



david_kamchis

TENSILE FABRIC ARCHITECTURE

BIOCLIMATIC TEXTILE FACADES



FACADE TEXTILE INTERNATIONAL



International supplier of tensioning products and patented solutions for textile facades applications.

■ Services :

- Facade design & implementation services
- Mechanical engineering solutions
- Cleaning and maintenance solutions
- On-line monitoring

■ Structure :

- Qualified international & multidisciplinary team
- International network

■ Network :



■ References :



gehry partners

Bioclimatic facades
Lightweight architecture
International Network
Greentech Technology
Patented Systems

■ Policy :

- Locally produced and licensed systems to :
- Minimize the impact caused by air and sea shipping
 - Reduce CO2 emissions as well as costs and delays.



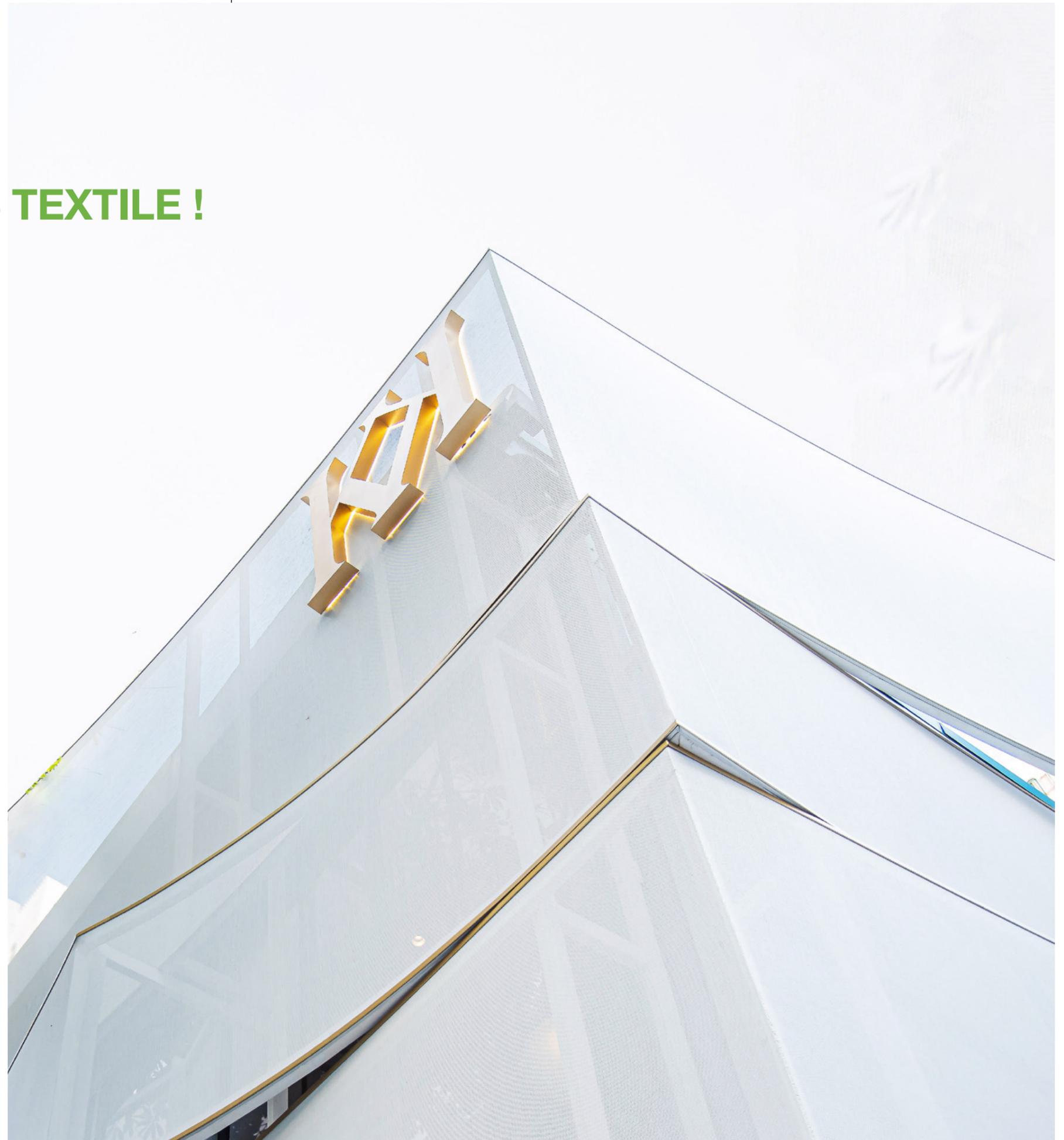
THE FUTURE OF FACADES IS **TEXTILE !**

Textile Facades are an exciting and cost-effective architectural application to aesthetically transform and enhance the look of any building.

It consists of tensioned fabric or flexible membrane material that acts as a second skin to a building's exterior.

It's an innovative, cost-effective and eco-friendly alternative to the traditional metal mesh facade screens.

Due to the lightweight nature of fabric membrane, tensile facades are often the ideal choice because they can span longer distances with less structural support compared to conventional building products which make it an affordable and innovative solution.



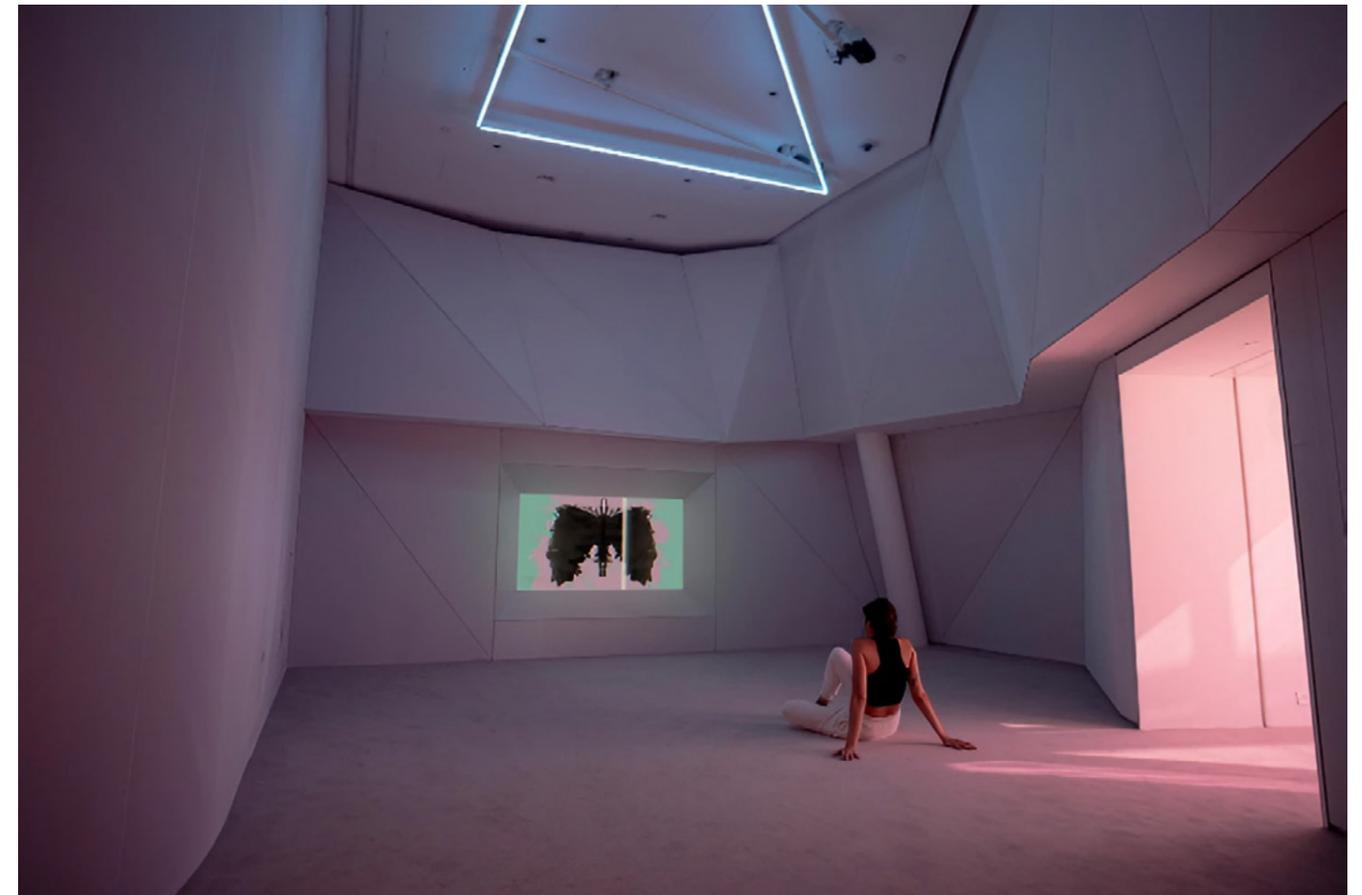
Different use of textile solutions !

Tensile facades come in different shapes and sizes. They can also be used to create sliding panels to cover balconies and walkways.

Textile solutions are also considered as one of the best options to customize interior spaces.

Lightweight and cost-effective they create a unique visual experience and allow to brighten up corridors and dark spaces.

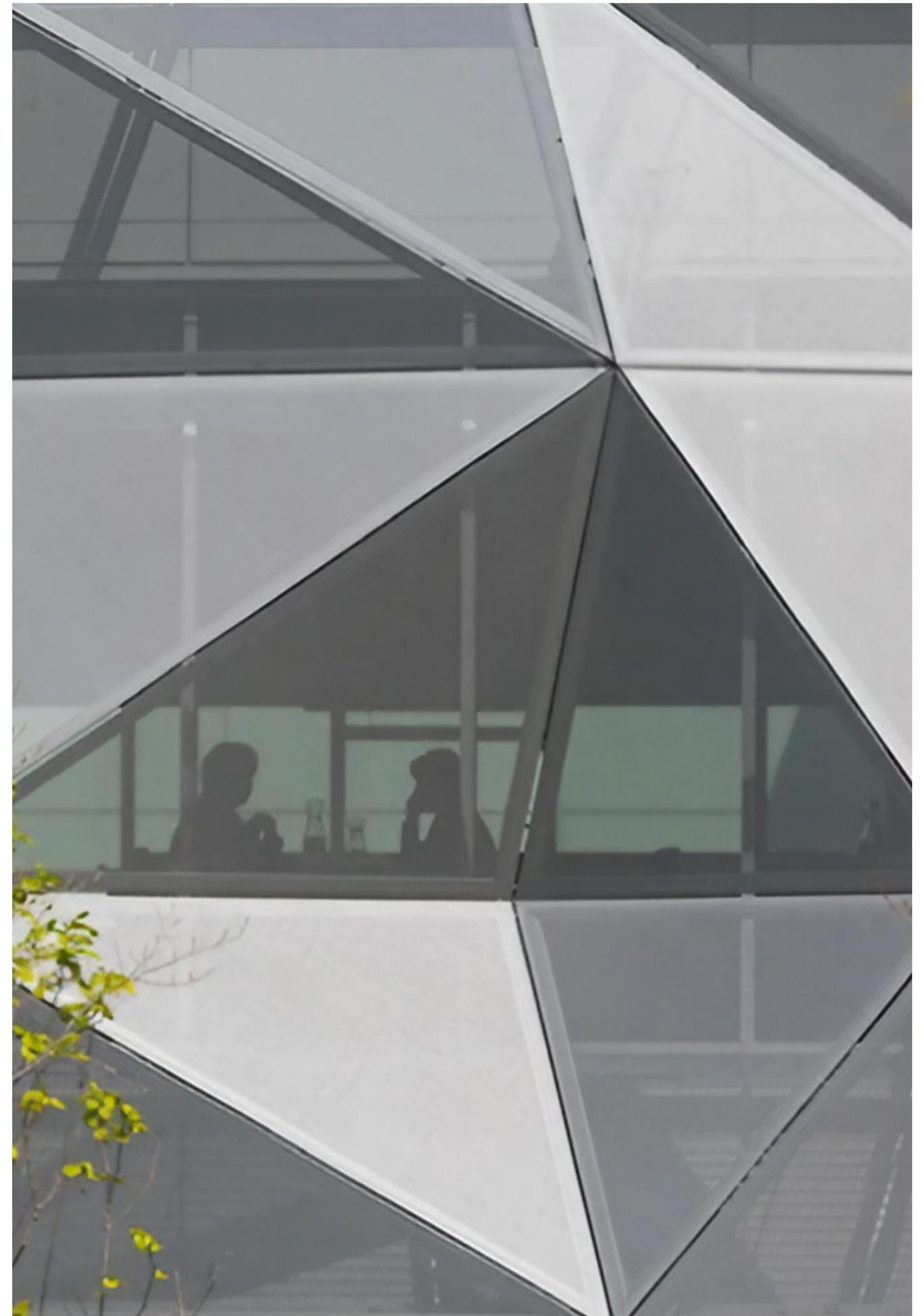
Interior tensile facades also provide acoustic benefits and can be designed and fabricated to amplify or dampen sound.



Bioclimatic Facade & Energy Efficiency

Used as solar and thermal protection, the bioclimatic facade strongly contributes to the improvement of the energy balance of buildings while enhancing the transmission of natural and homogeneous light.

OCCUPANT'S WELLBEING
VISUAL TRANSPARENCY
IMPROVED AIR QUALITY
HARMFUL UV RAYS BLOCKED
THERMAL & ACOUSTIC CONTROL



THE MEMBRANE FRONT SIDE VIEW 381

Serge Ferrari

A UNIQUE SOLUTION TO ASSERT
OR TRANSFORM A BUILDING'S
PERSONALITY

A mesh for textile façades to preserve
outward visibility. In new-build and
renovation projects, it reduces heat
inside the building.

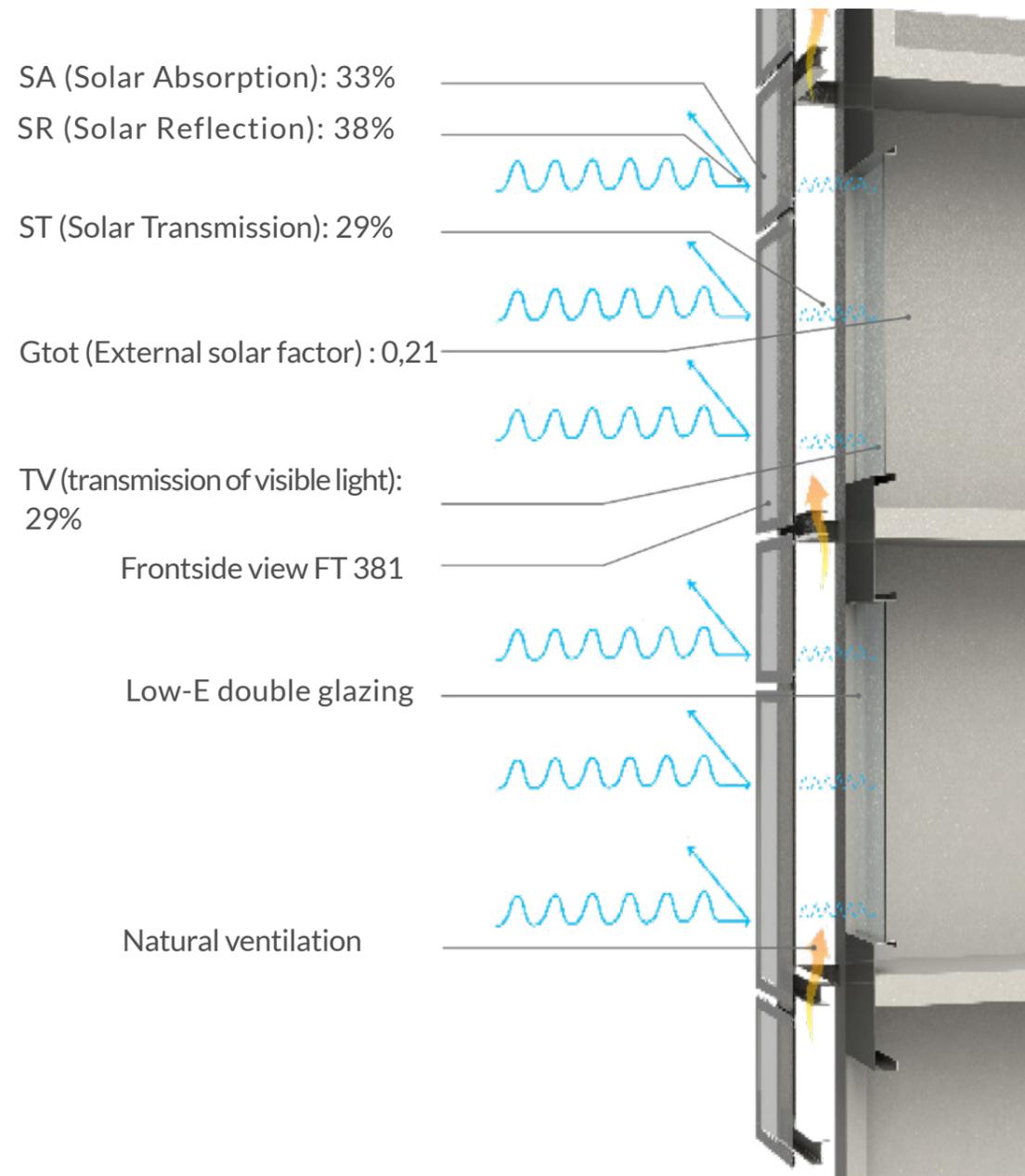
IN FEW WORDS ...

- . Advanced technology
- . Lightweight and flexible, facilitating easy installation and the creation of complex architectural shapes.
- . Exceptional resistance to weather, UV rays, tearing, and abrasion.
- . Smooth and homogeneous surface ensuring optimal transmission of natural light.
- . Protection against harmful solar rays: Visual Comfort.
- . Promotes optimal use of natural lighting, reducing energy consumption.
- . Enhanced thermal comfort: reduces air conditioning usage.
- . Good fire resistance, ensuring safe use.
- . Highly performing technical solution for demanding architectural applications.
- . Reduced carbon footprint through improved energy efficiency and responsible material management.
- . 10-year warranty | 100% recyclable | Average lifespan: 20 years.

| | | | | | | | |
|---|---|---|---------------------------------|---|--|---|---------------------------------------|
|  | LIGHTNESS 550g/m ² |  | DURABLE RESISTANCE |  | OCCULTATION 70 % |  | VISUAL TRANSMISSION INT / EXT 80 % |
|  | THERMAL COMFORT 81% solar heat blocked |  | FIRE RESISTANCE B-S2-D0 |  | CERTIFIED TECHNOLOGY FOR CYCLONIC ZONES |  | REDUCED CARBON FOOTPRINT |
|  | EASY CLEANING & MAINTENANCE |  | LIFE CYCLE AVERAGE: 20 YEARS |  | 10-YEAR WARRANTY |  | 100% RECYCLABLE |

Thermal Performance:

Textile facades can improve the thermal performance of buildings by providing insulation and reducing heat gain or loss. The fabric material used in these facades can be designed to have specific thermal properties, such as low thermal conductivity or high reflectivity, helping to maintain comfortable indoor temperatures and reduce reliance on heating or cooling systems.



SOLAR PROTECTION : INDOOR | OUTDOOR

Taking as an example the neutral colour used most frequently the efficiency difference between indoor and outdoor protection becomes quickly obvious. The solar factor is 2,2 higher with indoor textile (from 0.21 to 0.47). In concrete terms it means that heat building up in the room will be multiplied by 2, 24.

Therefore it is essential to compare the efficiency of indoor and outdoor textiles with the same colour and the same glazing (in this example we have low-E double glazing according to EN14501 standards).

An outdoor solar protection guarantees a more even temperature during daytime, meaning more comfort and a more enjoyable atmosphere.

Because of a more even room temperature, air conditioning is minimized and the operating costs of the building is reduced.

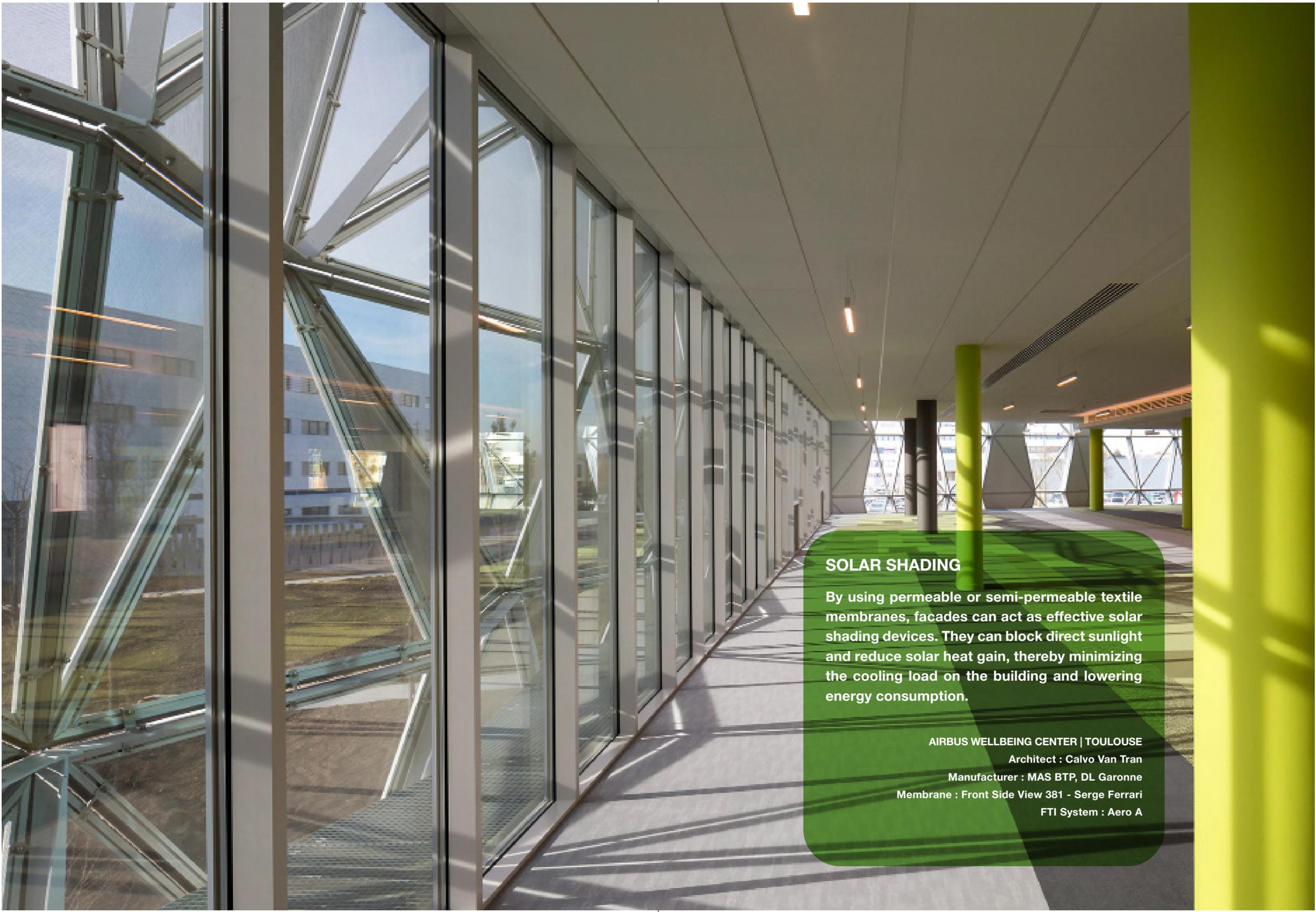


DAYLIGHTING AND VISUAL COMFORT:

Textile facades can be designed to allow natural light to penetrate into the building while diffusing it evenly. This reduces the need for artificial lighting during the day, leading to energy savings and creating a more pleasant and productive indoor environment.

GULLIVER PRIMARAY SCHOOL | SLOVAKIA
Architects: Richard Murgaš, Martin Lepej,
Lukáš Cesnak
Manufacturer : Kontis
Membrane : Front Side View 381 - Serge Ferrari
FTI System : Aero W





SOLAR SHADING

By using permeable or semi-permeable textile membranes, facades can act as effective solar shading devices. They can block direct sunlight and reduce solar heat gain, thereby minimizing the cooling load on the building and lowering energy consumption.

AIRBUS WELLBEING CENTER | TOULOUSE

Architect : Calvo Van Tran

Manufacturer : MAS BTP, DL Garonne

Membrane : Front Side View 381 - Serge Ferrari

FTI System : Aero A



WESTHILLS MEDICAL CENTER | USA
Architect : Michael W. Folonis Architects
Manufacturer : Flex Facades
Membrane : Front Side View 381 - Serge Ferrari
FTI System : Aero S

Ventilation and Air Quality:

Depending on the design, textile facades can facilitate natural ventilation by allowing air to pass through the fabric, improving indoor air quality and reducing the reliance on mechanical ventilation systems. This can enhance energy efficiency and occupant comfort while reducing the environmental impact.



Rain Water Management

Textile facades can incorporate rainwater management systems, such as rainwater harvesting or controlled drainage. The fabric material can be designed to be water-resistant and enable controlled water runoff, reducing the strain on stormwater systems and promoting sustainable water management practices.



Recyclability and Durability :

Many textile facade materials are designed with recyclability and durability in mind. They can be manufactured using environmentally friendly materials and processes, and at the end of their life cycle, they can be recycled or repurposed. This reduces waste generation and promotes a circular economy approach.

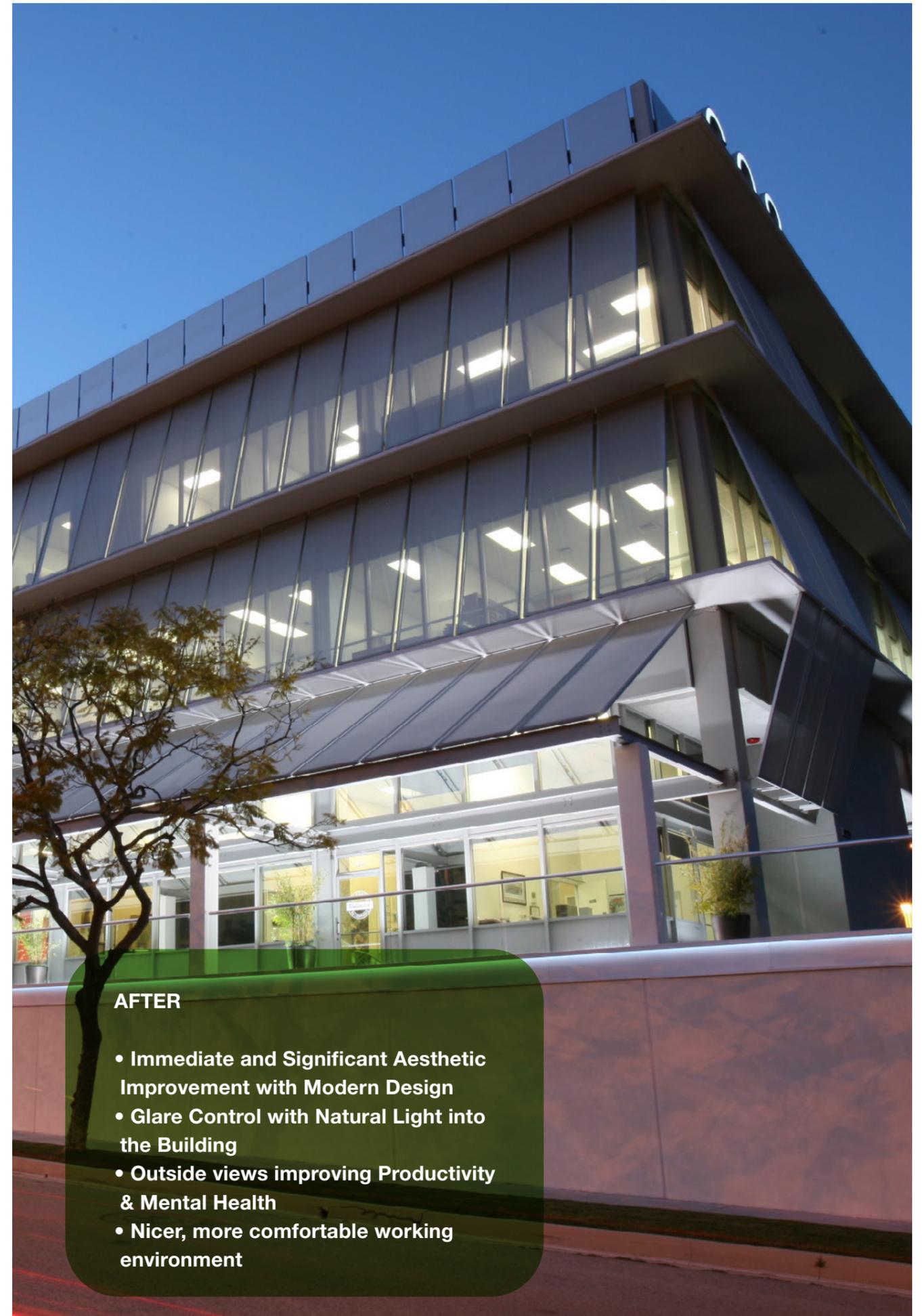


STUDY CASE BY SERGE FERRARI

SOTHEBY'S INTERNATIONAL REALITY BUILDING | USA

BEFORE

- Built in 1960's, Dated design, viewed as local Eyesore
 - Inefficient building, high energy cost, lighting and HVAC
 - Uncomfortable for Occupants, see closed Curtains
- All of these factors are culminating in loss of tenancy and nightmare for building owner



AFTER

- Immediate and Significant Aesthetic Improvement with Modern Design
- Glare Control with Natural Light into the Building
- Outside views improving Productivity & Mental Health
- Nicer, more comfortable working environment



2

years to realise ROI

3

months to realise full tenancy

\$60K

in annual energy savings

\$700K

in energy savings over 15 years

- Cost effective intervention & Lightweight, little additional loading on existing Building
- Low carbon footprint
- Significant Energy Savings;
- External Thermal Protection reduces HVAC Energy consumption
- Natural Light into Building further reducing Energy requirement

Textile Solutions: Where Durability and Sustainability Converge, Stitching a Greener Tomorrow!

When considering textile facades and their adherence to environmental norms, it is important to ensure that the materials used meet relevant standards and certifications for sustainability, such as LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assessment Method). These certifications assess the overall environmental performance of buildings, considering factors like energy efficiency, resource usage, and indoor environmental quality.

It's worth noting that environmental norms and regulations may vary across regions and countries, so it's crucial to consult local building codes and standards to ensure compliance with specific requirements.



Examples of LEED Certifications with FrontSide View 381 range

TRIPARK LAS ROZAS | SPAIN

A 5,000 m² textile facade for twelve office buildings.

This project is the first in Spain to achieve LEED Gold certification, thanks to its textile facade which contributes in reducing the energy consumption and enhancing the transmission of natural and homogeneous light inside the building.

The energy savings of such a construction are estimated at 120,000 euros per year and the reduction in CO₂ emissions is equivalent to planting 750 trees.

Architect : Allende Arquitectos

Manufacturer : Bat Spain

Membrane : Front Side View 381 - Serge Ferrari

FTI System : Aero S



PEGASO CITY | SPAIN

The office building of the Pegaso City commercial complex in Madrid has obtained LEED Gold certification.

The 500m² textile facade provides the building with solar protection, reducing its air conditioning consumption by up to 50%. It also increases visual comfort and gives the building a unique aesthetic aspect.

Architect : Allende Arquitectos

Manufacturer : Bat Spain

Membrane : Front Side View 381 - Serge Ferrari

FTI System : Aero S

The FTI Systems

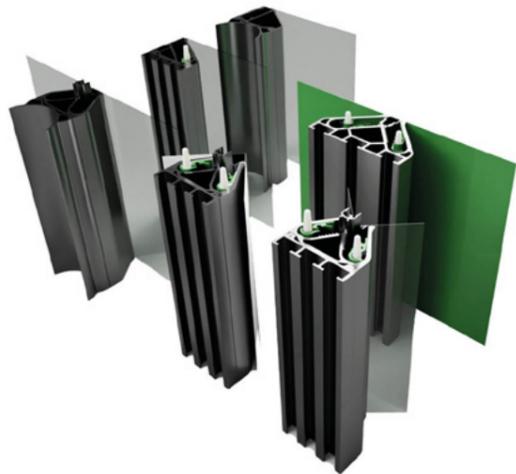
■ PROFILE LINEUPS 2023



Aero Range



Aero GP



Solar Skin



TS Mod

The Augmented Reality Experience



AVAILABLE IN 21 COUNTRIES !

System produced in:

- Europe
- China
- India
- Brazil



THE NETWORK

Through the years, we have developed local networks with partners who can operate in an intentionally limited area, which allows us to minimize the impact caused by air and sea shipping of our equipment.

We collaborate with clients and professional partners who share our vision of sustainability and our desire to contribute to the transformation of our systems and societies into ones that thrive within planetary boundaries.

Our Green Tech approach !

We follow a global greentech approach that focuses mainly on the supply chain.

Our main aim is to :

- Reduce the carbon footprint
- Optimize costs
- Use local resources
- Minimize the impact caused by air and sea shipping of our equipment.

By offering to produce our systems locally and under license.





+41791378159

✉ contact@facade-textile.com

