



# INSTRUCTIONS

# MADE TO MEASURE ENCLOSED FIREPLACE

www.totemfire.com



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#### **1** Foreword

You have purchased a Totem enclosed fireplace, thank you for your custom.

The enclosed fireplace is intended for burning logs, it cannot be used as an incinerator or for burning liquid fuel, coal or similar by-products.

Follow the instructions in this manual to the letter and install the fireplace in line with good practice, any local regulations and notably DTU (French code of practice) 24.1, 24.2 and European standards NF EN 13229. Keep this manual in a safe place.

We strongly recommend that this appliance is installed by a qualified professional.

A qualified professional shall have ensured, in particular, that the characteristics of the chimney flue and its environment are suitable for the fireplace to be installed.

The manufacturer shall not be held responsible if these instructions are not followed and this would render the contractual guarantee null and void.

The manufacturer reserves the right to carry out any assembly or functional modifications that he deems necessary, without notice.

Installations in public places are subject to Règlement Sanitaire Départementale (county health regulations) and fire regulations. Inquire at your local prefecture.

If you have any questions about how the appliance works, please contact your fitter.

The explanations in this manual apply to all Totem enclosed fireplaces.

To make these operating instructions easier to read and understand, we have used general illustrations and terms corresponding to a particular type of appliance. The images used may differ from your appliance.

For further information, consult our Internet site: www.totemfire.com



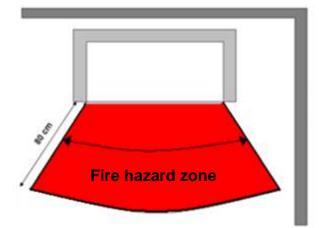
### 2 **Operating instructions**

#### 2.1 Basic safety rules

#### 2.1.1 General points

- Your Totem enclosed fireplace is fitted with foldaway swinging doors which allow it to operate with the door lowered (shut) in complete safety and an easy wood loading door open.
- It is essential to wear protective gloves or use the safe handling tool to handle the door. When the door is lowered (shut) the accessible surfaces of the frame of the door and the vitroceramics rise considerably in temperature when the appliance is in operation and can cause burns when touched.
- Explain the risks of burns to children and ensure that they are not close to the fireplace when it is in use.

#### 2.1.2 Fire hazard zone



Do not store flammable items within an 80 cm radius around the fireplace door.

(logs, tables, chairs, firelighters...)

No flammable material must be placed in the appliance's fire hazard zone.









#### 2.1.3 In the event of fire propagation in the flue

If maintenance and operating conditions are adhered to, there is no risk of fire in your flue. Nevertheless, please read these rules concerning chimney flue fires.

**Never use water to put out the fire**. Water causes thermal shock which could cause the bricks and vitroceramics of the fireplace to explode.

Close all the combustion air inlets, the smoke damper trap as well as the door, using the safe handling tool to extinguish the fire.

Move any flammable objects away from the fireplace.

Call the fire brigade.





In the European Union dial 112



Before using again, it is compulsory to have the entire installation (especially the duct) checked and cleaned by a qualified professional.

A fit for use certificate provided by a professional is compulsory.



#### 2.2 How does your Totem fireplace work?

#### 2.2.1 Door

Your Totem enclosed fireplace is fitted with a swinging door. This is used to make the appliance function on a daily basis.

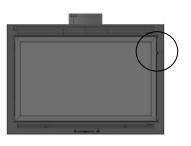
To optimise heating performance and use the fire in complete safety, fully lower the door.

To prepare the fire and add wood or to take full advantage of a traditional fire, raise the door.

When the appliance is hot, use a glove or the safe handling tool to operate it.

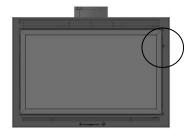
Open the door by a few centimetres before fully opening to prevent down draughts.

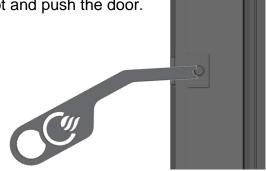
To open the door, insert your safe handling tool in the notch provided for this purpose then move apart outwars.





To close the door, place your safe handling tool on the spot and push the door.





The Totem safe handling tool

The safe handling tool, supplied with every enclosed fireplace, allows the various elements to be handled without risk of burns.





#### 2.3 Combustion adjustment elements

Effective wood burning depends on the amount of air supplying the fire and the rate of smoke evacuation, i.e. the draught of the chimney.

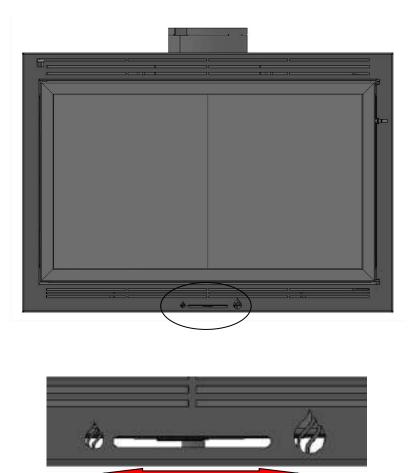
Pour un feu qui dure en toute sécurité, il faut réguler la quantité d'air d'alimentation et la vitesse d'évacuation des fumées.

#### 2.3.1 Combustion air

L'air de combustion est un élément essentiel dans la combustion d'un feu, les éléments de réglage suivants permettent d'en gérer l'allure.

#### Primary air control

The primary air control connected to the air intake flap allows you to control the rate of your fire and adjust its power.





#### 2.4 Using your appliance for the first time

## Before lighting your fire for the first time, remove any documents and accessories it may contain. Also check the ash pit.

Allow covering materials to dry (rough plaster, finishing plaster...) before using the appliance for the first time to prevent them from deteriorating by drying too quickly.

During the first few hours of use, maintain a moderate fire to allow the materials time to cure.

Each time you use the fireplace, gradually increase the load of wood.

They are due to final evaporation of paint, the sheet metal preservative oil and drying bricks. If this occurs, ensure that the room in which the appliance is located is well ventilated.



**N.B.**: Never allow products containing silicone to come into contact with the appliance's paint.



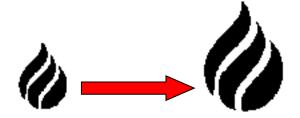
#### 2.5 How to operate the fire

If you have not used your appliance for a long time, check that none of your fireplace's air passages are obstructed (chimney flue, outside air delivery pipe, convection and ventilation grille) before lighting.

Also check that mechanical parts such as the door, counterweights, and adjusters operate freely.

#### 2.5.1 Lighting

- Open the door
- Open the air intake control to the maximum (large flame side, as per the diagram above)



- Place two or three chopped logs in the centre of the enclosed fireplace.

- Place dry and resawn kindling on top. Position your wood so as to allow air to circulate freely.

- Place paper or firelighter on the kindling.

- Light the paper or firelighter

- Allow the flue to increase gradually in temperature without causing the fire to become over active.

- Allow about fifteen minutes for your fire to catch before fully lowering the door using a glove or the safe handling tool.

Once the fire has started, after approximately thirty minutes reduce the combustion air supply by moving the air intake control to the left (small flame).

Load wood before the fire has become a bed of embers.

Recommendation: Never overload your fireplace with wood, especially when starting it up.







#### Adding wood 2.5.2

To open the door during operation, slightly raise the door, pausing before fully opening it to prevent any risk of down draught.

Use protective gloves or the Totem safe handling tool to operate the fireplace's door handle in order to protect you from burns.

#### Maximum loads of dry wood per hour of operation

Maximum	Weight	50 cm logs	Equivalence in kW			
600	3	1 - 2	12			
800	4	2 - 3	18			
1000	6	5	30			



3 logs weighing approximately 4kg

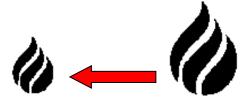
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4 logs weighing approximately 5 kg
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2 logs weighing approximately 3 kg

#### 2.5.3 **Extinction**

Fully lower the door.

Close the air intake control. Control in the stop position on the small flame side (see diagram below)



Allow the fire to go out.



#### 2.6 Maintenance guide

Before carrying out any maintenance on your appliance, wait for it to completely cool down to prevent any risk of burns or fire.

#### 2.6.1 Cleaning the glass

Carefully cover the floor below the door so as not to mark it.

Take a damp cloth dipped in cold ashes.

Ne jamais utiliser de produits décapant pour four, cela endommage les joints de la porte.

Open the swinging door.

Wipe the damp cloth dipped in ashes on the inside of the glass and leave to work.

During this time, empty the ash tray and clean the enclosed fireplace.

Use a wet cloth to rinse.

Dry with newspaper.

Repeat these cleaning procedures until the glass is clean.

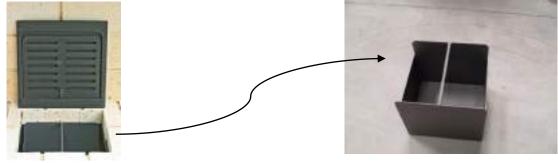
Note: using good quality, sufficiently dry wood (see page 24) reduces carbon deposits on the glass.



#### 2.6.2 Cleaning the fireplace

#### Removing ash

In order to prevent obstruction of the combustion air inlet grille, it is necessary to regularly empty the ash pit located under the cast iron grate. (Selon la taille de l'insert, il sera équipé ou non de grille et/ou bac cendre. Si l'insert n'est pas équipé de bac à cendres et/ou de grille, nettoyer les cendres à l'aide d'une pelle ou d'un aspirateur spécifique à cet effet)



Keep a regular eye on the level of the ash box (every day in the heating season). Empty the box as soon as the level gets close to the top. Collect the ashes in a container designed specifically for this purpose (non-flammable and fitted with a lid), the presence of residual embers could cause a fire. Whenever you empty the ashes, examine the inside of the base of the fireplace and clean it if necessary with a vacuum cleaner. Observing these instructions will ensure maximum convenience when using the fireplace by preventing clogging at the level of the draught control.

For safety reasons, it is preferable to store the ashes outside.

Use a soft, dry cloth to clean the metal parts of the fireplace.

**Remarque** : Si votre insert n'est pas équipé de grille en acier, nettoyez impérativement le fond de votre foyer.

Tip: Your ashes can be used as compost for your garden.

#### **Cleaning the bricks**

Nettoyer à la brosse puis passer de l'huile de lin.







#### Cleaning the steel grate

Use an abrasive pad to remove rust. Rub with household oil to make it shine..





#### 2.6.3 Maintenance and Chimney Sweeping

#### Maintenance

The appliances must be checked at least once a year and repaired if necessary by a qualified professional.

The chimney connectors must always be maintained in good working order, their maintenance must be carried out at least once a year.

The fresh air ducts must always be maintained in good working order.



Clean the outside grille allowing fresh air intake (leaves, dust...) at the start of the heating season and check it periodically throughout the period of use.



Clean the dust filters and grilles of the hood twice a year.



Clean the inside of the installation using a vacuum cleaner or brush in order to eliminate any dust deposits causing carbonization of dust (dirt around the hot air outlets and on the ceiling) at the start of the heating season and once during the heating season.







Check the condition of the door gaskets. Replace them if necessary.



#### Spare parts

The appliance has some wearing parts which must be checked by your fitter during annual servicing.

If you wish to replace parts, broken glass or worn gaskets, contact your fitter, providing the references for your fireplace.

#### **Chimney sweeping**

By chimney sweeping, we mean cleaning by direct mechanical action to the inside wall of the chimney flue in order to remove soot and deposits to prevent these from catching fire, ensuring that the flue is clear over its entire length.





Remove the reflectors or the flame breaker of the appliance (according to the model) before sweeping the flue.

Legislation recommends that you have the installation swept at least twice a year, including once during the heating season, by a professional, qualified company.

After sweeping the chimney, replace the smoke reflector or the flame breaker. Before using the appliance again, check that all of the parts have been correctly replaced.

A certificate must be issued by the contractor after the work has been completed.



Flue after chimney sweeping

Flue before chimney sweeping



#### 2.7 Maintenance record

Maintenance record table

					/	/ /		·
N							ainions on	
Model					. /		nd P stille nditte	
Date installed			/	epinte	,et	nains	a and we co	
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Contact details of installater			Inne	weepine weepine zaning ru	orico	anillene	the private condition the second seco	
Name	 Date	<u> </u>	<u> </u>	<u> </u>	/ 0	/ 0/	/ Work carried out by	
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Address								
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### 3 Basic information about firewood

Totem fireplaces are high-performance appliances. Using good fuel is essential for optimal functioning of your fireplace.

Wood is a renewable form of energy when it comes from sustainably managed forests.

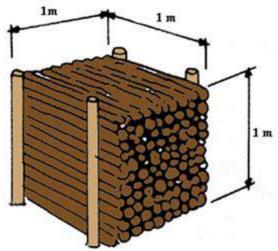
In France, forests represent 30% of the country's area. French forests have been expanding for several centuries. (*Fibra*)

Here is some basic information about firewood.

#### **3.1 General points**

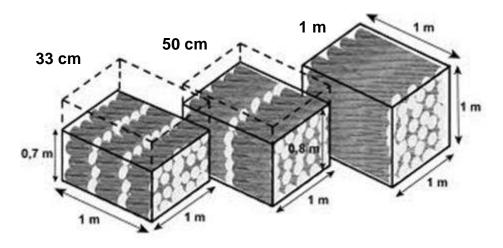
#### What is a stere of wood?

A stere of wood corresponds to  $1m^3$  of wooden logs measuring 1 m stacked parallel. However, since 1978, the legal sales unit is no longer the stere but the  $m^3$ .



A stere is not always equivalent to one 1 m<sup>3</sup>, the volume of the stere varies with the length of the logs. With smaller logs, the volume in m<sup>3</sup> will decrease but you still have the same amount of wood. The spaces are filled better.

Below, 3 steres of wood in logs measuring 33, 50 and 100cm.





#### Which type of wood should I choose?

**Birch**: Birch burns quickly without its flames becoming too hot and leaves very little ash. It produces attractive, slightly bluish flames. It is a wood liked by bakers. It produces good embers and is used for lighting the fire.

**Beech**: Beech is excellent firewood: it dries quickly and offers good heating power. For drying, it must be placed under a shelter as soon as it has been resawn so that it does not rot. It is a wood which burns quickly, so it is easy to light. It emits pleasant odours when burning. It is considered the idea firewood. It produces attractive flames and good embers.

**Oak**: It burns very slowly. It has to be left for 1 year in the rain in order to remove all traces of tannin before being stored under shelter to dry. Oak produces the best embers. It burns slowly and produces a lot of heat.

**Hornbeam**: Hornbeam burns slowly which results in a good amount of heat production. Not much smoke is produced when burning. Hornbeam produces excellent embers which distribute heat over time. The flames that it produces are attractive and uniform.

**Ash**: Described as producing the most attractive flames, it is a wood which burns for a long time without projecting sparks and produces a large amount of heat. It is difficult to cut.

**Chestnut**: Chestnut is a strong wood. It used to be used for manufacturing barrels. It is mediocre firewood because it explodes and produces a lot of sparks when burning. When the fireplace door is lowered, it can be used without risk: when the door is raised we recommend that you use a fire screen.

**Coniferous trees**: Coniferous trees should not be used. This type of wood releases large amounts of heat but burns very quickly. When it burns it causes the projection of embers and the resins contained in the wood clog up the fireplaces and flues very quickly. These very large deposits of soot encourage fires to start in the flues.

#### Important :

- Oak and chestnut contain tannins which affect burning. They must be stored for 6 – 9 months in a non-sheltered area to remove the tannins before being stored in a sheltered area for a period of 2 years.

- Avoid burning too much bark as it creates 10% more ash.

- Also avoid using wood with knots in it as this reduces the appliance's performance

- Wood which is too dry is not good for burning. Indeed, the wood heats too quickly, does not burn for long enough and significantly increases the temperature of the smoke.

- Do not use wood gathered on beaches as it releases hydrogen chloride when burned.



There are 3 families of wood:

- hard hardwood (oak, beech, ash, chestnut, hornbeam, walnut...)
- soft hardwood (poplar, willow, alder, birch...)
- coniferous trees (pine, spruce, fir, larch, Douglas fir...)

We recommend that you use firewood from the hard hardwood family. It has better heating power for an equal volume. I.e., it has greater heating power for the same volume of wood burned.

Here is a table presenting the heating power, with equal humidity and volume, of the different species of wood.

The heating power is presented on the basis of beech wood (set arbitrarily at 100).

Species	Heating power							
Recommended wood								
Hornbeam	110							
Beech	100							
Ash	97							
False acacia	97							
Oak	96							
Elm	96							



Hard Soft Coniferous

Species	Heating power							
Wood to avoid								
Birch	93							
Chestnut	<u>89</u> 84							
Maple								
Lime	76							
Alder	71							
Poplar	60							

Species	eating power							
Wood which must not be used								
Spruce	68							
Fir	64							
Larch	84							
Pine	78							



#### 3.2 Drying of wood and its moisture content

For wood, we generally speak of the moisture content, represented by H%, known as moisture content on dry basis (in relation to oven dry wood).

Moisture content of wood:

$$H \% = \frac{Mass of pure water}{Dry wood} \times 100$$

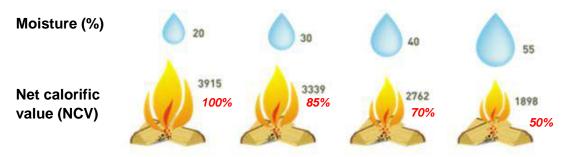
Moisture content varies from 50 to 120% (or more) for saturated wood (green wood) and from 10 to 20% for air-dried wood

It is this value which is measured using our hygrometers.

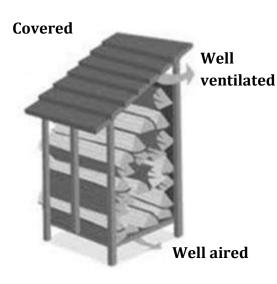
It is important to note that wood which contains too much moisture does not produce heat and that the more moisture the wood contains the less warmth it will provide.

Indeed, the heat output produced by wood during burning is not used to warm you, it is used to evaporate the water that it contains.

Furthermore, humid wood increases carbon monoxide emissions by a factor of 2 to 4 compared with dry wood and encourages clogging of your appliance, in this way decreasing its efficiency.



These figures correspond to the mean for hardwoods.



Furthermore, humid wood increases carbon monoxide emissions by a factor of 2 to 4 compared with dry wood and encourages clogging of your appliance, in this way decreasing its efficiency.

This is why wood must be dried for at least 15 - 18 months and stored in a sheltered, ventilated place, away from water and out of direct sunlight.

Wood must be resawn into logs, which encourages drying.

The duration may vary but in the end, you must obtain wood with moisture content always lower than 25%.

This content can be checked using our hygrometers which can be purchased from our distributers.



#### 3.3 Types of fuel which are forbidden

- Plastic
- Liquids, solvents
- Household waste
- Hazardous or noxious waste
- Electronic components
- Lignite
- Coal, petrol, alcohol...



Totem fireplaces are designed for domestic use. They should under no circumstances be used to incinerate waste of any kind.

It is forbidden to use treated wood which may produce toxic fumes and clog up the installation.

For your safety, you should also avoid intense fires. Recycled wood (**pallets**, **joinery wood**, **planks**...) **must not therefore be used** as it results in overheating which could damage the appliance, the chimney connector and the chimney flue.

#### 3.4 Initial checks in case of poor functioning

- When the door is closed, the wood burns too quickly and the fire is over active:
  - Is the fire door shut properly?
  - Are the reflectors in place?
  - Do you use recommended firewood?
  - Is the wood too small?
  - Is the draught of your fireplace excessive? If so, fit a draught stabiliser.
- When the door is closed, the fireplace does not heat up sufficiently:
  - Are the ventilation and convection grilles clogged up?
  - Is the enclosed fireplace door correctly shut?
  - Have you loaded enough wood?
  - Is the supply of combustion air insufficient? Open the combustion air damper.
- The wood does not burn well:
  - Is the wood too humid?
  - Are the pieces of wood too large? If so, saw them.
  - Is the draught of your fireplace insufficient? If so, insulate the chimney flue and chimney stack.

CE CERTIFICATION : NF EN 13 229												
					kW	Co rate	T° smoke	particles	СхНу	NOx		
	date	number	laboratory	wer		at 13% O2		in mg/Nm3 at 13% O2	in mg/Nm3 at 13% O2	in mg/Nm3 at 13% O2	Environmental performance index	
Enclosed fireplaces												
INSERT 600		2014/0010	ARGB	70,2%	13,5	0,11%	355°C	48	87	50	0,9	
INSERT 800		2013/0123	ARGB	76,4%	14,9	0,15%	293°C	48	234	45	1,0	
INSERT 1000		2013/0158	ARGB	75%	23	0,47%	329°C	85	597	21	3,0	

## 5 Warranty

#### 5.1 Statutory warranty

The statutory warranty, complete and compulsory, stems from application of articles 1641 et. seq. of the Civil Code.

If the buyer proves that there is a latent defect, the manufacturer must legally make good any foreseeable consequences.

#### 5.2 Contract guarantee

The aim of the contract guarantee, which in no way excludes the statutory warranty, is to guarantee the buyer against any manufacturing faults or faulty material other than latent defects.

The guarantee is valid for 5 years from the purchase date indicated by the seller.

It includes, during this period, free exchange of faulty parts (parts).

The appliance must be installed in such a way as to allow fast and easy disassembly and reassembly (inspection panel compulsory).

#### 5.3 The following are not covered by the warranty

- damage caused by something external to the appliance (e.g. broken glass due to mechanical shock),

- damage resulting from forms of energy, use or installations which do not comply with the manufacturer's instructions and with legal and regulatory requirements,

- damage entailing the liability of a third party or resulting from a deliberate act or willful misconduct,

- wearing parts (brickwork, vitro-ceramics, vermiculite reflectors and combustion grilles).