# **Greenhouse Covering**

When agriculture is nature-dependent, a love-hate relationship evolves between the farmer and the forces of nature. Although the farmer cannot manage without the forces of nature, they can also destroy everything that the farmer has built. Polygal sheets enable the farmer to enjoy the benefits of nature while also protecting the produce from harmful weather conditions.

These 6-10 mm thick sheets by Polygal offer a number of advantages - available in different levels of transparency, they are flexible, heat and weather resistant, provide insulation, and are easy to install.

### Quality of Light for Better Plant Growth

Polygal sheets transmit light better than other greenhouse materials and make a critical difference in crop yields.

- Diffuse Light: Polygal sheets diffuse transmitted light More light reaches the less exposed parts of the plant canopy and improves total growth.
- Less Shade: Polygal is the only sheet available in up to 2.1 m width and unlimited length. Fewer connecting frames and structural supports mean significantly less shade.

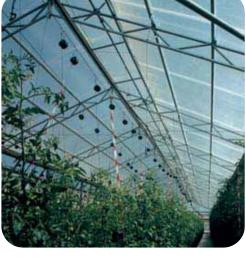
#### The Best Thermal Insulation for Energy Cost Savings

Designed especially for greenhouses, Polygal's advanced multi wall sheets provide the best thermal insulation of any greenhouse covering material.

### Polygal Sheets:

- Save significantly on heating expenses
- Scale-down heating system requirements
- Provide lower heat-transfer coefficient







Greenhouse System	Reduction of Energy Consumption (%)	Cost Savings (%)
Single layered glass	0	0
Solid layered Polycarbonate	7	7
Single layered glass plus thermal curtain	41	29
Polygal multi wall sheet	38	27
Polygal multi wall sheets plus thermal curtain	59	39





### 10 - Year Guaranteed Anti-Fog Performance

Polygal's advanced Anti-Fog coating provides the most effective, long-term

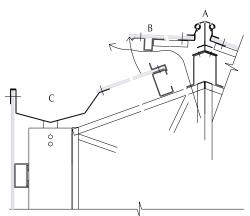
protection against condensation drip damage.

- Less drop formation allows better light transmission
- Reduces disease and other damage from dripping
  Anti-Fog coating covered by a 10-Year Warranty

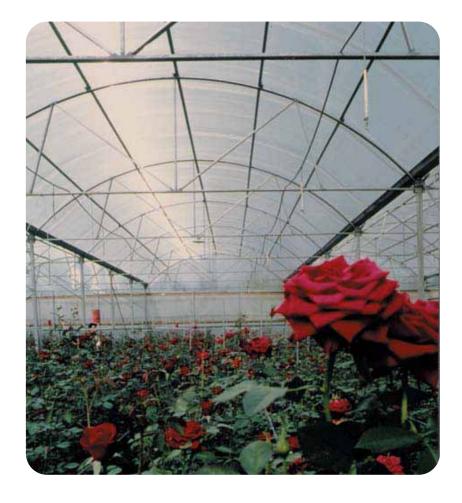
### Longer Greenhouse Service Life

Strong and flexible, Polygal sheets are virtually unbreakable and effectively withstand hail and vandalism damage. An advanced UV-protective layer safeguards sheet transparency and mechanical properties, even with exposure to extreme weather conditions.

Polygal sheets are backed by a 10-Year Warranty against light transmission reduction, yellowing and hail damage.



Installation drawing of a greenhouse with roof vent



## **Specifications**

Product	Structure	Thickness (mm)	Weight g/m² (lb/ft²)	Standard width (mm)	Minimum radius for cold bending arches	U-Factor ASTM C177 TNO (W/m² x °C) [Btu / (h x ft²x f°)]	Light Transmission by ASTM D-1003 (%)
Polygal Standard		6	I 300 (0.27)	980 1050 1200 1220 1250 2100	1.05 (3'5'')	3.6 (0.63)	80
Januara		8	1500 (0.31)		I.4 (4'7'')	3.3 (0.58)	80
		10	1700 (0.35)		I.75 (5'9'')	3.0 (0.53)	79
Triple Clear (PC3)	-	8	1500 (0.31)		1.4 (4'7'')	3.3 (0.58)	77
		10	I700 (0.35)		1.75 (5'9'')	3.0 (0.53)	76

Polygal is the leading manufacturer of structured Polycarbonate panels, and is known throughout the world for the outstanding quality of its products.

