

POLYGAL®  
TITAN

## TITAN

### Strong and Stiff Multi-Layer Panel

TITAN's internal cross-brace structure gives these panels twice the strength and rigidity of equivalent standard Polycarbonate panels. Polygal TITAN provides a quality solution that is both intelligent and advanced for use where withstanding heavy loads is required. TITAN is available in 10mm and 16mm thicknesses.

#### Principal Uses

Roofing and glazing of structures built in areas subject to difficult climatic conditions. Their special strength makes it possible to reduce construction costs.

#### Advantages

Very light weight, six times lighter than glass and three times lighter than Acrylic of identical thickness. TITAN withstands wind and snow loads better than standard 10mm and 16mm thick panels.

#### Unbreakable

Polygal panels are 200 times stronger than glass and 8 times stronger than Acrylic panels. They have passed licensing tests according to ASTM D5628-95, BS 2782 and DIN 53443 standards.

#### Excellent Insulation

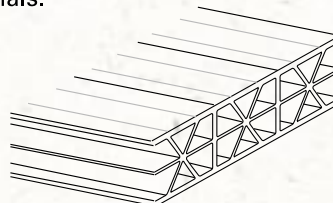
TITAN's special structure traps air inside the hollow channels between the braces. This serves as an excellent insulator which contributes to savings of up to 50% on heating and cooling expenses in comparison with monolythic panels.

#### UV Radiation Resistance

TITAN panels feature an external protective layer against UV radiation which ensures long-term maintenance of optical properties even during intense exposure to UV radiation. The panels are opaque to all short wavelengths from 385 nanometers and down, and thus limit damage to people and property caused by UV rays.

#### Flame Retardancy

The special composition of the material is flame retardant and complies with the accepted standards for flame retardant materials.



### Light Transmission

TITAN panels are ideally suited for use in applications where controlled light transmission is required.

### All Weather Conditions

TITAN panels withstand harsh climatic conditions and service temperatures ranging from -40°C to +120°C.

### Prevent Condensation Build-up

Polygal panels can be supplied with a special Anti-Fog coating that prevents condensation build-up. The coating is resistant to chemicals, does not wash or peel off, and is covered by a 10-year warranty.

### Easy Installation

Titan panels are easy to install using standard work tools. They are also suitable for hot and cold bending.

### Standard Colors

Clear, Ice, Bronze - other shades and colors are also available.

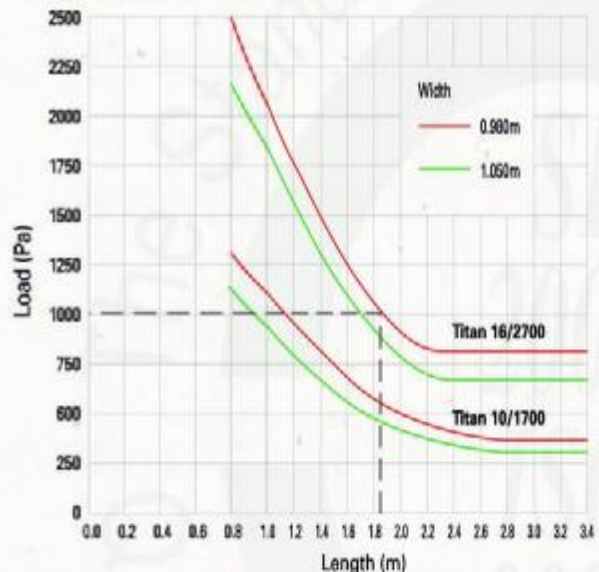
### Especially Lightweight

Polygal panels weigh one sixth the weight of glass and one third the weight of Acrylic of identical thickness. This makes it possible to construct lighter buildings and reduce installation costs.

### Technical Specifications

Color Availability	Clear, Bronze, Ice
Weight	10 mm - 1700 gr/m <sup>2</sup> 16 mm - 2700 gr/m <sup>2</sup>
Sheet Thickness	10 mm, 16 mm
Minimum Radius for Cold Bending	10 mm - 1.75 m 16 mm - 2.8 m
Standard Widths	980 mm, 1050 mm, 1200 mm
Standard Lengths	3.0m; 4.0m; 6.0m
Thermal Coefficient (U-Factor ASTM-C236)	10 mm - 2.5 W/m <sup>2</sup> ·°C 16 mm - 2.2 W/m <sup>2</sup> ·°C
Light Transmission	Clear - 61% Ice - 32% Bronze - 42%
Thermal Expansion	Clear, Ice - 2.5 mm/m Bronze - 4.5 mm/m
Minimum Recommended Roof Slope	6°

Polygal TITAN 10 mm and 16 mm  
Maximum recommended distance between supports (Length)



### How to use the graph:

For example, for a panel 16mm thick and 980 wide, if wind load is 1000 Pa (axis y), the maximum recommended distance between the supports is 1850mm (x axis).

Polygal is the leading manufacturer of structured Polycarbonate panels, and is known throughout the world for the outstanding quality of its products. Polygal was the first manufacturer in the world to create structured Polycarbonate panels, and over the last 25 years, has developed and produced a broad spectrum of these products, which are successfully covering a full array of structures worldwide.



PLASTICS INDUSTRIES LTD.

POLYGAL Plastics Industries Ltd.  
Ramat Hashofet 19238  
Israel  
Tel: 972-4-959 6222  
Fax: 972-4-959 6284  
E-mail: sales@polygal.co.il  
Web: www.polygal.com

The data in this advertisement are provided in good faith and constitute general information without commitment, and no warranty is given or implied. Polycarbonate is a combustible thermoplastic that complies with various international standards, as customary in each country. Avoid exposure to excessive heat or aromatic cleaning solvents. Normal fire precautions should be taken to protect against combustion.