

**RULES FOR THE CORRECT INSTALLATION OF AN
ESSEBLOCK ESSEWOOD CHIMNEY FLUE *particularly suited to
passing through wooden ceilings and roofs with the special EC certified
closed roof or ceiling passage***

***EC Certificate: T400-N1-D-V2-L50050-G00
T200-P1-W-V2-L50050-O00***

***T450-N1-D-Vm-L50050-G20
T450-N1-D-V2-L50050-G20***

CHECK – Before installing the double-insulated *ESSEBLOCK ESSEWOOD* chimney flue, which can be placed in direct contact or close to wooden surfaces, you **must** check that the product designation (in accordance with UNI EN 1856-1), cross-section, technical characteristics and anything else necessary corresponds with the chimney flue's intended use, as **required by the standards** and the **provisions** laid down in the thermal technician's **plans**.

INSTALLATION: The following instructions must be followed for installation.

POSITION – During installation, follow the planner's instructions for inserting special elements (inspection module etc.). When starting from ground level, it is necessary to prepare an adequate concrete base to support the weight of the *ESSEBLOCK ESSEWOOD* chimney flue, bearing in mind that the maximum compression load that the flue can withstand is up to 80 free elements. If the chimney flue does not start from ground level, you must make a support along the wall or use the WBSB bracket, always bearing in mind that if fixed properly using steel anchors (not provided) with a diameter of at least 8 mm and special washer, the bracket can support *up to six metres of an ESSEBLOCK chimney flue* (you are advised to check both the load capacity of the anchors you are using and the capacity of the back wall if it is not made of reinforced concrete or does not have a solid structure).

If necessary, the WBSB bracket can also be used between segments to share out the weight. The flue can only be installed vertically.

You must act with due diligence if the wall near the chimney flue is made of a combustible material, i.e. wood or similar.

It is possible to place *ESSEWOOD* in direct contact with combustible surfaces, whether the ceiling, or roof, or the walls of the house, for smoke released from equipment operating at constant temperatures of up to 400°C, even if there is the risk of fire caused by soot. You must nevertheless take care when overlaying or joining together the elements.

For equipment releasing smoke at constant temperatures of up to 450°C, or if the thermal technician has provided for use of the T450-.....-G20, when installing the *ESSEWOOD* you must check that the combustible parts are the correct distance away (min. **2 cm**). The gap must not be filled to allow air to pass for cooling. When passing through a wooden ceiling or roof, it is necessary to use the special certified WPT roof or WPS ceiling passage. Nevertheless, you must **always** make sure that you **leave 2 cm** between the wood and the outside of the chimney flue. You must **not** put insulating materials (rock wool, ceramic fibre, or the likes) between the wood and the stainless steel because they provide a **bridge** for the heat. As a result, the gap must be left **empty** so that the low amount of

heat radiation from the stainless steel and the very low outside temperature of the **ESSEBLOCK ESSEWOOD** chimney flue guarantee a safe temperature on the wooden surfaces.

In order to place the condensation drain at the start, when so required, you must use the WSC “condensation drain support”, which has room to contain the RC steel “condensation collection” element. This is fixed to the module above with a band and is then connected to the water drainage system. It is a good idea to create a cleaning system by placing a WBMI inspection module above.

STABILITY – one of the most stable and simple installation solutions is to start from ground level with a suitable base. So that the **ESSEBLOCK ESSEWOOD** elements remain stable and anchored to the back wall, you must apply some fine mortar between the wall (if made of stone or brick) and the flue element. In addition, you must insert a WBSA bracket every four free elements. This should be embedded in the internal perimeter of the **ESSEBLOCK ESSEWOOD** cement layer and fixed to the wall in a suitable manner (using dowels or wall anchors – not provided). On the other hand, if the walls are made of wood, in order to guarantee stability, you must use the WSAM steel bracket which should be anchored to the support every four elements of the chimney using special screws (not provided).

If the **ESSEBLOCK** flue goes through ceilings or terraces or similar brickwork elements, it can be anchored perfectly by filling the gap between the outside of the flue and the structure it crosses through with cement. No other anchoring systems are required.

SAFETY – As said previously, if the chimney flue passes through ceilings or roofs built using **wooden beams and components**, and it is connected to fireplaces or stoves or other equipment operating at temperatures of up to 400°C using fuel that produces soot, therefore causing danger of fires, the chimney flue can be placed in direct contact with the combustible surfaces. With equipment operating at temperatures of up to 450°C, you **must** leave at least **2 cm** between the outside of the plastered **ESSEBLOCK ESSEWOOD** chimney flue and use the special EC certified WPT roof or WPS ceiling passages.

Up to three **ESSEBLOCK ESSEWOOD** elements can be placed on a roof without the need for anchoring.

If it is forecast that houses with structures made wholly of solid wood will need to settle, compensation must be provided for the elastic movements of the structure at the points where it passes through ceilings or the roof. As a result, it is also important to use a steel-enclosed WPT “roof passage” or WPS “ceiling passage” for **ESSEWOOD** T400 chimney flues... so that the plastered concrete outside the chimney flue and the steel inside the roof or ceiling passage can slide alongside each other to compensate for any settling. In order to waterproof the part above the wooden roof, you need to position a metallic rain water collection gully and close the top part of the gully to the chimney flue by attaching a tar or similar sheath to the **ESSEBLOCK** flue. This must then be placed above the metallic gully in order to compensate for any movements of the wood.

However, due to the countless building methods and the various ways of installing the **ESSEWOOD** chimney flue, the best method for installing the **ESSEWOOD** chimney flue must be decided on in each single case so that you can enjoy the benefits and warmth of stoves and fireplaces in peace of mind.

JOINTS – The first step is to place the right quantity of fine mortar or glue for tiles or a similar product (all products that are not fireproof or are combustible are prohibited) along the outside border of the heat-insulating concrete. Join the two modules together. When positioning the various elements of the chimney flue, the part with the smaller diameter (MALE) goes downwards and fits in the part with the wider diameter (FEMALE) which faces upwards. This is to prevent leaks of condensation (follow the arrows on the flue label).

When installing **ESSEBLOCK** chimney flues on methane boilers, and therefore where there is condensation, you must put the GS silicon seal in its housing, taking care to place the wings in correspondence to the direction in which the next element will be inserted.

N.B. : when joining together the various elements, it is important to prevent the mortar or similar product from touching the steel part when squashed down. This would prevent perfect insulation and when the steel flue dilates this could result in cracks in the plaster. In addition, it is a good idea to limit the thickness of the mortar to around **0.3-0.5 cm**.

EXTERNAL FINISH – When installed, the whole **ESSEBLOCK ESSEWOOD** column must be given a suitable external finish with overlay, special plaster netting, and, if the flue is outside, it is indispensable for the surface finish to be completed with a coat of waterproof/waterproofing material in order to prevent damp getting inside. The outside part can then be finished with a coat of paint.

In particular, it is important to prevent water leaks when positioning any chimney stacks different from **ESSECOM**, which are specifically for use with the **ESSEBLOCK** chimney flue. In addition, waterproofing systems suited to the type of cover must be used.

MAINTENANCE: - In order to keep **ESSEBLOCK ESSEWOOD** chimney flues for equipment that uses solid and/or liquid (oil) fuel clean and in good working order, we recommend that you call out a specialist (chimney sweep), especially if there is any dirt or soot. In any case, at least once a year it is necessary to check that the flue is free from residuals from combustion or other blockages. If necessary, it should be cleaned using a swab of a suitable size to remove all solid residuals attached to the walls. In the same way, you should check the chimney stack for any build-ups of soot in the places where smoke is released, and clean it thoroughly.

Pay attention that the swabs do not scratch the material on the internal part of the flue.

In order to keep **ESSEBLOCK ESSEWOOD** chimney flues for equipment that uses gas fuel in good working order, at least once a year it is necessary to check that there are no blockages of any type along the flue and in the stack, and that the condensation drains are free and in working order.

WPT ROOF PASSAGE

WPS CEILING PASSAGE

When going through wooden ceilings or roofs, a “**ceiling passage**” or “**roof passage**” must be used as a safeguard to keep the temperatures of the combustible materials within safe limits. The concepts behind the two passages are essentially the same. They consist of two rectangular sheets of stainless steel whose internal dimensions are the same as the external size of the **ESSEWOOD** chimney flues. They overlap partially like a telescope to prevent direct radiation from the outside walls of the chimney flue to the combustible walls. They have wings whose purpose is both to fix them on the ceiling or roof, and to guarantee the minimum distance of the chimney flue from the combustible walls (always 2 cm).

The stainless steel rings are also intended to compensate for shrinkages and movements of the wood structure.