

BUILDING REGULATION UPDATED

JUNE 2022

STARTING FROM JUNE 2022 THIS YEAR, BUILDING REGULATIONS WILL BE MORE STRINGENT IN SEVERAL AREAS. THIS CHANGE WILL AFFECT BOTH NEW BUILDS, EXTENSIONS AND ALTERATIONS. WE HAVE SUMMARISED THE CORE CHANGES AND THEIR EFFECTS ON DEVELOPMENT PROPOSALS.

GENERAL CHANGES

If an extension to a dwelling has more than 25% glazing, a SAP calculation will be required to ensure compliance.

Existing heating systems with an efficiency below 92% can not be extended into new extensions. Either a new, more efficient boiler must be installed or a stand-alone heating system for the extension will be required.

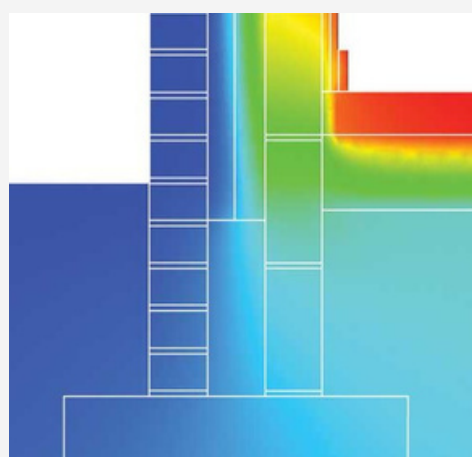
Conservatories and porches must not be served by the dwelling's heating system, it must be thermally separated from the dwelling.

The Inner leaves of new walls must be built from lightweight blockwork below a damp proof course.

THERMAL BRIDGES

All new build houses now must adhere to thermal bridging details stated 'Psi' values, which represent the amount of heat loss through the junction. Previous Accredited details have been used for this purpose, but the calculation software now will apply a significant penalty for using the now obsolete accredited details. In their place, either details must be used from companies that have had their 'Psi' values calculated, or details must have the 'Psi' values calculated by the SAP assessor. The latter of which is an expensive undertaking. To this end, the project will use calculated details from companies.

The ramification of this is that any deviation from the details listed within the construction notes as shown on working drawings will mean the project SAP calculation is obsolete. Once the SAP calculation is complete, no changes can be made to insulation or block specifications.



OVERHEATING

Regulations have been updated to address the growing problem of overheating. Two methods are offered: "simplified" which greatly restricts the amount of glazing on facades and requires large opening areas. Or CISBE's TM59 thermal modelling, which allows considerably more flexibility. It is anticipated that the majority of projects will now require TM59 thermal modelling, which SAP assessors will be able to undertake in conjunction with Design SAP calculations.



NEW BUILD U-VALUES

Thermal Element	Current U-Value (W/m ² K)	Notional new dwelling U-values (W/m ² K)	New threshold U-values (W/m ² K)
New Floors	0.22	0.13	0.18
New Walls	0.28	0.18	0.26
Roof	0.16 or 0.18	0.11	0.16
Glazing	1.6	1.6	1.6

EXTENSION AND ALTERATIONS BUILD U-VALUES

Thermal Element	Current U-Value (W/m ² K)	New U-values (W/m ² K)
New Floors	0.22	0.18
Retained Floors	0.25	0.25
New Cavity Walls	0.28	0.18
Retained Cavity Walls	0.55	0.55
Retained Solid Walls 9inch	0.3	0.3
Retained Solid Walls 4inch	0.3	0.3
Timber Frame Walls	0.28	0.18
New Pitched Roof (Flat Ceiling)	0.16	0.15
Retained Pitched Roof (Flat Ceiling)	0.16	0.16
New Pitched Roof (Vaulted Ceiling)	0.18	0.15
Retained Pitched Roof (Vaulted Ceiling)	0.18	0.16
New Flat Roof (Cold Deck)	0.18	0.15
New Flat Roof (Warm Deck)	0.18	0.15
Retained Flat Roof	0.18	0.16
Windows	1.6	1.4
External doors more than 60% glazing	1.8 B and E	1.4 B and C
Other External Doors	1.8 B and E	1.4 B and B
Roof Lights	1.6	2.2 (new method of calculations)

PHOTOS

For all new build housing, photos must be taken of the thermal bridging details prior to their covering over. These photos must be geotagged and date stamped. These are mandatory, and failure to provide these will result in the inability to issue an EPC and, in turn, gain Building Control Completion.

An example of the minimum information required is shown. DFAL will be happy to provide this service to builders if required.



AIR TIGHTNESS

New dwellings will have to achieve a minimum of $5\text{m}^3/\text{hm}^2$ at 50Pa if designed with intermittent ventilators. If the property is tested at $3\text{m}^3/\text{hm}^2$ or below, a mechanical ventilation system will be required. This may present a problem if a project has been designed for intermittent ventilation but achieved less than $3\text{m}^3/\text{hm}^2$ on the as-built air test, as this will require the retrospective installation of a mechanical ventilation system.

TRICKLE VENTS

All habitable rooms must now have between 8000-10,000mm² of equivalent area trickle vents. Bathrooms require 4,000mm². Open plan kitchen and living areas now also require a minimum of 3 trickle vents.

Regulations have also changed regarding the positioning and protection of the trickle vents. If the vents are facing the main road or the source of noise pollution, they will be required to be acoustically attenuated.

ELECTRIC CAR CHARGERS

Every new dwelling with associated parking will require an electrical vehicle charging port. This will also apply to a new dwelling formed by a change of use.

Residential buildings which undergo 'major renovation' will have to have its parking assessed and may require EV port or EV cabling in place

New non-residential buildings will need 20% of available spaces with EV cabling in place and a minimum of 1 charging port if there are 10 or more parking spaces.

Non-residential buildings which undergo 'major renovation' will have to have its parking assessed and may require an EV port or EV cabling in place in line with a new non-residential building.

EV port power supplies are to be a minimum of 7kW.