Turbhogar®

Mod. ALFA, BETA, DELTA, NEO, SIGMA





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fr

Manual de uso y montaje
Manual of assembly and use
Manuel d'utilisation et de montage
Benutzer und Montagehandbuch

de



TURBHOGAR - MANUAL OF ASSEMBLY AND USE

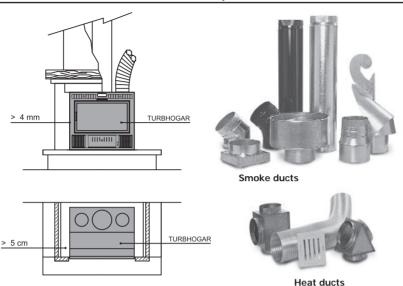
↑ The proper functioning of the TURBHOGAR Fireplace will depend on its correct installation and use. To ensure this read this manual carefully and follow the general instructions and those pertaining to each model in the respective technical data section.





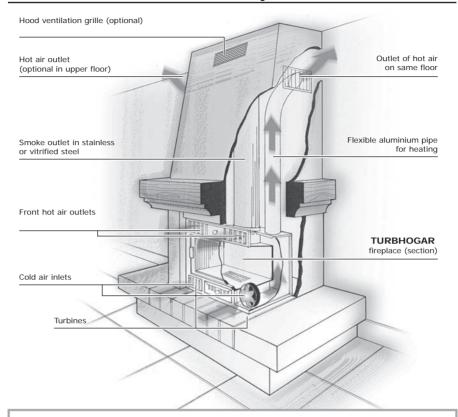
- The **TURBHOGAR** fireplace is a model of open fireplace that is designed to provide the maximum amount of calorific energy while achieving the most economical performance and providing the greatest degree of safety.
- The heat given off directly by radiation is added to by that obtained from the efficient system of hot air heating, driven by its two turbines. This enables us to heat up more quickly the space in which the TURBHOGAR fireplace is installed, by means of its front air outlets. Moreover, and thanks to its two upper outlets, the hot air can be conveyed to other rooms in the house.
- With the TURBHOGAR fireplace the fuel will be exploited to good effect as it is fitted with a device for regulating the draught by means of an upper switch, and one for controlling the influx of combustion air, through an adjustable lower grate. In this way the consumption of fuel can be optimised according to the room temperature requirements at any given time.
- Finally, it is important to point out that the TURBHOGAR, as compared with traditional open fireplaces, provides greater safety as it comes with a vitro-ceramic glass door, an anti-opening system and an electrical circuit controlled by thermostat

Assembly



- Whilst the brickwork is being done the front section of the TURBHOGAR fireplace should be protected against plaster remains or water falling onto the device as this could damage the paintwork or cause rusting.
- Do not rest the brickwork, decorative fittings or wood directly on the TURBHOGAR fireplace. A channel of at least 4mm should be left between the decorative fittings and the front section of the device. This is to allow for any expansion of the device and avoids cracks appearing in the decorative fittings.
- An interior air chamber of at least 5cm should be left between the lateral decorative fittings, the back wall and the main body of the fireplace. Under no circumstances should the TURBHOGAR be coated with fibre glass sheets or other types of insulating material.
- To convey hot air to other rooms, the TURBHOGAR fireplace is fitted with two upper outlets. The connection is made with a flexible aluminium pipe by first removing the cover and then inserting an adjustable grille in the outlet. The connections should be fastened with metal clamps.
- The fireplace hood should be made ideally from bulkhead set in plaster. A
 grille can be fitted in this hood to enable ventilation of the air chamber and
 avoid cracks occurring.

Assembly



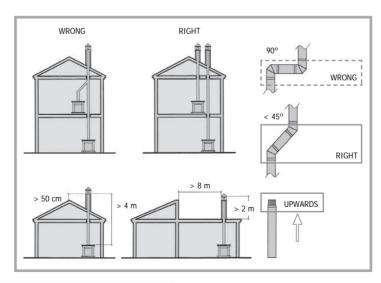
↑ The TURBOHOGAR fireplace, ducts and hood should not be installed next to coatings, wood parquet or other potentially inflammable elements. Nor is the installation authorised in houses with wooden frames, beams or roof, or asphalt roofing felt...

No installation in the house should be passed through the interior of the chimney duct or hood. A safety distance of 0.5m should be maintained where the installation passes near electrical conduits or other installations.

The site of the fireplace installation should have sufficient ventilation to provide a draught and allow for air recycling. In the event of it being insufficient, an exterior air inlet grille can be fitted as close as possible to the fireplace.

Smoke ducts

- A metallic pipe of a specified diameter must be used for the evacuation of smoke through the draught. In accordance with current regulations, we recommend the use of a stainless or vitrified steel pipe with a bracket joint. In the event of an exterior assembly, this should be of a modular double panel type.
- Avoid reducing the diameter of the pipe, the use of elbow bends of more than 45° and the connection of various devices to the same duct, as this could cause the back-puffing of smoke.
- In the event of requiring insulation in a section of the chimney draught, we recommend the use of ceramic heat resistant panels.
- The chimney draught should have a minimum height of 4m, and rise to at least 50cm above the highest section of the roof. It should be placed at a distance of over 8m from any adjacent building. For the top of the chimney it is advisable to use standardised prefabricated or metallic hoods.
- When joining together the pipes the nozzle end should be pointing upwards. To ensure a faultless sealing in the section that passes through the hood, between the TURBHOGAR fireplace and the wrought ironwork, heat resistant putty may be used.



Lighting and Control

- Before lighting the TURBHOGAR fireplace, ensure that the draught is open (horizontal handle). Whilst the device is functioning at least one of the hot air outlet grilles must remain open.
- You are advised to use dry firewood, with low resin content (for example olive or evergreen oak). Wafer board or wood with paint or varnish remains should not be used. Under no circumstances should liquid fuel or coal briquettes be used to light the fire.
- To help in the lighting of the fire a mixture of fine and bulky firewood can be used. Once it is functioning, when opening the door to refuel, do so slowly to avoid the back-puffing of smoke. Observe the maximum load indicated.
- During the first lighting some smoke may appear as a result of the drying
 of the protective coat of heat-resistant paint in the TURBHOGAR
 fireplace. For this reason we recommend that you ventilate the area until
 this smoke disappears.
- To improve the performance of the TURBHOGAR fireplace there is an adjustable draught operated by a handle located on the upper section:

To open the draught: turn to horizontal position **To close the draught:** turn to vertical position, which prevents the door from opening.

- The lighting of the fire is helped by opening the adjustable grille on the ashes box and opening the draught. When the fire has taken well, the grille can be closed and adjust the draught in order to reduce fuel consumption. The draught must never be closed when the door is open.
- In order to control the flow of hot air, the TURBHOGAR fireplace is fitted with a three-position switch:

Position 0: Automatic mode – minimum speed Position I: Manual Mode – minimum speed Position II: Manual Mode – maximum speed (en

Lighting and Control

- At position 0, due to the action of the thermostat, the turbines start functioning automatically once a specified temperature has been reached (normally 20-30 minutes after the lighting); in the same way, the turbines switch off when the temperature of the TURBHOGAR fireplace drops.
- To get full benefit from the heating power of the TURBHOGAR fireplace we recommend using Position II, as its greater air flow is specially designed for the conveying of air to other rooms or for heating up an area more quickly.
- Once the desired room temperature has been reached Position I can be used. If you want the turbines to switch off automatically after the fire has been put out, switch to Position 0.

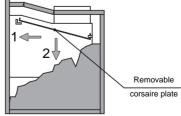


Safety Handle

for the opening of the door and the control of the draught

Maintenance

- For the cleaning of the exterior a dry cloth should be used, and should not be moistened or used with any abrasive product that may damage the paintwork.
- The glass should be cleaned when cold, using a product specially designed for fireplaces, or any brand of oven cleaner. In the event of persistent stains, a glass scraper can be used.
- The cleaning out of the ashes is done by removing the interior fireplace grille and collecting up the ashes in the box, making sure beforehand that the live embers are fully extinguished.
- For the periodic removal of soot from your chimney we recommend that you seek professional advice. The draught shutter blade of the TURBHOGAR fireplace is detachable to allow for this operation.



TURBHOGAR SECTION

Diagram and Connection to the electricity mains

 During the normal use of the device and whilst it is lit, you are advised not to disconnect it from the electrical mains. However, a permanent connection must not be made in the fuse box but preferably by means of an approved plug with an earth wire which, when required, allows the user to disconnect it.

A Remember that your fireplace is connected to the electrical mains. It must not be extinguished with water as, in addition to causing a safety hazard, it could damage the device and its electrical components.

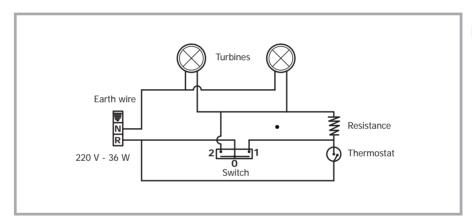
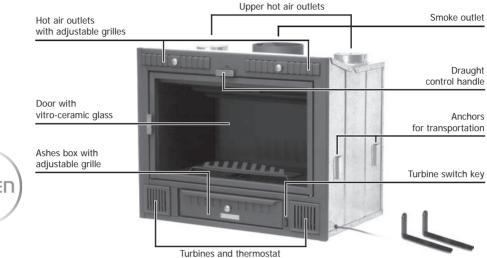


Diagram of the electrical connection

- Any repair work to or handling of the Turbhogar model particular the electrical system must be carried out by authorised technical staff.
- · For any information related to the assembly, use or maintenance of your fireplace, which is not contained in this manual, please do not hesitate to contact the nearest Rofer & Rodi Fireplace Dealer.

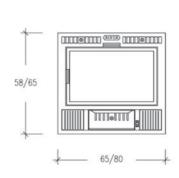
Technical data - ALFA Model

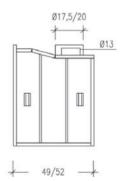


Handles for transportation

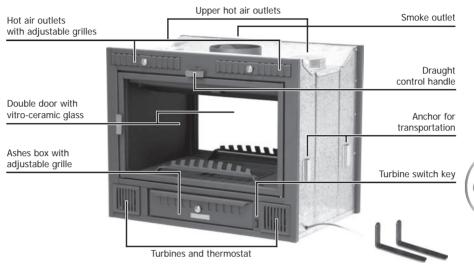
Reference	65-T	80-T
Diameter of Smoke Ducts	17,5 cm	20 cm
Flexible hot air pipe	13 cm	13 cm
Heating capacity	12.000 kcal/h	16.000 kcal/h
Weight	85 kg	116 kg
Maximum firewood load	9-12 kg	12-15 kg

- · Fireplace made of electrosoldered steel plate 5mm
- · Door with vitro-ceramic glass guaranteed to resist up to 750° C
- Draught adjustable by means of external handle
- · Bronze handles and knobs
- · Removable ashes box with air inlet control
- · Heat chamber with turbines and thermostat





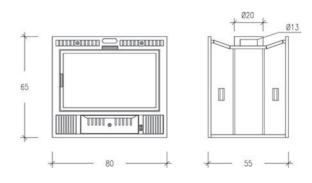
Technical data - BETA Model



Handles for transportation

Reference	80-B
Diameter of Smoke Ducts	20 cm
Flexible hot air pipe	13 cm
Heating capacity	16.000 kcal/h
Weight	128 kg
Maximum firewood load	12-15 kg

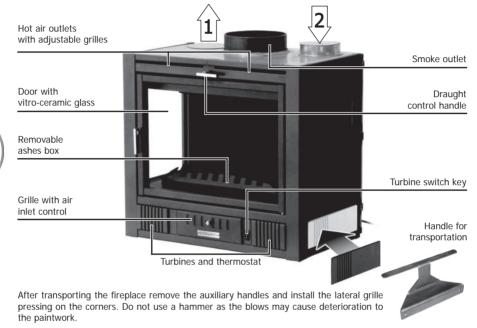
- Fireplace made of electrosoldered steel plate 5mm
- Double door with vitro-ceramic glass guaranteed to resist up to 750° C
- Draught adjustable by means of external handle
- · Bronze handles and knobs
- Removable ashes box with air inlet control
- Heat chamber with turbines and thermostat



Technical data - DELTA 2 - DELTA 3 Model

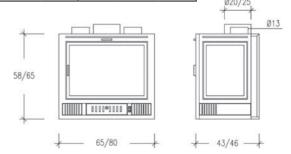
Connection of the heat ducts

- 1.- Remove the upper cover of the Turbhogar fireplace using a screwdriver to lever the edge of the lid.
- **2.-** Insert the metallic connector supplied, which will serve as a joint for the flexible heat pipe.



Reference	65-I	65-D	65-C	80-I	80-D	80-C
Diameter of Smoke Ducts	20 cm			iameter of Smoke Ducts 20 cm 25 cm		
Flexible hot air pipe	13 cm			13 cm		
Heating capacity	10.000 kcal/h			1	4.000 kcal/	h
Weight	91 kg	91 kg	87 kg	120 kg	120 kg	115 kg
Maximum firewood load	8-10 kg				11-13 kg	

- Fireplace made of electro-soldered steel plate 5mm
- Door with vitro-ceramic glass guaranteed to resist up to 750° C
- Stainless steel handles and knobs
- Draught adjustable by means of external handle
- Removable ashes box with air inlet control
- Heat chamber with turbines and thermostat

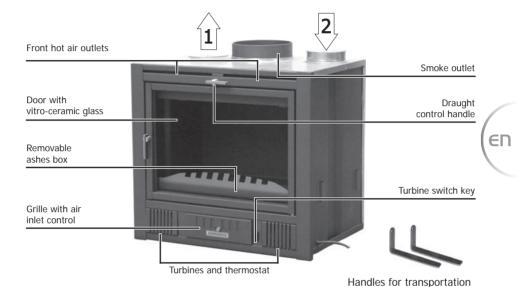


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Technical data - NEO Model

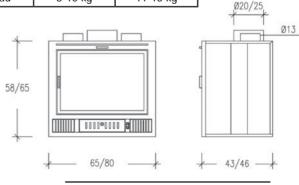
Connection of the heat ducts

- 1.- Remove the upper cover of the Turbhogar fireplace using a screwdriver to lever the edge of the cover.
- **2.-** Insert the metallic connector supplied, which will serve as a joint for the flexible heat pipe.

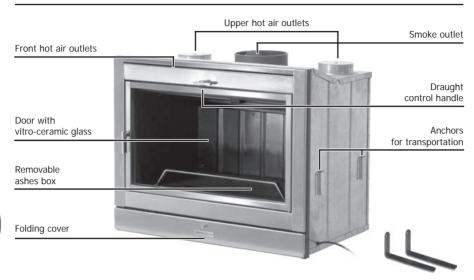


Reference	65-N	80-N
Diameter of Smoke Ducts	20 cm	25 cm
Flexible pipe for hot air	13 cm	13 cm
Heating capacity	10.000 kcal/h	14.000 kcal/h
Weight	96 kg	126 kg
Maximum firewood load	8-10 kg	11-13 kg

- Fireplace made of electro-soldered steel plate 5mm
- Door with vitro-ceramic glass guaranteed to resist up to 750° C
- Stainless steel handles and knobs
 Draught adjustable by means of
- Draught adjustable by means of external handle
- Removable ashes box with air inlet control
- Heat chamber with turbines and thermostat



Technical data - SIGMA Model

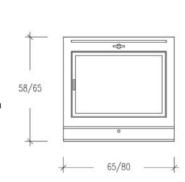


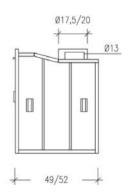
This model has an air inlet control grille, turbines and a switch key behind the folding cover.

Handles for transportation

Reference	65-S	80-S
Diameter of Smoke Ducts	17,5 cm	20 cm
Flexible pipe for hot air	13 cm	13 cm
Heating capacity	12.000 kcal/h	16.000 kcal/h
Weight	86 kg	117 kg
Maximum firewood load	9-12 kg	12-15 kg

- Fireplace made of electro-soldered steel plate 5mm
- Door with vitro-ceramic glass guaranteed to resist up to 750° C
- Draught adjustable by means of external handle
- Removable ashes box with air inlet control
- Heat chamber with turbines and thermostat
- Stainless steel door, handles and knobs





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Complementary sheet to the Manual of Installation and Use

Review 281108

TURBHOGAR Models Alfa, Beta, Delta, Epsilon, Lambda, Neo, Sigma

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Manufacturer:	ROFER AXARQUÍA S.L.
Family / Models	TURBHOGAR
	Models Alfa, Beta, Delta, Epsilon, Lambda, Neo, Sigma
Heating power	12 kW
Energetic Performance	70%
Minimum distance to adjacent fuel materials	1.2 m
Carbon Monoxide emission at 13% of Oxygen	0.8%
Temperature of smoke emissions	430° C

Insertable fireplace that uses **natural firewood as fuel**, for intermittent use and which functions with the door closed.

Read and follow the instructions for installation and use.
Use only the recommended fuels.

ROFER & RODI FIREPLACES

Warning for installer and user (Add to the beginning of page 3)

- The installation of the fireplace and of the smoke duct should be carried out in observance of all the local regulations, including those referring to national and European norms.
- An incorrectly installed fireplace or one with a defective chimney installation could cause damage to the apparatus and set on fire the soot accumulated in the chimney draught causing a risk of fire, back-puffing smoke, etc...
- The manufacturer refuses any responsibility for damage or deterioration caused by the use of fuels not recommended or by unauthorised alterations made to the device or the installation. The installation and repair of the device as well as the periodic maintenance of the chimney draught must be carried out by qualified professionals.
- Failure to observe the instructions for installation and use will result in the invalidation of the manufacturer's warranty.

Assembly (Add to the end of page 5)

- To guarantee the correct insulation of the fireplace and chimney, fire bricks, ceramic and steel plates etc. can be used. The safety distance for adjacent combustible materials must be observed.
- The floor surface on which the chimney is placed should be able to support the load or total weight of the fireplace, decorative fittings and hood. In the event of this condition not be observed, the forging work can be reinforced by means of a metal structure or the load can be distributed by the laying of a reinforced concrete slab. Consult a qualified technician before carrying out any of these measures.
- If the dwelling is fitted with mechanical air conditioning units or extractors, when these begin to function the air intake for the chimney draught is likely to be insufficient and it will be necessary to install an exterior air inlet grille **which must not be sealable**, as close as possible to the fireplace, with a minimum section size of 100 cm2. As a general rule, we recommend the installation of this type of grille as it guarantees an adequate combustion and chimney draught.

Smoke ducts (Add to the end of page 6)

- The smoke duct and the hood of each device should be individual. Do not connect 2 or more heating devices to the same smoke duct.
- Where necessary, fit dampers to ensure that the installation of the smoke ducts and the chimney coping hood do not obstruct the mechanical removal of soot from the chimney draught.

Lighting and Adjustment (Add to the beginning of page 7)

- Contact with the lighted stove or with the vitro ceramic glass can cause burns. For this reason, in order to adjust the draught and open the door you should use the handle supplied with the device.
- For safety reasons, do not allow children to go near the lighted fireplace, moreover once extinguished take the necessary precautionary measures as the **device will remain hot for a certain period of time afterwards.**
- A safety distance of 1.2 m around the device should be observed inside which no potentially inflammable materials should be placed. Take into account that even though there may be no direct contact, there may exist a risk of damage and even fire due to the heat radiation. For this reason do not place inside the indicated area wood or plastic furnishings, wallpaper, fitted carpeting, carpet rugs, curtains, etc...
- Once the fireplace is functioning, the door must be kept closed, except when opening to refuel.
- This device is **not an incinerator.** Do not use it to burn domestic waste, cardboard, magazines, etc...

Maintenance (Add to the end of page 8)

- In order to prevent the soot accumulated in the chimney draught catching fire, we recommend a periodic check and cleaning of the draught installation using mechanical means carried out by qualified technical staff at least once a year.
- In the event of this soot catching fire close the chimney draught and call the fire service immediately.

Spare Parts

• To order spare parts indicate the serial number and year of manufacture figuring on the plate attached to the device or on the warranty card. Only original spare parts must be used.

Parts replaceable only by qualified professional staff:

Electrical cables, Turbines, Thermostat, Switch.

Parts replaceable by the user:

Draught break plate. Firedog, Ashes grate, Ashes box, Grille knobs

Vitro ceramic glass: bear in mind that although resistant to temperature it is fragile and any impact to it or to the fireplace may cause it to break. In order to replace it the use of specialised tools may be required and adequate protection measures need to be taken to avoid suffering cuts during the handling of broken glass.

Technical data (Add to the beginning of page 10)

 \bullet The TURBHOGAR fireplace is an insertable device, which conforms with the obligatory UNE EN-13229 regulations:

Normal heat output:	12 KW
Performance:	70%
CO concentration at 13% oxygen	0.8%
Smoke flow	10 g/s
Optimum draught suction:	12 Pa
Average smoke temperature:	430°C
Combustion chamber:	Closed
Type of combustion:	Intermittent
Fuel:	Dry firewood from natural wood
Maximum size of firewood:	Length 35 cm Diameter 18 cm
Recommended type of firewood:	Beech, oak, Chestnut, elm, olive, holm-oak etc

The size, weight and other characteristics of each model are set out in the relevant technical catalogue.

Probable causes of failure or irregular functioning

- The device you have purchased is a high performance fireplace of guaranteed quality. Nevertheless, certain extreme climate conditions such as strong winds, hail storms or risks of freezing temperatures, may cause the chimney draught to be inadequate. In view of the potential risk of back-puffing smoke we advise you not to use the fireplace under such conditions as this will not be considered as a defect or malfunction of the device.
- Owing to the high heating power of the fireplace, we do not recommend its installation in small rooms as the resulting increase in temperature could cause a heat shock hazardous to persons' health. For this reason the device should not be used during hot days or periods.
- Below is a detailed list of instructions on how to correct and avoid an irregular functioning of the device and some example cases of failure with indications on how to repair the problem.

IMPORTANT NOTE: the repair work or procedures indicated with an asterisk (*) must be carried out by qualified professional staff.

table 1

Description of failure	Probable cause	Procedure
The turbines continue to function	Switch is in position I / II (manual connection)	Turn the switch to position 0. This will automatically disconnect the turbines (after a time).
after the device has been turned off.	Failure of thermostat (*)	Disconnect the device from the electricity mains and do not use again until the device has been repaired.
	The switch is in position 0 (automatic connection)	As the temperature is falling disconnection is automatically activated. Press position I / II if you wish to continue heating the room.
The turbines stop while the device is in operation.	No electrical supply	Check that the plug is correctly inserted in the socket.
	Turbine failure (*)	Disconnect the device from the electricity mains and do not use again until the device has been repaired.
The protection circuit differential of the dwelling is activated when the turbines start functioning.	Failure in the electrical installation of the dwelling or in the device (*)	Disconnect the device from the electricity mains and do not use again until the device has been repaired.
The turbines function in automatic mode but not in manual mode.	Malfunction of the turbine switch (*)	Disconnect the device from the electricity mains and do not use again until the device has been repaired.

$\label{total constraints} \mbox{TURBHOGAR} - \mbox{Complementary sheet to the Manual of Installation and Use table 2}$

Irregular function	Probable cause	Course of action
Reduction in the hot air flow.	Excess of hot air outlets	Close the hot air outlets in the rooms that are not being used. You have probably installed more outlets than the recommended number for your fireplace.
	The wood is of a poor quality	Use only the types and sizes of firewood recommended in the user's manual.
The device does not generate sufficient heat.	There is an insufficient amount of firewood	Load the device with the quantities recommended in the user's manual.
3	The premises are poorly insulated	The premises may be too large for the type of fireplace installed or they are poorly insulated.
	The firewood is damp	Use dry not damp or green firewood
The fire does not light	The firewood pieces are too large	To ensure the firewood sets alight it is advisable to use small branches or twigs that burn well. Use split firewood to stoke up the hearth once lit.
sufficiently or goes out.	The chimney draught is closed	Open the draught regulator and once the firewood has caught fire sufficiently close the draught again.
	The air inlet is closed	Open the lower air inlet and keep it open for as long as is necessary.
	The chimney draught is open	Adjust the draught control and close completely if necessary.
	The air inlet is open.	Close the lower air inlet.
The fire is too high	The firewood is of a poor quality.	Avoid using certain types of wood that cause rapid burning such as chipboard, ply wood, carpentry shop wood shavings and sawdust, pine wood, etc.
	The smoke outlet duct is cold	The fire needs to be high as soon as it is lit in order to heat up the duct. To achieve this use fuel briquettes for barbeques and fireplaces.
	The chimney draught is blocked	Check that there is no blockage in the duct, particularly at hood level. Where necessary clean out the soot mechanically.
Smoke emanates during the lighting process or when the device is functioning.	The draught is insufficient	Check that the exterior air inlets are not blocked. It may be necessary to lengthen the smoke ducts in order to obtain the optimal chimney draught suction.
	Use of ventilators or mechanical extractors	In specific cases it may cause a suction that prevents the device from functioning correctly. In such event it will be necessary to install an external air inlet next to the fireplace.
	A defective installation of the fireplace or use of inadequate material	A check on the ducts a hood should be carried out by qualified professional staff.

CE Declaration of compliance



The manufacturer hereby Certifies that the fireplace models listed below meet all the requirements of the EU Directive governing construction products (89/106/EEC) and comply with regulations UNE-EN 13229:2001 "Insertable devices, including open fireplaces:2003,which use solid fuels – test requirements and methods" amended by UNE-EN 13229/AC, UNE-EN 13229/A1:2003, UNE-EN 13229:2002/A2:2005, UNE-EN 13229/AC:2006 and UNE-EN 13229:2002/A2:2005/AC:2006.

Commercial brand: ROFER & RODI

Family / Models: TURBHOGAR, models Alfa, Beta, Delta, Epsilon,

Lambda, Neo, Sigma

Description:

Insertable device using natural firewood as fuel, for intermittent use and functioning with the door closed.

Heating power: 12 kW

Energy performance: 70%

Public Organism notified: Nº 1722 CEIS

Manufacturer: ROFER AXARQUIA, S.L.

Vega Melilla, plot 1 – P.O. Box 81

29740 – TORRE DEL MAR (Malaga) SPAIN

Signed: Andrés Román Cortés, Technical Director.



tradición diseño calidad



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