

DATA Sheet: Solar collector

ZEN Thermic Collector

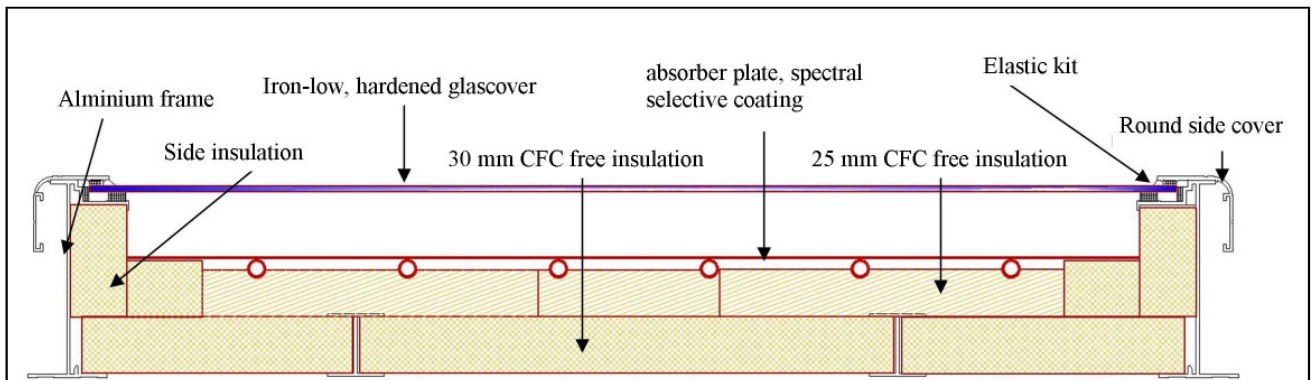
ZEN technology

- collector is developed and produced by ZEN Renewables ever since 1988.
- ZEN Thermic is developed to be used in combination with ZEN Drain Back system
- Suitable for any application: small to large domestic hot water systems, industrial process, swimming pool heating, large collective systems.
- Easy to install with ZEN flashing sets or flatroof systems
- Easy to transport.



Guaranties and certificates

- Tested by TNO- Netherlands, TÜV, ISFH, ITW-Germany, TIL Denmark
- Guarantee: 10 years



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- **ABSORBER PLATE:**

Copper sheet and tube bonded over the full length of the pipe in an automated process. Selectively coated surface layer: absorption coefficient = 0.96; emission coefficient = 0.08-0.12. Interchangeable by means of compression fittings, after removal of glass cover

- **GLASS COVER:**

Low iron, tempered, low reflection glass, 3.2mm. Removable with black aluminium frame cover. Light transmittance = 91%

- **COLLECTOR BOX:**

Heavy aluminium box section with black anodised aluminium glass cover frame. A temperature sensor pocket is located at the top back side of the collector

- **INSULATION:**

All insulation materials are 100% CFC-free

- **FLUID CONTENT:**

0.5 litre/m² of collector area

- **FLOW RATE:**

0.015 litres per second per m² of collector area

- **PRESSURE DROP:**

4 kPa at a flow rate of 0.04 litres per second (Thermic 28)

- **THERM. CAPACITY:**

1750 J/K per m² collector area

- **TEST PRESSURE:**

6 Bar

- **FIXING METHODS:**

(1) Roof integrated using flashing kit; (2) Roof mounted using brackets on top of the tiles; (3) Flat roof mounted with A-frames and ballast or roof fixings

- **EFFICIENCY:**

$\eta = 0.7847 - 3.4746 T^* - 0.01572 G T^*2$

- **TESTED BY:**

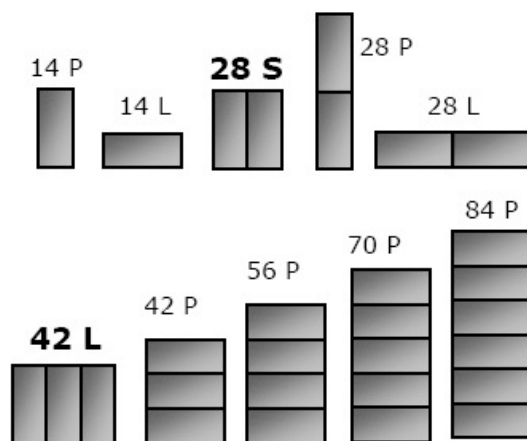
TNO- The Netherlands, TÜV, ISFH, ITW - Germany, SPF- Switzerland CSTB France, TIL- Denmark

- **LIFE EXPECTANCY:** min. 25 to 30 years

• **APPLICATIONS:** small to large domestic hot water systems, industrial process and swimming pool heating

- **GUARANTEE:**

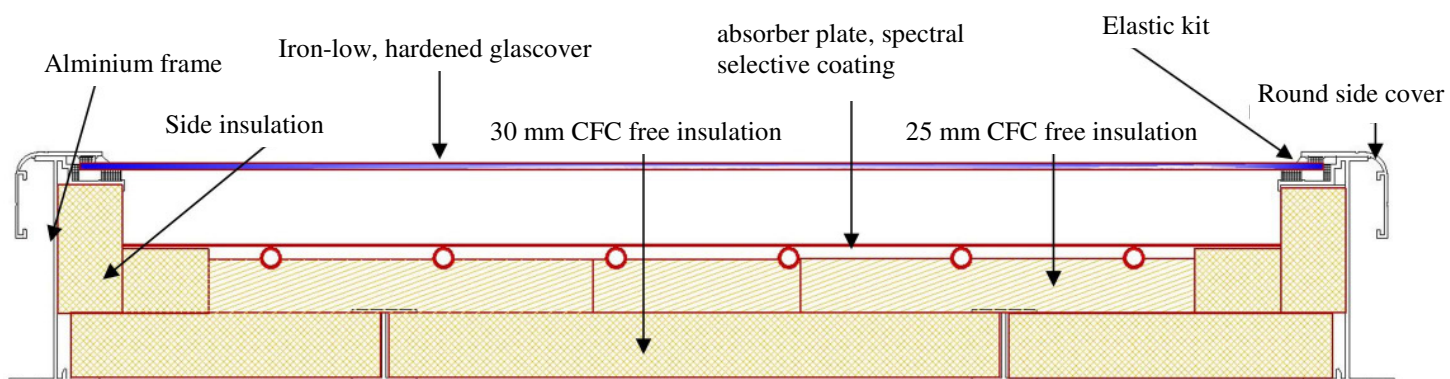
5 years



S = standaard type
P = portrait
L = landscape

Model	height	width	weight	aperture
Thermic	mm	mm	kg	area m ²
14 P	1776	910	31	1.38
14 L	910	1776	31	1.38
28 S	1776	1751	55	2.75
28 P	3491	910	60	2.76
28 L	910	3491	60	2.76
42 L	1776	2596	84	4.12
42 P	2596	1776	84	4.12
56 P	3433	1776	117	5.50
70 P	4276	1776	146	6.88
84 P	5119	1776	175	8.26

All collectors 105mm thick



with

30 mm CFC free side insulation