

Innovative Fire Products and Standards

Why don't innovative products have Standards?

Innovative products often tend to be patented and do things differently from convention as a result they often fall outside of the scope of existing Standards. This however does not prevent them from demonstrating they are fit for purpose.

Very few British Standards are a legal requirement in application, and instead should be treated as guidance only.

The development time for a new British Standard typically takes many years, as it often requires consensus from existing manufacturers. All British Standards are subject to review at least every five years, as a result Standards tend to lag behind novel products.

A proposer of a new standard, or even a revision of an existing one, must be able to demonstrate a need for any proposed addition and is therefore also reliant on some market adoption.

Can innovative products be used that do not have a Standard?

Yes, as stated on the [BSI website](#):

'Standards aren't the same as regulations and following a standard doesn't guarantee that you're within the relevant laws...there are usually ways of being compliant with legislation without using a standard.'

Yes, [Regulation 7 and Approved Document 7](#) states in Section 1:

1.1 ...Approved documents refer to materials covered by harmonised European product standards, British Standards and other technical specifications. However, there is no obligation to adopt any particular solution contained in an approved document in order to meet functional requirements; the references are not exclusive and other materials may be suitable in the particular circumstances.

1.7 If the declared performance of a product is suitable for its intended use, the building control body should not prohibit or impede the use of the product.

Yes, as per BS 0:2016, 'A standard for standards - Principles of standardization' published by BSI, clause 9:

'British Standards are voluntary in that there is no obligation to apply them or comply with them...They are tools devised for the convenience of those who wish to use them.'

Yes, [Approved Document B](#) (Volume 1, 2019 edition, page i) specifically provides for the use of non-standard systems, explaining that:

'because the approved documents cannot cater for all circumstances, variations and innovations.... Where the guidance in the approved document has not been followed... the person carrying out building works should demonstrate that the requirements of the regulations have been complied with by some other acceptable means or method.'

See on the following page, 'Figure 1 - map of the current regulatory system'.

How can you assess if an Innovation is fit for purpose?

Independent third-party performance testing to the applicable parts of the nearest standard (ideally from an accredited laboratory), experience (track record) and independent fire engineering assessments allow the person carrying out building works to demonstrate that the requirements of the regulations have been complied with and an innovative product is 'fit for purpose.'

Credible manufacturers will select clauses from the nearest applicable Standards and present third-party evidence that they meet the performance requirements and can provide an equivalent level of performance.

Example: Plumis Automist Due Diligence Website - <https://bit.ly/3x35TBO>

Why do we need more Innovation?

Dame Judith Hackitt, recognises in her report that the over-reliance on standardised solutions is one of the building industry's key failings, resulting in 'an over-reliance on the system' that 'discourages[s] ownership and accountability for decisions'.

An expectation that all products fully meet a specific standard, limits competition from alternative safe and effective products (including both existing technologies and potential new products) that do not completely comply with those standards. This reduces consumer choice and results in innovative new products that could potentially improve fire safety being excluded from the market. To exclude a system that is outside of the scope of a standard, as opposed to a technical justification, results in a restriction of competition which further stifles innovation.

The exploration of new technology is an important part of the Regulatory Reform (Fire Safety) Order 2005, which states: 'Where the responsible person implements any preventive and protective measures, he must do so on the basis of the principles specified in Part 3 of Schedule 1.' Part 3 of Schedule 1 states under Article 10: **PRINCIPLES OF PREVENTION, adapting to technical progress.**

It is essential that fire protection standards, products and systems keep pace with new expectations of fire and structural safety in the built environment – especially to maintain the reduction of fire-related injuries and fatalities in the future.

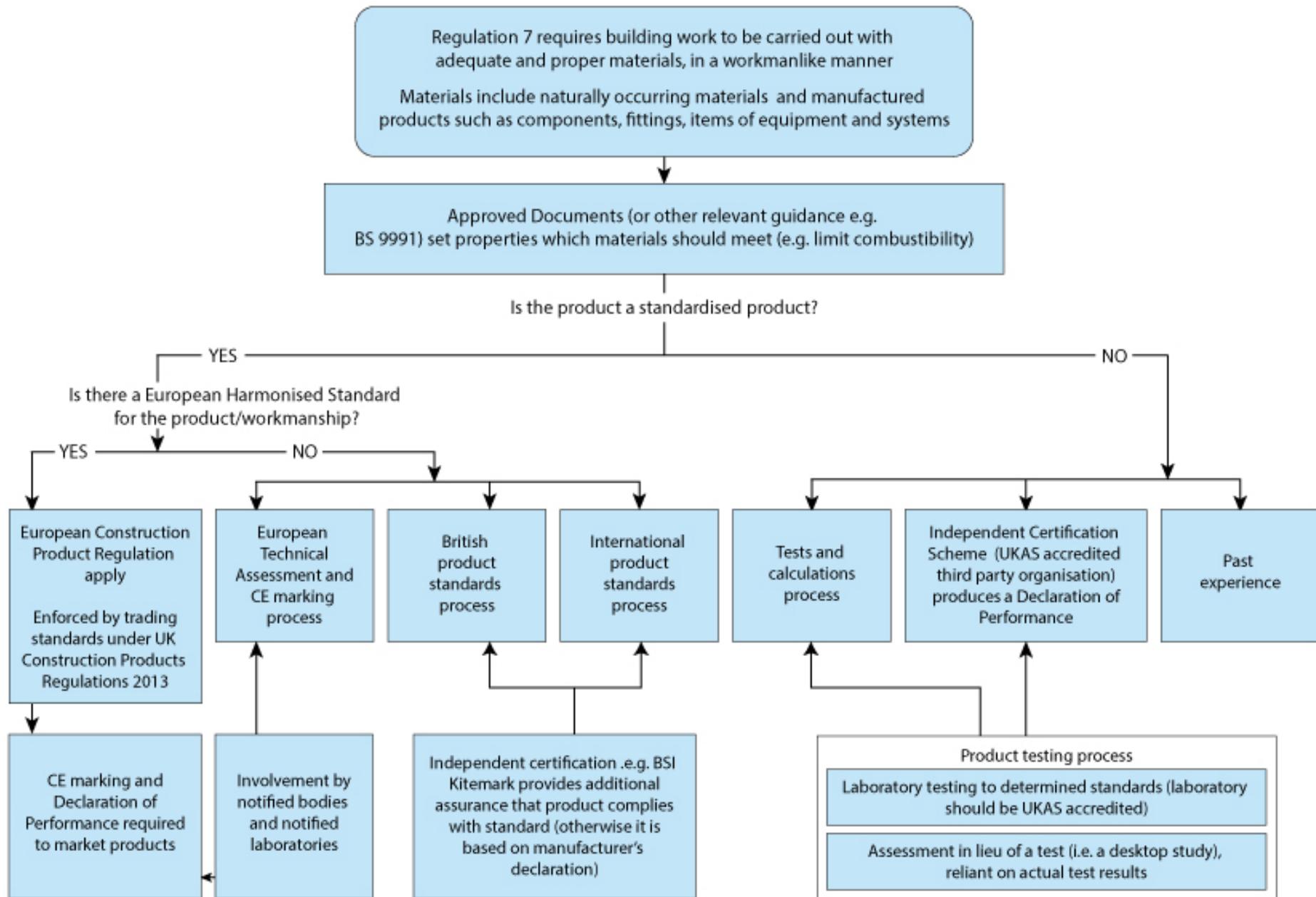


Figure 1: Map of the current regulatory system (from Dame Judith Hackitt, 'Building a Safer Future: Independent Review of Building Regulations and Fire Safety' - page 15)