

# MAGNUM sauna stove

## 6.6kw 9.0kw 10.5kw

### Operating and installation instructions

#### Installation instructions for Magnum sauna stove 6.6kw, 9.0kw and 10.5kw

#### Magnum RC with a control centre

**Please read these instructions carefully through before the installation and the first use of the sauna stove.**

These installation and operating instructions have been meant for sauna owners and the electric fitter responsible for the installation of the sauna stove. These installation and operating instructions of the sauna stove should be handed to sauna stove owner after the installation.

**The warranty does not cover defects due to installation or operating faults**

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Manufacturer: Starsauna Oy  
Pistotie 4, 15860 Hollola, Finland  
Technical support:

Sami Kulju +358 40 5455625

- Ventilation in the sauna

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-Wall mounting of the sauna stove

**Installation of the sauna stove**

**- Only an authorized electric fitter is allowed to carry out the electric installation**

**- You'll find the instructions for electric installation in the connecting diagram included in these installation instructions and in the sticker attached to the sauna stove.**

1. Remove the stainless steel frame from the upper part of the sauna stove.
2. Remove the protective plastics.
3. Place the lower part of the sauna stove into a selected location in a way that the maintenance/installation hatch located in the sauna stove base remains facing free space.
4. Open the hatch located in the sauna stove base and connect the power line with a terminal strip and close the hatch. **Attachment 2**
5. Connect the other end of the cable with a connection box. (Note. The upper edge of box max. 400mm from the floor)
6. Test that the resistances work by switching the sauna stove on. If all the resistances do not heat, or there is some other defect, please contact the retailer or manufacturer.
7. Install the lower part of the sauna stove vertically using the adjusting feet.
8. Pile the sauna stove stones up in the lower part of the sauna stove. (Leave 4-5cm from the upper edge without stones in order to be able to install the upper part of the sauna stove into its place.) Do not wedge the resistances. Take care that the resistances travel vertically in the same place where they have been mounted to the bottom plate, all the way where stones have been piled up.

9. Install the stainless steel frame of the upper part of the sauna stove.

**Attachment 1 Figure 3**

10. Pile the stones carefully into the upper part of the sauna stove in a way that no resistances remain visible. Cover the resistances entirely with stones. Select for the outer edge stones with such shapes that do not allow them to fall through the vertical profiles to the sauna bench or to the floor. (NOTE. A resistance glowing freely may cause an ignition hazard even outside of the safety distances.)

**Attachment 1**

11. Use stones with the diameter of 5-10cm that have been meant to be used for sauna stove stones, such as olivine diabase, olivine or peridotite stones.

12. The use of ceramic stones other than (KERKES) is forbidden. Other ceramic stones may cause premature breaking of resistances.

13. Sauna stove stones must be piled up again once a year, the space reserved for stones in the sauna stove must be cleaned, and broken stones must be replaced with new ones. Depending on the use, the interval for changing stones is recommended to be 2 years.

14. Sauna stove stones subside due to both the heat expansion of stainless steel and the weathering of stone, therefore, check that resistances do not become visible. When necessary, add new stones.

## **SAFETY DISTANCES TO INFLAMMABLE MATERIALS**

### **Minimum distances**

Sauna stove	to lower bench	to upper bench	to the side	up
Magnum 6,6	20 mm	70 mm	70 mm	800 mm
Magnum 9,0	20 mm	70 mm	70 mm	800 mm
Magnum 10,5	20 mm	70 mm	70 mm	800 mm

## TECHNICAL SPECIFICATIONS

	Magnum 6,6	Magnum 9,0	Magnum 10,5
Output	6.6 KW	9 KW	10.5 KW
Lower part diameter	320 mm	320 mm	320 mm
Upper part diameter	360 mm	360 mm	395 mm
Lower part height	730 mm	730 mm	730 mm
Height	1270 mm	1270 mm	1440 mm
Size of the sauna	5-9 m <sup>3</sup>	8-15 m <sup>3</sup>	10-20 m <sup>3</sup>
Min. height of the sauna	2070 mm	2070 mm	2240 mm
Fuse	3x10 A	3x16 A	3x16 A
Connecting cable	5x1.5 mm <sup>2</sup>	5x2.5 mm <sup>2</sup>	5x2.5 mm <sup>2</sup>
Stone quantity	75-85kg	75-85kg	100kg

### Connecting of the sauna stove to electric power network

**Only an electric fitter qualified for the work is allowed to carry out electric installation work in accordance with the valid regulations.**

The sauna stove is connected with the electric power network in a semi-fixed manner using H07RN-F or a similar rubber cable.

Check the required cable size from the table below.

**Note. It is forbidden to use a line with PVC-insulation as connection cable.**

**Table**

Sauna stove	OUTPUT	FUSE	INPUT CABLE	SAUNA SIZE
Magnum 6,6	6.6 KW	3x10 A	5x1.5 mm <sup>2</sup>	5-9 m <sup>3</sup>
Magnum 9	9 KW	3x16 A	5x2.5 mm <sup>2</sup>	8-15 m <sup>3</sup>
Magnum 10,5	10.5 KW	3x16 A	5x2.5 mm <sup>2</sup>	10-20 m <sup>3</sup>

### Installation of the thermostat sensor

The thermostat sensor is installed on the wall in a manner that leaves a distance of 100 mm from the ceiling to the upper edge of the sensor. The sensor must be placed at a distance of 100-500 mm from the outer edge of the sauna stove.

Additionally, the sensor must be placed at the minimum distance of 1000mm from a non-directional air-intake valve or at a distance of 500 mm from an outbound air-intake valve.

#### **Attachment 4**

Install the thermostat cable into an air gap behind the panel; if this is not possible, use power skirting.

## **Installation of the control panel**

The control panel can be installed within the sauna. In the sauna the control panel must be located in a way that allows the minimum distance of 500mm from the sauna stove and the maximum distance to the upper edge of the panel 1000 mm. Mount the control panel with the enclosed screws. **Attachment 4**

## **Troubleshooting**

Why does the sauna stove not heat?

Check the following:

1. Has the power been connected?
2. Is the adjusted temperature higher than the sauna temperature?
3. Has the temperature limiter tripped? (The reason must be clarified prior to the next use)
4. Are the fuses intact?
5. Is there any error code on the control panel display **Attachment 3**

## **Instructions how to bathe in the sauna**

- Heat the sauna stove before the first use, because odours may come off of the new stones, and protective agents will also be removed then from the sauna stove. Take care of adequate ventilation.
- The recommended temperature is 55-70 degrees centigrade.
- The sauna stove heats up to be ready for throwing water onto the stones in approximately 25 – 50 minutes, depending on the size of the sauna stove and the sauna itself and ventilation.
- Use water that fulfils the quality requirements for drinking water as the water to be thrown on the stove stones.

- Do not throw water onto the sauna stove, if there are people beside the sauna stove, because the water splashing from the stove and water vapour are burning hot.
- Be careful when moving in the sauna premises, because the floors may be slippery.

## Warranty

The warranty period is one year from the delivery date. The warranty is valid in Finland.

Defects due to materials or manufacturing defects that appear during the warranty period will be repaired free of charge. The warranty does not cover defects due to installation and/or use that is not in accordance with the instructions.

## Quality requirements for the water to be thrown on the stones

Water quality	Impact	Recommendation
Water containing organic impurities	Colour, taste, deposits	<12 mg/l
Water containing iron	Colour, odour, taste, deposits	<0.2 mg/l
Hardness: the most important substances manganese (Mn) and lime i.e. calcium (Ca)	Deposits	Mn: <0.05 mg/l Ca: <100 mg/l
Water containing chlorine	Health risk	Use forbidden
Sea water	Rapid corrosion	Use forbidden

Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 1

Pile the sauna stove stones up in the lower part of the sauna stove. Do not wedge the resistances. Take care that the resistances travel vertically in the same place where they have been attached to the bottom plate, all the way where stones have been piled.

Fig. 2

Stop piling stones up approx. 5cm before the surface of the lower part and make sure that the resistances do not touch each other.

Fig. 3

Place the upper part of the sauna stove in a way that the ventilation holes remain within the profile.

Fig. 4

Select for the outer edge such stones that cannot fall down between the profiles; a hot stone may cause damage when falling down.

Fig. 5

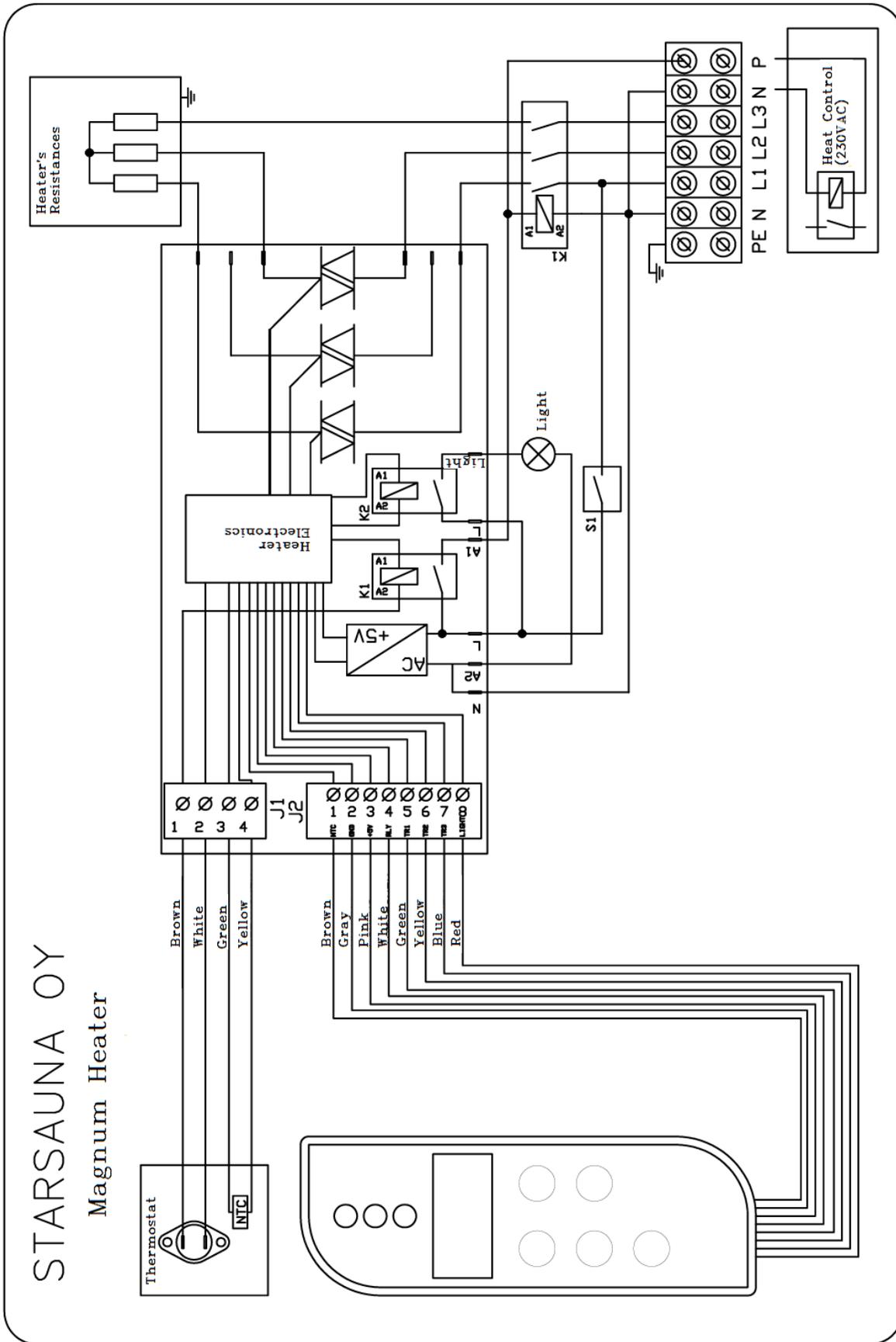
Place the stones against the profiles in a way that resistances are not able to radiate heat outwards between the profiles; place the even side of a stone on the outward edge in a way that no resistances remain visible..

Fig. 6

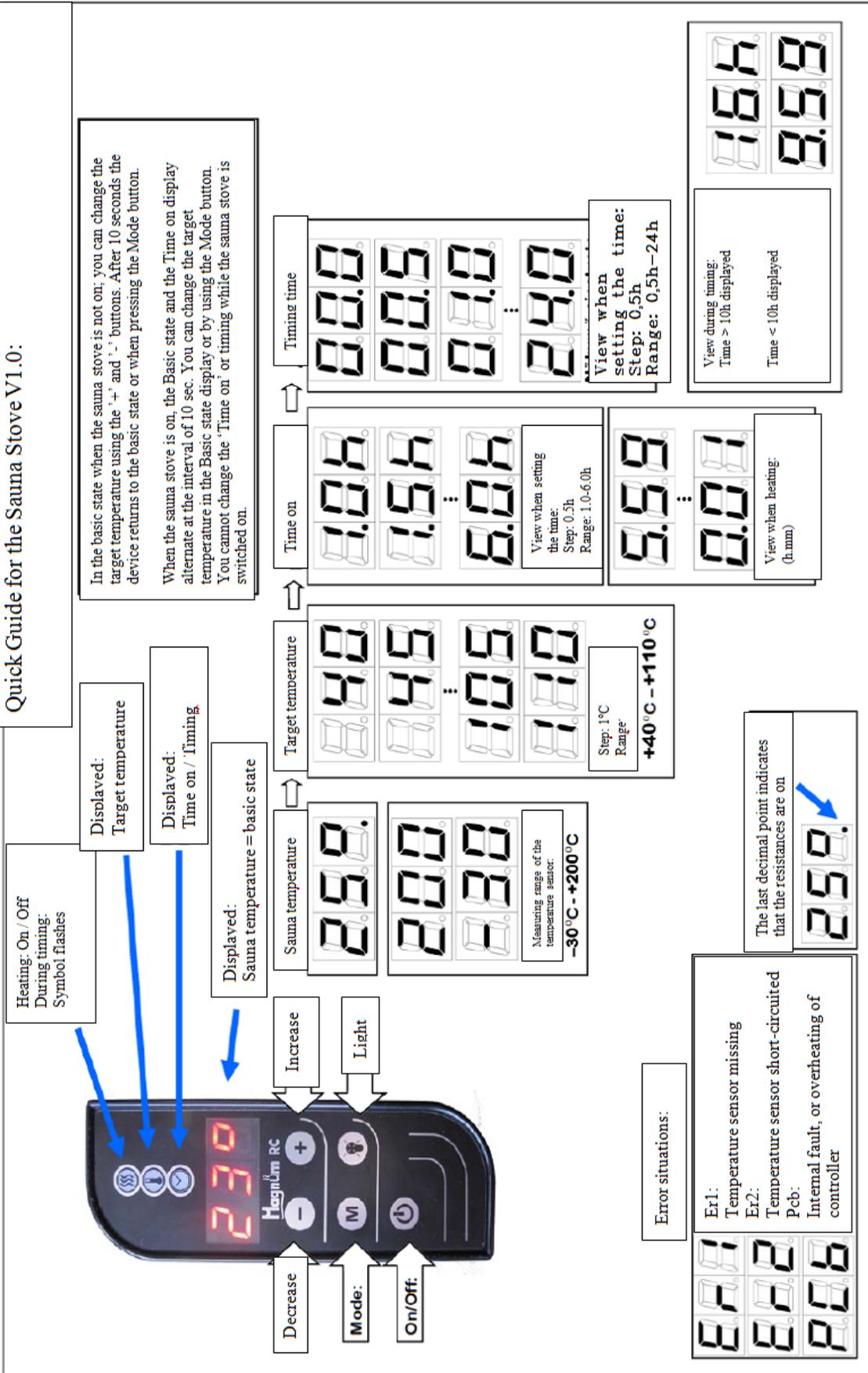
Check that the resistances do not touch each other, pile the rest of the stones on the sauna stove up. If resistances become visible in the course of time, fix the arranging of the stones, and when necessary, add new stones.

When necessary, mount the sauna stove onto the walls using the enclosed supporting irons.

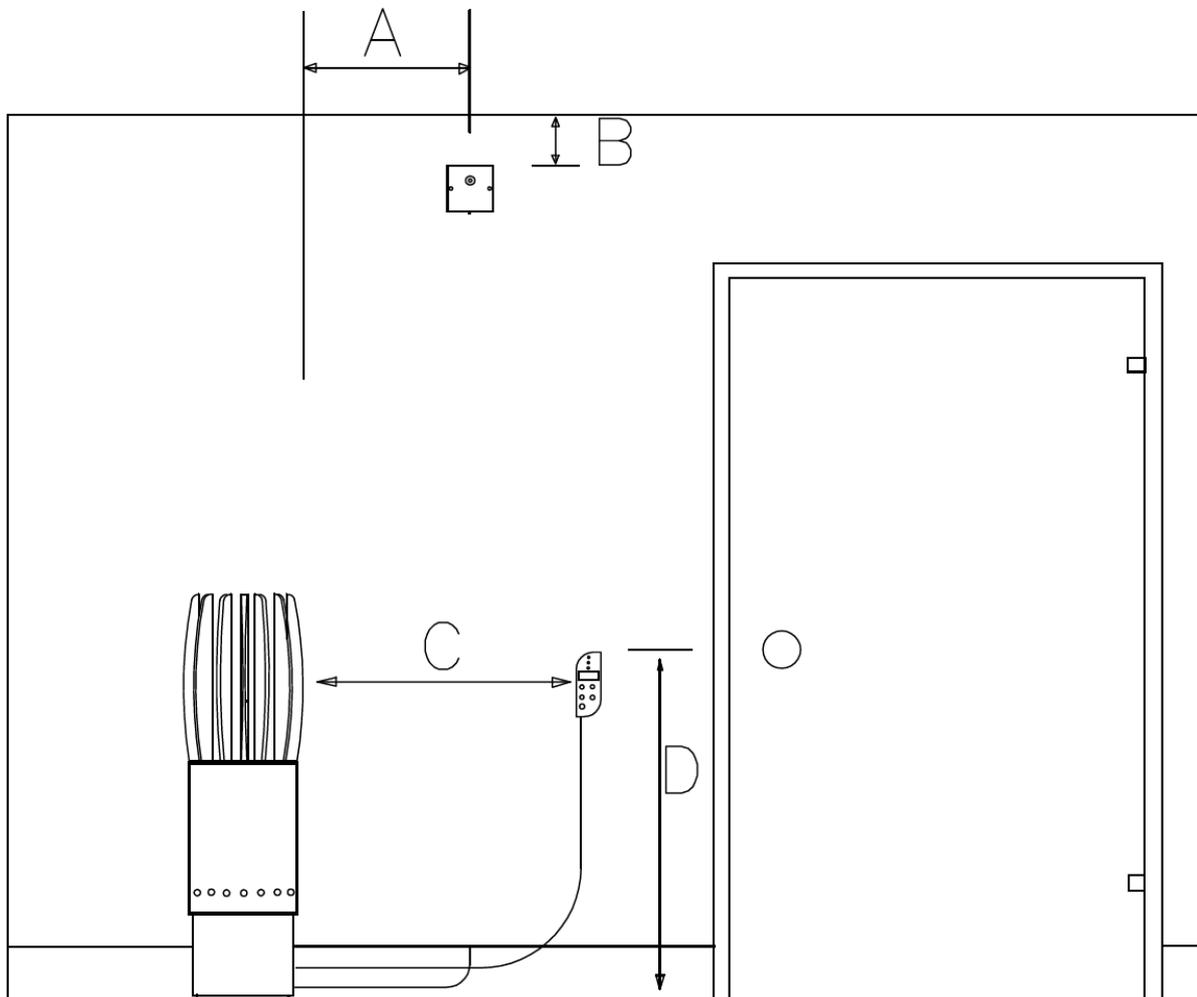
Attachment 2 Connecting diagram



Quick Guide for the Sauna Stove V1.0:



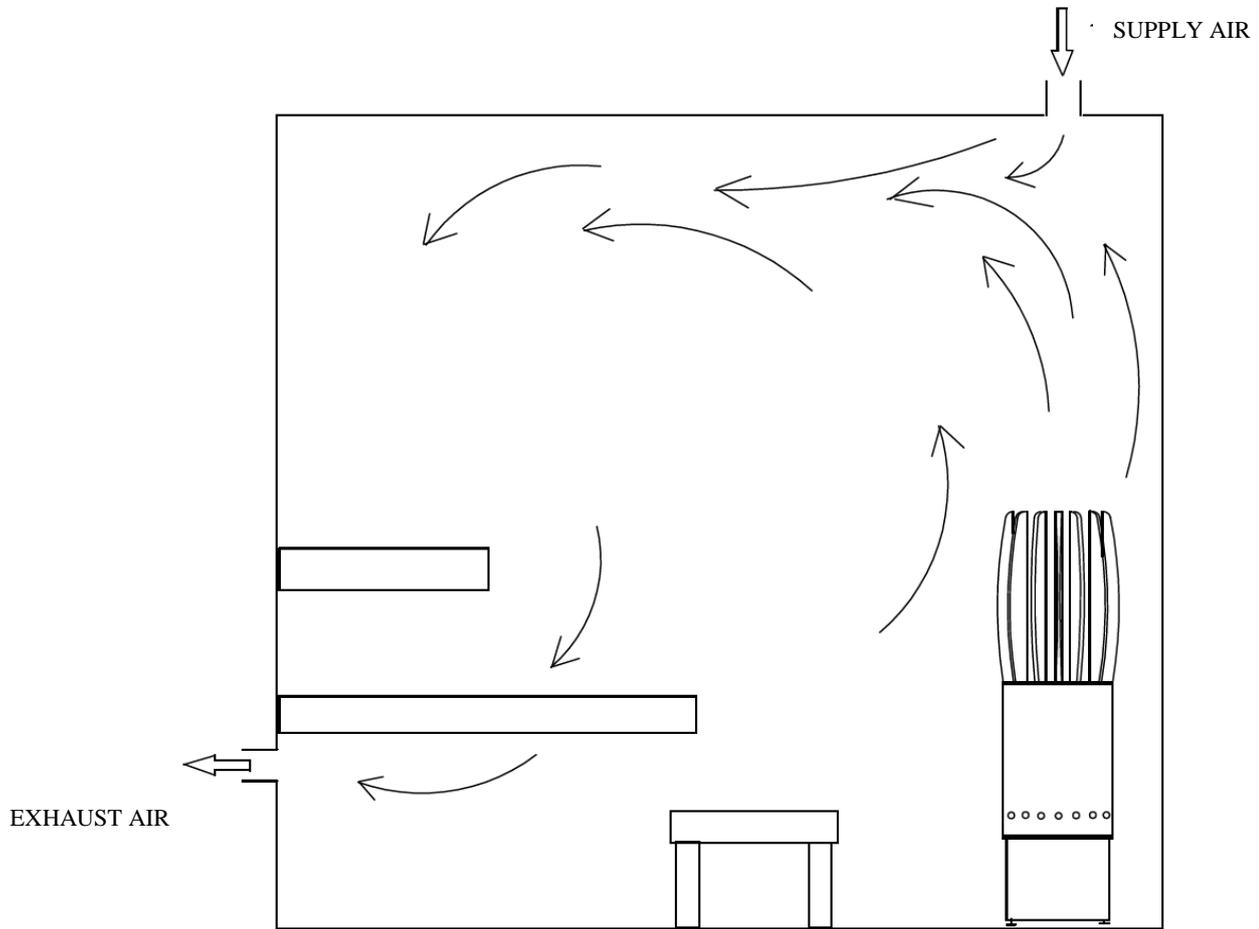
#### Attachment 4 Installation of the thermostat sensor and the control panel



- A. The distance of the thermostat sensor from the outer edge of the sauna stove 500-1000mm  
Installation at least 1000mm from a non-directional air-intake valve or at least 500mm from an outward bound air-intake valve.
- B. The distance of the thermostat sensor from the ceiling 100mm.
- C. The distance of the control panel from the sauna stove min. 500mm.
- D. The installation height of the control panel from the floor max. 1000m.

Attachment 5 Ventilation of the sauna room

Mechanical ventilation in sauna for an electric sauna stove



## Attachment 6 Wall mounting of the sauna stove



1. Press the supporting iron to be placed within the sauna stove to the bottom of the groove.
2. Fix the supporting iron to the end of the sauna stove.
3. Fix the supporting iron to the wall bracket.
4. Measure the correct distance using the wall bracket.
5. Fix the wall bracket to the wall.