ARDENNES

Wood stove

NF EN 13240

Model: 134 13 15

Output: 11 kW



Description of the appliance Installation instructions Operating instructions Spare parts Warranty certificate

Document n° 1146-10 $\sim 15/05/2006$











Technical manual

to be saved by the user for future reference



STAUB FONDERIE

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Subject to modifications.

FRANCO BELGE congratulates you on your choice.

FRANCO BELGE guarantees the quality of its appliances and is committed to meet its customers' needs.

FRANCO BELGE, which can boast a 80-year experience in the industry of heating devices, uses state-of-the-art technologies

to design and manufacture its whole range of products.

This document contains instructions on how to install your appliance and make full use of its functions, both for your comfort and safety.

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This appliance is meant to burn wood safely WARNING

Incorrectly installed, this appliance can be dangerous and possibly cause serious accidents. We recommend that you engage the services of a professional engineer for its installation and the regular maintenance requirements.

1 Description of the unit

1.1 Package

• 1 package : Stove

1.2 Specifications

Model	134 13 15
(combustion chamber)	
- Width mm	520
- Depth mm	304
- Height mm	265
Logs dimensions	
- Depth cm	50
- Diameter cm	10 à 16
Ash pan capacity litre	5
Weight kg	140
Heated volume m³	480
Smoke exit at rear	
- Chimney draft required Pa	13
- Nominal Heat Output kW	11,04
- Smoke temperature C°	357
- Specific smoke flow g/s	13,85
- Efficiency	67,75
- Co (13% O ₂)	0,158
Smoke exit on the top	
- Chimney draft required Pa	12
- Nominal Heat Output kW	11,32
- Smoke temperature C°	386
- Specific smoke flow g/s	13,96
- Efficiency	65,8
- Co (13% O ₂)	0,165

Note: The indicated performances result from tests carried out in accordance with standard NF EN 13240 with logs of \varnothing 12 of 40 cm and a draught of 12 Pa with top outlet and 13 Pa with rear outlet.

1.3 Appliance description

Wood stove - in conformity with NF EN 13240

- · Continuous-burning heating appliance.
- Detachable flue spigot for rear or top chimney connection.
- Front loading door fitted with large refractory glass panel.
- Adjustable air control for controlling the burning rate.
- · Large ash-pan.

1.4 Operating principle

The "ARDENNES" is designed for operating only with the door closed. Heat is mainly diffused by radiation, through the window and body of the appliance.

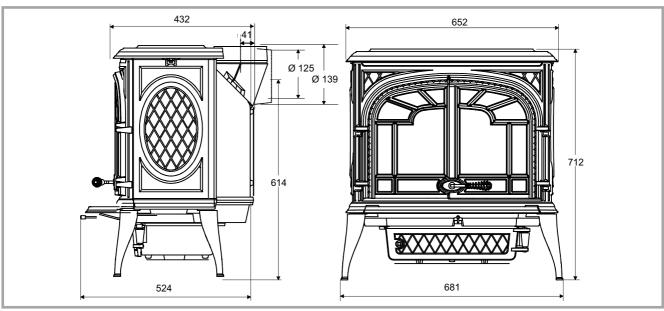


Figure 1 - Dimensions in mm

2 Installation instructions

2.1 Warning to the user

All the local and national regulations, and in particular those relating to national and European standards, must be observed when installing the appliance.

An incorrectly installed heating appliance can cause serious accidents (chimney fires, burning of plastic insulation materials, in partition walls, etc.).

The insulation of both the appliance and the exhaust gas pipe has to be reinforced and done according to the Standards and the Building Regulations for safety reasons. The installation must be carried out according to the Standards and the Building Regulations.

Failure to respect the mounting instructions leads to engage the responsibility of the one doing the installation.

The manufacturer's responsibility shall be limited to the supply of the appliance.

2.2 Location of the unit

Ventilation: For satisfactory appliance operation with a **natural draught**, check that sufficient air for combustion is available in the room. In houses equipped with one VMC (controlled mechanical ventilation), this one aspire and renew the ambient air; in this case, the residence is under slight low pressure and a **non-sealable** external air intake must be installed in addition to the chimney itself, at least 50cm² in section.

Position of the unit: For new installations, select a central position within the house, to provide a good heat distribution around the building. The heat distribution towards the other rooms will be made through the communicating doors. These rooms must be at low pressure or fitted with **non-adjustable air registers**, **placed so that they cannot be obstructed**, to encourage circulation of the hot air.

Floor and walls: Make sure there are not combustible

covered combustible material. Otherwise it must necessary to install a non-combustible protection. There must be a clearance of at least 150 mm at each side of the appliance and at the back of the appliance from a non-combustible wall. This distance must be extended to a minimum clearance of 400 mm from combustible any materials.

This measurement may be reduced to a minimum gap of 50 mm when the non-combustible wall is at least 200 mm thick.

There should ideally be a minimum gap of 300 mm

at the right hand side of the stove, this will ensure the best possible access to the loading door. When using a single wall flue pipe, there must be a clearance (A) of at least three times its diameter (B) from any combustible materials. If the appliance has to be located in an opening, this distance must be extended to a minimum clearance (A) of 450 mm from the pipe or the stove body to any combustible materials.

Hearth:

The appliance must stand on a fireproof hearth.

It is possible to provide a hearth made of non combusible board/sheet material or tiles at least 12 mm thick (C).

Constructional hearths should be constructed of solid non combustible material at least 125 mm thick (including the thickness of any non combustible floor under the hearth).

The hearth must protrude at least 300 mm in front of the stove and 150 mm each side.

If the hearth is constructed on timber, there must be a clearance of at least 250 mm from the timber to the top surface of the hearth. (See section J of the Building Regulations).

When using a single wall flue pipe, there must be a clearance (A) of at least 450 mm from any combustible materials (timber mantel, girder).

2.3 Chimney

The chimney must comply with Current Building Regulations. If in doubt, consult your Dealer or local Building Inspector.

Existing flue:

- The flue must be in good condition and must provide sufficient draught (refer to technical details p. 3).
- The flue must be suitable for the installation of fuel burning appliances, otherwise it must necessary to install a tubing.
- The flue must be **clean**. It should be swept to remove soot and dislodge tar deposits.

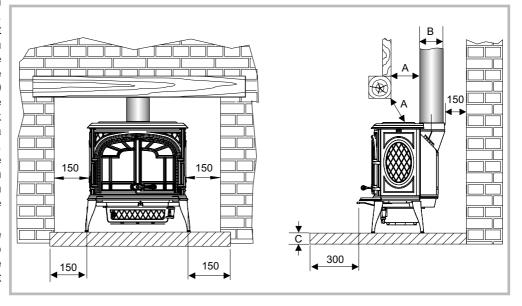


Figure 2 - Minimum clearances

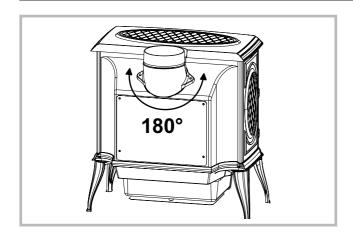


Figure 3 - Mounting the flue collar

- The flue must be well insulated. If the flue inner wall surfaces are cold, a good thermal draw is impossible causing condensation problems (tar formation etc) to occur.
- The flue must be watertight.
- The flue must not be shared with other appliances.
- The chimney must have a constant cross section.
- When the cross-section of the chimney is too large, it has difficulties in obtaining a good draught.
- The chimney must be at least 4.5 m (15 ft) high and be at 40 cm above the ridge of the roof and 8 meters away from any construction.
- In case of a flat roof or when the roof gradient is lower than 15°, the stack must be 1,2 m (4 feet) high at least.
- The capping must not restrain the draught.
- If the chimney has any down draught tendency, due to its position in relation to nearby obstacles, then an anti-down draught cowl must be installed on the chimney or the chimney height must be increased.
- If the chimney draught is excessive or irregular, a draught stabilizer (barometric damper) must be installed to the connector pipe it must be visible and accessible.

Flue non-existent:

- The appliance must not support the weight of the flue.
- It must be distant from any combustible material (walls, cross members)
- It must permit an easy sweeping.

2.4 Mounting the flue collar

The stove is supplied with a connection flue spigot with an inner diameter of 125 mm and an outer diameter of 139 mm.

Figure 3

The same smoke outlet can be used to install a top or rear flue. All you have to do is remove the 2 screws and turn the adapter 180 degrees.

Ensure that the seal is fitted correctly.

2.5 Chimney connector

- The connection to flue must be carried out according to local building regulations.
- The appliance must be installed as close as possible to the chimney.

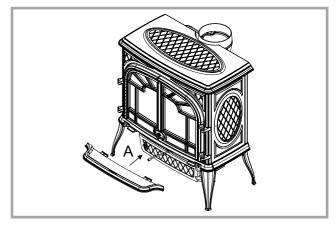


Figure 4 - Mounting the tray

- The connector pipe must be approved for installation with combustion products (either 24 ga. Black painted or blued steel or 316 grade 20 ga. Stainless steel or 1 mm vitreous enamelled steel).
- Pipe diameter must not be less than the appliance spigot diameter. If there is no other solution, the reduction can not be more than one diameter lower than the flue spigot and be situated as distant as possible from the flue connection of the appliance.
- The connection can be either vertical or horizontal. For horizontal connections, avoid right angle bends.
- -The join between the connection pipe and the stovepipe, and the flue, must be leak tight.
- For the premises equipped with a mechanical controlled ventilation, the airtightness has to prevent the exhauster drawing out the smokes from the exhaust gas pipe.

The connection pipe and any draught stabiliser must have access for cleaning.

2.6 Mounting the tray

Figure 4

To avoid damage during transport, the tray has been stored behind the main door.

Centre the tray on tab "A" and lower into place.

2.7 Pre-utilisation check

 Check that the seals of the smoke-line are in good condition. Check that the door closes correctly. Check that the glass is not damaged. Check that the smoke passages are not obstructed by packaging or removable parts. Check that all removable parts are correctly installed.

Note: if it acts of a ceramics braid, it is consumable and thus brought to be changed by the user.

2.8 Maintenance of the Chimney

Very important! In order to avoid any incident (chimney fire, etc...), maintenance tasks must be carried out regularly.

If the appliance is regularly used, the chimney should be swept several times per year, together with the stovepipe connection section.

Chimney condition should be checked at least once per year by a professional engineer.

3 Instructions for user

The manufacturer will not be responsible for damages on parts of the appliance due to the use of prohibited fuel or due to an alteration of the appliance or its installation. Only use replacement parts supplied by the manufacturer.

All the local and national regulations, and in particular those relating to national and European standards, must be observed when using the appliance.

Don't run the stove in mild weather with coal! Under certain circumstances (e.g. fog and repeated thaw) the chimney will not draw sufficiently well and thus be at the origin of asphyxia.

3.1 Fuel

This appliance is not an incinerator.

Use hard wood logs, which have been cut for at least two years and stored, under a ventilated shelter.

Use hardwood that have a higher calorific value per cu metre (Yoke-elm, oak, ash, maple, birch, elm, beech, etc.). Large logs must be split and cut to an useful length (50 cm), before being stored in a sheltered and ventilated place.

Recommended fuel

Firewood: Hornbeam

Suitable fuel

Firewood: Oak, ash, maple, birch, elm, beech, etc.

Prohibited fuel

Any form of coal and flued oil!

"Green wood". Green or damp wood reduces the appliance efficiency and soils the glass, the internal walls and the flue (soot, tar, etc.).

"Recovered wood". Railway sleepers, telegraph poles, offcuts of plywood or chip board, pallets, etc. Burning treated wood quickly clogs the flue ways (soot, tar, etc...), pollutes the environment (pollution and smell, etc.) and cause the fire to burn too quickly and overheat.

Green wood and recovered wood can cause a chimnev fire.

3.2 Lighting

Figure 5

- Open the air regulation flap (rep. B1)
- Open the main doors.
- Place on the grate on scrunched up paper, some brushwood and some hardwood of small diameter,
- Set light to the paper and close the glass doors.
- When the wood is well lit partially, load the appliance without excess and close the main doors (rep. A).

At the first lighting, the fire must be progressively increased to allow the various parts to expand normally and to dry up.

When the fire is lit for the first time, the appliance may give off fumes from the new paint. This is normal but ensure the room is well ventilated during the first few hours operation.

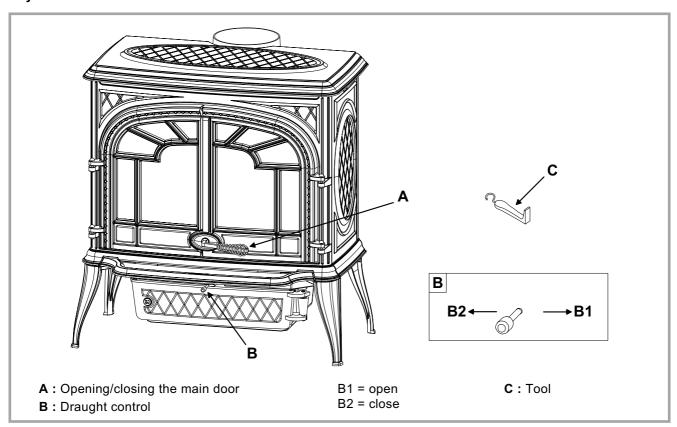


Figure 5 - Operating devices

3.3 Operating procedure

The appliance must function all door properly closed. The burning rate can be adjusted by the air control flap (rep. B).

Experience will show you which settings are best for your situation.

The airwash system works with the top airslide. When the top airslide is full open the system works at its strongest efficiency.

The more closed down the airslide is, the less effective the airwash will be (when shut down completely, the airwash system can not function)

· Loading the fuel:

- The door should be opened slowly, avoiding a sudden rush of intake air, so that smoke does not escape into the room.
- The minimum reloading interval for nominal heat output is 1.5 hours.
- The maximum loading height is approximately 2 12cm-diameter logs
- The logs must be placed on the glowing embers.
- For a briskly burning fire, there should always be at least two logs in the fire. The fire will burn better if there are several logs (diameter 10 to 16 cms).
- For a slower burning fire (for example, at night), select larger logs.
- After loading the firebox, close the main doors (rep. A, page 6).

3.4 De-ashing

- Ashes must be removed regularly.
- Ashes must never be allowed to pile up to the grate.
 The grate would not be cool down and could rapidly be damaged.
- Empty the ashes when the appliance is cold.
- Pick up the ash pan using a tool.
- Empty the ashes carefully with regard to the live embers.

3.5 Maintenance of the Chimney

Very important ! In order to avoid any incident (chimney fire, etc...), maintenance tasks must be carried out regularly.

If the appliance is regularly used, the chimney should be swept several times per year, together with the stovepipe connection section.

If the chimney catches fire, you must cut off the flue draught, close the doors and windows, hatches and keys, remove the embers from the stove, stop up

the connection hole with wet cloths and call the Fire Brigade,

Chimney condition should be checked at least once per year by a professional engineer.

3.6 Maintenance of the stove

- The appliance must be cleaned regularly, together with the connecting pipe and the flue pipe.
- Open the door and remove all deposits in the firebox and clean the removable fire grate.
- Cleaning of the glass door can be done with a soft cloth dampened with water and vinegar or potassium; this must be done when the appliance is cold; then rinse with clear water. Do not use abrasive cleaners.
- The "vitroceramic" glass will resists to temperatures of up to 750 C. Should the glass break due to misuse, it must be replaced by the manufacturers own product.
- Check that there are no obstructions before relighting after a long period of disuse.
- The appliance must not be used with a flue serving several appliances.
- To maintain the grates ventilation free of any obstruction,

For enamelled finishes, the stove body can be cleaned using a soft cloth either dry, or slightly damp with a very mild detergent.

NEVER CLEAN ENAMEL SURFACES WHILST THE STOVE IS HOT.

The cast iron body panels of non-enamelled stoves can be cleaned with a proprietary stove cleaner or re-sprayed / touched up using a stove paint. These products are available from your Franco Belge Dealer.

3.7 Safety advice

This appliance produces heat and may cause severe burns if touched.

The stove may still be HOT even when the fire has burnt out.

KEEP CHILDREN AWAY.

3.8 Trouble shooting



☑ : This sign means that you should ask for a qualified engineer to do the work

		1	for a qualified engineer to do the work.
Situation	Probable causes		- Corrective action
Fire difficult to start. Fire goes out.	Wood green or too damp	•	Use hard wood logs, which have been cut for at least two years and stored, under a ventilated shelter.
	Logs are too big.		- To light the fire, use small, very dry twigs. To maintain the fire, use split logs.
	Poor quality wood.		 Use hardwood that have a higher calorific value per cu metre (Yoke-elm, oak, ash, maple, birch, elm, beech, etc.)
	Not enough primary air		- Open air control.
			- Open the outside fresh air inlet grid.
	Insufficient draught.	\square	- Check that the flue is not obstructed, sweep it if necessary.
			- Seek advice from a chimney specialist.
Fire burns too quickly.	Too much draught.		- Ensure that the lighting flap is closed.
			- Partially close the air control.
	Excessive draught.	\checkmark	- Install a draught stabiliser to the connector pipe.
	Poor quality wood.		- Do not continuously burn small wood, sticks, bundles, carpentry offcuts (plywood, pallets), etc.
Smokes when lighting up.	Flue duct is cold.		- Burn paper and kindling wood to increase heat.
	Room is in decompression (negative pressure).		 In houses equipped with mechanical ventilation, partly open a window until the fire is well established.
Smokes while burning.	Insufficient draught.	\checkmark	- Seek advice from a chimney specialist.
			- Check that the flue is not obstructed, sweep it if necessary,
	Down draught.	V	- Install an anti-down draught cowl.
	Room is in decompression (negative pressure).		 In houses equipped with mechanical ventilation, an outside air intake must be installed for the chimney.
Low heat output.	Poor quality wood.		- Use the recommended fuel.
	Poor mixing of the convection air.		- Check the air flow system (air inlet, piping, air outlet).
			- Check that the next rooms are equiped with ventilation grids to help out the hot air circulation.

4 Spare parts

When ordering spare parts, specify the stove type and serial number, including the colour index (on the guarantee or identification plate), the name of the part and the part number.

Example: Wood stove "ARDENNES", model 134 13 15, the colour index Y, top plate 352165 EF

Y = 134 13 15 Y **B** = 134 13 15 B **E** = 134 13 15 E **N** = 134 13 15 N

L = 134 13 15 L **P** = 134 13 15 P **C** = 134 13 15 C

N°	Code	Description	Туре	Υ	L I	В	Р	Ε	с	N	Qty
1	207315	Back panel		Υ	L	В	Р	Е	С	N	01
2		Flue baffle									
3		Sealing plate									
4		Fixing plate									
5		Fixing plate									
		Air control flap									
6	270414	Leg		Υ	L	в	Р	Ε	C	. N	01
7											
7		Leg									
7		Leg									
7	300134 RH	Leg					Ρ				04
7	300132 RJ	Leg				В					04
7		Leg									
7		Leg									
8	300491 EF	Base		Υ	L	В	Р	E	С	N	01
9	301172 77	Ash pan door			L						01
9	301172 EF	Ash pan door		Υ							01
9		Ash pan door									
9	301172 RH	Ash pan door					Р.		•		01
9		Ash pan door									
9		Ash pan door									
9		Ash pan door									
10											
11		Firebrick									
12		Firebrick									
13	306285	Back wall		Υ	L	В	Р	Ε	С	N	01
14	309233	Grate		Υ	L	В	Ρ	Ε	С	N	01
15		R. side panel									
15		R. side panel									
15		R. side panel									
15	310734 RH	R. side panel					P				01
15	310734 RJ	R. side panel				В					01
15	310734 RP	R. side panel						E			01
15		R. side panel									
16	310830 77	L. side panel			L						01
16	310830 FF	L. side panel		Υ							01
16		L. side panel									
16		L. side panel									
16	310030 KII	L. side panel				 D	г				01
	310030 RJ	L. side panel				Б					01
16											
16		L. side panel									
17		Air duct									
18		Grate support									
19	322717										
20		Flue baffle									
21		Ash pan guide									
21	327905 EF	Ash pan guide		Υ							01
21	327905 MK	Ash pan guide							С		01
21		Ash pan guide									
21	327905 RJ	Ash pan guide				В					01
21		Ash pan guide									
21		Ash pan guide									
22		Hearth plate									
23		Adapter									
24		Support									
2 4 25		Main door									
		Main door									
25	3310UU EF	IVIAIII UUUI		ĭ							υT

"ARDENNES" - model 134 13 15

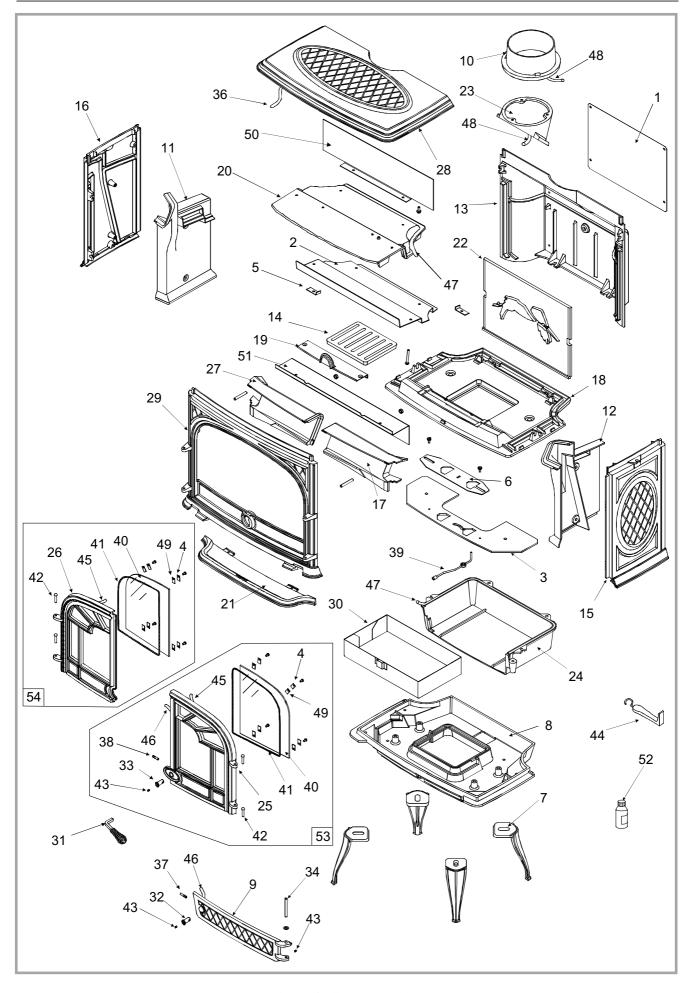


Figure 6 - Spare parts view

	Y = 134 13 15 Y	B = 134 13 15 B	E = 134 13 15 E	N = 134 13 15 N	
	L = 134 13 15 L	P = 134 13 15 P	C = 134 13 15 C		
N°	Code Desc	ription	Туре	. L B P	. E C N Qty
25	331800 MK Main	door			C 01
25					01
25					01
25					. E 01
25	331800 EP Main	door			N 01
26					01
26					01
26	331900 MK Main	door			C 01
26	331900 RH Main	door		P	01
26	331900 RJ Main	door		B	01
26	331900 RP Main	door			. E 01
26					N 01
27					. E C N 01
28					01
28					01
28					C 01
28					01
28					
28 28					. E 01 N 01
29					01
29					01
29					C 01
29					01
29	359806 RJ Front	t plate		B	01
29					. E 01
29					N 01
30	624045 Ash p	pan	Y	. L B P	. E C N 01
31					. E C N 01
32					. E C N 01
33					. E C N 01
34					. E C N 01
36					. E C N 2 m
37					. E C N 01
38					. E C N 01 . E C N 01
39 40	179624 Regu 188829 Refra	nator snatt		. L B P	. E C N 01
40	181632 Relia	ct glass 2767	Λ 22U Λ 4 Υ <i>Ο</i> Ι 6 V	. L D P	. E C N 02 . E C N 2 m
42					. E C N 04
43					. E C N 02
44			Y		
45			Ø 15 Y		
46	181633 Gask	et	Ø 10 Y	. L B P	. E C N 1,33 m
47	181625 Cerai	mic rope	Ø7Y	. L B P	. E C N 3,16 m
48					. E C N 1 m
49					. E C N 08
50					. E C N 01
51					. E C N 01
52			(P)		
53					N 01
53					01
53 53					01
53	_	-			01
53	_	-			. E 01
53	_	-			C 01
54					N 01
54		-			01
54					01
54	988927 Left 0	Complete door		B	01
54	988929 Left 0	Complete door		P	01
54		•			. E 01
54	988933 Left 0	Complete door			C 01

Y = 134 13 15 Y **B** = 134 13 15 B **E** = 134 13 15 E **N** = 134 13 15 N



FRANCO BELGE



Guarantee certificate

≥ Legal guarantee

The specifications, dimensions and information shown on our documents are provided for information purposes only and under no circumstances are binding upon the vendor.

With the aim of constantly improving our equipment, all modifications considered as necessary by our departments may be made without notice.

The provisions of the present guarantee certificate are not excluding or limiting the owner of the equipment's rights, concerning the legal guarantee regarding faults or hidden vices which applies in all circumstances, in the conditions detailed in articles 1641and following of the civil code, and in the country in which the equipment was purchased.

№ Contractual guarantee

Our equipment is guaranteed against faults and hidden vices subject to the following conditions:

- Installation and adjustment of the device by a professional installer.
- 2) Observance of the instructions provided in our technical documents and our installation/adjustment instructions.
- 3) The installation, use and maintenance of the device carried out in conformity with the applicable standards and legislation, and with the indications provided in the technical instructions accompanying the device.

This guarantee covers the replacement, in our factory, of parts recognised as being defective from the outset by our "Guarantee Inspection" Department. Carriage and labour is at the user's cost. Moreover, if the repair or

replacement of parts covered by the guarantee is found to be too costly vis-à-vis the price of the appliance, the decision to replace or repair the appliance will be taken by the vendor.

Our guarantee is for 2 (two) years for all appliances, with the exception of closed combustion fireplace and inserts for which our guarantee is 5 (five) years excluding the following:

- 1) Indicator lights, fuses, electrical elements and fans.
- 2) Parts subject to wear or in contact with high temperatures namely: soles and burner grills, bottom plates baffles, ash pans, paintwork and surface treatments for decorative parts. Also excluded from this guarantee are seals and windows.
- 3) Any damage which may result from the use of the appliance with a fuel other than that stipulated in our instructions.
- 4) Damage occurring to parts caused by elements outside the appliance (down draught, storm damage, damp, abnormal pressure or vacuum, heat shocks, etc.).
- 5) Damage to electrical parts caused by plugging in and using the appliance on a mains system, the voltage of which (measured at the entrance to the appliance) is 10% above or below the nominal voltage of 220 V.

> Exclusion of liability

In the case of a product manufactured at the client's request, under no circumstances may we, as a subcontractor, be considered liable vis-a-vis the client or third parties for defects arising from the installation or a design fault with the item in question.

	Name and address of the installer :
~	Telephone :
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Name and address of the customer :
Date	e of installation ://
Mod	el of the appliance : 134 13 15
Colc	or: OY OL OB OP OE OC ON
Seria	al number :
	This certificate has to be completed and kept carefully. In case of claims, send a copy of this to:

STAUB FONDERIE, BP 73, 59660 MERVILLE, FRANCE.