

Understanding The Temperature in Your Sauna - with tips

Clearlight infrared heaters are designed to create the perfect infrared therapy wavelengths from 42°C to 55°C for a total usage time of 20-45 minutes. This is the ultimate goal to work towards so you get the maximum benefits from each session, ideally three times per week.

However, the perfect session times and frequency are very much up to the individual and their specific health needs and preferences. If you are working with health professionals, always follow their advice and listen to your body.

The benefits come from being in direct alignment with the infrared heaters and from being exposed to infrared wavelength for extended periods of time, so it is better to use the sauna for longer sessions at a lower temperature rather than having shorter and hotter sessions. If you do like the sauna hotter you can increase the preheating times, however, it is not necessary per se as the infrared is the main driver for perspiration. In other words, with infrared, you will still sweat even if the cabin temperature is lower, because the infrared warms the body up from within.

Our heating panels, regardless of the sauna model, are designed so that the temperature rises upwards. This means that the heating elements do not heat up homogeneously, but gradually from the bottom to the top.

Depending on the model that you have, the maximum temperature that your sauna can reach is between 55-70°C. Infrared saunas work differently from traditional or conventional saunas and it is not uncommon that there are unfeasible expectations of the achievable temperature inside an infrared sauna. As mentioned above, a therapeutic infrared sauna session requires much lower temperatures - anywhere between 42°C and 55°C is considered optimal and the most beneficial.

The sauna's ability to heat up fast and achieve higher temperatures is limited not only by the Sauna model and its features but also by the surrounding ambient temperature, which will be affected by the geographical location, climate, and positioning in the premises/garden. In colder climates/seasons or exposed positions, our saunas may only achieve temperatures in the 50s, whereas, in hot climates/summer and sheltered positions, they may achieve high 60s to 70s.

The sauna is not designed to get beyond 70°C or reach the maximum set temperature. Temperatures beyond 60°C result in a different way of sweating, which is not the purpose of an infrared sauna. With higher temperatures your way of sweating changes from fat-based to water-based sweating, which is less effective when it comes to detoxification and other therapeutic benefits.

The fact that your sauna reaches 55°C (or over) is not a mistake. It was designed that way as the heaters work like thermostats. In an infrared sauna, you want the heaters on all the time in order to benefit from the infrared wavelengths. If the sauna was to reach the set temperature, the heaters would turn off which would compromise their effectiveness. Therefore, the maximum temperature is never achieved. The FS (Full Spectrum) Heaters (certain models only) are linked to the infrared panels behind the black mesh in the sauna walls and will also switch off when the sauna reaches the set temperature.

It is worth remembering that an infrared sauna is not heating you up via the air, but directly through infrared wavelengths penetrating your body.

If you intend to sweat more, we recommend drinking water, increasing the session length, taking a hot shower, or moderately exercising shortly before a sauna session.

If you believe that your sauna is not reaching the desired temperature then we need to consider the following points:

- What is the ambient temperature surrounding your sauna? Is it in a heated room? A garage for example (which is not heated) will cause the sauna to have a slower heating up time and a lower maximum temperature.
- Our saunas (except our Outdoor sauna models) are designed to be placed indoors in a dry, clean, well-ventilated area at room temperatures not below 17-19°C.
- Have you placed your sauna directly onto a concrete floor? Concrete has little insulating value (when not exposed to direct heat), and it will feel quite cold, especially in winter. A concrete floor can also make the whole room colder - see first bullet point.
- Are all the heater panels working - Our infrared heater panels (not FS Heaters) either work or do not work. It is almost impossible for them to work at half-capacity due to the nature of their design. If a heater panel is identified as emitting no heat, this panel may need its connection checked or replaced entirely. See [Carbon/Ceramic Heater Panels](#)
- Do your FS Heaters work? - Sanctuary and Outdoor models only unless you have an add-on attached to your door. They should give an orange glow and intense heat. See [Full Spectrum \(FS\) Heaters](#)
- What have the FS Heaters been set to? 0/50/75/100% - this can only be done on a Sanctuary or Outdoor model. We recommend setting them to the maximum as this will speed up heating up times and offer a higher overall temperature. You can reduce the intensity setting at anytime.

- Have you closed the air vent hatch in the ceiling during the warming-up period? Although we do recommend keeping this open to allow circulation of fresh air, it can be closed during the initial warm-up period to speed up the heating-up time.
- Is the door closed and are the door seals attached properly? A towel under the door can help keep cold air out (although as with the vent, we advise allowing air to circulate). See ["There is a gap around the door!"](#)
- Ensure the temperature is set to the desired temperature or higher. Setting to maximum (recommended) will force the heaters to run continually, as they will never reach the maximum temperature and therefore never switch off. This will also ensure that the benefits from infrared are continuous.
- Ensure the timer is set to the desired session length, or to the maximum of 60 minutes (recommended). If the timer is set all the heaters will switch off when the set time is reached.

Functionality Check:

If you are still questioning the achievable temperature of your infrared Sauna or the speed at which it heats up, please follow these steps to check the functionality of the heaters:

Carbon/Ceramic Heater Panels in the walls, under the bench (not all models), and in the floor.

From cold, turn the sauna on, and after 15 minutes feel against each heater panel with the palm of your hand. If you can feel heat, the panel is working. Check the sides, back, under bench panel, and front panels. Not all models have a heater under the bench or in the front panel. **Do not do this with FS Heaters**

The heater under the bench will always feel much cooler - this is a safety feature designed to protect the calf muscles which are in close proximity to the heater. It is not uncommon for customers to think these heaters are not working at all. A temperature gun will easily identify that this is not the case. The floor heater works on the same principle as the heater under the bench - it is only designed to take the cold feeling away from the feet so that it is more comfortable.

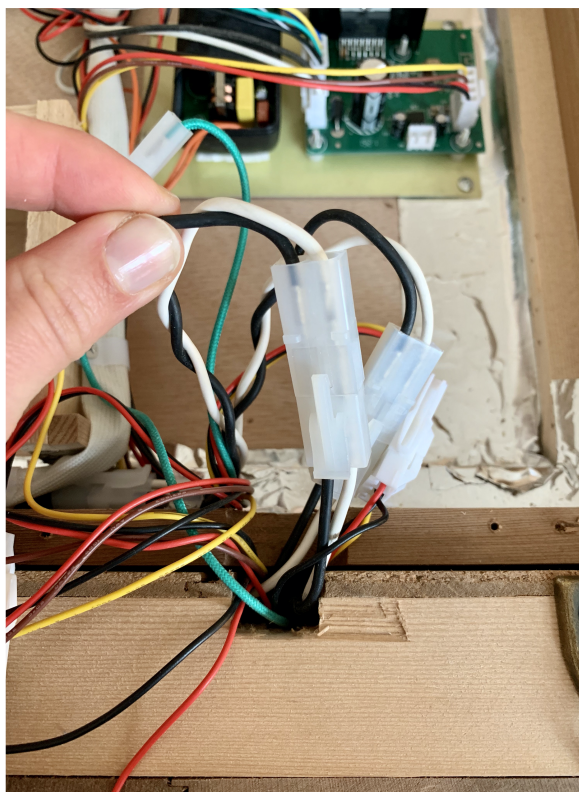
To measure the temperature of a heater panel with an infrared thermometer:

1. Measure the temperature after 45 minutes with your infrared thermometer at the marked points. (Points 3 and 4 will always have a temperature up to 20% lower than points 1 and 2).
2. Report your results back to your customer care support team.



Note: Our infrared heater panels (not FS heaters) either work or do not work. It is almost impossible for them to work at half-capacity due to the nature of their design. If a heater panel is identified as emitting no heat, please check the Molex connection - all the connections (black/white) in the roof - you will find them in all the hatches - small and large - and under the bench - certain models only. From an electrical point of view, it does not matter if a white cable is paired with a black cable and vice versa.

Typical Heater Connection -
both Carbon/Ceramic and FS Heaters



Full Spectrum (FS) Heaters (on the front glass panels)

FS Heaters are standard on all our Sanctuary and Outdoor models. Other models, Essential and Premier, can add an FS Heater during installation or at a later stage to the door. Even our Sanctuary and Outdoor models can add another FS Heater - also on the door.

As mentioned above FS Heaters are working if they give an orange glow and intense heat. The intensity can be adjusted on the keypad or app (only Sanctuary and outdoor models). It is recommended to set the heaters to 100% when heating up the sauna. Adding an FS Heater to your sauna (door) will certainly increase your heating up times by around 12-18% and overall maximum temperatures depending on the size of the sauna .

The mini FS Heater on the door and the FS heaters attached as standard on the Sanctuary and Outdoor models are operated in different ways:

If the FS Heaters are not working there can be a number of reasons:

FS Heaters on the glass side panels:

- The FS Heaters have not been activated on the Touchpad or have been deactivated on the touchpad. **Press the FS Button**
- The FS Heaters are not plugged into the socket on the floor.
- Molex connectors in the roof have not been properly connected during installation (see photo above).
- There is a loose wire in the electrical circuit.
- There is a loose wire inside the FS Heater.
- The bulbs inside the FS Heater have been damaged during transit/installation.

FS Heaters on the door:

- The add-on socket is not activated - see below.
- The add-on socket has been deactivated - powercut or sauna unplugged
- The FS Heater is not plugged into the socket on the floor.
- Molex connectors in the roof have not been properly connected during installation (see photo above).
- There is a loose wire in the electrical circuit.
- There is a loose wire inside the FS Heater
- The bulbs have been damaged during transit/installation

To test if an FS Heater is working or not:

The FS Heaters run on 230 volts and can be plugged into any household socket with an adaptor. If the FS Heater is working then it signals that there is a wiring or connection fault.



How to activate the add-on socket for the FS Heater on the door:

Older Essential models (Pre 2023)

Different models:

1. Press inside & outside lights simultaneously for 4-5 seconds (you should hear a click coming from the ceiling above).
2. FS Heater will operate in coordination with the heater panels.
3. If there is a power cut or you disconnect the power supply to the sauna the activation will need to be done again

Essential/Premier/Sanctuary/Outdoor model:

1. Press the power button so the sauna is on.
2. Set the temperature scale to Celsius/Centigrade (C) - bottom right button on the touchpad (1).
3. Set the temperature to exactly 60 - top left button on the touchpad (2).
4. Press the AUX button for 5 seconds (you should hear a click coming from the ceiling above) (3).
5. FS Heater will operate in coordination with the heater panels.
6. If there is a power cut or you disconnect the power supply to the sauna the activation will need to be done again



Temperature Sensor

It is feasible that the temperature sensor reads a lower temperature than what the sauna actually is. A thermometer is the best way to check this. Place the thermometer close to the temperature sensor in the ceiling (hole next the the speaker in the ceiling (image below) and compare your result to the temperature reading on your key/ touchpad and report your result to your customer care support team. Dust may have accumulated around the

sensor preventing it from giving an accurate temperature reading - using a vacuum cleaner with a nozzle will alleviate the dust collection.



“There is a gap around the door!”

The air gap is a safety feature, allowing fresh air to be drawn in and exit out of the ceiling air vent. The gap is intentional, and ensures the sauna passes certain safety requirements set out by Edison Testing Laboratories (ETL):

Edison Testing Laboratories (ETL) is recognized as an NRTL in the United States and, in a similar capacity, as a Testing Organization and Certifying Body in Canada by the Standards Council of Canada. A product bearing the ETL Certification Mark is determined to have met the minimum requirements of prescribed product safety standards. The Mark also indicates that the Intertek ETL Certification Mark manufacturer's production site conforms to a range of compliance measures and is subject to periodic follow-up inspections to verify continued conformance.

Additionally, it is worth remembering that an infrared sauna is not heating you up via the air, but directly through infrared wavelengths penetrating your body. Cool air entering through the gap around the door will not impede the therapeutic benefits of your sauna. A towel placed along the bottom of the door can block a draught if necessary during your session.

If you wish to discuss sealing the door with extra draught excluders please ask for advice from your customer care support team.

Health Benefits and Specifications

For the specifications of the Carbon/Ceramic Heater Panels and FS Heaters, as well as health benefits of the sauna please read the information posted on our website and in our Blog.