Palram’s Cannabis Greenhouse Solutions

Main Benefits:

- SECURITY
- LIGHT DIFFUSION
- HIGH LIGHT TRANSMISSION UP TO 90%
- UV PROTECTION
- BUILT IN CONDENSATION CONTROL
- WIDE SERVICE TEMPERATURE RANGE
- A COMPLETE SOLUTION - All your glazing needs under one roof
SUNLITE Plus built-in condensation control glazing system for commercial greenhouse

**Thermal Properties**

SUNLITE Plus is available in various configurations. Lightweight and easy to install, our insulated panel accommodates a wide range of temperatures.

<table>
<thead>
<tr>
<th>Structures</th>
<th>Thickness</th>
<th>U Value (W/m² K)</th>
<th>R (m²K/W)</th>
<th>Light Transmission</th>
<th>Drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin wall R</td>
<td>8mm</td>
<td>3.3</td>
<td>0.303</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Twin wall R</td>
<td>10mm</td>
<td>3.0</td>
<td>0.333</td>
<td>79%</td>
<td></td>
</tr>
<tr>
<td>Triple wall RS</td>
<td>8mm</td>
<td>3.0</td>
<td>0.333</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Triple wall RS</td>
<td>10mm</td>
<td>2.7</td>
<td>0.37</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Triple wall T&amp;RS</td>
<td>16mm</td>
<td>2.3</td>
<td>0.434</td>
<td>76%</td>
<td></td>
</tr>
</tbody>
</table>

**Light Transmittance**

SUNLITE Plus provides up to 80% light transmittance with high levels of light diffusion. Its excellent thermal insulation properties are crucial in cold climates.

**Light Deprivation**

SUNLITE Eclipse multiwall opaque polycarbonate panels for light deprivation applications

Engineered for complete light deprivation, with a highly reflective, white outer skin and a black core, SUNLITE Eclipse ensures 0% light transmission, yet allows for high reflectance for interior lighting. Its multiwall design offers insulation to help maintain consistent temperatures inside your structure. SUNLITE Eclipse is a durable solution for cannabis greenhouse, processing and storage areas.

**Security, Safety & Privacy**

Virtually Unbreakable, suitable for extreme load bearing and impact resistance, our polycarbonate solutions provides the highest weather resistance and crop protection available. You will not need to worry about storms, nor for visibility from outside the structure.

**Typical Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Method*</th>
<th>Conditions</th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>D-792</td>
<td></td>
<td>g/cm³</td>
<td>1.2</td>
</tr>
<tr>
<td>Heat deflection temperature (HDT)</td>
<td>D-648</td>
<td>Load 1.82 MP</td>
<td>°C</td>
<td>135</td>
</tr>
<tr>
<td>Service Temperature - Short term</td>
<td></td>
<td></td>
<td>°C</td>
<td>-50 to +120</td>
</tr>
<tr>
<td>Service Temperature - Long term</td>
<td></td>
<td></td>
<td>°C</td>
<td>-50 to +100</td>
</tr>
<tr>
<td>Coefficient of linear thermal expansion</td>
<td>D-696</td>
<td></td>
<td>mm/mm °C</td>
<td>6.5x10⁻³</td>
</tr>
<tr>
<td>Tensile strength at yield</td>
<td>D-638</td>
<td>10 mm/min</td>
<td>MPa</td>
<td>62</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>D-638</td>
<td>10 mm/min</td>
<td>%</td>
<td>&gt;90</td>
</tr>
<tr>
<td>Impact falling dart</td>
<td>ISO 6603/1</td>
<td></td>
<td>J</td>
<td>40-100</td>
</tr>
<tr>
<td>Practical thermal expansion/contraction</td>
<td></td>
<td></td>
<td>mm/m</td>
<td>X</td>
</tr>
</tbody>
</table>

* ASTM except where noted otherwise.
Palram’s Cannabis Greenhouse Solutions

SUNTUF Plus corrugated polycarbonate condensation control roofing system for commercial greenhouses.

Light Transmittance

SUNTUF Plus corrugated polycarbonate condensation control roofing system for commercial greenhouses.

SUNTUF Plus provides 90% light transmission with high levels of light diffusion, and encourages consistent growth with optimal light distribution.

Built-In Condensation Control

SUNTUF® Plus Maintains clarity and light transmission
Standard Sheet Covered with condensation drip

Embosed

Offers high light transmission and good diffusion for excellent flexibility.

90% light transmission. 20% Diffusion.

Hemispheric Light Transmittance

At N45° to N55° latitude, during the 5 critical months between November and March, the sun shines most of the day at a 15°-25° angle with the horizon. SUNTUF Plus refracts light at low angles of incidence, reduces reflection, and facilitates more light penetration into the greenhouse than any other material.

SUNTUF Plus UV resistance

SUNTUF Plus maintains its high optical properties over time. A protective layer prevents UV related degradation of the material and makes SUNTUF Plus an ideal greenhouse cover.

Weathering resistance of clear SUNTUF Plus 0.8 sheet

Weathering resistance of clear SUNTUF Plus 0.8 sheet

100% - 0% 0 500 1000 1500 2000

0.0% 89.2% 88.9% 88.9% 88.9%

100 hours of QUV machine are equivalent to 1 year exposure to UV radiation in areas of 160-180 kl.ys, such as the Mediterranean coast, Mexico & Central America, Central & south Africa, Australia & southeast Asia.

The test was carried out according to ASTM G-154, using 313nm lamps producing 0.75 W/m²/nm at 47°C for 20 hours followed by 4 hours of darkness under condensation.

In as much as Palram Industries has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the material’s suitability for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any Palram Industries patent covering such use or as recommendations for use of such materials in the infringement of any patent. Palram Industries or its distributors cannot be held responsible for any losses incurred through incorrect installation of the material. In accordance with our company policy of continual product development you are advised to check with your local Palram Industries supplier to ensure that you have obtained the most up to date information.

© 1997 Palram Industries Ltd | SUNTUF is a registered trademark of Palram Industries Ltd.