



Tuisku XL - electric heater
13,6kW-21kW

ASENNUSOHJE • MONTERINGSANVISNING • INSTALLATION MANUAL • MONTAGESANLEITUNG

®
Tulikivi

Sauna

Hyvä asiakas,

Olet hankkinut korkealaatuisen kiukaan, jonka avulla voit nauttia monien vuosien ajan saunomisesta. Onnittelut hyvästä kiuasvalinnasta. Tämä asennus- ja käyttöohje on tarkoitettu saunan omistajalle tai saunan hoidosta vastaavalle henkilölle sekä kiukaan sähköasennuksesta vastaavalle sähköasentajalle. Kun kiuas on asennettu, luovutetaan nämä asennus- ja käyttöohjeet saunan omistajalle tai saunan hoidosta vastaavalle henkilölle. Lue käyttöohjeet huolellisesti ennen käyttöönottoa.

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Bästa kund,

Du har skaffat ett högklassigt bastuaggregat som ger dig njutbara bastubad många år framöver. Grattis till ett bra val! Denna monterings- och bruksanvisning är avsedd för bastuns ägare eller den person som är ansvarig för underhållet av bastun samt för den elmontör som är ansvarig för elinstallationerna. Efter monteringen av bastuaggregatet ska denna bruksanvisning överlämnas till bastuns ägare eller den person som är ansvarig för underhållet av bastun. Läs bruksanvisningen noggrant innan du börjar använda bastuaggregatet.

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Dear customer,

You have purchased a high-quality sauna heater which will provide you with many years of enjoyable use – congratulations on the good choice! These instructions for installation and use are intended for the sauna owner or for the person who is responsible for the sauna's maintenance and for the electrician responsible for the electrical connection of the heater. Once the heater has been installed, these instructions for installation and use should be given to the owner of the sauna or the person responsible for the maintenance of the sauna. Please read the instructions carefully before use.

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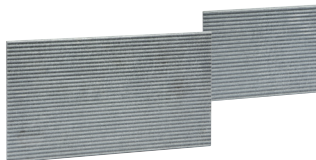
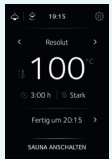
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Sehr geehrter Kunde,

Sie haben einen hochwertigen Saunaofen erworben, mit dessen Hilfe Sie Ihre Saunagänge viele Jahre lang genießen können. Herzlichen Glückwunsch zu der Wahl dieses Saunaofens. Diese Installations- und Bedienungsanleitung ist für den Saunabesitzer oder die Person gedacht, die für die Bedienung der Sauna zuständig ist, sowie für den Elektroinstallateur, der die Elektroinstallation des Saunaofens übernimmt. Wenn der Saunaofen installiert wurde, wird diese Installations- und Bedienungsanleitung dem Saunabesitzer bzw. der für die Saunabedienung zuständigen Person übergeben. Lesen Sie die Bedienungsanleitung vor der Ingebrauchnahme sorgfältig durch.

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SS036D, 2 x 6,8 kW= 13,6 kW, 10-18 m ³ SS037D, 2 x 9 kW= 18,0 kW, 16-26 m ³ SS038D, 2 x 10,5 kW= 21,0 kW, 18-30 m ³ Kiukaan runko Bastuaggregatets stomme Heater body Rahmen des Saunaofens	SS1618 1 kpl/st/pcs/Stck Tehoyksikkö (Sisältää lämpöanturin SS1392) Effektenhet (Inkluderar värmesonden SS1392) Power unit (Includes the temperature sensor SS1392) Leistungsmodul (Enthält den Temperaturfühler SS1392)	12 kpl/st/pcs/Stck Verhouskivet Inredningsstenar Lining stones Verkleidungssteine		SS1005, 1 kpl/st/pcs/Stck Kivikehä Stenram Stone cage Steinkorb
		S1: U3777, 4 kpl/st/pcs/Stck U3778, 2 kpl/st/pcs/ Stck U3859, 4 kpl/st/pcs/ Stck U3860, 2 kpl/st/pcs/ Stck S2: U3726, 4 kpl/st/pcs/ Stck U3727, 2 kpl/st/pcs/ Stck U3728, 4 kpl/st/pcs/ Stck U3991, 2 kpl/st/pcs/ Stck	S3: U3984, 4 kpl/st/pcs/Stck U3986, 2 kpl/st/pcs/ Stck U3988, 4 kpl/st/pcs/ Stck U3990, 2 kpl/st/pcs/ Stck S4: U3985, 4 kpl/st/pcs/ Stck U3987, 2 kpl/st/pcs/ Stck U3989, 4 kpl/st/pcs/ Stck U3991, 2 kpl/st/pcs/ Stck	
	SS1606 / SS1607 Wi-Fi Tulikivi Sauna Control Panel Kiukaan ohjain Bastuaggregatets kontroll Heater controller Ofensteuerung			
				SS1007, 1 kpl/st/pcs/Stck Sokkelikehys Sockelram Base framework Sockelrahmen
OU2475, 1 kpl/st/pcs/Stck Logomerkki Logotyp Logo Logoabzeichen	Kulmahakaset, 8 kpl/st/pcs/Stck Vinkelhakar Corner brackets Eckhaken Suorat hakaset, 8 kpl/st/pcs/ Stck Raka hakar Straight brackets Gerade Haken Kulmaraudat, 4 kpl/st/pcs/ Stck Hörnjärnen Angle irons Winkelisen 10-ruuvit, 8 kpl/st/pcs/ Stck 10-skrugar Size 10 screws 10-Schrauben	SS1018, 1 kpl/st/pcs/Stck Tyypikilpi Typskylt Product nameplat Typenschild	SS1006, 1 kpl/st/pcs/Stck Välipelti Mellanplåt Intermediate plate Zwischenblech	

General

The walls and ceiling of the sauna room must have a high standard of thermal insulation. Any heat-retaining surfaces, such as brick and stone, must also be insulated. However, any flues that are in use must not be insulated. You should contact the fire authorities to find out which parts of the fire wall should not be insulated. The structural fire safety distances given in these instructions must be complied with. You must not, for example, install any safety panelling or safety framework that is not part of the sauna heater itself around the heater. Wooden panelling is recommended for lining the walls and ceiling in the sauna room. If the interior lining of the sauna room includes materials that retain heat well (decorative stone, glass, etc.), please remember that this will add to the time taken to heat up the sauna, even if the sauna is otherwise well insulated.

POWER RATING OF THE SAUNA HEATER

The power rating (kW) of the sauna heater should always be chosen on the basis of the size of the sauna room (incubic metres, m³). Uninsulated wall surfaces (brick, glass brick, glass, concrete, tile, etc.) will increase the amount of heater power required. For each square metre of uninsulated wall surface, add 1.2 m³ to the volume of the sauna room. For example, a 10 m³ sauna room with a glass door corresponds to an approximately 12 m³ sauna room in terms of its power requirement. If the sauna room has log walls, multiply the volume by 1.5. The minimum and maximum sauna room volume permitted by the heater's power rating must be complied with.

The design of the sauna room must comply with the relevant building regulations and the guidance given in the RT building information card.

VENTILATION

The ventilation should be such as to renew the air in the sauna room six times every hour. If the sauna room has mechanical ventilation, the air intake should be placed above the sauna heater. If the ventilation is gravitational, the air intake should be placed below or next to the sauna heater. The exhaust vent should be placed at a level at least one metre higher than the air intake, on the wall opposite the sauna heater.

Minimum dimensions of ventilation ducts: air intake duct 75 cm² (diameter 50 mm); exhaust vent duct 150 cm² (diameter 70 mm).

Do not position the air intake in a way that causes the air flow to cool the temperature sensor. Do not position the air intake below the heater, either. The distance between the air intake

and the sensor should be at least one metre (temperature sensor positioning is shown in Figures 3–4 on page 20).

If the exhaust vent is on the shower room side (only if your site has mechanical air exhaust), the gap between the bottom of the door and the floor must be at least 100 mm. The exhaust vent can also be positioned at a height of 300 mm on the wall opposite the sauna heater. If an exhaust vent is positioned above the benches, it should be kept closed during heating and bathing.

Sauna ventilation must comply with the E1 regulations in the National Building Code of Finland and the RT91-10480 guidelines.

SAUNA HEATER

Only one electric sauna heater may be installed in the sauna room. The installation must comply with the safety distances indicated in Table 1 and Figures 1–2 (pages 19–20). The sauna room should have a minimum height of 1900 mm. The electrical work for the sauna heater may only be performed by a qualified electrician authorised to undertake such work, in accordance with the prevailing regulations.

SAUNA STONES

Only use stones intended for sauna heaters and recommended by the manufacturer. A suitable size for the stones is a diameter of less than 10 cm.

The use of ceramic sauna stones is prohibited. The manufacturer will not be accountable for any damage caused by using ceramic stones in the heater.

WATER FOR THE SAUNA STONES

The water thrown on to the hot sauna stones must be clean domestic water. If water with a high salt, lime or iron content is used, this will corrode the sauna heater. Use of sea water or water with a high chlorine or humus content is prohibited. Do not use discolouring sauna products, such as sauna scents and sauna whisks, with decorative stones or a white sauna heater. To avoid discolouration of the decorative stones or the heater, use water which is exceptionally clean.

CONTROL UNIT FOR OPERATING THE SAUNA HEATER

The operation of the sauna heater is controlled via a separate control unit. Ask the system supplier whether your building automation system can be used for controlling the sauna heater.

SAFE USE OF THE SAUNA

Children must not be left in the sauna unsupervised, and children must not be allowed to go near the sauna heater. Remember to take care in the sauna, as the benches and floor can be slippery.

Anyone with reduced physical or mental capacity, a sensory impairment or little experience or knowledge of using a sauna heater may only use the heater under supervision or according to the instructions of someone responsible for his or her safety.

Remember that spending a long time in the sauna raises the body temperature. Consult your doctor if you have any health issues that may restrict your use of the sauna.

The sauna is not intended for drying clothes. Nor is the sauna heater suitable for heating up food or for cooking. Roasting bags must not be used on the heater.

Do not throw water on the stones if anyone is near the heater, as hot steam can cause burns.

Sauna heater maintenance

CLEANING AND MAINTENANCE

Clean the heater only when it has cooled down. You can clean the smooth polished Classic soapstone surface using a mild solution of water and washing-up liquid. Note that the Tulikivi Cleaning Agent 4 product should only be used on the smooth Classic soapstone surface. You can do the regular cleaning of Texture soapstone surfaces (Grafiä, Nobile and Unica) using a vacuum cleaner and its brush nozzle. Never sand a specially treated soapstone surface. Do not use strongly alkaline detergents, solvent-based detergents, detergents that contain oil or detergents that stain or discolour.

SAUNASTONES

For a residential electric sauna heater, the stone chamber should be reloaded at least once a year, with decayed stones replaced at the same time. For a sauna used in community settings, the stones should be reloaded at least three times a year, and in addition, they should be replaced at least once a year. During the reloading process, clean the interior of the sauna from any fragments of crushed stones. Make sure that no scaling (deposits) appears over time.

Installation instructions

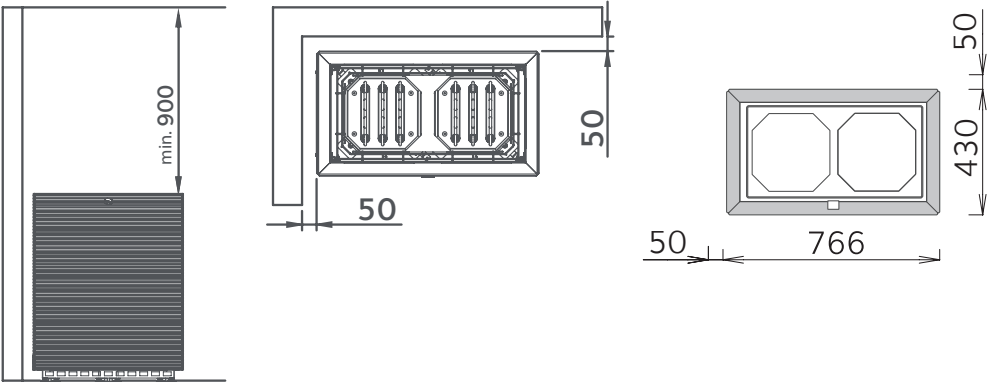
Only one electric sauna heater may be installed in the sauna room. First, decide where to place the heater. The installation must comply with the safety distances indicated in Table 1 and Figures 2–4. The sauna room should have a minimum height of 1900 mm. The heater is on adjustable legs and stands directly on the floor. It should be screwed (2 screws) to the floor as shown in Figure 5, by attaching the separate metal fasteners to the adjustable legs and to the floor. This will ensure that the safety distances are maintained during use. Make sure that the screw holes are watertight and take care to avoid damaging any underfloor power cables or heating pipes. The heater must be fitted with a safety frame, or the sauna must be equipped with a door switch and reset button, if the heater is operated remotely or the heater control unit is located so that safe start-up of the heater cannot be ensured. If any problems arise or you have questions related to installation, please contact our technical support, tel. +358 (0)403 063 005.

SAFETY DISTANCES

TABLE 1

POWER	SIZE OF SAUNA ROOM	SAFETY DISTANCES				RECOMMENDED AMOUNT OF SAUNA STOVE	WEIGHT WITHOUT STONES
		minimum height mm	around the heater to a height of 900 mm	around the heater above a height of 900 mm	minimum to ceiling mm		
kW	m³					approx kg	kg
13.6	12-20	1900	20	50	950	120	300
18.0	18-30	1900	20	50	950	120	300
21.0	24-36	1900	20	50	950	120	300

FIGURE 1
SAFETY DISTANCES – FLOOR STANDING MODEL



ELECTRICAL CONNECTION

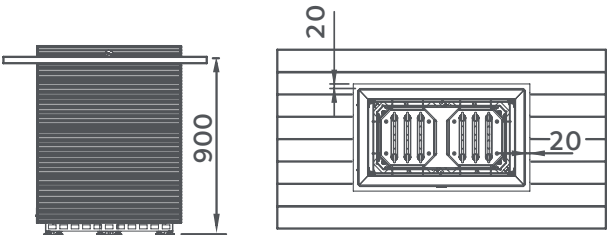
The electrical work for the sauna heater may only be performed by a qualified electrician authorised to undertake such work, in accordance with the relevant regulations. The heater should be connected to the mains semi-permanently. The coupling box must be splashproof and placed at a minimum of the safety distance from the heater and at a height of no more than 500 mm above the floor.

The connecting cable must be a rubber cable of type H07RN-F or equivalent. The heater must not be connected using a cable with PVC insulation. The specifications for the connecting cables and fuses are presented in Table 2. Do not connect the heater's power feed through an earth leakage circuit breaker (ELCB). In the final inspection of electrical installation work, the heater's insulation resistance test may show leakage. This is due to moisture having been concentrated in the heating elements' insulating material during storage or transport. The moisture can be removed from the heating elements by heating the sauna once or twice.

TABLE 2

POWER	ELECTROTECHNICAL DATA	
	kW	heater connection cable H07RN-F/60245 IEC mm²
	fuse	
13.6	2 x 3 x 16 A	2 x 5 x 2.5 mm² S
18.0	2 x 3 x 16 A	2 x 5 x 2.5 mm² S
21.0	2 x 3 x 16 A	2 x 5 x 2.5 mm² S

FIGURE 2
SAFETY DISTANCES - INTEGRATED



TEMPERATURE SENSOR INSTALLATION

The temperature sensor should be screwed to the wall above the heater about 50 mm from the ceiling, or directly to the ceiling above the heater (see Figure 3 for location of temperature sensor). The ceramic cover for the sensor should then be pressed into place. Make sure that the air intake vent is sufficiently far away from the sensor.

Omnidirectional (360°) air intake vents must be at least 1000 mm from the temperature sensor. Air intake vents with a baffle (180°) must be at least 500 mm from the temperature sensor. Air from intake vents must not be directed at the temperature sensor.

A bench sensor is also available as an accessory for the sauna heater. It can be installed above the top bench on the ceiling at a maximum distance of 300 mm from the wall or on the wall about 50 mm from the ceiling. If such a sensor is installed, it is used to measure the temperature in the sauna, while the sensor above the sauna heater stops the heater from overheating (125 °C) together with the overheat shut-off (135 °C).

FIGURE 3

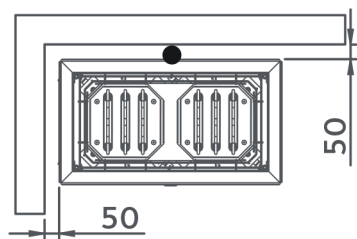


FIGURE 4

Resetting the overheat shut-off

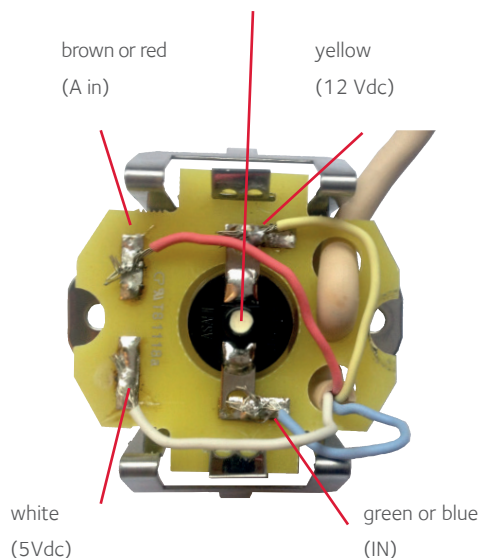
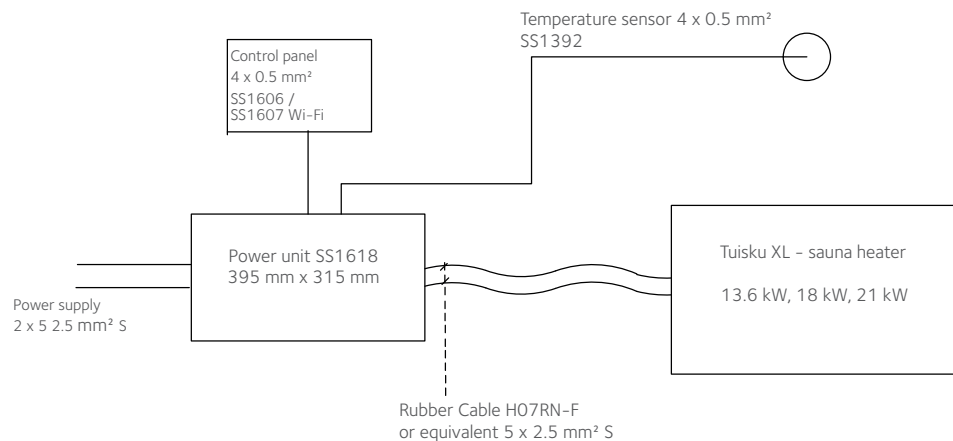
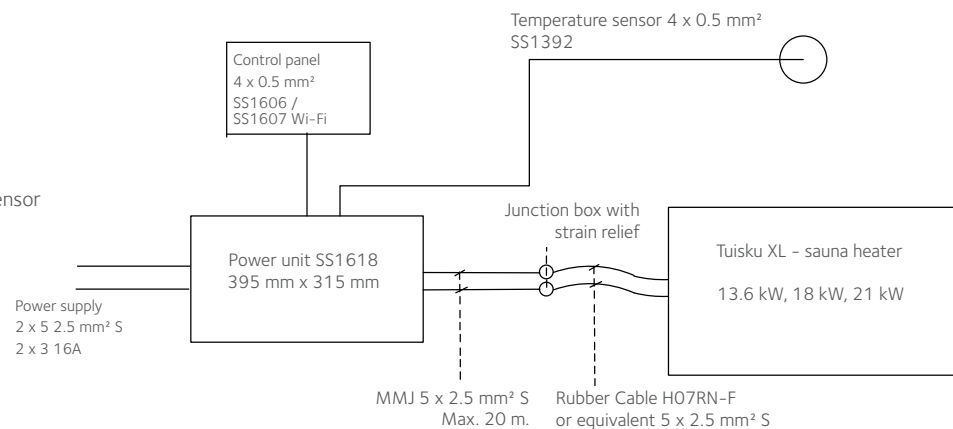


FIGURE 5
ASSEMBLE POWER UNIT IN SAUNA

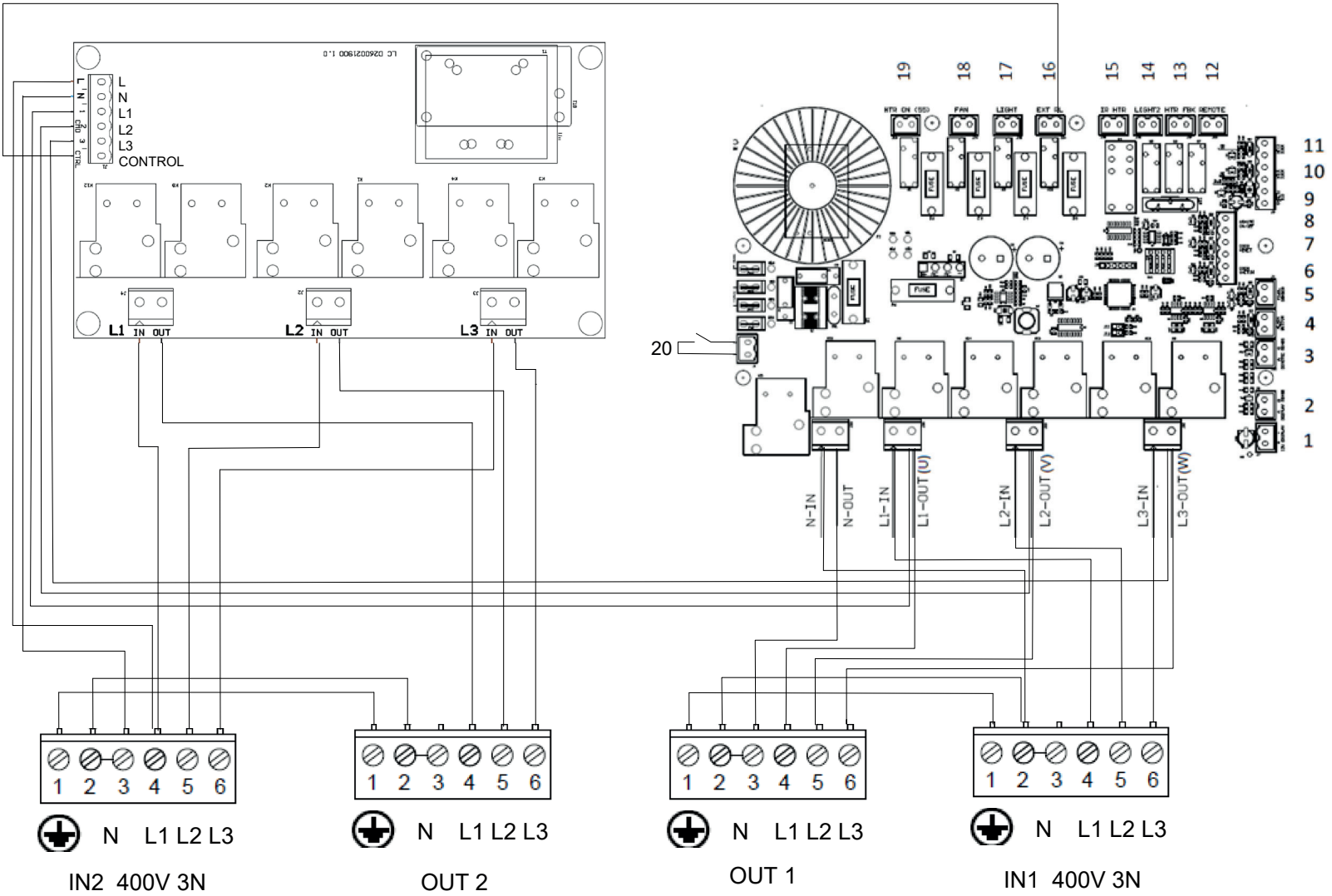


NOTE! THE POWER UNIT'S MAXIMUM INSTALLATION HEIGHT IS 600 MM AND TOUCH SCREEN'S 1000 MM. THE POWER UNIT FOR 21KW SAUNA HEATER IS NOT RECOMMENDED TO BE INSTALLED INSIDE THE SAUNA ROOM.

FIGURE 6
ASSEMBLE POWER UNIT IN NON-HUMID ROOM



CIRCUIT DIAGRAM



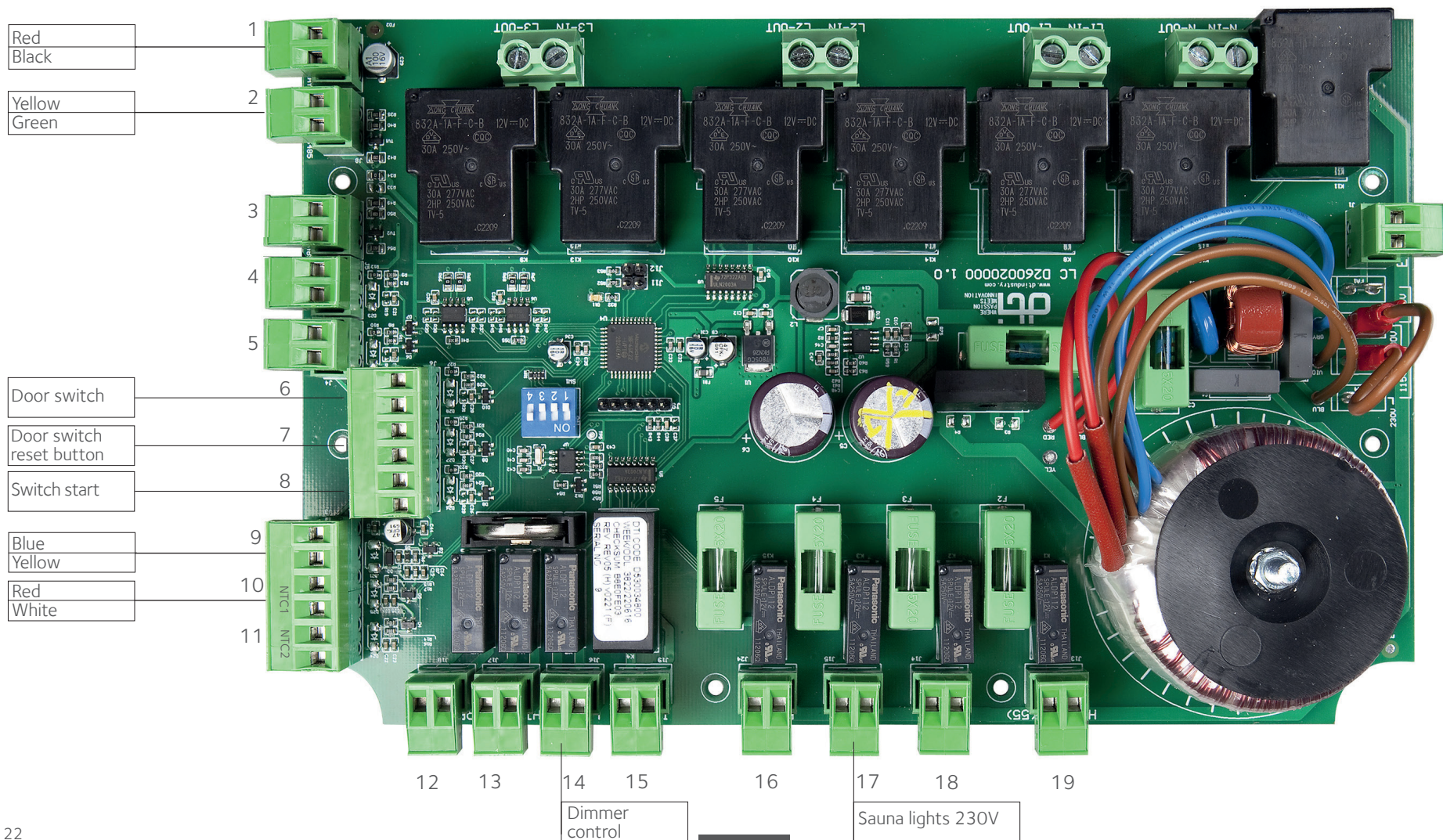
CIRCUIT BOARD CONNECTORS

Board's connections

1. Control unit's power supply voltage 12 V DC + and -
2. RS485 bus 1 control panel A and B
3. RS485 bus 2 A and B
4. Emergency stop button **N.B.** : when used disconnect jumper
5. Safety switch (required with the weekly timer or wireless remote use) **N.B.**, selected on dip switch and disconnect jumper
6. Door switch (option for safety switch sensor together with reset button) **N.B.**, selected on dip switch
7. Door switch reset button
8. Switch start, e.g. VAK or weekly timer

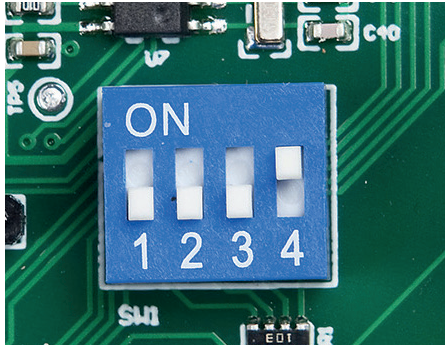
9. Overheat shut-off (blue and yellow)
10. NTC 1 Wall sensor (red and white)
11. NTC2 Bench sensor (brown and blue)
- A separate sensor is installed above the benches.
12. Timer on. Switch position
13. Sauna heater on. Switch position
14. Dimmer switch position (Dimmer control)
15. Extra heater unit relay max. 10 A
16. Control of the additional power unit's safety relay 230 V, when the heater is switched on and OK. (3.15 A)
17. Sauna lights power input 230 V (3.15 A)

18. Fan 230 V (3.15 A)
19. Alternation of electric heating 230 V (3.15 A)
20. Main switch



CUT-OFF CLOCK

Tulikivi sauna heaters have a built-in cut-off clock.



Board's connections

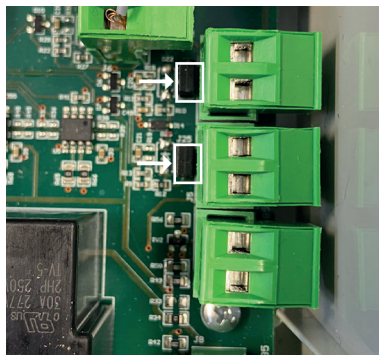
Dip switch (blue switch on circuit board)

Functions: when ON position selected

- 1 Safety switch in use (remote start possible)
 - 2 Door switch in use (remote start possible)
 - 3 Cut-off clock for use in apartment block shared saunas (during a 24-hour period there must be one unbroken 6-hour break, only communal saunas)
 - 4 Household use (max. usage time 6 hours in household use)
- N.B.** If both 3 and 4 are in the ON position, the cut-off clock is not in use. Only permitted in saunas under permanent supervision.

JUMPER

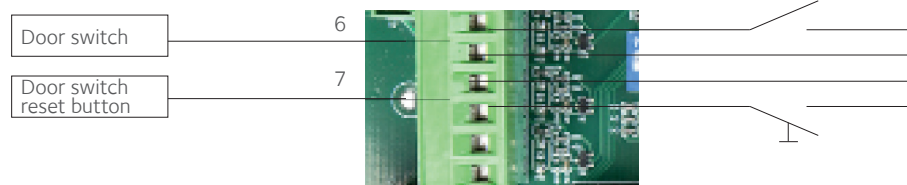
Disconnect the jumper (short-circuit loop) before installing the safety switch or emergency stop button.



DOOR SWITCH PACKAGE SS288 (OPTIONAL ACCESSORY)

The door switch must be installed when using remote start unless a safety switch is installed. When the door switch is activated, the system checks that the door to the sauna room is closed and secured before starting the sauna. If the door of the sauna room is opened when the sauna heater is not on, you must always verify that the sauna is ready for use after closing the door again. The heater controller can activate and reset the door switch, but if the controller is located in the steam room, a separate reset button is required.

The magnetic switch is installed on the door frame, and the magnet on the door. The magnetic switch has a 6-meter cord. Distance of switch from magnet is max. 30 mm. **Note!** The twisted wire pair is the wire safety loop, NOT IN USE!



Magnetic switch



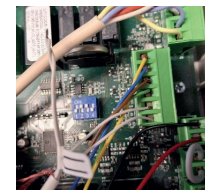
Magnetic



Confirm button



Installation on PCB-board



DOOR SAFETY ALERT

Sauna cannot be switched ON.
Door safety function is not activated.



First make sure door is closed and then activate door safety function.

ACTIVATE

SAFETY SWITCH (OPTIONAL ACCESSORY)

The safety device prevents the sauna heater from starting if it is covered. A safety switch must be used with remote operation unless a door switch package is installed.

SWITCH START

For example, switch start with VAKs or a weekly timer (connector 8). When the voltage-free switches of the control unit are connected, the heater starts according to the settings of the heating cycle.

BENCH SENSOR SS1576 (OPTIONAL ACCESSORY)

The best place for the bench sensor in the sauna is in the corner opposite the sauna heater. The sensor is equipped with a 10 m heat-resistant cable. The sensor is installed on the upper side of the bench no more than 300 mm from the wall or on the wall about 50 mm from the ceiling. The sensor is screwed in place through the hole in the middle of its housing together with the actual sensor component. This will set the temperature control to use the information from the bench sensor, and the temperature sensor in the sauna heater itself will act as a safety device, limiting the temperature above the sauna heater to 125°C.



ASENNETUT LAITTEET

Valitse kaikki kuukaaseen fyysisesti
kytketty laitteet, joiden toimintaa
haluat hallita tai valvoa.

1. Valot
2. Himmenin
3. Tuuletin
4. Lisälämmitin
5. Lämpöanturi #2

Under Manage, select
item 5, 'Temperature sensor 2'.
When using the sensor for the
first time, select 'Show tempera-
ture sensor 2'.

LED

220-240 V

L

N

OSRAM
OTI DALI 15/220-240/1A0 LT2

0A
0A
220-
240 V

Light 17

Light 2 Dimmer 14

Cariitti

Nro:

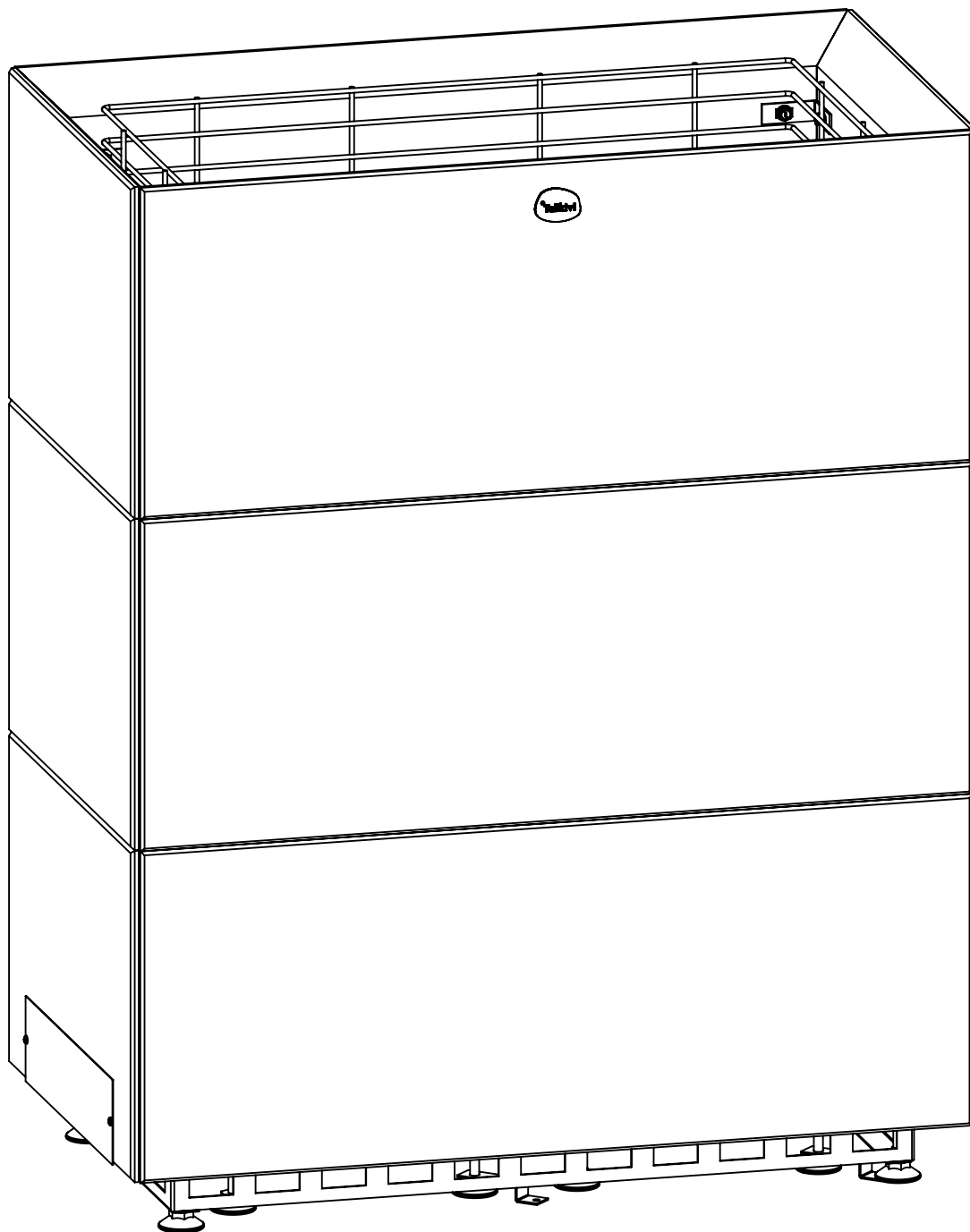
1532601	150 mA
1532602	
1532609	
1532610	
1532603	350 mA
1532604	
1532605	
1532606	
1532611	
1532650	

The reuse of old equipment and materials as well as other forms of reuse represent a valuable deed for the environment.

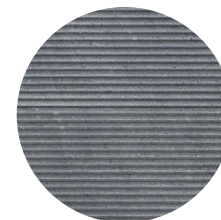
A rubbish bin crossed out: this product must not be disposed of with household waste, but must be recycled appropriately.



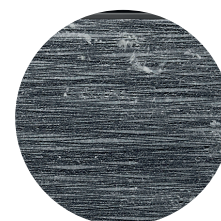
A fee for recycling the product packaging has been paid to the appropriate national organisation in the product's country of manufacture.



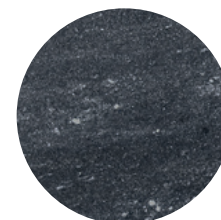
S1



S2

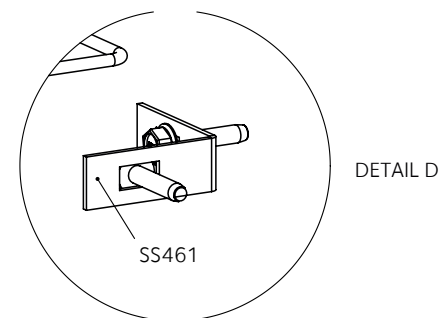
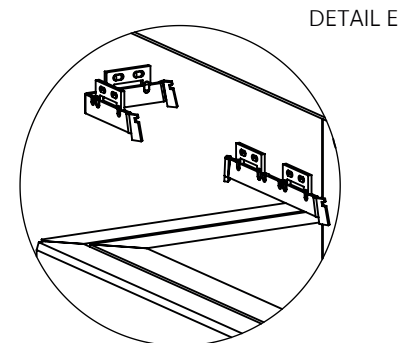
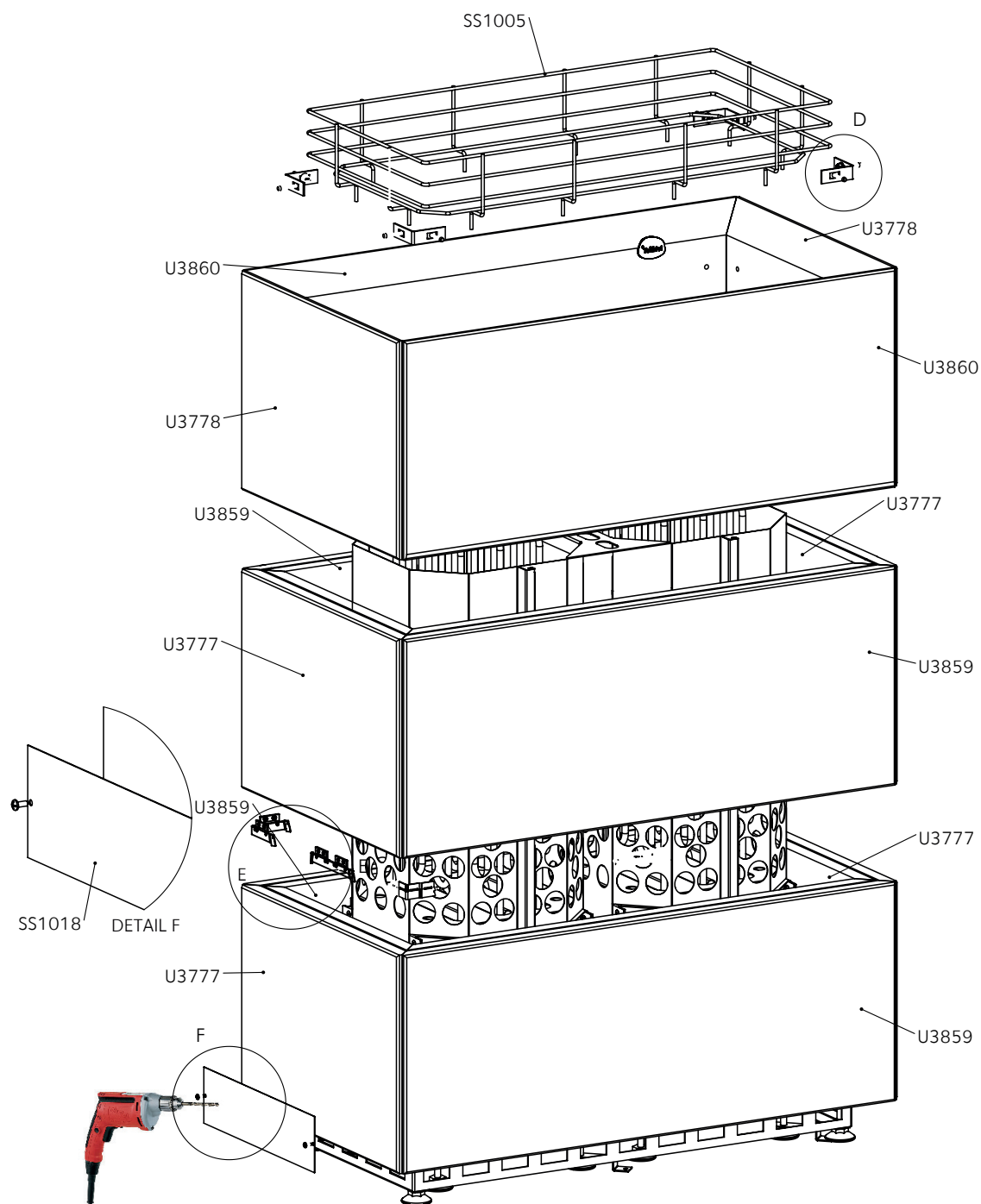


S3

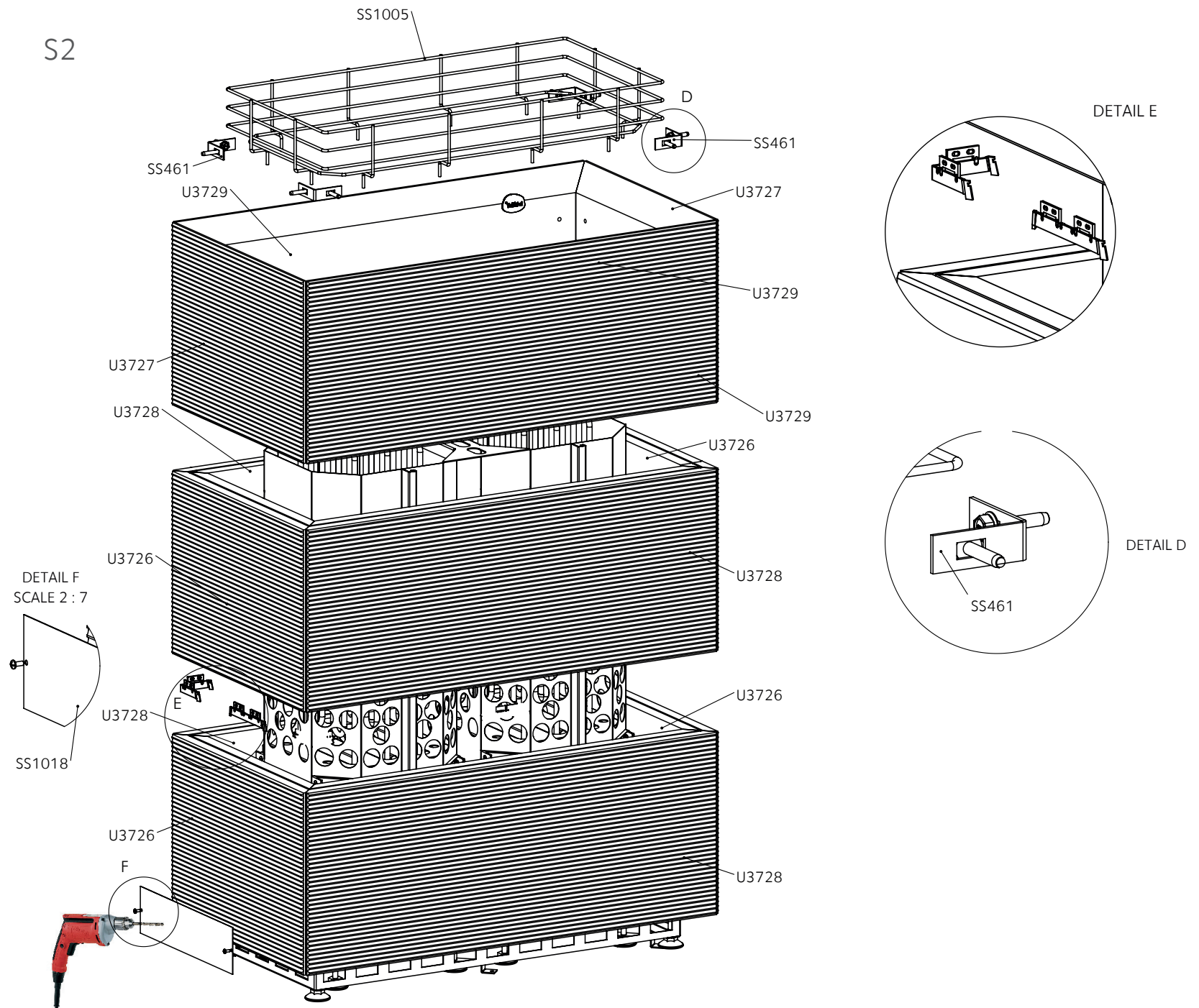


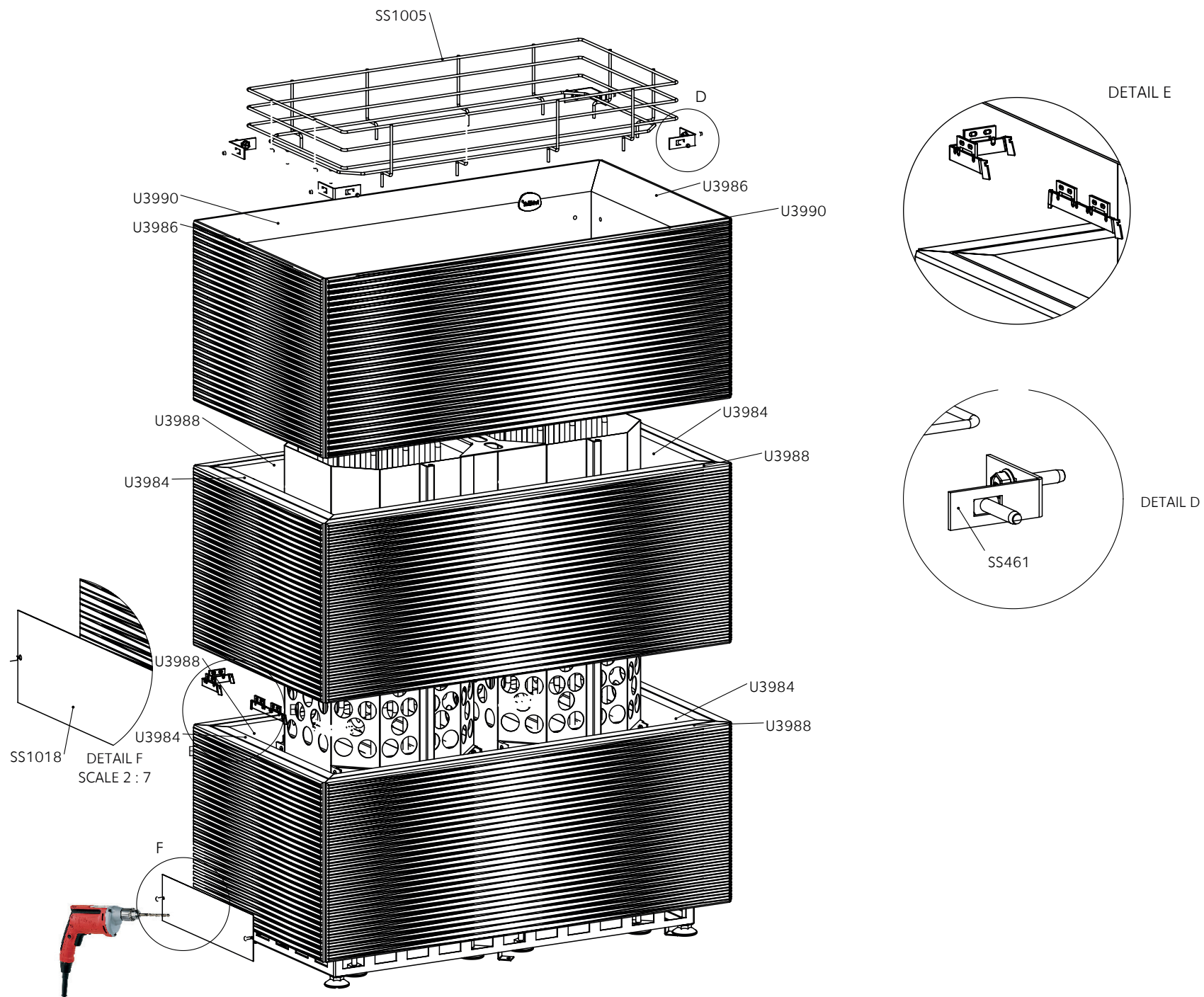
S4

S1

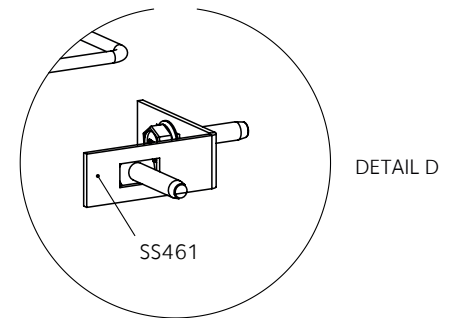
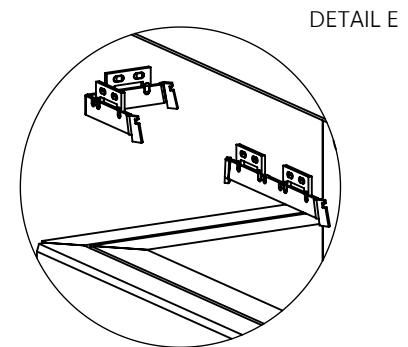
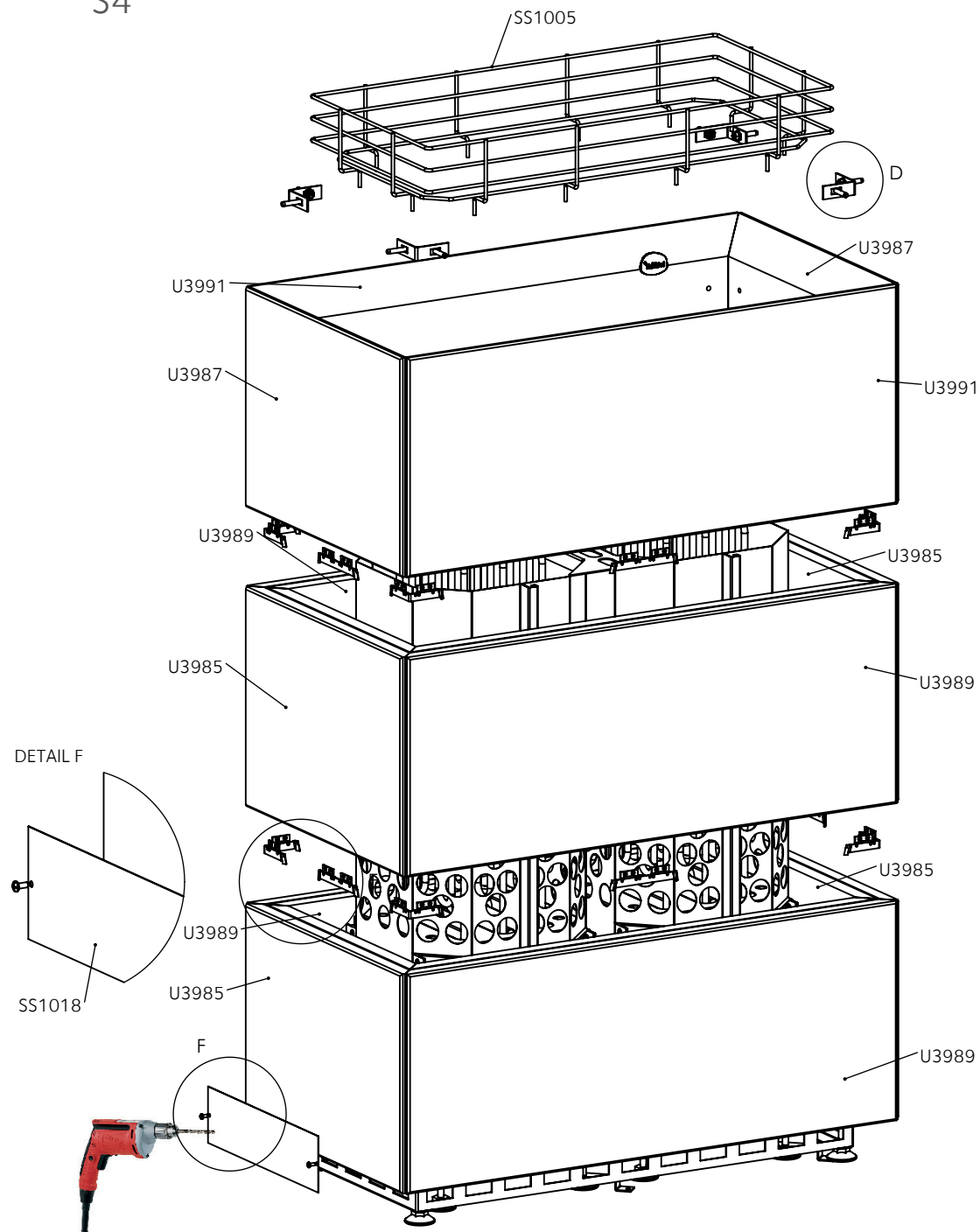


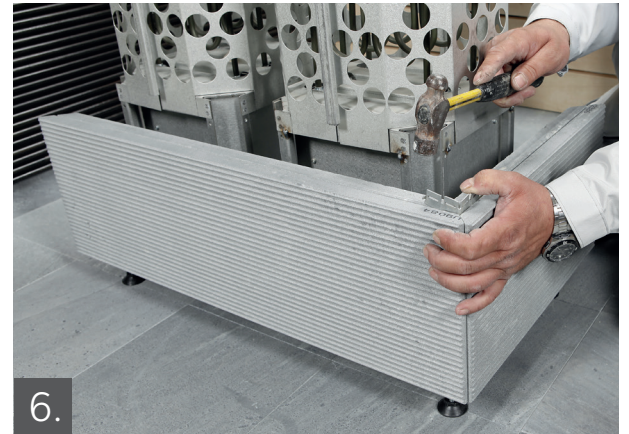
S2





S4





FIN Tuisku XL –kiukaan asennus

1. Kiinnitä sokkelikehyksen (SS1007) säätöjalat paikoilleen ja ruuvaa niitä n. 20 mm ulospäin. Näin sisä- ja ulkorungon yläreuna saadaan helpommin samalle tasolle painavien runkokivien latomisen jälkeen.
2. Tarkista suojaetäisyydet. Aseta sokkelikehys paikoilleen ja katso vesiväällä suoruus
3. Kytke kiuasrungot ja niiden syöttökaapelit tehoyksikköön.
4. Aseta kiuasrungot keskelle sokkelikehystä. Yhdistä rungot yläreunasta välipellillä (SS1006).
5. Tarvittaessa säädä kiuas kiuasrungon säätöjaloilla suoraan. Kiuasrungon säätöjalan muoviosan mutteria voi säätää sokkelikehyksen aukoista 20 mm:n kiintoavaimella.
6. Huomio alinta verhoilukivikerrosta asennettaessa, että kivet painuvat ponttiurastaan alakehikon ulkonevaan listaan. Aseta verhoilukivi paikoilleen tukemalla sitä samanaikaisesti nurkasta. Kiinnitä verhoilukivet toisiinsa mukana toimitettujen kivihaakasten avulla. Jatka verhoilukivikerrosten asentamista kivijärjestyksen mukaan ja sido verhoilukivierrokset toisiinsa kivihaakasilla.
7. Aseta kaikki ylimmän kerroksen verhoilukivet kiinni toisiinsa mukana toimitetuilla kulmarautoilla. Kiristä kulmarautojen mutterit kiinni 10 mm:n lenkkiavaimella.
8. Aseta kivehjä kiuasrungon päälle.
9. Kiinnitä tyypikilpi etureunaan kahdella mukana toimitetulla ruuvilla (poraa ruuveille metalliterällä 2,5 mm:n halkaisijan rei'ät) ja lopuksi merkitse tyypikilpeen rasti ruutuun oikean tehon kohdalle. Kiinnitä Tulikivi-logomerkki verhoilukiveen poraamalla metalliterällä 3,5 mm:n halkaisijan reikä ja kiertämällä logomerkki paikoilleen. Lopuksi kivitila täytetään kiuaskivillä. Kiuas on valmis käytettäväksi.

SWE Montering av bastuaggregatet Tuisku XL

1. Fäst sockelramens (SS1007) justerbara ben på plats och skruva dem ca 20 mm utåt. Så får du inner- och ytterstommens övre kant lättare på samma nivå efter staplingen av de tunga stomstenarna.
2. Kontrollera skyddsavstånd. Ställ sockelramen på plats och kontrollera rakheten med vattenpass
3. Anslut bastuaggregatets stommar och deras matarkablar till effektmodulen.
4. Ställ aggregatstommarna i mitten av sockelramen och förena stommar på övre kanten med en mellanplåt (SS1006).
5. Vid behov justera bastuaggregatet med aggregatstommens justerbara ben. Muttern i plastdelen i aggregatstommens justerbara ben kan justeras genom sockelramens öppningar med en 20 mm:s U-nyckel.
6. Vid monteringen av det nedersta beklädnadsstenlagret se till att stenarnas spont trycks mot nederramens framskjutande

list. Sätt beklädnadsstenen på plats genom att samtidigt stöda den från hörnet. Fäst beklädnadsstenarna till varandra med hjälp av medföljande stenfästen. Fortsätt monteringen av beklädnadsstenlagren enligt stenordningen och bind stenlagren till varandra med stenfästena.

7. Bind alla beklädnadsstenar i det högsta lagret fast i varandra med medföljande vinkeljärn. Spänn vinkeljärnens muttrar fast med en 10 mm:s ringnyckel.
 8. Placera stencirkeln på aggregatets stomme.
 9. Fäst typskylten med två medföljande skruvar (borra hål på 2,5 mm för skruvarna med en metallkrona) och slutligen märk ut ett kryss på typskylten vid den rätta effekten.
- Fäst Tulikivi-logon på beklädnadsstenen genom att borra ett hål på 3,5 mm i diameter med en metallkrona och skruva logon på plats. Till slut fylls stenutrymmet med stenar. Bastuaggregatet är färdigt att användas.

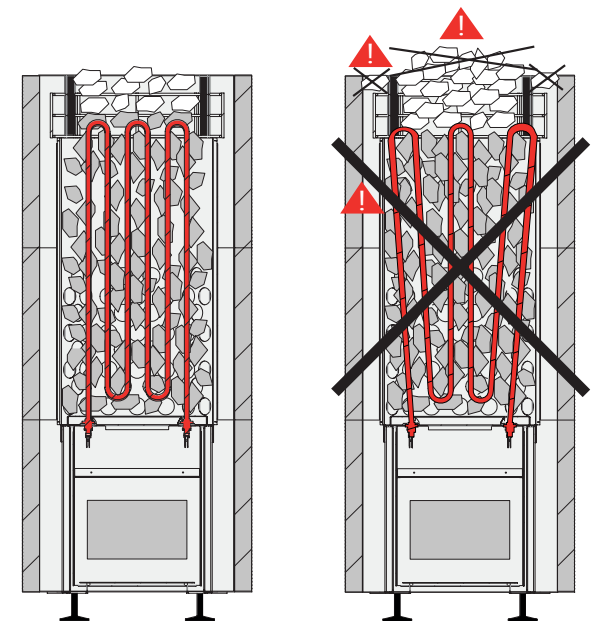
ENG Installation of Tuisku XL sauna heaters

1. Attach the adjustable legs of the base framework (SS1007) and unscrew them about 20 mm. This allows the upper edges of the inner and outer body structures to be positioned at the same level more easily after putting the heavy stone body sections in place.
2. Check the safety distances. Place the base framework in position and use a spirit level to check that it sits level.
3. Connect the heater bodies and their supply cables to the power unit.
4. Place the heater body structures in the middle of the base framework and join the body structures at the upper edge with the intermediate plate (SS1006).
5. Adjust the legs to level the heater, if necessary. The nut on the plastic part of each adjustable leg of the heater may be adjusted at the base framework openings using a 20 mm open-end spanner.
6. When installing the lowermost sections of stone cladding, make sure that the interlock grooves in the stone sections press against the protruding moulding in the base frame. Position each stone section by supporting it at the corner at the same time. Use the stone support brackets included in the delivery to attach the stone cladding sections to one another. Continue fitting the stone sections in the indicated order and attach each higher set of sections to the ones below using the stone support brackets.
7. Attach the topmost set of stone cladding sections to one another using the angle irons included in the delivery. Tighten the nuts for the angle irons using a 10 mm ring spanner.
8. Fit the sauna stone cage on top of the heater body.
9. Attach the product nameplate to the front edge using the two screws supplied (use a metal drill bit to drill holes of diameter 2.5 mm for the screws). Tick the appropriate power output on the product nameplate.

Attach the Tulikivi logo to the stone cladding by drilling a hole of diameter 3.5 mm using a metal drill bit and turning the logo into position. Finally, place the sauna stones in the stone compartment. The sauna heater is ready for use.

GER Montage des Saunaofens Tuisku XL

1. Befestigen Sie die verstellbaren Füße des Grundrahmens (SS1007) und schrauben Sie sie etwa 20 mm heraus. Dadurch lassen sich die Oberkanten des inneren und äußeren Aufbaus nach dem Aufsetzen der schweren Steinkörper leichter auf die gleiche Höhe bringen.
2. Überprüfen Sie die Sicherheitsabstände. Stellen Sie das Grundgerüst auf und prüfen Sie mit einer Wasserwaage, ob es waagrecht steht.
3. Schließen Sie die Rahmen des Saunaofens und ihre Zuleitungskabel an die Leistungseinheit an.
4. Platzieren Sie die Heizkörper- Einsatz in der Mitte des Grundrahmens und verbinden Sie die Heizkörper Einsatz am oberen Rand mit der Verbindungsplatte (SS1006).
5. Stellen Sie die Füße ein, um den Ofen zu nivellieren, falls erforderlich. Die Mutter am Kunststoffteil jedes verstellbaren Schenkels des Heizgeräts kann mit einem 20-mm-Maulschlüssel an den Öffnungen des Grundrahmens eingestellt werden.
6. Achten Sie bei der Montage der untersten Steinverkleidungsabschnitte darauf, dass die Nut der Steinabschnitte gegen die vorstehenden Leisten des Grundrahmens drücken. Positionieren Sie jedes Steinteil so, dass es gut zusammensteht an jeder 90° Ecke. Verwenden Sie die im Lieferumfang enthaltenen Metallklammern, um die Steinverkleidungselemente miteinander zu verbinden. Fahren Sie mit der Montage der Steinfelder in der angegebenen Reihenfolge fort und befestigen Sie jede Steinschicht mit Hilfe der Metallklammern.
7. Befestigen Sie den obersten Satz von Steinverkleidungselementen mit den mitgelieferten Winkeleisen aneinander. Ziehen Sie die Schrauben für die Winkeleisen mit einem 10-mm-Ringschlüssel an.
8. Montieren Sie den Saunasteinkäfig auf den Ofenkörper.
9. Befestigen Sie das Typenschild mit den beiden mitgelieferten Schrauben an der Vorderkante (bohren Sie mit einem Metallbohrer Löcher mit einem Durchmesser von 2,5 mm für die Schrauben). Befestigen Sie das Tulikivi-Logo auf der Verkleidungsfläche, indem Sie mit einem Metallbohrer ein Loch mit einem Durchmesser von 3,5 mm bohren und das Logo einschrauben. Abschließend wird der Steinbereich mit Saunasteinen gefüllt. Der Saunaofen ist nun einsatzbereit.



FIN

KIUASKIVIEN LATOMINEN

Sähkökiukaissa käytetään kooltaan alle 10 cm oliviinidiabaasia. Keraamisten kivien käyttö on kiellettyä. Mikäli kiukaassa käytetään Tulikiven toimittamia koristekiviä, ne asetetaan kiukaan muiden kiuskivien päälle siten, etteivät ne estä kiukaan läpivirtaavaa ilmaa ja ne eivät saa koskettaa vastuksia. Muiden kuin Tulikivi Oyj:n myymiä koristekiviä ei saa kiukaassa käyttää.

Huuhdo kiuskivet ennen kiukaaseen latomista. Lado kivet väljästi, jotta ilma pääsee liikkumaan niiden välistä. Kivien paino tulee on toisten kivien varassa, ei vastusten varassa. Älä kiilaa kiviä tiukasti vastusten väliin. Lado kivet siten, että vastukset peittyvät. Älä tee kivistä kekoa kiukaan päälle. Älä lada kiviä kivikehän ja rungon väliin. Kivet asennetaan aina vain kivikehän sisälle. Takuu ei korvaa liian tiiviisti ladottujen kivien aiheuttamaa vahinkoa kiukaan vastuksille. Liian täynnä tai vähän täytetty kivitila voi aiheuttaa tulipalon.

Huom. Liian täynnä tai vähän täytetty kivitila voi aiheuttaa tulipalon.

SWE

STAPLING AV BASTUSTENAR

I elektriska bastuaggregat är stenarna olivindiabas med en diameter på under 10 cm. Det är förbjudet att använda keramiska stenar. Om dekorationsstenar från Tulikivi används i bastuaggregatet ska de staplas på de andra bastustenarna så att de inte hindrar luften att strömma genom ugnen. De får inte heller röra vid elmotstånden. Endast dekorationsstenar som säljs av Tulikivi Oyj får användas i bastuaggregatet.

Skölj bastustenarna innan du staplar dem i bastuaggregatet. Lagg stenarna glest så att luften kan cirkulera mellan dem. Stenarna ska vila mot varandra, inte på elmotstånden. Kila inte fast stenar mellan elmotstånden. Stapla stenarna så att de täcker elmotstånden. Gör inte en stack av stenarna på bastuaggregatet. Lagg inte stenar mellan stenramen och ugnens stomme. Stenarna ska alltid staplas innanför stenramen. Garantin ersätter inte skada i bastuaggregatets elmotstånd som förorsakats av alltför tätt staplade stenar. Ett alltför fullt eller glest stenutrymme kan orsaka eldsvåda.

Obs. För mycket eller för lite fyllt stenmagasin kan orsaka brand.

ENG

PUTTING THE SAUNA STONES IN PLACE

Olivine diabase stones with a diameter of less than 10 cm are used in electric sauna heaters. The use of ceramic sauna stones is prohibited. If you use Tulikivi decorative stones, place them on top of the other sauna stones. Make sure that they do not prevent air from flowing through the heater. Also make sure that they do not touch the heating elements. The use of decorative stones supplied by manufacturers other than Tulikivi is prohibited.

Rinse the sauna stones before putting them in place. Position the stones loosely so that air can pass between them. The stones should rest on the other stones and not on the heating elements. Do not wedge the stones tightly between the heating elements, but place them so as to cover the heating elements. Do not stack the stones high in a pile on the heater. Do not place stones between the sauna stone enclosure and the heater body. The stones must always be placed inside the sauna stone enclosure. The warranty does not cover damage to the heating elements caused by stones that have been set too tightly. If too full or too empty, the sauna stone compartment can cause a fire.

Note! If too full or too empty, the sauna stone compartment can cause a fire.

GER

AUFSCHICHTEN DER SAUNASTEINE

In elektrischen Saunaöfen werden Olivin-Diabas-Steine verwendet, die weniger als 10 cm groß sind. Die Verwendung von Keramiksteinen ist verboten. Falls mit dem Ofen von Tulikivi gelieferte Dekorsteine verwendet werden, werden diese so auf die anderen Saunaofensteine aufgelegt, dass sie nicht verhindern, dass Luft durch den Ofen strömt, und sie dürfen keine Widerstände berühren. Es dürfen ausschließlich von Tulikivi verkaufte Dekorsteine verwendet werden.

Die Saunasteine abspülen, bevor sie auf den Saunaofen gelegt werden. Steine locker stapeln, so dass die Luft zwischen den Steinen durch strömen kann. Das Gewicht der Steine muss auf den anderen Steinen aufliegen, nicht auf den Widerständen. Die Steine nicht zu eng aneinander zwischen die Widerstände legen. Die Widerstände müssen von Steinen bedeckt sein. Die Steine auf dem Ofen nicht zu einem Haufen stapeln. Keine Steine zwischen den Steinrahmen und den Ofenrahmen legen. Die Steine werden nur innerhalb des Steinrahmens aufgestapelt. Die Garantie deckt keine Schäden ab, die durch zu dicht gestapelte Steine an den Widerständen des Saunaofens entstehen.

Bitte beachten Sie: Ein zu dicht oder zu wenig gefüllter Steinrahmen kann einen Brand auslösen.

Säilytä tuotteen ostokuitti yhdessä tämän asennus- ja käyttöohjeen kanssa. Asennus- ja käyttöohje sisältää tärkeitä valmistustietoja.

Monterings och bruksanvisningar innehåller viktiga information om produkten. Vänligen förvara kvittot tillsammans med monterings- och bruksanvisningar.

Keep the product purchase receipt in the same place as these instructions for installation and use. The instructions for installation and use include important manufacturing information.

Verwahren Sie die Rechnung des Produkts zusammen mit dieser Installations- und Bedienungsanleitung auf. Die Installations- und Bedienungsanleitung enthält alle wichtige Herstellungsdaten.



Tulikivi Oyj, FI-83900 Juuka, Finland, Tel. +358 (0)403 063 100, www.tulikivi.com