

# **ZEN Thermic**

### **DATA Sheet: Solar collector**

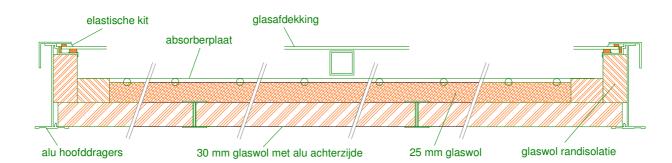
#### **ZEN technology**

- collector is developped and produced by ZEN Renewables ever since 1988.
- ZEN Thermic is developped to be used in combination with ZEN Drain Back system
- Suitable for any application: small toe 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











## Energizing your Future

# ZEN Thermic

### DATA Sheet: Solar collector

• 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

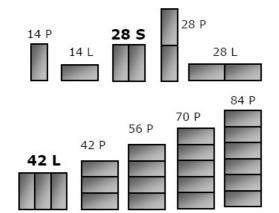
• GLASS COVER:

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/m<sup>2</sup> of collector area
- FLOW RATE:
- 0.015 litres per second per m<sup>2</sup> of collector area



- S = standaard type
- P = portrait

L = landscape

- PRESSURE DROP:
- 4 kPa at a flow rate of 0.04 litres per second (Thermic 28)
- THERM. CAPACITY:
- 1750 J/K per m<sup>2</sup> 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 CSTBFrance, TIL- Denmark

• LIFE EXPECTANCY: min. 25 to 30 years

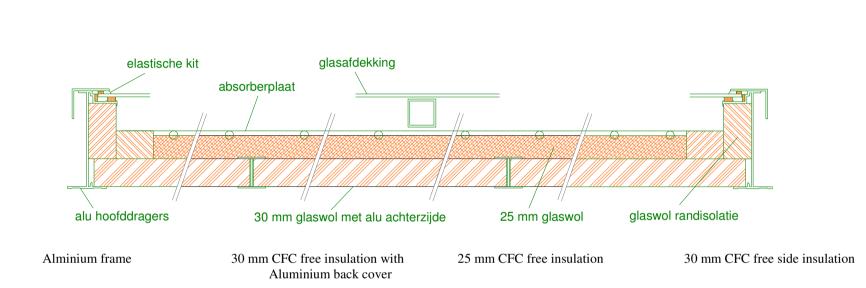
•APPLICATIONS: small to large domestic hot water systems, industrial process and swimming pool heating

• GUARANTEE:

5 years

Model	height	width	weight	aperture
Model	neight	width	weight	aperture
Thermic	mm	mm	kg	area m²
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 10Emm thick				

All collectors 105mm thick



glass cover

absorber plate

Elastic kit