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Last edited 23 Nov 2020

BS 8414 Fire performance of external cladding systems

The British Standards Institution (BSI) is the UK National Standards Body (NSB). It publishes standards and provides a range of books, self-assessment tools, conferences and training services. It also represents UK economic and social interests in European and international standards organisations.

British Standard (BS) publications are technical specifications or practices that can be used as guidance for the production of a product, carrying out a process or providing a service.

BS 8414 is a two-part standard:

- BS 8414-1:2015 Fire performance of external cladding systems. Test method for non-loadbearing external cladding systems applied to the masonry face of a building was published in 2015. It was then amended by BS 8414-1:2015+A1:2017 in June 2017. It can be used to test rainscreen cladding and external wall insulation systems.
- BS 8414-2:2015 Fire performance of external cladding systems. Test method for non-loadbearing external cladding systems fixed to and supported by a structural steel frame was published in 2015. It was then amended by BS 8414-2:2015+A1:2017 in June 2017.

The use of new and innovative products for cladding buildings has given rise to concerns about fire performance, as these systems are often less well understood than more traditional construction materials. A number of high profile fires have illustrated the importance of adequately testing external wall systems on a realistic scale.

First published as British Standards in 2002, the BS 8414 test methods were developed by the Building Research Establishment (BRE). They evaluate whether a cladding system subject to fire breaking out of an opening (such as a window) in an external wall, will result in excessive fire spread up the outside of the building and the potential for fire to re-enter at a higher level.

The tests are carried out in specialist laboratories, and are performed on full-scale systems (rather than small-scale samples) incorporating joints and corner details, fixings, insulation, fire breaks, cavities and other elements of the system construction.

A video of a BS 8414-1 test can be viewed [here](#).

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- Automatic fire detection and alarm systems, an introductory guide to components and systems BR 510.
- ACM cladding.
- BR135: Annex B. Performance criteria and classification method for BS 8414-2:2005.
- BS 5839-1.
- BS 9999: Code of practice for fire safety in the design, management and use of buildings.
- Building Research Establishment.
- Celotex RS5000 PIR insulation.
- Cladding for buildings.

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Automatic fire detection and alarm systems, an introductory guide to components and systems BR 510.

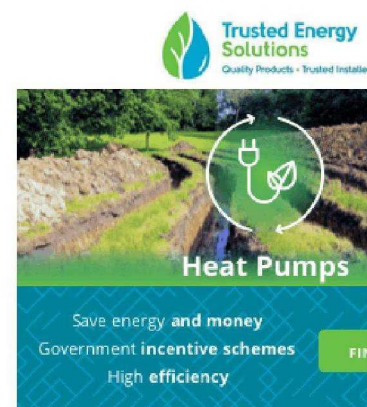
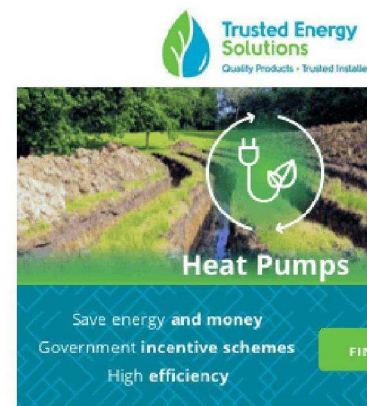
ACM cladding.

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BS 5839-1.

BS 9999: Code of practice for fire safety in the design, management and use of buildings.

Building Research Establishment.



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- Desktop study.
- EWS1 forms not required for buildings without cladding.
- External fire spread, Supplementary guidance to BR 187 incorporating probabilistic and time-based approaches.
- External wall insulation.
- Fire at the Cube, Bolton.
- Fire performance of external thermal insulation for walls of multistorey buildings, third edition (BR 135).
- Fire safety design.
- Grenfell Tower fire.
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- Understanding the factors affecting flashover of a fire in modern buildings.

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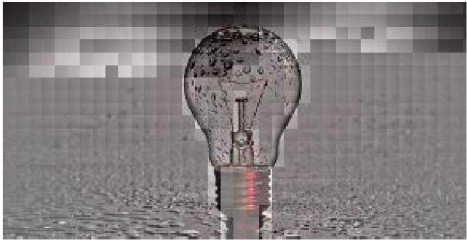
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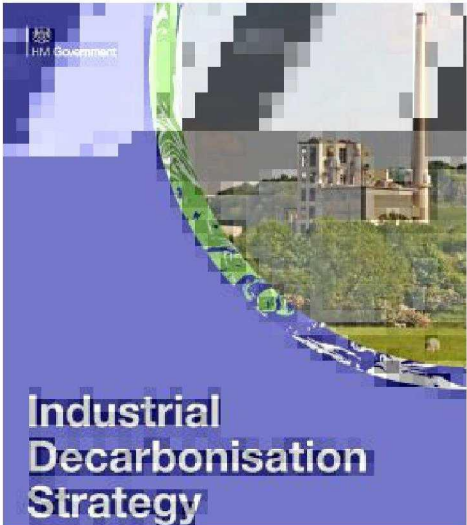
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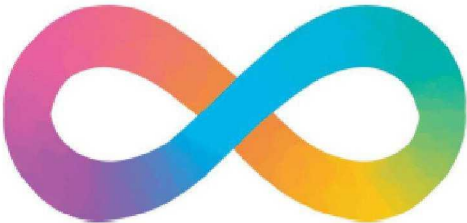
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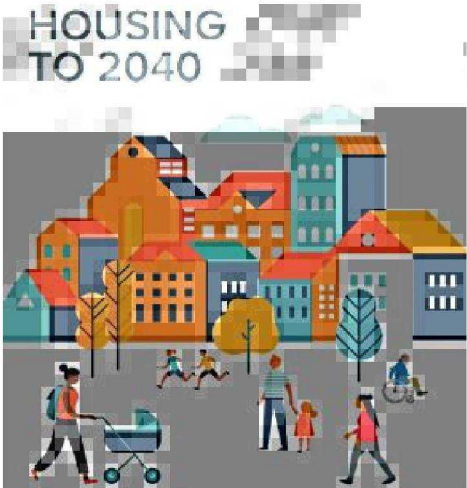
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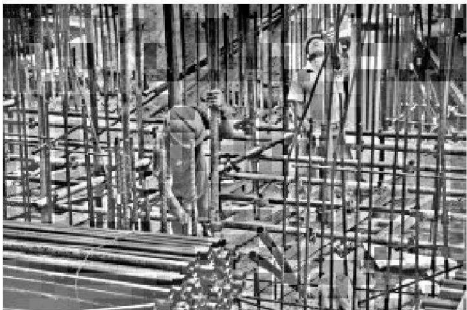
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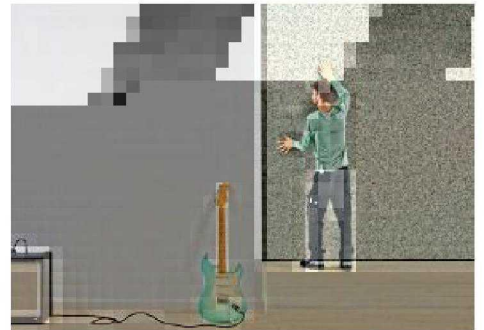
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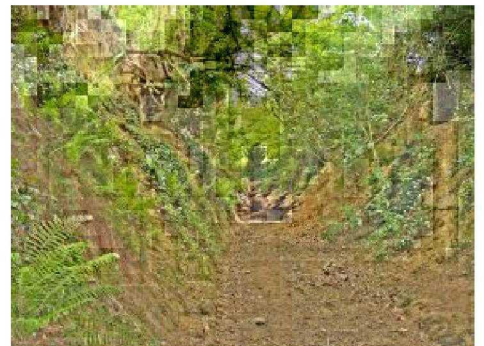
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