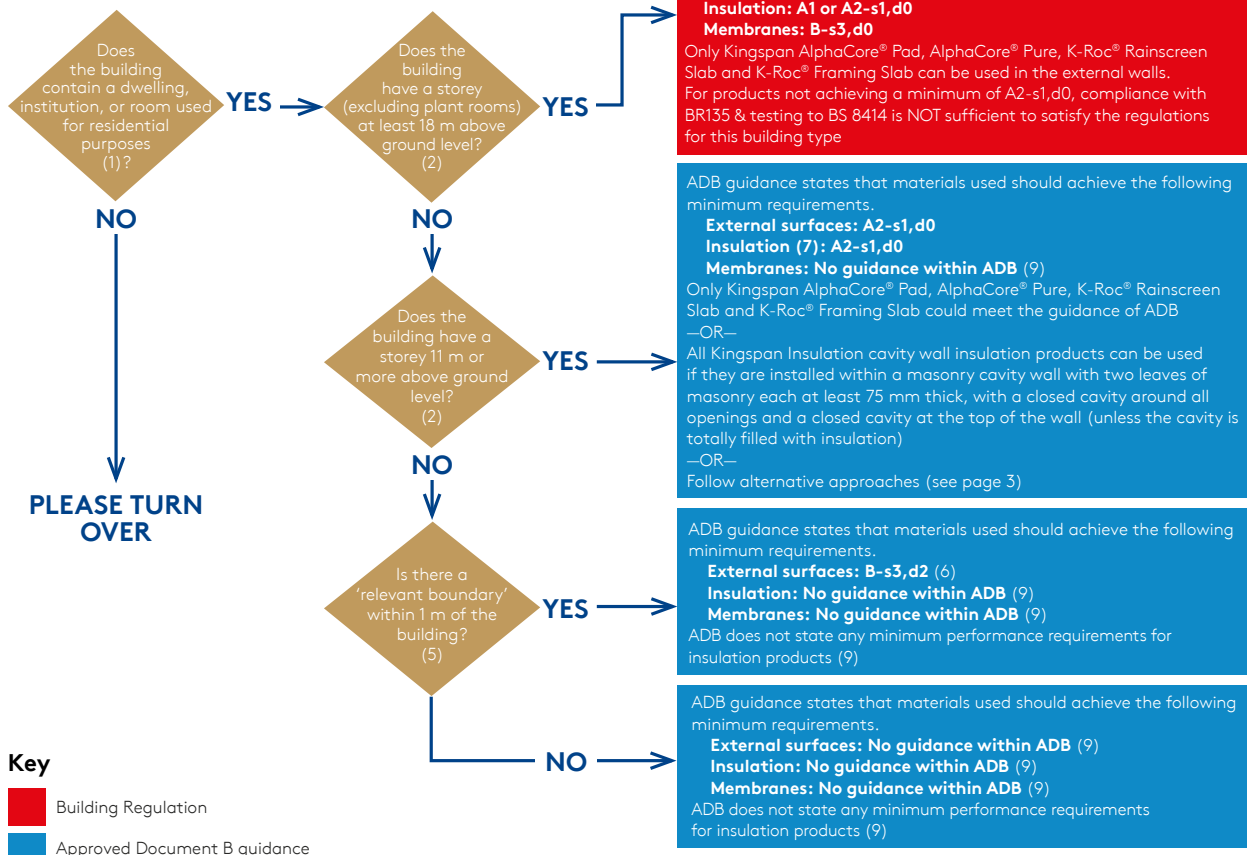


Wales - fire safety for insulation in external walls

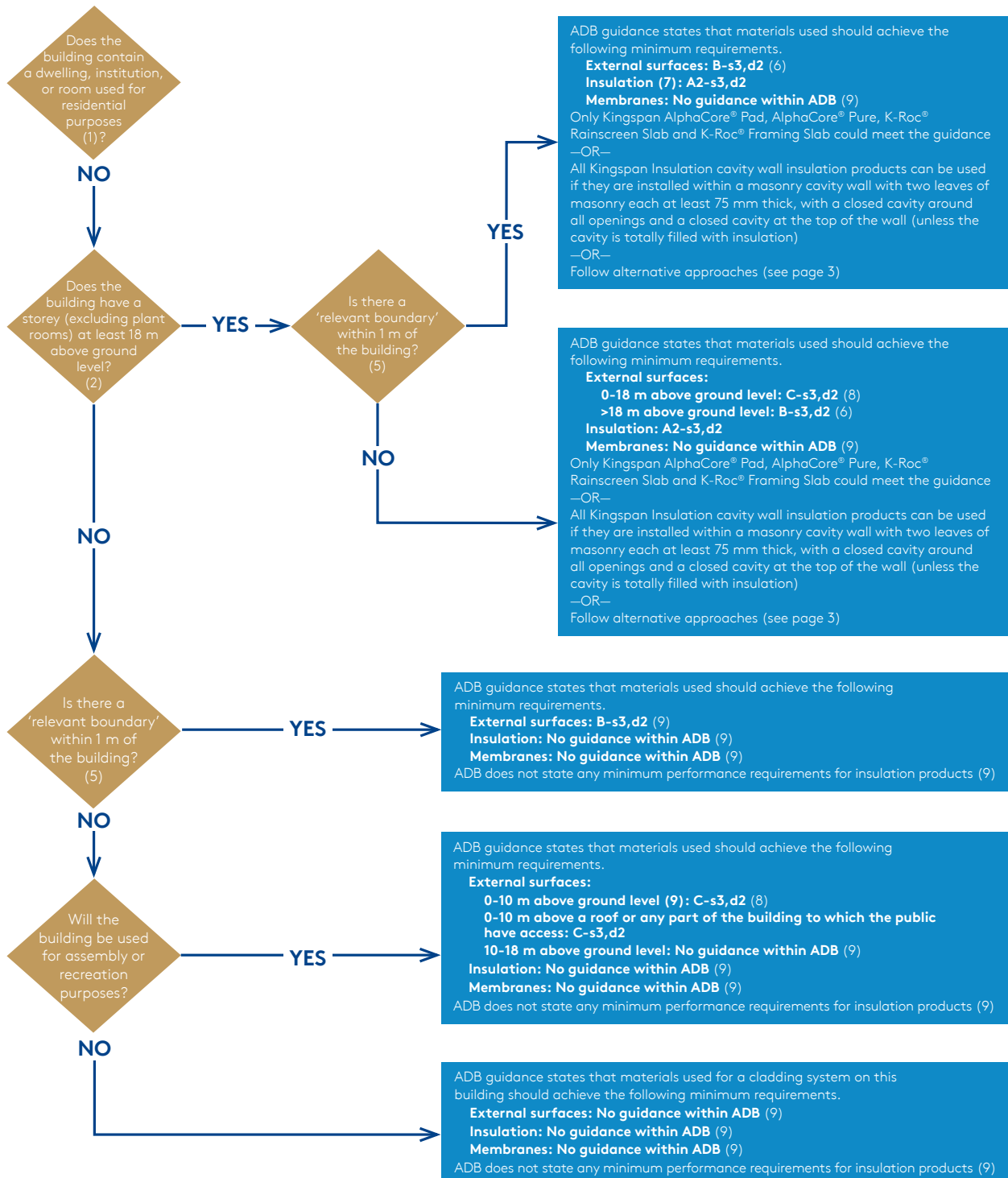
The flowchart is based on the Welsh versions of Approved Document B (ADB) 2006 edition with 2010, 2013, 2016 & 2017 amendments, and forthcoming 2025 changes. The information presented here is intended only to provide a simplified overview of the fire performance regulations and guidance for external wall systems (including Rainscreen and ETICS type cladding, but not curtain walling). The flowchart looks at the reaction to fire requirements; there are other requirements, for example cavity barriers or fire resistance, which should also be considered - please see Approved Document B.

The amendments to the approved document take effect on 20 December 2025. The amendments do not apply in any case where a building notice or an initial notice has been given to, or full plans deposited with, a local authority and either the building work to which it relates started before that day, or is started within the period of six months beginning with that day. Please refer to the Building Regulations 2010 for definition of "building notice", "initial notice" and "full plans".

Note that complying with the guidance in the Approved Document does not guarantee that building work complies with the requirements of the regulations. There may also be other ways to comply with the requirements than those described in the Approved Document. The project Principal Designer (during design stages), Principal Contractor (during construction) and relevant consultants (such as Fire Engineers) should be consulted to ensure compliance with the Building Regulations.



Wales - fire safety for insulation in external walls



Wales - fire safety for insulation in external walls

Alternative approaches

Meet the performance criteria given in BRE report BR 135 for external walls using full-scale test data from BS 8414-1 or BS 8414-2 ([click here](#) for details of Kingspan Insulation test data).

—OR—

Assessment in lieu of test to BS 9414 using BS 8414 test data (note the tested system must match what is built)

—OR—

Fire safety engineering might provide an alternative approach to fire safety. Fire safety engineering may be the only practical way to achieve a satisfactory standard of fire safety in some complex buildings and in buildings that contain different uses. Fire safety engineering may also be suitable for solving a specific problem with a design that otherwise follows the provisions of Approved Document B. A fire engineering professional should be consulted. Please note that when using this route you will need to consider the certification for the products, for example BBA approvals of some products restrict the use above 11 m. Please contact highrisetechnical@kingspan.com for further advice.

NOTES:

- (1) The term relevant building includes student accommodation, care homes, sheltered housing, hospitals, dormitories in boarding schools, hotels, hostels and boarding houses. For more information on relevant buildings, [please click here](#).
- (2) The height of the top storey in a building is determined by Diagram C1 (for dwellinghouses) or C6 (for buildings other than dwellinghouses) of ADB. The height of the top storey is measured from the upper floor surface of the top floor to ground level on the lowest side of the building. The height of the top storey excludes roof-top plant areas and any top storeys consisting exclusively of plant rooms.
- (3) This includes
 - cavity trays when used between two leaves of masonry;
 - any part of a roof (see paragraph (iv) of regulation 2(7)) if that part is connected to an external wall;
 - door frames and doors;
 - electrical installations;
 - fibre-optic cables;
 - insulation and waterproofing materials used below ground level;
 - intumescent and fire stopping materials where the inclusion of the materials is necessary to meet the requirements of Part B of Schedule 1;
 - membranes (however, note that **membranes used as part of the external wall construction above ground level should have a minimum rating of B-s3,d0**);
 - seals, gaskets, fixings, sealants and backer rods;
 - components associated with a solar shading device (excluding components whose primary function is to provide shade or deflect sunlight, such as the awning, curtain or slats);
 - thermal break materials where the inclusion of the materials is necessary to meet the thermal bridging requirements of Part L of Schedule 1;
 - window frames and glass (however, window spandrel panels and infill panels must comply with Regulation 7(3));
 - materials which form the top horizontal floor layer of a balcony which are of European Classification A1fl or A2fl-sl (classified in accordance with the reaction to fire classification) provided the entire layer has an impermeate substrate under it.
- (4) Specified attachments include: (a) balconies attached to an external wall; (b) solar panels attached to an external wall; (c) devices attached to an external wall to deflect sunlight (sun-shades).
- (5) This is typically the distance between a side of a building and the site boundary (see diagram 17 (for dwellinghouses) or diagrams 41 & 42 (for buildings other than dwellinghouses) of Approved Document B)
- (6) Profiled or flat steel sheet at least 0.5 mm thick with an organic coating of no more than 0.2 mm thickness is also acceptable.
- (7) This includes any insulation product, filler material (such as the core materials of metal composite panels, sandwich panels and window spandrel panels but not including gaskets, sealants and similar) etc. used in the construction of an external wall.
- (8) Timber cladding at least 9 mm thick is also acceptable.
- (9) Whilst ADB does not provide any specific requirements for this cladding element, the document does state: "In relation to buildings of any height or use, consideration should be given to the choice of materials (including their extent and arrangement) used for the external wall, or attachments to the wall, to reduce the risk of fire spread over the wall."
- (10) Based upon scientific principles and in line with the BS 7974 suite of documents from an integrated or a 'whole building' perspective, fire safety engineering not only considers the performance of structures, systems, products and materials when exposed to fire, it also includes human behavioural aspects, fire prevention and active and passive fire protection measures e.g. effective means of egress and adequate measures for alarm, detection, control and extinguishment.

NB The fire safety requirements of the Building Regulations should be satisfied by following the relevant guidance given in the Approved Document. However, Approved Documents are intended to provide guidance for some of the more common building situations and there may well be alternative ways of achieving compliance with the requirements. If other codes or guides are adopted, the relevant recommendations concerning fire safety in the particular publication should be followed, rather than a mixture of the publication and provisions in the relevant sections of the Approved Document. However, there may be circumstances where it is necessary to use one publication to supplement another.

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