

BRUGERMANUAL
USER MANUAL
BRUKERVEILEDNING
BRUKSANVISNING
KÄYTTÖOHJE
MANUAL D'UTILISATION
GEBRUIKERSHANDLEIDING

RAIS 900



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DECLARATION of PERFORMANCE (back of the user manual)	

Produced at:

RAIS A/S, Industrivej 20, 9900 Frederikshavn, Danmark

EN 13229:2001+A2:2004 EC.NO: 911

15 **RAIS 900**

Raumheizer für feste Brennstoffe Appliance fired by wood Poêle pour combustibles solides

Anordningen må kun installeres i forbindelse med ubrændbart materiale.

DK: SE BRUGERVEJLEDNING

DK: SE BRUGERVEJLEDNING

UK: SEE USER MANUAL

DE: SIEHE BEDIENUNGSANLEITUNG

DE: SIEHE BEDIENUNGSANLEITUNG UK: SEE USER MANUAL

DK:1000 mm/SE BRUGERVEJLEDNING

DE: 0.0624% / 780 mg/nm³

DK: 6 mg/Nm3 / DE: 6 mg/Nm3

UK: 6 mg/Nm3 / FR: 6 mg/Nm3 DK: 297°C / DE: 297°C

UK: 297°C / FR: 297°C

DK: 79% / DE: 79% UK: 79% / FR: 79%

DK: BRÆNDE

DK: 6,9 kW / DE: 6,9 kW UK: 6.9 kW / FR: 6,9 kW

UK:1000 mm/SEE USER MANUAL

DK · 0.0624%

UK: 0,0624%

FR: 0,0624%

FR: CONSULTEZ LE GUIDE DE L'UTILISATEUR

FR: CONSULTEZ LE GUIDE DE L'UTILISATEUR

DE:1000 mm/SIEHE BEDIENUNGSANLEITUNG

AFSTAND TIL BRÆNDBART, BAGVÆG ABSTAND ZU BRENNBAREN BAUTEILEN, HINTEN DISTANCE TO COMBUSTIBLE BACK WALL DIST. ENTRE COMPOSANTS COMBUSTIBLES, ARRIÈRE

AFSTAND TIL BRÆNDBART, SIDEVÆG ABSTAND ZU BRENNBAREN BAUTEILEN. SEITE DISTANCE TO COMBUSTIBLE SIDE WALL

DISTANCE ENTRE COMPOSANTS COMBUSTIBLES, COTÉ AFSTAND TIL BRÆNDBART, MØBLERING

ABSTAND VORNE ZU BRENNBAREN MÖBELN DISTANCE TO FURNITURE AT THE FRONT DISTANCE ENTRE COMPOSANTS COMBUSTIBLES, DEVANT FR:1000 mm/CONSULTEZ LE GUIDE DE L'UTILISATEUR

CO EMISSION CO EMISSION IN DEN VERBRENNLINGSPRODLIKTEN

EMISSION OF CO IN COMBUSTION PRODUCTS EMISSION CO DANS LES PRODUITS COMBUSTIBLES

STØV / STAUR / DUST / POUSSIÈRES:

RØGGASTEMPERATUR / ABGASTEMPERATUR / FLUE GAS TEMPERATURE / TEMPÉRATURE DES GAZ DE FUMÉE:

NOMINEL EFFEKT / HEIZLEISTUNG / THERMAL OUTPUT / PUISSANCE CALORIFIQUE: VIRKNINGSGRAD / ENERGIEEFFIZIENZ /

ENERGY EFFIENCY /EFFICACITÉ ÉNERGÉTIQUE: DK: Brug kun anbefalede brændsler. Følg instrukserne i brugermanualen. Anordningen er egnet til røggassamleledning og intervalfyring.

DE: Lesen und befolgen Sie die Bedienungsanleitung. Zeitbrandfeuerstätte. Nur empfohlene Brennstoffe einsetzen.

UK: Fuel types (only recommended) Follow the installation and operating instruction manual. Intermittent operation.

F: Remarque: Veillez lire et observer les instructions du mode d'emploi. Foyer à durée de combustion limitée, homologué pour cheminée à connexions multiples. Utiliser seulement les combustibles recommandé

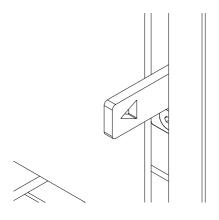
DF: HOLZ UK: WOOD

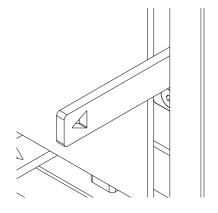
FR: BOIS

Hergestellt für /Produced for:

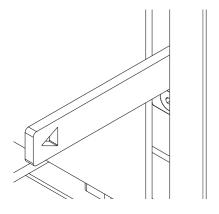
ATTIKA FEUER AG, Brunnmatt 16, CH-6330 Cham / RAIS A/S, Industrivej 20, DK-9900 Frederikshavn

15a B-VG VKF-NR: XXXXX Typ FCxxxFCxxx Brug af brændeovn / Using the wood burning stove / Bruk av peisovn Använda kaminen / Tulisijan käyttäminen / Utilisation du poêle / Gebruik van de kachel.



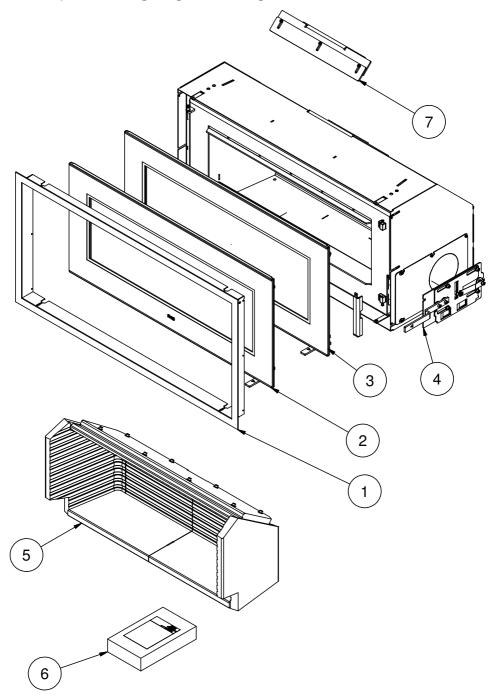


2 2 2 2
2



Position Posisjon Positionen Asento Positie	33333
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Reservedelstegning / Spare parts / Reservdelsritning / Varosapiitokset Dessin des pièces de reghange / Tekeningen van reserveonderdelen



5 Eco-friendly advices for sensible heating - common sense both environmentally and economically.

- 1. Effective lighting. Use small pieces of wood (fir tree) and a suitable fire lighter, for example paraffined wood wool/sawdust. Open the air damper, so plenty of air is fed to the stove and the gases from the heated wood can burn rapidly.
- 2. Light the fire with only little wood at a time this gives the best combustion. Remember plenty of air for every time new wood is added.
- 3. When the flames are diminished, adjust the air damper so that the air supply is reduced.
- 4. When only glowing embers remain, air flow can be reduced further, so heating demand is just covered. With a lower air supply the charcoal will burn slower and the heat loss through the chimney is reduced.
- 5. Use only dry wood ie. wood with a humidity of 15 to 20%.

RECYCLING:

The oven is wrapped in packaging that is recyclable. This must be disposed of according to national rules regarding the disposal of waste.

The glass can <u>not</u> be reused.

The glass should be discarded along with the residual waste from ceramics and porcelain.

Pyrex glass has a higher melting temperature and therefore can not be reused.

If discarded you make an important positive contribution to the environment.

We cannot be held responsible for any misprints.

RAIS 900

Revision: 3

Dato : 24-10-2018

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Introduction

Thank you for purchasing a RAIS wood burning stove.

These appliances have been approved by HETAS Ltd as intermittent operating appliances for burning wood logs only.

A RAIS wood burning stove is more than just a heat source: it also shows that you care about design and quality in your home.

To make the most of your wood burning stove it is important that you read the manual thoroughly, before installing and using it.

In the case of warranty coverage, and for general queries regarding your wood burning stove, it is important that you know the stove's production number. We therefore recommend that you note down the number in the table below.

The production number is located in the top of the convex box.

Production number:
Produced by: RAIS A/S 9900 Frederikshavn, DK

Date: Distributor:

WARRANTY

RAIS – wood-burning stoves are tested repeatedly in terms of safety, as well as material and manufacturing quality. We grant warranty on all models, starting with the date of installation.

The warranty refers to:

- documented malfunctions due to faulty manufacture
- documented material defects

The warranty does not cover:

- door and glass seals
- ceramic glass
- chamber lining
- appearance of the surface structure or natural stone texture
- appearance or changes of colour of the stainless steel or patina surfaces
- expansion noise

The warranty is invalidated in case of:

- damagés, caused by overfiring
- damages, caused by external influence and the use of unsuitable fuels
- non-observance of statutory or recommended installation guidelines, and modificatons to the wood-burning stove
- non-observance of service and care provisions

Please contact your retailer in the event of damage. We determine the way to repair the damage, in case of warranty claims. In the event of repair, we ensure proper and professional execution.

Warranty claims submitted for additionally delivered or repaired parts are subject to national/EU laws and regulations in terms of renewed warranty periods.

Please contact RAIS A/S for the applicable warranty provisions.

Specifications

	RAIS 900
Nominell output (kW):	6.9
Min./Max. output(kW):	5 - 9
Heating area (m²):	ca. 75 - 135
Stove's width/depth/height (mm):	962 / 380 / 470
Combustion champer's width/depth/height (mm):	700 / 200 / 230
Recommended amount of wood when fuelling (kg): (Distributed on 2-3 logs of wood approx. 25 cm)	1.9
Min. uptake (Pascal):	-12
Weight (kg):	120
Efficiency (%):	79
CO-emission at 13% O ₂ (%)	0.06
Particles after NS3058/3059 (g/kg):	2.05
Dust measured according to Din+(mg/Nm³):	6
Smoke gas mass flow (g/s):	5.6
Smoke gas temperature (°C) with Nominal output	297
Intermittent operation:	Fuelling should be undertaken within 56 minutes

Installation instructions

The following pages give instructions for the safe and proper installation of this heating appliance in the UK. These instructions cover the basic principles of installation, although detail may need slight modification to suit particular local site conditions. In all cases the installation must comply with current UK Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the stove. Please note that it is a legal requirement under England and Wales Building Regulations that the installation of the stove is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

It should be noted that the current Building Regulations requirements are given in Approved Document J. These requirements may also be met by adopting the relevant recommendations given in British Standards BS 8303, BS 6461 and BS 7566.

WARNING: Health and Safety Advice Notice

The installation of this heating appliance is governed by the Health and Safety at Work Act 1974. It is the responsibility of the installer to ensure that all requirements of this Act are met during the installation works. Attention is drawn in particular to the following:

Handling: The appliance is a heavy item and adequate facilities must be available for

loading, unloading and site handling.

Fire Cement: Some types of fire cement are caustic and should not be allowed to come

into contact with the skin. Protective gloves should be worn when handling fire cement. In case of contact with the skin wash immediately with plenty

of water.

Asbestos: This stove contains no asbestos. If there is a possibility of disturbing any

asbestos in the course of installation then please seek specialist guidance

and use appropriate protective equipment.

Metal Parts: When installing or servicing this stove care should be taken to avoid the

possibility of personal injury.

Important Warning – Preparatory Work and Safety Checks:

- This stove must not be installed into a chimney that serves any other heating appliance.
- There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit fumes into the room.
- If this appliance is installed into an existing chimney, the chimney must first be swept and examined for soundness and suitability before the appliance is installed (see also section headed "Chimney").

Convection

RAIS stoves are convection stoves. Convection means that there is a circulation of air, which ensures that the heat is distributed more evenly throughout the entire room. The **cold air** is sucked in at the base of the stove up through the convection channel, which runs along the stove's combustion chamber. The **heated air** pours out at the top of the stove, which ensures a circulation of warm air throughout the room.

The stoves are equipped with "cold" door handles – RAIS special feature – which means you could almost do away with gloves. Be aware, however, that all exterior surfaces become hot during use - so take extreme care.

Chimney

The chimney is the driving force which makes the stove function. In order for the stove to perform satisfactorily the chimney height must be sufficient to ensure the correct draught of 14 to 18 Pa so as to clear the products of combustion and prevent problems of smoke emanating into the room when firing.

NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in BS 5854:1980 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

If installation is into an existing chimney then it must be sound and have no cracks or other faults which might allow fumes into the house. Older properties, especially, may have chimney faults or the cross section may be too large i.e. more than 230 mm x 230 mm. Remedial action should be taken, if required, seeking expert advice, if necessary. If it is found necessary to line the chimney then a flue liner suitable for solid fuel must be used in accordance with Building Regulations Approved Document J.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the stove. If the stove is fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire.

If there is no existing chimney then either a prefabricated block chimney in accordance with Building Regulations Approved Document J or a twin walled insulated stainless steel flue to BS 1856-1 can be used. These chimneys must be fitted in accordance with the manufacturer's instructions and Building Regulations.

A single wall metal fluepipe is suitable for connecting the stove to the chimney but is not suitable for using for the complete chimney. The chimney and connecting fluepipe must have a minimum diameter of 150 mm and its dimension should be not less than the size of the outlet socket of the stove which is 150 mm in diameter. Any bend in the chimney or connecting fluepipe should not exceed 45°. 90°bends should not be used.

Combustible material should not be located where the heat dissipating through the walls of fireplaces or flues could ignite it. Therefore when installing the stove in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

If it is found that there is excessive draught in the chimney then either an adjustable flue damper or alternatively a draught stabiliser should be fitted. The adjustable flue damper should not close off the flue entirely but should in its closed position leave a minimum continuous opening free area of at least 20 % of the total cross sectional area of the flue or fluepipe.

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe.

You should also familiarise yourself with the draught conditions for chimneys with 2 flues.

The flue outlet spigot is 150 mm in diameter.

For strong draughts, the chimney or flue should be fitted with a draught stabiliser. In which case, it is important to ensure that there is a free flow-through area of minimum 20 cm² when the regulating gate is shut. Otherwise, the fuel energy may not be used optimally. If, at any time, you are unsure about the condition of the chimney, you should contact a chimney sweep.

Remember that access to the access door should be kept clear.

NB!!

RAIS A/S recommends that the stove installed by a licensed / qualified installer.
Ask your dealer for details.

Ventilation/heat transfer

Use the insert optimally.

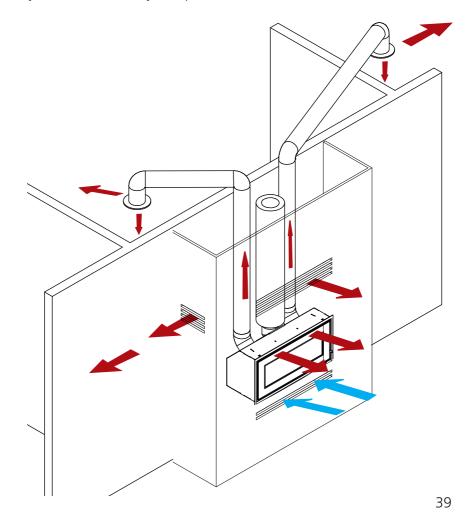
By installing hot air nozzles and flexible hoses (or similar) on top of the stove, it is possible to "move" the heat to other rooms.

Consider the placement of convection and outlet holes. Ensure that the area requirements are respected and that the holes are not blocked from the outside. There may be discoloration of the wall above the stove doors, and above the convection outlet holes. This is due to the ascending hot air.

RAIS accepts no liability for installation or consequential damages.

Material selection

Choose materials for panels/bricks with a thermal resistance greater than 0.03 m²xK/W. Thermal resistance is defined as the thickness (in m) divided by the wall's lambda value. Consult with your installer/chimney sweep.



Installation

It is prohibited to carry out unauthorised alterations to the stove.

There must be plenty of fresh air in the room where the stove is being installed, in order to ensure proper combustion. Note that any mechanical exhaust ventilation - e.g. an extraction hood - may reduce the air supply. Any air grates must be placed in such a manner, that the air supply is not blocked.

The stove is equipped with four convection air outlets, which may be connected with suitable air ducts to other rooms.

Building Regulations Approved document J gives specific guidance on the required permanent ventilation into the room for combustion air of solid fuel appliances.

The floor structure must be able to carry the weight of the wood burning stove, as well as the weight of a chimney, if necessary.

When you choose where to set up your RAIS wood burning stove, you should consider the heat distribution to the other rooms. This will enable you to get the best use out of your stove. The stove should be set up at a safe distance from inflammable materials. See the manufacturer's plate on the wood burning stove.

Installation of stove:

NOTE: Decision to be taken concerning the placement of the inlets and outlets of the convection system. The area requirements for convection holes to be kept.

Miscolouring of the wall above the doors and the convection air outlets may occur due to raising hot air.

RAIS cannot take responsibility for building in or consequential damage.

The stove to be inspected for defects at receipt.

Lift the stove from the pallet to the place of installation on a suitable floor protection. The stove can be mounted with rack and adjustable leg (buy accessories at your local RAIS dealer)

The stove is aligned by adjusting screws, so the lower edge of the glass door is in horizontal position and the surface of the door is vertical when the door is closed.

Remove the front plate and door from the stove. Be careful not to damage the glass on the door. Protect the painted stove body against spray of cement and paint.

Install the uninsolated flue pipe on the flue outlet inside the convection box.

It is important that there are no leakage between the flue pipe and the stove. It is recommended to seal the connection by suitable gasket or compound.

Install the insulated flue pipe and connect to chimney.

Install fresh air inlet connection to the pipe stub if such is to be installed (if chosen).

If pipes are intended installed on the outlets of the convection system this is recommended before building further.

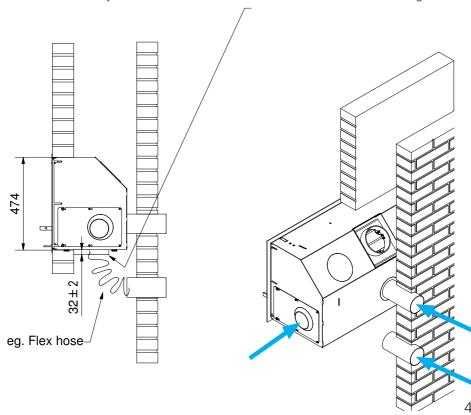
The stove is now ready for building into either panels or brick wall.

After establishing the wall and eventually painted, the fronts and covers are mounted again. Remove all protective plastic and tape.

It is possible to deliver front panels in special measures if needed together with the stove. Contact your local RAIS dealer.

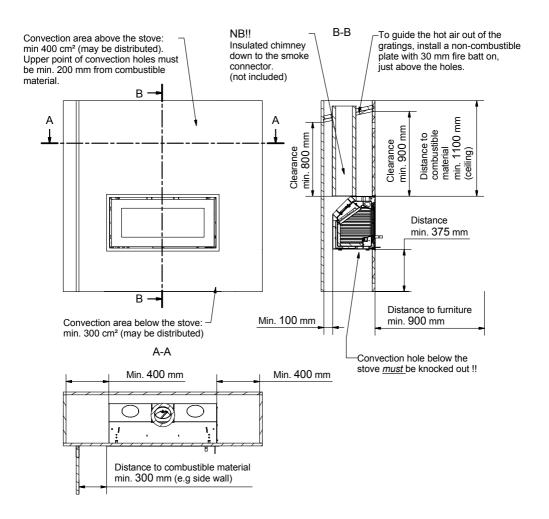
NOTE!!

Please note that if airsystem mounted under the stove increases the total height



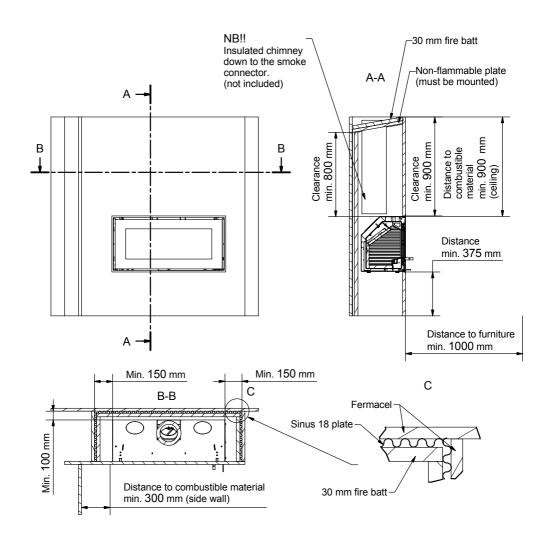
Mounting distance for panelled wall - combustible material Fermacel 13

With convection above and below the stove



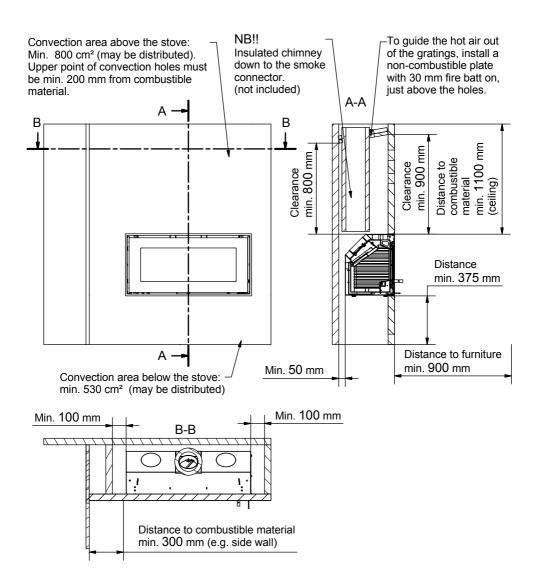
Mounting distance for panelled wall - combustible material Fermacel 13

Without convection above and below the stove



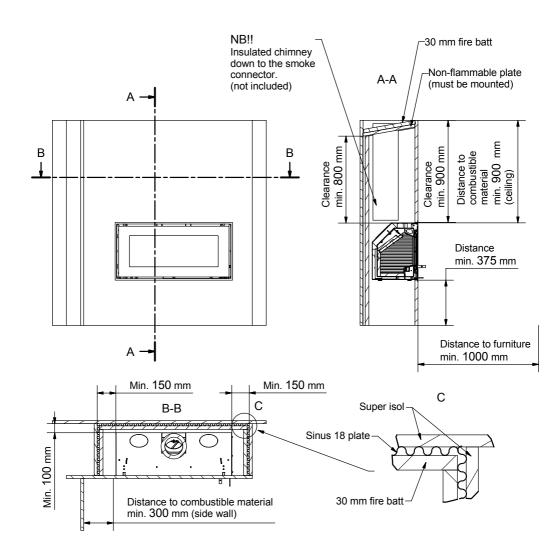
Mounting distance - Super isol 50 mm

With convection above and below the stove



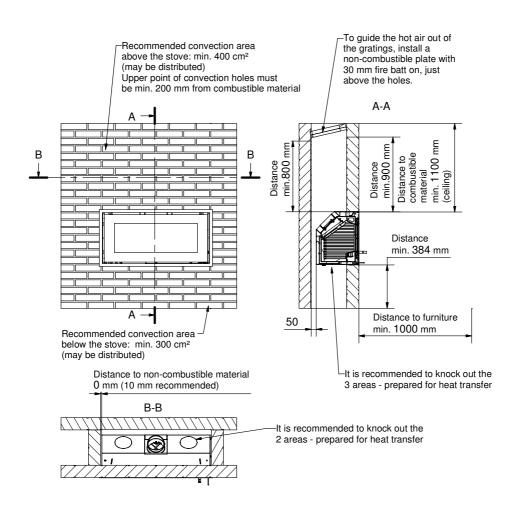
Mounting distance - Super isol 50 mm

Without convection above and below the stove



Mounting distance - Brick wall

With convection above and below the stove

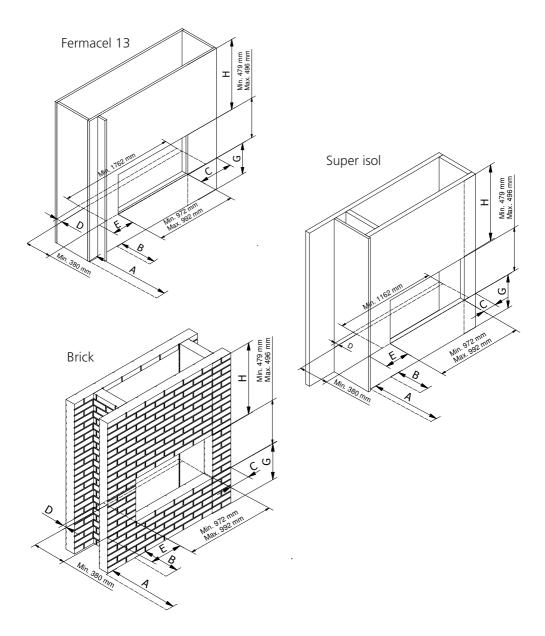


Wall opening - (height x width)

Min. 479 x 972

Max. 496 x 992

A wood burner insert should never fit tightly, Steel expands when heated.



Operating instructions

Please note that HETAS Ltd Appliance Approval only covers the use of dry seasoned wood logs on this appliance. HETAS Ltd Approval does not cover the use of other fuels either alone or mixed with the wood logs, nor does it cover instructions for the use of other fuels.

Fuel

The stove is designed and approved in accordance with EN 13240 and NS 3058 for stoking split, dried firewood. The firewood must have a water content of 15-20% and its max. length should be the length of the combustion chamber minus 50-60 mm.

Stoking with wet firewood causes both soot, environmental pollution and bad fuel economy. Freshly cut wood contains approx. 50-70% water and is thoroughly unsuitable for stoking. Count min. 1 year of storage time for newly cut wood before using. Wood with a diameter of more than 100 mm should be split. Regardless of wood size, it should always have at least one surface area free of bark.

We do not recommend stoking with painted, laminated or impregnated wood, wood with a synthetic surface, painted refuse wood, chipboard, plywood, domestic waste, paper briquettes and pit coal, as this will produce malodorous smoke, which could be poisonous.

When firing with the above-mentioned items and amounts larger than those recommended, the stove is subjected to a larger amount of heat, which results in a higher chimney temperature and lower efficiency. This can result in the stove and chimney becoming damaged and would void the warranty.

The calorific value of the firewood is closely connected to the moisture level of the firewood. Moist firewood has a low heat value. The more water the wood contains, the more energy it takes for this water to vaporise, resulting in this energy being lost.

ONLY USE RECOMMENDED FUELS

The following table shows the calorific value of different types of wood, which have been stored for 2 years, and which have a residual moisture of 15-17%.

Wood	Kg dry wood pr. m³	compared to beech/oak
Hornbeam	640	110%
Beech and oak	580	100%
Ash	570	98%
Maple	540	93%
Birch	510	88%
Mountain pine	480	83%
Fir	390	67%
Poplar	380	65%

1 kg of wood yields the same heat energy irrespective of wood type. 1 kg beech merely takes up less space than 1 kg of fir.

Drying and storage

Drying wood takes time: proper air drying takes approx. 2 years. Here are some tips:

Store the wood sawn, split and stacked in an airy, sunny place, which is protected against rain (the south side of the house is particularly suitable).

Store the firewood stacks at a hand's breadth apart, as this ensures that the air flowing through takes the moisture with it. Avoid covering the firewood stacks with plastic, as this prevents the moisture from escaping. It is a good idea to bring the firewood into the house 2-3 days before you need it.

Regulating the combustion air

All RAIS stoves are equipped with a one-handed operating lever for regulating the damper. The stove-specific regulating mechanisms can be seen on the diagrams.

Primary air is the combustion air added to the primary combustion zone, i.e. the bed of glowing embers. This air, which is cold, is only used in the lighting stage.

Secondary air is the air which is added in the gas combustion zone, i.e. air which contributes to the combustion of the pyrolysis gasses (preheated air, which is used for the cleaner glass system and combustion). This air is sucked through the damper under the combustion chamber and is pre-heated through the side channels and then emitted as hot scavenging air onto the glass. The hot air rinses the glass and keeps it soot-free.

The tertiary channel, which can be seen at the top of the combustion chamber towards the back, serves to combust the final gas residues.

By setting the interval between position 1 and 2, the energy content in the firewood is used optimally, as there is oxygen for combustion and for the burning of the pyrolysis gasses. When the flames are a clear yellow the damper has been set correctly. Finding the correct position comes with time after you have used for stove for a while.

It is not recommended that you turn it down completely. A mistake commonly made is shutting the damper too early because it feels too hot. This results in dark smoke emanating from the chimney and in the calorific value of the firewood not being used to its fullest

Room ventilation and stoves

There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit smoke and fumes into the room.

The stove requires a permanent and adequate air supply in order for it to operate safely and efficiently.

In accordance with current Building Regulations the installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion air. This air vent should not under any circumstances be shut off or sealed.

Using the wood burning stove

Adjustment of the air damper - the damper has 3 settings

Position 1

The damper is almost closed meaning that there is a minimal air intake.

Position 2

Pull the lever until first click. This position gives full secondary air. During normal stoking the lever is set between position 1 and 2. When the flames are clear and yellow, the damper is set correcly, i.e. resulting in a slow/optimal burning.

Position 3

Pull the lever until next click. The air damper is completely open and gives full primary and secondary air. The position is for the lighting stage and is not used under normal operation.

Control

If the ash is white and the walls in the combustion chamber sott-free after the stove has been used, the air regulation was set correctly and the wood was sufficiently dry.

First usage

A careful start pays off. Start with a small fire, so that the wood burning stove can get accustomed to the high temperature. This gives the best start and any damage is avoided.

Be aware that a strange but harmless odour and smoke concoction may emanate from the surface of the stove, the first time you fire up. This is because the paint and materials need to harden. The odour disappears quickly, but you should check the ventilation and draught, if possible. See also, the IMPORTANT warning notice below about persistent fumes

During this process you must be careful not to touch the painted surfaces, and it is recommended that you regularly open and close the door to prevent the door seal from sticking.

The stove may also produce "clicking noises" during heating and cooling, caused by the large temperature differences which the material is subjected to.

Never use any type of liquid fuel for kindling or maintaining the fire. You could be at risk of explosion.

The stove gets very hot when in use always wear protective gloves when tending the stove.

If the stove has not been used for a while, follow the steps as if you were using it for the first time.

IMPORTANT - Warning Note!

Properly installed, operated and maintained this appliance will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, the following immediate actions should be taken:

- (a) Open doors and windows to ventilate room.
- (b) Let the fire out or eject and safely dispose of fuel from the appliance.
- (c) Check for flue or chimney blockage, and clean if required.
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

IMPORTANT - Warning Note!

Do not use an aerosol spray on or near the stove when it is alight.

IMPORTANT - Safety advice!

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002 (Replaces BS 6539).

Warning!!

If the firewood is only burning slowly without flames or is smoking, and too little air is added, unburned exhaust gasses are developed.

Exhaust gasses can be ignited and explode, leading to damage to material and possibly

personal injury.

Never close the air supply completely when lighting a fire in the stove.



If there are only a tew embers remaining you must light the fire again.

If you just add firewood the fire will not be lit, but unburned exhaust gasses will develop.



Here firewood has been added to an ember layer which is too small, and the air flow is too small - smoke is developed.



Avoid heavy smoke - danger of exhaust gas explosion.

in case of very heavy smoke, open the damper and light the fire again.

Lighting and fuelling

NOTE: If airsystem is connected, the valve must be open.

TIPS before firing up:

Open a door or window close to the wood burning stove.

If there is a "storm" in the stove coming from the chimney, it is advisable to place a screwed-up piece of newspaper between the upper baffle plate and the chimney, set the paper on fire, and wait until you hear a "rumbling" noise in the chimney. This means that there definitely is a draught in the chimney and you avoid smoke in the room.

"Top-Down" lighting

Start by placing 3-4 pieces wood - approx. 1½-2 kiligram - in the bottom of the burning chamber

Place approx. 1 kilogram of firewood, split into kindling sticks, and a couple of alcohol briquettes or similar (1-2). Set the air damper to fully open position.

Light the fire and close the door (3), leaving the door ajar approx. 10-15 mm.

When the flames are clear - after approx. 10-15 min. - close the door completely(4). Damper - see adjustment of air damper.

When the last flames are extinguished and there is a nice layer of embers (5) - add 2-3 pieces of wood.

Leave the door ajar (6) until the fire has a good hold close the door completely. Damper - see adjustment of air damper.

After approx. 5 min. - or when the flames are clear and stable - close the damper gradually.

Note!

Keep an eye on the stove when lighting.

During operation the door should always remain shut.

Cleaning and care

During cleaning and care, the stove must be cold.

Woodstoves should be serviced every summer so they are ready for the winter season. Grates, firebricks, baffles, rope seals should all be checked that they are in good condition, Chimney and flues should be swept at least once a year, some liner manufacturers require their to be swept twice a year.

Paint finish

The appliance has been coated with a high temperature paint which can last for years. Do not clean with a damp cloth or any cleaning products as they can cause rust or discolouration. Only clean when cold use a brush with soft bristles or dust with a lint free cloth. Only re-spray when necessary.

Glass

Most woodstoves use a glass product called ceramic. This glass is resistant to heat but requires cleaning to keep its appearance. Soot or opaque marks can easily cleaned if the marks are fresh, however if you leave the glass dirty for any length of time the acid from the wood can etch the surface of the glass. Permantley(wet unseasoned wood, soft wood such as used in the building industri, pallet wood should be avoided)

Only clean when cold

Use only stove glass cleaners to re-move heavy tar / soot deposits. All other marks can normally be removed with a damp cloth, then dry with a clean cloth or newspaper, do not let the glass dry before applying a dry clean cloth.

With more stubborn marks i.e. Opaque areas / frosting, you need put a small amount of wood ash on a clean damp cloth. If the opaque mark / frosting, doesn't come out, use a cleaning pad called a "Dry Wiper" to reduce or remove the mark.

Cleaning the combustion chamber:

Scrape/shovel the ash out and store it in a non-flammable container until it has cooled down. You can dispose of ash with your normal household waste.

REMEMBER!! Never remove all the ashes from the combustion chamber - the wood will burn at its best with a layer of ashes of approx. 20 mm.

Prolonged periodes of non-use:

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open.

Prior to a new heating season, it should be checked that the chimney and smoke gas connector are not blocked.

Cleaning of the flue ways



The flue ways are consist of a baffle plate and a smoke conductor above. This parts are screwed together. Both parts are made of vermaculite. Handle these parts carefully.



Lift the baffle plate a little and push towards one of the sides.



Remove the baffle plate by lifting it upwards and tilting on end.

Gently take out the baffle plate.

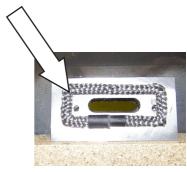


Now there is a clear view of the smoke exit. Remove dirt and dust and put the parts back in reverse order.

NB!

Make sure that the baffle plate are on a level with the hole in the backside of the stove.





Interruption of operation

Smoke spillage around door:

Could be due to too low draught in the chimney <12Pa

- Check whether the flue or chimney is blocked
- check whether the extraction hood is switched on; if it is, switch it off and open a window/door in the proximity of the stove for a short while.

Soot on glass:

Could be because the firewood is too wet.

- make sure that the stove is heated properly when firing up, prior to closing the door

Could be because the damper regulation is too low.

A stove burning too strong could be caused by:

- leak around the door seal
- chimney draught too large >22 Pa, draught control regulator should be installed.

A stove burning too weakly could be caused by:

- too little firewood
- too little air supply for room ventilation
- unclean smoke channels
- leaky chimney
- leakage between chimney and flue

If your stove continues to malfunction, we recommend that you contact your RAIS distributor or chimney sweep.

IMPORTANT!! To ensure safe burning there must be clear yellow flames or clear embers at all times. The firewood should not be smoldering. Therefore you should never completely cut off the air supply.

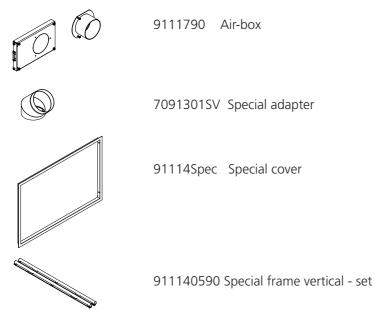
WARNING!!

In case of chimney fire:

- shut off all air supply on the wood burning stove
- contact the fire department
- never attempt to put out fire with water!
- afterwards, you should ask your chimney sweeper to check the stove and chimney

Accessories and spare parts

If spare parts other than those resommended by RAIS are used, the warranty is voided.



Spare parts RAIS 900

If spare parts other than those recommended by RAIS are used, the warranty is voided. All replaceable parts can be bought as spare parts from your RAIS distributor.

For reference see spare parts drawing (front of manual).

Pos.	Qty	Part number	Description
1	1	911140190	Standard cover
2	1	9111090	Glass door
3	1	9112090	Steel door
4	1	9110990	Air damper
5	1	9112200	Fire brick set
6	1	9115500	Sealing set
7	1	911130150	Smoke chicane set



RAIS A/S Industrivej 20 DK-9900 Frederikshavn www.rais.dk



DECLARATION OF PERFORMANCE

Regulation (EU) 305/2011 No. 0001 — CPR-2013/07/01

No.: 911

1. Unique identification code

of the product-type

RAIS 900

ATTIKA 900

Inset appliance burning solid fuel without hot water supply 2. Type

3. Intended use

Domestic room heater

4. Manufacturer

Industrivej 20, Vangen

Telephone

+45 98 47 90 33

DK-9900 Frederikshavn.

Telefax Webmail Homepage +45 98 47 92 91 kundeservice@rais.dk www.rais.com

5. Authorised representative

System of assessment

System 3

Denmark

n/a

AVCP 7. Notified body

The notified laboratory

Danish Technological Institute - Identification no. 1235

Teknologiparken, Kongsvang Allé 29, DK-8000 Århus C performed the determination of the product type on the basis of type testing under system 3 and

issued test report

a. 300-ELAB-1938-EN

8. Declared performance

Harmonized technical specification:

EN 13229:2001/A2:2004/AC:2007

Essential characteristics	Performance		
Fire safety			
Reaction to fire	A1	Insulated flue 13 mm non-combustible panel board	
Distance to combustible materials	Insulation thickness rear	113	
Minimum distances [mm]	Insulation thickness sides	413	
For other installation or wall	Insulation thickness ceiling	900	
settings see instruction manual	Front	900	
	Floor	375	
Risk of burning fuel falling out	Pass		
CO-emission of combustion products	0.0624 %		
Surface temperature	Pass		
Electrical safety	Pass		
Cleanability	Pass		
Maximum operating pressure	- bar		
Flue gas temperature T at nominal heat output	297 °C		
Mechanical resistance (to carry a chimney/flue)	NPD		
Thermal output			
Nominal heat output	6.9 kW		
Room heating output	6.9 kW		
Water heating output	- kW]	
Energy efficiency η	79 %]	

The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Place

FREDERIKSHAVN, DENMARK

Date

27-06-2013

Henrik Nørgaard, Managing Director

