

what the F and L?

building regulation changes for 2022



What You Need To Know

NET ZERO





building regulations

what you need to know

Building Regulation Changes in 2022

In December 2021, The Department for Levelling Up, Homes and Communities (DLUHC) announced a raft of changes to Building Regulations, which **came in to effect from 15th June 2022**. This guide is aimed at helping you to understand the new regulations and to ensure that your projects are fully compliant.

Why Are Building Regulations Changing?

While uplifts around ventilation come from Public Health England data on indoor air pollution, the bulk of the building regulation changes in 2022 are part of the roadmap to the 2025 Future Homes Standard. A key part of this Standard is that all new builds are zero carbon ready in support of the UK's bid to deliver net zero carbon emissions by 2050.

According to figures from the Department for Business, Energy & Industrial Strategy, heating and powering buildings currently accounts for 40% of the UK's total energy usage. So, by implementing new building regs that help reduce the need for heat and power in buildings, the UK can make great strides towards its carbon zero ambitions.

The new regulations also affect the refurbishment and replacement window and door market.

Changes in 2022

The two Building Regulation changes that directly affect our industry are Document F (ventilation) and Document L (heating and energy). These will have an impact on both new builds and existing homes.

New minimum efficiency standards – In new and existing domestic builds, there will be a lower set of U-value for walls which affects windows, doors and rooflights.

Ventilation and indoor air pollutants – Background trickle ventilators will be required in new and existing domestic builds.

What are the requirements for background ventilators? (windows and doors)

Part F of the building regulations covers ventilation. In December 2021, Part F received a revision updating the regulations around ventilation in the home, which came in to effect on 15th June 2022. In most cases, with windows and doors, Part F covers trickle vents and when to use them.

NEW HOMES

Using Natural ventilation with background ventilators and intermittent extract fans guidance (suitable only for less air tight dwellings)

2022 Regulation Guidance

For dwelling with multiple floors:

Habitable rooms and kitchens: 8000mm²EA

Bathrooms: 4000mm²EA

Sanitary Accommodation/Utility Room: No minimum

For single storey dwellings (e.g flats):

Habitable rooms and kitchens: 10000mm²EA

Bathrooms: 4000mm²EA

Sanitary Accommodation/Utility Room: No minimum

There are some sub-rules:

Seek expert advice should the dwelling have a single exposed façade, or at least 70% of its openings on same façade, or the kitchen has no windows or façade for vents.

If kitchen and living room not separate, at least 3 vents of same EA as for habitable rooms should be provided in that space.

Total number of vents in habitable rooms and kitchen should be at least 5, or 4 if one bedroom property.

If a bathroom has no window or external façade through, which a ventilator can be installed, the minimum equivalent area specified should be added to the ventilator sizes specified in other rooms.

NEW HOMES

Using Continuous mechanical extract ventilation

2022 Regulation Guidance

Trickle vents should provide 4000mm²EA in each habitable room.

NEW HOMES

Using Mechanical ventilation with heat recovery

2022 Regulation Guidance

No change, trickle ventilators are not required because these are balanced ventilation systems in more energy efficient house designs.

EXISTING HOMES

2022 Regulation Guidance

Replacement windows should be fitted with trickle vents regardless of whether the windows being replaced had vents in them or not, if no background ventilation alternative is being installed.

Habitable rooms and kitchens: 8000mm²EA.

Bathrooms (with or without a toilet): 4000mm²EA.

Addition of a wet room to an existing building: 5000mm²EA.

Addition of a habitable room to an existing dwelling (if existing room has less than 5000mm²EA): 10,000mm²EA.

If the existing dwelling has continuous mechanical extract ventilation fitted then 4000mm²EA is required in habitable rooms.

In all cases there is now an Installation & Commissioning Checklist that needs to be completed and handed over by the installer, this includes background ventilation sign off. This Checklist appears in the Approved Document 'Part' F, as opposed to the separate DVCG (Domestic Ventilation Compliance Guide) which has been made obsolete.

FURTHER INFORMATION & GUIDANCE

If you require any further information and guidance, or are unsure of any of the above, please do contact our technical department:

Call 0121 325 2100 or email technical@selectasystems.com

What are the U value requirements for windows and doors?

Part L of the building regulations covers conservation of fuel and power. In December 2021, Part L received a revision updating the regulations, which is designed to reduce CO₂ emissions by 30% compared to current levels. This came in to effect on 15th June 2022.

NEW HOMES

The basic requirements set out are as per below:

2022 Regulation Guidance

Minimum Performance Targets

WINDOWS

U_w 1.2 W/(m²K) - Frame Factor = 0.7

DOORS >60% of internal face glazed

U_w 1.2 W/(m²K) - Frame Factor = 0.7

The above values are U_w values - Whole window U values

Alternatively, consideration can be given to the performance of the building design overall, which is usually modelled using the SAP (Standard Assessment Procedure) approved methodology. The SAP calculation must show that the dwelling meets the following performance targets against the following criteria:

- Target primary energy rate
- Target emission rate
- Target fabric energy efficiency rate

Depending on the specific dwelling design, it is sometimes possible to compensate for lower performing windows and doors, with other components used in the overall design, as long as minimum performances are achieved as summarised below:

WINDOWS

U_w 1.6 W/(m²K)

DOORS including glazed doors

U_w 1.6 W/(m²K)

EXISTING HOMES

Including extensions

2022 Regulation Guidance

The performance of replacement windows must be no worse than the windows being replaced, but with a minimum performance as per below:

WINDOWS

Uw 1.4 W/(m²K) or Window Energy Rating Band B

DOORS >60% of internal face glazed

Uw 1.4 W/(m²K) or Doorset Energy Rating Band C

The above values are Uw values - Whole window U values

Notes:

Where a dwelling is extended by adding a conservatory or porch, the work is exempt from energy efficiency requirements, under Regulation 21 of the Building Regulations, if all of the following apply:

- 1. The extension is at ground level.*
- 2. The floor area of the extension does not exceed 30m².*
- 3. The glazing complies with Part K of Schedule 1 to the Building Regulations.*
- 4. Any wall, door or window that separates the extension from the dwelling has been retained or, if removed, has been replaced with a wall, door or window.*
- 5. The heating system of the dwelling is not extended in to the conservatory or porch, neither does the extension have its own fixed heating appliance.*

FURTHER INFORMATION & GUIDANCE

Over the past twelve months or so, we have been working with glass suppliers, industry experts, third party certification bodies and simulators to ensure that the performance levels of our windows and doors, not only meet, but exceed the regulatory requirements of Building Regulations.

Information on which glass configurations are best suited for your current and future window and door installation projects can be provided by contacting our technical department:

Call 0121 325 2100 or email technical@selectasystems.com

www.selectasystems.com



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