



F-GR

Fixed glazed roofs are a contemporary structural solution for residences and professional spaces. They are used and specified by architects, designers and constructors throughout the world, in order to ensure natural lighting in a confined space and free the user's view up from fixed, opaque obstructions.

Any glazed roof manufacturer's goal is to create roof of fine aesthetic appeal, while ensuring they will function safely, in terms of supporting the glazing weight, along with other additional loads, such as snow or wind pressure, and at the same time remaining watertight even under hard rainfall.

Confidently, with many years of experience to draw from, Salinox took up the challenge and designed a fixed glazed roof which can be constructed in any size and geometry, from simple rectangular shapes to pyramids and polygons.

The roof is constructed with high-grade aluminum crossbeams 185x100mm in dimensions, which can accommodate tempered glassboards, both single and double. The overall structure has been tested under very bad weather conditions, and exhibits excellent behaviour in terms of robustness and watertightness, so its design renders the alternative use of framed glazing and additional sealants obsolete. By using materials that will not wear off over time - aluminum and glass - and with a very smartly designed set of profiles, it maximizes the glassboard's surface, offering an unobstructed view.



S-GR and T-SR

An even greater design challenge would be to design a roof that can withstand the glazing's weight and additional loads (from say, snow, or winds), stay watertight, while at the same time allow its panes to retract whenever weather conditions allow. Salinox has designed a roof (S-GR: Sliding Glazed Roof) which does just that. An extraordinarily robust construction, which can, at the touch of a button, free up two thirds of the opening, while when closed it will stay watertight even under hard rainfall accompanied by strong winds.

Made of primary-grade aluminum alloy and internally reinforced with heavy-duty iron beams, the S-GR sliding glazed roof will endure wind, water and snow loads, without jeopardizing safety and convenience, allowing the user to marvel the view above and make use of natural light. It also employs an internal water drainage system and, optionally, an external gutter profile. The construction can be anodized and painted in a variety of electrostatic coating colours, to fit any environment. Its glass is double tempered and laminated structural glass, to ensure maximum durability against heavy loads, and allows for the largest practical pane size, reducing the barrier between the interior and external environment.

The T-SR (Thermo Sliding Roof) version, does not differ significantly in terms of appearance from the S-GR version, but it entails transparent, yet very important for the space's thermal insulation design changes in the profile. The T-SR is overall capable to substantially increase the energy efficiency index of any space.

technical information:

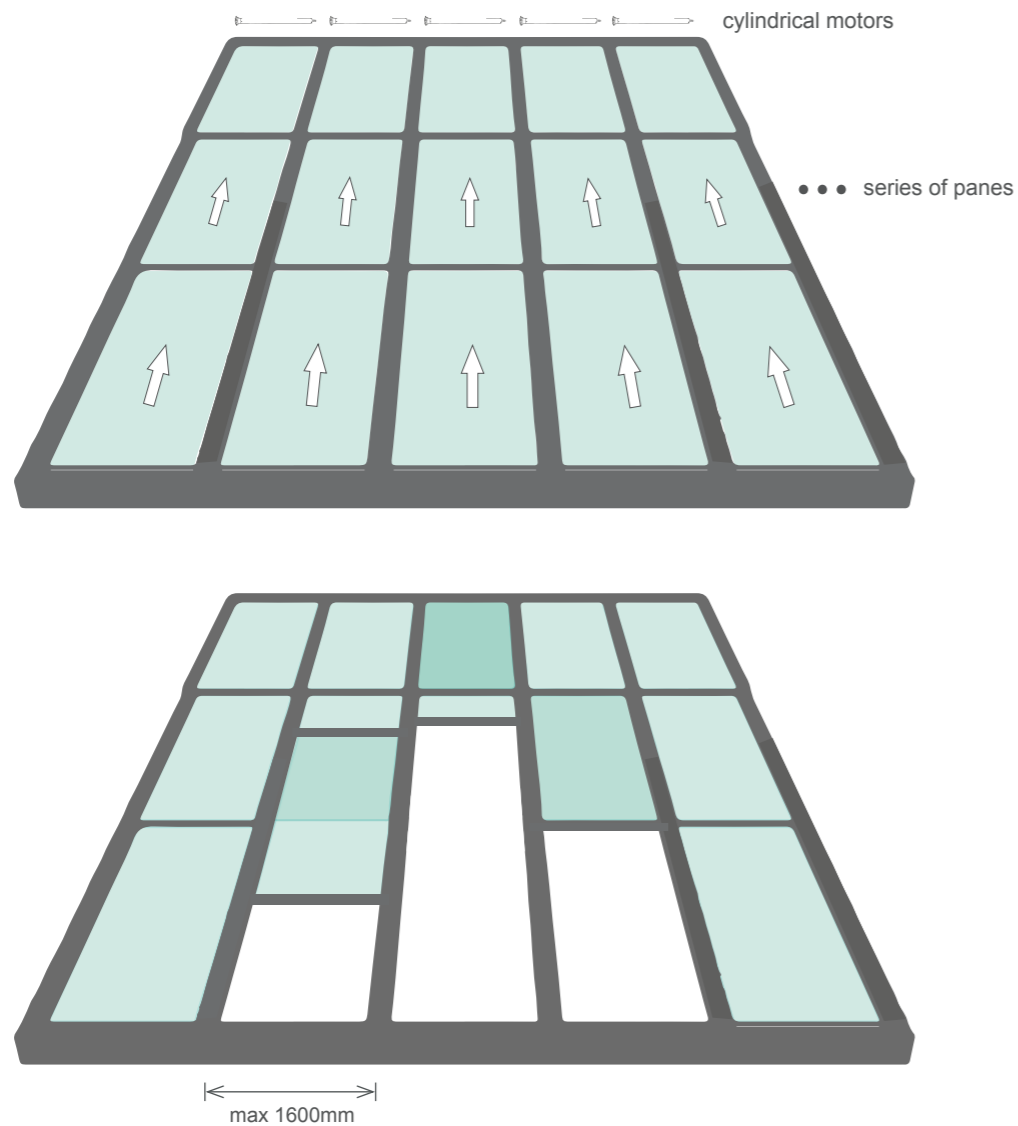
| | | |
|----|--|----------------|
| 1 | aluminum alloy | EN AW-6060-T66 |
| 2 | max moveable pane weight | 140Kg |
| 3 | multiple roller system Ø30 made of teflon | Ø30 |
| 4 | toothed belt driveline system | |
| 5 | advanced steelbeam drainage system | |
| 6 | insulative gaskets on horizontal profile | |
| 7 | insulation between vertical pane and steelbeam with brushes and hi fin membrane | |
| 8 | cylindrical motor diameter | Ø60-Ø70 |
| 9 | cylindrical motor torque | 55-120Nm |
| 10 | cylindrical motor power | 430-600W |
| 11 | cylindrical motor rotating speed | 12-17rpm |
| 12 | numerous choices for automation, such as remote control, control via cellphone, rain, wind and light sensors etc | |
| 13 | available in aluminum anodizations, electrostatically painted (RAL colours, wood imitations) | |





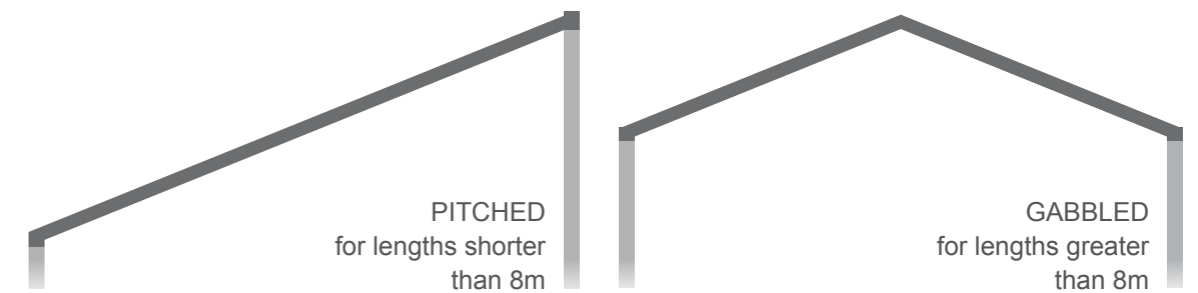
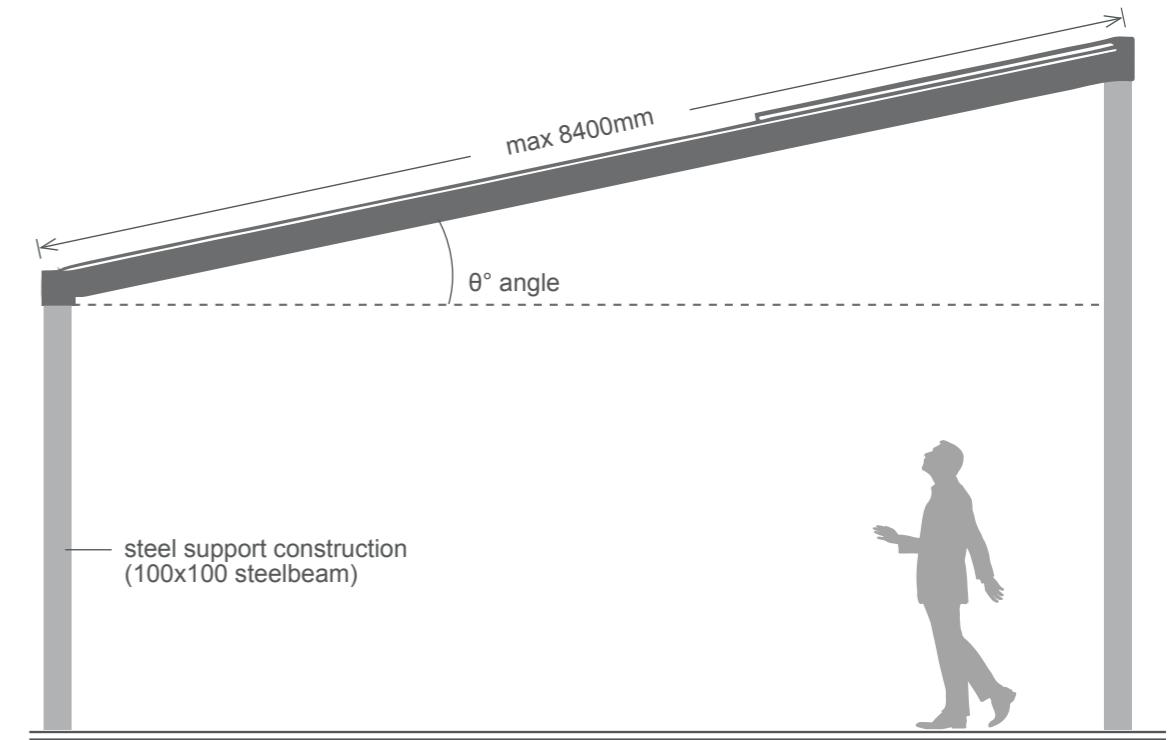
The overall design of both the S-GR and T-SR roofs is that they contain architectural elements that make the space's vitality more evident, as it seamlessly connects the indoors to the outdoors, while allowing fresh air and natural light to come in.

Both the S-GR and T-SR maximize the glazing's usage, decreasing the optical obstruction in between as much as it would ever be possible.



Electrical motors pull up the panes, revealing two thirds of the opening, with smooth, gentle movement, adding to the construction's overall aesthetic appeal. Each pane can be individually retracted, offering the possibility to have only partial coverage. The motor can be connected to a controller and adjusted to operate automatically, based on scenarios and sensors (for example, opening twice a day for 5 minutes if the weather is good, to refresh the space's air, or other scenarios for rain, wind etc.).

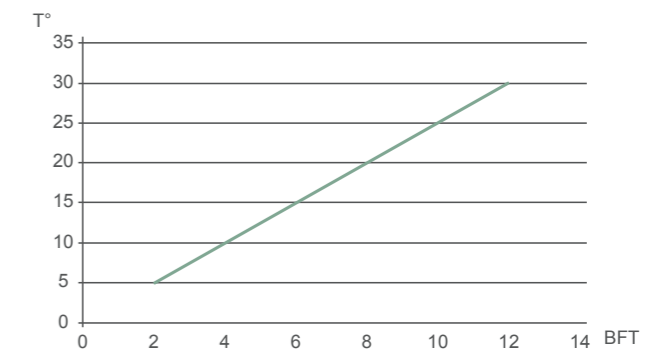
In this way, the roof is entirely embedded in any space, with its appearance being in harmony with the interior environment. Then at the touch of a button, the user is, in a very short while, brought out to the outdoors.

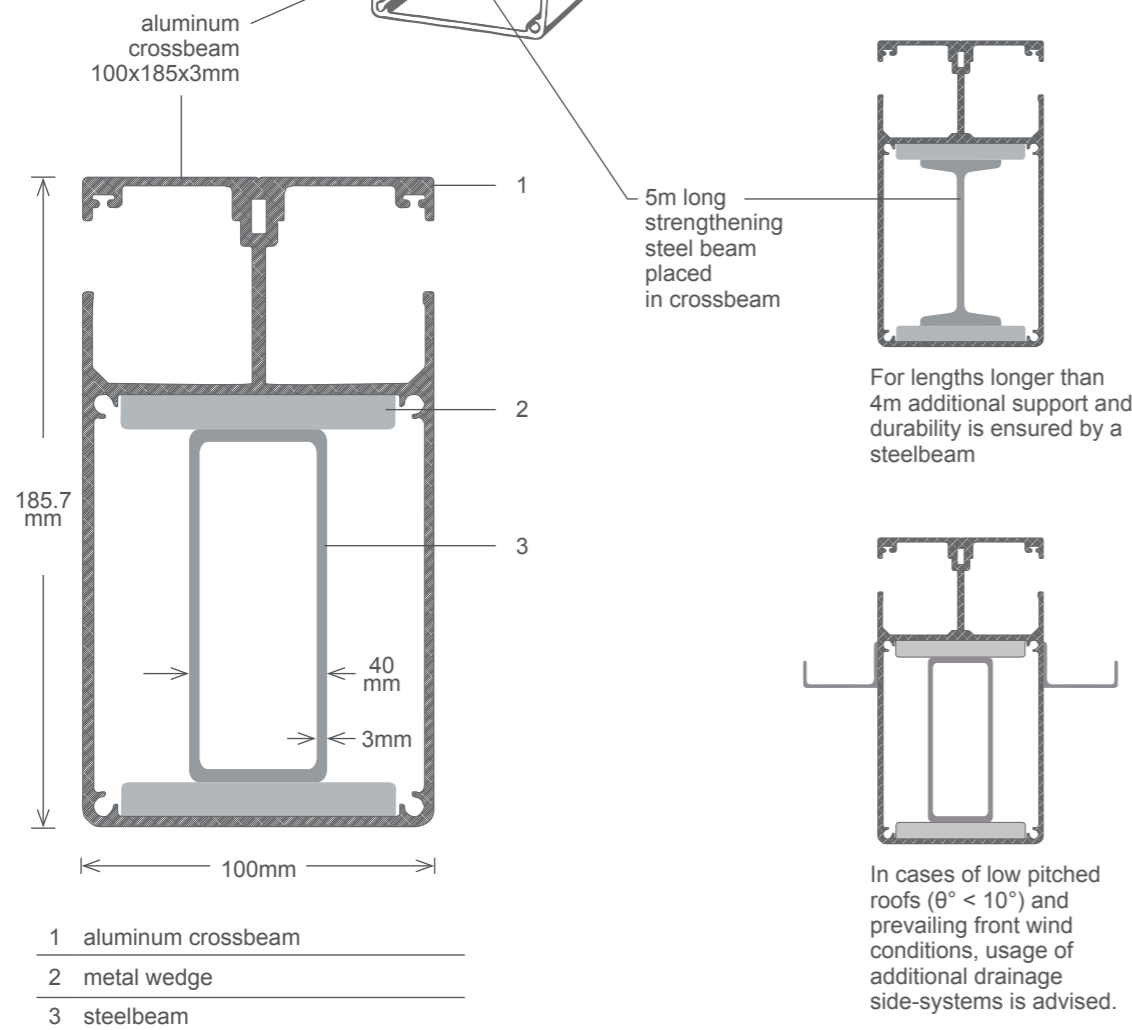
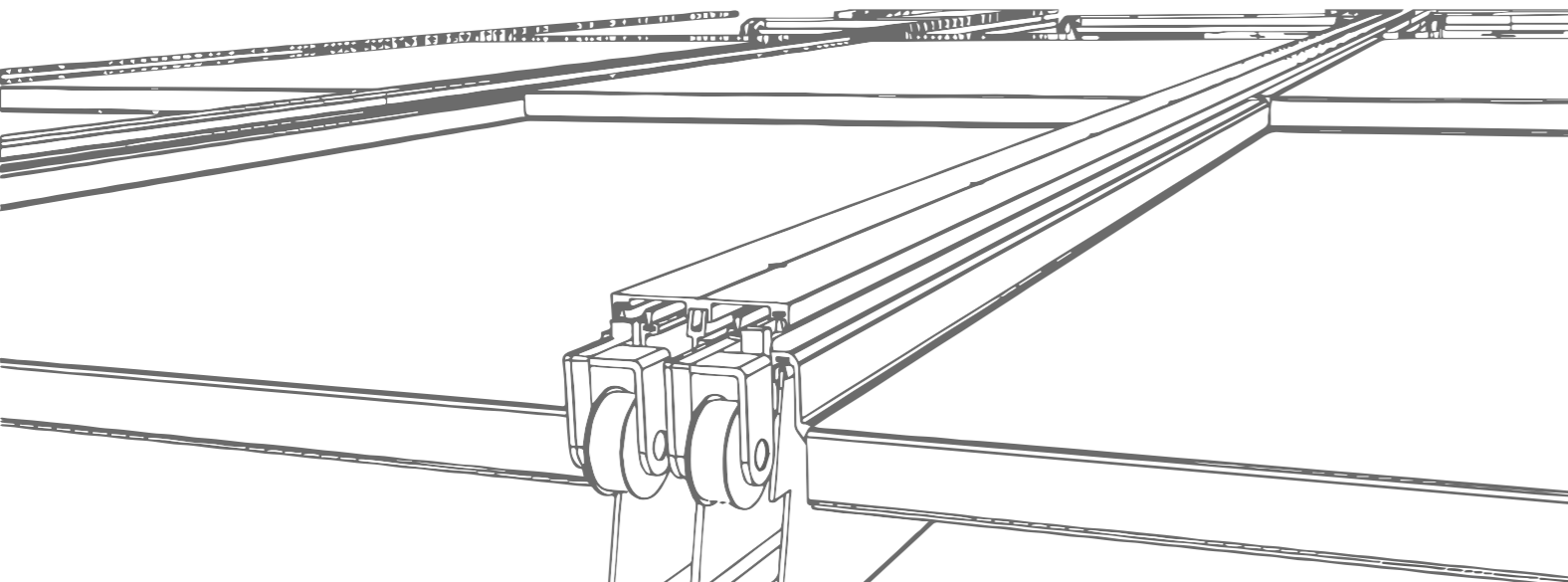


In cases where the construction exceeds 8m in length, the roof cannot be pitched, it has to be turned into a gabbled design to ensure safety and adhere to regulation.

Salinox recommends a slope of at least 12°, to ensure good watertightness under any weather conditions.

The company's design team can guarantee a completely watertight result based on the predominant weather conditions at the project's location, and more specifically the prevailing wind profile. In broad terms, the rule of thumb is that the stronger the winds, the greater the slope of the roof must be.

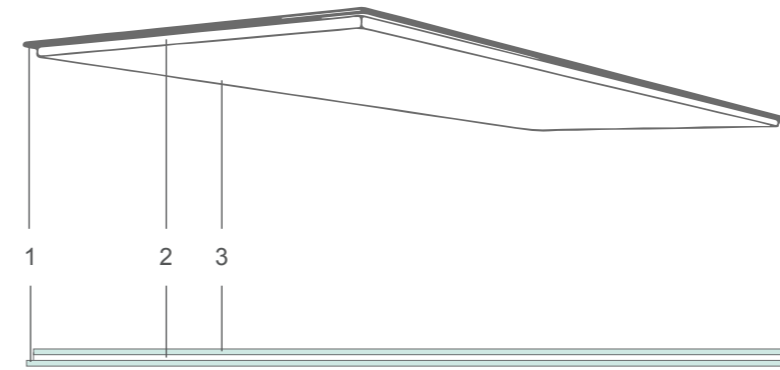




Salinox's sliding roofs use a heavy type of aluminum profile specially designed to accommodate an internal drainage system. Water flows off the panels to the peripheral drainage, ensure perfect functionality and watertightness even under bad weather conditions.



“entirely smooth surface to unobstructedly drain all rainwater”



Insulation via structural glazing:

- 1 outer glassboard 6-10mm (transparent, low-e or reflective)
- 2 15mm glassboard gap (air or gas)
- 3 6mm inner laminated glassboard (4+4 transparent or low-e)

Glassboards are double tempered and laminated to maximize overall safety and robustness. Salinox recommend the use of low-e glassboards in order to ensure a cool, fresh interior environment. The glassboards are completely embodied into the building's construction elements (structural glazing) offering a completely smooth glass surface, allowing rainwater to quickly and unobstructedly drain off the roof.

