

# Summary of Amendments to Building Regulations



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# **Background**

- The anticipated amendments to Building Regulations in relation to Fire Safety have now been published and come into force on 21st December 2018.
- The MHCLG promised a simplified document and are claiming that they have implemented a ban on combustible materials but neither is quite the case and we offer here a summary of the changes and how they will affect your designs or constructions.

### The Amendments

- The Regulations are presented in two elements, firstly there are The Building Regulations 2010 which are a legally binding statutory instrument and all of the rules contained within it must be followed as a minimum standard. Then there are a series of Approved Documents which provide guidance on how the rules within the Building Regulations may be met. Approved Document B relates to Fire Safety.
- The amendments that have now been introduced are:
- 1) An amendment to the Building Regulation [The Building (Amendment) Regulations 2018] which is fundamental and applies to almost all residential buildings over 18m such as dwellings and institutions or those containing a room for residential purposes (but excludes hostels, hotels or boarding houses).
- 2) A revised Section 12 of Approved Document B [Approved Document B: Fire Safety Volume 2 buildings other than dwelling houses] Other than the Regulation 7(2) changes, which only affect residential, the amendments to this section of the Approved Document are minor and maintain the original concept largely intact. They apply to all other categories of building.
- The detailed amendments are available online through

http://www.legislation.gov.uk/uksi/2018/1230/regulation/2/made

and

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/760526/AD\_Bv2\_vB\_amend.pdf

## The Building (Amendment) Regulations 2018

- **Scope:** This amendment 7(2) applies to any building over 18m above ground which are in the categories:
  - a) contains one or more dwellings
  - b) an institution
  - c) a room for residential purposes
  - d) student accommodation
  - e) care homes
  - f) sheltered housing
  - g) hospitals and
  - h) dormitories in boarding schools.
- It specifically excludes any room in a hostel, hotel or boarding house.
- The Requirement: That all elements within the external wall or specified attachment (this now includes balconies, solar panels and sun shading) should be of EN 13501 Class A1 or A2-s1,do.
- There is no option within this Regulatory change to use BR135 (BS8414) as a getaround. It applies to the full height of the external wall and not the limited areas denoted in Diagram 40 (AD B) or Table 17 (BS9991).
- Some components are exempted and these are:
  - a) Cavity Trays (between two masonry leaves)
  - b) Any part of the roof.
  - c) Door frames and doors.
  - d) Electrical installations.
  - e) Insulation and waterproofing used below ground.
  - f) Intumescent and fire stopping materials.
  - g) Membranes.
  - h) Seals, gaskets, fixings, sealants and backer rods.
  - i) Thermal break materials.
  - j) Window frames and glass.
- Where an external wall requires a period of fire resistance, in accordance with AD B Table A1 & A2, then this still applies but the components must now be either EN13501 Class A1 or A2-s1,do as well as achieving that period of fire resistance.

# **Amendment to Approved Document B: Fire Safety**

- **Scope:** These amendments apply to all other building types including
  - a) Offices.
  - b) Shops and Commercial.
  - c) Assembly and recreation (except where accommodation is provided).
  - d) Industrial.
  - e) Storage and other non-residential.
  - f) Car parks.
  - g) Hotels, Hostels and Boarding Houses (since they are not included in categories affected by the Regulation 7(2) changes).
- The Requirement: The original concept of Section 12 remains largely intact with the addition of some notes as follows:
- 12.3 Portal Frames
  - Note 1: The resistance of overturning is not a requirement if a sprinkler is fitted.
  - Note 2: The resistance of overturning is not required where a concrete portal is used.
  - Note 3: Existing portals may have been designed where overturning is restricted, the column is encased in brick up to a ring beam or there is roof venting for release of heat (unaltered).
- 12.5 External walls should meet the requirements of Diagram 40 (unaltered).
- 12.6 Insulation materials should be of limited combustibility (unaltered).
  - Note 1: "Consideration" should be given to other materials in the build-up of and external wall and attachments.
  - Note 2: Best practice for Green Walls can be found in "Fire Performance of Green Roofs and Walls (DCLG).
- 12.7 Cavity Barriers should be provided in accordance with Section 9 (unaltered).
- 12.8 Surfaces which face into cavities should also meet the requirements of Diagram 40.
- 12.9 12.12 Summarises the changes made by Regulation 7 (detailed above).
- 12.13 Where a building changes use to one of residential, covered by regulation 7 then alterations must be made to make it comply with the requirement.

- 12.4 Regulation 7 applies in addition to AD B4 but in particular:
  - o Membranes should achieve EN Class B-s3,do.
  - o Internal linings should comply with Section 6.
  - o Any roof should comply with Section 14.
  - Although window frames and glass are exempted from 7(2) spandrels and infill panels must comply with 7(2).
  - Thermal breaks should not span two compartments and should be limited in size.
  - Regulation 7(2) includes specific attachments but excludes shop front signs.
  - o Repeats the comments in 12.6 Note 1.

#### Conclusion

- Residential buildings (with the exception of hostels, hotels and boarding houses) now have to be built with A1 or A2-s1,do components in the external wall and cladding layer. This is at all heights and no option of BS8414 tested materials is permitted.
- All other buildings are to be built with largely the original interpretation of Section 12 and Diagram 40
  - For buildings above 18m the insulation layer must be "limited combustibility" or better. See Table A7 for the definition of "limited combustibility"
  - o For buildings above 18m the surface (cladding or render) should be Class B-s3,d2 or, if more than 1m from the boundary, Class C-s3,d2 up to 18m. Please note that National Class O is considered an alternative. In either case a material must also meet the Regulatory equirement of "adequately resisting the spread of fire" so some materials that achieve these classifications may still not be suitable.
  - For any building less than 18m and more than 1m from the boundary there is no restriction on the combustibility of materials.
  - If a designer wishes to use insulation and cladding materials that do not meet these test requirements they still have the option of proving suitability via a BR<sub>135</sub> (BS8<sub>414</sub>) test.

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