



28 February 2018

Ref: DOIA 1718-0951

Geoff Merryweather
Email: fyi-request-7193-b89ed504@requests.fyi.org.nz

Dear Mr Merryweather

Thank you for your email of 30 January 2018 to the Ministry of Business, Innovation and Employment (MBIE) requesting the following information under the Official Information Act 1982 (the Act):

Subject: Official Information request - Supporting documentation to Determination 2017/88 (facade system fire spread)

With regard to Determination 2017/088 (Regarding the code-compliance of a facade system proposed for remediation work to an apartment building at 12 Selwyn Road, Howick, Auckland)

Can you please provide the supporting documentation, calculations, reports or correspondence between the parties supporting the conclusions of Determination 2017/88, particularly, in regard to fiber cement cladding as a rigid air barrier and timber framing.

On 2 February 2018, we wrote to you to clarify the following:

In order to help us respond to your request can you please clarify what information you are specifically seeking. Determination 2017/088 made a decision in respect of the fire compliance of the wall system as it is described in the determination itself – the system, which was revised during the course of the determination process, does not rely solely on fibre cement sheet as the outer layer to the timber framing supporting the high pressure laminate panels.

The performance of the fibre cement as a rigid air barrier is a question more related to Clause E2 External moisture: this matter was not in dispute and the determination does not consider this clause.

On 15 February 2018 you clarified your response based on our advice as follows (with questions in bold for ease of reference):

- 1. I am looking for the information that supports the conclusion that fibre cement RAB board on timber framing will not prevent fire spread up the building when part of a vented cavity with inter-storey firestops. The RAB is part of the facade system and this determination was about a vented cavity system which relied on the NFPA 285 full scale test for fire compliance. From the determination it appears the conclusion is that the timber framing is a concern and it will burn, even if covered by a fibre cement board of limited combustibility, causing fire spread up the building. **What information supports the integrity failure of the fibre cement board, and fire spread?***

- 2. Did the research behind the determination outcome consider alternative thicknesses or materials (such as Calcium Silicate boards) The accepted outcome of a modified wall system had fire rated plasterboard under the fibre cement, but also has 13m fire rated plasterboard part of the inside wall lining. The Building Code recognizes the fire may spread up to 3.5m, hence is not concerned with spread up the outside wall of room of fire origin of an ordinary apartment. Assuming the wall is not otherwise fire rated for other reasons (which is not clear in the text), is the fire rated plasterboard required as part of the determination conclusion? if so, then why? if the wall is not fire rated, it could be full height glazing with no limitations.**

This has a significant impact on recladding costs of leaky buildings as there is now extensive remedial work inside the building, including removal of kitchens, bathrooms, refitting showers and waterproofing etc which would not otherwise be required. What is [are] the conclusions based on - tests, referenced literature, expert opinions, etc.?

In relation to your first request seeking 'the supporting documentation, calculations, reports or correspondence between the parties supporting the conclusions of Determination 2017/88', these are outlined in the determination itself, supported by the technical findings in the expert's report (which is summarised in the determination).

The determination is publicly available at www.building.govt.nz; however, I have also attached a copy for ease of reference.

I have also provided a copy of the full expert's report and addendum that support the conclusions in the determination. In addition to this, MBIE received information and submissions from parties to the determination, which are summarised in the determination. Please advise us if you would like full copies of these submissions or any other documents referenced in the determination.

I will now respond to your additional questions of 15 February 2018 as outlined below:

1. *What information supports the integrity failure of the fibre cement board, and fire spread?*
2. *Did the research behind the determination outcome consider alternative thicknesses or materials (such as Calcium Silicate boards)*
3. *Assuming the wall is not otherwise fire rated for other reasons (which is not clear in the text), is the fire rated plasterboard required as part of the determination conclusion? if so, then why? if the wall is not fire rated, it could be full height glazing with no limitations.*
4. *What is [are] the conclusions based on - tests, referenced literature, expert opinions, etc.?*

In making the determination I considered the two design solutions proposed by the applicant for the determination.

- *Assuming the wall is not otherwise fire rated for other reasons (which is not clear in the text), is the fire rated plasterboard required as part of the determination conclusion? [I]f so, then why?*

The determination tested the equivalence between the system tested in NFPA 285 (to which you referred in your original request) and the system as proposed by the applicant. Information about the role of the fire-rated plasterboard in the determination's conclusion is outlined further in both the determination and the expert's reports.

- *What [are] the conclusions based on - tests, referenced literature, expert opinions, etc.?*

I reiterate that the rationale for the determination's decision is outlined in the determination (supported by the expert's report and addendum).

You have the right to seek an investigation and review by the Ombudsman of our response to your request. Information about how to contact the Ombudsman's office is available at: www.ombudsman.parliament.nz or freephone: 0800 802 602.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Katie Gordon'. The signature is fluid and cursive, with a large initial 'K'.

Katie Gordon
Manager Determinations