

System components

The extensions for your 3S solar roof



3S solar roof - Thermal module

Thermal solar collector for heating and hot water



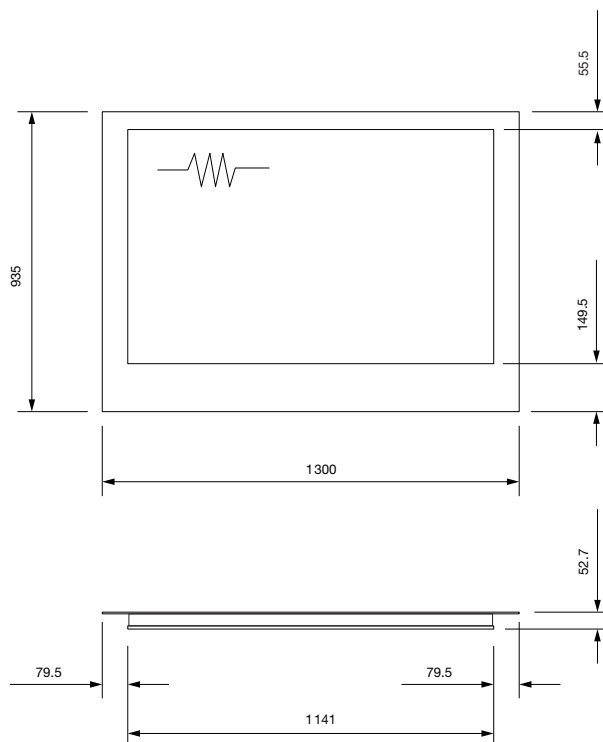
The 3S thermal panels expand on the proven 3S solar roof with a highly efficient thermal collector system. The frameless design guarantees perfect integration into the 3S solar roof while maintaining the highest aesthetic standards. Hot water heating and central heating backup ensure a sustainable energy supply within the energy roof concept.

Thermal specifications	L	Q	M	S
Nominal power* (Wp)	586			
Pressure loss panel	25 l/h >> 1051 PA 50 l/h >> 2510 PA 75 l/h >> 4276 PA			
Maximum volume flow	5 l/h			
Nominal volume flow	18 l/h			
Maximum volume flow	80 l/h			
Absorption (AM 1.5)	95%			
Thermal emission (100 °C)	5%			
Carrier medium**	Propylenglykol (Nautra-Guard® Neo recommended)			
Stagnation temperature***	180°C (according ISO 9806:2017)			

* Test performance according to SPF certificate C1920

** Glycol must maintain a stagnation temperature and antifreeze content of -25 °C.

*** Depending on the heat transfer medium



Mechanical specifications	
Length (mm)	935
Width (mm)	1300
Thickness (mm)	55
Weight (kg)	23.5
Visible area	1.15 m ²
Roof pitch	3 - 75°
Glass	5 mm ESG solar glass
Collector type	Flat-plate collector filled with noble gas
Absorber	Aluminium full, highly selective coating
Absorber surface	0.77 m ²
Collector content	0.7 l
Wiring	3-5 panel in series = subfield, max. 25 collectors per collector array
Maximum operating pressure	6 x 10 ⁵ Pa (6 bar)
Maximum operating temperature	100 °C
Thermal insulation	Armaflex 10 mm
Connection	Flexible hose 380 mm, 12 mm clamp connection VSH
Maximum load Tested pressure and suction load according to ISO 9806:2017	5 400 N/m ² (Pressure) 2 400 N/m ² (Suction)
Snow load Alpin (SPF)	13 000 N/m ²
Hail resistance class	HW 5 - Hailstone Ø 50 mm at 30.8 m/s (111 km/h)

Warranty

Product warranty	5 years
Weather resistance guarantee	40 years

Certifications & standards

Applied standards	ISO 9806:2017; EN 12975:2022
SOLAR KEYMARK	Certificate 011-7S1710 F
Fire class DIN EN	DIN EN 13501-5: B Roof (t1)

3S solar roof - Skylight

Perfection for tangible comfort



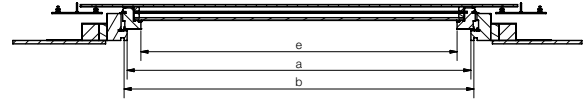
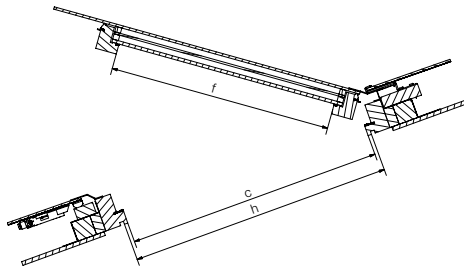
The skylight was specially developed for the 3S solar roof. With its elegant all-glass appearance, the high-quality, flush-mounted skylight is the ideal match for the solar roof. The wooden interior lining can be adapted to your surroundings with different types of wood, finishes and colours. Choose your skylight with a convenient electric drive, manual opening or fixed glazing. The components of the solar roof are perfectly coordinated and guarantee an architecturally appealing look and functionality. Thanks to our cooperation partner's many years of experience in window construction, the highest quality and safety standards are guaranteed.

Mechanical specifications	L 1 field	L 2 fields high	Q 1 field	Q 2 fields high
Window dimensions (B x H)	1 300 x 935 mm	1 300 x 1 820 mm	1 300 x 720 mm	1 300 x 1 390 mm
Lining size (b x h)	1 040 x 725 mm	1 040 x 1 610 mm	1 040 x 510 mm	1 040 x 1 180 mm
Visible glass area (a x c)	1 022 x 707 mm	1 022 x 1 592 mm	1 022 x 492 mm	1 022 x 1 162 mm
Daylight size - opening sash (e x f)	940 x 625 mm	940 x 1 510 mm	940 x 410 mm	940 x 1 080 mm
Weight	60 kg	120 kg	45 kg	90 kg
Outer glass ESG	6 mm	6 mm	6 mm	6 mm
Centre glass ESG	6 mm	6 mm	6 mm	6 mm
Inner glass VSG	2 x 4 mm	2 x 4 mm	2 x 4 mm	2 x 4 mm

Mechanical specifications	M 1 field	M 2 fields high	S 1 field	S 2 fields high
Window dimensions (B x H)	875 x 935 mm	875 x 1 820 mm	875 x 720 mm	875 x 1 390 mm
Lining size (b x h)	615 x 725 mm	615 x 1 610 mm	615 x 510 mm	615 x 1 180 mm
Visible glass area (a x c)	597 x 707 mm	597 x 1 592 mm	597 x 492 mm	597 x 1 162 mm
Daylight size - opening sash (e x f)	515 x 625 mm	515 x 1 510 mm	515 x 410 mm	515 x 1 080 mm
Weight	45 kg	90 kg	38 kg	75 kg
Outer glass ESG	6 mm	6 mm	6 mm	6 mm
Centre glass ESG	6 mm	6 mm	6 mm	6 mm
Inner glass VSG	2 x 4 mm	2 x 4 mm	2 x 4 mm	2 x 4 mm

Roof pitch	10 - 90°, with additional measures down to 3°			
Fixed glazing	•	•	•	•
Top-hung sash	•	•	•	•
Manual operation	•	-	•	-
Electric drive	•	•	•	•
Electric operation with remote control	•	•	•	•
Overall U-value	Uw < 1.0 W/m²K			
U-value glass at 90°	Ug = 0.6 W/m²K			
U-value frame	Uf = 1.5 W/m²K, FRsi = 0.695			
U-value edge of glass	Ulin = 0.043, ASC+			
Sound insulation value	R'w+Ctr = >32 dB			
Glass	Triple solar control glazing, TSG/LSG, g-value 24%, LT 32%			
Wooden frame	Timber, RAL 9016 white lacquered / Others on request			
Underfelt collar	Stamisol Pack 500 extreme / Others on request			
Counter-batten frame	inclusive			

U-Value = heat transfer coefficient
 • available / - not available / o optional



Warranty	
Manufacturer's warranty	5 years

Certifications & standards	
Hail resistance class	HW 5 - Hailstone Ø 50 mm at 30.8 m/s (111 km/h)

Options	
Timber frames	- Spruce, natural lacquer finish - Larch, natural lacquer finish - Oak, natural lacquer finish
Roof window telescopic pole	Operating rod for manual opening and closing of roof windows.
Underfelt collar	andere Materialien auf Anfrage
Blackout pleated blind	Manual or electric Available colors: - White - Light grey - Dark grey
Pressure equalization and snow load	This option is required for locations at altitudes above 800 m above sea level. It is automatically added during the window configuration.

Formats	
1 field	
2 fields	

Other sizes, landscape or portrait formats, roof pitches of less than 10° or flat roofs are available on request. Please contact us and we will be happy to discuss your requirements.

In cooperation with:



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