

## **RULES FOR THE CORRECT INSTALLATION OF A CHIMNEY FLUE**

***ESSEBLOCK 316* – EC certificate: T600-N1-D-Vm-L50050-G50  
T600-N1-D-V2-L50050-G50  
T200-P1-W-V2-L50050-O30**

***ESSEBLOCK 304* – EC certificate: T600-N1-D-Vm-L20050-G50**

**CHECK** – Before installing the *ESSEBLOCK* chimney flue for gas- or oil-operated boilers or for stoves or fireplaces, 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* chimney flue, bearing in mind that the maximum compression load that the flue can withstand is up to 80 elements. If the chimney flue does not start from ground level, you must make a support or use the BSP 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 BSP bracket can also be used between segments.

The flue can only be installed vertically.

In order to place the condensation drain at the start, you must use the SC "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 BMI inspection module above.

**STABILITY** – In order for the *ESSEBLOCK* elements to remain stable and anchored to the back wall, you must apply some fine mortar between the wall and the flue element. In addition, you must insert a BSA bracket every four free elements. This should be embedded in the internal perimeter of the *ESSEBLOCK* cement layer and fixed to the wall in a suitable manner (using dowels or wall anchors – 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** – If the chimney flue passes through ceilings or roofs built using **wooden beams**, and it is connected to fireplaces or stoves or other equipment operating at high temperatures with fuel that produces soot, therefore causing danger of fires, you **must** leave at least 5 cm between the outside of the plastered *ESSEBLOCK* chimney flue and the wood; this gap must never be filled (it is a good idea to use the *ESSEBLOCK ESSEWOOD* chimney flue).

If used at temperatures of under 400°C, there is no need for protection against accidental contact. However, protection is needed at higher temperatures (it is a good idea to use the **ESSEBLOCK ESSEWOOD** chimney flue).

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

**The space between the chimney flue and combustible materials must NEVER be sealed using expanding products or mineral wool.**

**If you have to pass through wooden roofs or ceiling, it is a good idea to use the *ESSEBLOCK ESSEWOOD* chimney flue. If not, you must leave open a gap of 50 mm.**

**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** 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 to prevent rain water from leaking in from the roof.

**MAINTENANCE:** - In order to keep **ESSEBLOCK** 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** chimney flues for equipment that uses gas fuel clean and 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.