

Structural
transparent
innovative skin



STRUCTURAL AND LIGHTWEIGHT



STRUCTURAL

The polyarylate mesh provides structural strength for large free span and minimizes secondary structure. Easier installation and reduced environmental impact.

> 10X

LIGHTWEIGHT

STFE building solution is more than 10 times lighter than glass/steel system.

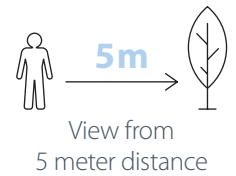
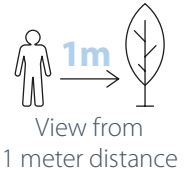
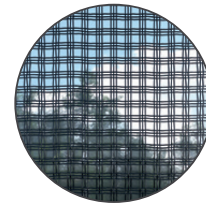


FLEXIBLE SHAPES

Thanks to its composite and flexible nature, the STFE opens new architectural possibilities and creative freedom for the building envelopes.

TRANSPARENCY AND SUNGLASS EFFECT

As a building skin, STFE disappears and becomes transparent to leave room to the horizon



> 50%

LIGHT TRANSMISSION
for a better view through.



NATURAL LIGHT
for user's comfort
for plants growth thanks to UV.



SUN GLASS EFFECT
thanks to integrated
sun mesh protection.



HIGH RESISTANCE

High mechanical resistance
(8 tons/linear meter).



FIRE SAFETY

(Euroclass B-s1,d0)
(ASTM E 84 A).

> 30 years

DESIGN LIFE

Excellent ageing performance.
Accelerated weathering tests at
third party laboratory show more
than 30 year longevity.



Main application benefits

Natural light and UV inputs:

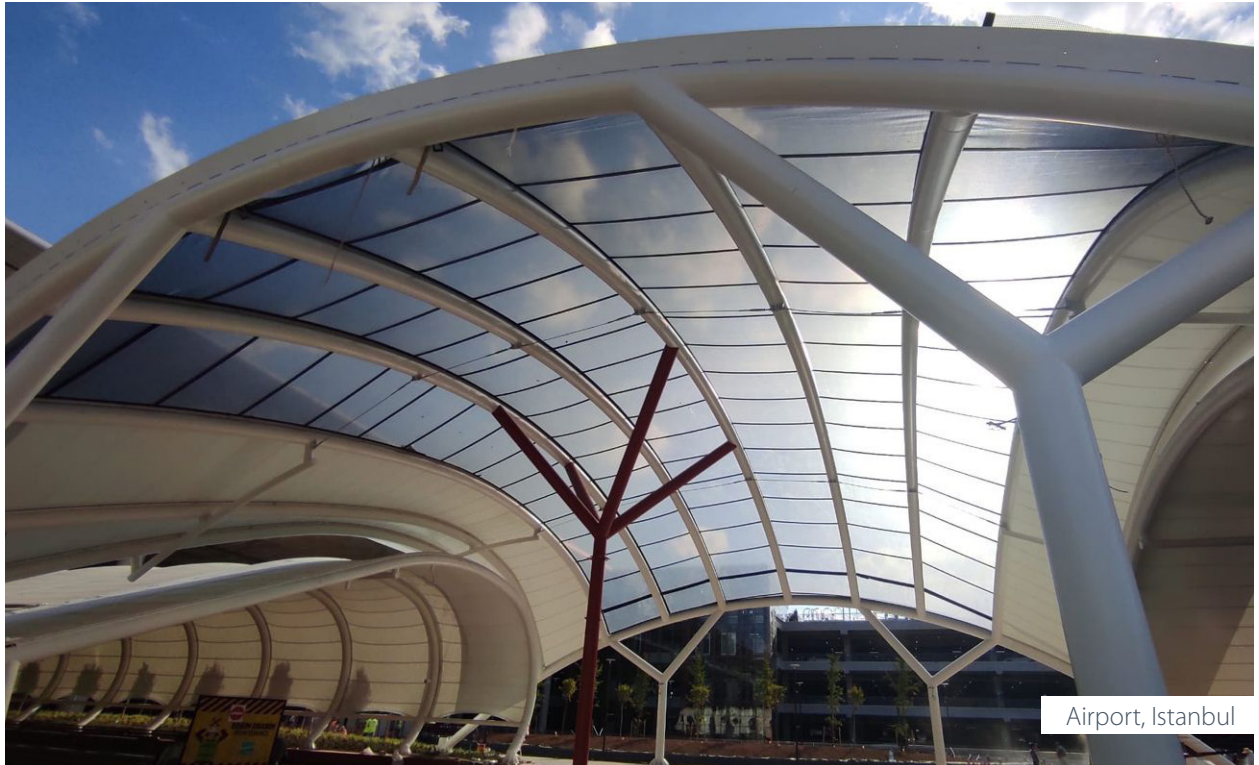
- Zoo & botanical garden
- Winter garden
- Stadium



No sense of enclosure in public buildings:

- Transportation walkway
- Shopping mall
- Skylight
- Atrium





Airport, Istanbul



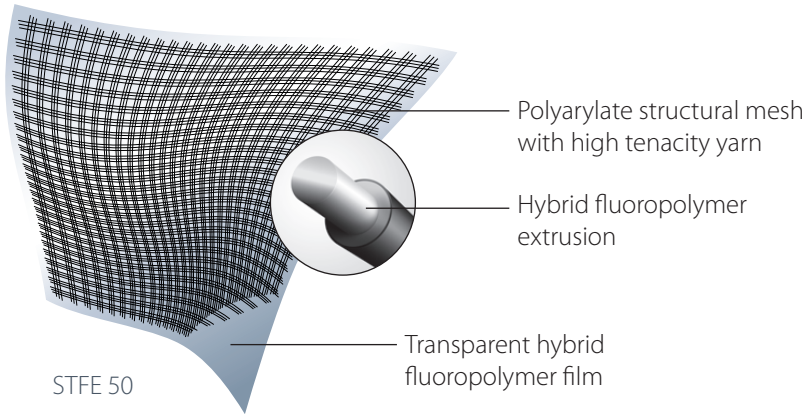
Airport, Istanbul



Grand Palais Éphémère, Paris



Horatio hospital, London



> 
INDOOR
PROTECTION

> 
OUTDOOR
FEELING



■ Technical properties

■ Standards

Product code	7902	
Material composition	outer surface : Transparent hybrid fluoropolymer inner surface : polyarylate mesh	
Weight	900 g/m ²	EN ISO 2286-2
Width	155 cm	
Tensile strength (warp/weft)	400/400 daN/5cm	EN ISO 1421
Tear strength (warp/weft)	80/80 daN/5cm	DIN 53.363
Elongation at break (warp/weft)	4,6 / 3,5%	DIN 53.363
Crease fold resistance	100%	ASTM D4851

The technical data above are averaged values with a +/- 5% tolerance.

■ Flame retardancy

Euroclass	B-s1,d0	EN 13501-1
-----------	---------	------------

■ Thermal, Solar Optical & Acoustic properties

Heat transfer coefficient (vertical/horizontal)	5,6 / 6,4 W/sqm.°C	Calculated
Visible Light Transmittance (Tv)	Tv n-h=53%	EN 410
Direct Tv (view Through)	Tv n-n=46%	EN 410
Visible Light Reflexion (Rv)	7%	EN 410
Solar Transmittance (Ts)	54%	EN 410
Solar Reflexion (Rs)	7%	EN 410
Solar factor (g)	64%	EN 410
UV transmittance (T _{uv-A}) (T _{uv-B})	57,8% 52,3%	EN 410
PAR Photosynthetic Activ Radiation	50% (all wavelengths)	
Acoustic weakening index	~12 dB A	ISO 140-3 & ISO 717-1

■ Certifications, Labels, Guarantees

ISO 9001	10 year
ISO 14001	Warranty

The buyer of our products is fully responsible for their application and their transformation with regard to any possible third party. The buyer of our products is responsible for their implementation and installation according to the standards, workmanship and safety regulations in force in destination countries. For information on our contractual warranty, please refer to the relevant terms and conditions. The values quoted above represent results of tests performed in compliance with common design practices and are provided for information only to enable customers to make the best use of our products. Our products are subject to changes based on technical advances and we reserve the right to modify their characteristics at any time. The buyer of our products is responsible for checking the validity of the above data.

HANDLING PRECAUTION : STFE membrane is delivered with a protective film which one must keep as long as possible during the STORAGE OF THE JUMBO ROLL. THE FILM MUST BE REMOVED BEFORE WELDING and INSTALLATION. STFE membrane must be packed with care and transported as rolls and not bundles to avoid crushed folds which could generate unsightly marks by transparency.

HF WELDING : consider the STFE COVERT TAPE as part of the STFE Fabrication requirement for the warranty. Details available in the Technical Guide.