



File No. 1718-0747

03 JAN 2018

Mr Geoff Merryweather
fyi-request-6913-e15ccc66@requests.fyi.org.nz

Dear Mr Merryweather

Thank you for your email of 29 November 2017 requesting the following information under the Official Information Act 1982 (the Act):

I am looking for the correspondence and information supporting the development of Building Code clause NZBC 3.8, where unsprinklered warehouse buildings closer than 15m to the boundary (and greater than 5000sqm or 20TJ in energy) need to have a layer height greater than 2m at the Fire Service arrival time. In particular I am looking at the distance to boundary separation.

How was the 15m value arrived at?

What is the intended purpose of it? If it is intended to facilitate operations in the building such as search and rescue, the distance from the boundary is not relevant.

What is the supporting evidence for this value vs a greater or lesser value?

The Ministry of Business, Innovation and Employment (the Ministry) used New Zealand Fire Service (NZFS) operational methods when developing Building Code clause C3.8 (C3.8). For this reason the Ministry is only able to provide the following information in relation to your request.

The purpose of clause C3.8 is to achieve the Building Code clause C1 objective, that being to 'facilitate fire-fighting and rescue operations'. Clause C3.8 requires the provision of safe conditions for internal fire-fighting procedures in buildings not protected by an automatic fire sprinkler system where the floor area exceeds 5000m² or, the fire load exceeds 20TJ. This clause is intended to require the provision of either fire separations, ventilation or sprinklers to enable fires to be contained within a size that can be controlled by the Fire Service.

Clause C3.8 only applies to buildings that are located within 15m of their site boundary. Buildings closer than 15m do not have sufficient access for Fire Service vehicles to the perimeter of the building for external fire-fighting. For buildings located greater than 15m to the site boundary, external fire-fighting can be provided to enable the external control of fire spread. Additionally, the distance of 15m from the site boundary is considered that, in most cases, if the building was left to burn without Fire Service intervention, there would be little risk of damage to neighbouring property and to control the potential of external fire spread due to flying debris or radiation.

The NZFS Emergency Vehicle Access Guidelines show the access requirements for an aerial appliance are a turning radius of 12.5m and a carriageway width of 6m. Additionally, appliances cannot park adjacent to buildings due to risk of falling structure and debris. The Code of Practice for Fire-Fighting Water Supplies requires fire hydrants to be a minimum of 6m from the building. Therefore, to provide safe access for Fire Service vehicles and also safe operation of fire fighters to establish water lines and operate water streams and monitors, a distance of 15m is required between the building and the site boundary for external fire-fighting to be possible.

The NZFS Emergency Vehicle Access Guidelines and Code of Practice for Fire-Fighting Water Supplies can be found on the NZFS website <http://www.fire.org.nz/>.

You have the right to seek an investigation and review of my decision by the Ombudsman, in accordance with section 28(3) of the Act. The relevant details are:

The Ombudsman
Office of the Ombudsman
PO Box 10152
WELLINGTON 6143

0800 802 602
www.ombudsman.parliament.nz

Yours sincerely



Dave McGuigan
Team Leader Engineering
Building System Performance