



# **Fire Industry Association**



FIA Guide to the Building (Amendment) Regulations 2018

## FIA Guidance document – FIA Guide to the Building (Amendment) Regulations 2018

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## **1. EXECUTIVE SUMMARY**

The Building (Amendment) Regulations which came into force in December 2018 introduce new restrictions on the combustibility of materials contained within external walls of "relevant buildings" in England.

"Relevant buildings" includes residential and institutional buildings that are more than 18m high.

Materials used within external walls of those buildings will need to be either Euro Class A2-s1,d0 or Euro Class A1. Other test standards, or the use of terms such as "non-combustible" or "limited combustibility" would not guarantee compliance with those standards. In practice, any materials which contains any significant amount of organic material (e.g. plastics or timber) are unlikely to achieve those standards.

The new restrictions are very extensive and include all materials contained within the external wall (not just insulation and cladding). This would also include materials which pass through the wall, such as ducts and pipes.

The restrictions also apply to certain types of "specified attachments" which includes balconies, solar shading and solar panels.

The Amended Regulations includes a list of materials which are excluded from the restriction, which includes window frames, doors, seals, gaskets, electrical wiring and membranes. That list is very specific, and if a material is not in that list, then it will need to comply with the combustibility restrictions.

One key issue is that the Amendment has been introduced directly into the Building Regulations themselves, rather than just into guidance documents such as Approved Document B. As a result, the new restrictions will be enforced much more rigidly than is the case for other aspects of fire safety in buildings. Whilst it is possible for local authorities to permit Relaxations against the new restrictions, it would be entirely up to the local authority as to whether they would be willing to do this.

As a result, if it is discovered during construction that a non-compliant material has been used within the external wall (even in small quantities) it is very possible that the material will need to be removed, even if that requires the entire external wall to be dismantled to achieve it. This could clearly have a very severe impact on the project cost and programme.

This is a much stricter level of control than the majority of the construction industry is used to. As a result, FIA strongly suggest that when working on these types of buildings, the design team should include a competent fire engineer to produce and maintain a specific register of materials that they have checked as being compliant, and only materials that are on that register should be permitted within the external walls. Site staff should be trained and site inspections carried out to ensure that only materials that are on that list should be used. If this is not carried out, there is a high risk of non-compliant materials being used, with potentially very severe implications on the project.



## **2. INTRODUCTION**

The Building (Amendment) Regulations 2018 came into force on 21 December 2018, along with an associated amendment to Approved Document B. That amendment introduces major restrictions on the combustibility of materials used within external walls of certain types of buildings (referred to as "relevant buildings") in England.

The additional restrictions, and the way that those changes have been introduced, will have a major impact on those types of buildings and anyone involved in the design of those types of buildings needs to be extremely careful to ensure that they fully comply with the Amended Regulations.

This document has been produced to help give clarity on these issues.

The document is intended for use by anyone involved in the design, specification and approval of those "relevant buildings". That would include fire engineers, architects, engineers, developers, contractors and approving authorities.

It should be noted that this document shows the FIA's views in relation to the Amended Regulations. The FIA has consulted with various organisations when producing this document, but cannot guarantee that other parties or organisations will concur with those views.

FIA is also aware that as these are new regulations, the government may issue clarifications or changes which may affect certain issues discussed in this document. Users should check for relevant updates to this document and to any clarifications or changes issued by the government or other relevant bodies.

#### Note:

For simplicity, this document has referred to the Building (Amendment) Regulations 2018 as the "Amended Regulations" and Approved Document B is referred to as ADB.

#### **3. TIMESCALE FOR COMING INTO FORCE**

The Amended Regulations were made on 28 November 2018 and came into force on 21 December 2018. They do not apply to any case where "the building notice or initial notice has been given to, or full plans deposited with, a local authority" before the 21 December 2018 **and** the building work has either already started, or starts within 2 months of that date (i.e. before 21 February 2019).

The Amended Regulations only impact on buildings in England (they do not affect other parts of the UK, such as Scotland, Wales or Northern Ireland).

## **4. LEGISLATION**

In order to understand the impact of the changes, it is necessary to understand the regulations themselves.

The Building Regulations 2010 are *functional* requirements. That means that the technical requirements are listed in Schedule 1 (which includes Part A, Part B, Part C etc). of those regulations and give *functional* requirements – e.g. provide adequate means of escape. The Regulations themselves do not give any specific detail as to how to achieve those *functional* requirements.



The practical design guidance on how to meet those *functional* requirements are described in documents such as ADB. ADB is therefore a guide on ways to meet the *functional* requirements of the Building Regulations, but if designers can demonstrate that they have met those *functional* requirements in different ways (e.g. by fire engineering analyses, risk assessment) then that is perfectly acceptable.

The Amended Regulations are different. It introduces new design requirements, but those design requirements are directly introduced within the Building Regulations themselves, not just the guidance document (although the guidance documents are also updated). So the new Amended Regulations are *prescriptive*, not *functional*. As a result it is necessary to fully comply with the detailed requirements of the Amended Regulations. It is therefore not possible to use alternative approaches to demonstrate acceptable standards of safety (e.g. fire engineering, risk assessment).

The only option for permitting non-compliant materials would be to achieve a "Relaxation" from the local authority. The process for this is summarised later, but it would be entirely down to the local authority as to whether they would permit this case-by-case, and at present, it is not clear as to whether local authorities would be willing to consider this approach.

This would mean that if it is found that a material was used within an external wall which does not comply with the Amended Regulations, and the local authority will not issue a Relaxation, then it has to be removed. Even if the remedial works would incur major costs and delays, then it will still have to be carried out.

The consequence of non-compliance with the Regulations could therefore potentially have a very severe impact on the project budget and programme.

Because the Amended Regulations are *prescriptive*, they would not fit well within the existing *functional* requirements in Schedule 1. As a result, they have been introduced within Regulation 7 of the Building Regulations. Regulation 7 covers materials and workmanship although previously it only required work to be carried out with "adequate and proper materials" and "in a workmanlike manner". Approved Document 7 gives more guidance on this. The Amended Regulations introduces new paragraphs which give detailed restrictions on the types of materials that can be used within external walls.

There are also other supporting parts of text in other part of the Amended Regulations (e.g. giving definitions on what is considered part of the external wall and guidance on works which are a material change of use) which are introduced into areas such as Regulations 2, 4, 5 and 6.

The Amended Regulations would be enforced by the same Building Control Body that is appointed to carry out the other aspects of Building Regulations approval (e.g. local authority Building Control or an Approved Inspector).



### **5. RELAXATIONS**

Under the Building Act 1984, it is possible for the local authority to relax most requirements of the Building Regulations if they consider *"that the operation of a requirement in building regulations would be unreasonable in relation to the particular case to which the application relates"*. Relaxations can only be issued by the local authority and cannot be issued by Approved Inspectors.

As this is a new change to regulations, at present it is not clear whether local authorities would be prepared to issue such Relaxations. If they were, it would require an application to the local authority (not Approved Inspector). In order to consider issuing a Relaxation, the local authority would need to be satisfied that enforcing the regulation would be "unreasonable". The level of evidence required would depend on the specific situation but would be likely to be influenced by the consequences of fully compliance.

For example, if, at a late stage of construction, it is found that a non-compliant material has been used in small quantities, the local authority may be more sympathetic to the application for a relaxation as the consequences of enforcement might be to remove and rebuild the external wall.

However, as noted earlier, there is no guarantee that the local authorities would be prepared to issue Relaxations on this issue. As a result, FIA would suggest that design teams should only consider the use of Relaxations when absolutely necessary. If designers intend to apply for a Relaxation, they should communicate this with the local authority at an early stage in order to confirm whether they would be open to this approach.

#### **6. DEFINITIONS**

#### 6.1 Definition of "relevant building"

The Amended Regulations only apply to "relevant buildings". That is defined as below.

- a) a "relevant building" means a building with a storey (not including roof-top plant areas or any storey consisting exclusively of plant rooms) at least 18 metres above ground level and which:
  - (i) contains one or more dwellings;
  - (ii) contains an institution; or
  - (iii) contains a room for residential purposes (excluding any room in a hostel, hotel or boarding house); and
- b) "above ground level" in relation to a storey means above ground level when measured from the lowest ground level adjoining the outside of a building to the top of the floor surface of the storey.

The Amended Regulations state that they apply to England and Wales, although they then state that they do not apply to any building in Wales. Effectively they therefore only apply to buildings in England. They do not apply to other parts of the UK (e.g. Scotland, Northern Ireland).

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The word "institution" is defined within the Building Regulations as follows:

"An institution (whether described as a hospital, home, school or other similar establishment) which is used as living accommodation for, or for the treatment, care or maintenance of persons:

- a) suffering from disabilities due to illness or old age or other physical or mental incapacity,
- or
- b) under the age of 5 years

where such persons sleep on the premises."

The Amended Regulations therefore apply to buildings that contain flats, and the Amendment to ADB confirms that the above definitions also include student accommodation, care homes, sheltered housing, hospitals and dormitories in boarding schools (although that is not an exclusive list).

#### 6.2 Definition of external wall

The definition of the external wall is relatively extensive. It includes the following:

- a) anything located within any space forming part of the wall;
- b) any decoration or other finish applied to any external (but not internal) surface forming part of the wall;
- c) any windows and doors in the wall; and
- d) any part of a roof pitched at an angle of more than 70 degrees to the horizontal if that part of the roof adjoins a space within the building to which persons have access, but not access only for the purpose of carrying out repairs or maintenance.

So it would not only include the materials used within the external wall construction, but would also include any materials which are contained within it or pass through it.

This would include ducts, soil vent pipes or other pipes which are contained within or pass through the wall, and essentially anything within the wall itself.

For example, MVHR systems often include plastic ducts passing through the external walls, often with fire dampers. That will no longer be permitted, and the parts of the ducts which pass through the external wall now need to comply with the restrictions (i.e. will have to be metal or another compliant material).

The definition of external wall includes the materials which make up the internal linings of that wall within the building. Those would often be of plasterboard, but sometimes other materials are used. It would be essential to ensure that all boards that are used within any part of the external walls comply with the combustibility requirements.

Item b) above confirms that decorations and other finishes (e.g. paint) applied to the external surfaces of the wall would be included, but if they are applied to the internal surface they would not. FIA would note that in FIA's view the word "internal" refers to the surfaces which faces into the interior of the building, not the surfaces within the interior of the wall. Internal surfaces within the wall (e.g. surfaces within cavities) would therefore be covered by the restrictions.

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It is not specifically stated in the definition, but FIA would consider it reasonable to define the extent of the external wall as from the external surface to the internal surface. For example, if an additional lining board is applied to the internal face of the external wall, that would become part of the external wall. Another example is that if an SVP is attached to the outside of the wall, then that would not be part of the wall, but if it is then 'boxed in' then the materials used for boxing it in, as well as the SVP itself, are likely to become part of the external wall.

#### 6.3 Definition of specified attachments

The restriction on combustibility also applies to materials used within "specified attachments" which are fixed to the external wall as shown below.

- a) a balcony attached to an external wall;
- b) a device for reducing heat gain within a building by deflecting sunlight which is attached to an external wall; or
- c) a solar panel attached to an external wall.

This is a very specific list, and the restrictions on combustibility do not apply to other attachments that are not in this list. However, to comply with Requirement B4, it would still be necessary for the fire risk of other attachments to be considered before being introduced (i.e. just because a particular attachment is not on the list, it does not mean that it is acceptable to use any materials, irrespective of combustibility).

The term "balcony" is often used in different ways. A "balcony" would often be a specific area used by one apartment. However, "balcony approach" is often used to describe the type of design where apartments are approached by a communal external balcony/walkway. FIA would suggest that the restrictions would apply to both of these definitions.

#### **7. FIRE PERFORMANCE OF MATERIALS**

The materials within the external walls and specified attachments need to comply with one of the two following options:

- a) Euro Class A1; or
- b) Euro Class A2-s1, d0

It should be noted that the s1, d0 criteria only applies to materials that achieve a Euro Class A2 performance. If the material achieves Euro Class A1 then the s1, d0 are not required.

These classifications relate to BS EN 13501-1:2007+A1:2009 entitled "Fire classification of construction products and building elements. Classification using test data from reaction to fire tests". That standard requires products to have achieved particular ratings when tested to a range of fire tests.

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For other parts of the Building Regulations, ADB describes the terms "non combustible" and "limited combustibility" and to comply with those, materials could have been tested to either European or UK test methods. Whilst those criteria still apply to the original functional Requirements B1 to B5, they are different from that required to comply with the Amended Regulations within external walls. FIA would therefore recommend **not** using those terms when specifying materials to comply with the Amended Regulations.

The UK testing criteria that gives results of Class 0, Class 1, etc. is still acceptable for compliance with Requirements B1 to B5, but are not acceptable for compliance with the Amended Regulations for external wall materials.

There are also a range of generic materials (e.g. metals, ceramics) where the classification has been agreed by Commission Decision without the need for further testing. These classifications would usually include certain restrictions (e.g. thickness of coatings, proportion of organic content) so it would be important to obtain confirmation from the supplier as to the classification that they would achieve.

The classifications shown above are very hard to achieve. In most cases it will not be possible for a material to achieve this classification if it contains any significant amount of organic content. Timber and plastics would not meet this standard. In addition, due to the type of testing, applying surface treatments to a combustible material would not normally be enough to meet these standards.

In effect, it means that plastics and timber (or other engineered timber such as CLT or boards which contain wood products) cannot be used within any part of the external wall construction except for the list of exclusions shown on page 10.

Care should be taken to ensure that the products achieve the required performance. Even some materials which, from the product description, may appear to be safe in fire, might not be quite as clear-cut. In particular products that are made of composite materials may have the different materials held together with glue or resin, and the fire performance would be dependent on the amount of glue or resin that is actually used.

In some cases a composite product will contain an amount of combustible materials. For example, composite metal panels would often consist of two layers of metal with a honeycomb of that metal sandwiched between the outer layers. The different components are held together by adhesive. As long as the product as a whole achieves the Euro Class A2-s1, d0 or Class A1 classification, then that should be acceptable.

It would also be necessary to ensure that the testing was carried out in a configuration which is similar to the situation in which it is being used.



## 8. EXCLUSIONS

The Amended Regulations has a list of materials which are excluded from the fire performance criteria shown above. These are as follows:

- a) cavity trays when used between two leaves of masonry;
- b) any part of a roof (other than any part of a roof which falls within paragraph (iv) of regulation 2(6)) if that part is connected to an external wall;
- c) door frames and doors;
- d) electrical installations\*;
- e) insulation and water proofing materials used below ground level;
- f) intumescent and fire stopping materials where the inclusion of the materials is necessary to meet the requirements of Part B of Schedule 1;
- g) membranes;
- h) seals, gaskets, fixings, sealants and backer rods;
- i) thermal break materials where the inclusion of the materials is necessary to meet the thermal bridging requirements of Part L of Schedule 1; or
- j) window frames and glass.

#### \*Note:

The term "electrical installation" is defined in the Building Regulations as "fixed electrical cables or fixed electrical equipment located on the consumer's side of the electricity supply meter". That would mean that electrical cables with plastic insulation are acceptable, but if they are contained within a conduit, that conduit would need to be of compliant materials (not plastic). FIA would assume that if the cable is feeding an electrical socket, the plastic within the socket itself and the plastic face of the socket would be acceptable, but there may be a question as to whether plastic back boxes would be acceptable. FIA would suggest using metal back boxes in order to avoid any risk on this item.

In relation to item j) above ("window frames and glass") FIA have received confirmation that this exclusion only relates to glass that is within window frames. Glass in other situations (e.g. when used as balustrades for balconies, or in spandrel panels) would not be exempt. In those situations the glass would have to comply with the combustibility restrictions, which would mean that toughened glass (which has a plastic interlayer) would not be allowed in those situations.

FIA would note that adhesives are not included in the list of exemptions (and FIA have received confirmation that adhesives would not be covered by the exemption for "fixings"). Adhesives would therefore only be acceptable if they either:

- a) meet the Class A2-s1, d0 or Class A1 rating;
- b) are part of a product or system which overall meets the Class A2-s1, d0 or Class A1 rating; or
- c) are used in a situation in which one of the other listed exclusions would apply.



In the event of any uncertainty as to whether specific materials are covered by the exclusions, FIA would suggest that the design team either clarify this with the relevant Building Control body or should take the low risk approach of, wherever possible, avoiding materials that do not meet the combustibility restrictions described earlier.

It should be noted that whilst the above materials are excluded from the need to meet the Euro Class A2-s1, d0/A1 criteria, that does not mean that they are entirely uncontrolled because Requirement B4 still applies (in addition to Regulation 7) so the designers still need to ensure that the building is safe from fire.

In addition, there is further guidance in the new Section 12.14 of the Amendment to ADB which is described later in this document.

### 9. WORK ON EXISTING BUILDINGS

When the work relates to existing buildings, the restrictions differ depending on a number of factors as described below.

If the works result in a building that was not previously a "relevant building" becoming a "relevant building" then it would be necessary to ensure that the materials within the external wall fully comply with the combustibility restrictions throughout the entire building. This would require a review of the existing external walls, and removal of any materials that do not comply. In practice, in many buildings this would require the external wall to be dismantled and rebuilt which may have a very significant impact on costs.

A few examples of typical types of works that would cause this are shown below.

- a) Conversion of a 20m high office building into residential.
- b) Adding a storey to an existing 17m high residential building so that the top floor is now over 18 high.
- c) Adding a dwelling to an existing 20m high office building (e.g. a caretaker's flat, or a penthouse flat).
- d) Adding a creche to any existing building that is over 18m high.\*

#### \* Note:

A creche (where used for children under the age of 5 and where they may be sleeping on the premises) would be classified as an "institution" so introducing a creche into an existing building that is over 18m high would make it a "relevant building".

If the building were classified as a "relevant building" prior to the works, then the situation is different because the works are not changing the building from a "non-relevant building" into a "relevant building". In that situation, it is only necessary to ensure that materials which "become part of an external wall, or specified attachment" meet the combustibility requirements.

That would include any new materials which are added to the external wall or specified attachments, but it would not necessarily require removal of any existing materials within the external wall. However, FIA would suggest that in this situation a fire risk review should be carried out of the existing materials in order to ensure that they maintain an acceptable standard of fire safety.

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## **10. MATERIAL SUBSTITUTION/QUALITY CONTROL ON SITE**

As noted earlier, the restrictions on the materials that can be used within the external wall are very strict and inflexible. There will be many people within the construction industry who are not used to this level of control and so there is a risk that even if the design is compliant to the Amended Regulations, there may be a substitution of materials later on, or that the contractors on site may use certain materials which are not specifically shown in drawings or approved details.

For example, contractors would often use products such as washers, rawlplugs etc. which may be plastic (or of other non-compliant materials). If those components are in the list of exclusions, then that is not a problem. That list includes "fixings" which FIA would presume would cover washers and rawlplugs. However, if the products that have been used are not covered by that list of exclusions, then they will need to be removed, even if they are only used in very small quantities. There is no flexibility in the regulations on this issue.

If this happens, and it is only identified late in the construction, it will be necessary to remove the non-compliant materials. Depending on their location, it may be necessary to dismantle the external wall to access them. Clearly, the impact of this on the costs and programme could potentially be extremely severe.

FIA would therefore suggest that a very strict change control process be introduced to prevent materials being incorrectly substituted. In addition, the site processes should be carefully supervised to ensure that the construction personnel do not use or introduce any non-compliant materials into the external walls even in small quantities.

## **11. DEFINITION OF "BUILDING"**

The definition of a "building" in the Building Regulations is "any permanent or temporary building but not any other kind of structure or erection, and a reference to a building includes a reference to part of a building".

The Amended Regulations relate to the entire building, but there is limited guidance available as to what separation is needed to consider two adjacent (or intertwined) buildings as separate from each other.

In practice, large developments often have multiple blocks built over a shared basement (e.g. car park) or a shared podium. If only some of the blocks are over 18m height, it would be necessary to agree with the relevant Building Control Body as to the extent of the "relevant buildings" – i.e. how far the Amended Regulations apply within the development.



#### Mixed use buildings

The Amended Regulations apply to the entire building. So if a building includes residential as well as other uses (e.g. offices, retail) the restrictions apply to all parts of the building, including the non-residential locations.

Even having a single flat within a building would mean that the restrictions would apply to the entire building.

#### **12. DESIGN STANDARDS**

When designing new buildings there are often a number of different options of design standards which can be used. For example, for blocks of flats, the main options would be either ADB or BS 9991. Other design standards include BB100, BS 9999 and HTM guidance for other types of buildings.

Whilst an amendment has been published to ADB, there are not currently amendments to those other documents. However, the amendment is to the Building Regulations, not just ADB, so it is necessary to comply with those additional requirements even if the design is based on those other documents. Until those documents are updated, compliance with those documents would therefore not guarantee compliance with the Amended Regulations.

If the design is based on documents other than ADB, FIA would therefore suggest that the design team ensure that the fire strategy is developed by an appropriately competent fire engineer who can ensure that the design adopts the requirements of the Amended Regulations into the fire strategy. For example, a fire strategy based on compliance with BS 9991 would not be sufficient. The fire strategy would need to be based on compliance with BS 9991 as well as the Amended Regulations.

As noted in the following section, the Amendment to ADB also includes certain additional recommendations (in addition to those required by the Amended Regulations). Those additional recommendations have not yet been included in the other guidance documents noted above (e.g. BS 9991, BS 9999) but FIA would suggest that, for good practice, those additional recommendations should be included in designs.



## **13. NEW ADDITIONS IN APPROVED DOCUMENT B (ADB) ON COMPLIANCE** WITH PART B4

The majority of the guidance in ADB on how to comply with Part B4 is unchanged. However, there are a few additions which are summarised below.

Sections 12.4 to 12.8 of the Amendments to ADB include guidance on the combustibility of external walls for all buildings other than the "relevant buildings" as described earlier. So this would include residential or institutional buildings under 18m height, and other occupancy types of any height.

The guidance in Sections 12.4 to 12.8 is largely unchanged from previous guidance (other than that it now does not apply to "relevant buildings"). However, there are two new Notes to Section 12.6.

The first of these Notes states that whilst the restrictions on combustibility of materials within Section 12.6 only applies to certain materials, consideration should be given to the choice of materials used for other parts of the external wall or attachments which could impact on the risk of fire spread over the wall. There is no further specific guidance on this issue, but FIA would assume that this section would mean that if the designers are considering materials which may introduce a risk of fire spread up the external wall, they should ensure that this would not compromise Requirements B1 to B5.

The second Note references a document titled "Fire Performance of Green Roofs and Walls" published by the DCLG which designers should refer to if using green walls or roofs.

Section 12.8 states that surfaces which face into cavities should meet the provisions of Diagram 40 and the provisions in Section 9. This is stricter than the guidance in the previous version of ADB.

There is a new Section 12.14 which is included within the section on compliance with Regulation 7, but relates to compliance with Part B4. It gives a number of additional recommendations which apply to "relevant buildings" such as:

- a) membranes used within the external wall construction would need to achieve at least a Euro Class B-s3, d0 rating. Whilst this only applies to "relevant buildings", in other types of buildings, if the membrane is exposed in the cavity, the guidance of Section 12.8 would apply (as described above).
- b) whilst thermal breaks are excluded from the list of restricted materials under Regulation 7, they should be restricted in size and they should not span fire compartments. Thermal breaks are often included in balcony support brackets, so this would mean that if combustible insulation is used for those balcony support brackets, they must not be located in line with fire resisting walls or floors. Cavity barriers at floor level would therefore need to go either under or over these brackets.
- c) Shop signs and similar attachments are not covered by Regulation 7(2) but designers should ensure that they do not introduce a risk of fire spread over the wall.



#### **14. OTHER ISSUES**

As this is a new regulation, it is inevitable that there will be a number of questions that arise about the details of specific issues. FIA understand that MHCLG (the government department responsible for Building Regulations) will be issuing some clarifications on specific issues.

As noted earlier, the Amended Regulations are very strict with no flexibility. The consequences of mistakes would be extremely onerous for the project in relation to costs and programme. So in cases where there is uncertainty, taking the most onerous interpretation would reduce the risk to the project. Taking that approach may increase costs on specific items, but those increased costs may be insignificant in relation to the risk of non-compliance.

In any instance, FIA would advise on ensuring the agreement of the relevant Building Control Body to the proposed approaches.

### **15. CONCLUSIONS**

This note summarises the main issues relating to the new Amendment to the Building Regulations and to Approved Document B. Those amendments apply to certain "relevant buildings" and introduce new restrictions on materials that can be used within the external walls of those buildings and certain "specified attachments" to those walls.

The restrictions are very extensive with very little flexibility. The consequences of non-compliance could be extremely severe as it could require the removal and reconstruction of the external wall, even if it is identified late in construction.

Carrying out a review of drawings to identify non-compliant materials would be a way to address this issue, but in practice on buildings of this nature there are a large number of drawings, each showing multiple materials and the drawings are updated regularly. As a result, it is very possible that non-compliant materials would be missed, with very severe consequences for the project.

FIA would therefore suggest that a more comprehensive strategy should be taken to deal with this issue and would suggest that the following approach be followed for the design of all "relevant buildings".

During the design stage, a list should be produced of all materials that are to be used within the external wall of the proposed building. This list should cover everything that is contained within the external walls, which would include all materials that are used within the wall construction as well as any components which are contained within, or pass through, the external wall, such as ducts and pipes.

That list of materials should be reviewed by a suitably competent fire engineer to ensure that they comply with the requirements. Once reviewed and approved they should be entered into a register of approved materials. The register should describe the basis on which they are considered acceptable (e.g. that is achieves Euro Class A1, or that the material is within the list of exclusions).



The register should form part of the Building Regulations submission, in order to ensure that the relevant Building Control Body can confirm approval to each of the materials.

During the construction stage, a very strict change control process should be used to ensure that any changes of materials or components that are within, or attached to the external wall are reviewed thoroughly to ensure that they fully comply with the combustibility requirements. In the event of changes, all relevant drawings and the approved materials register should be updated.

Site staff should be trained to ensure that they are aware that they should only use materials within the external walls that are included within the register.

In addition, the actual construction should be supervised carefully to ensure that no unexpected materials are used or introduced within the external wall.

In FIA's view this process should significantly reduce the risks to the project finances and programme of non-compliance with the Amended Regulations.

#### **16. LIMITATIONS**

This document has been produced by FIA as a summary of FIA's view on the key issues relating to compliance with the Building (Amendment) Regulations 2018. FIA have taken reasonable steps to ensure the accuracy of information contained within the document, but anyone using this document should familiarise themselves with the relevant Regulations and guidance documents themselves. FIA will not accept liability for any costs associated with failure to comply with the Amended Regulations for whatever reason.

DISCLAIMER

The information set out in this document is believed to be correct in the light of information currently available but it is not guaranteed and neither the Fire Industry Association nor its officers can accept any responsibility in respect of the contents or any events arising from use of the information contained within this document.



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