SUNTUF®
Construction and Architecture Applications
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The sky is the Limit
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Introduction

SUNTUF corrugated polycarbonate sheet is an outstanding roofing material that offers superior physical properties. It is favored by professionals for noncorrosive structural roofing and siding and a multitude of other applications due to its high impact strength and wide service temperature range.

SUNTUF represents Palram’s cutting edge polycarbonate corrugation technology and the infinite possibilities it opens for architects and designers. With virtually limitless corrugation capabilities, the profile design can be used strictly for structural durability and drainage. A design based on this type of panel can lower thickness requirements and make most fitting accessories redundant. Palram’s experience with architectural projects support allows in-depth assistance with design and implementation.

SUNTUF is offered in a multitude of colors and solar properties to suite diverse applications, and can also be tailored per project to create optimal climatic conditions within any given structure.

Architectural Project Support

In the last two decades, Palram’s project support team has helped specify, adapt, support and facilitate architectural challenges around the globe. Among the team members are civil engineers, designers, technical supporters, plastics engineers and more. The team offers a bundle of professional services based on accumulated experience in medium and large scale projects, a part of which are displayed here.

Planning Stage Services

- Quick matching of product specification per project
- Adapting plans while preserving the architect’s vision
- Creating specific planning details for architects
- Professional consultation on planning meetings
- Expert advisory on materials and engineering
- Creating conceptual designs for given structures

Implementation Stage Services

- Creating specific installation guides per project
- On-site support in critical construction stages
- Background construction engineering supervision
- Conducting special seminars upon request
SUNTUF® Main Benefits
SUNTUF® Constructions Applications

Strength
SUNTUF sheets, manufactured from polycarbonate are virtually unbreakable. SUNTUF is extremely resistant to impact, hailstones and loads.

Low Weight
Light in weight, SUNTUF sheets are easy to handle and install.

Clarity.
Natural, clear SUNTUF exhibits the clarity of glass, transmitting up to 90% of natural light.

Cost Effective
SUNTUF combines low weight and structural strength, which results in a cost effective design and allows lighter supporting structure.

Weather resistance
SUNTUF resist wind, hail and extreme temperatures from -50°C to +120°C. An integrated UV protective layer allows SUNTUF to retain its transparency without yellowing over the course of a long lifetime of service.

10 Year Warranty
SUNTUF is warranted to retain its attractive appearance over its long lifetime with minimum maintenance.

Protection
SUNTUF does not allow harmful UV radiation to penetrate, and meets the highest flammability standards in its field.
Aviva Stadium (Lansdowne Road) - Dublin, Ireland
Palram was challenged to stretch its capabilities for this project in terms of design, production and logistics. The roofing material was characterized by low thickness panels, a requirement met by Palram’s proprietary corrugation technology. A revolutionary solution was conceived: installation of the corrugated panels perpendicular to the slope, relying on the stadium’s unique “wavy” architectural design. This allowed the panels thickness to be decreased by 65%, which made for a cost efficient solution that preserved the architect’s vision.

Project Gallery
SUNTUF has been used in a large variety of applications and projects around the world. Some of them are presented below.
The football stadium was fitted with a new roof during its renovation in 2005. The roof was specified with SUNTUF panels, which provided a cost-effective solution due to their quick installation and low weight. The white opal tinted sheets provide moderate lighting in addition to completely blocking out UV radiation.
Falkirk Stadium – Scotland
Clear SUNTUF sheets provide rain shelter for the audience while allowing high transmission to diminish shadowing of the playground.

Gas Station - Israel
Clear Blue SUNTUF panels provide partial natural lighting, while blocking harmful UV rays to protect the customers and workers.
**Australian Motors - Australia**
The car dealership, located in Wayville, South Australia, covered its outdoor display area with SUNTUF Solar Control panels, which helped achieve moderate lighting, UV blocking and reduction of heat buildup for visitors.

**Thomas A. Edison School - Columbia**
White Opal SUNTUF panels create a pleasant, natural, moderate lighting during daylight hours.
Public Swimming Pool - Israel
SUNTUF Solar Control panels are ideal for swimming pools in hot climates. They help create a cool and pleasant surroundings by reflecting some of the heat-inducing Infra-Red radiation. They also block harmful UV rays, which is crucial for the pool visitors.

Hangar 9, Tel Aviv Harbor - Israel
The hangar is an old industrial warehouse remodeled into a commercial building, home to fashion stores and coffee shops. The corrugated metal outer skin was replaced with a matching profile SUNTUF Solar-Ice panels, which made the structure look modern and pearlescent using a cost effective, practical solution.
SUNTUF® Product Range

<table>
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<tr>
<th>Product</th>
<th>Description</th>
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<tr>
<td>SUNTUF®</td>
<td>Corrugated polycarbonate sheet with integrated UV protective layer on one side.</td>
</tr>
<tr>
<td>SUNTUF® UV2</td>
<td>Corrugated polycarbonate sheet with integrated UV protective layer on both sides.</td>
</tr>
<tr>
<td>SUNTUF® Plus*</td>
<td>UV protective layer on the exterior side and anti-condensation treatment applied to the interior side.</td>
</tr>
<tr>
<td>SUNTUF® Solar Control*</td>
<td>Transmits selected percentages of daylight (20%, 35%, or 50%) while reflecting and absorbing some of the heat-generating Infra-Red radiation.</td>
</tr>
<tr>
<td>SUNTUF® Embossed*</td>
<td>Embossed or Hair Cell finish on one sides.</td>
</tr>
<tr>
<td>SUNTUF® Smart</td>
<td>Advanced heat blocking combined with low haze.</td>
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*Also available with co-extruded UV protective layer on both sides.

Color Availability

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<thead>
<tr>
<th>Group</th>
<th>Description</th>
<th>Colors</th>
</tr>
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<tr>
<td>Clear</td>
<td>Transmits up to 90% natural daylight, resulting in high lighting within the structure.</td>
<td>Clear</td>
</tr>
<tr>
<td>Transparent</td>
<td>Low haze colors offering high clarity. Breeze and Smart colors offer advanced heat blocking that reduces heat buildup while allowing a clear view through the sheet.</td>
<td>Solar Gray, Bronze, Sky Blue, Transparent Green, Smart Gray, Breeze</td>
</tr>
<tr>
<td>Translucent</td>
<td><strong>White Opal</strong>: Transmits 24-45% visible light with high light dispersion, produces mild and even lighting within the structure. <strong>Diffuser</strong>: Transmits 85% visible light with complete light dispersion, produces diffused and consistent lighting within the structure.</td>
<td>White Opal, White Diffuser, Solar Control (Solar Metallic Grey), Solar Ice, Mist Green, Smooth Cream</td>
</tr>
<tr>
<td>Opaque</td>
<td>Colors that transmit very little to no light.</td>
<td>White, Green, Blue, Red Brick</td>
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