

On 27 June 2019, the UK became the first major economy in the world to set its net zero greenhouse gas emissions target in law.

To achieve this by 2050, updates to Part L and F of the building regulations come into force as of 15 June 2022.

Naturally the pace of change and ongoing debate around this has caused much disruption among the construction sector. Particularly concerning are tightening background ventilation requirements under Part F, with the Government making trickle vents mandatory for many new frames. In response, REHAU has developed this simple fact sheet as a reliable aid.

Ventilation Systems You Need to Know – Introduction 15th June 2022

The new guidance allows for three ventilation systems for new builds:

- System 1 Known as Natural Ventilation, allows for use of trickle vents and used in buildings referred to as 'less airtight'
- System 2 Uses continuous mechanical extraction, allowing for trickle vents with a minimum equivalent air area (EQA) of 4,000mm² for each habitable room.
 - Number of vents in a building should be two more than bedrooms (eg. three for a onebed dwelling, four for a two-bed dwelling, etc.)
- System 3 Mechanical ventilation systems with heat recovery with no provision for background ventilators

For projects where System 1 is used, 'less airtight' is defined as:

- Design stage calculation showing air permeability higher than 5m³/ hm² at 50Pa
- After-build air tightness test showing air permeability higher than 3m³/hm² at 50Pa

Room Type	Multiple Floor Dwellings Minimum Equivalent Air Area (EQA)	Single Floor Dwellings Minimum Equivalent Air Area (EQA)
Kitchen	8,000mm ²	10,000mm ²
Utility room	No minimum	No minimum
Bathroom	4,000mm ²	4,000mm²
Sanitary accommodation	No minimum	No minimum

Future-proof your designs with high-performance uPVC accessories

With growing pressure on developers to select products capable of increasing requirements for ventilation, windows are now being looked to for those marginal gains. Of the various materials available, polymer has risen in popularity as the specifier's choice in recent years due to the pace of innovation and compatibility with ventilation-minded frame accessories.

REHAU profiles have been developed to be compatible with Glazpart trickle vents, featuring an innovative 'link' to reduce draughts and direct air away from building occupants. Frames can therefore be specified to meet updated, mandatory Part F requirements on new projects and installations, ensuring good air quality through adequate means of ventilation.

Further consultation should be considered in the below situations when using System 1, where minimum EQAs may be subject to change:

- Buildings with only one exposed façade, such as multi-storey structures
- Buildings with more than 70% of its openings on the same façade
- Buildings featuring kitchens with no external façades or windows
- Buildings featuring bathrooms with no external facades or windows
- Buildings where the living room and kitchen are not separate (i.e. open plan)

Need more information?

REHAU's commercial technical team is ready to answer any design questions you may have, as well as supporting your specification process. Why not book a *free CPD to ensure your specification team are compliant and understand the new compliance requirements for windows and doors. T&C's apply.











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