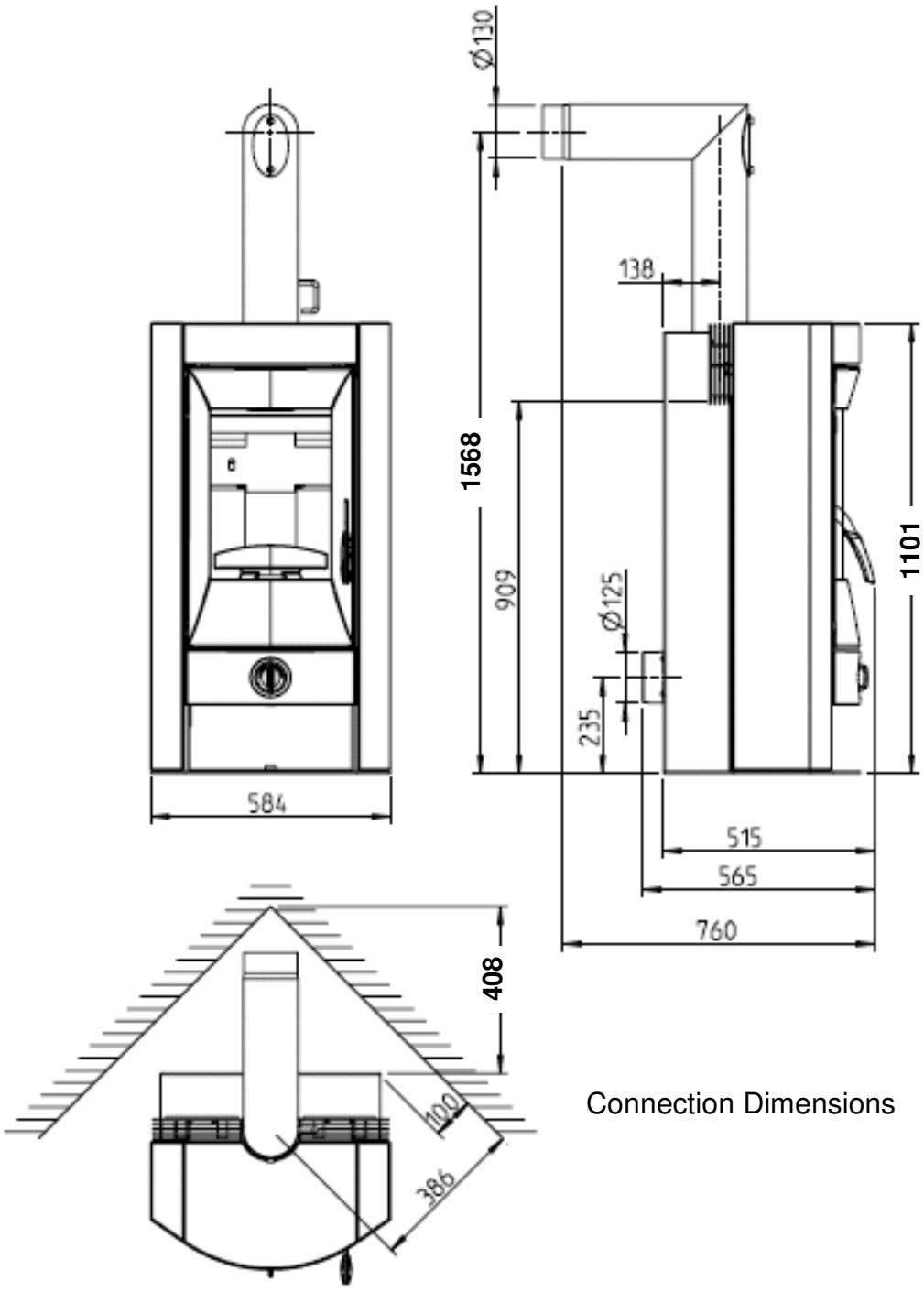
ECO

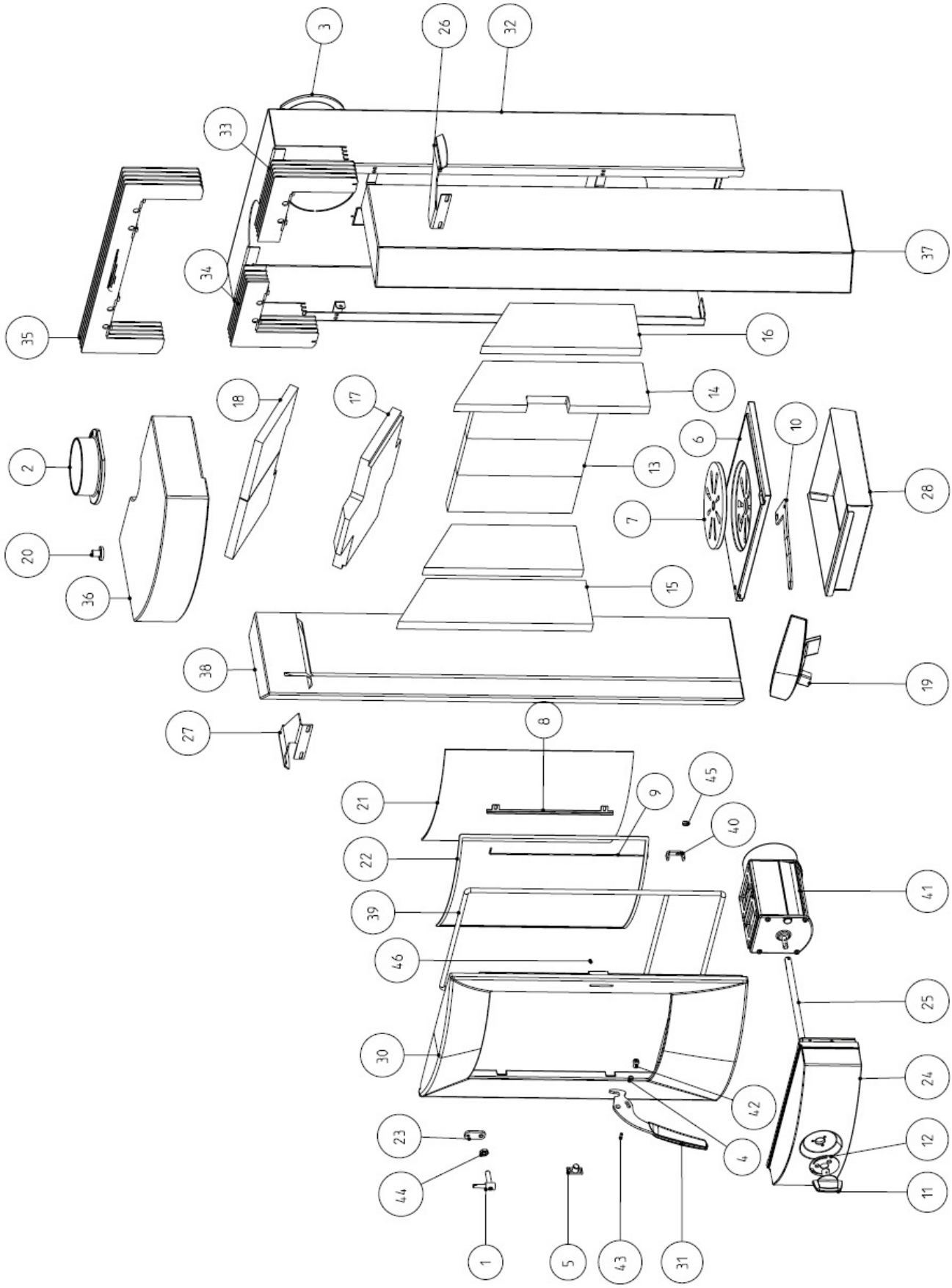
Instruction Manual

RIKA®



Connection Dimensions

SPARE PART OVERVIEW



Item	Designation	Article number
1	Hinge	B15807
2	Flue pipe adapter	Z10020
3	Cooking plate lid	Z10021
4	Handle sleeve	Z14937
5	Lock cpl.	B12322
6	Vibrating grate	Z25946
7	Vibrating panel	Z25948
8	Glass retainer	L01244
9	Torsion spring	Z32691
10	Vibrating grate lever	L00616
11	Control knob	Z33349
12	Marking plate	Z33105
13	Fireclay, rear	Z32590
14	Fireclay, front right	Z32591
15	Fireclay, front left	Z32592
16	Fireclay, rear left/right	Z32593
17	Deflector panel lower	Z32596
18	Deflector panel upper	Z33323
19	Wood retainer, black	Z32940
	Wood retainer, metallic grey	Z32603
	Wood retainer, copper	Z33481
20	Bolt	Z33324
21	Door glass	Z32533
22	Flat sealing strip 8x2, self-adhesive	103693
23	Adjusting plate	L01136
24	Control panel, black	Z34157
	Control panel, metallic grey	Z34158
	Control panel, copper	Z34159
25	Governor shaft	Z34166
26	Side panel bracket, right, black	Z33219
	Side panel bracket, right, metallic grey	Z33220
	Side panel bracket, right, copper	Z33597
27	Side panel bracket, left, black	Z33221
	Side panel bracket, left, metallic grey	Z33222
	Side panel bracket, left, copper	Z33598

Item	Designation	Article number
28	Ash tray	L00867
	Combustion chamber door cpl., black	B15695
	Combustion chamber door cpl., metallic grey	B15696
	Combustion chamber door cpl., copper	B15949
30	Combustion chamber door, black	Z33192
	Combustion chamber door, metallic grey	Z33196
	Combustion chamber door, copper	Z33592
31	Combustion chamber door handle	B15697
32	Rear panel, black	Z34160
	Rear panel, metallic grey	Z34161
	Rear panel, copper	Z34162
33	Fins, right	B15699
34	Fins, left	B15700
35	Fins, rear connection	B15391
36	Soapstone cover	Z33223
	Sandstone cover	Z33231
37	Soapstone side casing panel, right	Z33224
	Sandstone side casing panel, right	Z33229
38	Soapstone side casing panel, left	Z33225
	Sandstone side casing panel, left	Z33230
39	Round sealing strip Ø 12	100485
40	Door stop	L01320
41	Air regulator	B16017
42	Fillister head screw with hexagon socket	104622
43	Headless screw M5	108427
44	Hexagonal nut M10	100483
45	Connecting disc (spring mount)	111701
46	Set screw	102434

C O N T E N T S

Subject to technical and visual changes; setting and printing errors excepted.

DRAWING EXPLANATION

Important information 

Practical advice 

Use the plan 

PACKAGING

Your first impression is important to us!
The packaging for your new fire provides excellent protection from damage. However damage to the fire and accessories can occur during transport.

Therefore please check your fire for damage and that all parts are there on receipt! Report any defects to your fire dealer immediately! When unpacking please ensure that the soap stone panels are intact. The material scratches easily. Soap stones are not covered by the warranty.

The packaging for your new fire in the main has no effect on the environment.

The wood in the packaging has not been surface treated and can therefore be burned in your fire. The box and the film (PE) can be recycled without any problem.

TECHNICAL SPECIFICATION

This is a Design 1 fire and has a connection for fitting to a chimney that is equipped for other fires and boilers for solid and liquid fuels, insofar as the chimney dimensions are in accordance with DIN 4705, Part 3.

Technical Specification	
Dimensions (mm) and weights (kg)	
Height	1101
Width	584
Depth of the corpus	479
Weight without casing	145
Weigth with stone casing	285
Flue pipe outlet diameter	130
Raed heating capacity as per EN13240	8 kW
Lowest thermal output	4 kW
Room heating capacity dependent on the house insulation	90-210 m3
Fuel flow rate	2,2 kg/h
Efficiency	83,2 %
CO2 content	8,2%
CO emissions related to 13%	792 mg/Nm3
dust emissions	24 mg/Nm3
Draught requirement	12 Pa

Flue gas values for multiple connection to a chimney as per DIN 4705, or for measuring the chimney as per DIN 4705.	
Flue gas mass flow	7,3 g/s
Flue gas temperature	206,3 °C
Minimum flow pressure at rated heating capacity	12 Pa

The owner of the small heating system or the authorised person for the small heating system must keep the technical documentation in a safe place and present it to the local authority or the chimney sweep.

1.IMPORTNANT INFORMATION

Read the instructions before installing and commissioning your stove. Pay particular attention to the national regulations and legislation, as well as any local directives and rules.

GENERAL WARNING AND SAFETY INSTRUCTIONS

The general introductory warning information must be followed.

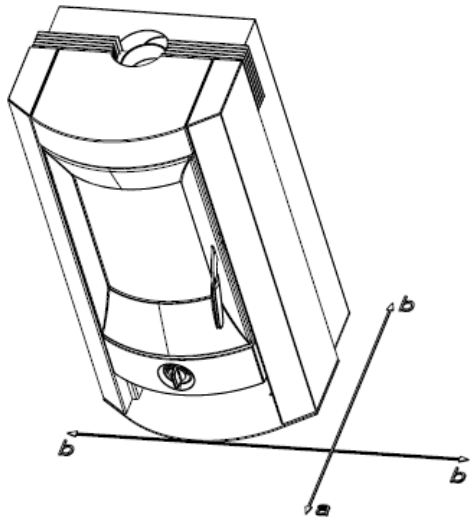
- Read the whole of the manual thoroughly before commissioning the fire.
- Only approved transport aids with adequate load bearing capacity must be used for transporting your fire.
- Your fire is not suitable for use as a ladder or scaffold.
- Thermal energy is produced by burning fuel; this leads to the surface of the fire, the doors, the door and operating handles, the door glasses, the flue pipes and possibly the front wall of the fire becoming very hot. Avoid touching these parts without wearing the relevant protective clothing or using the relevant means (cold hand).
- Make children aware of the danger and keep them away from the fire when in use.
- Only burn the approved fuel listed in the chapter “Clean Burning”.
- Burning or inserting easily combustible or explosive materials, such as empty spray cans and suchlike in the fire, as well as storage of the same close to the fire is prohibited due to risk of explosion.
- When reheating, no wide or easily combustible clothing should be worn.
- Setting down of non heat resistant objects on the fire or nearby is prohibited.
- Do not lay washing on the fire to dry.
- Stands for drying items of clothing or suchlike must be set up at an adequate distance from the fire hazard!
- Working with easily combustible and explosive materials in the same or adjoining room to the fire is prohibited when the fire is on.

BEFORE SETTING UP

1.1 Ground load bearing capacity:
Before setting up, ensure that the supporting construction has a load bearing capacity that will support the weight of the fire.

The stove must not be modified in any way as this will invalidate the guarantee and warranty.

SAFETY CLEARANCES (Minimum clearances)
1. From non-combustible items
a > 400 mm b > 100 mm
2. From combustible items and supporting walls made from reinforced concrete construction
a > 800 mm b > 200 mm



Safety clearances

1.2 Flue pipe connection
Flue pipes are a particular hazard source in respect of escape of poisonous gas and fire hazard. Obtain the advice of an appointed specialist company in respect of laying and fitting the pipes.

When connecting the flue pipe to the chimney, in the area of walls cladded using wood, please follow the relevant fitting directives

1.3
You must follow the flue gas formation in the event of unfavourable weather (atmospheric inversion) and the draught conditions.

If too little combustion air is added smoke can enter your house or flue gases can escape. Additionally harmful deposits can arise in the fire and in the chimney.

In the event that flue gas escapes let the fire go out and check if all air inlet openings are free and the flue gas feeds and the fire pipe are clean. In cases of doubt you must inform the master chimney sweep, as a fault in the draught could be due to the chimney.

1.4
Before adding new fuel, push the embers together.

1.5
Only use a suitable tool from our accessory range for pushing the embers together, and ensure that no combustible material falls out of the fire.

1.6
Use the devices supplied with your fire, such as the protective gloves or the cold hand to open the doors, as well as for operating the control elements.

1.7 Design 1 fires (BA1)
These fires must only be operated with a closed fire door.

1.8
The fire door must only be opened for adding fuel and must then be closed again, as this could otherwise lead to a danger to other fires that are also connected to the chimney.

1.8.1
When the fire is not in operation, the fire door must be kept closed.

1.9
When using wet fuel and if operation is throttled too much, the chimney can soot up, i.e. easily combustible materials such as soot and tar can be deposited and this can lead to a chimney fire. Should this happen, close all air inlet slides and flaps. Call the fire brigade and get your self and all other occupants to safety.

The primary and/or secondary air supply must be open before you open the combustion chamber door.

ATTENTION: The size of the fire door means that, particularly when reheating blazing flames, the door must not be opened abruptly, in order to prevent the flames from springing out.

Important information relating to ROOM AIR DEPENDENT and ROOM AIR INDEPENDENT OPERATION:

Your stove has been tested as a room air dependent stove in accordance with EN 13240 and does not fulfil the German requirements for room air independent operation.

In combination with room air technical installations (e.g. controlled ventilation and extraction systems, dust extraction systems, etc) it must be ensured that the stove and the room air technical installations are monitored and made safe (e.g. via a differential pressure controller, etc.). The required combustion air flow of approx. 40 m3/h must be assured.

Please observe any local directives and rules in consultation with the responsible chimney sweep.

2. BRIEFHEATING INFORMATION

SUITABLE FUELS

In principle your fire is suitable for burning dry billets. You can also burn fuels such as wood brickets.

Only use dry fuel (between 14% and 18% rel. wood humidity). The burning of waste of any kind, in particular plastics, damages your fire and the chimney, and is prohibited by the Emissions Protection Ruling.

FUEL QUANTITIES

The fire is equipped with flat firing due to the design. This means that only one layer of fuel may be placed on the existing basic embers.
Please note that when a larger quantity of fuel is added, your fire will emit a larger quantity of heat or will heat up more strongly than is intended for the design. This can lead to damage to your fire.

TYPES OF WOOD

Different types of wood have different calorific values, deciduous wood being especially suitable for combustion. It burns with a stable flame and forms long-lasting embers. Coniferous wood contains a high lever of resin, burns very quickly like all soft woods and tends to throw out sparks.

Type of wood	Calorific value kwh/m3	Calorific value kWh/kg
Maple	1900	4,1
Birch	1900	4,3
Beech	2100	4,0
Oak	2100	4,2
Alder	1500	4,1
Ash	2100	4,2
Spruce	1700	4,4
Larch	1700	4,4
Poplar	1200	4,1
Robina	2100	4,1
Fir	1400	4,5
Elm	1900	4,1
Willow	1400	4,1

MAXIMUM FUEL QUANTITIES

Wood:

2 logs of approx. 1,1 kg

Wood brickets (broken):

2 pieces of approx. 1,1 kg

Your stove output is regulated via the knob. This regulator knob must be used according to your own experience since your stove output also depends on the chimney draught.

Use the heat-resistant glove when operating the regulator knob.

The riddle grate lever (part 10) may only be operated with the riddle hook.

The challenges of the present day and age mean that everyone must act responsibly. One of most important matters of concern is retaining our natural world. Our products are developments that comply with the most recent state of the art technology. This is an essential prerequisite for a clean, efficient and perfect functioning of our fires.

CLEAN BURNING

The following is important for clean burning:

1. THE FIREWOOD MUST BE DRY AND UNTREATED.

Recommended value between 14% and 18% rel. wood humidity.
Dry and well ventilated stored wood that has been stored for 2-3 years.

A fire is not a „waste incineration plant". The warranty will become null and void if rubbish or nonapproved material, such as plastic, treated wood etc. is burned. Further consequences are damage or soiling of the fire and chimney as well as the environment!

2. CORRECT FIREWOOD QUANTITY AND FIREWOOD SIZE

-Too much firewood causes overheating. This causes the material to burn too heavily and your fire will produce poor flue gas values.

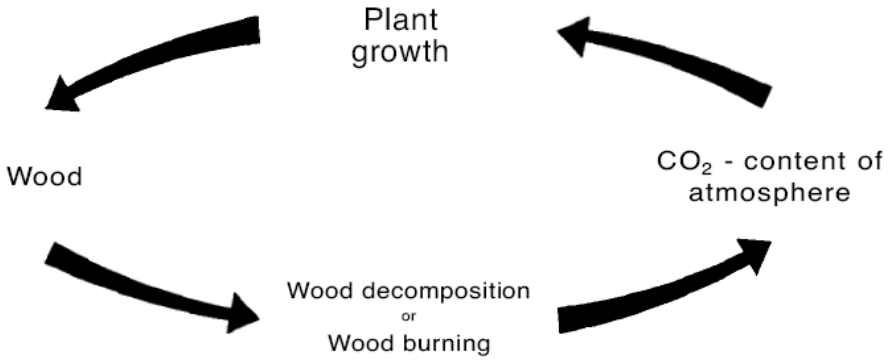
-Too little firewood or too large billets have the effect that the fire does not reach the optimum temperature. The flue gas values are poor here.

-The correct firewood quantity means:
For wood 2,2 kg (2 billet - 25 cm long) per layer (recommended value) at rated thermal output.
At the smallest thermal output 1,1 kg (2 billets - 25 cm long)

Note: Only wood and wood brickets must be burned in your fire. Plastic, treated wood materials (e.g. chipboard), hard coal or textiles must not be burned.

BURNING WOOD

Clean burning of wood corresponds to the same chemical process as natural decay, i.e. that the CO2 (carbon dioxide) released does not increase or contaminate the original CO2 content – household of the atmosphere.



3. INSTALLING THE FIRE

Before first commissioning or after changing the location of the fire, cleaning and service work, ensure that the flue plate, as well as the log guard (part 17 and 19) is in the correct position.
When using a flue pipe with throttle valve, the throttle valve must be open.

Care must be taken with this fire that the flue draught reaches at least the prescribed value (10 Pa). Should problems arise here, please contact your master chimney sweep.

CONNECTING THE FIRE

Proceed as follows when fitting a connection to a bricked chimney:

1. Measure and draw in the chimney connection (taking a possible floor plate thickness into account) as per the natural dimension

2. Chisel out (drill) the holes in the wall

3. Brick in wall lining

First seal the wall lining using mineral wool insulation. Afterwards plaster using heat resistant cement mortar or equivalent.

4. After the mortar has hardened, and after plastering and painting, position the floor plate including the floor protection (carton).

5. The fire can now be lifted onto the floor plate carefully.

The fire must not be pushed along an unprotected floor.

Strong corrugated cardboard, carton, or an old carpet are excellently suited as an installation aid and an underlay. The fire can also be pushed on this underlay.

We recommend original flue pipes from the RIKA flue pipe range for professional connection.
The connecting piece must not project into the chimney shaft! Seal the gap between the flue pipe and wall lining using a ceramic seal.

The installation must comply with the respective safety and construction regulations.
Please contact your master chimney sweep in this respect – he will be happy to give you information.

If you use a system chimney (e.g. glazed fireclay), we would ask you to follow the manufacturer's connection regulations exactly.

MAKING AN EXTERNAL COMBUSTION AIR FEED

- Tighten the suction connector the pipe Ø125 (e.g. spiral pipe or HD pipe) and attach with a hose clip (not included in delivery!)

- The line should not be longer than 4 m and have no bends in order to guarantee adequate air feed.

- If the line leads outside it must have a windbreak.

Note:

Please note that problems may arise due to updrafts in the case of combustion air supply from an integrated chimney ventilation shaft. If the combustion air flowing downwards is heated it may rise and thus counter the chimney with a resistance which in turn reduces the negative pressure in the combustion chamber. The chimney manufacturer is to guarantee that the resistance for the combustion air is a maximum 2 Pa even in the least favourable operating state of the chimney.

4 . O P E R A T I O N

STARTING THE FIRE

In order to keep exhaust emissions as low as possible, we would ask you to keep to the following starting instructions.

1.
If the fire and chimney are still cold or if there is atmospheric low pressure, then burning some paper at the start is reco mended, in order to “drive” the cold out of the fire and chimney.

2.
To start heating first lay untreated paper on the floor of the combustion chamber, on top of that 0.5 kg soft wood chip and 1 kg wood (3 small billets). Turn the rotary control knob (page 14) to the right in the start heating position, primary and secondary air are completely open (See item: “Rotary control knob”).

Please do not use glossy paper or paper from magazines. It does not burn well and the print colours produce very poisonous substances in the flue gas.

3.
Now light the paper. Wait until the soft wood chips are burning well.

Turn the rotary control knob 90° to the left a few minutes later. The primary air is now closed and the secondary air is completely open. A few minutes later set the rotary control knob to the ideal position (See item: “Rotary control knob”)

4.
After this has burned, lay approx 2,2 kg wood (2 billets) on the fire. Open the shaker grate handle and the primary air slide until the wood is burning well.
Proceed in the same manner for each further layer.

ATTENTION:
When laying fuel onto a thin bed of embers ensure that the primary air and the shaker grate actuator are open, otherwise there is a danger of explosion. For safety reasons we recommend starting a new heating cycle.

5.
The mineral parts of the wood (approx. 1%) remain on the bottom of the combustion chamber as combustion residue. This ash is – because it is a natural product - an excellent fertiliser for all plants in the garden.
However the ash should be left to settle beforehand and doused with water.

THE FIRE PAINT ONLY HARDENS PROPERLY AFTER HEATING UP DURING USE.

- Do not touch the surface during heating. It is still soft.

- Our paints are completely harmless in accordance with the TUV-certificate; there is no danger to health. In spite of that we recommend that the house is well ventilated several times after first heating.

- Heat the fire up well – this will reduce the hardening time.

- Hardening of the surface is complete after several proper periods of heating.

All details on the nature of the fire wood and correct heating can be found in Chapter 2.

ASH DRAWER

(Part 28)

The ash drawer must be emptied regularly to prevent excessive heating of the fire grid.

Never heat the fire with the ash drawer open → danger of overheating → lost of warranty.

Caution: Embers could remain in the ash. Only fill the ash into non-flammable containers and do not put the ash onto flammable surfaces.

OPERATING THE SHAKER GRATE

The ash is moved from the fire into the ash drawer by moving the shaker grate handle (Part 10) to and fro. This frees up room for the primary feed air that is required for the heating phase in the fire.
The riddle grate should always remain closed. Exception: Wood or briquettes are too moist and in the heating phase.

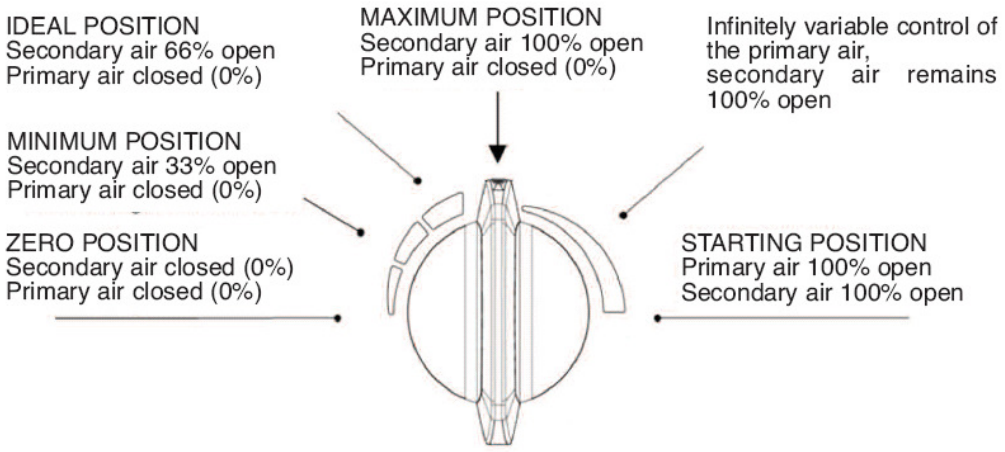
ROTARY CONTROL KNOB

Fuel	Wood/Wood Brickets
Primary air	closed (0%)
Secondary air	2/3 open (66%)
Shaker grate	closed

The position “Primary air completely open” may only be used as a starting position.

As you fire output is also dependent on the chimney draught and the weather conditions, you must get used to the use of this secondary control slide according to your own experiende.

Note: Air regulator seals to 100%.
Complete closure of the air regulator (zero setting of regulator knob) during operation leads to hazard of deflagration and is strictly prohibited.



5. FITTING OPTIONS

CHANGING FLUE PIPE CONNECTION ABOVE TO CONNECTION AT REAR

- Remove the stone cover (part 36).

- Now remove the two stone side sections.

- Loosen the two hexagonal screws and remove the plate fins (part 33, 34).

Please remember when changing the flue pipe connection that the individual parts of the stone panelling weigh about 40 kg. In addition the surface of the stone should be protected to prevent scratching.

- Cut out the pre-stamped, round section in the rear wall (part 32) using a hacksaw.

- Swap the flue gas connector and the hob (part 2, 3) with each other.

- Fit the new plate fins (part 35 - must be optionally ordered) and the stone sections in the reverse order. (Make sure your fingers do not become trapped!)

6. MAINTENANCE AND CLEANING

GENERAL MAINTENANCE

Your stove has been designed by our development team with minimal maintenance in mind and for a very long service life. Certain cleaning activities and checkin the seals are however necessary from time to time.

The time periods between the inspection intervals are above all dependent on the fire wood quantity used and the frequency of use.

All maintenance and cleaning work must only be carried out when the fire is completely cooled down.

ONCE MORE

Only use wood that has been stored properly and is dry and untreated.
Feed the correct quantity of wood into the fire.

Should the fuel be poor, the number of necessary maintenance activities can more than double.

SURFACE TEXTURE AND CLEANING

The glass in the door can be cleaned by using a special glass cleaner (free from corrosive acids and solvents - otherwise there is a risk of damage to the glass surface and/or inscription).The glass cleaner can be obtained from your specialist fire dealer. Should the glass become heavily sooted the possible cause could be damp wood.

The stove surface is heat resistant and may only be cleaned with a cloth (possibly moist).

Only use original paint for touch up work, this is available from your specialist dealer as an accessory.

Under no circumstances must the paint be cleaned before heating for the first time!

CONVECTION AIR OPENINGS

Regularly clean dust deposit from the convection air openings.
The fire should be cleaned thoroughly before the start of the new heating season, in order to prevent strong odours.

CLEANING THE FLUE GAS CHANNELS

(1 x annually)

- Removing the flue pipes

- Brush off any soot and dust deposits in the fire and in the flue pipes and vacuum.

- Check the seals on the fire door or the ash drawer before the beginning and end of the heating period. Should they be damaged or excessively worn, then please order the relevant replacement.

Only intact seals guarantee the perfect function of your fire.

7. PROBLEMSOLVING

WHAT TO DO IF…?

Problem	Reason	Solution
1. Ceramic glass pane soots up too quickly		In principle: From time to time (dependet on use), each glass pane must be cleaned with a glass cleaner.
	→poor draught	Clarify this with the chimney sweep (if necessary increase height of chimney)
	→incorrect regulation	Regulation must be carried out as per the operating instructions using the rotary control knob (if secondary air is closed, the glass pane will soot up very quickly, but this can be burnt off again by correct use.
	→to much fuel	See item: "Max. Fuel quantities"
	→damp wood	See item: "Clean burning", if necessary use wood brickets (these dry evenly)
2. Fire not pulling correctly	→Chimney draught inadequate →Fire is sooted up on the inside	See item: „Brief Heating Information" See item: „Maintenance and Cleaning"
3. Fire does not start correctly	→Weather influences →Incorrect starting	See item: „Lighting the fire" See item: „Lighting the fire"
4. Fire smells strongly and is smoking outside	→Burning in phase →Fire is dusty / sooted up	See Item: „Operation" (hardening of the paint) See Item: „Convection air openings
5. Paint not drying out	→Burning in phase not completed properly	See item: „Operation" (hardening of the paint)
6. Flue gas excapes when fuel is added and during the heating phase	→Chimney draught too low, flue gas connection leaking	Check the connection points and reseal if necessary

Should you not be able to find the correct solution to your problem, than please contact your special list dealer or your chimney sweep.

8. GUARANTEE

These warranty conditions apply to Austria, Germany and Switzerland.

For the purpose of timely damage limitation, the warranty claim on the part of the claimant is to be enforced at the RIKA dealer in writing using the invoice and stating the purchase date, model name, serial number and reason for complaint.

WARRANTY

5 years on the welded stove body. The warranty only covers defects in materials and workmanship as well as delivery of spare parts free of charge. Labour and travel times are not included in the manufacturer's warranty.

Only use spare parts recommended or supplied by the manufacturer. Loss of warranty on non-observance!

The precondition for the warranty is that the stove has been installed and commissioned properly according to the Instructions for Use valid at the time of purchase. Connection must be performed by a specialist for such stoves.

The warranty excludes WEARING PARTS such as glass, coating, surface coatings (e.g. handles, panels), seals, fire trough, grates, draught plates, deflector plates, combustion chamber liners (e.g. fireclay), ceramics, natural stone, ignition elements, sensors, combustion chamber sensors and temperature controller.

Damage arising from non-observance of the manufacturer's instructions for operation of the unit is also excluded (e.g. overheating, use of non-approved fuels, incorrect intervention in the stove, electrical excess voltage, a chimney draught set incorrectly for the stove, non-performance or deficient maintenance and cleaning, incorrect operation by the user or third parties, etc.) or caused by such.
Any costs incurred by the manufacturer due to unjustified warranty claims are to be charged to the claimant.

THE WARRANTY DOES NOT AFFECT THE STATUTORY WARRANTY PROVISIONS.

GUARANTEE / GARANTIE

Dealer's stamp / Cachet du revendeur:

Date of purchase / Date d'achat:

Product name / Nom du modèle

Installed from / Branché du:

Number of type plate on the backside of the stove:
Numéro de plaque signalétique au verso du fourneau:

Serial number / Numéro de série

GARANTIE / GARANZIA

Händlerstempel / Timbro del rivenditore:

Kaufdatum / Data d'acquisto:

Modellname / Nome modello:

angeschlossen von / allacciato da:

Nummern des Typenschildes auf der Ofenrückseite:
Numeri della targa modello sul retro della stufa:

Serien Nr. / Nr. serie:

Z33491 – 2010/11/11

GUARANTEE/GARANTIE

Customer/Client:

Stamp
Marque

To/A:

GARANTIE/GARANZIA

Kunde/Cliente

Marke
Marca

An/A