WELCOME ... to the HERGOM's family.

Thank you for choosing our HERGOM stove, Model FRANKLIN.

To ensure a long life for your stove, cast iron and brass components have been used throughout.

In common with all our products, we are sure that your new FRANKLIN STOVE will give you complete satisfaction.

To own a FRANKLIN stove, reflects real common sense for outstanding quality.

We would recommend this booklet to be read in full, the user will then become fully acquainted with the very useful procedures for the installation, operation and maintenance of the stove. Keep this booklet at hand and refer to it as and when required.

For further information, do not hesitate contacting your supplier or simply telephone the manufacturer.

WARNING: Only when properly installed will the stove give the excellent performance for which it has been designed Thoroughly read those instructions and let the installation work be carried out by an expert.

Your stove is protected by a heat resistant cost of paint specially designed for high temperatures. It is absolutely normal that during the first few firings same smote will be produced due to the drying of resins which in tam helps the paint to set. Therefore, good room ventilation should be provided until this smoke is no longer present.

## **1. MODEL AND FINISHINGS**

These STOVES are avilable in any of the two following typos:

FRANKLIN 82: A model with thermal glass doors allowing the fire to be seen.

FRANKLIN 90: A new style of stove fitted vith glass doors.

Those FRANKLIN STOVES are delivered in black paint or in a back, navy, blue, blue, cream, garnet, and brown coloured enamel finish.

**Optional accesorier.** All models can be suplied with the following accesories:

 ASH-TRAY, for easy removal of all ash produced when burning wood.

• GRILL, height adjustable grill, easily rotated against its anchor point located on one of the sides of the stove

• BRASS SPHERES AND CROWN, for ornamental purposes enhancing the beauty of the stove (only FRANKLIN-82).

**Cleaning and maintenance.** We would recommend using a damp cloth for cleaning enamelled stoves. Avoid using strong detergents or corrosive pro- which could damage the enamel. Cleaning should be carried out whilst the stove is cold. At the end of the winter season, paint finished stoves should be given a coat of heat resistant, Hergóm black matt finish paint.







Brass spheres and crown

# 2. INSTALLATION

The safety and good performance of the stove will greatly depend upon its installation procedure.

It is extremely important to carry out a proper installation work.

For the installation of the stove and chimney to be correct, we would recom mend it to be corned out by an expert. However, should you undertake this work yourself, do seek advice from en expert or telephone our works in case of difficulty.

### 2.1. LOCATION OF THE STOVE FOR ITS BEST PERFORMAN-CE.

Heat is applied by this stove in two ways: (a) through infrared radiation, directly heating walls, ceilings, furniture, etc., and (b) by hot air being convected right up to the furthest corners of any room.

Regardless of its location, the FRANKLIN stove, will very often produce a constant and radiant heat which will reach every room. However, the reception room, being generally spacious and centrally situated within the dwelling, is usually the ideal location. If the dwelling is a two storey building, its best location would be in the lower floor, near the staircase.

#### 2.2 FLUE AND/OR CIMNEY.

The stove's performance varies according to:

- a) The flue and/or chimney.
- b) The way the stove is operated.
- c) The quality of the fuel being burned.

After several years of use, the user may change the type of fuel. However, it would not be so easy to alter the fue/chimney or change its position once it has been fixed in a given location. The following information is given to help the user decide whether he should use the existing chimney or build a new one. Based on this information, the ultimate decision should be correct.

#### How the flue and/or chimney work.

A good understanding of the basic principles on which the flue and/or chimney work, should help the user to obtain the maximum performance of the FRANKLIN stove. Flues and/or chimneys have the following functions:

a) To exhaust smoke and gases to the outside of the house without risks.

b) To produce enough draught in the stove to keep the fire burning bright.

### What is the draught?

As hot air tends to rise a draught is produced. On lighting the fire in the stove, hot air rises up the flue and/or chimney to the outside. When the smoke duct warms up, a draught is maintained which will only work at its best when both the stove and the smoke duct are hot.

The position, size and height of the flue and/or chimney will all affect the draught performance.

The following must be taken into account:

- Flues and/or chimneys located within the house are naturally warmer thus increasing the draught.

-The recommended size of the flue and/or chimney produces a good draught.

– The flue and/or chimney height affects the draught; the taller they are the better the draught. The flue and/or chimney must clear a metre over and above the highest point of the roof.

Other factors affecting the draught are:

– Dreughtless and well internally insulated houses decrease the amount of air entering the stove and consequently the draught is reduced. However, this can be overcome by supplying outside air into the stove.

Tall trees and/or high rise buildings located near the dwelling.

 Wind speed. As a general rule, draught is increased by strong constant winds, but reduced by gale force winds.

Outside temperature. The colder the weather the better the draught.

- Atmospheric pressure. Draught is generally weak on damp, rainy and stormy days.

-The intensity of the fire. The hotter the fire the stronger the draught.

- Cracks in the flue and/or chimney, air entering through joints in the pipe- a second appliance connected to the same flue and/or chimney, etc., all impair the draught performance.

#### Options.

There are two possible choices when building a smoke duct for the FRANKLIN stove:

a) A brickwork chimney.

b) A pipework flue.

Experience shows that there is very little difference in performance whatever the choice. According to the type of dwelling, the ultimate choice rests with you. the user.

As far as possible, the smoke duct should be located within the dwelling for a better draught, less creosote build-up and longer life.

BRICKWORK CHIMNEYS HAVE THE FOLLOWING ADVANTAGES:

a) Bricks and tiles help to reduce the cooling of smoke within the chimney.

b) The heat absorbing properties of the bricks will help to keep the heat

within the dwelling long after the fire has been extinguished.

c) Felxibility to build the chimney according to user's taste.

d) If properly built, the brickwork chimney can be more fire

Brickwork chimneys must be adequately lined to reduce the cooling of the smoke. Corrosion-proof and high temperature resistant materials must be used. Chimneys can be round or square shaped, their internal size being the all important factor.

For FRANKLIN stoves, the brickwork chimney must be built according to the following measurements:

Round-shaped chimneys: 200 mm dia.

Square-shaped chimneys: 200 mm x 200 mm.

PIPEWORK FLUES HAVE THE FOLLOWING ADVANTAGES:

a) Easy installation.

b) Possibility of small changes of direction and therefore more flexibility as to the stove position.

c) Round elbows with better draught performance than angular shaped ones

#### A few rules.

Here are some other to be taken into account when building flues and/or ch imneys:

a) Use strong fire-resi stunt materials Do not use cement fibre pipework.

b) Choose the most vertical route as possi ble and avoid connecting addi- anal appli liances to the flue and/or chimney.



c) Lead the smoke duct away from buildings and take it to a higher level 23 than that of the uppermost po int of any adjoining building.



d) Inner walls must be perfectly flat and free from any obstacles. Allow proper gaps where a pipework flue is fitted into a brickwork chimney.



e) **Very important**: Joints must be properly sealed to avoid the' entry of air through any possible cracks.



To check the seal of the smoke duct, it is recommended to seal the smoke duct outlet in the roof and put paper and wet straw burning through the lower section of the duct.



f) **Very important:** The flue and, or chimney height must exceed the tall est point of the building If draught must be increased, the flu ue and/or chimney height must also be increased.



g) The draught must not be impaired by the smoke duct top cover.





i) Joints in flues built using single metal pipework must be sealed with refractory putty. Each lenght of pipework must into the next to avoid any creosote leaking to the outside.

j) Outside metal chimneys must be built using double skin insulated tubing especially manufactured for solid fuels.

### 2.3. INSTALLING THE STOVE.

Because of its large section, it is not recommended to use the chimney of a sitting-room fireplace as a smoke duct for the stove. However, if it must be used, a run of metal pipework of proper diametre will have to be internally fitted, and either the upper or lower opening between the two ducts should be sealed to stop the smoke passing through the pipework flue being cooled by the air '5 flowing between them.

## 2.4. CONNECTING THE PIPEWORK FLUE.

1. Installation.

The chimney may be connected to the top or rear outlet of the FRANKLIN- model. Chimney connection to the FRANKLIN-90 model can only be carried out to the top outlet of the stove. Aluminium piping is dangerous and it is not therefore recommended for this type of installations.

We would recommend using HERGOM enamelled tubing for perfect marching and best results.

Since the stove includes a built-in draught regulating valve, there is no need for such a valve to be built into the stovetochimney connection or into the chimney itself.

When connecting the stove to the flue and/or chimney, elbows and long horizontal lengths of piping must be avoided to improve draught performance and reduce any creosote and soot build-up. The connection must follow a sloping and upwards direction.

When pipework must go through ceilings and walls, insulated piping and proper accesories must always be used.

h) Flues and/or chimneys must be swept at east once a year.

# 3. ASSEMBLY

### FRANKLIN-82.

Assembling the FRANKLIN-82 stove must be carried out as follows:

1. Pull the stove out of its box and place it on the floor resting on its back.

2. Place the tray (L-014) in position, line up the holes and fix it firmly using the screws provided. Check straight ahead that the tray remains in a horizontal position or a little bit downwards in order to avoid the close contact with the doors.

3. Fit legs inside the housings of tray and to the bottom, holding them in place with M.8x15 screws and washers.

4. Carefully stand the stove vertically avoiding its full weight resting on-its rear leg.

5. Check that there is not rubbing in between the doors and the tray before you install the chimney pipes.

6. Fit hood L-003 or L-004 according to whether the upper or rear smoke outlet has been respectively chosen and make a proper seal using putty.

a) Upper smoke outlet. Place the hood over the opening provided and fix it with screws.

b) Rear smoke outlet. Withdraw the smoke outlet cover (L-005) from the rear side of the stove, place this cover over the upper opening and fix the same.

The hood could then be fitted and fixed with screws to the rear smoke outlet.

7. Make sure that any screws which have loosened during transport are properly tightened.

8. Check visually the final assembly, mainly the joints in between the parts. If there is any gap fill with refractory paste.

### LIST OF COMPONENTS FRANKLIN-82

L 001 Bottom L-002 Roof L-00 3 Hood front side I -004 Hood rear side L-005 Smoke outlet cover L-006 Front panel L-007 Outside right door L-008 Inside right door L-009 Baffle plate L-010 Legs (three in all) L-011 Left panel L-012 Right panel L-013 Back panel L-014 Tray L-015 Outside left door L-016 Inside left door L-017 Primary air inlet slidding knob L-018 Latch L-019 Grill (optional) L-020 Damper L-021 Primary air inlet plate L-022 Door hinge rivel L-023 Grate for wood or coal L-024 Grill support (optional) L-025 Brass crown (optional) L-026 Brass sphere (optional)





#### FRANKLIN-90

The FRANKLIN-90 stove is delivered partially disassembled. For its final assembly, proceed as follows:

- 1. Unpack the stove and identity its components.
- 2. Carefully lay the stove down on its rear side (Fig. 1).

Fig. 1



3. Fit tray (F.90-007) close to bottom (F-180), as shown in Fig. 2, until holes match (Detail "A"). Hold both parts together using four M.6x20 screws with their nuts and washers. To hold the tray at the sides two M.6x40 screws with nuts and washers are used, (Detail "B").



4. Fit legs (F-90-009) inside the housings of tray (F-90-007) and to the bottom (F-180) (1), holding them in place with M.8x15 screws and washers. See Fig. 3, (Detail "C").



5. Carefully stand the stove vertically avoiding its full weight resting on its rear leg.

6. Take the nuts "E" off which hold provisionally the top protecting plate (F-90-012), and fit the smoke outlet (F-90-002) over the top of the stove, taking care that the seal between the smoke outlet and the top remains in place.

Fit the parts using the following screws:

Point "E": Fit smoke outlet, top and top protecting plate.
2 (M.6x25) screws and 2 washers.

Point "F": Fit smoke outlet and top.
2 (M.6x20) screws and 2 washers.

7. To assemble the wings, fit them next to their own columns and fix them using four (M.6x10, roudhead) screws. (Fig. 4).

8. The brass framed glass doors are fitted by simply inserting their butts into the hinges located on the columns.

**NOTE:** Those glass doors are very delicate. If by any chance they become loose and do not close properly, adjust the position of the hinges and/or glass in order to recuperate the right closing. This adjustment is done by loosening the screws which hold the hinge and/or the glass modifying their position and fixing them again.

9. Make sure the firebox screws are fully tighten in case they have become loose in transit.

10. Connect your FRANKLIN-90 stove to the chimney following the instructions given under the heading "Chimneys" in this booklet.

11. Check visually the stove and mainly the adjustment between the parts, if there is any gas in between use the Hergóm refractory paste to seal it.





## 4. OPERATION

### 4.1. DRAUGHT CONTROL.

The fire is controlled by rotating the flue butterfly valve or damper (Fig. 5). Model fitted with doors (FRANKLIN-82) have this facility for contra ing the draught as well as primary air inlet slidding plates on the central doors (Fig. 6). Those plates can be opened or closed by moving them sideways.

Draught control for the FRANKLIN-90 Stove is by means of the damper control located in the smoke outlet.



Fig. 5

## 4.2. INITIAL FIRING OF THE STOVE.

It is recommended that your stove be slowly fired for a period of three or four hours for the cast iron components to age thus avoiding possibl e brea.



When firing the stove for the first time after a long per od of time it is recommended to heat up the flue and/or chimney by introducing burning paper through the upper part of the baffle plate.

### 4.3. WOOD FEEDING.

Whenever wood is fed into the stove, it is advisable to open fully the draught regulating butterfly valve thus avoiding the room being invaded by smoke. Then keep the damper open until free burning of the wood is achieved, thus elimina ting any tar buildup inside the chimney.

# **5. MAINTENANCE**

Your stove is an appliance which has to boar extreme temperatures and the corrosive effect of combustion residues. For longer life and better performan- it should be regularly maintained.

We would recommend that the following checks be fairly often cerried out:

#### A. During the heating season.

1. Visually check the flue and/or chimney. Clear any soot and tar build-up from the inside walls of the stove.

2. Check whether the doors c lose properly.

#### B. At the end of the heating season.

1. Check the flue and/or chimney and clean it if required.

3. Vacuum clean and check the inside of the stove. doors and locks.

4. Apply a new coat of paint to cast iron components, if required.

5. Check whether the different components of the "stove's body have been affected by distortion due to overheating.

#### C. Cleaning.

1. Enamelled cast iron components.

Cleaning of cast iron components should preferably be carried out whilst the stove is cold, using a damp cloth. Strong detergents or corrosive products must be avoided.

2. Glass.

Glass cleaning products for stoves are fairly effective. Never attempt cleaning whist the stove is in use. We would recommend using HERGOM glass cleaner. 3. Your stove is fitted with Thermoshock glass panels, specially manufactured for wood and/or coal burning stoves. Any broken glass panel should be replaced by another of identical specification. Por replacement glass panels and gaskets, together with fitting instructions, please contact our Agents.

#### D. Maintenance products.

Hergóm, S. A. have available a line of stove and freplace products for maintenance purposes, such as: heat resistant paint, refractory paste, soot inhi- lighting up sticks, glass cleaners, etc.

### E. Connector and smoke duct.

1. Build-up and cleaning of creosote.

Slow burning wood produces tar and other organic fumes which combine with natural humidity to form creosote. If flue walls are cold, condensation of creosote vapours could occur. Creosote could burn with a high flame and therefore any buildup should be immediately removed. Since there are many factors affecting creosote build-up, it is difficult to determine the right time at which the smoke duct should be cleaned. Visual inspection is the most practical method

to check whether the sm oke duct is actually free from creosote. This is the reason why we recommend easily accessible installations.

#### 2. Cleaning.

Best results are achieved when soot cleaning brushes tightly fitting into the chimney opening are used. If you prefer delaying the general cleaning, we re- you the period ical use of the soot inhibitor that you may find in any of our D istrib utors.

## 6. SAFETY

# 6.1. GENERAL PROCEDURE.

Whatever the make, certain risks must be taken into account when operating solid fuel stoves. Such risks would be minimized by following the instructions and advice given in this booklet.

Although we recommend the following rules and advice, the user's common sense must prevail:

1. Keep inflammable material, such as furniture, curtains, clothing, etc.. away, at a minimum distance of 0.90 m.

2. Never keep your stove burning at a high temperature for a long period of time. Cast iron components will begin to break when overheating occurs.

3. Ash should be placed in a metal container and immediately taken out of the house.

4. Liquid fuel must never be used to light the fire up inside the stove. All types of petrol, oil and spirits must be kept very far away from the stove.

5. The flue and/or chimney must be inspected at regular intervals, and cleaned as required.

6. Whilst the stove is working, the loading door should never be opened before the primary air regulating valve is fully open. Then wait for a while until any possible build-up of inflammable gases is swept away, thus avoiding their spontaneous ignition.

# 6.2. DISTANCE TO INFLAMMABLE SURFACES.

When installing the stove and the smoke duct, both must be kept at a safe dis tance from any inflammable surfaces such as paper covered and wood pane led walls, wooden floors, etc. Only when these surfaces are properly protected could that distance be reduced.



Base of 150 mm. thick non-flammable material (such as bricks, tiles, etc.).

# 7. TECHNICAL SPECIFICATIONS



### FRANKLIN-82.

### FRANKLIN-90.



MODEL	WEIGHT Kg.	DRAUGHT mm H₂O	RECOMENDED SIZE			CALORIFIC POWER			SPACE
			PIPE- WORK	BRICK- WORK	RECOMMEN. HEIGHT	Kcal/h	BTU/h	Kw	m <sup>3</sup>
F-82	139	2,5	200 mm Ø	200x200 mm	5 - 6 mts *	10.000	39.600	11.62	250
F-90	144								

\* Chimney height: 5-6 metres. For other heights, please check with agents or manufactures.

INDUSTRIAS HERGOM, S. A. declines responsability for any damages due to faulty installation or alteration of their products unless previously approved in writing.

Responsability for manufacturing faults remains at the discretion of the technical department after the relevant inspections and checks have been carried out, and is limited to the repair or replacement of faulty product, excluding any work and damage due to such repair or replacement.