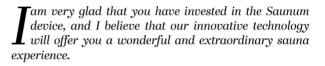


# saunum

# Saunum Air Perfect (тур60с07, тур60с10) all-in-one sauna heater to create a spa atmosphere

V\_24\_09.1

# THE BEST SAUNA EXPERIENCE TO HAVE!



I have a degree in thermal engineering and come from the Southern Estonia, where my love for saunas began. The special feature of local historic smoke saunas is the lower temperature and higher humidity level than, for example, a classic Finnish sauna. In ordinary saunas, the stone volume of the sauna heater is generally small. Such an arrangement can cause a sudden, burning hot steam and an extremely uneven temperature, where your head and shoulder level is really hot, but your feet are left cold. Such an experience can be quite unpleasant and may cause headaches and lead to body stress. However, in ancient smoke saunas and Native American saunas, the stones were first heated during the day. Then the heat stored in the stones was used to cleanse the body and create a truly enjoyable sauna experience.

Inspired by the experience of a smoke sauna, I wanted to create an innovative solution that combines the best features of an authentic sauna with modern technology; enabling a pleasantly mild and relaxing sauna experience without painfully scorching steam. For that, however, I had to solve the problem of how to achieve an even temperature, at both the head and foot levels. My development work was supported by research done alongside Tallinn University of Technology,



in which we analysed the thermal stratification and air movement in the sauna room. Saunum was born in cooperation between scientific thinking and technological innovation.

Saunum's unique patented mixing system of air layers captures the hot steam that rises under the ceiling of the sauna room, mixes it with the cooler air from the surface of the floor, and directs the milder steam back evenly. This makes for an enjoyable, unaggressive heat. You can sit in the sauna for a longer time, and enjoy a sweat and a deep cleanse without feeling tired. The stone volume of our heaters is significantly larger than other sauna heaters, which is the reason for the especially pleasant indoor climate with long and soft steam.

A moist steamy sauna, a therapeutic salt sauna, or a healthy aroma sauna – all of these functions are available on Saunum's devices to create a truly relaxing sauna experience. When using Himalayan salt balls in our device, salt ions that are beneficial to skin and respiratory tract evaporate and the steam circulates these into the air. Adding a sauna aroma system that blends steam and healthy aroma oil creates an even more enjoyable sauna environment.

Saunum's sauna devices are suitable for both adults and children.

#### Have a pleasant sauna!

Audum Van

Andrus Vare The creator of Saunum

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# Saunum congratulates you on choosing a heater with an innovative saunaroom indoor Heat Equalizer!

## **HOW TO USE SAUNA**

Enjoying Sauna has relaxing effect. It should never be a source of stress.

Having a best Sauna experience is individual. While using Sauna it is good to have as fewer clothing as you feel comfortable.

Go to steam room when it has reached your target temperature (see page 14). When you have target temperature use dedicated Sauna ladle with hot water - around 6 to 7 oz at once - by pouring it on hot stones (see page 16).

Use always hot water, cold water will fragment stones quicker.

Or you can install an automatic water spraying system. This will raise the humidity in steam room and gives sensations of hotness.

With Saunum climate device use ventilation mode to have even distribution of steam between top and bottom layers in room.

Sweating is perfectly normal in sauna. By using Saunum LEIL control panel You can always pre-set or manually change temperature, humidity and Saunum climate device ventilator speed to find best settings you enjoy the most.

Before using the Saunum Air Perfect heater with an indoor climate device (hereinafter 'climate device'), read the installation and safety instruc-tions.

NB! Do NOT use combustible material under the sauna heater

NB! This guide is only valid about saunas in home use.

NB! The control device must correspond to the power according to Table 1.

NB! it is forbidden to use the device above 176°F with other manufacturers control device.

**NOTE** The control device must have the ability to control the fan of the sauna climate device, and the function of simultaneously switching off the heater and the fan of the sauna climate device is recommended.

# NB! Do not use the sauna climate device for any other purposes!

## SAFETY INFORMATION

These instructions for installation and use are intended for the sauna owner or maintenance provider, as well as the electrician responsible for installing the heater with a sauna room indoor climate device.

After installing the heater with an indoor climate device, the instructions must be handed over to the owner or maintenance provider.

The sauna climate device is intended for heating the sauna room at 140 - 194°F and for regulating the sauna room climate during steaming.

NB! It is forbidden to use the climate control unit together with the heater constantly at temperatures above 194°F!

#### Table 1

DEVICE	WATTAGE	VOLTAGE	PHASE	AMPERAGE	CIRCUIT BREAKER
Air Perfect 7	6900	240	1	28.75	Selected and supplied by an
(TYP60C07)					electrician-installer in accordance
Air Perfect 10	0000	240	1	41.25	
(TYP60C10)	9900	240	I	41,25	with NEC and local codes



Do not connect the heater to the power and/or utilities via a GFCI breaker!

# $\mathbb{S}$

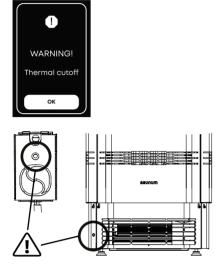


Figure 1

When it is exceeded, on the Air IQ controller is displayed "THERMAL CUTOFF" (Figure 1) and the thermal protection is activated, resulting in the fan and the device stopping for safety.

To restart the device, cool the steam room approx. 5-10 minutes 68°F lower by keeping the steam room door open and restarting the temperature and/or device sensor safety switch by pressing the switch on the temperature sensor until you hear a click.

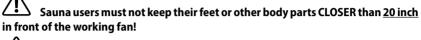
**NB!** To connect the sauna climate device to the power network, a control device for the control of electric heaters is required. The control device must correspond to the power of the heater used according to **Table 1**.

To ensure the longevity of the device, make sure that the temperature of the sauna room at the height of the lower part of the device does not exceed 176°F.

The manufacturer is not responsible for any malfunction caused by an overrun of the authorized operating temperature.

ROOM SIZE ft <sup>3</sup>	MIN. CEILING HEIGHT	MIN. SAFE DISTANCE FROM THE TOP OF THE STONES TO CEILING	Minimum safe distance from the heater
210 - 350	77′′	31.5′′	3.15´´ all around (A, B)
300 - 550	77′′	31.5′′	3.15´´ all around (A, B)



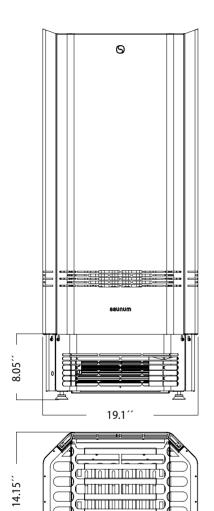


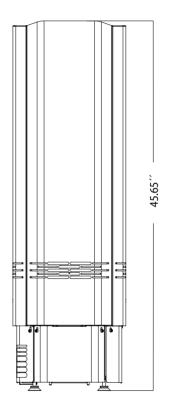
Please keep CHILDREN away minimal <u>39.4 inch</u> if the fan works with any speed, the sauna steam may cause burn skin!!!



Do not allow PETS in the steam room while the device is operating!!!









# DIMENSIONS

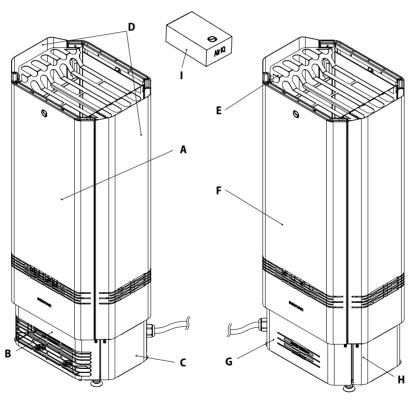


## **PRODUCT COMPLETENESS**

All parts of the product are supplied in single package.

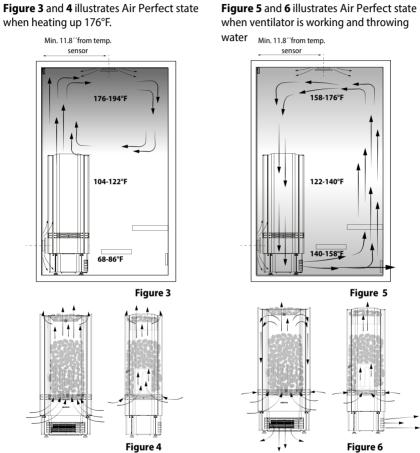
I - Air IQ control panel, temperature and door sensor, cables, Himalayan salt ball set.

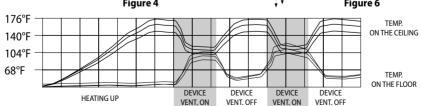
**Elements that are not part of the Air Perfect package:** safety barrier, bottom air deflector, external salt tray and stones (approx. 99-121 lbs.).



- A Front panel
- **B** Bottom front panel (air outlet grille)
- C Panel covering the electrical connection
- D Side flues

- E Stone basket top grille
- F Rear panel
- ${\bf G}$  Panel covering the controller Air IQ
- H Panel covering the electrical motor





11

## BEFORE THE INSTALLATION

Before starting the installation work, read the installation instructions and observe the following:

Make sure that proper preparatory work has been done in the steam room before installing the sauna climate device:

- The thermal insulation of the walls and ceilings must be good, otherwise too much time and energy will be spent warming up the room.

- Make sure that the appropriate electrical supply and ventilation preparations have been carried out for the temperature conditions of the steam room environment (see **page 13** paragraph "Sauna room ventilation").

## POWER OF THE HEATER

 $\angle I$  Make sure that the power (kW) is suitable for the given steam room ft<sup>3</sup> as shown in **Table 1** (pages 6-7).

To calculate the room size multiply the height (Z) by the width (X) and the length (Y) in feet to get the cubic volume of your sauna room like shown.

Every squere foot of unisulated material (etc. glass door, -wall, log walls) adds 1.5 cubic feet to room volume.

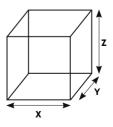
If you want to install the control device and/ or temperature sensor cable of the climate device inside the wall, it is recommended to prepare the installation of the cable gland in the desired location in the wall.

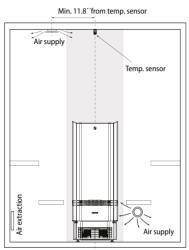
There must be no obstructions in front of the air outlet from the device, the blown air flow must be able to spread freely over the steam room (e.g. air is blown under the stage). The upper edge of the fan outlet of the sauna air conditioner is lower than the lower edge of the stage (see **Fig. 11** and **12** on pages 14-15).

# The installation of the sauna climate device must be performed by a qualified electrician.

The connection of the device must be performed in a stable location with a cable that meets the temperature conditions. Protective earthing (PE) must be connected to the connection terminal of the device. The device must be powered from the control device's supply circuit, which is protected by overcurrent fuses.

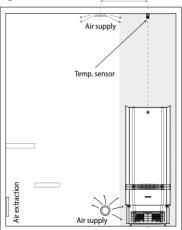
At the installation site of the sauna climate device, the minimum safety distances given in **Table 1** (see pages 6–7), measured from the heater housing, are guaranteed.





#### Figure 9

Min. 11.8" from temp. sensor



#### Figure 10

#### NOTE!

The air supply and exhaust shown in the **Figure 9** and **10** are illustrative and their location may change according to the size and shape of the room

# SAUNA ROOM

The air in the sauna room must be changed at least six times an hour.

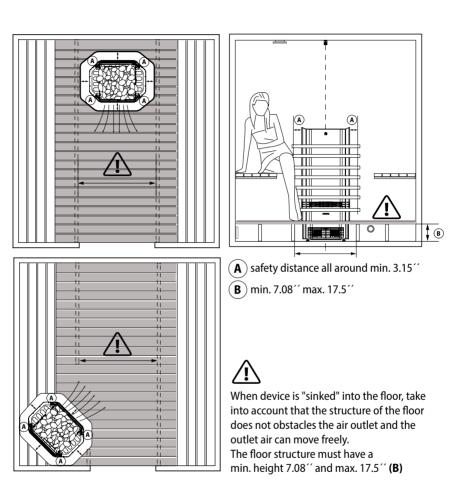
When using mechanical air extraction, place the air supply above the sauna climate device. When using natural air extraction, place the air supply under or next to the sauna climate device.

The air supply pipe must have a diameter of 3.15<sup>''</sup> to 3.94<sup>''</sup>.

Install the air outlet near the floor, as far as possible from the sauna climate device. The diameter of the air extraction pipe must be twice the diameter of the air supply pipe. If the air outlet is in the washroom, there must be a gap of at least 3.94<sup>''</sup> under the sauna room door.

# Exhaust ventilation in the sauna room is mandatory.

The venting hole for drying (optional) must be installed in the ceiling near the wall opposite to the sauna climate device (closed during heating and sauna). The sauna can also be dried by leaving the door open after using the sauna. The sauna ventilation system should preferably prevent the sauna exhaust air from entering other rooms, especially when using the sauna climate device with salt balls

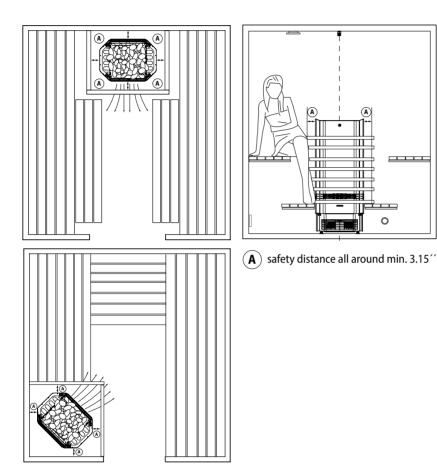




#### NOTE!

Figure 11 is indicative and only illustrates the possible situation in the steam room of the sauna, how there should be no obstacles in front of the climate device air outlet.





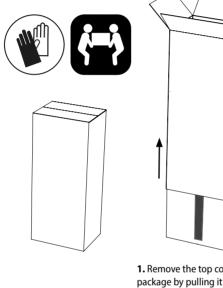


### NOTE!

**Figure 12** is indicative and only illustrates the possible situation in the steam room of the sauna, how there should be no obstacles in front of the climate device air outlet.



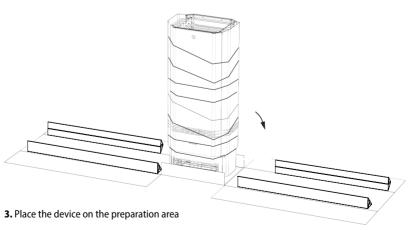
NOTE! The total weight of the device package is 121 lbs. 2 people are required to transport the package.





**1.** Remove the top cover of the package by pulling it upwards

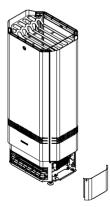
2. Remove the mounting tape. DO NOT USE BLADES TO SCRATCH!



# $\bigcirc$



4. Remove the protective film. DO NOT USE BLADES!



**5.** Place the device on the sauna steam room. Open the panel covering for connection.

NB! Do NOT use combustible material under the sauna heater

## **ELECTRICAL** CONNECTIONS

# The sauna climate device is already equipped with the control device.

The control device is integrated within the heater, located behind the bottom rear panel.

During normal installation and maintenance there is no need to access the controller box.

All connections necessary during installation will be made using the cable terminals that are located behind the bottom side panel.

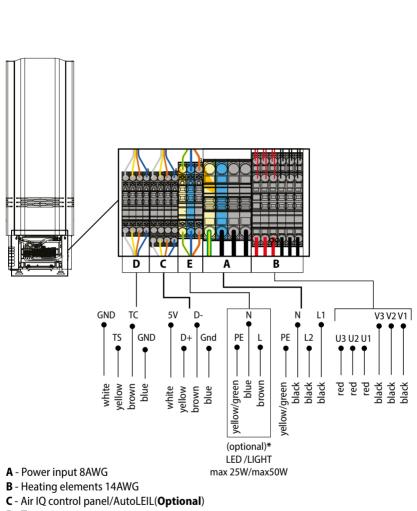
#### The electrical connection of the device must be performed by a certified electrician following N.E.C. and local building codes.

To access the electrical connectors, you need to remove the bottom right side panel. Undo the two bolts fixing the panel and remove the panel.

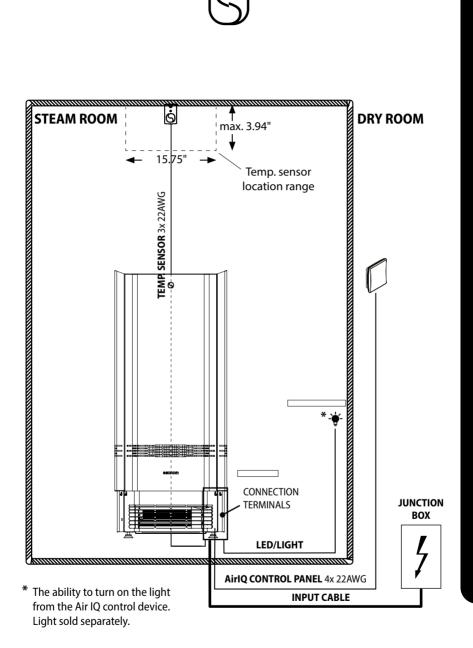
Do the electrical connections according to the schematic on **page 18**.

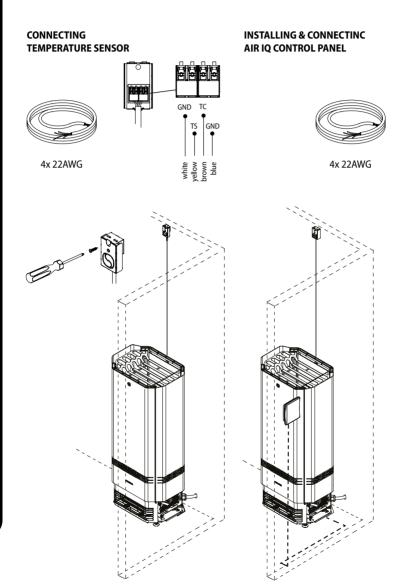
Feed the cable through the openings in bottom of the heater near the cable terminals.

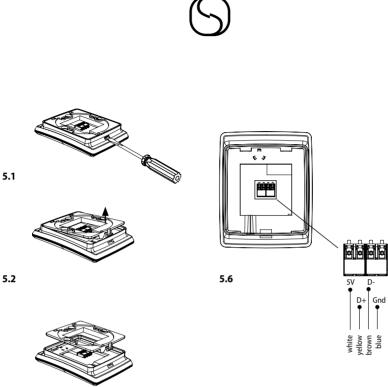




- **D** Temperature sensor
- E LED/Light (Optional)\*











5.4





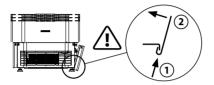
5.7



66

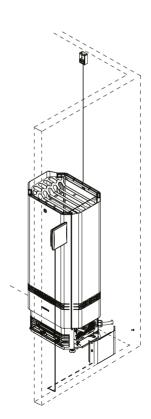


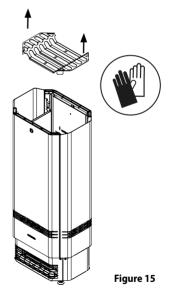
**6.** Place back the electrical connection cover plate



7. Fill the stone basket with stones like shown page 23-25

**DEFORE LOADING THE STONES** REMOVE THE HEATING ELEMENTS PROTECTION PADDING FROM THE STONE BASKET AND MAKE SURE THAT THERE ARE NO EXTRANEOUS OBJECTS LEFT IN THE STONE BASKET!





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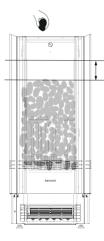
#### LOADING THE STONES:

**IMPORTANT!** The stones should be 1.95<sup>--</sup> 3.94<sup>---</sup> in diameter. About 110 - 120 lbs of stones are used to operate the device (4x Saunum stone package).

1. Place the climate device in the sauna room, making sure that all safety distances are met (**Tabel 1** page 7, **Figure 9** and**10** page 14-15) and that the device is installed securely.

2. Remove the stone basket top grille by pulling it upward (**Figure 15**). Remove the padding from the heaters!

3. Fill the stone basket **by hand** with heater stones up to the openings of the air ducts 5.9<sup>--</sup> 7.87<sup>--</sup> as shown **Figure 16**.





Do not force the heater stones. Stack the heater stones so that air passes between them. Start by stacking larger stones.

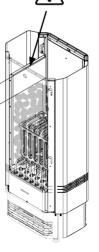


Figure 16

Figure 17

Do not pour heater

stones into a stone

basket!

0



Do not drop any stone inside of the both side flue (Figure 18)!!!

If this happened the stones fall into the fan chamber and damage the fan!!!

## LOADING THE STONES:

4. Place back the stone basket top grille and add 1-2 layers of stones so that air can pass through the top grille and stones freely (**Figure 19 & 20**).

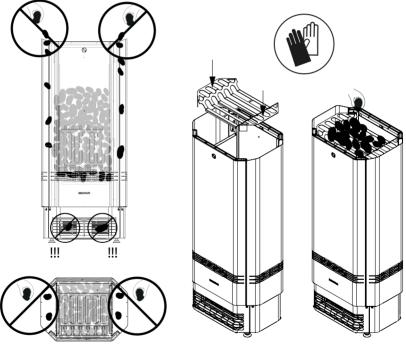


Figure 18

Figure 19

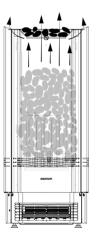
If the heater stone(-s) have got into the fan, it is FORBIDDEN to start the fan of the device before the stone(-s) have been removed!!!

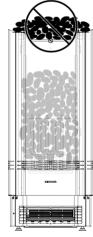
Do not pile heater stones on the upper stone basket in such a way that they prevent air from moving freely (Figure 20)!!!

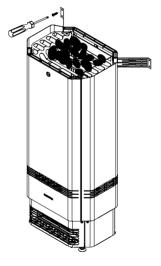
Too much heater stones significantly affect the overheating of the device and the operation of the fan.



Do not cover the upper air intake openings of the flue (Figure 20).







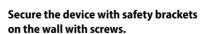


Figure 20

Figure 21

## HEATING THE SAUNA ROOM

Before using the sauna climate device for the first time, make sure that:

- the electrical connections meet the requirements;
- the supply voltage corresponds to the nominal ratings allowed for the sauna climate device;
- the protective earth (PE) is in working order;
- the attachments of the sauna climate device housing are in order;
- the over-current fuses are in working order;
- the fan rotor rotates smoothly;
- there are no tools or materials left after mounting the device in the housing.

When switching the sauna climate device on, check:

- the direction of the air flow the air intake from the upper and the output from the lower opening;
- that there is no vibration or excessive noise when the fan is running.

When the sauna climate device is switched on for the first time, the heaters and the stones will emit an odour. The sauna room must be properly ventilated to remove the odour.

If the power of the heater is suitable for the sauna room, it takes 45–90 minutes to reach the desired temperature in a properly insulated sauna room. The stones are usually heated to the steam temperature at the same time as the sauna room. Only switch the device fan on just before entering the sauna room – this will help to prevent the sauna bench from overheating and an excessive energy consumption.

Saunum's recommended temperature for sauna operation is 149 °F to 176 °F.

# USING THE SAUNA

**NB!** Before switching the sauna climate device on, always make sure that nothing is above or near it.

The operating time of the sauna climate device model Saunum Air Perfect may be adjusted by a separate control device.

- Do not connect the device directly to the mains!
- The sauna climate device must not be used if the components of its housing have been removed and/ or the wiring diagram has been changed.



- Children should not be allowed to access or play with the sauna climate device.
- When switching the sauna climate device on and off, refer to the instructions for the use of the control device you are using.

**NB!** After using the sauna, make sure that all parts of the sauna climate device are switched off (the heating and the fan have stopped).

## ADJUSTING THE TEMPERATURE

**NB!** It is recommended to keep the air circulation fan of the sauna climate device switched off during the heating of the sauna room!

In this case, the sauna room heats up faster and the sauna bench does not get too hot during the heating. To find the right setting, start testing at the lowest temperature and lowest airflow rate. If the temperature becomes too high while in the sauna room, reduce the maximum temperature in the sauna room or the fan speed of the sauna climate device.

# REGULATION OF THE **SAUNA CLIMATE**

The amount of air circulation generated by the device is regulated by the same control unit that is used for heating control.

**The airflow speed** increases by adjusting it on the control unit you may choose between three different speeds.



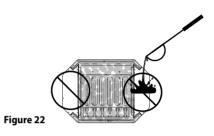
# THROWING WATER **ON THE HEATER**

The air in the sauna becomes dry as it heats up. Therefore, it is necessary to create steam to achieve a suitable level of humidity. The effects of heat and steam on people are different. When testing the different settings of the sauna climate device, you will find the most suitable combination of temperature and humidity. The effects of heat and steam on people are different. When testing the different settings of the SAUNUM climate device, you will find the most suitable combination of temperature and humidity.

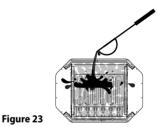
The volume of the sauna ladle should not exceed 0.05 gal. When throwing water, the amount of water should not exceed 0.05 gal, because by pouring too much water on the stones at once, some of it may be sprayed outwards in splashes of boiling water.

Make sure that people are at a safe distance from the heater when creating steam! Hot steam and water splashes cause skin burns.

The water to be thrown onto the heater must meet the requirements for clean domestic water. Only fragrances specially designed for a sauna may be used in the water. Follow the instructions on the package. NB! Do not pour water into the air flue or ventilation openings of the sauna climate device (Figure 22)!



A small amount of water drops in the flue is normal and does not affect the operation of the device (Figure 23).



# $\bigcirc$

3.

The sauna climate device comes with Himalayan salt balls.

### The use of salt balls in the device is optional and does not affect the main function of the device.

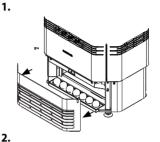
To use the salt balls, they must be installed in the sockets between the air outlet grille and the fan. Make sure that the salt balls are installed correctly and do not impede the fan rotation.

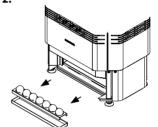
To install or remove the salt balls, unbolt the bottom front panel and place the salt balls in their sockets. When replacing old salt balls, it is recommended to rinse the salt ball tray. After installing or removing the salt balls and before reposition the bottom front panel place back to the previous position the air deflector to.

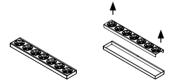
# NB! The sauna climate device may only be used with the front panel in place!

**NB!** Do not use/start the device if the salt balls get into the fan housing!

**NB!** The use of third-party salt balls is not covered by the device warranty.











## INSTALLING AND REPLACING THE HEATING ELEMENTS

NB! Before proceeding to replace the heating elements, make sure that the device is disconnected from the mains!.

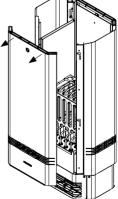
1. Remove the top grille.





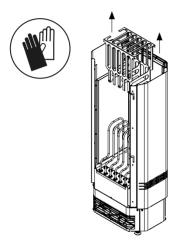
2. Remove the front panel by releasing (DO NOT REMOVE) the front panel bolts and pulling the front panel upwards.





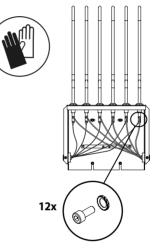


**3.** Remove the heating element air tunnel by pulling it upwards.

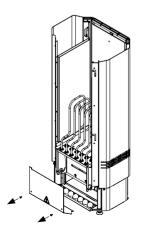


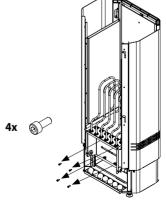
**4.** Undo the two bolts holding the bottom front panel and two bolts holding the panel covering access to the heating elements.

**5.** Release all the heating element cables (use M4 hexagon key)

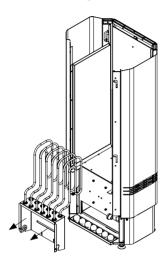


**6.** Undo the bolts holding the heating element module in place.









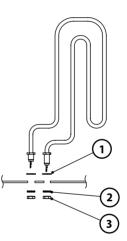
NB! Each heating element is fixed with special gaskets (1), star-washers (2) and nuts (3).

Use 3/4 (SAE), 19 (metric) socket wrench to remove the nut.



**8.** Replace the heating element module and re-position all components in reverse order.

NB! Use high-temperature grease for nuts and bolts.



## WARNINGS

- Staying in the sauna room for a long time raises your body temperature, which may be dangerous to your health! Do not touch the hot heater – the stones and the outside of the heater may burn you!
- Do not allow children, disabled or sick people into the sauna room without supervision!
- Consult a doctor about medical contraindications to steam!
- Consult a doctor about medical contraindications to salt treatment!
- Make sure you are not allergic to salt treatment. Saunum is not responsible for the side effects of salt treatment!
- Consult a pediatrician or family doctor about the presence of children in the sauna room!
- Be careful when moving in the sauna and sauna room, as the bench and the floor may be slippery!
- Do not go to the sauna under the influence of alcohol, drugs, or narcotics!
- Do not sleep in the hot sauna room!
- Sea air and humid climates may cause an oxide layer (rust) on the metal surfaces of the heater!

- Make sure you have proper ventilation in the sauna room. Saunum is not responsible for possible salt corrosion of equipment and machinery. If necessary, consult a specialist!
- Do not hang towels and clothes to dry in the sauna room – this may cause a fire hazard!
- Excessive moisture may damage the electrical equipment!
- There must be no obstructions closer than 50 cm in front of the fan opening!
- Sauna users must not keep their feet or other body parts closer than 50 cm in front of the fan!
- Do not cover. Symbol and text sign to prevent accidents resulting in injuries or damage from covering equipment which could lead to fire.



# Please note. The electric heater requires a control unit and stones.

**NB!** Do not leave the fan of the sauna climate device running when you are not in the sauna room – this will cause an excessive energy consumption, and the sauna bench will become too hot!

## SOLVING PROBLEMS

NB! Contact a qualified service specialist to perform maintenance. In the case of any disturbances in the operation of the sauna climate device, the use of the device must be stopped immediately, and the device must be inspected by a person authorised by Saunum.

# THE SAUNA CLIMATE DEVICE DOES NOT HEAT OR BLOW AIR.

- Make sure that the heater fuses are in working order.
- Make sure the connection cable is connected.
- Make sure that the sauna climate device is switched on.
- Increase the maximum temperature in the sauna room.

#### THE SAUNA ROOM HEATS UP SLOWLY. THE WATER THROWN ON THE STONES COOLS THEM DOWN QUICKLY.

- Make sure that the air circulation fan of the sauna climate device is switched off during the heating.
- Make sure that the fuses of the sauna climate device are in working order.
- Make sure that all heating elements are hot (smouldering) when the sauna climate device is operating.
- Increase the selected temperature on the control device.

- Make sure that the power of the heater is sufficient.
- Check the stones. Stones that are placed too tightly, falling down/ sinking closer over time, or the wrong type of stone may interfere with the air flow through the heater and therefore reduce the heating speed.
- Make sure that the ventilation of the sauna room is correct.

### THE SAUNA ROOM HEATS UP QUICKLY, BUT THE TEMPERATURE OF THE STONES IS INSUFFICIENT. THE WATER THROWN ON THE STONES FLOWS DOWN.

- Make sure that the power of the heater is not too high. If the power of the heater is suitable for the sauna room, it takes 45–90 minutes to reach the desired temperature in a properly insulated sauna room.
- Make sure that the ventilation of the sauna room is correct.
- Reduce the speed of the sauna climate device fan.

## THE WALL COVERING OR OTHER MATERIAL NEAR THE HEATER BECOMES DIRTY QUICKLY.

- Observe the safety distance requirements.
- Check the stones. Stones that are placed too tightly, stones falling down/sinking closer over time, or

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the wrong type of stone may interfere with the air flow through the heater and cause the surrounding materials to overheat.

 Make sure that no heating elements are visible between the stones. If the heating elements are visible, lift the cooled stones so that the heating elements are completely covered.

**NB!** Too sparsely placed stones allow the heating elements to overheat and worsen the indoor climate of the sauna room. It may cause a fire hazard!

# THE WOODEN SURFACES OF THE SAUNA ROOM BECOME DIRTY OVER TIME.

This process may be accelerated by:

- sunlight;
- · heat from the heater;
- wall protectors (protection equipment has poor heat resistance);
- fine particles from the stones.

#### THE HEATER SMELLS.

- See section HEATING THE SAUNA ROOM page 22.
- A hot heater may amplify odours mixed with air, but this, however, is not caused by the sauna nor the heater. Causes include paint, glue, oil, spices, etc.

# THE SAUNA CLIMATE DEVICE IS MAKING NOISE.

- There is always a certain noise when the fan is running. If it is not uniform and/or accompanied by a metallic sound, the fan is likely to need maintenance or repair. Check that there are no foreign objects in the fan air vents.
- Try switching the fan to a lower speed.
- Loud sounds are likely to be caused by stones cracking due to heat.
- Thermal expansion of the heater parts may cause noise when the heater warms up.

## MAINTENANCE

Due to large temperature fluctuations, stones tend to break down. Stones must be restacked at least once a year and even more frequently when using the sauna often. When restacking the stones, remove stone fragments from the bottom of the heater and replace the broken stones with new ones. By monitoring this, the heating capacity of the heater remains optimal and the risk of overheating is avoided.

If you use Himalayan salt balls with the sauna climate device, it is recommended to inspect the salt balls once a year and, if necessary, replace worn and broken balls with new ones. Make sure that there are no foreign objects in the fan air vents of the sauna climate device.

**CAUTION!** Before maintaining and cleaning the sauna climate device, the device power supply must be disconnected from the mains, and the moving parts of the unit must completely stop.

Before servicing and cleaning the sauna climate device, make sure that:

- the sauna climate device is disconnected from the mains (in addition to the device's power switch, also by means of over-current fuses);
- the device fan has stopped completely;
- the prescribed occupational safety and personal protective equipment is used when performing the work;

 the connection cables are undamaged. In the event of damage to the connection cables, have the cables replaced by a qualified electrician in accordance with the applicable standards and requirements before continuing maintenance and cleaning work.

The device housing can be cleaned with a cloth dampened with water. Do not use pressure washers, running water, chemical cleaners, or solvents to clean the housing!

Use a 10% citric acid solution to remove scale and rinse with water.

Excessive dirt can prevent the fan rotor from operating correctly, causing an increase in noise when operating the sauna climate device. Noise may also increase due to damage/bending of the fan blades. Make sure that there are no foreign objects or salt balls in the working area of the fan rotor.

Generally, the fan does not need to be cleaned more than once a year. The fan may only be cleaned by a person authorised by Saunum.

Using compressed air to clean the fan can permanently damage the fan rotor! The fan bearings are maintenance-free and must be replaced if problems occur.

It is recommended to check all electrical connections of the sauna climate device at least once a year. This can be done by a suitably qualified person.

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## WARRANTY

With the Saunum device warranty, Saunum guarantees that the product will be free from defects in the materials and the assembly for a specified period after the date of purchase. If, during the warranty period, the device is found to be defective due to the use of substandard materials or the quality of the assembly, Saunum's recommended repair partners will repair or replace the device or its defective part under the conditions set out below. Saunum reserves the right to decide whether to replace the defective product component or to replace the device with a new one. The replaced defective product components remain the property of Saunum.

#### Warranty conditions:

- 1. The warranty is only valid if a completed installation report is submitted with the claim.
- The device has been connected to the power network by a qualified electrician in accordance with the regulations in force.
- 3. The warranty period of the sauna climate device when used in a private sauna is two (2) years.

#### Not covered by the warranty:

- Routine maintenance and cleaning of the device and replacement of the components due to normal wear and tear.
- Adaptation or modification of the device for any purpose other than that indicated in the instructions for use.
- 3. Risks arising from transport.
- 4. Damage resulting from the misuse of the device.
- 5. Damage resulting from the improper installation of the device;
- Repairs to the device not carried out by Saunum's recommended repair partner (maintenance partner).
- Accidents, lightning, water, fire, improper ventilation, or any other factor beyond the control of Saunum.
- 8. Breakages caused by the use of stones and salt balls not recommended by Saunum.
- 9. The heating elements and the salt balls.
- 10. Saunum will not cover labour cost.

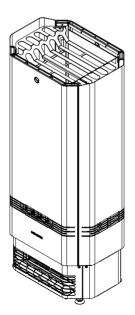


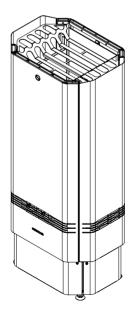
Read all of the instructions for use carefully and thoroughly **before** using the device and keep them in

a safe and easily accessible place for future reference. For Saunum Saunas installation and maintenance help contact with your local distributor.

techsupport@bathingbrands.com phone: +1 (224) 253-5909

**Please note!** The sauna may only be connected to the power network by a qualified electrician in accordance with the local NEC.





# INSTALLATION REPORT

Date of purchase:
Heater type:
Sticker/serial number: Date of installation:
Installed by:
Checked by:
Date, signature:
Description of the work done:
All the details are available for the installation
There are no colour defects or dents
Installed on the wall or on the floor according to the instructions
The electrical connections are made according to the installation instructions
All the heating elements heat up
The three fan speeds are working / in the correct order
Notes:
Customer's contact (name, email address):
Received work:
Warranty start date:



Manufacturer: Saunum Saunas North America LTD Telliskivi Tn 60-1, Põhja-Tallinna Linnaosa, 10412 Estonia

declares that the product:

# **Saunum Air Perfect**

complies with the requirements of the following standards:

UL 875, Electric Dry-Bath Heaters, Edition 9, Revision Date 01/04/2021; CSA C22.2 No. 164, Electric Sauna Heating Equipment, Edition 2, Issue Date 02/2018.

These products do not contain hazardous substances in excess of 0.1% (SVHC) and meet the requirements of the REACH Regulation (1907/2006/EU REACH XVII) and comply with the requirements of the RoHS Directive (2011/65/EU, RoHS2 and 2015/863/EU, RoHS3)