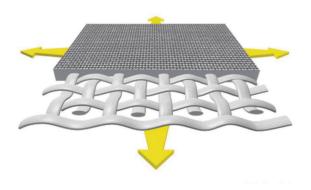


ARCHITECTURAL EFFECTS AND BENEFITS

OF TEXTILE FACADE COVERINGS



## WHAT IS THE TEXTILE FACADE?



Textile facades are a new category of screens and fabric architecture used on the exterior surfaces of buildings.

Both old and newly built buildings can be quickly and simply clothed. It can be used for many buildings from industrial buildings to shopping centers, stadiums to residential buildings.

Textile facade coating applications are made of textile materials using static (closed) pvc, mesh (mesh), Ptfe (teflon) laminates and / or mesh and ethetics materials and imported textile products with guaranteed aluminum construction for the steel construction, And / or by applying special design tensioning apparatuses.

These systems, which are used in the direction of sunlight breaker function, shading and thermal insulation as well as light permeability (night and day, inside-out, far-away view) which must be perceived differently from the inside by the inside, besides their contribution to architectural appearance and esthetics, ease of application and economic costs .

### **ADVANTAGES OF TEXTILE FACADES**

#### **COMPATIBILITY OF DIFFERENT MATERIALS**



PVC, PTFE Mesh, Lamine Mesh and ETFE different materials provide brand new designs with perfect harmony on the facades.

#### **FACADE COATING**



Textile facades add value to the structure with its detailed appearance and esthetic.

### THE NEW FACE OF **BUILDINGS**



It provides awareness in all of the forms with material texture, colors, louvre feature and distantnear sense.

### **FABRIC ARCHITECTURE**



The façade has very different meanings with hard or soft lines.

#### STADIUM ARCHITECTURE



It creates unusual structures with its esthetic appearance.

#### **SLIDING AND FIXED PANELS**

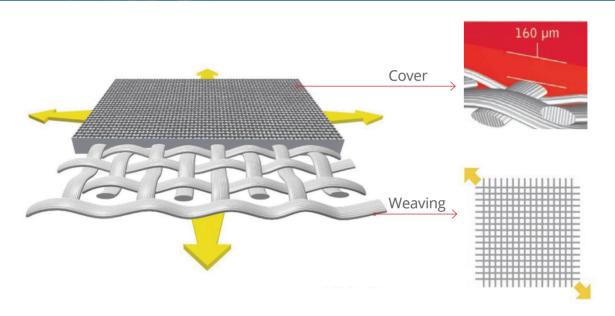


Facade systems can be fixed or mobile.

# GENERAL PROPERTIES OF TEXTILE FACADE MATERIALS



## GENERAL PROPERTIES OF MATERIALS



Mesh membrane materials can be PVC coated on polyester fabric or can be produced as Teflon coating on glass fiber. Apart from the characteristic differences between these two products, the most distinguishing feature is that the fire resistance in PVC materials is class B1 and the fire resistance in PTFE materials is class A2. Mesh materials vary in their use, depending on the latency and functional expectations.

Material can be produced with different texture, color and pore sizes according to architectural expectations. The material variety is offered at about 300 - 700gr / m2 unit weight and different static strengths. In addition to the standard weaving techniques, the stretch that can be formed over time with the pre-germ production technology can be taken during production and the life of the material can be increased.













INSIDE FROM OUTSIDE

COL

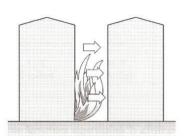
PRINTABLE

ANTI - DUSTINESS SURFACE

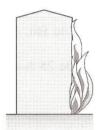
FREE OF

TO WIND LOAD

### FIRE RESISTANCE







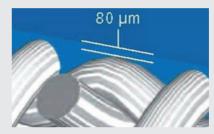




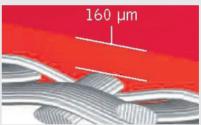
Euroclasse B,s2-d0, B1, M1, ... Euroclasse A2 incombustible

### BETTER PROTECTION OF YARNS

It has a thicker coating on the yarns and, while still lightweight, provides better UV protection, more protection against contamination and abrasion.



Conventional coated membrane



Greater coating thickness and protection over yarns.

#### **RESISTANT AND LIGHTWEIGHT**



#### **STRECH RESISTANCE**

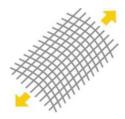
- \* Stretching force: 400dN75cm weft and warp
- \*Suitable for 5 cm width for 400 gr
- \*Stamisol FT482 8 ton \* / Im shows weft / warp resistance.
- \*400 x 20 = 8.000 kg



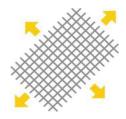
#### **PATENTED INDUSTRIAL INNOVATION**

Precontraint Serge Ferrari membranes guarantee the compatibility of yarns.









Precontraint textiles







EKONOMIC





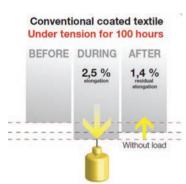




LONG LIFE STRECHING



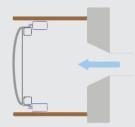
Less maintenance Esthetic preserved



There is no loss of tension and tension No stretching (dimensional precision)

### RESISTANT OF WIND LOAD

Panels 2.5 x 2.5m Precontraint membrane



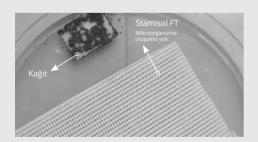
Pressure daN/m²	100	200	300	400	500	600	630
Results	Ok						

<sup>\*</sup> Maximum abnormal wind load in France

Wind	83.600	10.720	3.820	560	280	720
Period	Period	Period	Period	Period	Period	Period
Basınç	65	99	131	164	197	230
daN/m²	daN/m²	daN/m²	daN/m²	daN/m²	daN/m²	daN/m²
Results	Ok	Ok	Ok	Ok	Ok	Ok

<sup>\*</sup> The result of the test proved that after 3 days of abnormal 100,000 rpm wind vibration, the membrane is still stretched.

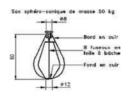
### RESISTANT TO MOLD AND FUNGUS

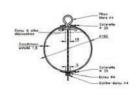


#### (STANDARD • ISO 846 A)

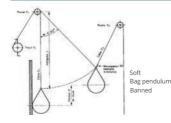
The material has high resistance to micro organisms such as mold and fungus. This does not create maintenance costs and maintenance costs after the application.

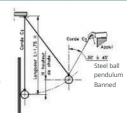
#### **RESISTANT TO IMPACT**





	Steel ball 50 Kg.	Steel ball 3 Kg.	Steel ball 1 Kg.	Steel ball 0,5 Kg.
Energy (joules)	400	60	10	3
Result	Ok	Ok	Ok	Ok





## NEW ARCHITECTURAL STRUCTURES

# WHY SHOULD BE PREFFERED TEXTILE FACADE?

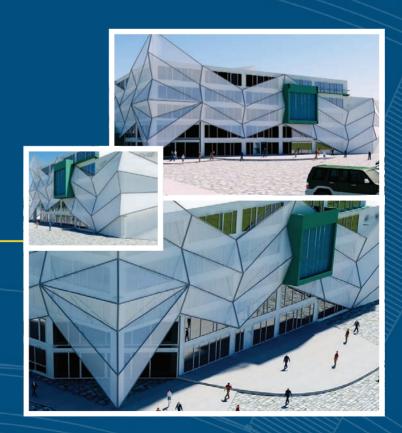
- 1 | ARCHITECTURAL DESIGN FREEDOM AND ECONOMICS
- 2 THERMAL COMFORT AND SOLAR PROTECTION
- 3 INTERIOR GLARE CONTROL AND INTERIOR VIEW
- 4 VISUAL EFFECT AND PRINTABLE
- 5 RAPID SOLUTIONS AND MODERNIZATION
- 6 ACOUSTIC CONTRIBUTION AND SAFETY

# ARCHITECTURAL DESIGN FREEDOM AND ECONOMICS

Due to the material characteristic, the design alternatives, which have been identified, allow to create 3-dimensional amorphous forms that can not be obtained with many known materials. In addition to building new modern buildings, the forms that can be formed can also be used in the modernization of old buildings to transform buildings into structures that will add value to the building and reflect the corporate identity.

It is much more economical than other conventional (glass, wood, metal coating) materials. Because tonnage, manufacturing and assembly times and costs are low. It can be applied in a very short time with less steel infrastructure and maintains its appearance and stability for a very long time with little maintenance.

In architectural design freedom, both in the advanced architectural buildings, and in the old buildings to be renovated, the facade offers three dimensions and visual richness.







## 2

# TERMAL COMFORT AND SOLAR PROTECTION

By means to the solar and thermal protection it creates, it saves a great deal of air conditioning costs in the summer, as well as it protects against sunburn effect and greenhouse effect especially in glass curtain façade or skylight applications.





Before



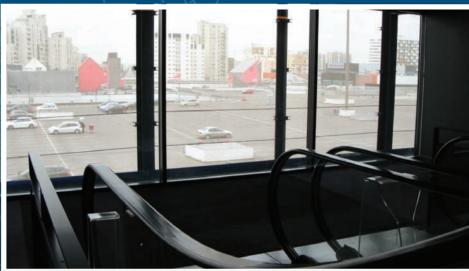
After



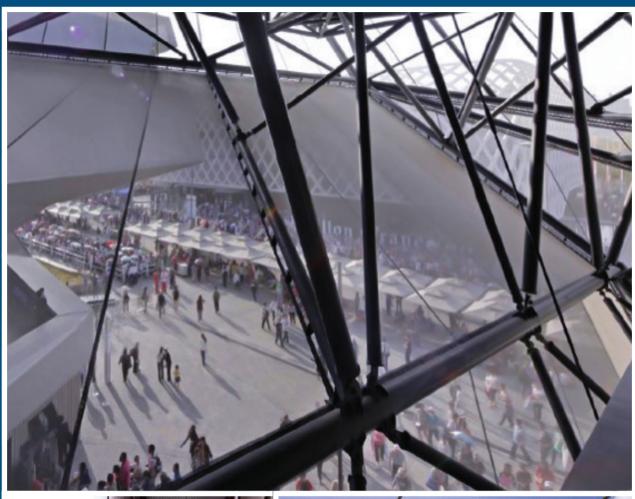
# 3

# INTERIOR FLARE CONTROL AND OUTDOOR VIEW

Gives the possibility to benefit by high solace without being influenced by sunlight inside.









Z IIsH noitididix

mboA loting

## 4

## VISUAL IMPACT AND PRINTING

The aesthetic appearance and the light play to be done add value like a monument.

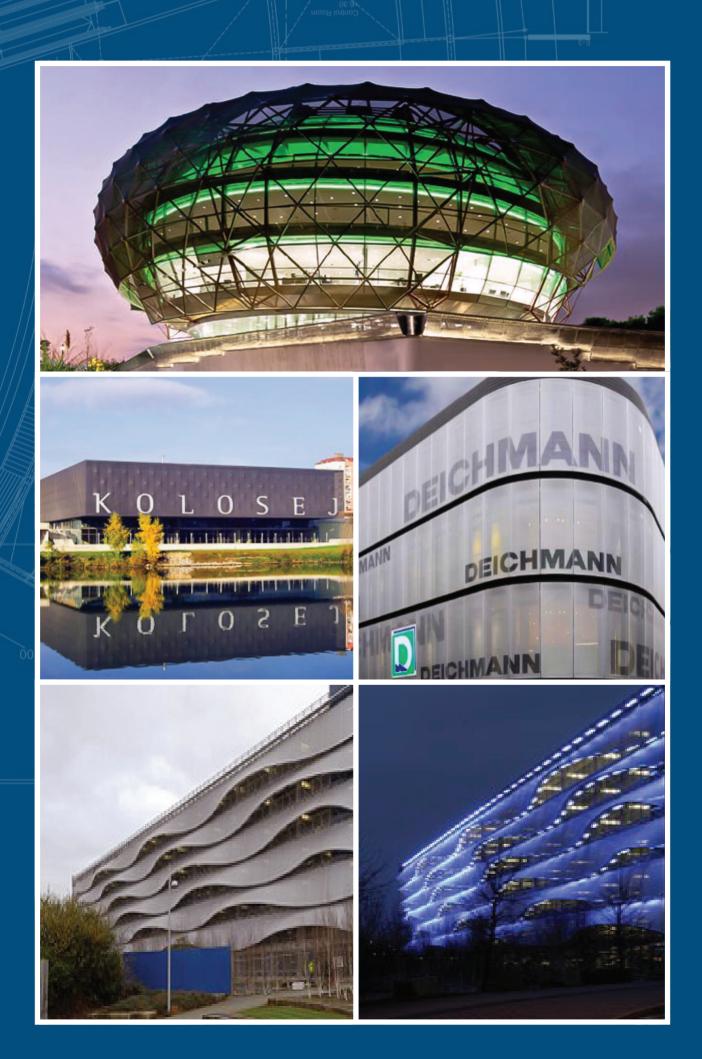
By adding a 3dimensional value to the old building, a visual effect can be created and the corporate identity can be reflected clearly.



Before

1. Option

2. Option



## 5

## QUICK SOLUTIONS AND MODERNIZATION

With the Mesh membrane facade applications, old structures have a modern plant look. Thanks to its transparency and mounting system, it offers aesthetically pleasing, cost-effective and very fast solutions in old building renovations, with an additional steel substructure weighing approximately 5 kg / m2 without altering existing facades and interiors.

Ispanya Oasis Hotel- Lanzarotte visual effect can be created and the corporate identity can be reflected clearly.



Before

After







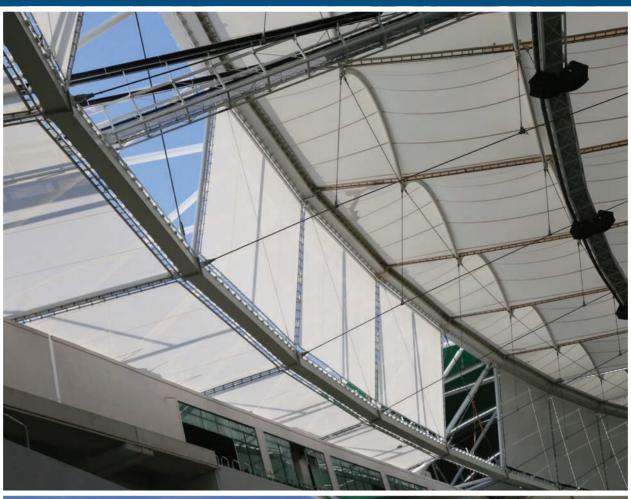
## 6

## ACOUSTIC CONTRIBUTION AND SAFETY

Used to reduce echo and noise levels in structures such as indoor gyms, shopping malls or stadiums. It also provides architects with a practical solution to conceal the structures or installations of conventional roof enclosures and to create an aesthetic element there.

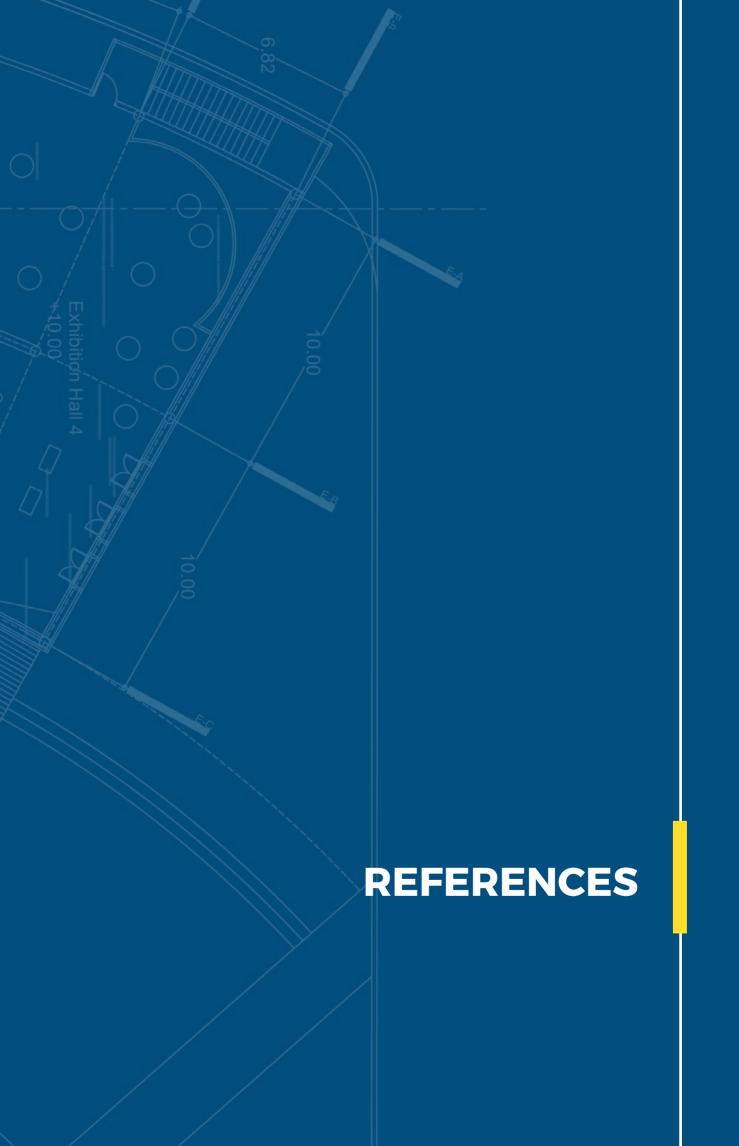
In terms of building use safety, membrane material also comes out with its features such as no toxic gas extraction, dripping and non-flammability. Especially, many materials used in interior applications are disintegrated during the earthquake, and the human life is threatened.











## BURSA CROCODILE ARENA STADIUM



### **PROJECT INFORMATION**

Project Form : Barrel Vault

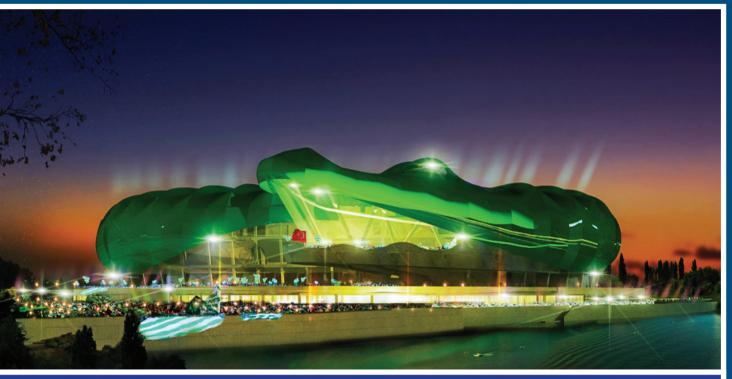
**Application Area:** Sport Facilities

**Project Material**: PTFE

**Project Location:** Turkey

**Project** m<sup>2</sup>: 65.000 m<sup>2</sup>







## KONYA CITY STADIUM



### PROJECT INFORMATION

Project Form : Flat

Application Area : Sport Facilities

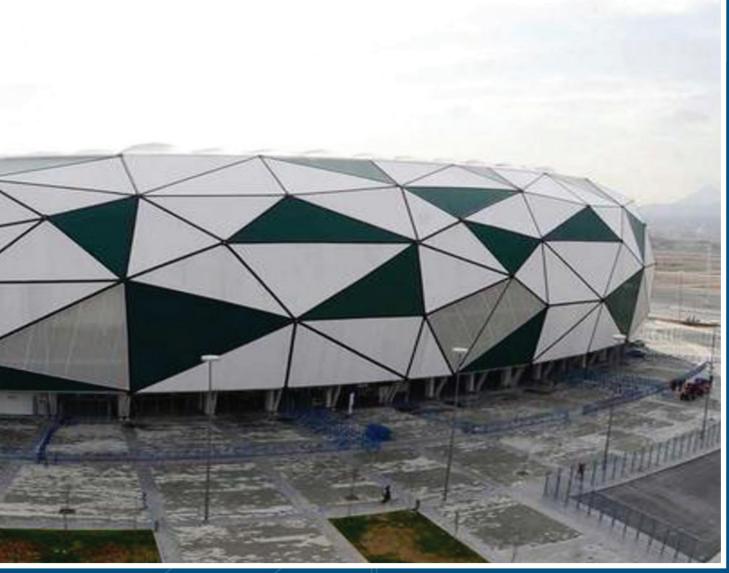
Project Material : PVC

Project Location : Turkey

**Project** m<sup>2</sup>: 45.000 m<sup>2</sup>







## GAZIANTEP STADIUM



### PROJECT INFORMATION

Project Form : Barrel Vault

Application Area: Sport Facilities

Project Material: PTFE

**Project Location:** Turkey

**Project** m<sup>2</sup>: 65.000 m<sup>2</sup>







## PSH KVARELI

### PROJECT INFORMATION

Project Form: Dome

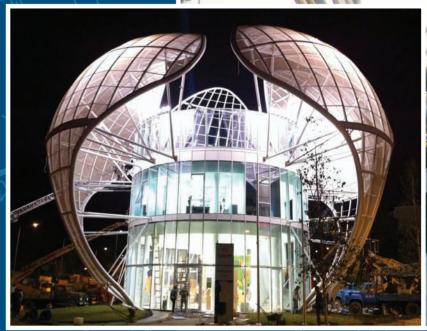
Application Area: Facade

Project Material: PTFE Mesh

Project Location: Asia

Project m<sup>2</sup>: 1.100 m<sup>2</sup>









### PROJECT INFORMATION

Project Form: Wave

Application Area: Facade

Project Material: PTFE Mesh

Project Location: Asia

Project m²: 1.744 m²

Completion Year: 2012







## BAKU 2015 EUROPEAN GAMES

### **PROJECT INFORMATION**

Project Form : Flat

Application Area: Sport Facilities

**Project Material**: PVC Mesh

**Project Location : Asia** 

**Project** m<sup>2</sup>: 32.000 m<sup>2</sup>







Project Form : Flat

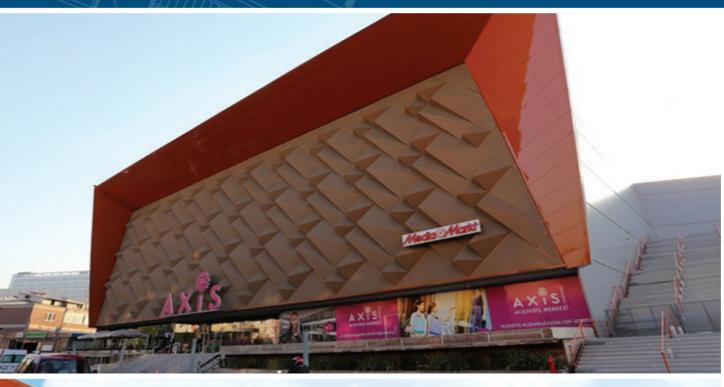
Application Area : Facade

Project Material : PVC Mesh

Project Location : Turkey

**Project** m<sup>2</sup>: 2.100 m<sup>2</sup>







## VAKIFBANK SPORT PALACE



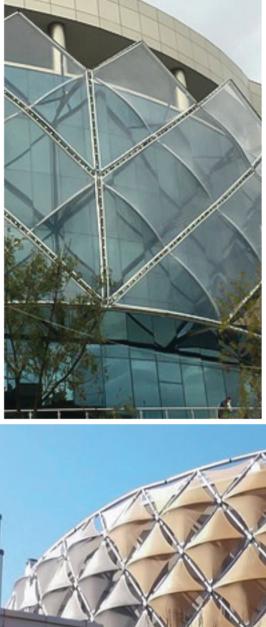
Project Form : Barrel Vault

Application Area: Sport Facilities

**Project Material**: PVC Mesh

**Project Location : Turkey** 

Project m<sup>2</sup>: 2.700 m<sup>2</sup>









## SIMSEK BISQUIT FACTORY



### **PROJECT INFORMATION**

Project Form: Wave

Application Area: Facade

Project Material: PTFE Mesh

Project Location: Turkey

Project m²: 2.000 m²

Completion Year: 2015









## ARCHITECTURAL EFFECTS AND BENEFITS OF TEXTILE FACADE COVERINGS



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