

Heat from the sun – free energy delivered to your door

Anyone who invests in a new heating system today should design it from the outset to include a solar thermal or photovoltaic system. This will allow you to benefit from lower energy consumption and also look forward to lower monthly energy bills.

Furthermore, by installing solar collectors, you are demonstrating your commitment to protecting the environment, by sustainably lowering CO₂ emissions. To help you do this, Viessmann guarantees that all appliances and components work seamlessly and effectively with our futureproof technology.

Another argument for investing in solar technology that should not be underestimated is the associated increase to the value of your property.

On the following pages, you will find comprehensive information about the possibilities open to you with Viessmann solar technology, for energy-efficient domestic hot water (DHW) heating and central heating backup.

With more than 30 years' experience in the development and manufacture of solar thermal systems, you can count on Viessmann technology to be of the highest quality and completely futureproof.

It makes no difference whether you are starting out with a new condensing boiler for oil or gas, a heating system for wood, or even a heat pump – all Viessmann systems are designed to work in combination with solar technology. Don't forget our photovoltaic panels, which you can use with free solar energy to generate power, that is fed back into the public grid and remunerated month by month by your power supply utility company.

Saving energy and protecting the climate

Viessmann is aware of its responsibility for the sustained protection of the environment. Its company philosophy and products are oriented towards this duty.



"Nothing is so good that it cannot be improved." This maxim is at the heart of the company's principles. In this industry, Viessmann can rightfully claim to be the leader in quality and technology, and as such, aims to continually set new standards.

Of course, this applies in particular to its product range, which is consistently geared towards significantly lowering the consumption of fossil fuels, and gradually replacing them with renewable sources of energy.

At around 40%, the heating market actually accounts for the largest proportion of energy consumption. The rest is shared by goods transport, personal transport and power. This will largely be indicative of most other industrial countries. Ever-rising energy costs mean that the emphasis is on reducing the consumption of fossil fuels as quickly as possible.

Condensing technology plus solar – an optimum result

Anyone who invests in a new heating system would do well to choose a condensing boiler. Taking current energy prices into consideration, it is the most economical choice. Viessmann oil and gas fired condensing boilers convert up to 98% of the fuel oil or gas used into heat.

By combining them with highly efficient solar collectors from Viessmann, you can save up to 35% on your heating costs, if you utilise the solar collectors for both domestic hot water heating and central heating backup. For DHW heating alone, the energy consumption required can be lowered by up to 60%.

Viessmann offers you energy-efficient heating systems for oil, gas, solar, wood and natural heat. The pictograms and motifs will help to guide you.

VITOSOL

With a wide range of flat plate and tube collectors, Viessmann provides flexible and individual solutions for every kind of modern heating system.

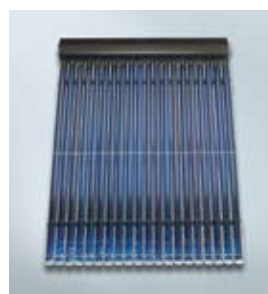
Every year, the sun radiates an average of 1 000 kWh onto every square metre of central Europe. This corresponds to the energy content of 100 litres of fuel oil. With Viessmann, you can utilise this energy to generate heat. A solar thermal system is the ideal extension to any heating system, and lowers energy consumption in the long term.

The heating system that loves the environment

Even when it comes to environmental compatibility, with Viessmann solar thermal systems you'll be on the sunny side of the street. On average, in a family home, about three quarters of a tonne less carbon dioxide (CO₂) is produced.

Futureproof in every respect

All Viessmann flat plate and tube collectors are distinguished by their high operational safety and long service life. No wonder, the Vitosol solar collectors are made of corrosion and UV resistant materials. This is most impressively verified by quality tests according to the EN 12975 test standard, which at the same time also confirms the consistently high thermal output.



Vitosol 300-T

Vacuum tube collectors with heat pipe technology for the highest level of operational reliability.

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Vitosol 200-T

Vacuum tube collectors with heat pipe technology for the highest level of operational reliability.

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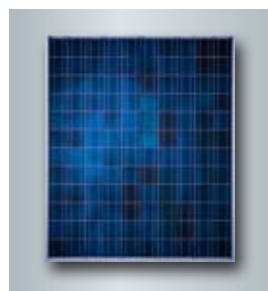


Vitosol 200-F

Vitosol 100-F

Powerful, durable and easy to install flat plate collectors.

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Vitovolt 200

Photovoltaic panel with crystalline silicon technology.

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Solar technology
Tube collectors

Vitosol 300-T
Vitosol 200-T



VITOSOL 300-T VITOSOL 200-T

Highly efficient tube collectors with time-saving and safe plug-in system.

The Vitosol 300-T and Vitosol 200-T vacuum tube collectors are recommended for systems which are not in continuous operation. They work according to the proven heat pipe principle, which provides particularly high operational reliability and gives the collector reliable protection against overheating.

Effective use of the sun's heat

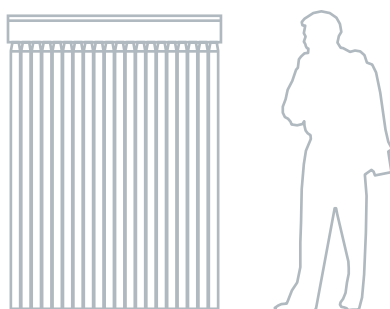
The Sol-titanium coated absorbers collect a vast amount of solar energy and thereby ensure high efficiency. The vacuum in the tubes guarantees very effective thermal insulation. There are therefore almost no losses between the glass tubes and the absorber, enabling the collector to convert even low levels of solar radiation into useful energy.

High energy yields for years to come

Viessmann solar collectors are designed for an exceptionally long service life. This is guaranteed by the use of high-grade, corrosion-resistant materials, such as glass, aluminium, copper and stainless steel. The absorber is an integral part of the vacuum tube. This protects it from weather influences and contamination, and ensures lasting energy utilisation.

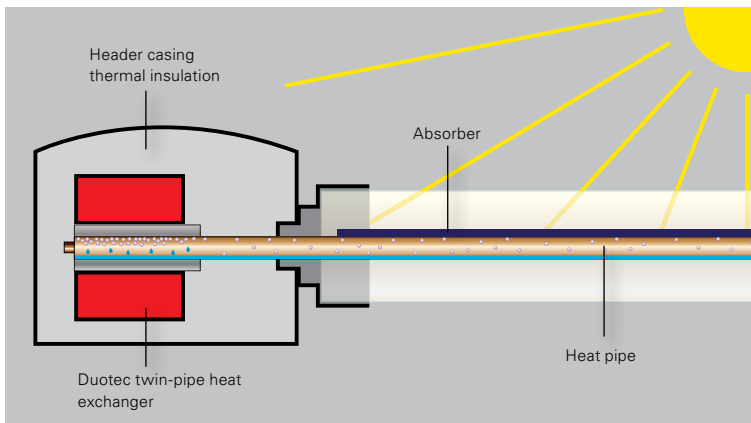
Quick and safe installation

Vitosol tube collectors are delivered in a modular design. An innovative plug-in system enables the simple and quick installation of the tubes, without requiring tools or having to open the header casing. Plug the tubes into the manifold – click – done. The stainless steel corrugated plug-in connectors interconnect the individual collectors. The individual tubes can then be rotated for optimum alignment with the sun.



VITOSOL 200-T

The Vitosol 200-T is a highly efficient tube collector with a time-saving and safe plug-in system for installation in any location.



The water heated by the sun evaporates and shifts to the colder part of the tube. There the steam condenses, transfers the heat to the collector and is reheated in a new cycle.

With the Vitosol 200-T vacuum tube collector, Viessmann increases the reliability of solar collectors to the extent that they can be installed anywhere. This collector can be installed vertically and horizontally at any angle between 0 and 90 degrees. It is as suitable for private as for commercial systems. Here, the dry connection of the heat pipe tubes inside the header and the small amount of fluid inside the collector ensure particularly high operational reliability. The collector is available either with 20 tubes (= 2 m²) or with 30 tubes (= 3 m²).

Heat pipe principle for high operational reliability

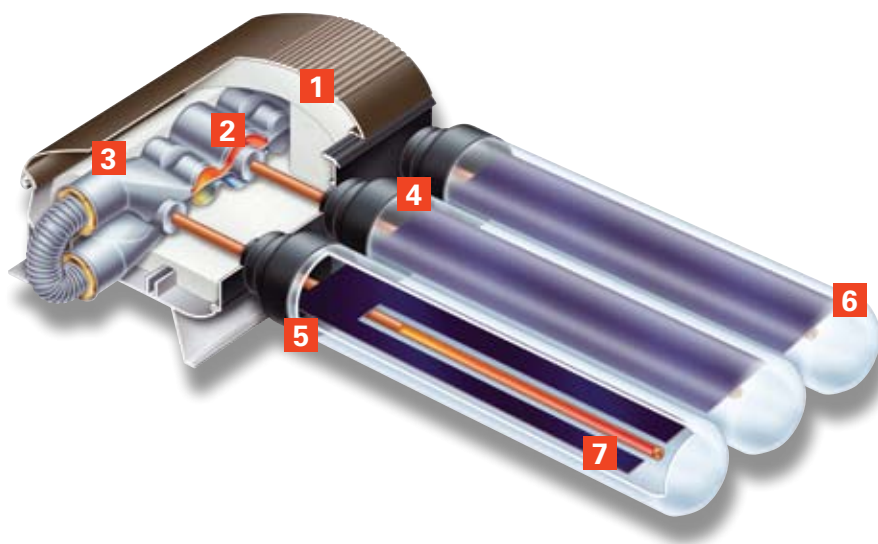
In heat pipe systems, the solar medium does not flow directly through the tubes. Instead, a process medium evaporates in the copper pipe below the absorber and transfers the heat to the heat transfer medium via a heat exchanger.

Making the most of solar energy

To convert the maximum amount of solar energy into heat, every tube can be optimally aligned towards the sun, which maximises energy utilisation. The highly effective thermal insulation in the header casing minimises heat losses, particularly during spring and autumn, and through cold winters.

Quick and easy installation

Standard installation material made of stainless steel simplifies collector installation. During maintenance, an innovative plug-in system allows tubes to be replaced quickly without the need for tools. Corrugated stainless steel plug-in connectors make the installation of several collectors in series very much easier than the connection by conventional plumbing methods.



Vitosol 200-T

- 1 Highly effective thermal insulation
- 2 "Dry" connection, no direct contact between process and heat transfer medium
- 3 Duotec twin pipe heat exchanger
- 4 Tubes are easy to replace and rotate
- 5 Highly selective coated absorber
- 6 High-grade, low ferrous glass
- 7 Heat pipe



Vacuum tube collector Vitosol 300-T

Heat pipe system

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Type			SP3A	SP3A
Version	m ²		2	3
Gross area	m ²		2.87	4.32
Absorber area	m ²		2.00	3.02
Aperture area	m ²		2.15	3.23
Dimensions (overall)	Depth	mm	143	143
	Width	mm	1 420	2 127
	Height	mm	2 040	2 040
Weight (incl. thermal insulation)	kg		58	87



Vacuum tube collector Vitosol 200-T

Heat pipe system

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Type			SP2	SP2
Version	m ²		2	3
Gross area	m ²		2.88	4.32
Absorber area	m ²		2.00	3.02
Aperture area	m ²		2.15	3.23
Dimensions (overall)	Depth	mm	143	143
	Width	mm	1 420	2 129
	Height	mm	2 040	2 040
Weight (incl. thermal insulation)	kg		58	87



Flat-plate collector Vitosol 200-F

Vitosol 100-F

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Type			SV2	SH2	SV1	SH1
Gross area	m ²		2.51	2.51	2.51	2.51
Absorber area	m ²		2.32	2.32	2.32	2.32
Aperture area	m ²		2.33	2.33	2.33	2.33
Dimensions (overall)	Depth	mm	90	90	72	72
	Width	mm	1 056	2 380	1 056	2 380
	Height	mm	2 380	1 056	2 380	1 056
Weight (incl. thermal insulation)	kg		52	52	43	43



Photovoltaic panel Vitovolt 200

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Rated power			230 V
Module efficiency			13.94%
Mpp voltage			29.8 V
Mpp current			7.72 A
Dimensions (overall)	Depth	mm	1 665
	Width	mm	991
	Height	mm	50
Weight (incl. thermal insulation)			23 kg

More information on request or at www.viessmann.co.uk

