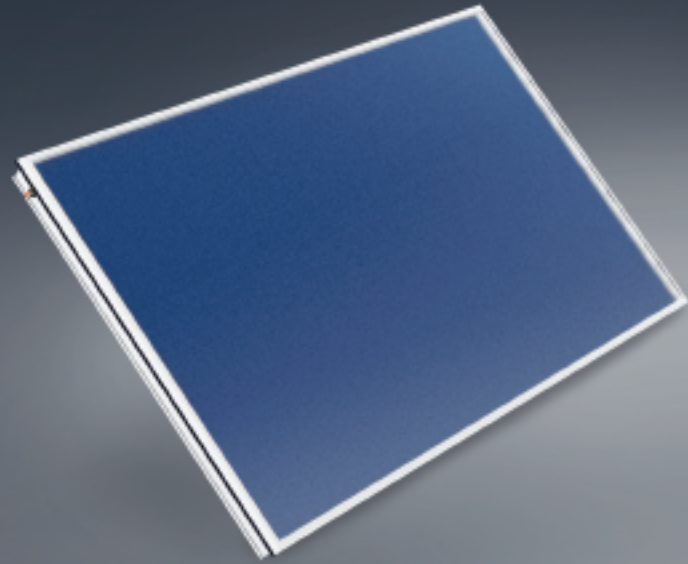


Schüco Premium H

Flat Plate Solar Collector



The Schüco Premium H high-performance solar collector converts solar energy into heat, and is excellent for providing domestic hot water as well as for heating swimming pools. The Premium H collector is designed for installations that require landscape orientation. The high selective absorber coating and optimum thermal insulation maximize efficiency. The absorbed solar heat is transferred to a storage tank by freeze-protected, non-toxic solar fluid through a serpentine copper pipe.

This aesthetically pleasing collector was developed with performance, longevity, and simple installation in mind.

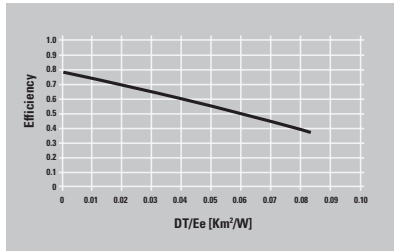
Features

- High efficiency with high selectivity absorber coating.
- Low energy loss due to excellent thermal insulation.
- Robust silver anodized aluminum frame for maximum durability.
- Corrosion-resistant materials for high reliability and long service life.
- High transparency, low-iron glazing.
- Superior flow control over conventional header/riser designs.

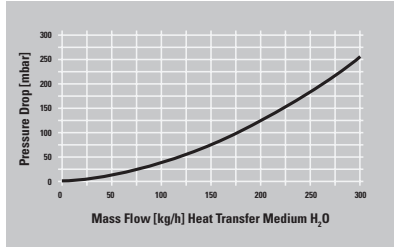
- Suitable for pitched roof, flat-roof, synergy roof®, awning and façade installation.
- Tempered glass inset a full half-inch into the frame.
- Quick and simple installation with SolarEZ mounting hardware, collector connectors, and installation accessories.
- Ideal for low profile installations.
- Serpentine piping, 1 connection on each short side for landscape orientation of collector.
- Certifications: SRCC OG-100, CE, DIN EN 12975-2, DIN CERTCO, EC guideline 97/23/EC.
- 10 year performance warranty.

SCHÜCO

Technical Data



Performance Characteristics



Pressure Drop Characteristics

Size: 84.7 x 49.3 x 3.6 in.
(2152 x 1252 x 93 mm)

Collector surface area (A_g):
29 sq. ft. (2.69 m²)

Weight (empty): 121 lbs. (55 kg)

Efficiency: $\eta_o = 78.4\%$

Heat loss coefficient:
 $k_1 = 4.28 \text{ W/m}^2\text{K}; k_2 = 0.014 \text{ W/m}^2\text{K}^2$

Incident angle modifier: $k_{(50)} = 0.96$

Thermal output: 2.0 kW_{th}

Piping configuration: Serpentine

Absorber long-wave emissivity:
 $\epsilon = 5.0\%$

Absorber short-wave absorptivity:
 $\alpha = 95\%$

Net aperture area:
27.1 sq. ft. (2.52 m²)

Aperture surface area:
27.0 sq. ft. (2.51 m²)

Absorber material: Copper

Absorber coating: High selectivity

Heat transfer fluid volume:
0.53 gal. (2.0 ltr.)

Minimum volume flow:
0.66 gal./min (2.5 ltr./min)

**Maximum number of collectors
in series:** 4

**Pressure drop (0.66 gal./min
solar fluid):** 1.1 psi (75.0 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. (4mm)

Frame material: Aluminum

Gaskets: EPDM

Thermal insulation:

0.79 in. (20 mm) mineral wool

Schüco article

Premium H 231 157

Schüco installation system

SolarEZ

Specifications subject to change
without notice.

Schüco USA L.P.

www.schuco-usa.com