Determination 2024/018

Date: 24 April 2024

Regarding the refusal to grant a building consent for alterations to replace the external cladding of a dormer roof and window

16/15 Harrison Road, Mt Wellington, Auckland

Summary

This determination looks at the authority's decision to refuse to grant a building consent for alterations to an existing multi-unit dwelling due to a dormer wall not being fire rated. The determination considers whether fire rating the wall is necessary to meet the requirements of section 112(1)(b) of the Building Act.





The legislation discussed in this determination is contained in Appendix A. In this determination, unless otherwise stated, references to "sections" are to sections of the Building Act 2004 ("the Act") and references to "clauses" are to clauses in Schedule 1 ("the Building Code") of the Building Regulations 1992.

The Act and the Building Code are available at www.legislation.govt.nz. Information about the legislation, as well as past determinations, compliance documents (eg, Acceptable Solutions) and guidance issued by the Ministry, is available at www.building.govt.nz.

1. The matter to be determined

- 1.1. This is a determination made under due authorisation by me, Andrew Eames, Manager Advisory, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.¹
- 1.2. The parties to the determination are:
 - 1.2.1. the owner of the house, D Binnie ("the owner")
 - 1.2.2. Auckland Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.
- 1.3. This determination arises from the authority's decision to refuse to issue a building consent for building work to reclad the owner's house. The authority refused the building consent because it considered that an issue raised in its requests for information (RFIs) relating to the fire-rating of the walls and roof of a dormer window was unresolved, and that it could not be satisfied that the proposed building work would comply with the Building Code.
- 1.4. In the authority's view, the proposed work was new building work and required to comply fully with Clause C3 with respect to the fire affecting areas beyond the fire source. In the owner's view, the proposed recladding work was an alteration to an existing building and, while the recladding work had to comply with certain Clauses (Clause E2 among others), under section 112(1)(b)(ii) the building itself was only required to comply with the provisions of Clause C3 to the same extent as before the work was carried out.
- 1.5. The matter to be determined, under section 177(1)(b) and (2)(a), is the authority's decision to refuse to grant a building consent for alterations to the owner's house. The determination will turn on the application of sections 17 and 112, as they relate to building code clauses C3.3, C3.6 and C3.7.

¹ The Building Act 2004, section 185(1)(a) provides the Chief Executive of the Ministry with the power to make determinations.

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1.6. I have not considered any other aspects of the Act or of the Building Code, nor have I considered the Building Code compliance of the proposed building work covered by the building consent, other than as outlined in paragraph 1.5.

2. The building work

- 2.1. The owner's property is a three-storey townhouse on a flat section in residential area of Auckland.
- 2.2. The two townhouses were originally constructed in 2000 and the authority subsequently issued a code compliance certificate for that building work.
- 2.3. The front bedroom on the second floor has a pushed-out or dormer window with a roof. The pushed-out area around the window is 3120mm wide. While I do not have exact measurement for how far the push-out projects from the townhouse wall, this would not appear to be more than 500mm. The walls of the pushed-out section are clad in weatherboards in common with the rest of the house. The pushed-out area has a dormer roof constructed of a waterproof roofing membrane installed over plywood, which in turn is installed over building wrap onto rafters. The membrane, and its plywood substrate, extend down the sides of the adjacent walls, and an aluminium gutter and bargeboard have been installed over the membrane in this area, around the sides and front of the pushed-out area. The rest of the townhouse roof is clad with metal roofing tiles.
- 2.4. The pushed-out area of the wall extends all the way down to the first floor ending at the deck. There is an equivalent window on the adjacent townhouse. On the first floor a solid fire-rated privacy or wing wall, built on the vertical boundary, separates the two decks and properties. On the second floor, there is no separation between the two properties. The distance between the side wall of the owner's pushed out area and the vertical boundary that separates the two townhouses is approximately 950mm. The dormer and walls of the push-out area were not originally constructed to provide any fire protection.
- 2.5. On 13 August 2020, the owner applied for a building consent (BCO10312543), and it is this building consent that is the subject of this determination.
- 2.6. The proposed building work to be covered by the consent was originally described in the consent application as:

Complete reclad of unit 16 with decayed timber replacement, new wall and tiles to laundry area, new bifold doors to ground floor bedroom and to east and west decks, new range hood and ventilation ducting layout, new deck framing layouts.

2.7. However, following a request from the authority, the consultant agreed that the description could be amended to read:

Complete RECLAD with Linear weatherboards, decayed timber replacement, new wall and tiles to laundry area, new D/G PC aluminium bifold doors to ground floor bedroom and to east and west decks, new range hood and ventilation ducting layout, new deck framing layouts with new WP membrane, new balustrades & privacy screens. Reconstruct roof to create eaves, reconstruct dormer roof and replace WP membrane, refurbish & reinstate existing aluminium joinery.

- 2.8. The aspects of the proposed building work that this determination is concerned with involve:
 - replacing the external cladding on the side walls around the dormer windows, but without the intention of replacing any of the structural wall timbers or internal wall linings.
 - installing a fibre-cement sheet substrate below the new weatherboards on the side walls of the dormer window, in the area between the dormer and the house roofs.
 - replacing the dormer roof membranes and plywood roofing substrate, including installing a new membrane, and additional nogs and rafters to the roof structure as required to ensure the compliance of the substrate, but not otherwise altering the existing roof structural members.
- 2.9. The owner's consultant advises this work was required because the cladding installed under a 2009 building consent required replacing. The area on the side of the pushed-out area requiring recladding is less than $0.1m^2$ in area, and is located within 1m of the vertical boundary with the neighbouring property. The work to install the fibre-cement sheets in this area was proposed because it was not considered 'reasonably practicable to reconstruct the entire dormer roof to install gib to the inside face'. The internal linings and framing of the wall and roof are not being replaced.

3. Background

3.1. Following the lodgement of the building consent application, the authority issued three RFIs detailing issues that it wanted resolved. The parties worked through these issues, until there was only one remaining. This issue was detailed in point 27(c) of the authority's third and final RFI issued on 25 February 2021, as follows (formatting is authority's).

27. While the sequenced isometric details provided for the reconstruction of the dormer roof is helpful further information is required.

c). Provide a sectional detail at the barge for the dormer roofs that are within 1m of the relevant boundary and are required to be fire rated.

19/10/20 UNRESOLVED. The points listed by the Engineer are not accepted.

i) ii) & iv). The roof dormer side wall is within 1m of the relevant boundary and the drawings specify that this wall is to be fire rated (refer sheet D112).

iii). The plans clearly show these roofs are being significantly reconstructed.

v). Provide evidence that demonstrates the construction proposed at the dormer barge wall junction complies with the performance requirements C3.6 & C3.7.

25-02-21 UNRESOLVED. Sec 17 of the Building Act requires new building works must comply with the building code; therefore, the dormer roof construction must comply with the external fire spread requirements in accordance with C/AS1.

Detail 45/D115 does not align with the series of construction details provided on D114. 18mm Hardie panel direct fixed to framing is not included in the fire rated systems covered in the James Hardie Fire & Acoustic design manual.

It is noted that a radiation calculation is offered in Chesters Addendum to the Fire Report 14148 (22 Jan 2021) however this calculation only addresses the radiation, it does not address the horizontal fire spread due to direct flame impingement. For this reason, NZBC C3.3 has not been complied with.

- 3.2. The authority's view was the building work involved the substantial reconstruction of the dormer roof, and therefore the proposed building work must comply fully with clause C3, in particular clauses C3.3, C3.6 and C3.7. It requested additional work to ensure the requirements in those clauses were met, including the construction of a fully fire-rated wall on the side of the dormer roof facing the neighbouring townhouse.
- 3.3. The owner disagreed with the authority's assessment and in a response to its third RFI stated that the building work involved merely replacing the existing roof membrane and cladding that had failed, and that after the work, the side walls to the pushed-out dormer window would continue to comply to the same extent with clause C3, as required by section 112(1)(b)(ii) of the Act.
- 3.4. To support this position, the owner supplied an assessment by a fire engineer that reconstruction of the dormer walls to provide a 30-minute fire rating was not required by section 112, and also referred to determination 2015/025.²
- 3.5. The authority did not accept the owner's position, and in a letter dated 12 March 2021 advised that the application for a building consent had been refused under section 50. The reason given for the refusal was that subsequent correspondence

² Ministry of Business, Innovation and Employment. (2025). Determination 2015/025: Regarding conditions on a building consent for the recladding of a house. Issued 29 May 2015. MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT 24 April 2024 5

had failed to resolve the issue raised in the authority's third RFI: "The requested information therefore has not been provided and consequently compliance with the NZ Building Code has not been demonstrated". The letter advised that the owner would need to submit a new application for a building consent if he wished to continue with the building work.

4. Submissions

The owner

- 4.1. The owner's submissions can be summarised as follows.
 - 4.1.1. The building work on the dormer window is 'weathertight repairs and not substantial reconstruction', irrespective of the wording of the building consent.
 - 4.1.2. 'The minor dormer walls and 'pushouts' located within 1m of the boundary are existing features and were not fire rated as part of the original construction.' The pushouts and dormer wall framings and linings are not being replaced. Reconstruction of the entire wall should not be required to improve the protection to other property: this is beyond the requirements of section 112. Replacing the exterior cladding of an existing non-fire-rated wall does not make it a new wall.
 - 4.1.3. The entire roof and ceiling of the townhouse within which the dormer is installed are 'completely unprotected from fire'.
 - 4.1.4. The new rafters and nogs shown on the plans were 'an if-needed compliance detail' to support the roof substrate, because the size, spacing and fall of the existing rafters was not yet known. The rafters will not be replaced if they are already compliant and removed if they are not. Any additional work needed will be installed without disturbing the existing ceiling and linings.
 - 4.1.5. The proposed fibre cement sheet to be fixed as a substrate to the sides of the dormer's external walls, was an 'as-near-as-reasonably-practicable solution', proposed by the owner's fire engineer, because it was not practicable to replace the internal wall lings in these areas with fire-rated plasterboard.
 - 4.1.6. The fire rating of exterior walls is primarily for protection of other property and not to protect a means of escape. As the proposed building works are alterations, under section 112(10(b)(ii) 'the existing level of exterior fire protection may be maintained and continue to comply to the same extent as it did before the alteration'.

- 4.1.7. 'The work to comply with C3.3 as requested by [the authority] is unwarranted and will provide little benefit or additional code compliance but will incur significant additional disruption and cost for the owners.'
- 4.1.8. If the existing wall framing or internal linings need replacing as work progresses, this will need to be fire rated, and an amendment to the building consent will be obtained for this purpose.

The authority

- 4.2. The authority made a submission is response to the application for a determination, the main points of which can be summarised as follows.
 - 4.2.1. The authority's position is 'the side walls of the pushouts, up to and including the dormer roof, need to be fire rated' as they are within 1m of the boundary with the neighbour's townhouse.
 - 4.2.2. The proposed building work involves reconstructing the dormer roof, including new rafters, plywood substrate and membrane. This is new building work and must comply with the external fire spread requirements in Clause C3, in accordance with section 17 of the Act.
 - 4.2.3. The proposal to install a fibre-cement sheet over the wall framing on the sides of the dormer roof, and overlay it with the waterproof membrane, does not comply with the manufacturer's specification for achieving a 30/30/30 fire-rated wall. 'The proposed construction may achieve a fire rating, however it has not been tested so it is not accepted by [the authority] as demonstrating compliance with NZBC C/AS1'.
 - 4.2.4. 'In accordance with section 49 of the Building Act 2004, [the authority] is not satisfied (on reasonable grounds) that the provisions of the building code would be met if the building work were properly completed in accordance with the plans and specifications that accompanied the application.'
 - 4.2.5. The authority refused the building consent application at the consultant's request because the outstanding matter in the RFI remained unresolved. Its usual approach would be to work with the applicant to resolve any outstanding matters.

5. Discussion

5.1. The matter for determination is the authority's decision to refuse to grant a building consent for proposed building work on the external cladding on the walls and roof for the dormer window and its associated push-out area of the owner's house.

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The legislation

- 5.2. The relevant legislation is in sections 17 and 112 of the Building Act, and clauses C3.3, C3.6 and C3.7 of the building code.
- 5.3. Section 17 of the act states:

17 All building work must comply with building code

All building work must comply with the building code to the extent required by this Act, whether or not a building consent is required in respect of that building work.

- 5.4. Section 17 is often cited as requiring all building work to comply with the building code. However, the degree to which work must comply is often affected by other sections of the Act, and in this case, the owner submits it is moderated by section 112.
- 5.5. Section 112 outlines situations where an authority can or cannot grant a building consent that involves alterations to an existing building. The relevant provisions in section 112 are:

112 Alterations to existing buildings

- (1) A building consent authority must not grant a building consent for the alteration of an existing building, or part of an existing building, unless the building consent authority is satisfied that, after the alteration,—
 - (a) the building will comply, as nearly as is reasonably practicable, with the provisions of the building code that relate to—
 - (i) means of escape from fire; and
 - (ii) ...
 - (b) the building will,-
 - (i) if it complied with the other provisions of the building code immediately before the building work began, continue to comply with those provisions; or
 - (ii) if it did not comply with the other provisions of the building code immediately before the building work began, continue to comply at least to the same extent as it did then comply.
- 5.6. I note initially the authority raised questions around the impact of the proposed building work on the building's means of escape from fire, in terms of section 112(1)(a)(i). However, the parties have now agreed that this is not relevant to the building work in question, and this determination is limited to consideration of section 112(1)(b).

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5.7. The provisions of the building code where compliance is disputed are those in clause C3—Fire affecting areas beyond the fire source, in particular clauses C3.3, C3.6 and C3.7.

Clause C3—Fire affecting areas beyond the fire source

Functional requirement

C3.1 ...

C3.3 *Buildings* must be designed and constructed so that there is a low probability of *fire* spread to *other property* vertically or horizontally across a *relevant boundary*.

Performance

СЗ.4 ...

- **C3.6** Buildings must be designed and constructed so that in the event of fire in the building the received radiation at the relevant boundary of the property does not exceed 30 kW/m2 and at a distance of 1 m beyond the relevant boundary of the property does not exceed 16 kW/m2.
- **C3.7** External walls of *buildings* that are located closer than 1 m to the *relevant boundary* of the property on which the *building* stands must either:
 - (a) be constructed from materials which are not *combustible building materials*, or
 - (b) for *buildings* in importance levels 3 and 4, be constructed from materials that, when subjected to a radiant flux of 30 kW/m2, do not ignite for 30 minutes, or
 - (c) for *buildings* in Importance Levels 1 and 2, be constructed from materials that, when subjected to a radiant flux of 30 kW/m2, do not ignite for 15 minutes.
- 5.8. Clause A2 defines what is meant by "other property" and I consider this includes the neighbouring property. The term "relevant boundary" is also defined and in this case means the vertical boundary between the owner's property and the neighbouring property. This boundary runs vertically between the two townhouses.

Compliance of the proposed building work

5.9. As stated above, whether the proposed building work complies with the building code depends on the level of compliance required under sections 17 and 112, and this in turn depends on whether the work comprises new building work or an alteration to an existing building and to what aspect of the building work the specific building code clauses apply.

Reference 3282

- 5.10. The authority considers that the proposed work must fully comply with the building code in relation to Clause C3 because it includes new rafters, plywood substrate and waterproof membranes, as well as new cladding components, which together amount to reconstruction of the dormer roof and push-out walls and that section 112(b)(ii) is not applicable.
- 5.11. The owner, on the other hand, considers the proposed work is only an alteration to replace cladding that has failed. The new structural components in the roof will only be added, as required, to support the new substrate, but whether they are required cannot be determined until the existing cladding is removed. It is not intended that the existing structural components of the dormer roof or walls will be replaced or removed.
- 5.12. In the authority's view, because the proposed work is new work it is required to comply fully with the building code, and this compliance has not yet been established in relation to clauses C3.3, C3.6 and C3.7, particularly around the top of the wall between the dormer and the house roof.
- 5.13. The Authority submits that while the consultant has provided calculations showing that fire radiation from the push-out walls may be within the limits in the Acceptable Solution C/AS1, the received radiation at the walls has not been addressed, so full compliance has not been shown. In addition, while the work incorporates a fire-resistant substrate at the top of the wall, the proposed construction methodology in this area is not in line with the manufacturer's specifications for a fire-rated wall.
- 5.14. In considering the nature of the proposed work, I consider it material to examine what is meant by the fire rating of an external wall. Fire resistance rating (or FRR) is defined in both the building code and C/AS1 as "the minimum fire resistance required of primary and secondary elements" in a building. In a built-up building element, such as a wall, the overall fire rating is achieved through the combined rating of each of the components within it, for example its linings, framing, building wrap and cladding. If any of these components are missing, or their fire resistance is inadequate, then the fire resistance rating of the whole composite element will be impacted.
- 5.15. In the current case, it is the building code compliance of the external wall and the building that is in question, and this compliance would be achieved through the fire resistance of the various primary and secondary components that make up the wall.
- 5.16. The building work proposed here does not involve the reconstruction of the wall, or the replacement of all the components that would together enable compliance with Clause C3 to be achieved. It involves the replacement of only some of those components, and in my opinion, this partial replacement reinforces the view that the proposed work is an alteration to an existing wall and roof, rather than the construction of new.

- 5.17. This means that section 112(1)(b) applies, and the building as a whole, if it complied with particular provisions of the building code before the building work began, must continue to comply, and if it didn't, must continue to comply to at least to the same extent.
- 5.18. I understand that the existing dormer roof and external walls of the push-out, including the side walls that face the relevant boundary, do not have a fire-rated construction. The parties agree that, at present, they do not offer any meaningful fire resistance.
- 5.19. The proposed building work includes the installation of a fibre cement substrate under the cladding on the push-out's side wall. Regardless of whether or not this complies with the manufacturer's guidelines for constructing a fully fire-rated wall, I consider the proposed installation of this substrate alone will be an improvement the fire-resistance of the wall beyond what was existing, both in terms of radiated and received heat.
- 5.20. As such, I consider the after the proposed building work the owner's townhouse will continue to comply with clauses C3.3, C3.6 and C3.7 to at least the same extent as it complied before the proposed work was carried out, meeting the requirements of s112(b)(ii). This is the degree of compliance required of the proposed building work under the Act, and the requirements of section 17 are therefore met.

6. Decision and remedy

6.1. In accordance with section 188 of the Building Act 2004, I determine that the decision of the Authority to refuse to grant the building consent (BCO10312543) is reversed.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 24 April 2024.

Andrew Eames

Manager Advisory