Capillary Heating and Cooling System

Basic requirements for maximum efficiency

The lower input and output temperatures to the connected heating system are, the more cost-effective it is to heat.

Clina — Capillary technology for heating and cooling systems

- Extremely low input and output temperatures
- Short reaction time
- Lays the foundation for effective and cost-efficient heating and cooling
- Suitable for ceiling, wall and floor heating
- Simple installation, even in existing buildings

Lukewarm or cold water flows through the capillary tubes in walls, ceilings and floors. This system guarantees the highest possible heating and cooling efficiency, and thus a pleasant environment.

Outer diameter:	4.3 mm
Wall thickness:	0.5 mm
Test pressure:	10 bars
Mat width:	up to 1000 mm
Mat length:	up to 6000 mm
Material:	Polypropylene

Heating mats can be built into walls, ceilings, floors and concrete structures.

For more information see:

www.inovativethermalsolutions.com

Service and Support

A quick summary of general rules equipment

SOLAR COLLECTORS:

Direction: **South +/- 45°**
Angle: **30° to 50°**

Hot Water:
Collector area: **2m² per person**

Heating support (with suitable heating system):
Collector area: **10% of heated area**
(Solar tubing must have at least the same diameter as the connected tubing for the water boiler)

HEAT STORAGE UNIT VOLUME

Standard solar heating system:
at most **50 liters per m²** of collector area

A solar heating system with **layered SpeedPower** tank:
100-200 liters per m² of collector area

Solid fuel boiler : **100 litres per 1 kW** of boiler output

SUPPORT

Telephone: 514.823.2440

We will be glad to find the best solution for your building.

You decide on the price, effectiveness and manner of installation of the new system.

We provide expert installation and service of the selected equipment.

A product catalogue, installation and connection manuals, and detailed technical explanations can all be found at

www.inovativethermalsolutions.com

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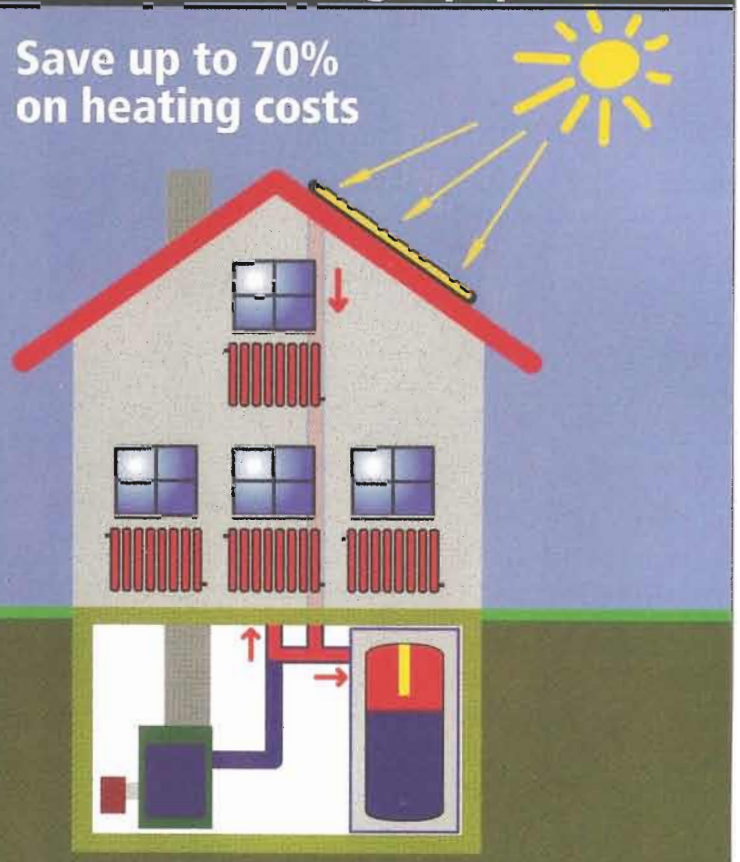
SANDLER

Solar and Heating Equipment

Save up to 70% on heating costs



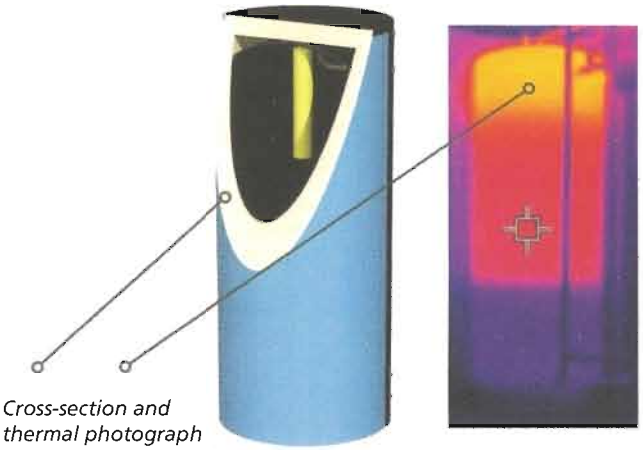
Simple building-block solar and heating systems

www.inovativethermalsolutions.com

Speed Power Layered Tank

The key to your heating system's efficiency

Patented **SpeedPower** technology - evidently one of the fastest and most effective heat-layered methods for hot water.



*Cross-section and thermal photograph of layers formed by the **SpeedPower** system.*

SpeedPower - heat layering system

- 7 independent charging channels
- Precise flow management
- Dynamic temperature zones
- Charging output 1 - 30 kW
- No moving parts
- Absolute reliability
- Layering guarantee

SpeedPower system LIFETIME GUARANTEE

For more information see:

www.inovativethermalsolutions.com

Speed Power Layered Tank

Hygienic heating of potable water

Take advantage of experience - already in 1989, Dipl. Ing. (FH) Marlin Sandler registered his first patent for heating potable water.

- Stable hot water temperature
- Extremely large heat exchanger to achieve lowest return temperature
- **BackFlow** system - protection against limestone deposits
- *Electronically regulated*

SANDLER potable water heating module with large-scale heat exchanger

Potable water that has been heated in a boiler can be contaminated with bacteria (e.g. Legionella).

To eliminate such risk, all SANDLER solar and heating systems have for years now been equipped with special potable water heating equipment. Cold water is immediately heated in a large-scale heat exchanger to the required temperature, not giving Legionella and other bacteria time to multiply.

A serious problem that accompanies the heating of hard water is that of the formation of limestone deposits.

We've solved this problem: in the patented **BackFlow** system, the heat exchanger is located at the lowest and thus coldest place in the device - limestone deposits do not form at low temperatures.

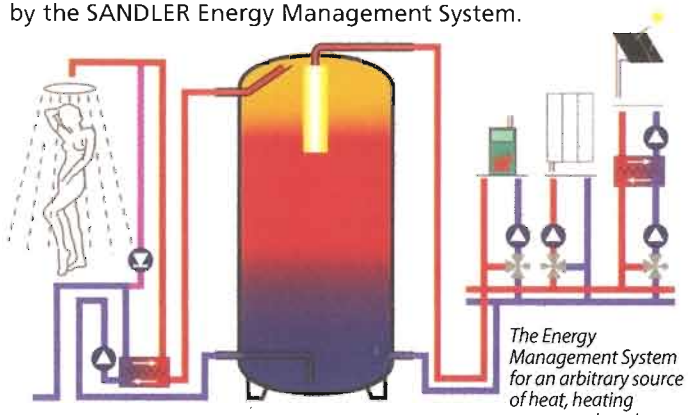
For more information see:

www.inovativethermalsolutions.com

Energy Management System

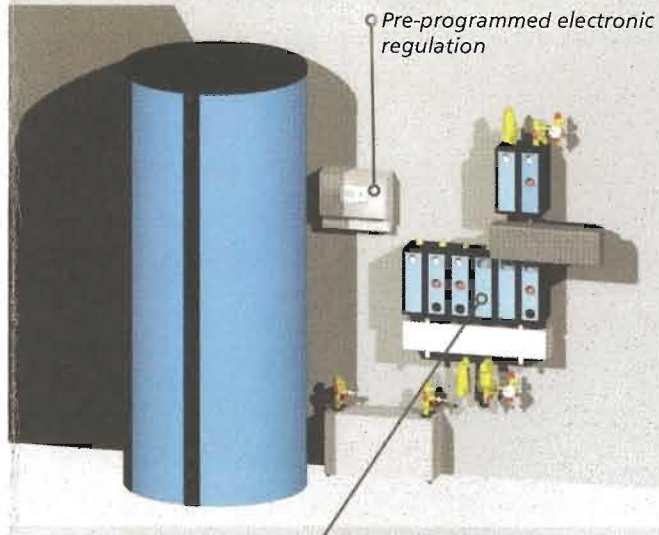
Perfect coordination is crucial

Energy must be supplied at the right time, in the right amount and to the right place - all this is taken care of by the SANDLER Energy Management System.



The Energy Management System for an arbitrary source of heat, heating system and a solar heating system.

SANDLER Energy Management System



Building-Block hydraulic group with system distributor, safety armatures and accessories.