Belfort

Wood or coal stove

Model: 134 04 09

Output: 5,5 kW

IGBfD-NFD35-376



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

Document $n^{\circ} 830-7 \sim 20/11/2008$



Technical manual

to be saved
by the user
for future reference



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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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"BELFORT" - ref. 134 04 09 Product information

This appliance is an oil-fired stove. WARNING

An incorrectly installed oil-fired stove can cause serious accidents. This appliance should only be installed by competent personnel.

1. Product information

1.1. Package

•1 package : Stove complete.

1.2. Optional equipment

Optional for Great Britain: Water jacket.

•Set of 4 hight legs.

1.3. General characteristics

Reference	134 04 09 5,5 20
Grate dimensions: - width	270 200 240 25 3 77
Autonomy h	7,30

1.4. Description

Stove, I G B f D - NF D 35-375

I: Intermittent-burning heating appliance.

G: Wood burnt on grate

B: Wood burning stove

f: Close cast iron firebox

D: Removable appliance, to be installed near a wall.

- Detachable flue spigot for rear or top chimney connection.
- Detachable top for easy handling and cleaning (rear smoke exit only).
- Adjustable air controls for controlling the burning rate.
- Spin wheel for lighting.
- · Large ash-pan.
- · Grate shaker control.

1.5. Principle of operation

The "Belfort" is designed for operation with the door closed.

Heat is mainly diffused by radiation, through the window and body of the appliance.

Combustion occurs on the grate, with draught entry through the top of the combustion chamber when using wood and under the grate when using coal.

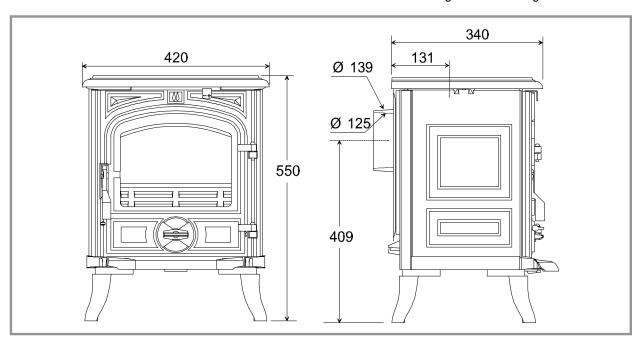


Figure 1 - Dimensions in mm

2. Installation instructions

2.1. Warning to the user

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

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

It is the installer's responsibility to conform to local building standards and requirements with regard to installation.

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

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 in negative pressure or must include ventilation gratings.

Floor and walls: Make sure that the floor can support the weight of the appliance, its surroundings and the hood. In the contrary the floor needs to be reinforced with a concrete screed to distribute this load.

Make sure they are not combustible or covered with combustible material (as per the Building regulations).

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 425 mm from any combustible materials.

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 375 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 225 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.

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 suitable for the installation of fuel burning appliances, otherwise it must necessary to install a tubing.

The flue must be in good condition and must provide sufficient draught. (refer to technical details p. 3).

The flue must be clean. It should be swept to remove soot and dislodge tar deposits.

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 chimney must have a constant cross section.

The flue must not be shared with any other appliance.

The chimney must be at least 4.5 m (15 ft high).

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 downdraught tendency, due to its position in relation to nearby obstacles, an anti-downdraught cowl must be installed on the chimney or the chimney height must be increased.

If the chimney draught is excessive or irregular, a draught stabiliser (barometric damper) must be installed to the connector pipe.

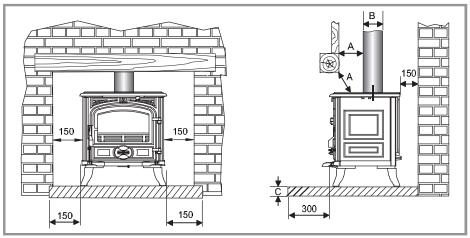


Figure 2 - Clearances

Chimney to be built / Flue non-existent: The chimney must comply with Current Building Regulations. If in doubt, consult your Dealer or local Building Inspector.

The appliance must not support the weight of the flue. Consult a chimney specialist for advice on suitable flue systems for solid fuel appliances.

It must be distant from any combustible material (walls, cross members)

It must permit an easy sweeping.

2.4. Assembly of flue spigot and blanking plates

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

2.4.1. Smoke exit on the top

Figure 4

- -Remove the internal baffle (# 17, page 12).
- -Fit the sealing rope in the groove and attach the flue spigot (# 26, page 12) using the three bolts and washers supplied.
- -Check that the two blanking plates are fixed to the back wall (# 25 & 35, page 12)
- -Replace the internal baffle.

2.4.2. Smoke exit at rear

Figure 5

- -Remove the internal baffle (#17, page 12) and the rear heat shield (#16, page 12).
- -Fix the sealing rope in the groove on the rear and fit the flue spigot, ensuring there is a good seal.
- -Fix the sealing rope in the groove on the top and fit the two blanking plates, ensuring there is a good seal.
- -Replace the internal baffle.
- -Remove the cut-out in the rear heat shield and re-fit.

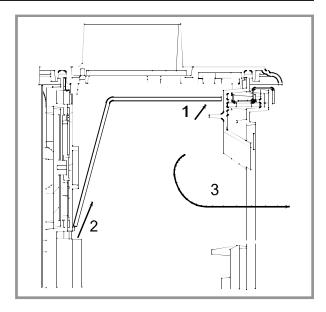


Figure 3 - Removing the flue baffle

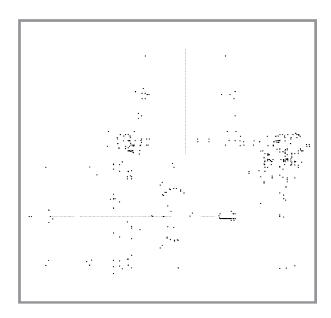


Figure 4 - Smoke exit on the top

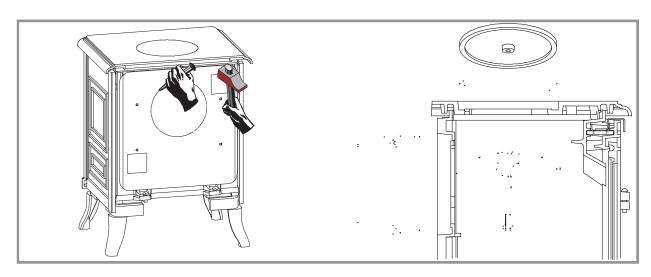


Figure 5 - Smoke exit at rear

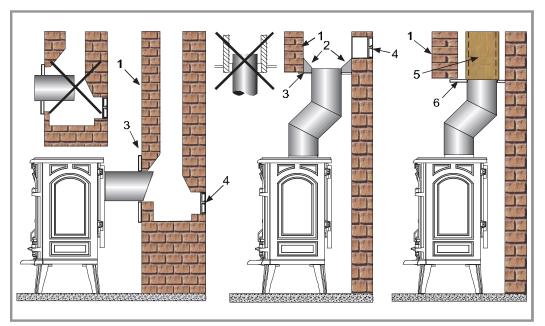


Figure 6 -Chimney connections

- 1 Chimney
- 2 -

Funnel-shape fireproof material

- 3 Non combustible register plate
- 4 Cleaning access door
- 5 Liner

2.5. Connection to flue

The stove must be installed as close as possible to the chimney.

The stove should be connected to the flue by a smoke pipe, approved for installation with combustion products (e.g. 316 grade 1 mm thick stainless steel or 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.

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

2.6. Maintenance of the stove body

- •The stove must be regularly cleaned.
- Remove all deposits from the combustion chamber and clean the grate area.
- The vitro ceramic glass can only be cleaned using a soft cloth and stove glass cleaner, available from your Franco Belge Dealer. DO NOT USE ABRASIVES
- The vitro ceramic glass resists a temperature of 750°C.
 If the glass should be broken, it is recommended that only an original factory replacement should be fitted.

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.

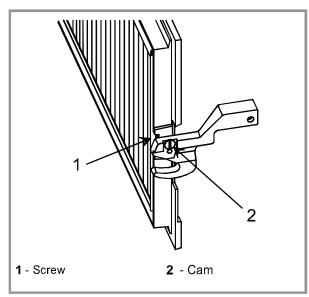


Figure 7 - Door closing pressure

Caution!: The appearance of cracks when burning the enamelled units is quite usual and tends to disappear when the appliance is cooling down. It should not be considered as a defect but rather as a patina of the enamel which does not affect its quality nor its service ability.

2.7. Door closing pressure

Figure 7

The closing latch rotates around a pressure screw positioned cam.

- -Loosen pressure screw 1.
- Turn cam to desired position 2.
- Tighten pressure screw 1.

2.8. Pre-utilisation check

Check the condition of the filler seals, 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 the seals of the smoke-line are in good condition.
- -Check that the doors close correctly.
- Check that all removable parts are correctly installed (fuel retainer (fig. 9), oscillating grate (fig. 10), baffle (fig. 3) Etc.).

- Fit the ash tray, located in the ash pan, between the front legs (# 2, fig. 10).

2.9. Chimney maintenance and sweeping

Very important: To avoid accidents (chimney fire, etc.), regular maintenance should be carried out. If the stove 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.

"BELFORT" - ref. 134 04 09 Instructions for user

3. Instructions for user

3.1. Fuel

Recommended fuel: Wood

- Use hard wood logs, which have been cut for at least two years and stored, under shelter.
- Hardwood has a higher calorific value per cu metre (oak, ash, maple, birch, elm, beech, etc.).
- •Large logs must be split and cut to a usable length, before being stored in a sheltered and ventilated place.

Recommended fuel: Coal

 Smokeless fuels, including coolite nuts, phurnacite, ancit and extracite.

Not recommended as fuel:

- "green wood". Green or damp wood reduces stove efficiency and soils the glass, the internal walls and the flue (soot, tar, etc.).
- "used timbers". Burning treated wood (railway sleepers, telegraph poles, offcuts of plywood or chip board, pallets, etc.) 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 eventually cause a chimney fire.
- Prohibited fuel: Homefire and any form of bituminous coal or petroleum based coke.

3.2. Instructions for use with wood

3.2.1. Lighting

Figure 8

- -Slide the top air control (# B1) to the right. Open the lower spin wheel (# C1).
- Lay firelighters or rolled up newspapers on the grate with a reasonable quantity, if necessary, of dry kindling wood. Place 2 or 3 small logs on top.
- Light the newspaper or firelighters using a long taper and close the door.
- When the fire is burning fiercely, add further logs of a diameter up to 10 cms.
- -When the stove body is very hot, close the lower spin wheel.
- The burning rate can now be lowered by moving the top air control to the left.

3.2.2. Re-fuelling

Figure 8

- Slide the top air control (# B1) to the right. Open the lower spin wheel (# C1).
- Open the glass door and add logs.
- Leave the lower spin wheel open for a few minutes to allow the initial volatiles in the wood to burn.
- Close the lower spin wheel.

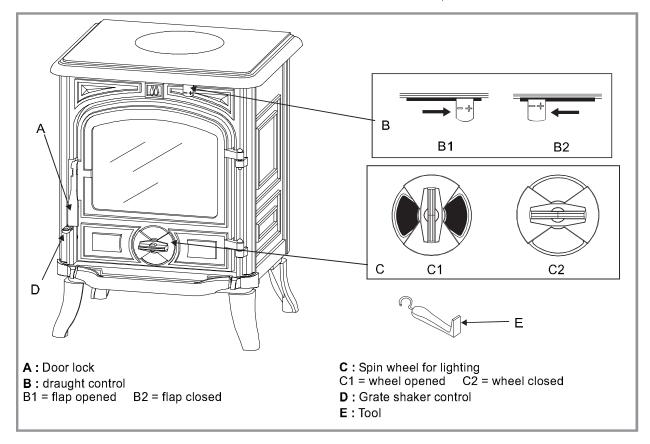


Figure 8 - Operating devices

"BELFORT" - ref. 134 04 09 Instructions for user

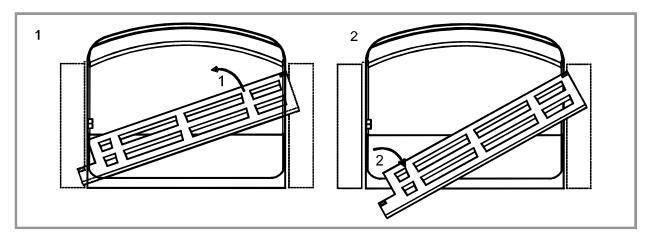


Figure 9 - Removing thefuel retainer

3.3. Instructions for use with solid fuel

3.3.1. lighting

Figure 8

- -Slide the top air control (# B1) to the right. Open the lower spin wheel.
- Lay firelighters or rolled up newspapers on the grate with a reasonable quantity, if necessary, of dry kindling wood. Place a small quantity of solid fuel on top.
- Light the newspaper or firelighters using a long taper and close the door.
- -When the fire is burning fiercely, add further fuel.
- When the stove body is hot, close the top air control by sliding to the left.
- The burning rate can now be adjusted by rotating the lower spin wheel.

3.3.2. Re-fuelling

- -Open the lower spin wheel.
- -Open the glass door and add fuel.
- -Leave the lower spin wheel open for a few minutes to allow the initial volatiles in the fuel to burn.
- -Adjust the lower spin wheel to the desired position.

3.4. Cleaning

It is essential to keep the grate free from a heavy build up of ashes. The Belfort is equipped with a grate riddling device which is used to "shake" ashes off the grate into the ash pan.

Whenever the stove is burning without life when the lower spin wheel is open, use the riddling lever to clear the grate of surplus ashes.

REMEMBER TO BURN SOLID FUEL CORRECTLY, AIR SHOULD BE ALLOWED TO FLOW FROM THE ASH PIT AREA THROUGH THE GRATE AND THROUGH THE FUEL. IF THE GRATE OR ASH PAN ARE CONGESTED, THE PERFOMANCE WILL BE EFFECTED.

If burning solid fuel, always empty the ash pan at least once a day or whenever it is full of ashes. Never allow the ashpan to overfill allowing ash to be in contact with the underside of the grate. If this condition is allowed, the grate will wear out pre-maturely.

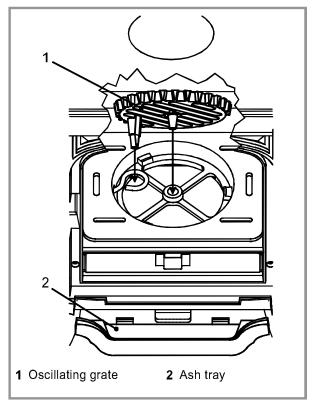


Figure 10 - Mounting the oscillating grate and the ash tray

3.5. Recommendations

This room heater is a high heat producing appliance and may cause severe burns if touched on the glass front door, or on top directly over the burner - keep children away.

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

3.6. Firebricks

When replacing firebricks, the fire must be progressively increased to allow the firebricks to expand normally and to dry up.

"BELFORT" - ref. 134 04 09 Instructions for user

3.7. Trouble Shooti	ng		☑ : This sign means that you should ask for a qualified engineer to do the work.
Problem	Probable causes	Ī	- Action
Fire difficult to start Fire goes out	Wood green, too damp or poor quality.	<u> </u>	- Use the recommended fuel.
	Logs are too big.		 To light the fire, use small, very dry twigs. To maintai the fire, use split logs.
	Air starvation.		- Open lower air control (coal) or top air control (wood)
	Insufficient draught.	Ø	- Check that the flue is not obstructed, sweep it necessary
			- Seek advice from a chimney specialist.
Fire burns too quickly.	Too much draught.		Ensure that the lower air control is closed (with wood burning) Detical value the transition of the lower air control is closed.
			- Partially close the top air control lever.
	Excessive draught.	$\overline{\mathbf{v}}$	- Install a draught stabiliser. Consult your Dealer.
	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.		 In houses equipped with mechanical ventilation, partly open a window until the fire is well established.
Smokes while burning.	Draught is insufficient.	$ \mathbf{\nabla}$	- Consult a chimney specialist.
			 Check that the flue is not obstructed, sweep inecessary.
	Down draught.	V	- Install an anti-down draught cowl. Consult your Dealer
	Room is in decompression.		 In houses equipped with Mechanical Ventilation, are outside air intake must be installed for the chimney.
Low heat output.	Incorrect Fuels.		- Use the recommended fuel.
	Note	es	

"BELFORT" - ref. 134 04 09 Spare parts

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:

-Belfort wood stove: "Belfort",

-model.: **134 04 09 Y**, -top : **352136 EF**.

Y = 1340409Y; J = 1340409J; I = 1340409I; C = 1340409C; D = 1340409D

N°	Code		Description Type Y J
1	100917		Cam pin
2	105123		Knob
3	105261		Firebrick 328X70X35 Y J
4	105262		Firebrick 207X207X35 Y
5	110404		Hinge pin
7	134258		Bushing
8	181632		Adhesive rope
9	162384		Descriptive plate
10	166003		Spring
11	181614		Ceramic rope d. 9,5 mm Y J I C D 1,92 m
13	181615		Ceramic rope Ø 12 Y J I C D 1,35 m
14	188798		Glass
15	189103		Screw
16	205368		Back panel
17	222542		Flue baffle
18	259015		Fixing plate
19	262321		Heat shield
20		EF	Leg Y D 04
20	300118	79	Leg
20		MP	Leg
20		MK	Leg
21	300477		Base
22	301526	EF	Door lock. Y
22	301526	79	Door lock
22		MP	Door lock
22	301526	MK	Door lock
22	301526	66	Door lock
23	301742	EF	Air damper
23	301742	79	Air damper
23	301742	MP	Air damper
23	301742	MK	Air damper
24	301901		Oscillating grate
25	303718	EF	Blanking plate
25	303718	79	Blanking plate
25	303718	MP	Blanking plate
25	303718	MK	Blanking plate
26	303860	EF	Flue collar
26	303860	79	Flue collar
26		MP	Flue collar
26		MK	Flue collar
27	306268		Back wall
28	307432		Fuel retainer
29		EF	Front plate
29	309870	79	Front plate
29		MP	Front plate
29		MK	Front plate
30		EF	Main door
30	309989	79	Main door
30		MP	Main door
30	309989	MK	Main door
30		66	Main door
31		EF	R. side panel
31	310724	79	R. side panel

"BELFORT" - ref. 134 04 09 Spare parts

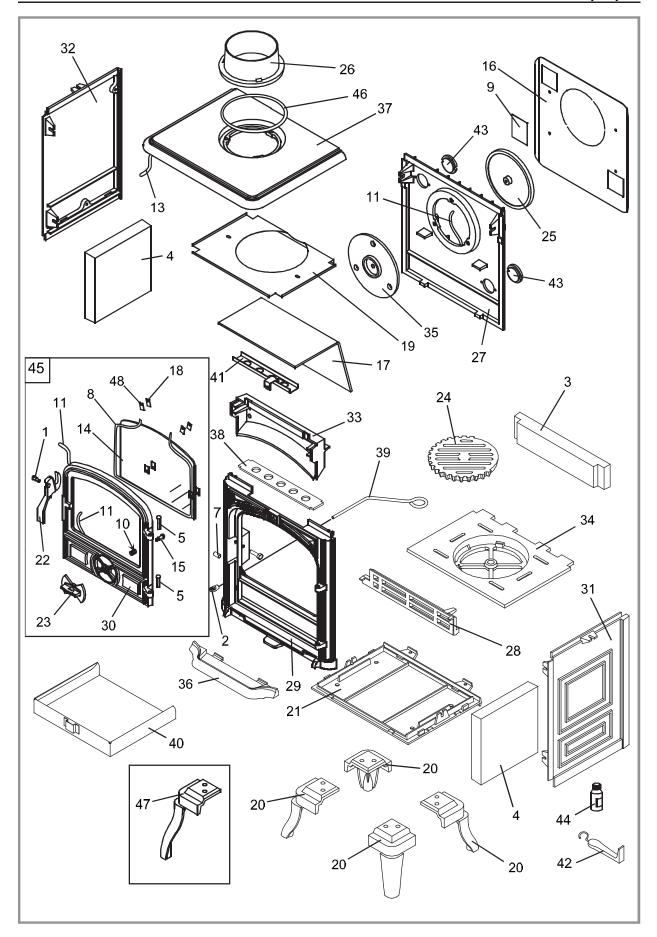


Figure 11 - Stove - exploded view

"BELFORT" - ref. 134 04 09 Spare parts

Y = 1340409Y; J = 1340409J; I = 1340409I; C = 1340409C; D = 1340409D

N°	Code		Description Type Y J
31	310724	MP	R. side panel
31	310724	MK	R. side panel
32	310822	EF	L. side panel
32	310822	79	L. side panel
32	310822	MP	L. side panel
32	310822	MK	L. side panel
33	315603		Air duct
34	319731		Grate support
35	327801		Clamp
36	327902	EF	Ash-tray
36	327902	79	Ash-trayJJ
36	327902	MP	Ash-tray
36	327902	MK	Ash-tray
37	352136	EF	Top plate
37	352136	79	Top plate
37	352136	MP	Top plate
37	352136	MK	Top plate
38	442015		Reducing plate
39	458404		Rod
40	624040		Ash-pan
41	613302	60	Air control flap
42	808001	ED	Hand tool
43	325304		Reducing plate
44	161027		Touch-up paint
44	161048		Touch-up paint
44	161032		Touch-up paint
45	988839		Main door complete
45	988841		Main door complete
45	988842		Main door complete
45	988843		Main door complete
45	988889		Main door complete
46	181607		Ceramic rope d. 9,5 mm Y J I C D 0,50 m
47	300122		High leg (optional)
48	142881		Gasket



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:

- 1) Installation and adjustment of the device by a professional installer.
- 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 of installation : / /
Model of the appliance : 134 04 09
Color: DY DJ DI DC DD
Serial 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.