

Three-dimensional Tensile Facade  
**aero A**



# aero A

Aero A profile is the perfect fit for three-dimensional textile facades. It is the product behind the iconic Airbus Campus facades in Toulouse.

Its innovative design was driven by the requirements of the aforementioned project, resulting in a highly aerodynamic shape, and a self-cleaning dirt-proof section.

Aero A design was inspired by the lines of the mythic A380, giving it an eye-pleasing, smooth flatless design.

## AN EFFICIENT, FLEXIBLE AND VENTILATED TEXTILE FACADE

### ◆ Thermals :

Associated with Serge Ferrari's Frontside View 381 membrane, the textile facade blocks up to 78% of solar heat.

### ◆ Resistance :

Laboratory test results show a breakout resistance at up to 4.2 T ml. Hence, the Aero A solution becomes one of the most resistant systems on the market.

Its effectiveness has already been proven by resisting to Hurricane Irma in 2017, as our Miami installations emerged unscathed.

### ◆ Inertia :

Its design enables up to 2m long tensioned frames without reinforcements.

## A SIMPLE CONSTRUCTIVE SYSTEM

### ◆ Technique :

With only 8 involved elements, including the membrane, you can give birth to all the designs that you have in mind.

FTI's tensioning system does not require any membrane sewing or welding. From the membrane to the frame, there's only one step !

Aero A profile is equipped with a technical channel that accommodates M12 square nuts, which are used as sliding attachment point, allowing different fixation possibilities.

### ◆ Tooling :

Soft-impact Mallet + FTI tightening tool + Basic Tooling.

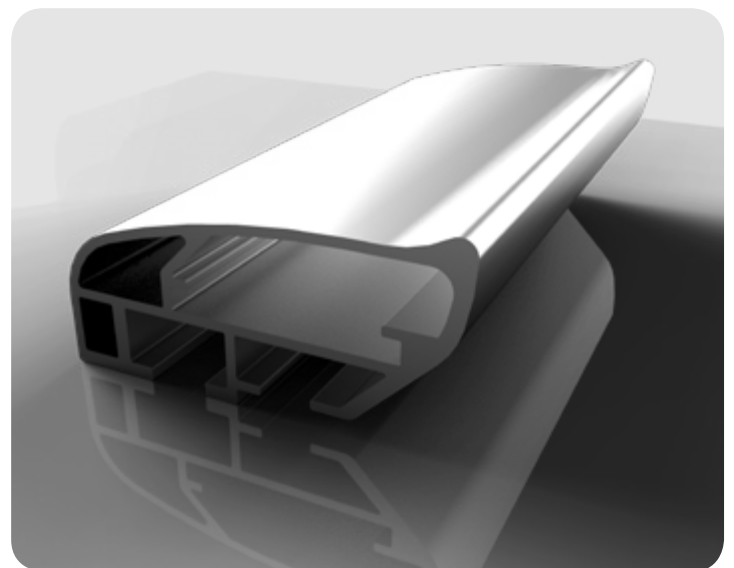
## AN AESTHETIC TEXTILE FACADE FROM THE INSIDE AS WELL AS FROM THE OUTSIDE

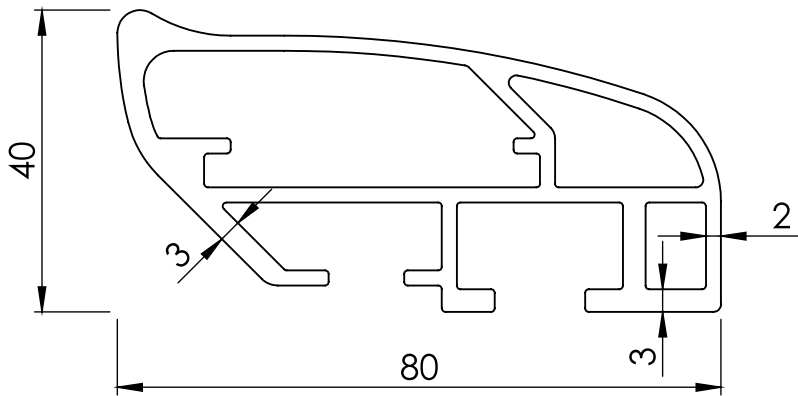
### ◆ Lightness of lines :

With a membrane that completely wraps the Aero A profile, the frame disappears totally from the external visual field.

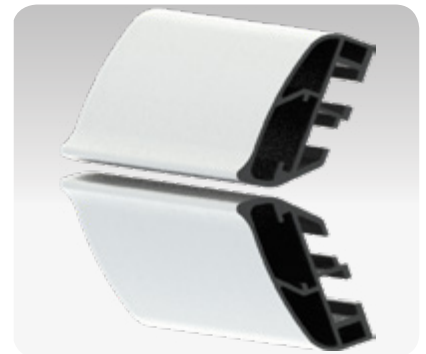
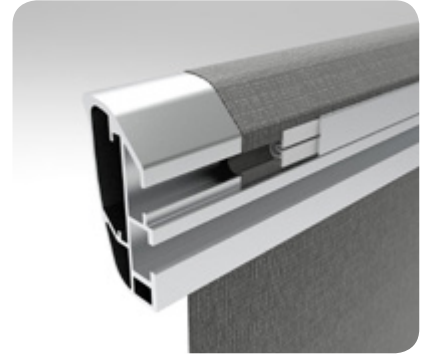
Its flatless design allows for no stagnation of plant particles, resulting in no frame stains on the membrane.

Aero A design also enables identical gap and spacing between frames, in three-dimensional dispositions, with a  $\pm 40$  degrees aperture.





Scale 1:1



CHARACTERISTICS

<b>Width</b>	80 mm
<b>Thickness</b>	40 mm
<b>Weight</b>	1,9 Kg/ml
<b>Maximum Surface</b>	4 m <sup>2</sup>
<b>Inertia</b>	Lxx = 91764.50 Lxy = 83315.61 Lxz = 0.00 Lyx = 83315.61 Lyy = 460610.82 Lyz = 0.00 Lzx = 0.00 Lzy = 0.00 Lzz = 552375.32
<b>Surface Treatment</b>	Anodized 15μ / Natural Alu / Powder Coating
<b>Bars Length</b>	2650 mm or 5300 mm
<b>Sold with</b>	Gripp PVC + Wedges kit + Key



WIND RESISTANCE  
250 Km/h



100% RECYCLABLE



TEARING 4,2T/lm



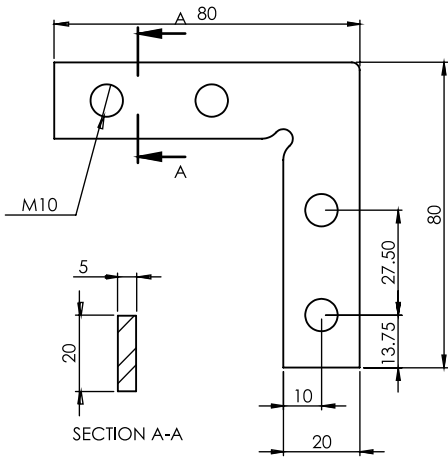
SURFACE 4 m<sup>2</sup>/frame



3D SHAPES

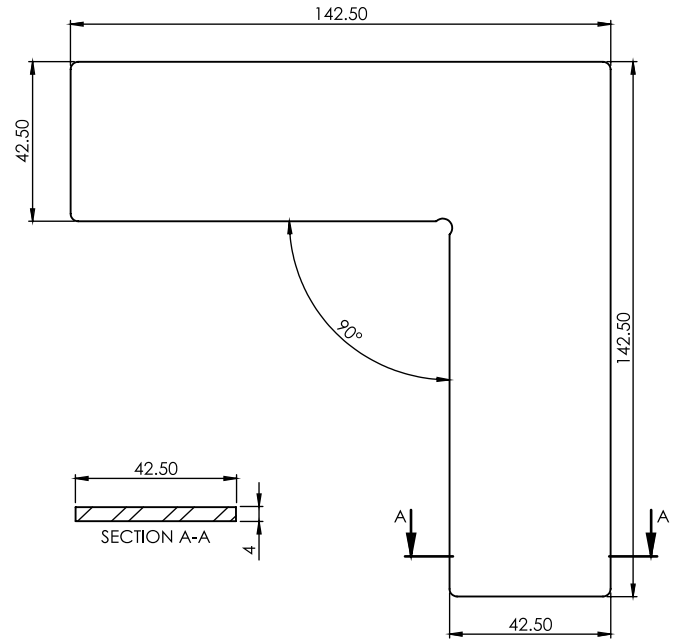


PATENTED SYSTEM



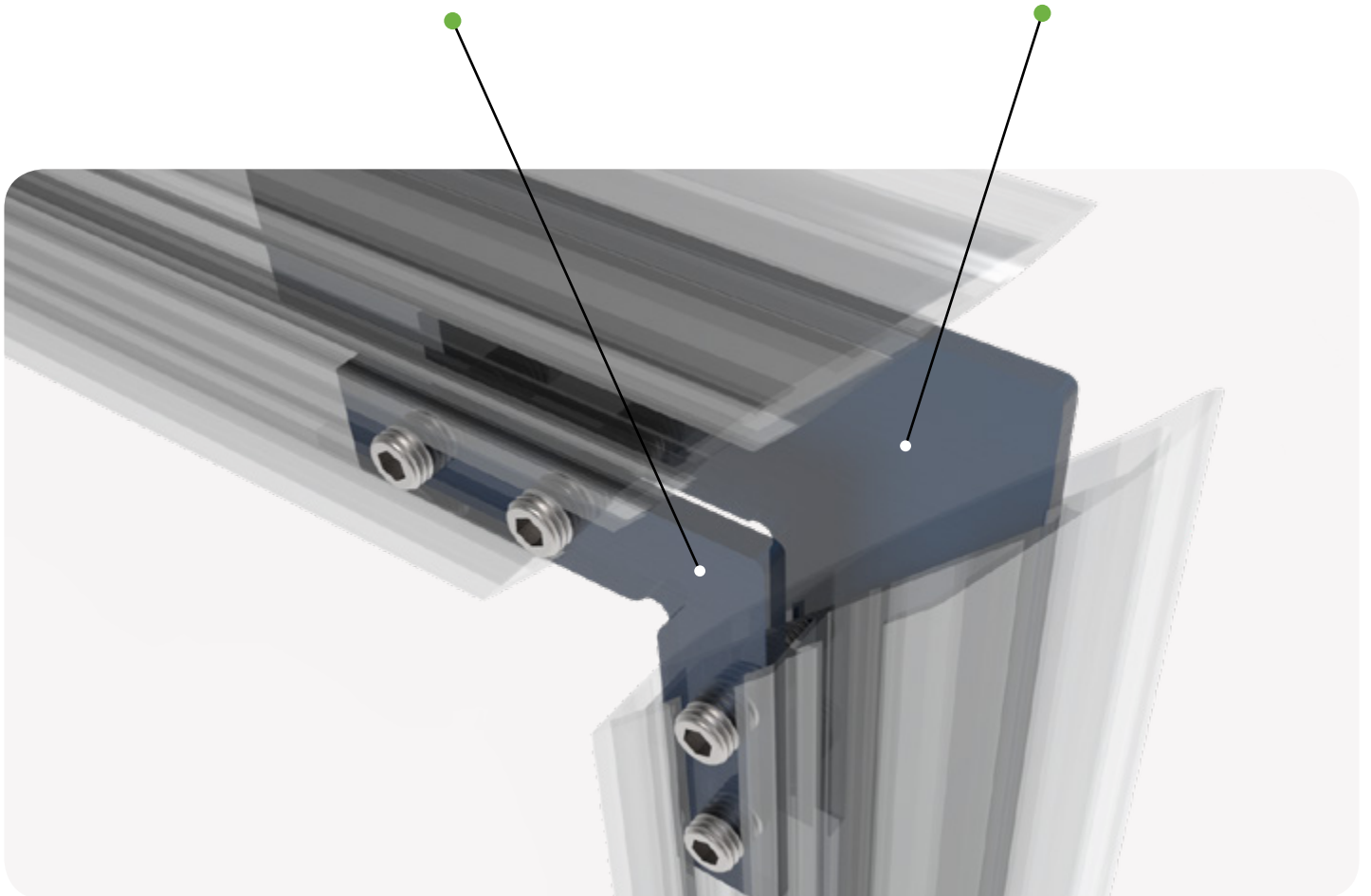
AERO A - EQ90T

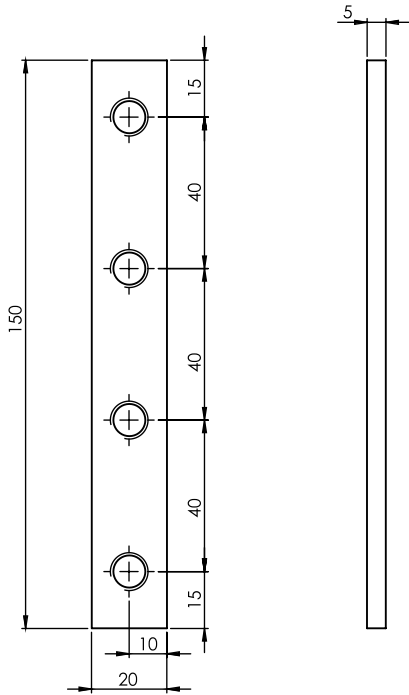
Scale 1:2



AERO A - EQ90

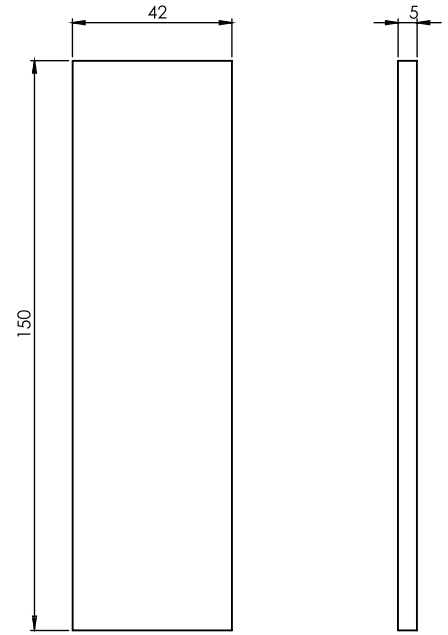
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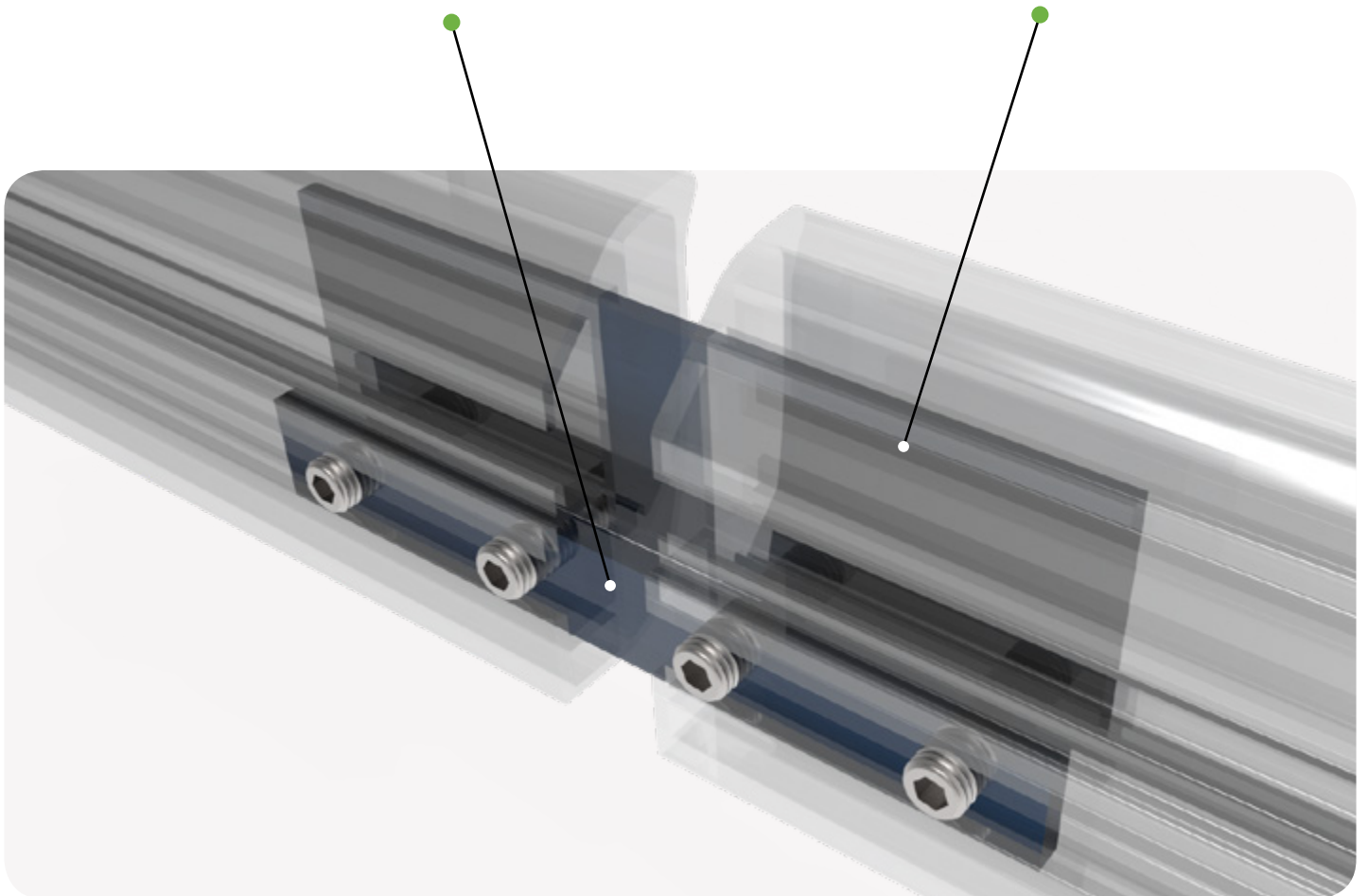
**AERO A - Threaded Junction Plate**

Scale 1:2



**AERO A - Junction Plate**

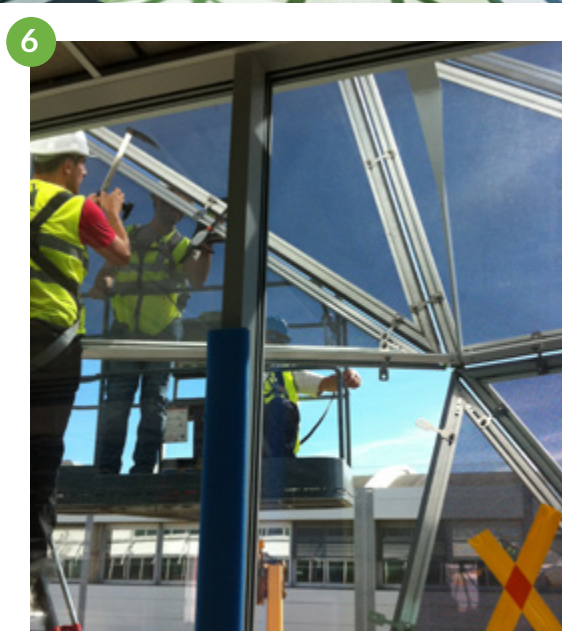
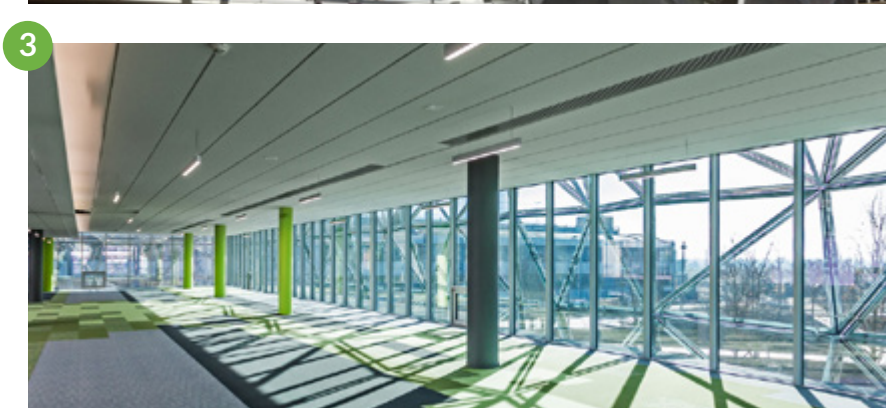
Scale 1:2



# The requirements of the Airbus project

The Airbus architect requirements streamlined the characteristics of a true lightweight architecture solution, focusing on the following aspects :

- Elimination of heavy structures such as square, U or H sections in the visual area.
- The supporting structure consists only of steel plates to allow wind resistance from the front while leaving only 10 mm of structure visible to the occupant (1, 2, 3).
- The canvas had to wrap around the profile to minimize its presence in the space (4).
- A 10 mm trickle of light had to pass between the diamond facets (5). This space allows the occupant not to feel the heaviness of the metal structure and to feel in a controlled way the well-being of the sun's rays (6).



# The requirements of the Airbus project

The entire structure also had to comply with mechanical standards in aeronautical space (Aluminium/Steel corrosion management by insulation, no self-drilling fasteners, ability to withstand vibrations and kerosene fallout). (07)

In order to optimize the light between the frames, the stainless steel connecting brackets are cut in the shape of an 8 and fixed with a cap nut. (08, 09)

The shape of the Aero A profile has been designed to allow a 10 mm shadow gap with angles of  $\pm 40^\circ$  in and out (10)

To date, the balance between technology and aesthetics designed by the team of the architect CALVO - TRAN VAN has given full satisfaction to the thousands of users who have lunch in this relaxation area. (11, 12)

