USAGE AND MAINTENANCE MANUAL FOR A SOLID FUEL STOVE

DEAR CUSTOMER.

Congratulations on your purchase of "TERMA" solid fuel stove. Please make installation and use the stove in accordance with this manual, this will ensure safe operation and long life of your stove.

Table 1. Technical specification:

| Model name | Dimension | Nominal Power | Weight | Flue coupling diameter | Minimum distance from surrounding combustible materials |
|------------|-----------------------------|------------------|--------|------------------------------|---|
| | width/length/height [mm] | [KW] | [kg] | [mm] | sides/rear/front [cm] |
| SPARTA | 515x460x1050 | 12 | 72,4 | 150 | 75/55/80 |
| LYNOR | 450x410x1150 | 9 | 89,6 | 150 | 70/75/80 |
| VALKIRA | 580x465x960 | 9 | 117,3 | 150 | 65/50/80 |
| LIBOR | 535x375x930 | 7 | 53,1 | 120 | 60/70/80 |
| LAMIA | 565x410x810 | 9 | 75,2 | 150 | 65/75/80 |
| LUNA | 470x370x80 | 7 | 42,9 | 120 | 65/75/80 |

1. Description and purpose of the stove:

TERMA solid fuel stoves are designed in a way to enable efficient combustion of solid fuels with the possibility of adjusting and regulating the amount of input air required for the combustion process. The stove consists of parts from steel, with doors and top plate made of cast iron or steel (depending on the model of the stove), and the grate in the combustion chamber made of cast iron. All stoves are plated inside with schamotte bricks, which provides long-term heat accumulation. The stoves are painted with special heat resistant paint. The glass on the door is the first class heat resistant ceramic glass.

The stoves are designed for space heating of a wide spectrum such as living rooms, offices, restaurants, schools, garages, warehouses, etc. ..

2. Installation:

- all local regulations including those referring to national and European standards needs to be complied with when installing the appliance.
- Place of installation must be horizontal and must have adequate carrying capacity, otherwise must be taken appropriate actions to fulfill these conditions.
- the stove must not be placed near combustible materials (such as wooden, textile or plastic furniture parts, etc..) nor near cooling devices. Minimum distance between the stove and such materials must be provided according to data from Table 1.
- if the stove is placed on the floor made from combustible materials (wood, itison, floor plastic, etc.) it is necessary to protect the floor with metal sheet of min.30cm width from the sides of the stove, and min. 50cm from the front side of the stove. Flue pipes must be away from combustible objects min. 40cm.
- When connecting the stove to the chimney you should consult a local competent institution. The stove should be attached to a chimney with inner radius of at least 120mm and height of 6m. If multiple stoves are attached to a single chimney, the attachment distance should be at least 2m. The chimney should extend beyond the top of the roof min. 50cm. You should also pay attention that connection pipe to the chimney does not stand out in the cross-section of the chimney, as well as the connection point of flue pipe to the chimney must be tightly sealed. (see the Figure No.1) If two chimneys are going parallel one to each other, they must have separate openings for

cleaning, and cavities between the chimneys also may not exist. Opening for cleaning the chimney must be tightly closed and sealed when using the stove (while the fire runs in the stove).). If the chimney is a newly built the fireplace must not be constantly fired at full capacity until the chimney is completely dry.

- on the place of installation of the stove there must be provided free access for cleaning of the stove, the flue connectors and the chimney itself.
- In order that stove work properly the necessary flue draught must be $12 \div 14$ Pa. Check of the airflow can be carried out by using a candle also, as shown in Figure no. 2
- Fresh air is necessary for combustion of the fuel and proper functioning of the stove, and you must provide that in the room where the stove is installed always be enough (fresh) air. Extractor fans, cooker hoods and similar devices which extracts air from the room should not be placed in the same room where the stove is installed. If this is the case or if the doors and windows are sealed, then if necessary you must find a way to lead fresh air from outside for proper combustion. In this case, before installing the stove, it is necessary to consult with a competent engineer/organization. If you do not provide a sufficient amount of air for combustion, the fuel in the stove will not burn completely and the room where the stove is placed can become contaminated with unhealthy and dangerous gases!

Figure No. 1 INSTALLATION OF THE STOVE

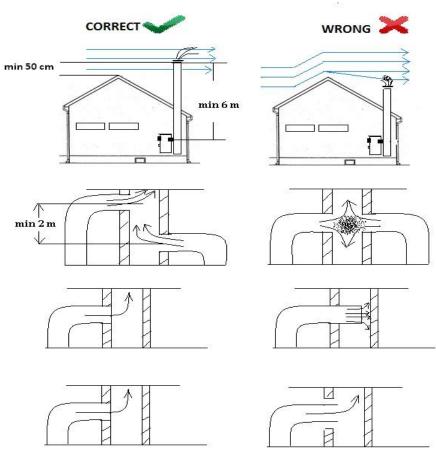
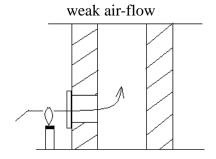
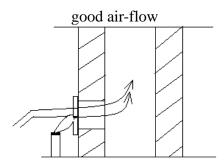
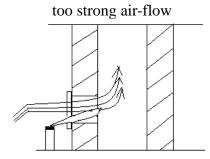


Figure No. 2 CHECKING OF THE FLUE DRAUGHT







3. Usage:

- all local regulations including those refering to national and European standards needs to be complied with when installing the appliance.
- recommended fuel: wood logs (beech wood, poplar wood, etc..), coal with less calories (brown coal) The heating strength depends on the type and quality of fuel used.
- the initial heating of the stove should be gradual to avoid sudden stresses on the material. Do not use the stove with full capacity during the first 8-10 hours of firing (1-2 days). Thermo-resistant paint on the stove will be fully formed (harden) after first 2-3 hours of the firing the stove. During this time, please do not touch the paint and do not put anything on the stove, in order to avoid damage of the paint. During first 15-30 min. of firing the stove may emit unpleasant smell and smoke, during which period windows of the room should be opened. Starting and maintaining the fire:
- the combustion intensity is regulated with the primary air regulator located at the front of the stove by turning it left-right, and with stack valve regulator (on models which possess it) located at the chimney spout by rotating it.

When handle of input air regulator is in most right position it is in closed position (no air flow into the burning chamber), and when in most left position it is fully opened (maximum flow of air into the burning chamber). Between these two, gradually can be set medium positions.

When handle of stack valve regulator is in most left or most right position, it is in closed position (mimimum output flow of combustion gases.. When handle of stack valve regulator is in upper position, it is in fully opened position (maximum output flow of combustion gases). Between closed and fully opened positions are medium positions.

- do not use gasoline, lighter fluid, Kerosene or other flammable liquids to start or rekindle the fire, for the safety reasons. When starting the fire, make sure that air regulator and stack valve regulator (on models which possess it) are in fully opened positions. Build a fire directly on the grate with crumpled newspaper, kindling wood and commercialy available "firelighters". Do not allow single pieces of paper to float up the chimney especially alight. This is a common cause of chimney fire and can cause structural damages to the property. When the kindling is burning well you can add larger pieces of wood to gradually increase the size of fire when you want to refuel the stove, first put the input air regulator in closed position and after that open the door slowly and carefully refuel the stove. Do not open the door abruptly as this may cause the appearance of smoke in the room. Maximum filling height in the burning chamber should not be more than 2/3 of the height of the chamber. Optimal filling height in the burning chamber is 1/2 of the height of the chamber. It is advisable to wait for the fire to be reduced to hot embers before re-loading. Do not let the congestion of grate in the combustion chamber with ash and non-burned fuel. Clean the grate regularly.
- The stove is constructed and designed for continuous operation with the closed door of the combustion chamber, except during refueling the stove. Do not open the door when the stove is in use without the need.
- de-ash the ash pan regularly do not allow a bed of ash to build up above the level of the sides of the ash pan. Wood will burn better with the slight build up of ash in the ash pan.
- it is forbidden to use the stove for burning of organic and inorganic waste (animals, plastic, textiles, oiled wood, etc..). During combustion of such materials can be released many harmful and toxic supstances.

4. Maintenance:

- ash pan must be emptied regularly
- burning chamber and all surfaces which are in contact with smoke gases should be cleaned and emptied

periodically from the ash and other types of fuel waste. Clean interior surfaces inside the stove guarantee economical operation of the stove. It is recommended to clean the stove once a month or more frequently in the case of larger soiling and fuel waste.

- after each heating season the stove, pipes and the chimney must be thoroughly cleaned from the soot. During the period of non-use the stove, leave the input air regulator and stack valve regulator in maximum opened position to allow natural air flow through the stove, in order to avoid aggregation of condensate inside the stove.
- clean the glass regularly with soft cloth. Clean the outside of the stove with soft cloth, but do not use abrasive and other aggressive chemical cleaners as they could remove the paint from the stove. Do cleaning only when the stove is cold.
- if there is a need for changing some part or repairing the stove you must call competent enginner to do this maintenance

5. SAFETY - CAUTION!

- the glass must not be cleaned with wet cloth nor sprinkled with water when is hot. Otherwise, the glass may crack
- very cold objects should not be placed on the top plate when is hot. Otherwise the top plate may crack.
- do not use alcohol, petrol or any other liquid fuel!
- some parts of the stove can reach very high temperatures during operation the stove, thus it is required adequate precaution while using the stove. Do not allow children to handle and play near the stove.
- It is not allowed to make any structural changes on the stove without the approval of the manufacturer.