

RESPONSES TO COMMENTS ON PERFORMANCE CRITERIA FOR FIRE SAFETY IN ENCLOSURES

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We would like to thank Dr. J.C. Jones for his comments on our paper. Our response to those comments is as follows.

One of the objectives of our paper was to present a compilation of various fire safety criteria found in the literature and used by fire protection engineers to design fire protection systems in buildings. This was done to indicate the variations that exist in the threshold values used by the engineering community. As these variations are quite significant (in some cases), the paper points to the need for a consensus among those involved on appropriate values for performance criteria. The references, where this information was taken from, give more details and discussion (Draft British Standard Code of Practice [1], New Zealand Fire Engineering Design Guide [2]). For additional information on performance criteria, the readers are referred to Hadjisophocleous and Bénichou [3], where more discussion and explanation are given on the issues of performance criteria raised by Dr. Jones.

With regard to item 6 “Further points of enquiry”, our response is as follows, with further details in Hadjisophocleous and Bénichou [3]:

- Structural steel temperature is the temperature at which the structural steel can no longer hold any applied stresses.
- Information found by the authors on glass breakage related to temperature only.
- Convection heat (in °C) is meant as the temperature of the gas layer that will cause incapacitation due to skin and lung damage.
- Critical time to reach untenable conditions is the time after which the chances of survival are very slim for those occupants in rooms with untenable conditions.

REFERENCES

1. Draft British Standard Code of Practice for The Application of Fire Safety Engineering Principles to Fire Safety in Buildings, BSI Standards, Panel FSM/-/5 and Technical Committee FSM/24 Fire Safety Engineering, London, UK, June (1994).
2. A.H. Buchanan (editor), Fire engineering design guide, Centre for Advanced Engineering, University of Canterbury, New Zealand, July (1994).
3. G.V. Hadjisophocleous and N. Bénichou, “Performance criteria used in fire safety design”, *Automation in Construction*, Elsevier Science, Vol. 8, pp. 489-501 (1999).