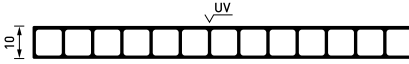
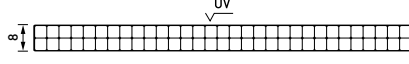
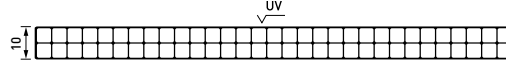
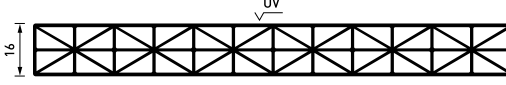


## Benefits

- Energy savings.
- Sustainable and recyclable.
- UV resistance.
- 15 year limited warranty against loss of light transmission from yellowing and breakage caused by hail.



Range

VARIETY	PROFILE	THICKNESS	COLOR
Twin Wall		8 mm	 IQ-Relax (Iridescence depending on the observation angle)
		10 mm	
Triple Wall		8 mm	
		10 mm	
X Wall		16 mm	

Technical Characteristics

PRODUCT THICKNESS	REFLECTED LIGHT	LIGHT TRANSMISSION	REFLECTED VISIBLE LIGHT	SHADING FACTOR	SOLAR HEAT GAIN COEFFICIENT	R FACTOR (Btu/hr-Ft <sup>2</sup> -F)	U VALUE	TOTAL SOLAR TRANSMISSION (%TST)
Twin Wall / 8 mm	0.47	0.47	0.33	0.47	0.41	1.72	0.58	41
Twin Wall / 10 mm	0.49	0.45	0.31	0.47	0.41	1.85	0.54	41
Triple Wall / 8 mm	0.47	0.47	0.33	0.43	0.37	1.85	0.54	37
Triple Wall / 10 mm	0.49	0.45	0.31	0.43	0.37	1.96	0.51	37
X Wall / 16 mm	0.60	0.28	0.20	0.38	0.33	2.86	0.35	33

Physical Characteristics

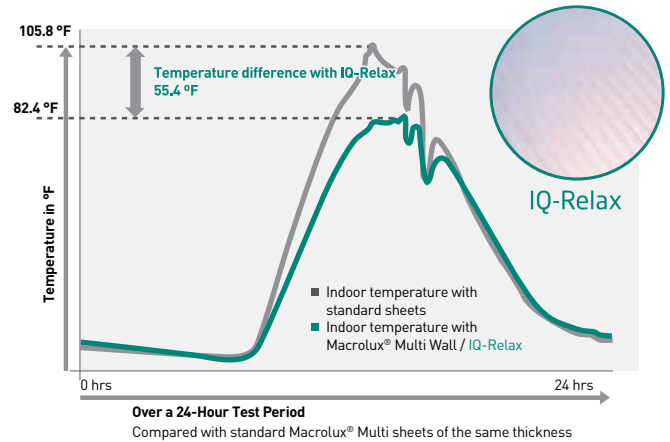
PROFILE	THICKNESS (mm)	WEIGHT (lbs/ft <sup>2</sup> )	WEIGHT (kg/m <sup>2</sup> )	STANDARD WIDTH (m)	STANDARD LENGTH (ft)	ACOUSTIC INSULATION (db)	COLD FORM BENDING (in)
Twin Wall	8 mm	0.31 0.35	1.5 1.7	47.25" 48" 71.25" 72" 82.67"	24'	14	49.21"
	10 mm	0.35	1.7			16	59.05"
Triple Wall	8 mm	0.31 0.35	1.5 1.7			14	51.18"
	10 mm	0.35	1.7			N/D	N/D
X Wall	16 mm	0.51	2.5			21	118.11"

>Based on ISO 1077-2

## IQ-Relax Technology

Macrolux® IQ-Relax polycarbonate smart technology integrates a special formulated additive into the sheet which adapts to environmental conditions. The sheet prevents heat build up from solar radiation without sacrificing natural light transmission.

Tests were conducted in covered sunrooms with no ventilation and the Macrolux® IQ-Relax reduced temperatures by 55 degrees Fahrenheit over sunrooms covered with traditional polycarbonate glazing without compromising the natural light transmission.



## Typical Applications

- Industrial – skylights, sidelights, canopies, doors, windows.
- Commercial – skylights, walkways, carports, solariums, canopies, pool enclosures, sunrooms.
- Residential – sunrooms, terraces, carports, patios, skylights, windows, doors, walkways.



This information and our product application recommendations are illustrative and must be verified for each project. The pictures presented are merely illustrative.