



ONE-STOP SUPPLIER OF ENGINEERING PLASTIC



Engineering Plastic



Machining Service



Application



UVPLASTIC

Solid Polycarbonate Sheet (UVFPC-SO)

www.uvplastic.com

www.uvacrylic.com

ABOUT UVPLASTIC

2003

Founding Time

165

Staffs

50+

Countries

1200+

Clients

12+

Millions

WHO WE ARE

UVPLASTIC Material Technology Co., Ltd is a *ONE-STOP SUPPLIER* in the engineering plastic field, established in 2003 at Suzhou, China. After many years of continuous effort, we have one subsidiary and three trademarks ([UVPLASTIC](#), [UVACRYLIC](#), [VIEWSKY](#)), main business are:

1. Engineering Plastic: providing polycarbonate and acrylic in all forms;
2. Machining Service: providing the integrated machining solution for engineering plastic;
3. Application: we design and manufacture products based polycarbonate and acrylic, including [VIEWSKY Bubble Tent](#), [Geodesic Dome Tent](#), [Office Chair Mat](#), [Riot Shield](#), Mini-Greenhouse, etc.

Today, UVPLASTIC is active in architecture & construction, agriculture, medical industry, auto industry, security industry, electronic industry, POP display, optical industry, and industrial fabrication, etc.

COOPERATION PARTNER



WHY UVPLASTIC

One-Stop Supplier



UVPLASTIC is a one-stop [supplier of polycarbonate](#) and [acrylic sheets](#) in all forms. Meantime, we offer the complete system for the greenhouse, building roof, and facade system.

Machining Service



With more than 15 years of experience and high efficient working style, UVPLASTIC can build the prototype and will make customer's ideas come true within short time.

Design and Development



With assistance from CAD, Solidworks, CATIA, and UG, UVPLASTIC works with global engineers to discuss product feasibility and find the best solution for the projects.

Design it and make it



UVPLASTIC have designed some products based on polycarbonate and acrylic, such as VIEWSKY Bubble Tent, Geodesic Dome Tent for hotel, restaurant, glamping, and display application. The mini-greenhouse and office chair mat are popular all over the world.

FEATURED PRODUCTS

UVPLASTIC Polycarbonate

[Solid Polycarbonate Sheet](#);

[Anti-Static Polycarbonate](#);

[Polycarbonate Light Diffuser](#);

[Multi-wall Polycarbonate](#);

[Polycarbonate Film](#);

[Corrugated Polycarbonate](#);

[Polycarbonate Roofing Panel](#);

[Polycarbonate Facade](#);

Machining Service

[Machining Polycarbonate](#);

[Custom Acrylic](#);

UVACRYLIC Plexiglass:

[Clear Acrylic Sheet](#);

[Colored Acrylic Sheet](#);

[Acrylic Rod](#);

[Acrylic Tube](#);

[Acrylic Mirror](#);

[Acrylic Block](#);

[LGP Acrylic](#);

[Acrylic Film](#);

Glamping Dome Tent

[VIEWSKY Bubble Tent](#);

[Geodesic Dome](#);

Solid Polycarbonate Sheet (UVFPC-SO)

Introduction

UVFPC-SO is a family code of UVPLASTIC Solid Polycarbonate Sheets, which is the ideal alternative to glass, [acrylic sheet](#) and tempered glass.

With unique combination properties including excellent strength, lighter-weight, more flexibility, durability, good fire retardant, and outstanding machinability, solid polycarbonate sheets are used for wide applications including construction & architecture, safety & security, industrial parts, home decoration & DIY projects, medical & healthcare, transportation, and daily necessities.



Main Features

INCOMPARABLE IMPACT RESISTANCE, BUT LIGHTER WEIGHT

UVFPC-SO Solid Polycarbonate Sheet is virtually unbreakable, it is 250 times stronger than glass, and 20 times stronger than plexiglass sheet, but half weight less than flat glass.

HIGH LIGHT TRANSMITTANCE

UVFPC Solid Polycarbonate Sheet is transparent as glass, the light transmission of the Clear Polycarbonate Sheet is up to 92%.

GREAT DIMENSIONAL STABILITY

UVFPC-SO [Solid Polycarbonate Sheet](#) offers great dimensional stability even under large temperature change.

EXCELLENT FLEXIBILITY AND GOOD FORMABILITY

UVFPC Solid Polycarbonate Sheet can be cold/hot bent to a certain radius, it is also can be thermoformed to any shapes. Otherwise, it can be machined and/or fabricated including cutting, drilling, engraving, bonding

GREAT WEATHER RESISTANCE

With the UV protective layers, UVFPC-SO Solid Polycarbonate Sheet offers excellent performance even under intense ultraviolet rays, hail-stone, wind, snowfall, ice formation.

OUTSTANDING FIRE RETARDANT

UVFPC-FR [Flame Retardant Polycarbonate](#) meets V0/UL94, Class A/B ASTM E84.

EASY TO INSTALL AND CLEAN

UVFPC Solid Polycarbonate Sheet is easy to cold-bent and installed on site. You can use 100% cotton cloths and water with mild detergent to clean.



Products Range

Model	Description
UVFPC-SO	Stabilized UV protective layer for general purpose
UVFPC-SO-U1	Co-extruded UV protective layer on outside for outdoor building application
UVFPC-SO-U1A	Co-extruded UV protective layer on outside, anti-condensation treatment on inside for greenhouse application as roofing
UVFPC-SO-U2	Co-extruded UV protective layer on both sides for outdoor application

Products Color

Colors	Description	Surfaces
Clear	Light transmission is up to 92%.	Polished

Transparent	Bronze, Gray, Light Blue, Light Green, Light Red. Light transmission is from 50% to 80%. Diffuser is available.	Polished, Matte, Frosted, Embossed
Translucent	Blue, Green, Red, Brown, White, Yellow, Golden Yellow, Green Black. Light transmission is from 10% to 50%. Diffuser is available.	Polished, Matte, Frosted, Embossed
Opaque	Light transmission is less than 10%. Yellow, Dark Red, Dark Green, Black, Dark Gray, Dark Brown, Cream.	Polished, Matte, Frosted, Embossed.

Products Dimension

Thickness/mm	Width x Length/m	Polished on both sides	Matte on one side	Embossed on one side
1mm, 1.5mm	1.22 x 1.83, 1.22 x 2.44 2.1 x 3	○		
2mm, 2.5mm,	1.22 x 1.83, 1.22 x 2.44 2.1 x 3	○	○	
3mm, 4mm, 5mm, 6mm,	1.22 x 1.83, 1.22 x 2.44 2.1 x 3	○	○	○
8mm, 10mm, 12mm, 15mm	1.22 x 1.83, 1.22 x 2.44 2.1 x 3	○	○	○
16mm, 18mm, 20mm	1.22 x 1.83, 1.22 x 2.44	○		
25mm, 30mm	1.22 x 2.44	○		

Note: Contact us for custom size and [machining service](#).



Physical Properties

Property	Testing Method	Testing Condition	Unit	Value
Density	D-792		g/cm ³	1.2
Heat Deflection Temperature	D-648	Load: 1.82 MP	°C	135
Short Term Service Temperature			°C	from -50 to +130
Long Term Service Temperature			°C	from -40 to +100
Coefficient of Linear Thermal Expansion	D-696		mm/m °C	0.065
Thermal Conductivity	C-177		W/m K	0.21
Tensile Strength at Yield	D-638	10 mm/min	Mpa or N/mm ²	>65
Tensile Strength at Break	D-638	10 mm/min	MPa or N/mm ²	>60
Elongation at Yield	D-638	10 mm/min.	%	6
Elongation at Break	D-638		%	>95
Tensile Modulus of Elasticity	D-638	1 mm/min	MPa	2350
Flexural Strength	D-790	1.3 mm/min.	MPa	100
Flexural Modulus	D-790	1.3 mm/min.	MPa	2600
Impact Falling Weight	ISO 6603/1 E50	3mm sheet	J	158
Light Transmission	D-1003		%	82 - 92
Haze	D-1003		%	<0.5
Flammability rate	UL 94			V-2/V-0

Application

Skylight Dome

Suitable materials: 5 – 10 mm [Flat Polycarbonate Sheet](#);

Surface: Polished / Matte;

Color: Clear, Blue, Gray;

Length: ≤12 m, Width: ≤2.1 m, Customized Size;

UV Protective Layer on one or two sides;

High impact resistance and easy to install;

Standard skylight dome is available;



Polycarbonate Carport

Suitable materials: 3 mm Solid Polycarbonate Sheet, 4 mm Solid Polycarbonate

Sheet, 5mm Solid Polycarbonate Sheet;

Surface: Smooth, Matte;

Color: Clear, Bronze, Gray, Blue;

UV: One or Two Side;

Length: ≤12 m; Width: ≤2.1 m;



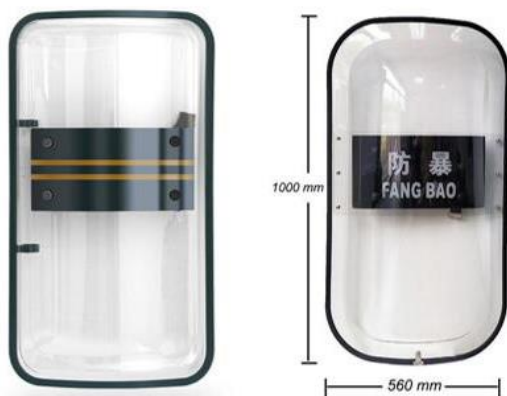
Riot Shield

Suitable materials: 3 – 5 mm Solid Polycarbonate Sheet;

Cut to size and thermoformed to shapes;

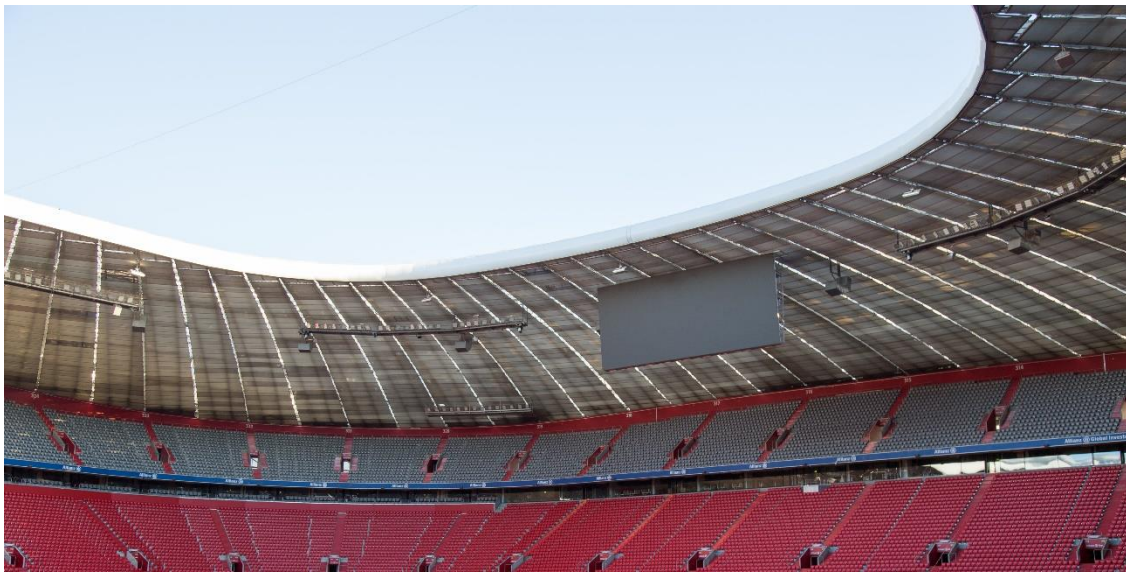
High impact resistance;

Custom service is available;



Stadium Roof

Suitable materials: 6 mm Solid Polycarbonate Sheet;
High impact resistance;
Lifespan is more than 10 years;
Custom service is available; |



Medical Face Shield, Eye Shield

Suitable materials: [anti fog polycarbonate sheet](#) or [optical grade polycarbonate film](#);
Thickness is from 0.125mm to 4mm;
Anti-fog coating;
High impact resistance;
Custom service is available;



Clear Kayak

Main material: Clear polycarbonate sheets;

Thermoforming technology;



SKYVIEW Bubble Tent



Polycarbonate Windshield



AND MORE...



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