

ATLAS
BUILDING TOGETHER



THE IMPORTANCE OF VENTILATION INSTALLATION

Guide for Homeowners

WHY IS VENTILATION SO IMPORTANT?

Proper ventilation is essential for safety, health, comfort, efficient operation of heating systems, and the durability of the building. This is especially crucial when applying an External Wall Insulation (EWI) system, which increases the airtightness of the house, reducing uncontrolled airflows.



SAFETY

- **Provides fresh air to residents**, preventing stuffiness and ensuring a comfortable living environment.
- **Prevents the production of carbon monoxide (CO)** from fuel-burning appliances by providing sufficient amount of oxygen (O₂) for proper combustion.



HEALTH

- **Removes dust mites, bacteria, fungal spores, allergens and toxins from the air**, limiting the concentration of harmful pollutants inside the building.
- **Prevents the accumulation of radon** and other dangerous substances.



COMFORT

- **Ensures pressure balance** inside and outside the building.
- **Maintains appropriate thermal and humidity conditions**, eliminating stuffiness and discomfort.
- **Removes unpleasant odors**, keeping the air fresh.



OPERATION OF HEATING SYSTEMS AND APPLIANCES

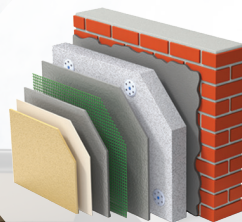
- **Provides necessary oxygen for combustion** in heating devices, water heaters, fireplaces, and stoves, ensuring proper operation.



BUILDING DURABILITY

- **Reduces the risk of condensation** on the internal surfaces of external walls, preventing mold growth.
- **Removes moisture from rooms**, which originates from daily activities (e.g., cooking, washing), plant transpiration, and the use of appliances.

WHAT SHOULD YOU KNOW WHEN INSTALLING EWI?



DO NOT BLOCK OR ALTER VENTILATION SYSTEMS

Never block, seal or alter any room ventilation ducts or vents on your own. It is crucial that ventilation is kept fully functional to ensure a safe and healthy home.

IF THERE ARE DOUBTS ABOUT THE QUALITY OF CONSTRUCTION OF THE VENTILATION SYSTEM

Whether these concerns come from the homeowner or the EWI installer, any necessary changes should be assessed and carried out by qualified specialists in ventilation or building physics.

MAINTAIN EXISTING VENTILATION

All vents must be preserved, ensuring they remain continuous and tight.

INSULATE VENTILATION DUCTS

Certain ventilation ducts must be thermally insulated.

IMPACT ON THERMAL EFFICIENCY

Inform residents that changes to the ventilation system may affect the thermal efficiency of the applied measures.

CONSULT PROFESSIONALS

Any changes to the ventilation system should only be done by qualified professionals.

COMPLIANCE WITH DIFFERENT REQUIREMENTS

Be aware that different ventilation requirements apply to daily living areas, wet rooms, and rooms with fuel-burning appliances.

FIRE SAFETY COMPLIANCE

The ventilation system must meet fire safety regulations.

MECHANICAL VENTILATION:

May be required in some cases, but it cannot be used everywhere.



RECOMMENDATIONS FOR HOMEOWNERS

If you have any questions or notice any ventilation issues, do not attempt to fix or modify them yourself.

Always contact a qualified professional to design and implement the right solutions.

A well-designed and functioning ventilation system is key to the health, comfort and safety of your home.

Always follow your EWI installer's recommendations, and never make changes to the ventilation system on your own.

References:

NSAI Standard Recommendation S.R. 54:2014 & A2:2022:

Code of Practice for the Energy Efficient Retrofit of Dwellings.

SEAI: Domestic Technical Standards and Specifications Version 1.6 2024.

Building Regulations 2019 Technical Guidance Document F: Ventilation; Department of Housing, Planning and Local Government.

Building Regulations 201 Technical Guidance Document J: Heat Producing Appliances; Environment, Community, and Local Government.

