



SB - 100

LOUVERS & SUN BREAKERS SYSTEM

ALUMEG

Integrated Façade Systems



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LOUVERS & SUN BREAKERS **SB -100**

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ALUMEG SB-100 system is highly efficient attractive shading system designed to reduce heat gain during summer and promote heat gain during winter, increase useful daylight availability, preventing glare, reduce HVAC loads and improve building energy performance.

ALUMEG SB-100 system is made of aluminum profiles of oval, elliptical or rectangular shape which could be fixed, adjustable, or electrically operated mounted on an aluminum or steel fin protruding from façade glass joints of the building emphasize minimalistic design of shading devices.

ALUMEG SB-100 system could be adjusted according to the required inclination to block direct sun beams which can be fixed horizontally or vertically thus significantly improve the energy performance of the building.

ALUMEG SB-100, simplified design using state of the art latest structural, architectural and technical design software thus offering superior structural integrity, unbeatable quality, installation flexibility, modular design, rapid assembly and excellent safety.

System Description

Depending on the projection, weight, substrate condition and integration detail, loads transferred from other systems such as cradle temporary park, fixation detail will be engineered. Starting from custom made stainless steel bracket fixed to curtain wall mullion or 6 mm penetrating steel/aluminum fin fixed to background substrate using steel plate fixed with expansion/chemical bolts.

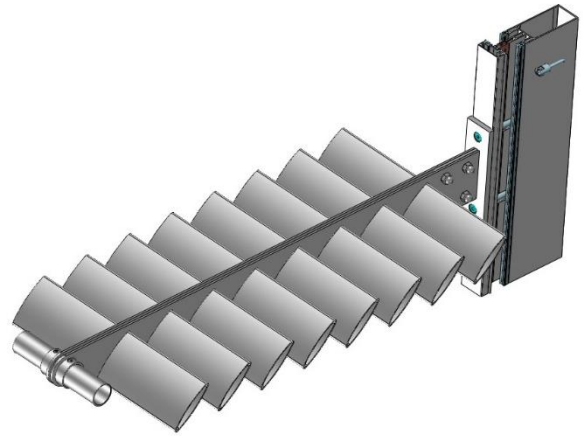
Louver blades shape, spacing and inclination is selected based on sun path calculation for the building and the required daylight and shading strategy.

Construction

Varies fabrication and installation methods based on the required daylight and shading strategy. Louver blades will be shipped to site with actual dimensions. The elegantly designed fin will be provided to site with all required holes for blade fixation and required flanges for frontal tube fixation.

The fixing bracket will be securely fixed and aligned, the blades will be fixed to the fins and then the assembled panel will be lifted and fixed to the brackets using stainless steel rod and dome nut both sides of the projected fins coming through the mullion. The frontal tube will be

inserted inside the flanges and fixed by stainless steel grub or counter sunk screws which preventing the whole structure of the sun breakers to move laterally.



Materials

- **Aluminum Extrusions:** Extruded aluminium profiles using alloy **6063** subject to **T5/T6** thermal treatment, following **UNE EN-573-1** standard. Profiles are extruded following **UNE EN-12020 & 755** standards.
- **Coatings:** Polyester, PVDF or anodized.
- **Chemical Anchor:** Two components epoxy adhesive according to **ETA-13/0397, ESR-3298, F120**
- **Structural Sealant:** Comply with **ASTM C 920**
- **Weather Sealant:** Comply with **ASTM C 920**
- **Screws:** Authentic stainless steel grade **A2**
- **Gaskets:** Gaskets are made of EPDM conforming to BS 4255 Part 1.

Technical Performance

System performance is directly linked with sun path calculation for the building and the required daylight and shading strategy.

ALUMEG SB-100 system achieves up to 80% shading efficiency when properly designed, manufactured, and installed according to ALUMEG recommended procedures and fabrication manual.

Size limitations

Size limitation of the system depends on varies parameters such as wind load, supporting bracket design, concentrated and linear applied load, projection and fixation details.

ALUMEG SB-100, sun breakers system dimension limits when manufactured and installed according to ALUMEG recommended procedures and fabrication manual.

- Horizontal blade spacing limit (width) up to 1800* mm
- Vertical blade spacing limit (height) up to 4000* mm

* Dimensions might varies based on project specs.