

“We now have a practical set of proposals which can be implemented within the UK market, but which are still demanding”

## SMOKE CONTROL

### Consistency of Building Control Regulators

Building control officers and associated regulators have a challenging task. Required to understand the intricate ins and outs of numerous legislations as well as the practicalities of real-world construction projects, they are also expected to have expert knowledge of some highly technical areas of engineering.

The situation isn't helped by the large number of differing regional requirements.

#### Building control apps

In the UK there are normally three ways of showing compliance with these building regulations, using fire safety as an example. The submission from the safety design teams/architects should show:

- compliance with the approved documents B;
- or be a fire engineered solution;
- or satisfy the appropriate British standards (for example British standard 9999).

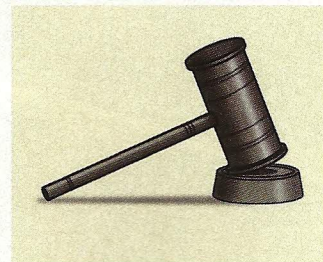
But the submission under fire safety should not include 'cherry picking' the best scenarios from each of the options.

Fire engineered requirements for larger projects usually mean trading off passive requirements against fire systems, ie suppression and smoke venting to name just two.

These projects usually have two or three fire engineers involved and they would like to choose the most economical trade-offs, cherry picking from fire engineering, approved document and BS 9999 – this situation cannot be considered to be correct and must be rejected.

In particular, the number of technicals involved with the stair

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core smoke venting system for life safety and fire fighting are a major problem, as are all the different technical trades who often do not communicate with each other.

This situation only improves when the BCO engineers attend sites to personally check the installations.

The other problem I would like to add is where certain systems and building fabric fire tests have been requested, the fire house only tests to the instructions of the manufacturers and not the relevant British standard.

#### Testing and inspection

All smoke control (mechanical and natural) systems should be thoroughly tested in the presence of the BCO to ensure correct operation. In the case of considerable numbers of other action systems, the testing and inspections can be found in appropriate British standard covering the design and installation.

These comments also apply to the inspections of passive systems and fire-resistant enclosures, used within the construction works.

The BCO should not issue a completion certificate until all works and systems are completed, including the required system tests. The temptation must be resisted to save expense and time if the inspection and testing are not carried out.



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