



#### **ONE-STOP SUPPLIER IN PLASTIC FIELD**

**Plastic Sheets** 

Plastic Fabricatio



# UVPLASTIC

Solid Polycarbonate Sheet (UVFPC-SO)

www.uvplastic.com

# **ABOUT UVPASTIC**

2003	35	30+	560+	12+
Founding Time	Staffs	Countries	Clients	Millions

# **WHO WE ARE**

UVPLASTIC Material Technology Co., Ltd is a ONE-STOP SUPPLIER and INTEGRATED

SOLUTION PROVIDER in the plastic field, established in 2003 at Suzhou, China. After many

years of continuous effort, the company has grown to be a leading supplier of

Polycarbonate Sheet;

Acrylic Sheet;

**Plastic Fabrication** Services;

**OEM & ODM Services;** 

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 <u>supplier of</u> <u>polycarbonate</u> and acrylic sheets in all forms. Meantime, we offer the complete system for the greenhouse, building roof, and <u>facade system</u>.

#### Strong Fabrication Capacity



UVPLASTIC offers integrated fabrication solution for polycarbonate and acrylic sheets including <u>cutting</u>, bending, drilling, milling, carving, thermoforming, injection molding, and coating.



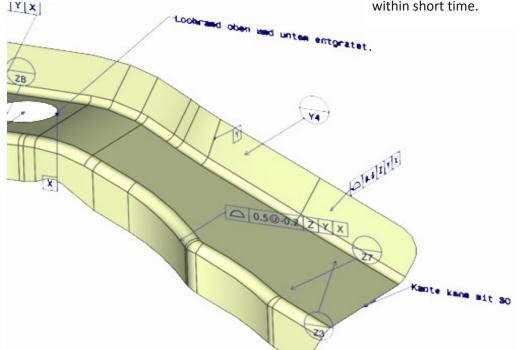
#### Design and Development

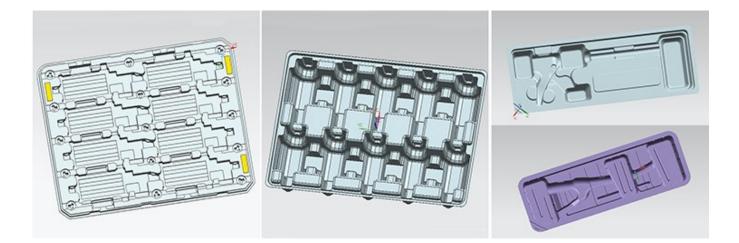
With assistance from CAD, Solidworks, CATIA, and UG, UVPLASTIC works with global engineers to discuss product feasibility and find the best solution for the projects.



#### **Custom Fabrication**

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





#### Polycarbonate

Solid Polycarbonate sheet; Multi Wall Polycarbonate Sheet; Thin Polycarbonate Sheet/Film; Hard Coated Polycarbonate Sheet; Corrugated Polycarbonate Sheet; ESD Polycarbonate Sheet; Polycarbonate Diffuser Sheet; V0 Flame Retardant Polycarbonate;

#### **Plastic Fabrication** Service

Polycarbonate Cut To Size; Edge Finishing; Plastic Bending; Surface Finishing; Thermoforming; Screen/Digital printing

#### Acrylic

<u>Cast acrylic sheet;</u> Extruded Acrylic Sheet; <u>Colored Acrylic Sheet;</u> <u>ESD Acrylic Sheet;</u> <u>Coated Acrylic Sheet;</u> <u>Non glare Acrylic Sheet;</u> Scratch Resistant Acrylic Sheet; <u>Acrylic Mirror Sheet;</u>

#### OEM & ODM

Riot Shield; Plastic Chair Mat; Clear Kayak; Polycarbonate skylight Dome; Clear Bubble Tent; Acrylic Display; Acrylic Furniture;



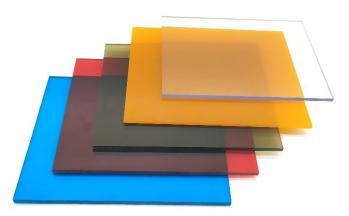


# Solid Polycarbonate Sheet (UVFPC-SO)

## Introduction

UVFPC-SO is a family code of UVPLASTIC Solid Polycarbonate Sheets, which is the ideal alternative to glass, <u>acrylic sheet</u>, 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 Solid Polycarbonate Sheet is virtually unbreakable, it is 250 times stranger, 25 times stronger than <u>plexiglass glass</u>, but half weight less than flat glass.

#### **HIGH LIGHT TRANSMITTANCE**

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

#### **GREAT DIMENSIONAL STABILITY**

UVFPC 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 Solid Polycarbonate Sheet offers excellent performance even under intense ultraviolet rays, hail-stone, wind, snowfall, ice formation.

#### **OUTSTANDING FIRE RETARDANT**

UVFPC-FR <u>Flame Retardant Polycarbonate Sheet</u> 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	0		
2mm, 2.5mm,	1.22 x 1.83, 1.22 x 2.44	Ο	0	
3mm, 4mm, 5mm, 6mm,	1.22 x 1.83, 1.22 x 2.44	Ο	0	Ο
8mm, 10mm, 12mm, 15mm	1.22 x 1.83, 1.22 x 2.44	Ο	0	0
16mm, 18mm, 20mm	1.22 x 1.83, 1.22 x 2.44	0	0	0

Note: Contact us for custom size and custom fabrication service.

# **Physical Properties**

Property	Testing Method	Testing Condition	Unit	Value
Density	D-792		g/cm3	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/mm²	>65
Tensile Strength at Break	D-638	10 mm/min	MPa or N/mm²	>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 <u>Flat Polycarbonate Sheet</u>; 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;

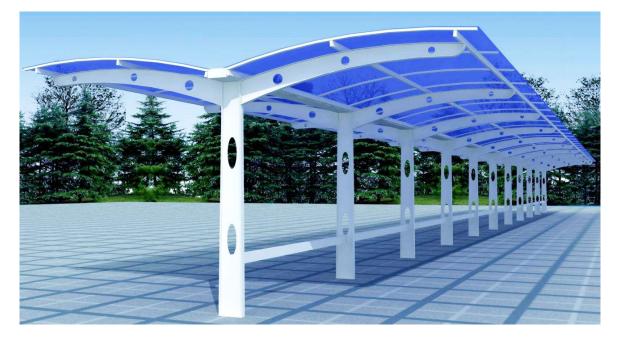
#### **ONE-STOP SUPPLIER IN THE PLASTIC FIELD**



UV: One or Two Side;

Length:  $\leq$ 12 m; Width:  $\leq$ 2.1 m;

Standard polycarbonate carport is available;



### **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;





# <u>Clear Kayak</u>

Main material: Clear polycarbonate sheets;

Thermoforming technology;



### **SKYVIEW Bubble Tent**







# Polycarbonate Windshield



# AND MORE...





# **CONTACT US**

### UVPLASTIC Material Technology Co.,Ltd

Add: 205 Suzhou West Avenue, Suzhou Industrial Park, Suzhou City,

China, 215000

Tel: +86 512 85186727

E-mail: info@uvplastic.com

Homepage: <u>www.uvplastic.com</u>