

SGG THERMOVIT®
elegance

Heizen mit
Durchblick



Technical FAQs

SGG THERMOVIT® elegance

Hinweise

ALLGEMEINE TECHNISCHE FRAGEN

How much living space (in m²) can one SGGTHERMOVIT® ELEGANCE glass radiator heat?

The maximum area that can be heated depends on various factors, such as the location of the building or flat and the quality and type of insulation in the windows and walls. Based on a rough estimate of 50W/m² each radiator can heat adequately the following area:

Model 06/04 [60x40cm]	240W	–	5-6 m ²
Model 10/05 [100x50cm]	500W	–	9-10 m ²
Model 12/06 [120x60cm]	720W	–	15-16 m ²
Model 15/07 [150x70cm]	1050W	–	20-21 m ²

Please note: These numbers are not precise values and are for guidance only. Please contact a specialist engineer for an exact analysis of your heating requirement.

What efficiency rating does the SGGTHERMOVIT® ELEGANCE radiator have?

SGGTHERMOVIT® ELEGANCE glass radiator is 100% energy-efficient. Any wasted electrical energy is automatically converted into heat; therefore 100% of input energy is used to heat up your room.

What is thermal- or infrared radiation?

Infrared radiation, also known as thermal radiation, is the movement of energy through electromagnetic waves. Infrared radiation heats objects independently of the ambient air. The best example of this principle is radiation from the sun. Infrared radiation from the sun, similar to the glass radiator, is absorbed by all objects, causing these objects to heat up.

What is convection?

Convection in this context describes the heating up of the ambient air, for example, by using a heater. Warm air rises because of its lower density and pushes the cooler air towards the ground. The cooler air is then warmed by the heater and rises, creating a circulation of air.

Circulating air spreads dust and creates a "cold-feet-effect" as the cooler air is continually pushed towards the floor.

What is the ratio of radiation to convection of the sggTHERMOVIT® ELEGANCE glass radiator?

The sggTHERMOVIT® ELEGANCE glass radiator works by 60% to 70% infrared radiation and 30% to 40% convection. Normal hot water heaters operate vice versa.

Is it difficult to install the sggTHERMOVIT® ELEGANCE glass radiator?

No. Every sggTHERMOVIT® ELEGANCE glass radiator is supplied with an illustrated multi-lingual guide, which details every step of installation. The radiator can easily be installed on the wall or on the floor by just about anyone.

Is it difficult to operate the sggTHERMOVIT® ELEGANCE glass radiator?

No. The multi-lingual guide that accompanies every sggTHERMOVIT® ELEGANCE glass radiator explains each function and how to programme the control panel.

Up to what distance can the remote control thermostat operate?

The remote control thermostat of the sggTHERMOVIT® ELEGANCE glass radiator has an average range of 20m. If the radiators are located in different rooms, it needs to be checked if the range is sufficient for the room configuration.

Do I have to use a separate remote control thermostat for every sggTHERMOVIT® ELEGANCE glass radiator in the house?

One remote control thermostat can control any number of radiators. Each thermostat has a unique identification number, which is programmed into the radiator control prior to commissioning (see instruction manual "*prior to commissioning*"). The remote control thermostat is also fitted with radio-noise-suppression to eliminate interference with other appliances. Thus each control signal can be identified and allocated individually. It is thus possible to set up groups that can be used in a single room, for example.

For different heating requirements in different rooms, it is necessary to install a separate thermostat for each of these rooms.

Will there be different sizes and shapes of the sggTHERMOVIT® ELEGANCE glass radiator in the future?

Mid 2004 three new sizes will be added to the range of glass radiators. These will be available in the same design variations as the current models. The new sizes are:

60x40cm	240W
100x50cm	500W
120x60cm	720W
150x70cm	1.050W

In coming months more sizes and design variations (screen-prints, etc.) will be developed. Bespoke sizes are possible for large quantities.

Will there be other screen-printed designs? (Customised designs)

The introduction of new designs is planned for the beginning of 2005. Personalised designs for customers are possible, depending on design, size and quantity. The manufacturer can provide more detailed information on request.

Will the sGGTHERMOVIT® ELEGANCE glass radiator be available in different glass types, such as patterned or acid-etched glasses?

Various prototypes are currently under development. Their introduction is also planned for the beginning of 2005.

How long is the warranty period for the glass radiator?

The warranty is for 2 years from the day of purchase. More detailed information is provided on the last page of the installation guide.

Are there any working parts on the sGGTHERMOVIT® ELEGANCE glass radiator?

No, there are not any working or wear parts on the radiator whatsoever.

What is the electrical power consumption on the highest output level in continuous use?

The electrical power consumption in continuous use with maximum output per hour is:

Size	max. power	energy consumption
60x40cm	240W	0.24kWh
100x50cm	500W	0.50kWh
120x60cm	720W	0.72kWh
150x70cm	1050W	1.05kWh

How has the glass radiator been certified?

The sGGTHERMOVIT® ELEGANCE glass radiator has been tested by the German TÜV Saarland Institute and certified with the TÜV/GS mark.

The manufacturer also provides the CE declaration of conformity, stating that the sGGTHERMOVIT® ELEGANCE glass radiator meets all necessary European norms.

The French NF certification is currently in preparation (Dated May 2004).

Can the radiator be covered when in use?

No. If the radiator is covered, the heat builds-up and causes a localised temperature peak. For this eventuality, there are two safety devices in the control box, mounted on the rear of the radiator: A temperature sensor, which measures the surface temperature of the glass and an electronic switch, which automatically switches the radiator off as soon as the surface temperature exceeds 65°C. In the unlikely event that this device fails, a bi-metal spring cuts off the electrical supply if 105°C is reached.

Warning! The manufacturer strongly recommends that the radiator is not covered at any time. For towels, please use the rail attachment available in a range of dimensions developed especially for SGGTHERMOVIT® ELEGANCE glass radiators.

Does the radiator create any electromagnetic pollution?

The magnetic field created by the radiator is less than the field created by a normal electric bulb.

Can I install the SGGTHERMOVIT® ELEGANCE glass radiator next to a shower? (Splash water) → Is the radiator resistant to humidity?

The SGGTHERMOVIT® ELEGANCE glass radiator is certified by the TÜV Saarland for its splash-resistance. It is protected against splash-water (IP46), which means that it is not damaged by regular splash water or humidity in bathrooms.

Please note: Electrical appliances must generally be installed at a minimum distance of 0.6m from a water supply.

What is the maximum surface temperature at maximum output?

The maximum output surface temperature is approximately 65°C on average, with an input voltage of 220V. When using a higher voltage the maximum surface temperature rises respectively. If the radiator is partially covered by a towel, for example, the temperature also rises.

Warning! Do not cover the radiator at any time.

A temperature sensor in the control box on the rear of the radiator measures the glass surface temperature. If the surface temperature reaches 65°C it is electronically shut off and in the unlikely event that it reaches 105°C it is mechanically shut off.

Is the radiator automatically shut off when it reaches the desired temperature?

The SGGTHERMOVIT® ELEGANCE glass radiator is controlled with the remote control thermostat. The thermostat measures the actual room temperature against the programmed temperature. The power output of the radiator decreases as the room temperature reaches the required temperature. When the room temperature reaches the desired level, the output level automatically reverts to 0.

Is the SGGTHERMOVIT® ELEGANCE available in other thicknesses?

For safety reasons SGGTHERMOVIT® ELEGANCE is produced with two leaves of 6mm heat-strengthened glass. Other thicknesses are possible but minimum volumes apply. They are not part of the standard product range.

Can the towel rail also be installed if the radiator is mounted horizontally?

The towel rail is available in all sizes, for both horizontal and vertical mounting (except 150cm).

How does the product work? How does it generate heat?

Heat is created by the electrically conductive neutral coating on one of the glass surfaces facing the laminated interlayer. Electricity is sent across this coating and this generates heat because of the resistance the electricity has to work against.

Can I get an electric shock if the glass breaks?

No. The PVB interlayer holds the glass panes together, even if the glass is broken. Furthermore in the event of breakage, the conductive coating breaks with the glass, interrupting the electrical circuit.

Warning! In the event of breakage, unplug the radiator immediately for safety reasons.

Is the glass resistant to breakage?

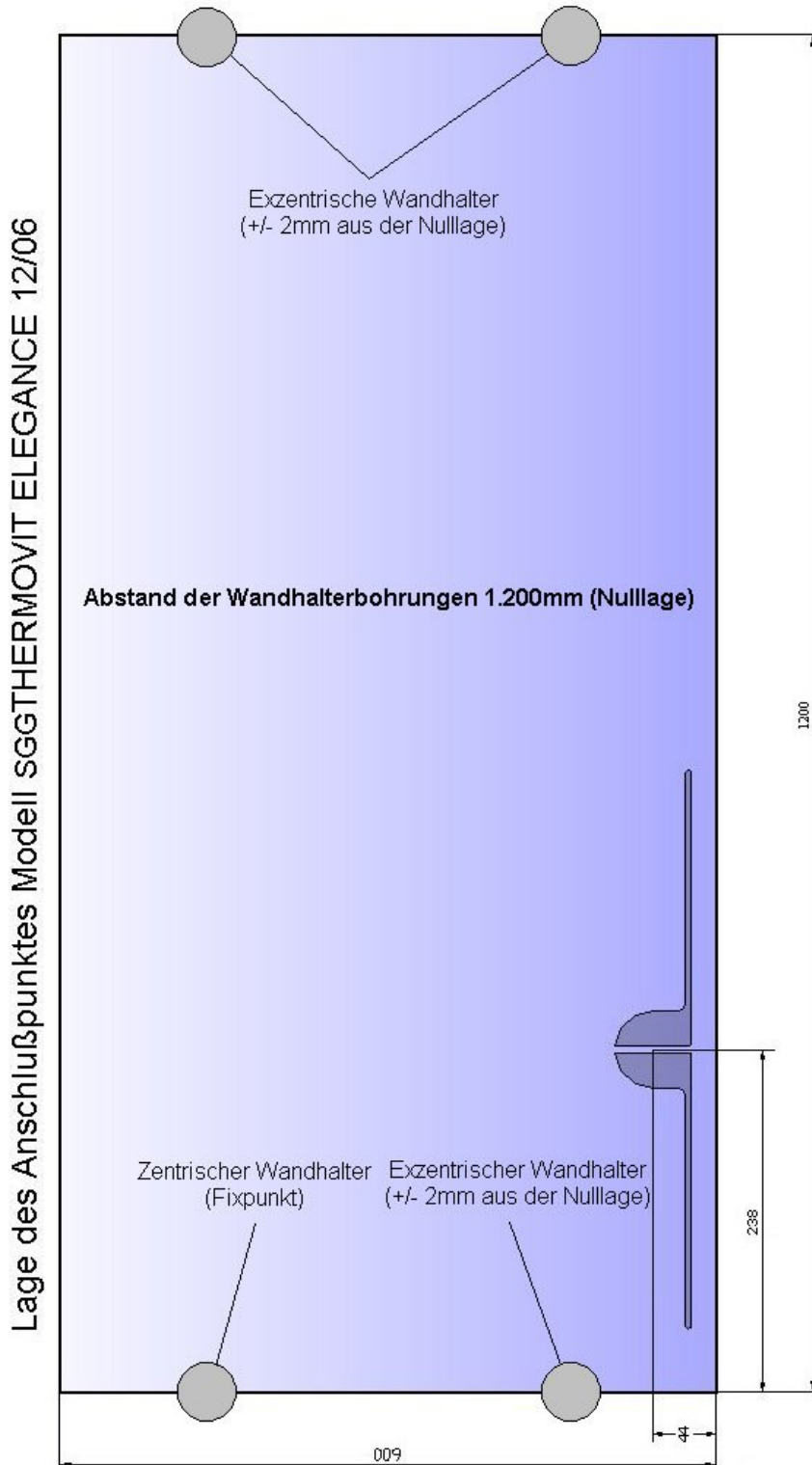
The SGGTHERMOVIT® ELEGANCE glass radiator was tested for impact resistance by an independent institute in cooperation of the Technical University of Aachen (RWTH). The glass withstood the pendulum test, in accordance with DIN EN 12600, to a swing-height of 700mm without breakage.

Are there any other fittings being developed?

The product range is planned for expansion in 2005. Variations of the glass type and surface coatings are feasible for large volume runs. Contact the manufacturer for further details.

Location of the fixings, Model 12/06 (1.200x600mm)

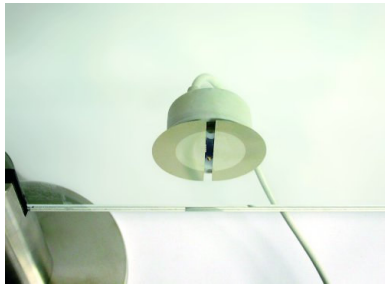
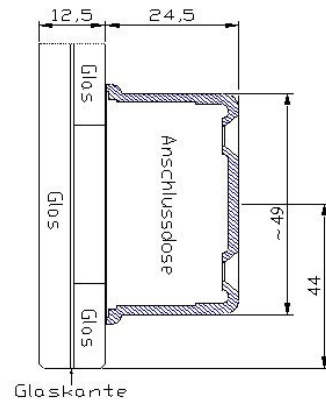
Front-view



Location of the fixings, Model 12/06 (1.200x600mm)

Side-view

Abmessungen Anschlußdose Modell SGGTHERMOVIT ELEGANCE 12/06



The control box on the rear of the radiator houses the microprocessor and the transmitter for the processor and the thermostat.

The attached power cable is 2-metres long as standard. In the controllable version (which includes both the microprocessor and transmitter) the depth of the control box is 24.5mm. In

the non-controllable version (without microprocessor and transmitter) the depth is only 11mm.