

Schüco Slim V Plus

Flat Plate Solar Thermal Collector



The Schüco Slim V is a highly efficient solar collector for thermal hot-water systems. The highly selective absorbent coating provides maximum energy gain, and optimal thermal insulation minimizes losses.

The serpentine copper piping is designed to work with Schüco closed-loop, pressurized, no-bleed systems using non-toxic, freeze-proof propylene glycol as a heat transfer medium.

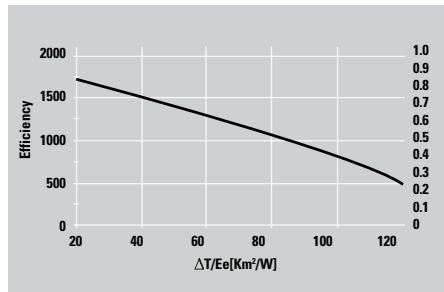
These collectors give the clean, attractive appearance of a high-tech skylight while the dark anodized aluminum frame blends beautifully with the home's exterior.

Features

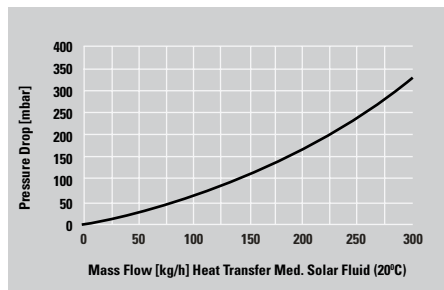
- Outstanding efficiency achieved with sunselect absorbent coating
- Low energy loss due to excellent thermal insulation
- Durable elegant dark anodized aluminum frame
- Low risk of leaking and superior flow control over conventional header/riser designs
- Dark anodized surface blends naturally with almost any rooftop
- High degree of light transmission through low-iron glass
- Transportation to roof made easy due to lightweight design
- Sensor wells located on both sides of collector ensure precise resistance measurements
- Tough, high-transparency, low-iron glazing
- Suitable for sloped or flat roof installation
- Quick and simple installation with SolarEZ mounting hardware, collector connections, and installation accessories
- Serpentine piping, 1 connection on each long side for portrait orientation of collector
- Certifications: SRCC OG-100, CE, DIN EN 12975-2, DIN CERTCO, EC Guideline 97/23/EC
- 10-year performance warranty

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Technical Data



Performance Characteristics



Pressure Drop Characteristics

Thousands of Btu Per Panel Per Day			
Category (Ti-Ta)	Clear Day 2000 Btu/ft ² ·d	Mildly Cloudy 1500 Btu/ft ² ·d	Cloudy Day 1000 Btu/ft ² ·d
A (-9°F)	34	25	17
B (9°F)	31	23	15
C (36°F)	27	19	11
D (90°F)	18	10	3
E (144°F)	9	3	

A – Pool Heating (Warm Climate), B – Pool Heating (Cool Climate)
 C – Water Heating (Warm Climate), D – Water Heating (Cool Climate)
 E – Air Conditioning

SRCC Collector Thermal Performance Rating

Size:

80.3 x 44.9 x 2.2 in. (2039 x 1140 x 56 mm)

Collector surface area (Ag):

25 sq. ft. (2.32 m²)

Weight (empty): 88 lbs. (40kg)

Efficiency: $\eta_0 = 76.7\%$

Heat loss coefficient:

$k_1 = 3.71 \text{ W/m}^2\text{K}; k_2 = 0.016 \text{ W/m}^2\text{K}^2$

Incident angle modifier: $k_{(50)} =$

0.90

Thermal output: 1.64 kW_{th}

Piping configuration: Serpentine

Absorber long-wave emissivity:

$\epsilon = 5.0\%$

Absorber short-wave

absorptivity:

$\alpha = 95\%$

Net aperture area:

23.1 sq. ft. (2.148 m²)

Aperture surface area:

23.0 sq. ft. (2.137 m²)

Absorber material: Copper

Absorber Coating:

High selectivity

Heat transfer fluid volume:

0.42 gal. (1.6 L)

Minimum volume flow:

0.66 gal./min (2.5 L/min)

Maximum number of

collectors in series: 5

Pressure drop

(0.66 gal./min solar fluid):

1.1 psi (78.0 mbar)

Connection:

12.0 mm Cu pipe, serpentine

Connector type:

Compression fitting

Operating pressure:

46.4 psi (3.2 bar)

Maximum operating

pressure: 145 psi (10 bar)

Test pressure: 290 psi (20 bar)

Stagnation temperature:

381°F (194°C)

Maximum operating

temperature: 248°F (120°C)

Solar glazing:

Low-iron, high-transparency

Transmittance: >91.0%

Thickness: 0.16 in. (4 mm)

Frame Material: Aluminum

Gaskets: EPDM

Thermal Insulation:

0.79 in. (20 mm) mineral wool

Schüco article:

Slim V 232 364

Schüco installation system:

SolarEZ

Specifications subject to change without notice.

Schüco USA L.P.

www.schuco-usa.com