

## **Briefing note: Changes to the Building Regulations in June 15 2022**

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### **1. Introduction**

1.1 This briefing note sets out the changes to the building regulations and Approved Documents from June 15 2022. It has been prepared by planning policy officers at the request of councillors, does not constitute professional building control advice and should not be shared externally.

### **2. Current building regulations and Approved Documents**

2.1 The current building regulations are the Building Regulations 2010 (as amended). The 2010 regulations have been amended several times, including in 2013 which saw the introduction of the current maximum carbon emission rates (implemented in 2014).

2.2 The building regulations are accompanied by the [Approved Documents](#). The Approved documents have a number of 'parts' which each cover a specific matter. They provide guidance on how the building regulations can be satisfied in common construction situations by setting out typical approaches. Developers are not obliged to build in the way described by the Approved Documents as long as they achieve the overall outcomes prescribed by the building regulations.

### **3. June 2022 Building Regulations Standards**

3.1 On June 15 2022 there will be a number of changes to the Building Regulations and the following Approved Documents:

- Part F: Ventilation
- Part L: Conservation of Fuel and Power
- Part S: Infrastructure for Charging Electric Vehicles (new Approved Document)
- Part O: Overheating (new Approved Document)

#### *Part L: Conservation of Fuel and Power*

3.2 The Target Emission Rate (TER, the maximum allowed carbon emission rate) for each new building will be around 31% lower for new dwellings and 27% lower for other types of building.

3.3 The limiting values (worst allowable u-values) for thermal elements like external walls, roofs and doors will be improved by 25-35%. There are modest improvements to the worst allowable values for thermal bridging and airtightness, which also effect energy efficiency. In order to achieve the TER, thermal elements have to be significantly better than the limiting values on the whole.

3.4 A new performance metric, 'primary energy', will be introduced. The new metric gives a complete picture of total energy used by heating, lighting, ventilation etc., but also considers upstream activities such as power station efficiency and energy used in the production and delivery of fuel to the building. New buildings will have a Target Primary Energy Rate (TPER) which they must not exceed.

- 3.5 Heating systems will have to be designed to operate at a maximum flow temperature of 55 degrees, a temperature compatible with ordinary heat pumps. Heating control devices must be self-regulating and based on zones.
- 3.6 Carbon emissions factors for different fuels and mains electricity will be revised. The main change is that the carbon emission factor for grid electricity will by fall by 73%, reflecting the ongoing decarbonisation of electricity from the grid. As a result, electric technologies like heat pumps will perform much better in emission rate calculations.

*Part S: Infrastructure Charging for Electric Vehicles*

- 3.7 Newly introduced Part S reflects changes to the Building Regulations that will require the installation of Electric Vehicle Charge Points (EVCPs) or cable routes in new developments. It covers residential and non-residential new build, material change of use of buildings, major renovation and mixed-use buildings undergoing specified building work.
- 3.8 Whilst there are nuances to the regulations, a typical new residential building with associated parking must have access to an EVCP. For new non-residential buildings, one space must have access to an EVCP, and cable routes must be installed in a minimum of one fifth of the total number of remaining spaces. Various exemptions apply, detailed in Part S.
- 3.9 Part S suggests the regulations could be met by the installation of a 7kW untethered charge point (where a chargepoint is to be installed). Where cable routes are to be installed, this would include various aspects such as space for an electrical connection at a consumer unit or feeder pillar, a dedicated cable route, a future connection location, labelling and space for a future charge point to be installed.

*Part O: Overheating*

- 3.10 Part O covers overheating in domestic dwellings and commercial properties with a residential function (e.g. care homes and student accommodation).
- 3.11 The new regulations state that dwellings, or other buildings containing rooms for residential purposes, should a) make reasonable provision to limit unwanted solar gains in summer and b) provide an adequate means to remove heat from the indoor environment. Proposals must take account of the safety of the building's occupants and reasonable enjoyment of the residence. Mechanical cooling may only be used where other methods would be insufficient.
- 3.12 Developers may choose one of two routes to compliance:
  - The Simplified Method – England is divided into areas of 'high' and 'moderate' risk of overheating (Guildford borough is within an area of moderate risk) and development is classified as having cross-ventilation or not. Based on these two classifications, a maximum glazing area is specified. In high risk locations, further measures such a low-g glass or external shutters are required to east, south and west elevations.
  - The Dynamic Thermal Modelling Method – The building design must be subject to a prescribed overheating assessment: "TM59 Design Methodology for the Assessment of Overheating Risk in Homes" produced by the Chartered Institution of Building Services Engineers (CIBSE).

#### **4. Implementation and transitional arrangements**

- 4.1 The new Building Regulations come into force on 15 June 2022. A key change is that the new regulations will apply to each individual building rather than entire schemes, and schemes will no longer be able to 'lock in' the extant standards for the entire scheme or phase when they commence.
- 4.2 Where schemes submit an initial notice or building notice or deposit full plans after 15 June 2022, all the buildings covered by the notice or deposit must comply with the new regulations in full.
- 4.3 Where schemes submit a notice or deposit full plans before 15 June 2022, there is a transitional phase whereby the current (2013) standards will continue to apply to any individual buildings for which work is commenced before 15 June 2023.
- 4.4 All buildings commenced after 15 June 2023 must meet the new regulations in full.
- 4.5 Commencement may be deemed to have occurred when substantial work has begun, e.g. excavation for foundations, piling/boring for piles or other substantial work within the footprint of the proposed building.
- 4.6 The government intends to improve standards further with the implementation of 'Future Homes' and 'Future Buildings' in 2025, which will involve further improvements to energy efficiency standards and set maximum carbon emission rates around 70-80% lower than current (2013) maximums. The June 2022 standards are described as an interim step on the path to those future standards.

END.