IRON DOG 03

INSTALLATION AND USER MANUAL

Robeys

A PASSION FOR QUALITY

BRUNNER®

made in germany.

2 SAFETY PRECAUTIONS

We recommend having the **IRON DOG** installed and connected to the chimney by an authorized stove-fitter, as safety and effectiveness depend on a proper installation of the product. All European, national and local regulations must be observed and followed.

No liability or guarantee entitlements will be accepted for damage resulting from nonobservance of this installation manual!

Fireplaces must be built to ensure safe operation and fire-safety, so that dangers and unreasonable nuisances cannot appear.

Fireplaces may be set up only in rooms or areas with no risk of danger due to their state, structure or intended use.

Other manuals accompanying the insert are to be considered.

Subject to technical changes.

Please read attentively this installation manual before the beginning of the installation.

3 DELIVERY CONTENTS

The **IRON DOG** is delivered completely assembled on a disposable pallet. The **IRON DOGs** are screwed to the pallet;

In order to enable an optimal installation and connection of the **IRON DOG**, we recommend using the optional accessories. These are adjusted perfectly to the required safety distances and make it possible to install the **IRON DOG** rapidly and safely, without any problems - see www.iron-dog.com.

In case of damages due to transport the supplier and the transport company should be notified immediately.

4 COMPONENTS

A detailed list of all the components of the **IRON DOGs** can be found in the user manual.

5 TRANSPORT

⚠ Caution when turning over the device - loose parts!

Stove top, baffle plate, grill and accessories are not screwed to the device. In order to reduce the weight during transport, these parts can be removed.

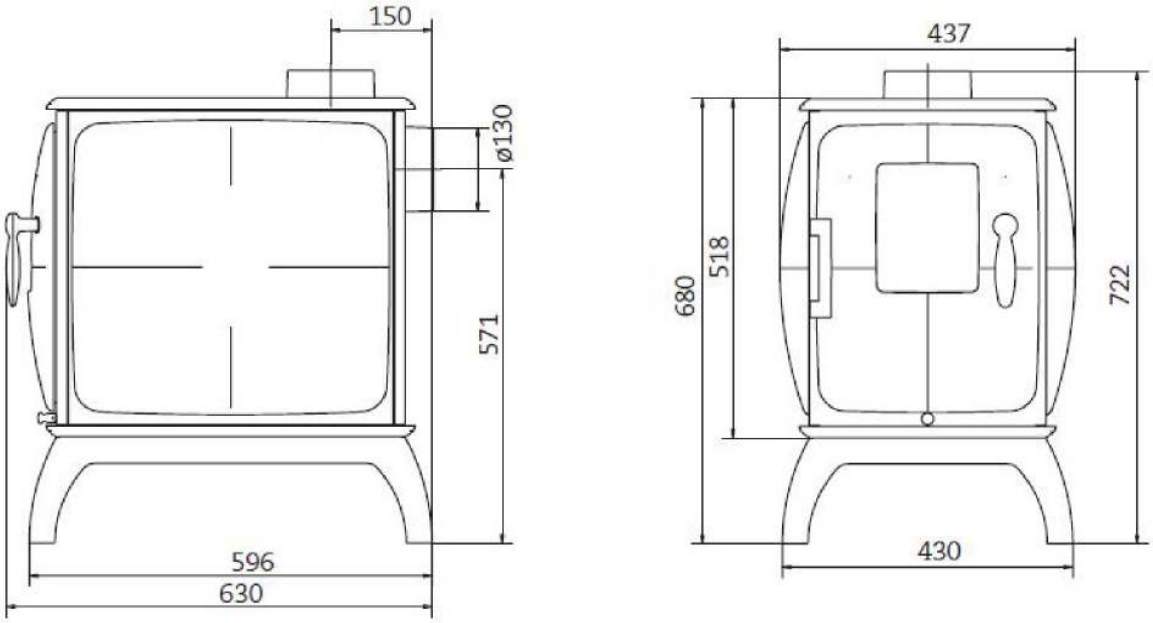
6 IDENTIFICATION PLATE

The identification plate is fixed to the inside of the firing door or the ash door. The identification plate of the Iron Dog 06 can be found on the soot door. Here you will find information about the permissible fuels and the serial number, needed in case of spare part orders. Please copy this serial number in the user manual.

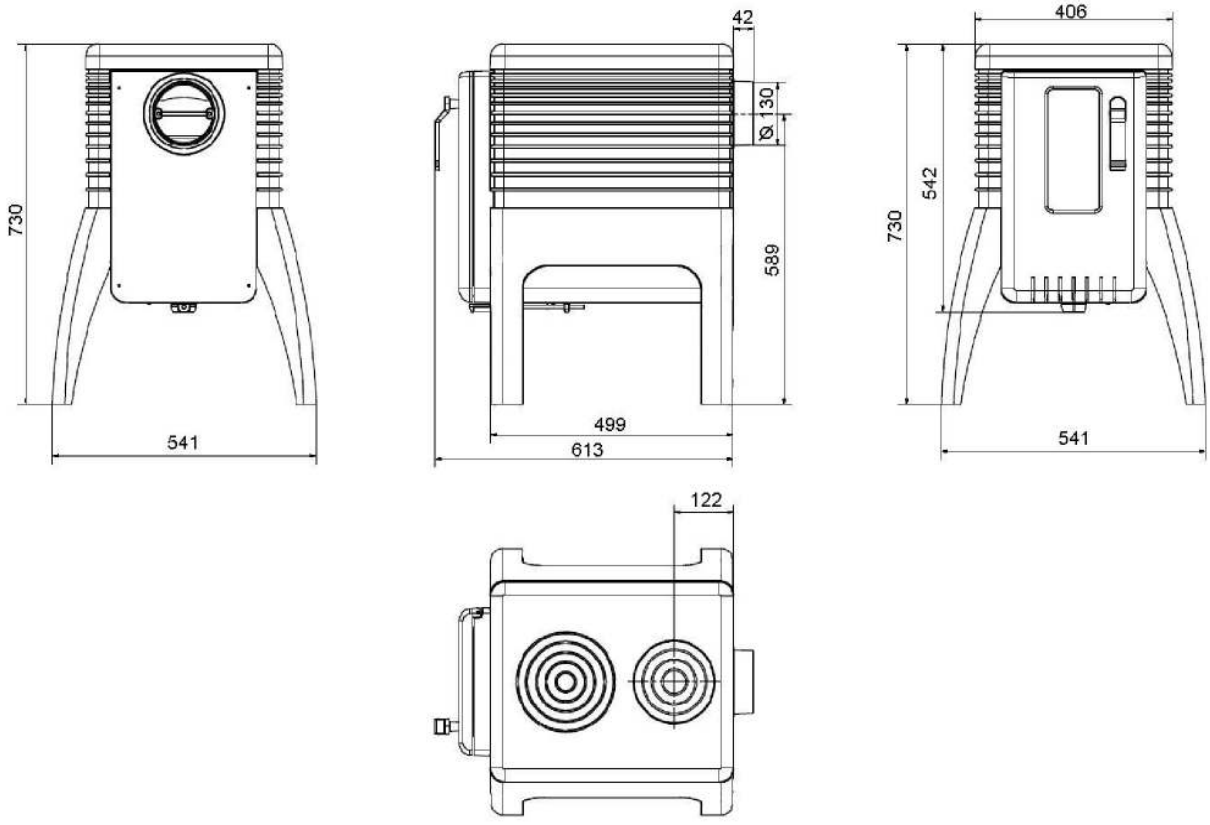
Illustr.1: Identification plate

7 DIMENSION DRAWINGS

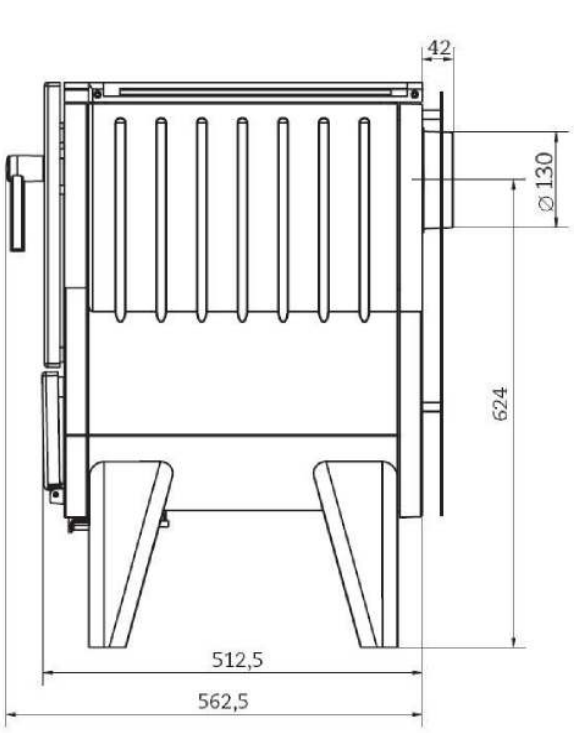
Iron Dog 01

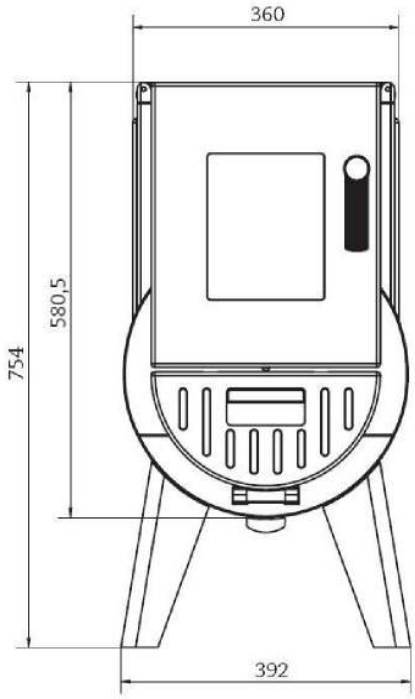


Iron Dog 02

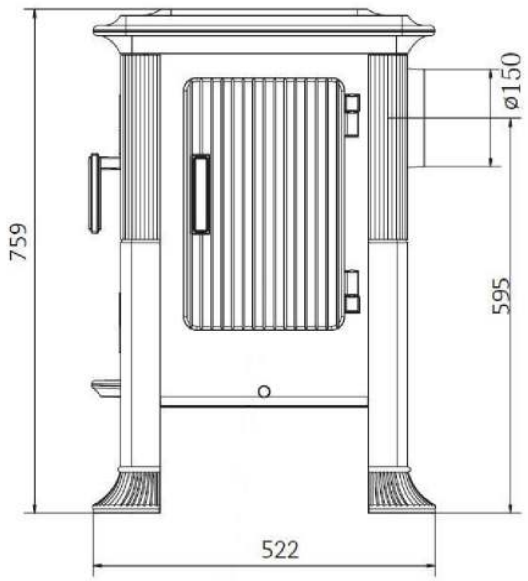


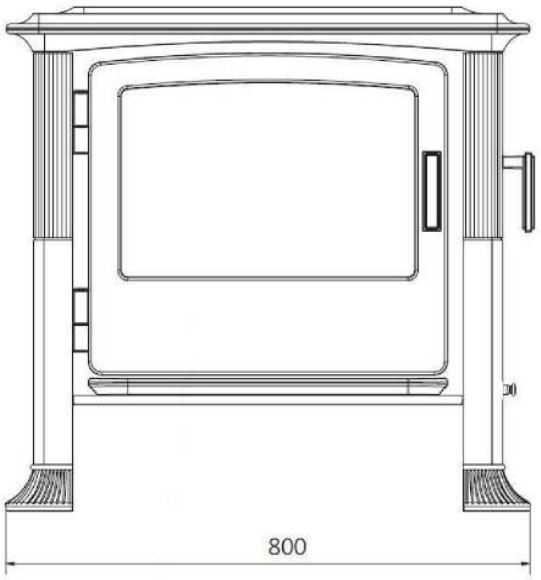
Iron Dog 03



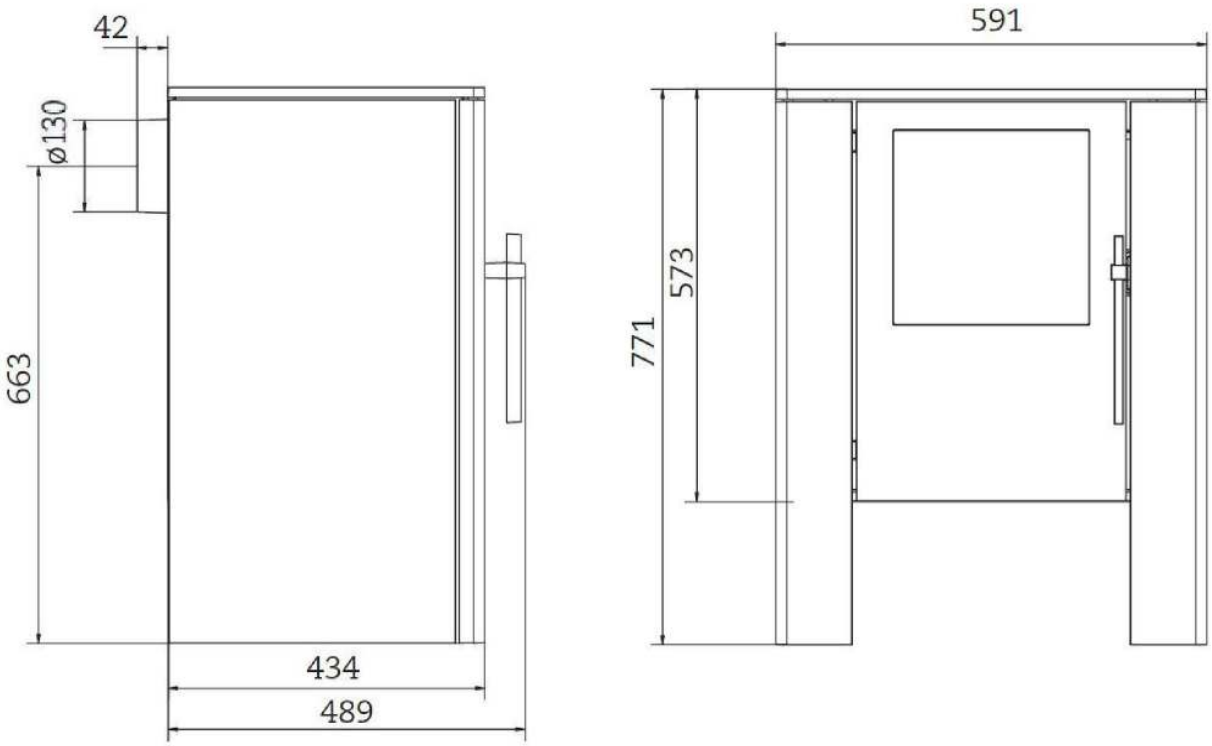


Iron Dog 04

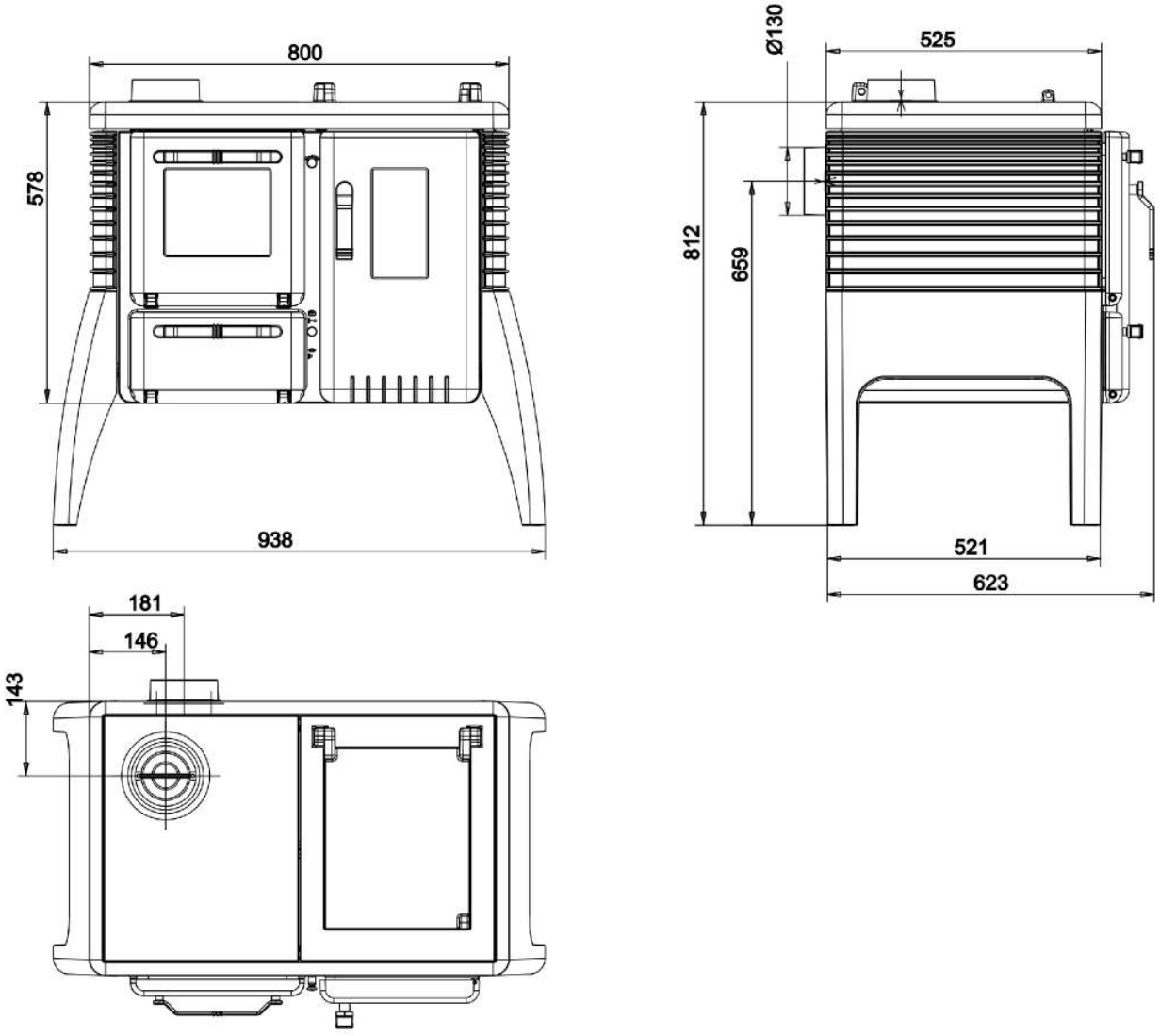




Iron Dog 05



Iron Dog 06



8 REQUIREMENTS TO THE INSTALLATION AREA

Possible locations for an **IRON DOG** are only such rooms, where no danger can occur, if only the instructions for use are being followed and the system is properly used. The state, structure and intended use of the room must be considered when choosing the location.

The installation of the **IRON DOGD**, the chimney connection and the combustion air supply must be arranged in consultation with the stove-fitter.

The **IRON DOG** should not be installed in places where the necessary supply of combustion air is not guaranteed or in places where flammable materials or explosives are stored, manufactured or processed.

The floor area where the device is installed must be large enough and configured in such a way that it allows a proper operation of the stove.

9 INSTALLATION

The stove has to be installed vertically on a load-carrying floor. Any differences in height can be compensated using the M10 screws screwed into the floor frame/foot.

The floor under the **IRON DOG** must exist of an incombustible cover. Materials as glass, steal, ceramic tiles or natural stone can be used. See also the information in the chapter 'Distances'.

The exhaust gas stub of the Iron Dog 01, Iron Dog 02 and Iron Dog 06 can be removed from the rear and placed on the top. Exhaust gas stub and blanking cover are fixed from within the firing chamber with two inside hexagonal bolts each. For modification remove the stove top and exchange the position of the exhaust gas stub and the blanking cover. The baffle plate (not Iron Dog 06) can be removed for a better accessibility.

After modification replace the parts again in their correct position, paying attention to a perfect placing of the stove rope seals.

The stove top of the IRON DOG 03 is protected by two swiveling retaining plates, so that with loading one side of the unfolded stove top plates the device does not turn over. The retaining plates are accessible by the opened firing chamber door.

⚠ Before using the stove, please check whether the stove top is protected

Illustr.2: Lever open

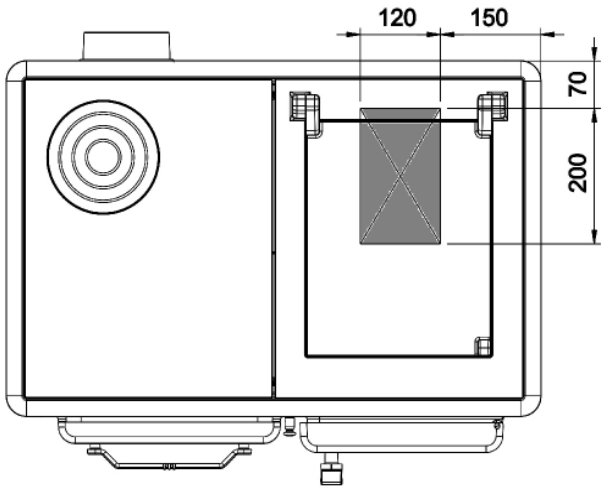
Illustr.3: Closing the lever

Illustr.4: Losening the retaining plate

⚠ The maximally allowable load of the unfolded stove top plates of the Iron Dog 03 is about 10 kg. Point this out to the operator of the Iron Dog 03.

The Iron Dog 06 can also be installed without leveling feet. In this case the Iron Dog 06 should be placed on a base from mineral, non-combustible material.

In this base, the area marked in the illustration must be kept open, in order to guarantee sufficient combustion air supply. The combustion air must be able to flow freely to this area.

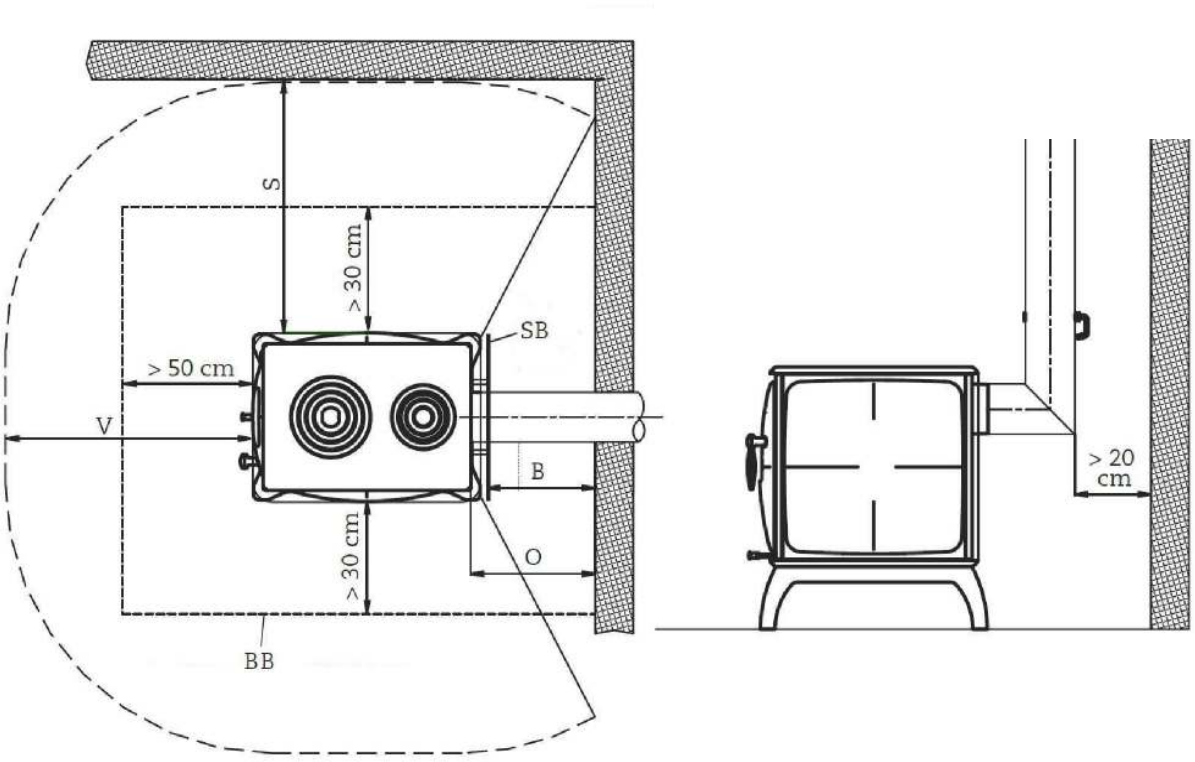


Illustr.5: Combustion air supply

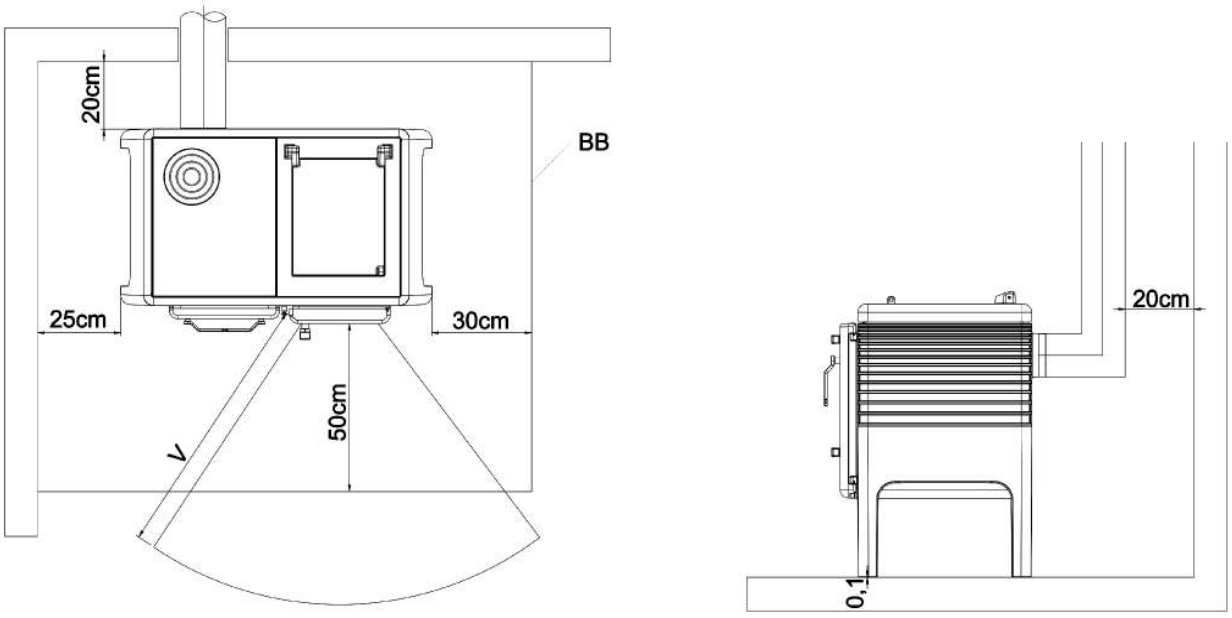
10 DISTANCES

The floor area (BB) under and in front of the Iron Dog must consist of an incombustible cover. Details can be found in the technical data.

The given safety distances guarantee that at adjacent construction parts (wall) no temperatures > 85°C can appear. If necessary keep bigger distances towards delicate objects and furniture. If a radiation shield (SB) is placed at the back wall, the Iron Dog can be placed at a distance “B” from the back wall. If in addition to the radiation shield "SB" also a ventilated double-walled wall protection shield is used, the distance to the wall can be reduced to "W" (not shown in the illustration. Without radiation shield the minimum distance "O" should be kept. The safety distance of the smoke pipe to the ceiling of the building “A” depends on the material used for the ceiling.



Illustr.6: Recommended distances to the Iron Dog 01 - Iron Dog 05



Illustr.7: Recommended distances to the Iron Dog 06

11 COMBUSTION AIR

A heating device may be located only in rooms, where sufficient combustion air supply is guaranteed. Normal operation requires sufficient air supply using a separate **combustion air connection**.

Sufficient combustion air supply is present, when by natural means or using technical equipment a combustion air volume of 12,5 m^3 per 1 kg fuel throughput can stream into a room with wood-burning fireplace over a period of 1 hour at calculated negative pressure below 0,04 mbar (4 Pa) against outside air pressure. This is equivalent to a speculative heating power (PLF) of 8 kW per 1 kg fuel throughput.

Combustion air supply is ensured in rooms with at least one window or one door leading to the exterior that can be opened, or when these rooms are directly connected or interconnected by air with other rooms of such type. Rooms considered as directly connected or interconnected by air, can as such be only parts of one flat or one facility of other kind. Particular attention to combustion air supply is to be paid, when exhaust fans and other heat generators in the same room combination are operated, or when multiple heating devices are connected to one single chimney.

Ventilation systems in this room combination cannot create negative pressure, which could affect the functioning of the fireplace. Exhaust ventilation systems operating in the same room or room combination together with fireplaces, can cause many problems.

When in the same room or additional rooms in connection other fireplaces are in operation, these fireplaces require at least 1,6 m^3 of combustion air per hour for each kW of their total rated heat power. When a room contains only a small volume of air and furthermore, the building is relatively air-tight, a separate combustion air supply leading to the exterior is required.

Ventilation lines or shafts must be tight and accessible for revision and cleaning. Ventilation air grilles cannot narrow the free cross section.

Make sure to avoid the risk of water condensation in combustion air pipe when cold air is aspirated from outside the building!

Remember about noise insulation!

Ventilation lines and their insulation materials must not contain any combustible ingredients (class A1 building materials). For buildings with more than two storeys and when crossing fire protection walls, the construction of these ventilation lines must prevent fire and smoke from penetrating other fire protection zones (their components must have a fire resistance rating of >90 minutes (F90)). See also regional building law.

12 CHIMNEY AND SMOKE PIPE CONNECTION

Chimney and smoke pipe connection design must be in accordance with DIN 18160.1; dimensions must be calculated according to DIN EN 13384. For calculations, please consider that with open doors (when stoking wood) a significantly increased air volume must be led away safely.

Connection of multiple heating devices to one single chimney is permitted for various stove types, when approved by a qualified chimney sweep.

When using a steel smoke pipe as connecting piece between additional heating surfaces and chimney, the pipe wall thickness must be at least 2 mm. The connecting piece must be connected directly to the chimney.

For a safe operation a soot fire resistant chimney T400 is required.

All smoke pipe connections must be sealed tightly! Remember to provide access for cleaning!

13 INITIAL OPERATION

Check the correct position of the fireplace parts. The baffle plate (not Iron Dog 06) must touch the back wall. Up to the first reaching of the maximum operating temperature, the paint keeps hardening. This may cause some smoke and smell nuisances. Therefore it is important to ensure sufficient room ventilation. Open doors and windows. Don't stay in the room longer than necessary.

Please read the user manual!

		Iron dog 01	Iron dog 02	Iron dog 03	Iron dog 04	Iron dog 05	Iron dog 06
Rated heat power	kW	7	7	7	8	7	8
Flue gas mass flow	g/s	7,6	7,6	7,6	8,2	7,4	11
Outlet temperature at exhaust gas stub	°C	353	353	353	322	356	290
Minimum chimney pressure	Pa	12	12	12	13	12	13
Combustion air consumption	m3/h	15	15	15	18	15	18
Heating capacity	m2	50 - 90	50 - 90	50 - 90	60 - 110	50 - 90	60 - 110
Firewood consumption / h	kg	2	2	2	2,2	2	2,5
Quantity of wood	kg	1,5 - 2,5	1,5 - 2,5	1,5 - 2,5	1,5 - 2,5	1,5 - 2,5	2,0 - 3,0
Recommended log lengths	cm	25 - 33	25 - 33	25 - 33	33 - 50	25 - 33	25 - 33
Efficiency	%	81	81	82	82	81	82
Device data							
Dimensions (hxwxd)	cm	68x44x63	73x54x61	76x39x56	76x80x52	77x9x49	81x94x62,5
Window surface (hxw)	mm	195x150	245x105	285x160	285x450	250x260	207x102
Fire chamber opening (hxw)	mm	200x245	205x210	208x195	255x218	265x295	238x267
Grill surface (wxd)	mm	-	-	-	-	-	260x360
Oven (hxwxd)	cm	-	-	-	-	-	27x30x41,5
Smoke pipe connection		Top / Rear	Top / Rear	Rear	Rear	Rear	Top / Rear
Smoke pipe ø	mm	130	130	130	150	130	130
Fire chamber depth	cm	40	40	38	60	40	45
Weight	kg	130	150	135	240	200	310
Minimal distance							
to the side wall "S"	cm	80	80	80	60	80	25
to the back wall (without radiation shield) "O"	cm	40	40	40	-	40	20
to rear (with stove radiation shield) "B"	cm	30	30	30	30	30	-
to rear (with stove radiation shield and wall protection shield) "W"	cm	10	10	10	10	10	-
Tested according to		EN13240	EN13240	EN13240	EN13240	EN13240	EN12815

The data are acquired during a EN 13240-test – room heater with horizontal smoke pipe connection, pipe length 35 cm

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SUPPLEMENTARY INSTALLATION INSTRUCTIONS FOR THE UK MARKET TO BE READ IN CONJUNCTION WITH THOSE IN THE INSTRUCTION BOOKLET

READ THE INSTRUCTION BOOKLET AND THESE SUPPLEMENTARY INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

These instructions together with those in the instruction booklet cover the basic principles to ensure the satisfactory installation of the stove, although detail may need slight modification to suit particular local site conditions.

In all cases the installation must comply with current Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the stove.

It should be noted that the Building Regulations requirements may be met by adopting the relevant recommendations given in British Standards BS 8303, BS EN 15287-1:2007 as an alternative means to achieve an equivalent level of performance to that obtained following the guidance given in Approved Document J.

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.

CO Alarms:-

Building regulations require that when ever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions. Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

HEALTH AND SAFETY PRECAUTIONS

Special care must be taken when installing the stove such that the requirements of the Health and Safety at Work Act are met.

Handling

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. In case of contact 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.

STOVE PERFORMANCE

In the UK the stove has been approved by HETAS Ltd as an intermittent operating appliance for burning wood logs only.

PREPARATORY WORK AND SAFETY CHECKS

IMPORTANT WARNING

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.

Chimney

For the stove to perform satisfactorily the chimney height must be sufficient to ensure an adequate draught of approximately 15 Pa so as to clear the products of combustion and prevent smoke problems into the room.

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 EN 13384-1 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 4543 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.

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 a draught stabiliser should be fitted. Fitting of a draught stabiliser will affect the requirement for the permanent air supply into the room in which the stove is fitted in accordance with Approved Document J (see also combustion air supply).

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe where it is not intended for the chimney to be swept through the appliance, also to permit visual checks on the integrity of the flue when the appliance is serviced.

Hearth

The hearth should be able to accommodate the weight of the stove and its chimney if the chimney is not independently supported. The weight of the stove is indicated in the brochure.

The stove should always be installed on a non-combustible hearth of a size and construction that is in accordance with the provisions of the current Building Regulations Approved Document J.

The clearance distances to combustible material beneath, surrounding or upon the hearth and walls adjacent to the hearth should comply with the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

If the stove is to be installed on a combustible floor surface, it must be covered with a non-combustible material at least 12mm thick, in accordance with Building Regulations Approved Document J, to a distance of 30 cm in front of the stove and 15 cm to each side measuring from the door of the combustion chamber

Combustion air supply

In order for the stove to perform efficiently and safely there should be an adequate air supply into the room in which the stove is installed to provide combustion air. This is particularly necessary if the room is double-glazed or a flue draught stabiliser is operating in the same room as the appliance. It may be necessary to increase the air vent size in property with low air permeability ($\leq$ 5.0 m^3 /($h.m^2$).
The provision of air supply to the stove must be in accordance with current Building Regulations Approved Document

J. An opening window is not appropriate for this purpose.
IMPORTANT NOTE: If applicable and the appliance is being fitted within an existing fireplace recess, specialist advice should be sought before fitting any permanent ventilation within this area.

Connection to chimney
Stoves may have a choice of either a rear or top flue gas connector that allows connection to either a masonry chimney or a prefabricated factory made insulated metal chimney in accordance with their instructions. In some cases it may be necessary to fit an adaptor to increase the diameter of the flue to the minimum required 150 mm section of the chimney or liner.

Electrical Services
The installation of any electrical services during the installation of this appliance must be carried out by a registered competent electrician and in accordance with the requirements of the latest issue of BS 7671

Carbon Monoxide Alarm
A carbon monoxide alarm complying with BS EN 50292 must be fitted in the same room as the appliance. It should be positioned on the ceiling at least 300mm from any wall or, if it is located on a wall, as high up as possible (above any doors and windows) but not within 150mm of the ceiling. The alarm should also be between 1m and 3m horizontally from the appliance.

Commissioning and handover
Ensure loose parts are fitted in accordance with the instructions given in the instruction booklet.

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, when a small fire may be lit and checked to ensure the smoke and fumes are taken from the stove up the chimney and emitted safely to atmosphere. Do not run at full output for at least 24 hours.

On completion of the installation and commissioning ensure that the operating instructions for the stove are left with the customer. Ensure to advise the customer on the correct use of the appliance with the fuels likely to be used on the stove and warn them to use only the recommended fuels for the stove.

Advise the user what to do should smoke or fumes be emitted from the stove. The customer should be warned to use a fireguard to BS 8423:2002 in the presence of children, aged and/or infirm persons.

SUPPLEMENTARY OPERATING INSTRUCTIONS FOR THE UK MARKET TO BE READ IN CONJUNCTION WITH THOSE IN THE INSTRUCTION BOOKLET

READ THE INSTRUCTION BOOKLET AND THESE INSTRUCTIONS CAREFULLY BEFORE USING THE STOVE

WARNING NOTE

Properly installed, operated and maintained this stove 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. In the event of fume emission from the appliance, then the following immediate action should be taken: -

(a) Open doors and windows to ventilate room and then leave the premises
(b) Let the fire go out
(c) When safe to do so, 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.

The most common cause of fume emission is flueway or chimney blockage. For your own safety these must be kept clean at all times.

IMPORTANT NOTES

General
Before lighting the stove check with the installer that the installation work and commissioning checks described in the installation instructions have been carried out correctly and that the chimney has been swept clean, is sound and free from any obstructions. As part of the stoves' commissioning and handover the installer should have shown you how to

operate the stove correctly.

CO Alarm

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under “Warning Note” above.

Use of fireguard

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).

If the fire is left unattended a spark guard to BS 3248, specification for spark guards for use with solid fuel appliances should be used.

Chimney cleaning

The chimney should be swept at least twice a year. It is important that the flue connection and chimney are swept prior to lighting up after a prolonged shutdown period.

If the stove is fitted in place of an open fire then the chimney will require sweeping after a month of continuous operation. This is a precaution to ensure that any “softer” deposits left from the open fire usage have not been loosened by the higher flue temperatures generated by the closed stove.

In situations where it is not possible to sweep through the stove the installer will have provided alternative means, such as a soot door. After sweeping the chimney the stove flue outlet and the flue pipe connecting the stove to the chimney must be cleaned with a flue brush.

The Clean Air Act 1993 and Smoke Control Areas

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise smokeless fuels or exempt appliances for use in smoke control areas in England. In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been "authorised" in Regulations and that appliances used to burn solid fuel in those areas (other than "authorised" fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations.

Further information on requirements of the Clean Air Act can be found at: http://smokecontrol.defra.gov.uk/
Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements.

Fuel overloading:
The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke.

Operation with door left open:
Operation with the door open can cause excess smoke. The appliance must not be operated with the appliance door left open except as directed in the instructions.

Dampers left open:
Operation with the air controls or dampers open can cause excess smoke. The appliance must not be operated with air controls or dampers left open except as directed in the instructions.

Periods of Prolonged 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.

Extractor fan
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.

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

Use of operating tools
Always use the operating tools provided when handling parts likely to be hot when the stove is in use.

Chimney Fires
If the chimney is thoroughly and regularly swept, chimney fires should not occur. However, if a chimney fire does occur turn off the stove immediately and isolate the mains electricity supply (if applicable), and tightly close the doors of the stove. This should cause the chimney fire to go out. If the chimney fire does not go out when the above action is taken then the fire brigade should be called immediately. Do not relight the stove until the chimney and flueways have been cleaned and examined by a professional.

Permanent air vent
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.

USER OPERATING INSTRUCTIONS - WOOD

Please read the important notices given above before referring to the main instruction book for detailed operating instructions.

HETAS Ltd Approval
HETAS approval may be limited to specific fuel types as detailed in the main instruction manuals. Approval does not cover the use of other fuels either alone or mixed with the recommended fuel, nor does it cover instructions for the use of other fuels.

Recommended fuels
Stoves may be designed to burn dry seasoned wood logs and/or solid mineral fuel as indicated in the main stove manuals.

Door operation
The door handle may become hot during operation, use the tool to open and close the doors, if appropriate.

Lighting of fire
Place some firelighters or paper and dry kindling wood on the grate and cover with a small amount of fuel. Set air controls to maximum and set light to firelighters or paper. Close the doors and allow fire to burn until fuel is well alight then load with more fuel and adjust air controls to the required level of heat output.

Before relighting the fire clean the firebed of ash and clinker and empty the ashpan.

Refuelling
Keep the firebox well filled (the fuel may be sloped up from the front firebars), but do not allow fuel to spill over the top of the front fire bars. Take care that fuel does not project over the front fire bars or damage to the glass may be caused when the doors are closed

Flueway cleaning
It is important that the baffle plate and all the stove flueways are kept clean. When burning smokeless fuels they should be cleaned at least monthly. When burning other fuels they should be cleaned at least once a week, and more frequently if necessary.
Remove any sooty deposits from the baffle plate until they fall off into the fire.
More soot will be deposited on the baffle plate and in the flueways if the stove is run at low levels for long periods. If this is the case then more frequent cleaning will be necessary.

Cleaning and maintenance
The instructions detailed in the section “Maintenance” in the instruction booklet should be followed.

Spare Parts
Spare parts can be obtained from Robeys Limited 01773 820 940

Trouble shooting
The instructions detailed in the relevant section in the instruction booklet should be followed together with the following additional items:

1. **Fire Will Not Burn**
   Check that:
   a) the air inlet is not obstructed in any way,
   b) that chimneys and flueways are clear,
   c) that a suitable fuel is being used,
   d) that there is an adequate air supply into the room,
   e) that an extractor fan is not fitted in the same room as the **fire.**

2. **Fire Blazing Out Of Control**
   Check that:
   a) the doors are tightly closed,
   b) the air control is turned down to the minimum setting,
   c) the air inlet damper is closed and that it is not prevented from closing completely by a piece of ash,
   d) a suitable fuel is being used,
   e) the door seals are in good condition.

IRON DOG 03

User manuel

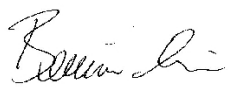
Iron Dogs

are cast Iron stoves made in Germany, manufactured by a family business in the 3rd generation, specializing in making fireplaces. In this series all their knowledge and craftsmanship come together in an exceptional stove of an exceptional quality. Therefore also the exceptional name »IRON DOG« for exceptional people or as a gift to friends.

Winter can come; we’re looking forward to it.

Welcome to the IRON DOG family.

Eggenfelden, August 2007



Ulrich Brunner

The name >>EISERNER HUND<< - >>IRON DOG<< - is a registered and protected mark. Individual models are registered as design patents.

IRON DOG

Please read the entire User Guide before lighting the fire for the first time. In particular, please note the safety precautions in this manual. The User Guide, as well as national or EU standards and local regulations must be observed. Your specialized enterprise and **IRON DOG** partner can give you the most current information and details.

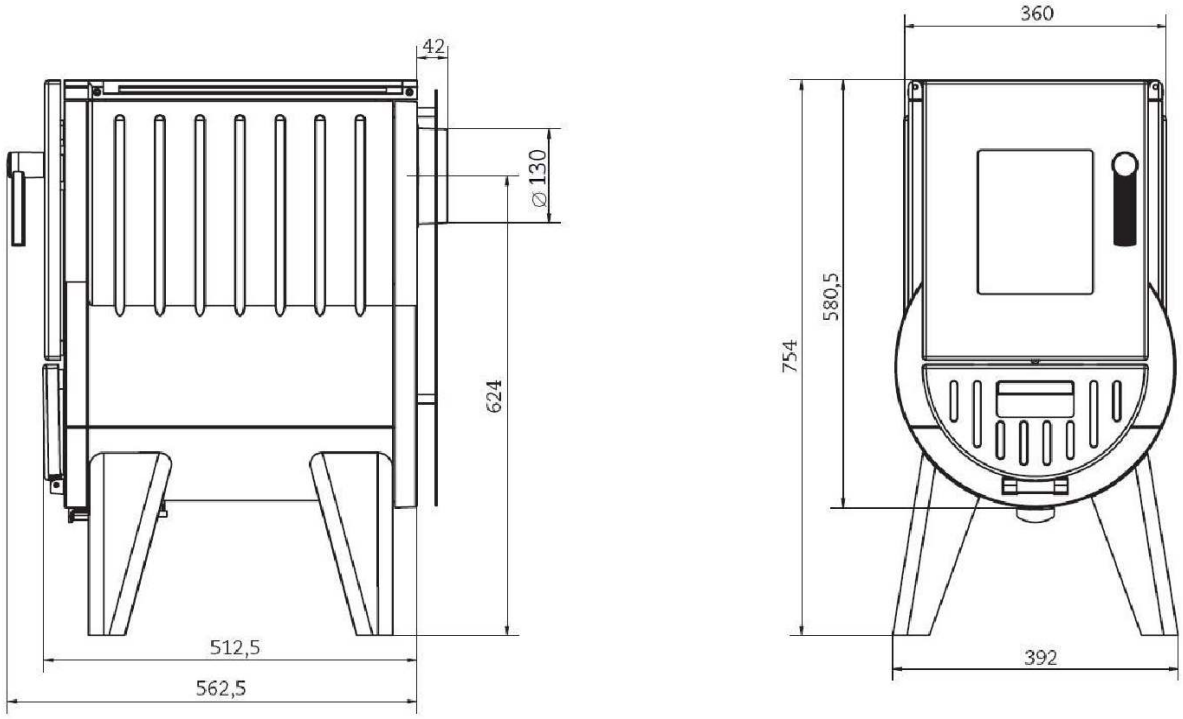
Please keep the User Guide for future reference!

2 MY IRON DOG

An **EISERNER HUND** is a special cast iron stove. It's a friend for life. Its life expectancy is about generations and it will do good services to its owners – therefore treat it well.

Nearly all components of the **IRON DOG** are made of solid cast iron. Ash boxes, screws and bolts are made of stainless steel. A special, temperature-firm color coating protects the surface. All components of this cast iron stove are manufactured and assembled in Germany with great care

3 TECHNICAL DATA



Illustr.1: measurements

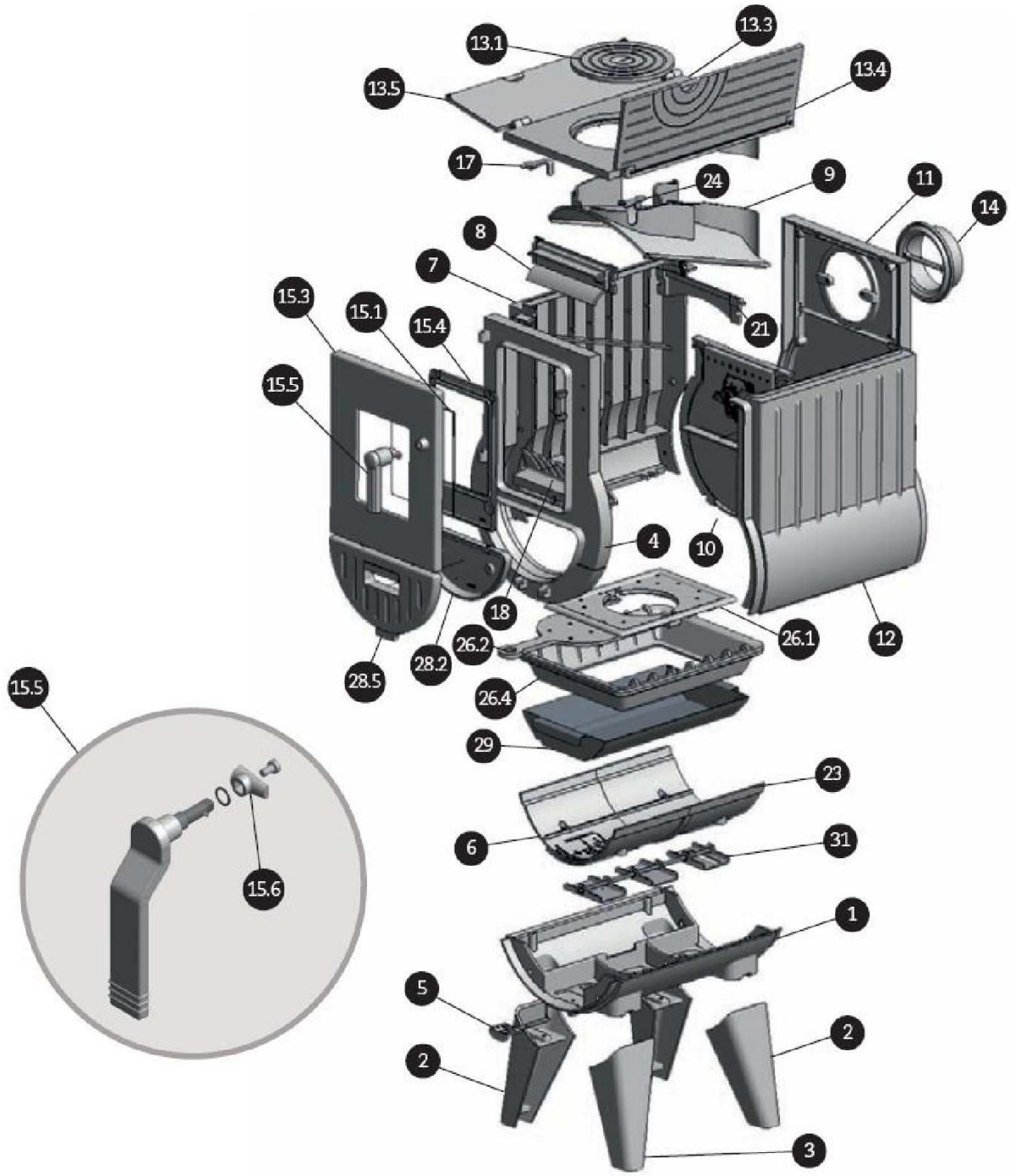
1 Ash pan

2 Air control push rod

3 Fire chamber

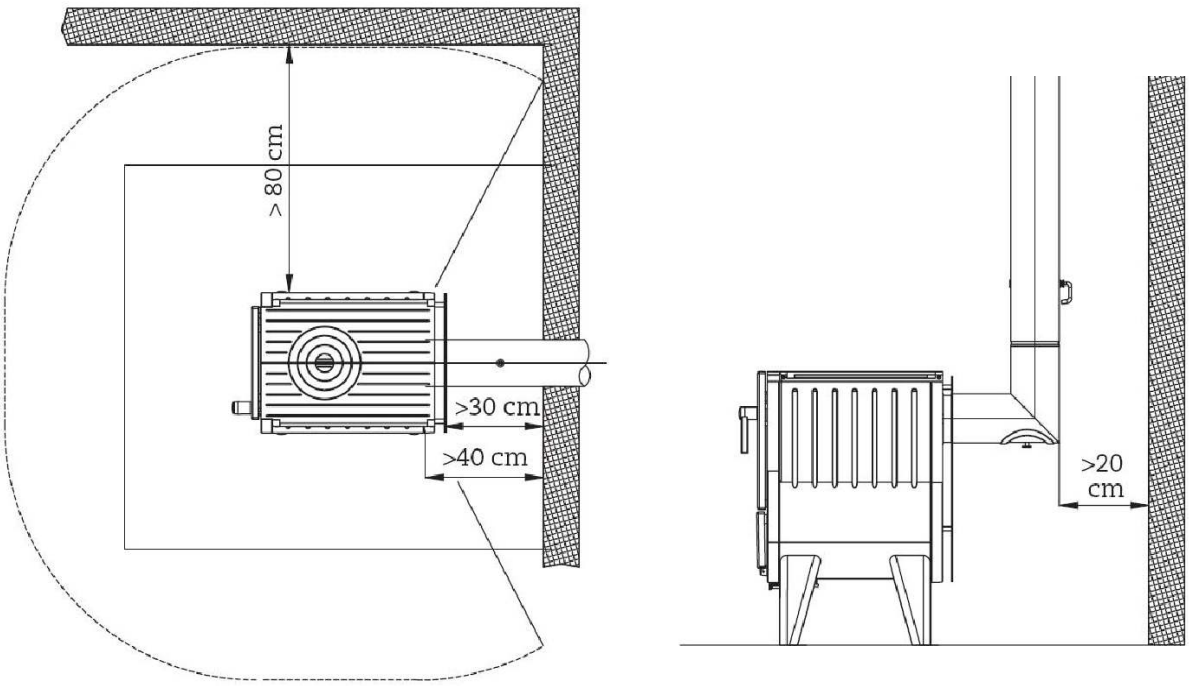
4 Hot plate

5 Fold hot plate parts



Illustr.2: components

1	Flor plate	2	Leg 1
3	Leg 2	4	Front
5	Air control rod	6	Air channel cover
7	Side wall left	8	Air diffuser plate
9	Bafle plate	10	Rear wall combustion chamber
11	Back wall	12	Side wall right
13	Hot plate assembly	13.1	Hot plate cover
13.3	Hot plate	13.4	Hot plate right
13.5	Top hot plate left	14	Exhaust gas stub
15	Firing door assembly	15.1	Firing door window
15.3	Firing door	15.4	Window frame firing door
15.5	Door handle assembly	15.6	Closing tonge
17	Hot plate holder left	18	Feeder
21	Cross web	23	Back air channel cover
24	Hot plate holder right	26	Bottom grate assembly wood
26.1	Bottom grate wood	26.2	Bottom grate
26.4	Bottom grate	28	Ash door assembly
28.2	Inner plate ash door	28.5	Ash door
29	Ash pan	30	Insulation panel



Illustr.3: minimum distance

values[1)]		
nominal heat output	kW	7
flue gas stream	g/s	7,6
flue gas temperature (at port)	°C	353
necessary draft	Pa	12
consumption/ h	kg	2
space heating capacity	m3	50 - 90
degree of efficiency	%	80,6
combustion air consumption	m3/h	15
appliance data		
dimension (h x b x t)	mm	760 x 390 x 560
glass pane surface (h x b)	mm	195 x 160
combustion chamber opening (h x b)	mm	208 x 195
flue diameter space heating capacity		rear wall
flue diameter	mm	130
permitted fuel quantity	kg	1,5 - 2,5
combustion chamber depth	cm	38
recommended log length	cm	25 - 33
cast iron weight	kg	135
required minimum clearances		
to the side wall	cm	80
to the rear wall (with insulation panel)	cm	30
to the rear wall (without insulation panel)	cm	40
approvals		
		CE nach EN 13240

[1)] The data was determined in an EN 13240 test with a chimney stove with a horizontal smoke tube connection, tube length 35 cm.

4 SAFETY GUIDELINES

Radiation range

Do not bring inflammable materials within an 80 cm radiation range of the **IRON DOG**! Fire risk! Don't put inflammable objects on the stove top, under the cast iron stove or in between the rear of the stove and the wall behind.

First starting-up

Up to the first reaching of the maximum operating temperature the protective paint hardens out. This can give some smelling nuisances. Provide therefore for sufficient ventilation of the installation area. Open doors and windows. Don't stay unnecessarily in the concerned area. Never use products as gasoline, white spirits or the like to start a fire!

Burning risk

The external surfaces of the **IRON DOG** become hot, especially the window of the fire door.

Don't touch – Burning risk!

Particularly warn children for this. Keep children away from the heated **IRON DOG**.

Use safety gloves during operation.

Ashes

Empty the ash pan only when the ashes are cold and keep them during at least 24 h in a fire resistant container. Fire risk by remaining glow! In case of fire, call the fire-brigade!

Chimney fire

In case of a chimney fire, remove all inflammable objects from the chimney. Beware of flying sparks. Call the fire-brigade!

Fire door

The fire door of the **IRON DOG** may only be opened for bringing in wood or for cleaning. During use with open fire door, the stove is too heavily charged, smoke or fire can come out and glowing particles can be ejected. There is the danger of a flue gas poisoning. The fire chamber of the **IRON DOG** is also to be kept closed when the stove is not heated.

5 BASIC PRINCIPLES

Cast iron stoves of the **IRON DOG** series function according to the principal of ‘burning from above’ and are heated with the intermittent burning method. The wood load degases with beautiful flames in approximately 60 - 70 minutes and produces a heating output between 5 - 9 kW/h depending on the quantity of wood (1,5 kg - 2,5 kg).

Cast iron stoves of the **IRON DOG** series are tested according to EN 13240 / EN 12815 and can be used with a closed fire door. Connecting more than one stove to a chimney is possible if the chimney is suited for this (ask the chimney sweep).

Air supply to the setting up area

The **IRON DOG** can only function properly when combustion air supply at the setting up area is sufficient. Before heating up make sure there is a sufficient supply of fresh air. In the building existing mechanisms for combustion air supply should not be changed.

Fuel

Use only suitable burning wood in the indicated quantities and qualities. Too small amounts of burning wood lead to insufficient combustion quality. Too large amounts of burning wood lead to overheating and damage to the equipment. Fire risk!

Heat output

The cast iron stoves of the **IRON DOG** series are designed to be used with the intermittent wood burning method; the heat output is determined by the quantity of wood used and by the distances in time between the firing operations. The right time to put on more wood has come when the wood has nearly been burned down to glow.

Combustion air regulation

For a simple operation the air income is regulated with one single air control rod. Please heat with the given combustion air regulations. Insufficient combustion air leads to an increased environmental impact, bad efficiency and creosote in the stove and the chimney.

Heating operation

We recommend using safety gloves during operation, since the operating elements become hot. Open the door slowly – this way no turbulences develop, which let flue gases esca.

Flue exhaust/heating during transitional periods

The **IRON DOG** needs sufficient chimney draught for drawing in the combustion air and exhausting the flue gases. It diminishes with rising outside temperatures and this can lead to problems to start a fire. When outside temperatures are over 15°C, please check the chimney draught. (for example open the door and keep a burning fire lighter at the entry of the flame channel – flame and flue gases must visibly take off). In case of too little draught first light kindling and add burning wood when the draught has been created.

6 FIREWOOD AND HEATING POWER

The combustion process in our devices has been optimized to enhance their performance and reduce emissions. You can support our efforts to protect our environment by respecting the following recommendations for low-emission heating: Use only dry, natural firewood with a water content below 20% or wood briquettes according to DIN 51 731, size class HP2.

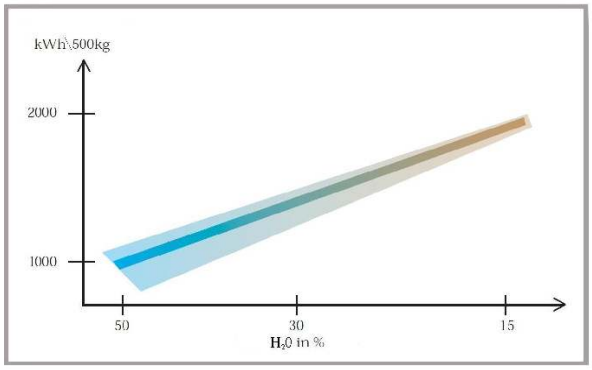
Damp, freshly cut or improperly stored wood has a high water content, therefore does not want to burn, makes a lot of smoke and gives not much of heat. Use only firewood stored for at least two years in a dry place with sufficient air circulation. Because dry wood is much more calorific, you can save on fuel costs.

For example: Dry wood has a calorific value of approx. 4 kWh/kg, freshly cut wood only 2 kWh/kg. You will need twice the amount of wood to achieve the same heating power.

	Water content g/ kg wood	Calorific value kWh/kg	Consumption raised by %
very dry	100	4,5	0
stored for 2 years	200	4	15
stored for 1 year	350	3	71
freshly cut wood	500	2,1	153

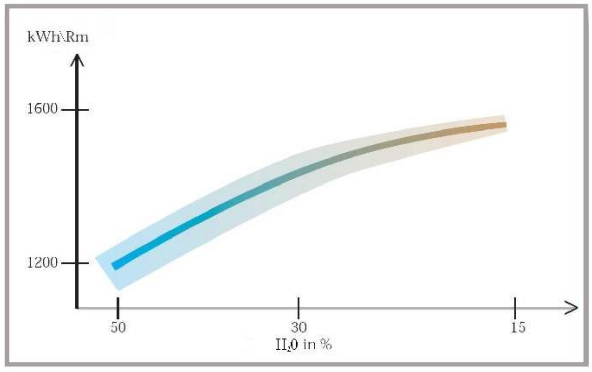
Natural firewood (picture left) is the best fuel for fireplaces, but you can also use wood briquettes complying to DIN 51 731, size HP2 (picture right).

How much thermal energy you will get, if you buy wood by weight?



500 kg freshly cut wood	Water content 50%	500 kg x 2.0 kWh/kg = 1000 kWh
500 kg dried wood	Water content 30%	500 kg x 3.3 kWh/kg = 1650 kWh
500 kg dry wood	Water content 15%	500 kg x 4.1 kWh/kg = 2050 kWh

How much thermal energy you will get, if you buy wood by volume (1 cubic meter = 1 m3)?



1 m3 freshly cut wood	Water content 50%	1286 kWh
1 m3 dried wood	Water content 30%	1518 kWh
1 m3 dry wood	Water content 15%	1550 kWh

Most suitable for use in open fireplaces are all types of hardwood, like beech or birch. Softwood species (conifers) have a closed-cell structure, which is bursting during combustion, causing glowing embers to be thrown out of the fireplace. Hardwood is burning more calm and evenly.

You can control the heat radiation intensity by volume of wood and the intervals for stoking up.

Adjusting the heat by reducing the volume of combustion air is wrong! If there is not enough combustion air available, the energy contained in firewood cannot be completely released. At the same time, the emissions are rising due to unburned particles.

Too much of firewood or inappropriate fuel types can cause overheating and damage.

No kind of waste shall be burned in a fireplace!

Waste on fire = Toxins in your garden!

Never use combustible fluids, like petrol or alcohol as aids for lighting fire!

Mind the waste incineration ban!

Remember to use only the recommended fuels described in this User Guide. Improper, not recommended fuels cannot be burned in a fireplace.

7 SEASONING OF FIREWOOD

After cutting the trees, the wood should be seasoned in an open and dry place and protected from rain and snow.

The best time to cut trees is from December till February.

Firewood should be stored under a roof or in a ventilated building (shed). Do not store freshly cut wood in the cellar or in a closed area. It can't dry there.

Our best 3 tips

for heating with wood to become an experience.

1) dry wood

2) dry wood

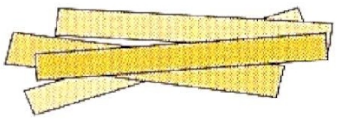
3) dry wood

8 AMOUNT OF FUEL

Heat output regulation by combustion air reduction is wrong!

By lack of combustion air the calorific capacity of the fuel can't be set free completely. At the same time the emissions increase over the unburned portions.

To large amounts of fuel or unsuitable fuel can lead to excessive heating and thus to damage.

Filling weight	Log lenght	Log size
1,5 kg - 2,5 kg	25 cm - 33 cm	20 cm - 30 cm
		

9 OPERATION

The combustion air is threefold:

Primary air (1), secondary air (2), tertiary air (3). Each of these air flows is led across its own inlet and internal distribution channels to its respective place of task. Regulation is done with the air control push rod (4).

The primary air (1) has as task to steer the degassing speed.

The secondary air (2) is necessary additional and preheated air that comes directly on the fuel from above. It also keeps the window clean.

The tertiary air (3) is led directly in the hot gas zone and brings in the oxygen, necessary for a perfect combustion of the gases.

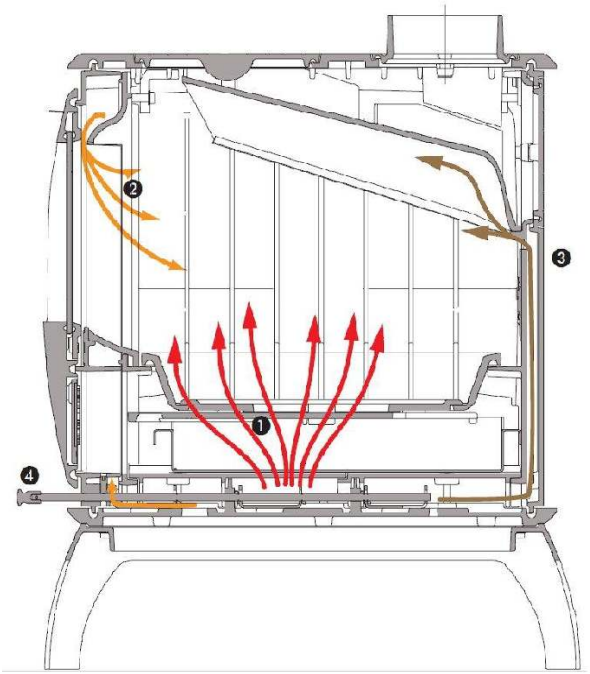


Image4: Air flow control

The air control push rod (4) can be put in three different positions. This way the respective air circulations are adapted to the combustion situation.

start-up output	nominal heat	closed
		
Combustion air completely open for a fast start-up	Full heating combustion	Air completely closed

The hot plates are designed for a max. load of 10 kg.

For larger loads or abrupt opening risk of breakage!

10 HEATING WITH THE IRON DOG

- Control whether the ash pan must be emptied. Minimum distance between ash layer and bottom grate should be 3 cm.
- Bring the push rod in its **"Start-up"** position. The combustion air can flow strongly on the wood in order to reach fast high heating temperatures.

- Pile wood logs loosely on the bottom grate. Put a fire lighter between the logs and light it on. To start the fire, use small wood; large wood logs degas and ignite badly in a cold fireplace.

Never use products as gasoline, white spirits or the like to start a fire!

- Close the fire door and observe the flame development during the first minutes. If the fire goes out, open the door slowly and put a new fire lighter between the wood logs and light it on. Check the chimney draught.
- After approximately 10 minutes, bring the push rod in its **"nominal heat output"** position.
- When the wood has burned down (glow phase) new wood can be added. Bring the push rod in its **"Start-up"** position for about 5 minutes. Then bring it back in its **"nominal heat output"** position.
- If no more wood has to be added, bring the push rod in its **"closed"**position at the end of the combustion, this is when no flames are to be seen any more.

ATTENTION: Never put the air control push rod in the **"closed"** position during the starting up phase or during the nominal heat output phase (lack of air). In case of a sudden oxygen admission (for example when one opens the fire door) gases present in the fire chamber can react with the incoming oxygen (deflagration).

The Iron Dog draws its combustion air from the installation area. Consider the combustion air need in case of simultaneous use of other fire places in the room.

11 ASHES

When burning dry wood and with correct steering of the combustion air, only light and fine ashes remain as a residue.

The ash pan must be emptied regularly.

Ashes in the fire chamber should not rise over the bottom grate frame.

The ashes can easily be pushed into the ash pan beneath. Pull the slide valve and push the ashes downward. The ash pan can be taken out with open fire door.

Empty the ash pan only when the ashes are cold and keep them during at least 24 h in a fire resistant container. Fire risk! In case of fire, call the fire-brigade!

12 CLEANING AND MAINTENANCE

At least once a year at the beginning of a new heating season, should be checked whether in the smoke pipe and on the baffle plate fly ash has settled. Remove the stove top cover or the entire stove top and remove eventual fly ash with an ash cleaner. In order to have a better access to the smoke channels, the baffle plate can be taken out or pushed toward the firing door.

Examine the chimney after longer rest breaks for obstructions.

Some soot on the window can be removed in warm condition with a dry tissue paper. To clean a more polluted window use a wet paper towel, dab it in the ashes and remove deposits on the glass.

Subsequently wipe with a dry cleansing tissue. Do not use scrubbing tools or aggressive cleaning agents!

The **Iron Dog** should be examined by your specialized enterprise regularly.

13 HINT

In order to guarantee a secure functioning of the **IRON DOG**, only original spare parts of the manufacturer may be used. Changes in the equipment may be accomplished exclusively through by the manufacturer authorized persons. The **IRON DOG** should be examined by your specialized enterprise regularly.

Non conform use of the equipment leads to expiring of the guarantee! The intended use of the equipment is guaranteed when the guidelines of the User Guide are observed.

14 ERROR SEARCH

Error search

Possible cause	Background	Solution
Draught not available or not sufficient.	Outside temperature higher than indoor temperature, or the chimney cover on the roof is heated by the sun	Control chimney draught Warming-up fire in the chimney Wait until outside temperature is below indoor temperature
Fuel unsuited	Wood logs are to big Wood is damp or wet	Use dry and smaller wood
Combustion air not sufficient	Without sufficient combustion air supply bad igniting and flow	Control push rod position (Start-up position) Control combustion air supply to the installation area Open fire door a little for a short time
	Minimum distance between ash layer in the ash pan and bottom grate too small	Empty the ash pan

Fire burns weakly, much smoke, window becomes black

Possible cause	Background	Solution
Fuel unsuited	Wood logs are to big Wood is damp or wet Fire chamber temperature too low	Only dry wood gives high ignition temperature with desired heat emission.
Combustion air not sufficient	Without sufficient combustion air supply bad igniting and flow.	Control the position of the push rod

Possible cause	Background	Solution
KaminzugDraught not available or not sufficient nicht vorhanden oder nicht ausreichend	Weather or the situation of the chimney influences the necessary exhaust of the gases.	Check the chimney draught in general In case of important disturbance, change the chimney or install an exhaust gas extractor
	Creosote in or damage to the chimney reduces the necessary draught.	Clean the chimney and the connection pipes and examine them for tightness and damage.
	Check whether other stoves or fireplaces are connected to the chimney.	The chimney draught can be worsened by other connected fireplaces.

15 GUARANTEE

The **IRON DOG** you acquired is a particularly high-quality cast iron stove made in Germany. Our goal is to manufacture outstanding fireplaces which technically and qualitatively probably belong to the best ones.

This requirement is reflected in our guarantee. For all **IRON DOG** cast iron stoves we give a ten year guarantee on all cast iron parts and their processing.

The guarantee begins on the purchase date and is to be proven by presenting the invoice and the guarantee certificate.

Within this period we grant free material replacement of cast iron and steel parts, which are substantially impaired or unusable in consequence of a manufacturing or a material failure.

On heat shields, bottom grate, baffle plate, windows and moveable parts we grant free material replacement for a period of 5 years in case they are substantially impaired or unusable in consequence of a manufacturing or a material failure.

Color coatings, enamel surfaces and seals are excluded from the guarantee.

In all cases of damage the guaranty claim exists only when the equipment has been used for the intended goal and according to the indicated heat output; damage in consequence of overheating, violent impacts or normal wear and tear (for example traces of usage on stove tops, grill or oven) do not give right on guarantee.

The guarantee period ends for the respective part after 5 or 10, without prejudice to whether a guarantee claim has been made or not. The replacement of a part does not extend the guarantee period and does not give right on a new guarantee period. Additional costs concerning installation or removal of parts are not covered by the guarantee.

Legal and contractual requirements from the contract with your specialized enterprise are not affected by this explanation.

In the case of guaranty please contact your specialist dealer.

16 ATTENTION

We recommend that the **IRON DOG** should be installed and connected by a specialized enterprise, since security and proper functioning of the stove depend on an installation according to the rules. Actual standards and regulations must be observed.

IRON DOG - Partner:

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