



Fire risk management - frequently asked questions

Q. Are all flame retardants acceptable?

A. No - Flame Retardants (FR) come in many different chemical formulations and work in different ways. The FR Build name given to the flame retardants acceptable to the STA are those that have been assessed for compatibility to timber frame during the construction process. A list of tested and approved FR Build products will be available on the STA website under approved fire build products tab.

Q. Are all non-combustible board products acceptable?

A. Non-combustible boards that have an EN fire test that a third party UKAS laboratory has credited the product with Euro class A1 or A2 is acceptable. Other boards will require to be tested within the STA test programme. Additional aspects of insulation requirements are presented in the supporting paper 3 - FS Build.

Q. Are all insulation products acceptable?

A. Testing is required on the insulation products that are available for timber frame. Testing in the STA test programme has noted a number of products that are acceptable. A competent fire engineer should be asked to consider the impact of the insulation during the build process and as to the impact it can have on timber frame radiant heat. A list of tested and approved FR Build products will be available on the STA website under approved fire build products tab. Additional aspects of insulation requirements are presented in the Supporting Paper 2 - FI Build.

Q. If I have a material which I consider to be appropriate for a Category B or C what do I need to do?

A. Testing in the STA test programme is required for submission on to the list of tested and approved products that is posted on the STA website.

Q. Who will check that that guidance is being followed?

A. HSE has reviewed and agreed with the guidance. If the designer wishes to adopt an alternative approach than a competent fire engineer should be engaged to provide proposals for HASE to approve.

Q. If a product is not listed on the STA website does that mean I cannot use it?

A. HSE has reviewed and agreed with the guidance for the products tested in the STA programme. The insurance industry and fire service has also had an input into the approach and testing verification. Alternatives to the products listed by the STA can be submitted to the HSE for approval on the basis that the product and construction will provide the required level of risk mitigation required for the project. The STA guidance is to support ease of acceptance and to demonstrate how to enable timber frame to be constructed in an appropriate manner in all construction site developments.

Q. If I include windows frames and glazing as part of the as delivered product to the site, will this reduce the potential radiant heat outputs and allow an enhanced grade of category?

A. The testing undertaken is based on the windows being absent. The presence of fully glazed and closed windows will reduce the ventilation in building which may in turn have an impact on the growth of a fire. However, a fire may have sufficient ventilation in the “during “construction state to allow it to become a significant fire if a fuel source is present. Under a condition where a fire has built up a degree of momentum the glass in a window can crack the fire can spread as it does in completed occupied buildings. It is pointed out that radiant heat can pass through glass within a window and it cannot be considered as risk mitigation against radiant heat. Windows installed and glazed will provide a deterrent against unofficial access to the building and is considered appropriate to provide resistance to arson attack.

Q. From which date can we expect sites to be compliant with the guidance?

A. The guidance is to be used now for projects that would benefit from the information provided. Current projects may have fire engineering assessment which can be used in place of the guidance.



Q. How do contractors confirm they have designed their schemes in line with the guidance?

A. The output from the guidance is to be used in the risk assessments and adoption of the information is to be actioned accordingly. The HSE will be looking for appropriate risk assessments covering the off-site risk of fire spread as requested in the HSG168.

Q. Can we expect to see the HSE come down hard on contractors that have not complied with the guidance?

A. The HSE will require an appropriate risk assessment of the potential for off the site fire growth and the STA guidance is one method on how to achieve this. A competent fire engineer can be appointed to assess difficult sites and provide independent risk assessment. Failure to consider the off-site risks may result in the HSE stopping the site works.

Q. Can contractors still engage with non-members of the STA to deliver schemes in high-risk areas?

A. The STA members have training and information presented to them to enable a better understanding of the issues that may arise.

Q. How does this Guidance ensure that all timber frame manufacturers are quoting for the same category of timber frame?

A. It is envisaged that the designers of the schemes will take the three categories of timber frame through to the procurement stage. The STA risk assessment check list provides guidance on this aspect.

Q. What is the next stage in the evolution of this guidance?

A. More compliant systems will be tested and posted on to the STA website. As more experience and data is presented the guidance will be updated. The test procedure is being considered as a standard and a committee will be established through the BSI structures to deliver this.

Q. Can I combine categories?

For example Category A with Category C, or Category A with Category B, or Category B with Category C?

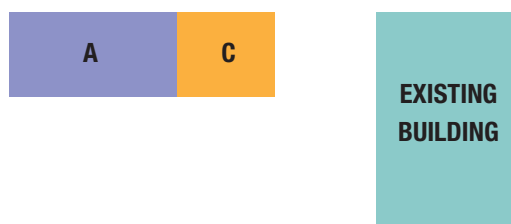
A. The combination of categories is a complex consideration which for accurate assessment a competent fire engineer should be employed to consider and make recommendations. For simplicity and conservative assessment the following can be adopted:

A with B

Not appropriate

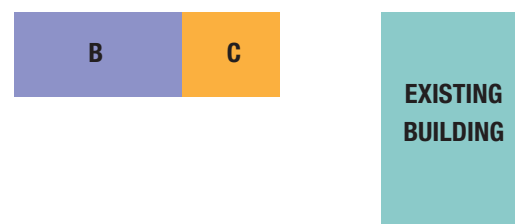
A with C

$S_a > S_r$



B with C

$S_a > S_r$



This simplified assessment of combining construction categories is taken from the STA 'Design guide to separating distances during construction', which contains detailed tables and diagrams to assess the fire risk to neighbouring buildings, should a fire occur in a structural timber building during construction. The document is available to download from the members area of the STA website.



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