Seeking an answer by tapping in ‘fire ratings’ on a computer is also not much help... This is certainly the case with fire ratings where the enquirer can find classifications expressed as two figures, say 30/30, with contradictory information as to whether these figures relate to ‘stability’ ‘integrity’ or ‘insulation’. Alternatively they may encounter designations ‘E’ ‘I’ ‘R’ or, in the case of fire doors, ‘FD’. What are they to make of all this?

The two figures, say 30/30 or 60/60, cover the ‘non-load bearing elements’ with the first figure describing the period in minutes during which the door or screen meets the ‘integrity’ requirement and the second the ‘insulation’ requirement. ‘Integrity’ is the ability to prevent the passage of fire and smoke. ‘Insulation’, as the name implies, is the ability to prevent the passage of radiant heat.

These are British classifications and might also be rendered as FD30 meaning a fire door with a 30-minute ‘integrity’ rating but no separate ‘insulation’ classification.

Referring to Building Regulations Approved Document B (Fire Safety) the potential specifier will encounter both FD and EI classifications, the latter being derived from Europe and which are still sometimes not recognised in Britain in the same way that they are throughout the continent.

‘E’ stands for ‘integrity’ and ‘I’ for ‘insulation’ and where one is dealing with a non-structural item such as a door or screen then the classification could be rendered either as E60 for 60 minutes ‘integrity’ only or EI60 for 60 minutes ‘integrity’ plus ‘insulation’.

There was a time when a specifier might encounter a three-figure classification, such as 30/30/30 in which case the first figure referred to structural stability. In the European system of classification the letter ‘R’ refers to structural stability so a classification covering all three elements would appear as REI followed by the number of minutes for which resistance is achieved. The ‘stability’ element is not relevant where non-load bearing components are involved and, say Fendor technicians, is no longer an area of great confusion. But an issue remains as to whether the specifier is seeking to inhibit just fire and smoke, or radiant heat as well.

The question Fendor so often find itself posing to customers is “What do you need it for?” and this often exposes the fact that the specifier is concerned with inhibiting the passage of flame and smoke but has not considered heat, something that could be critical if, for example, the component were adjacent to an escape route or if the building concerned were, say, an art gallery where the passage of heat would be just as destructive as that of flame.

This issue is covered in Approved Document B where it is stated: “Because fire doors often do not provide any significant insulation there should be some limitation on the proportion of doorway openings in compartment walls … no more than 25% of the length of a compartment wall should consist of door openings, unless the doors provide both integrity and insulation to the appropriate level.”

The point is also made that UK national classifications (the 60/60 or the FD30) do not automatically equate with the European (E or I) classifications found in the tables in the approved document and therefore a product cannot typically assume a European class unless it has been tested accordingly.

“It is not wrong for people to continue to use the British classification but they must do so with care and it would be best practice to use the European method,” says Fendor Technical Manager Martin Smith.

“There really need to understand from the design stage what is needed. British Standard classifications do not take account of where a component is going to be used in a building, that is to say, next to an escape route or protecting adjacent properties. This is something that someone such as a professional building control officer for fire can help with.

“Everything Fendor manufactures is bespoke to the particular job and the specifier and designer should understand what they need by discussing it at an early stage with the fire officer and, of course, our technical team at Fendor are always on hand to help.