

WATER

Enbloc thermo-fireplaces

Here below is described the whole range of firewood enbloc thermo-fireplaces for the production of water for heating.

IDRO-TERMO 80K25 TS. Model with front opening cm. 80 mouth;
 IDRO-TERMO 70K20 TS. Model with front opening, cm. 69 mouth;
 IDRO-ESA 70K25 TS. Model with large hexagon front opening;
 IDRO-ESA 70K20. Model with little hexagon front opening,
 IDRO-TERMO 81 SX/DX TS. Model with front opening and lateral opening,

Water thermo fireplaces are able to remarkable performances. The boiler body, made with high thickness, are designed to obtain the maximum heat exchange at each point of furnace exposed to fire. The fitting of a refractory panel, situated directly above the fire to divert the heat to piping, improve the already high thermal exchange. The base and load bearing structure are solidly assemble one other. The very silent movement of the rise and fall door is of simple conception but extremely reliable. With no telescopic guides, this carried out by micro-oscillating bushes on perfectly glossed steel bar. The balancing back weight of the door is supported by chains sliding on solid sprockets with bearing. This movement system has been successfully used on all the Grilli enbloc fireplaces since 1994. The external insulation cover, present on all the five models, guarantees great thermal inertia and stability of water temperature, permits to avoid loss of heat outside of the structure. This means high overall power yielded to water (18 - 19 KW) that directly influences on the heatin of radiators. At the everyday use the firewood consuption are decidedly reduced while the heating capacity can cram till 680 mc (calculated with energetic requirement of 30 Kcal/h per m3). All the five models are equipped with copper pipe coil included heat sink of emergency (it needs to link a temperature safety relief valve, that is optional). In alternative it can be used as fast producer of water for the sanitary. In this case, in order to obtain a good production of hot water, it will be necessary to plan higher starting values of circulation pumps.

How they work

You can use firewood for fireplaces and stoves which you can usually find for sale. Wood essence such as beech, oak, ash and hornbeam are suitable. In order to guarantee excellent heat exchange, the rotation of fumes is canalized into quite compressed spaces, so the standard functioning of the thermo-fireplaces is meant with completely pulled down door. The furnace gets heated after lighting the fire, after few minutes, the hot water goes upwards and sensitizes the probe connected to the (supplied) control panel. At the default temperature (set the values at 55° at least) the (optional) pump will start up and will send water to the home heating system. For the water production for the sanitarries, it is possible to use the copper pipe coil included. It is important to consider that the hot water production directly depends on the fire vivacity at the moment of collecting. For this reason, a constant and always available production of water is easier obtained adding a storage boiler to the system (optional). As for diagrams concerning system and installation see the following pages. The draught regulation rolling gate is manual and so it permits to check the draught of fireplace as well as its power. When the door is pulled down, the knobs of combustion control entirely opened and draught regulation rolling gate toward closing, it will get the maximum power of thermo-fireplace. Instead, regulating the knobs for combustion control toward closing, it will have a less firewood consumption.

