



## Construction

All forms of UK construction must comply with the requirements of national building regulations, with timber components and structures being no exception to the rule.

An up-dated version of Approved Document B (Fire Safety) came in effect in April 2007, recognising the complexity of fire development in construction, and its assessment in terms of a material's reaction to fire and/or its fire resistance. 'Reaction to fire' is concerned with ignitability and the material's contribution to the development of a fire. 'Fire resistance' is defined as the ability of a material to continue its function, in spite of its subjection to a fully developed fire. It is concerned with the composite, inclusive of the internal linings, the structure, and all insulation materials.

Timber linings to walls and ceilings are assessed in terms of meeting a specified period of fire resistance, with their reaction to fire defined in Approved Document B. Two classifications for dealing with reaction to fire performance are currently accepted in the UK and Europe. The European system grades performance on a scale of A1 to F, in accordance with EN 13501-1, with A1 being the highest. The UK national system, based on BS 476: Part 7, defines four categories, from Classes 1 to 4, with Class 1 being the highest.

In some high risk areas, the regulatory authorities may require a higher level of performance than the BS 476: Part 7 specification. In such cases, Class 0 is the required designation of meeting the criteria specified in BS 476: Part 6. Currently, under the European system, the criteria governing smoke emission are classified as s1, s2 and s3, with burning droplets defined by grades d0, d1 and d2, and additional classification and appendices are being considered.

The 'Duraflam-Duracote' Flame Retardant System has been developed by Fabric Flare with the aim of meeting the national and European requirements for flame retardancy performance of timber construction and associated components. Formulations can be applied to a variety of wood products for reducing the reaction to fire due to ignitability, heat release and flame spread.



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Timber products such as plywood, chipboard, MDF, T & G cladding, weather boarding, roof trusses, frames and glulam arch components, can all be treated with a 'Duraflam-Duracote' formulation, without surface bloom, efflorescence, or distortion.

Fabric Flare continues its involvement in a programme of research and development, with treated samples of timber and wood products regularly submitted to accredited laboratories for independent assessment of the reaction to fire performance. The results, thus far, indicate that the system will meet the performance criteria of the new and harmonised test methods.