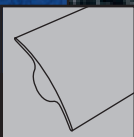


AEROWINGS 200-400

LUXALON



www.luxalon.com

LUXALON[®]

Sun Control Systems

A HunterDouglas[®] PRODUCT

System Description

Luxalon® wing-shaped elements, or fins, combine optimum solar effectiveness with an elegant and futuristic appearance.

- Aluminium extruded wing-shaped profiles
- Available anodised, in RAL colours in polyester or PVDF coating or in wood tones
- Fin direction horizontal or vertical
- System projected horizontally or positioned vertically
- 3 different standard profiles of 200, 300 and 400 mm wide
- Fins fixed at a chosen angle between 0 and 180 degree in increments of 5 degrees
- Adjustable fins with motorized operation, operable by Building Management Systems
- Two standard supporting structures available, tube or flat bar
- Corner solutions available for fixed systems



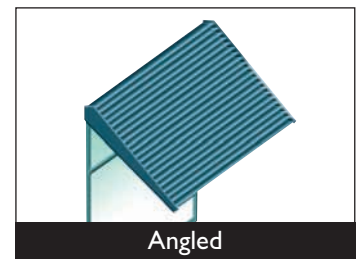
Absa, South-Africa - type 300AW

Practical Applications

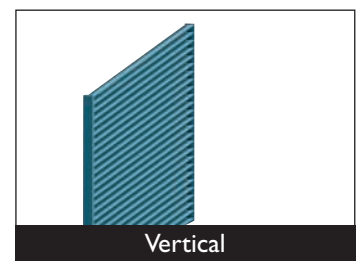
- *Horizontal projected Aerofoil system*
For high sun angles, the horizontal application assures a constant and reliable sun control system during sunny periods.

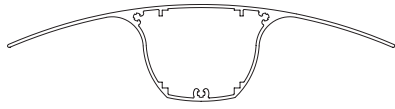


- *Angled projection Aerofoil system*
For high and medium sun angles, sloped applications give even more shade.

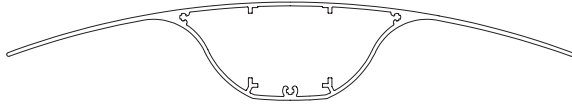


- *Vertical Aerofoil system*
For lower sun angles, the vertical application allows a reliable sun control system with good visibility to the outside.

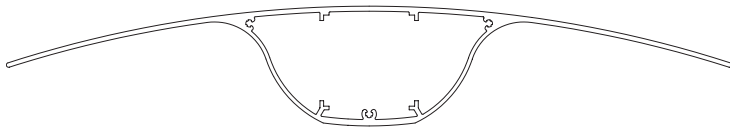




200AW - width = 200 mm, height = 50 mm

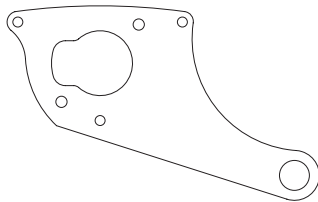


300AW - width = 300 mm, height = 52 mm

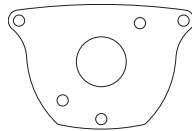


400AW - width = 400 mm, height = 66 mm

Adjustable system endcaps: 200AW - 300AW - 400AW



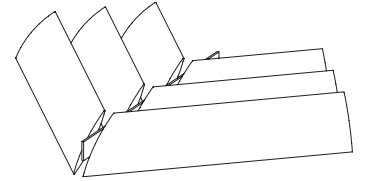
Driven endcap



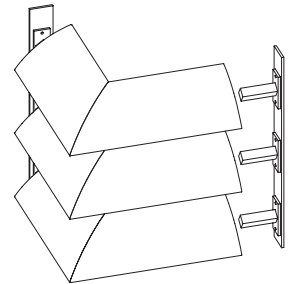
Endcap

- Corner Solutions

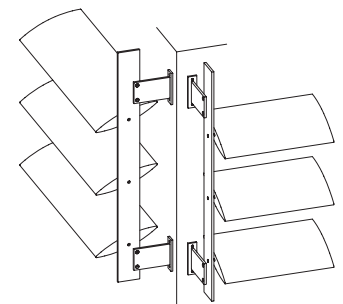
There is a solution for every corner angle with the fixed Aerofoil system, some standard configurations are shown.



Mitre cut with bracket



Mitre cut welded



Open corner



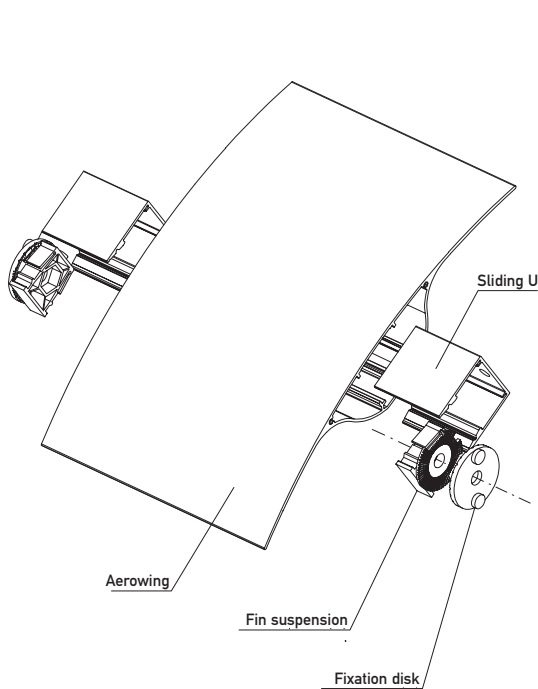
- Fixed Fin Angle

The Luxalon® Aerowing system in a sub-structure has been designed to accommodate any angle between 0° and 180° with increments of 5 degrees. The fin angle can be set during installation.

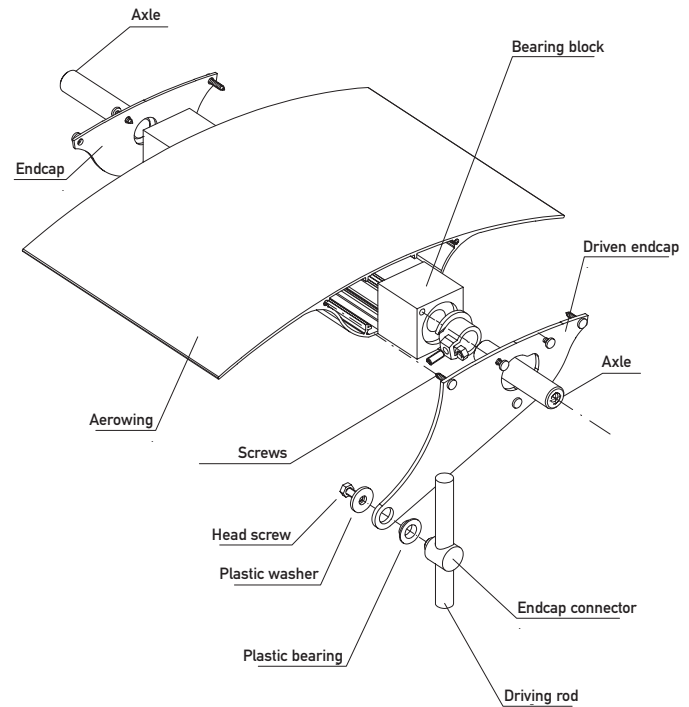
- Adjustable Fin Angle

The Luxalon® adjustable Aerowing system gives the user the option of setting the fins at any possible angle from 0 to a maximum of 120 degree at any time. With this motorised system, maximum convenience can be obtained with the optional intelligent control system, which automatically regulates the gap according to the sun's path. The high quality materials guarantee this system to operate with a minimum of maintenance.

Aerowing - Fixed system



Aerowing - Adjustable system



Possible Configurations

The right configuration of fins for a building depends on a number of factors:

- Shading needs that relates to the chosen horizontal, angled or vertical application
- The desired span in relation to the building design
- A chosen fin (200, 300 or 400 mm wide) each with its own span capabilities
- The required shading capabilities that influences the pitch of the fins
- The selected support structure; Luxalon® has two standard systems available.
- Fixed or adjustable fins.

Luxalon® can be of assistance to help select the right combination for an aesthetical design with optimum building comfort.

Installation

The installation of both Luxalon® Aerowing systems is easy and require a minimum of tools.

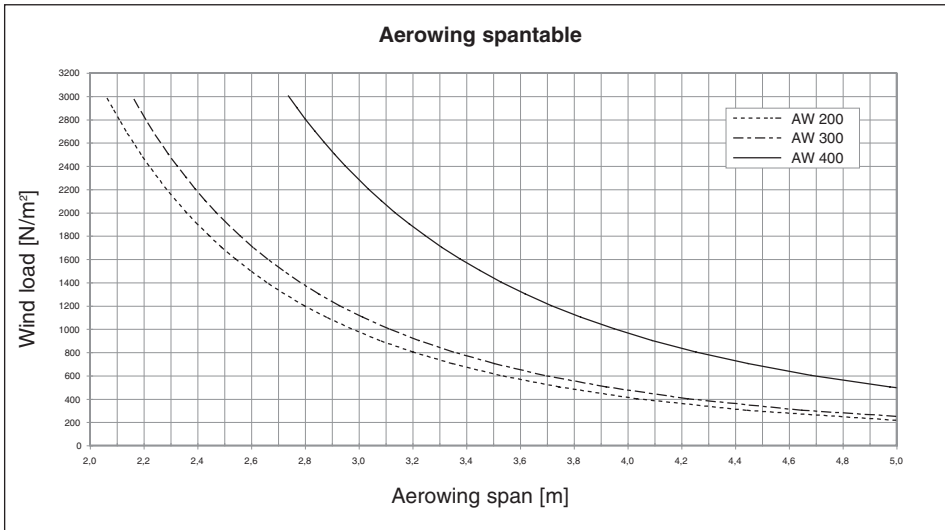
- For the fixed fin system each fin is 'snapped' into position by sliding the U-profile section over the fin suspension.
- For the adjustable system, two axles per fin are fitted to the frame. The fins are fixed to the axles and aligned with a setscrew. The driving rod is attached and adjusted. Finally the motor is installed and adjusted to provide the required angle of rotation of the fins.

Maximum Span

- Panel Span

The panel span in relation to the wind load (pressure or suction), can be calculated from the graph below.

Snow load calculations are identical to the calculation for wind load.



Note: Calculating the value of the local wind load is the responsibility of the installer who must take into account the regulations of local authorities.

For corners, roof edges or special designs wind pressure/suction will be determined with due consideration of the relevant local country's Standard Code of Building Practice.



Auto Jarof, Czechia - type 300AW





Material Specifications

- Base Material

Luxalon® Aerowing fins are aluminium extrusions with a wall thickness $\geq 1,8$ mm. For the adjustable system the ends are closed with aluminium caps cut from $\geq 1,5$ mm thick plate. All screws and bolts are made from stainless steel. For the support structure you can choose either aluminium or galvanised steel. The fixed system can optionally be provided with endcaps.

For the fixed system the fixation disc and the fin suspension are made of Nylon (PA6.6) filled with fibre glass. The sliding U-profile is extruded aluminium.

For the adjustable system the bearing block is made of Poly Ethilene (HDPE) with a stainless steel axle and an axle lock made of Nylon (PA6.6) filled with fibre glass. The end cap connector material is stainless steel and for the driving rod there is a choice of aluminium or steel.

All aluminium products can be recycled for the full 100% requiring very little energy.

- Finishes

Luxalon® Aerowings can be supplied with an anodised finish or with a polyester or PDVF powder coating.

- Luxalon® Colour Range

RAL or NCS colours are available or you may request custom made colours.

HunterDouglas®

Hunter Douglas is the world market leader in daylight regulation and solar heat control solutions with window covering and architectural products. The group, which origin goes back to 1919, is comprised over 150 companies with manufacturing and assembly organizations in more than 100 countries.

HUNTER DOUGLAS EUROPE B.V.

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Solar Protection Design Tool

In order to design the optimal Sun Control System for buildings Luxalon® has developed a Solar Protection Tool. This tool takes into consideration the orientation of the façade and the position of the building. It shows the sun and its shading during the day and throughout the year in and on the building. These calculations are made for projects by our project support team.

For additional information contact the Luxalon® sales office.

Product specifications are available in digital format.

