

PROTECTION SOLUTIONS
FOR ARPORTS

AIRPORTS REFERENCES
WORLDWIDE



# **WORLDWIDE**REFERENCES





## **OUJDA INTERNATIONAL AIRPORT**



Oujda, Morocco 2008

170 Certilux according to CE norm EN 12101-2 are directly integrated into the façade.

The blades are in glass «green parsol» 64.2mm and equipped electrically 24V. Therefore, units can be controlled for smoke ventilation as well as for daily ventilation.







## **EUROAIRPORT BASEL MULHOUSE**

Mulhouse, France 2013

Mindful of its impact on the environment and energy bills, Basel-Mulhouse Airport was equipped with new continuous roofligths in 2013: the Bluevoûte PCA Fix. These are ideal for bringing in overhead natural lighting, from which the airport now benefits.

350 pcs Acoustic Certiciel (concealed mechanism) were installed



## **CHARLES DE GAULLE AIRPORT**

Paris, France

350 pcs Acoustic Certiciel (concealed mechanism) were installed







## **QUEEN ALIA INTERNATIONAL AIRPORT**



Synthetic waterproofing system: 100.000  $m^2$ 

The waterproofing of the whole system on a total surface of about  $70.000 \text{ m}^2$ , is guaranteed by the 1.8mm PVC membrane with glass fibre reinforcement **Flagon® SV**.







## **MACEDONIA AIRPORT**



Thessaloniki, Greece 2008

## Mechanical fixing system: 6.000 m<sup>2</sup>

Waterproof synthetic membranes of the Flagon® TPO range are successfully employed in all sectors of roofing and civil engineering. The roofing business area uses membranes with inner reinforcement made of polyester mesh for mechanically fastened visible coverings and membranes with glass veil reinforcement for roofing with fixed or movable ballasting.



## **BANGALORE INTERNATIONAL AIRPORT**



Bangalore, India 2007

#### Mechanical fixing system: 60.000 m<sup>2</sup>

Waterproof synthetic membranes of the Flagon® TPO range are successfully employed in all sectors of roofing and civil engineering. The roofing business area uses membranes with inner reinforcement made of polyester mesh for mechanically fastened visible coverings and membranes with glass veil reinforcement for roofing with fixed or movable ballasting.





## **BLAISE DIAGNE INTERNATIONAL AIRPORT**



Dakar, Senegal 2016

Self-protected non-accessible roof: 10.000 m<sup>2</sup>

Solvent-free primer Aquadère® + Sopracolle® 300 N + Efigreen® Alu+ 40 mm + Soprastick® SI + Elastophène® Flam 25 AR Grey

High performance polyisocyanurate (PIR) thermal insulation is used to obtain 1.80 W/m².°C with only 40mm thickness to reduce transport costs. Bitumen waterproofing system is used for making installation fast, easy, and reliable and composed with 1st selfadhesive membrane and a 2nd self-protected membrane covered with coloured slate chippings. The great advantage of bituminous coverings is that they can be regenerated with adding new membranes of the same nature reducing the costs of demolition and waste disposal, over time.







## **NEW ANTALYA AIRPORT**

Antalya, Turkey 2014

Bituminous waterproofing system: 45.000 m<sup>2</sup>
APP mineral 4.2 mm bitumen material - white surface.



## **AIRBUS**

Hamburg, Germany 2004

Bituminous waterproofing system: 28.000 m<sup>2</sup> APP mineral 4.2 mm bitumen material - white surface.







## **TERMINAL CENTER KINGSTON**



Kingston, Jamaica 2007

Bituminous waterproofing system: 12.000 m<sup>2</sup>
Elastocol® 500 TP + Antirock® P under hot rolled asphalt
to resist to high bus traffic, thanks to Antirock® products
designed for roads and bridges with very high characteristics
such as concrete adhesion as example.

**Alsan® Flashing**, ready-to-use waterproofing bitumen-polyurethane resin used for upstands and details.

**Alsan® 400** is a single-component, ready-to-use watertight polyurethane resin used to waterproof all stairways of the building.

**Sopralène® Flam Stick** + **Sopralène® Flam 180 AR** are used as waterproofing system for making installation fast, easy, and reliable and composed with 1st self-adhesive membrane and a 2nd self-protected membrane covered with coloured slate chippings.







#### AL MASSIRA INTERNATIONAL AIRPORT

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Agadir, Morocco 2015-2016

Accessible roof under protection: 4.000 m<sup>2</sup>
Soprakote® + Elastophène® 25 + Sopracolle® 300 N + Efigreen®
Duo+ 40 mm + Sopravoile® 100 + Elastophène® Flam 180-25 +
Elastophene® Flam 25 + protection «slab»

The chosen built-up roofing system includes the best thermal insulation because of the ratio between thickness and thermal resistance. Due to the thermal conductivity of Efigreen® Duo (being of 0.022 W/mK) and a thickness of 40 mm, we obtain a thermal resistance of 1.80 W/m²K. This can reduce thicknesses and the weight on roofs, and allows to save on transportation fees. The good compressive strength (class C) allows this insulation a great waterproofing support for, non-accessible, technical or pedestrian access roofs and green roofs.



## **MOHAMMED V AIRPORT**



Casablanca, Morocco 2016

Bituminous waterproofing system: 20.900 m<sup>2</sup>
Bitumen surfaced mineral wool + Elastophène® Flam 25 + Elastophène® Flam 25 AR

This SBS multi layered waterproofing system is self-protected with colored slate chippings that protects the membrane from UV rays and external aggressions. The waterproofing is adhered and fully welded on the bitumen-surfaced insulation.

The SBS membrane allows an excellent flexibility and a good aging and heat resistance. Its elasticity is resistant to extreme deformations (memory effect) and is sufficiently adapted to movements of the flexible support such as the steel deck of the airport.







## INTERNATIONAL AIRPORT OF ZURICH



Zurich, Switzerland 2016

Liquid waterproofing system: 11.000 m<sup>2</sup> Alsan® Reku P 70 + Alsan® 870 RS + Alsan® 970 F

The products of the **Alsan®** range were the most suitable for this purpose, firstly because of their ease of implementation and secondly because it dry very quickly and thus contributed to reducing the time of construction.







#### **ALGER INTERNATIONAL AIRPORT**



Alger, Algeria 2000-2001

Self-protected technical roof: 35.000 m<sup>2</sup> Solvent-free primer Aquadère® + Sopracolle® 300 N + PSE (EPS) 40 mm + Soprastick® + Sopralène® Flam 180 AR



## **BAMAKO SENOU INTERNATIONAL AIRPORT**



Bamako, Mali 2011

Waterproofing system under protection: 12.000 m<sup>2</sup> Solvent-free primer Aquadère® + Elastophène® 25 + Sopracolle® 300 N + Efigreen® Duo 40 mm or 70 mm + Tapered IR + Styrbase® Stick + Sopralène® Flam 180 AR + Protecdrain® Filtre + concrete pavers

High performance polyisocyanurate (PIR) thermal insulation is used to reduce transport costs. Tapered insulation was used to make slope on the steel deck.

Bitumen waterproofing system is used for making installation fast, easy, and reliable and composed with 1st self-adhesive overlaps membrane and a 2nd self-protected membrane covered with coloured slate chippings, we used a drainage PEHD sheet under concrete pavers for a technical access roof.







## **ORAN INTERNATIONAL AIRPORT**



Oran, Algeria 2005-2006

Rehabilitation of terraces: 6.000 m<sup>2</sup>

Solvent-free primer Aquadère® + Elastophène® 25 + Soprastick® + Sopralène® Flam 180 AR







## **NEW TERMINAL OF ORAN**



Oran, Algeria 2017

Waterproofing system: 18.000 m<sup>2</sup>

Solvent-free primer Aquadère® + Sopralène® S Flam 180-40 (two layers)



## **CONSTANTINE AIRPORT**



Constantine, Algeria 2007

Waterproofing system: 6.000 m<sup>2</sup> Solvent-free primer Aquadère® + Elastophène® 25 + Soprastick® + Sopralène® Flam 180 AR





## **MOHAMMED V INTERNATIONAL AIRPORT**



Bituminous waterproofing system: 20.900 m<sup>2</sup>

Bitumen surfaced mineral wool + Elastophène® Flam 25 + Elastophène® Flam 25 AR

This SBS multi layered waterproofing system is self-protected with colored slate chippings that protects the membrane from UV rays and external aggressions. The waterproofing is adhered and fully welded on the bitumensurfaced insulation.







#### **ERBIL INTERNATIONAL AIRPORT**



Buried walls and synthetic roofing: 35.000 m<sup>2</sup>

**15.000 m² of Colphène® 1500** self-adhesive flexible SBS elastomeric bitumen waterproofing membrane with anti-root properties and flame-free application. **20 000 m² of Flagon® EP/PR Energy Plus** special synthetic Cool Roofing membrane white upper surface (addition of titanium) highly reflective and extremely resistant to aging, UV rays and chemical agents.



## **SAINT PIERRE AND MIQUELON OLD AIRPORT**



Saint Pierre and Miquelon, 2019

Waterproofing system mechanically fastened: 800 m<sup>2</sup> Soprafix® HP + Sopralène® Flam 180 ARD grey

Renovation of the existing roofing system on wood substrate.



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## **GUARULHOS AIRPORT**

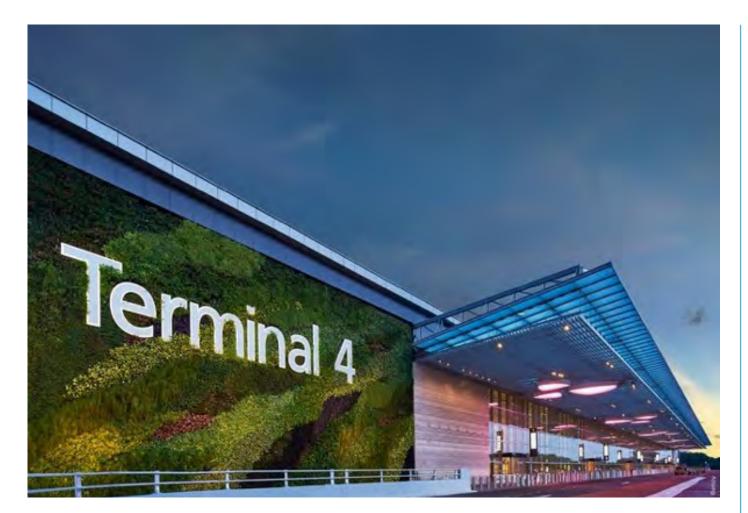


Sao Paulo, Brazil 2013

229 Certilight vents were installed on the glass roof of this international airport at Sao Paulo. These daily air and smoke vents comprise two leaves for letting smoke and heat out whilst remaining discreet in design and look, fitting perfectly into the environment of this airport covering more than 1400 hectares.

Watertank works were also made for terminal T3 with Alsan® Flashing liquid system and Flagon® AT synthetic waterproofing.







#### **CHANGI AIRPORT**

Singapore, Singapore 2017

**97 pcs Exubaie** with themally broken profile and double glazed laminated both side.

Bituminous waterproofing system: 88,000 m<sup>2</sup>

Colphene (1.5mm) self-adhesive flexible SBS elastomeric bitumen waterproofing membrane.



## **ARTES BRUGGE CRUISES TOWER**

Zeebrugge, Belgium 2019

Bituminous waterproofing system: 3.500 m<sup>2</sup> Solvent-free primer Aquadère® + Soprarock® PB P3 TF + Sopralène® Techno 4 AF C1 FR (roof) and Sopralène® Techno Garden 4 AF C1 FR (roof terrace).

The biggest challenge was to choose materials able of withstanding strong winds. Given its height, its location in a clear area on the coast and the large number of windows, the ABC tower was very demanding on this point.





## HAMMAMET INTERNATIONAL AIRPORT



**232 pcs Certilam** insulated blades and frame.







## **CONSTANTINE AIRPORT**



Constantine, Algeria 2007

Bituminous waterproofing system: 6.000 m<sup>2</sup> Solvent-free primer Aquadère® + Elastophène® 25 + thermal insulation + Soprastick® + Sopralène® Flam 180 AR



## **CANCUN INTERNATIONAL AIRPORT**



Cancun, Mexico

**Bituminous waterproofing system:** Sopralène® Flam 180 + Sopralène® Flam 180 GR White,

Cool Roofing membrane white upper surface highly reflective and extremely resistant to aging and UV rays.









## **CONTROL TOWER TOCUMEN AIRPORT**



## Flashing skylights roofing : $500 \ m^2$

**Soprasolin®** self adhesive waterproofing tape easily applied on most materials: wood, concrete, metal, fibre-cement, zinc, PVC. It is excellent for waterproofing details such as penetrations, ventilation, vents, sky lights, eaves, chimney stacks, insulation protection.

#### PMMA liquid waterproofing system : 50 m²

**ALSAN® 770** high-grade, PMMA-based resins with low-temperature flexibility and are used to create durable and reliable roof waterproofing membranes







## **ALANYA DIS HATLAR TERMINAL**

Antalya, Turkey 2007

Synthetic waterproofing system: 6.500 m<sup>2</sup> Flagon® EP/PR synthetic membrane manufactured in TPO modified polyolefin.



## **EDMONTON INTERNATIONAL AIRPORT**

Edmonton, Canada

**Bituminous waterproofing membranes:** Duotack® adhesive, Sopravap® 'R, Sopralène® 180 SP, Soprabase® 520, Sopraflash® Flam Stick, Soprastar® Flam WF, Soprastar® Flam HF GR and Sopraseal® Stick 1100 T for walls.







## PALMA DE MALLORCA AIRPORT



Palma de Mallorca, Spain

**252 pcs CERTILUX** with laminated glass









Bituminous waterproofing membranes: 180.000 m<sup>2</sup> Mineral wool thermal insulation + Colphène® (3 mm) self-adhesive flexible SBS elastomeric bitumen waterproofing membrane.





## **MENORCA AIRPORT**



Menorca, Spain

86 Exubaie with standard profile and double glazed and 32 Certilux with PC blades.







## **NANJING INTERNATIONAL AIRPORT**

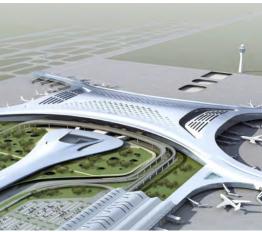


Nanjing, China

Synthetic waterproofing system: 100.000 m²
Flagon® SR synthetic membrane of plasticised PVC with signal layer.







## **ZHENGZHOU INTERNATIONAL AIRPORT**



Zhengzhou, China

Synthetic waterproofing system: 180.000 m<sup>2</sup>
Flagon® SR synthetic membrane of plasticised PVC with signal layer.





## **IBIZA AIRPORT**



Ibiza, Spain

**48 pcs Certilux** with polycarbonate 6mm blades





photos credit Vidal + Asociados arquitectos



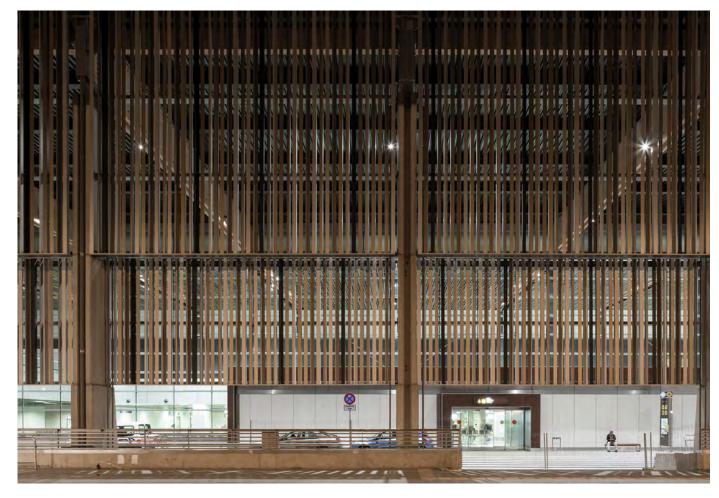
## **SARAGOSSA AIRPORT**



Saragossa, Spain

Tecsound® Soundproofing system: 25.000 m<sup>2</sup> Tecsound® 50.







## NORTH TERMINAL, GRAN CANARIA AIRPORT



Tecsound® Soundproofing system: 10.000  $m^2$  Tecsound® 50.



## T3 MALAGA AIRPORT



Malaga, Spain

Tecsound® Soundproofing system:  $30.000 \ m^2$  Tecsound® 100.







## **TERMINAL T-1 - BARCELONA**



Barcelona, Spain

Tecsound® Soundproofing system: 140.000  $m^2$  Tecsound® 100.







## **SANTIAGO DE COMPOSTELA AIRPORT**



Santiago de Compostela, Spain

Tecsound® Soundproofing system: 10.000 m² Tecsound® 100.



## **LEON AIRPORT**



Leon, Spain

Tecsound® Soundproofing system: 1.000 m<sup>2</sup> Tecsound® 100.





## ARTURO MERINO BENÍTEZ INTERNATIONAL AIRPORT



Santiago de Chile, Chile

Tecsound® Soundproofing system: 115.000 m<sup>2</sup> Tecsound® 70.





photos credit flickr.com (Gregouill)

## PALMA DE MALLORCA AIRPORT



Palma de mallorca, Spain

Tecsound® Soundproofing system: 40.000 m<sup>2</sup> Tecsound® 100.



## **NINOY AQUINO AIRPORT**



Manila, Philippines

Tecsound® Soundproofing system: 30.000 m<sup>2</sup> Tecsound® 50.

photos credit CNN Philippines Staff



#### **MURCIA AIRPORT**



Murcia, Spain

Tecsound® Soundproofing system: 15.000 m<sup>2</sup> Tecsound® 100.







## **SOPREMA** at your service

Looking for a sales contact in oder to discuss a future project or a project that is under way? Any questions about the installation of our product range?

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