

Product data sheet, May 2024

## Exolon® multi UV 5X/16-25

# Multiwall polycarbonate sheet



### Your benefits:

- optimised area weight
- good load bearing
- high surface quality

**Exolon® multi UV 5X/16-25** is a 5-wall polycarbonate sheet of 16 mm thickness, with an X-structure for enhanced stiffness. It combines high light transmission, good load bearing properties, good thermal insulation and excellent weather resistance. The sheet is lightweight, impact resistant and easy to install.

**Exolon® multi UV 5X/16-25** is ideal for flat glazing applications. It can also be installed as cold curved barrel vault.

- conservatories
- greenhouses
- covered walkways
- carports, porches,
- skylights, northlight glazing
- barrel vault

The sheets are produced with a coextruded UV-protective layer, which is homogeneously fused with the sheet material. This UV-protected side must be installed facing upwards/outwards. It provides **Exolon® multi UV** with a highly effective protection against weathering, guaranteed for 10 years.

### On request:

### **IQ-Relax**

**Exolon® multi IQ-Relax** are opal white sheets, which dramatically reduce the heat of the sunlight, allowing the visible light to pass through. More light, less heat!

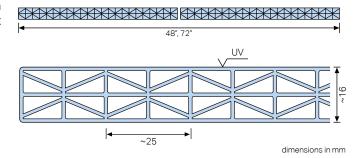
## Two side UV-protection

#### ClimateControl

**Exolon® multi UV ClimateControl clear** is a transparent polycarbonate sheet that largely absorbs infrared light on both sides. This therefore significantly reduces heat transfer whilst simultaneously providing a high level of light transmission.

Area weight	0,491 lb/sqft			
Sheet width	48", 72"			
Possible delivery lengths	max 38 ft.			
Minimum permissible cold-bending radius (1)	94" mm			
Light transmittance τ <sub>D65</sub> (UV-absorbing)	clear 1099: white 1146: IQ-Relax: CC clear 2070: bronze 1845:	ca. 64 % ca. 55 % ca. 47 % ca. 58 % ca. 27 %		
Heat transfer coefficient Ug (3)	0.360 BTU/h ft2 F			
Possible expansion due to heat and moisture	1/9" per 1'			
Max. service temperature without load	248 °F			
Certificates <sup>(2)</sup>	Class A - E84 Class CC1 - D635 Tsi > 650°F - D1929			

<sup>(1)</sup> The cold-bending must be parallel to the ribs of the sheets, never crosswise (risk of buckling). The sheets can be cold bent at a min. radius of 150 times of the sheet thickness. There may appear an optical distortion of the internal layers. This has no negative influence on the mechanical properties of the product providing our guidelines and installation tipps are followed correctiv.





<sup>[2]</sup> Fire certificates are limited in time and scope, always check if the mentioned certificate is valid for the purchased Polycarbonate sheet type at the date of delivery. Polycarbonate sheets may change their fire behavior due to ageing and weathering. The indicated fire rating was tested on new / unweathered Product in accordance with the indicated fire classification standards,

<sup>(3)</sup> Heat transfer coefficient Ug, calculated value

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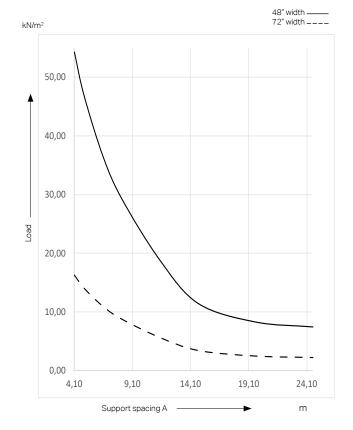
Exolon Group S-Line, the standard product line, represents a range of certified quality products which offer the reliable solution for most applications.

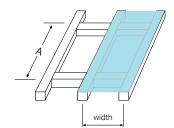
When using Exolon® multi UV 5X/16-25 in roof or wall installations, the forces exerted by snow and wind loads must be absorbed by a suitable substructure. We recommend implementing the support distance indicated in the diagram for the respective loads.

The diagram shows the load-bearing capacity of **Exolon® multi UV 5X/16-25** (supported on all sides, rebate depth  $\geq$  0.78") with a standard profile on the longitudinal sides. The load-bearing curves enable the user to calculate the actual load-bearing characteristics of the multi-wall sheets in their support construction.

In general, experience has proven that a safety factor of 1.3 is adequate with regard to the measured resistance values. This safety factor is included in the load tables and diagram.

# These statements do not replace the specified national certificates, e.g. building inspectorate approval.





Load	psi	15,7	20,9	26.1	31.3	41.8	Width in inches
Span [feet]		12.9	10.8	9.2	7.7	5.7	48"
A		4.3	_	_	_	_	72"

Exolon Group also produces solid sheets in polycarbonate (Exolon® GP) and in polyester (Vivak® and Axpet®). For more information, take a look at www.exolongroup.com.



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