



File No. DOIA 1516-0824

2 6 JAN 2016

Mr Geoff Merryweather
Fyi-request-3477-2c42a265@requests.fyi.org.nz

Dear Mr Merryweather

I refer to your email of 12 October 2015 requesting the following under the Official Information Act 1982 (the Act):

- The NZ Building code has performance criteria to allow for safe evacuation, in particular C4.3
 The evacuation time must allow occupants of a building to move to a place of safety in the event of a fire so that occupants are not exposed to any of the following:

 (a) a fractional effective dose of carbon monoxide greater than 0.3:
 (b) a fractional effective dose of thermal effects greater than 0.3:
 (c) conditions where, due to smoke obscuration, visibility is less than 10 m except in rooms of less than 100 m2 where visibility may fall to 5 m.
- C4.4 Clause C4.3(b) and (c) do not apply where it is not possible to expose more than 1 000 occupants in a firecell protected with an automatic fire sprinkler system.
- Can you provide any calculations, risk assessments or supporting documentation that was used to justify the allowance in C4.4 where visibility and thermal radiation do not apply.
- In particular any calculations, reports or references with regard to risk to life and any consideration whether this should apply all risk or purpose groups, any building height or consideration if the sprinklers would activate in time to be effective.

In response to your request, two documents are attached and released in full:

- 1. Fire Framework Design Fire Scenarios; and
- 2. Justify Clause C4.4 Discussion Document.

We do not hold any additional documents in scope of this request.

Yours sincerely

Peter Laurenson

Manager Building Systems Control **Building System Performance**