



Determination 2019/015

Regarding the refusal to extend the specified intended life of a 15-year-old straw bale house at 2/316 Two Chain Road, Rolleston

Summary

This determination concerns the authority's refusal to extend the specified intended life of a straw bale house. It considers whether the authority had the power to consent to the extension when written notice from the owner proposing to extend the life of the building was not received until after the previous specified life had expired. The determination discusses the conditions on the consent and the reasons for the specified intended life, the form in which the authority may choose to give consent to extend that life, and the evidence available on the building's performance.

Erratum

This determination contained an error when it was issued on 3 May 2019. Paragraph 4.4.23 said "However, this does absolve the applicants' of the responsibility...", but it should have said "However, this does not absolve the applicants of the responsibility..." This error has been corrected.

1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ ("the Act") made under due authorisation by me, Katie Gordon, Manager Determinations, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.
- 1.2 The parties to the determination are:
 - the owners of the house, A Knight and L Wilson, who are the applicants in this determination ("the applicants")
 - Selwyn District Council carrying out its duties and functions as a territorial authority or a building consent authority ("the authority").
- 1.3 This determination arises from the authority's refusal to extend the specified intended life of the applicants' house. The authority refused because the applicants had:
 - applied to extend the life by 35 years, which the authority considered excessive
 - not supplied adequate information to support their application
 - not applied for the extension before the original specified intended life of the house expired.

¹ The Building Act, Building Code, compliance documents, past determinations and guidance documents issued by the Ministry are all available at www.building.govt.nz or by contacting the Ministry on 0800 242 243.

- 1.4 Accordingly, the matter to be determined² is the authority's exercise of its powers of decision in refusing to consent to the extension of the specified intended life of the applicants' house under section 116 of the Act.³
- 1.5 In making my decision, I have considered the application, the submissions of the parties, and the other evidence in this matter. I have not considered any other aspects of the Act or Building Code, beyond those required to decide on the matter to be determined.

2. The building and background

- 2.1 The applicants' house is a detached dwelling on a flat site in a rural residential area on the outskirts of Rolleston. The house is one-and-a-half storeys high, with specifically engineered construction. The exterior walls are made up of a post and beam structure, which is infilled with non-loadbearing straw bales to form a mass wall approximately 450mm thick. The walls are finished, both internally and externally with 30mm thick, two-coat, mesh-reinforced plaster. The plaster is finished with an acrylic paint coating.
- 2.2 The authority issued building consent No. 010718, based on a building certificate issued by a building certifier, for construction of the house on 11 July 2001. The building work was substantially completed in 2004. However, difficulties arose when the applicants applied for a code compliance certificate for the completed work as the building certifier's scope of approval was amended in January 2003 to exclude approval of exterior claddings outside the scope of the Acceptable Solution E2/AS1⁴. In November 2005, the authority wrote to the applicants, declining to issue the certificate on the basis that it could not be satisfied that the plastered straw bale exterior cladding complied with Clauses E2 External moisture and B2 Durability of the Building Code⁵.
- 2.3 As a result of this refusal, the applicants applied for a determination in February 2006. The Ministry issued a determination on the matter on 16 October 2006⁶ ("the first determination"). The first determination considered specific features of the construction, and the particular risks involved in this straw bale construction in relation to durability and its specific maintenance requirements.
- 2.4 The first determination concluded that the cladding was performing, though some discrete faults required remediation to ensure ongoing performance. However, there were insufficient grounds to conclude the building would comply with Clause B2 for a period of 50 years. The first determination directed the authority to modify the building consent in accordance with section 113(2) to include a specified intended life of 15 years from 11 July 2001, and that any code compliance certificate should be issued in line with the modified building consent.
- 2.5 The basis for this modification was set out in paragraphs 6.7.1 to 6.7.3 of the first determination, which said (in summary):

² Under section 177(1)(b) and 177(3)(f) of the Act.

³ In this determination unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

⁴ E2/AS1 is an Acceptable Solution for Clause E2 External moisture

⁵ First Schedule, Building Regulations 1992

⁶ Determination 2006/98 Refusal of a code compliance certificate for a straw bale building with a plastered cladding system at two Chain Road, Rolleston, Christchurch. (16 October 2006)

- The legislation allows for alternative, innovative types of construction and accommodates the uncertainty of the expected life by providing for buildings to have specified intended lives of 50 years or less.
- If a building is lasting well it will be easier to obtain consent to extend the life of the building than if it has deteriorated badly during its life.
- The straw bale cladding has a relatively lower robustness as compared with other more durable claddings systems.
- It would be appropriate to modify the consent under section 113(2) so that it specifies the intended life of the building to be 15 years, being the minimum durability period required for claddings under Clause B2.3.1 of the Building Code.
- This modification would be subject to the condition that the building must be altered, removed, or demolished on or before the end of the specified intended life of 15 years.
- If the owner does not apply to extend the life of the building, the building consent authority may require the building to be demolished.
- The effect of the modification will ensure that the ongoing performance of the cladding is subjected to technical scrutiny after an appropriate test period.
- The length of extension will be a matter for agreement between the owner and the territorial authority at the time.

2.6 The first determination also discussed the importance of effective maintenance in ensuring the building's ongoing compliance with Clauses B2 and E2, and what constitutes "normal maintenance".

8.5 I take the view that normal maintenance is that work generally recognised as necessary to achieve the expected durability for a given building element. With respect to the cladding, the extent and nature of the maintenance will depend on the material, or system, its geographical location and level of exposure. Following regular inspection, normal maintenance tasks should include but not be limited to:

- where applicable, following manufacturers' maintenance recommendations
- washing down surfaces, particularly those subject to wind-driven salt spray
- re-coating protective finishes
- replacing sealant, seals and gaskets in joints.

2.7 I note that later determinations⁷ concerning buildings with straw bale systems have included a detailed assessment methodology that, in my view, can be used to form a view about Building Code compliance in relation to durability of the straw bale systems generally. These determinations noted the issues to consider include the likes of: history of approval and/or use of comparable wall systems and findings of previous determinations that have involved straw bale specialists, climatic and design features that influence the weathertightness risk, and the monitoring and maintenance of the system required to achieve compliance with Clause B2 i.e. what is "normal" maintenance. These determinations did not incorporate a modification of specified intended life for less than 50 years.

⁷ See for example 2010/064, 2010/136, 2011/067, and 2012/013

2.8 As I understand it, the rectification work was completed in November 2006, and the authority amended the building consent so that the 'Intended Life/Durability' of the applicants' house was specified to be '15 years from 11/07/01'.

2.9 On 16 January 2007, the authority issued a code compliance certificate in respect of building consent 010718, which stated:

This is a final Code Compliance Certificate in respect of all the building work under the above building consent.

Note: Maximum life of building 15 years from 11/7/2001 as per recommendation from the [Ministry] "Determination" ref 2006/98.

2.10 On 12 April 2018, the authority wrote to the applicants advising that the specified intended life in the building consent had expired on 11 July 2016, and pointing out that it was an offence to continue to live in the house without applying to the authority to extend its specified intended life. The authority asked the applicants to advise in writing whether they intended to 'alter, remove or demolish the building' and to 'provide relevant supporting information'. It suggested that the applicants refer to the first determination for guidance on the information required.

2.11 The applicants wrote to the authority on 22 April 2018, advising that they wished to extend the life of their house by a further 35 years. They also listed the work that they had undertaken 'to ensure the building, and the cladding in particular, is both performing well and is well maintained'. This included:

- repainting the exterior of the house and resealing the windows in February 2008
- repainting the interior and exterior of the house in 2010 – this work was carried out by contractors for the Earthquake Commission, following an earthquake in September 2010
- repainting the exterior of the house and resealing the windows in 2011 – the applicants state this work was needed because of subsequent earthquakes and the 'poor standard' of the work carried out in 2010
- taking moisture level readings in April and September of each year to ensure that moisture levels in the external walls remained at less than 14%.

The applicants did not supply any supporting documentation relating to this maintenance with their letter.

2.12 On 8 October 2018, the authority wrote to the applicants advising that their request to extend the specified intended life by 35 years had been declined. The letter gave the following reasons for the decision to decline the request.

- Insufficient information has been provided on how the building will comply, as is reasonably practicable, with the provisions of the building code that relate to means of escape from fire.
- Insufficient supporting information has been provided in relation to how the building has performed over its life to date.
- Insufficient information has been provided on how the requirements of B2–Durability will continue to be met over the next 35 years.
- 35 years is more than double the original specified intended life, however the reasoning for the original 15 years (to monitor ongoing performance of the building elements so that they continue to satisfy the performance requirements for the intended life of the building) is the same now as it was back when the building was first completed.

In addition, determination 2006/98 together with the Building Act, required you, as the owner, to apply for an extension to the intended life prior to its intended life expiring in July 2016. No such application was received until April 2018. The [authority] is unaware of any consents for extensions that have been granted after the expiry date (ie retrospectively) and whether a council has the required legal jurisdiction to do so.

- 2.13 The applicants applied for a determination about the matter and this was received by the Ministry on 11 November 2018.
- 2.14 The Ministry wrote to the applicants on 16 November 2018 requesting further information, including records and details of the moisture readings and maintenance that the applicants had carried out on their house.

3. The submissions

3.1 The applicants' submissions

- 3.1.1 In a submission dated 11 November 2018, the applicants explained that the reason they had not applied for an extension of the specified intended life before it expired was because they had 'made an error in not realising the original [code compliance certificate] was back dated to the initial consent.' They stated they had carried out 'the required maintenance as per the original determination', but that this had been complicated by the September 2010 earthquake. Although this earthquake was centred only a few kilometres from their house, there had been only some minor cracking to internal and external plaster and no structural damage. There was no further cracking in the later earthquakes. The applicants added that they were now concerned at having to comply with later Building Code requirements not needed in the original building consent. I note here that the requirement to comply with the Building Code currently in force only applies in respect of new building work⁸.
- 3.1.2 With their submission, the applicants provided copies of the correspondence between the parties and a copy of the first determination.
- 3.1.3 The applicants provided further information in an email on 2 December 2018 in response to the Ministry's request. The email confirmed that all of the maintenance on the house had been carried out by the applicants, and that they had no supporting documentation relating to it. Similarly, there were no records relating to the moisture readings taken from the external walls. The applicants advised that the readings 'typically' fell between 12% and 14%, and 'there was no indication of any increase in moisture content'. The applicants also advised that the exterior of the house was due to be repainted, but that they would hold off doing this until after the authority had inspected it.

3.2 The authority's submission

- 3.2.1 The authority made a submission dated 10 December 2018 in response to the application for a determination.
- 3.2.2 In its submission, the authority stated that, in addition to the matters raised in its refusal letter to the applicants, it would appreciate 'guidance on the correct way to deal with buildings nearing the end of their intended life that have not been demolished or altered'. It stated that different territorial authorities interpreted and applied the legislation differently, with some authorities requiring a request or an

⁸ See <https://www.building.govt.nz/managing-buildings/change-of-use-and-alterations> for more information on obligations that arise when altering an existing building.

extension of the specified life and some a building consent application for an alteration.

3.2.3 The authority now considered that ‘written consent to extend the life of a building could simply be permission for the building to stay, notwithstanding compliance with section 112, as opposed to having the building altered, removed or demolished as stipulated by section 113(2)...In other words, if the owner does not want the building; altered, removed, or demolished, and it complies with section 112, written permission is given for it to remain.’ I note here that section 112 only applies in respect of a building consent for alterations, and under section 116(3) a building that has been altered in accordance with the conditions relating to the specified intended life compliance must comply with section 112.

3.2.4 The authority considered that this approach was supported by:

- the absence of provisions in the Act to issue ‘a new building consent with a new limited intended life’, or a new code compliance certificate, or a new expiry date for the specified intended life
- the lack of a specified form in the regulations to enable a territorial authority to consent to an extension
- the Act treating the extension of life, change of use and subdivision of a building in the same way
- the limits of application in Clause B2.3.1, which state that a building element is not required to satisfy a durability performance that exceeds the specified intended life of the building. ‘This implies that a building only has one intended life not a series of intended lives’; to take the opposite view would create issues, as elements may have their original durability period extended by the extension of a building’s specified life.

3.2.5 The authority also requested guidance on the ‘correct way to proceed’ in situations where a request to extend the life of a building was received after the ‘due date’, noting that neither the offence provisions in section 114(3) nor the issue of a notice to fix would be effective in this situation.

3.3 A draft of this determination was issued to the parties for comment on 26 March 2019. The applicants responded to the draft on 8 April 2019 without further comment. The authority responded on 10 April 2019, with some non-contentious amendments. I have updated the determination accordingly.

4. Discussion

4.1 The matter to be determined is the authority’s exercise of its powers of decision in refusing to consent to the extension of the specified intended life of the applicants’ house. In making this decision I must consider:

- whether the authority can consent to the extension if it has not received written notice of the proposal to extend the specified intended life before the original period expired and / or where a condition of the original specified intended life has not been met
- whether the authority correctly exercised its powers based on the information before it at the time.

4.2 The legislative provisions

4.2.1 The provisions in the Act relating to buildings with specified intended lives are to be found in sections 113, 114 and 116.

4.2.2 Section 113 applies where a building is intended to have a life of less than 50 years⁹.

113 Buildings with specified intended lives

(1) This section applies if a proposed building, or an existing building proposed to be altered, is intended to have a life of less than 50 years.

(2) A territorial authority may grant a building consent only if the consent is subject to—

(a) the condition that the building must be altered, removed, or demolished on or before the end of the specified intended life; and

(b) any other conditions that the territorial authority considers necessary.

(3) In subsection (2), specified intended life, in relation to a building, means the period of time, as stated in an application for a building consent or in the consent itself, for which the building is proposed to be used for its intended use.

4.2.3 Section 114 sets out what is to occur in situations where the owner of a building with a specified intended life proposes to extend that life. In this situation, the owner must give the relevant territorial authority written notice of their intentions or they will commit an offence.

114 Owner must give notice of change of use, extension of life, or subdivision of buildings

(1) ...

(2) An owner of a building must give written notice to the territorial authority if the owner proposes—

(a) ...

(b) to extend the life of a building that has a specified intended life; or ...

(3) A person commits an offence if the person fails to comply with subsection (2).

(4) A person who commits an offence under this section is liable on conviction to a fine not exceeding \$5,000.

4.2.4 Section 116 prohibits building owners from extending the life of a building that has a specified intended life without an authority's consent. It also specifies the things that an authority must be satisfied of before it agrees to extend a building's life.

116 Code compliance requirements: extension of life

(1) The owner of a building with a specified intended life must not extend its life without the written consent of the territorial authority.

(2) This subsection applies to a building with a specified intended life if—

(a) under section 113(2), a building consent for its building or alteration was issued subject to the condition that it must be altered on or before the end of the specified intended life; or

(b) under section 39(1) of the Building Act 1991, a building consent for its building or alteration was issued subject to the condition that it shall be altered on or before the end of the specified intended life.

(3) The territorial authority must not give its consent to the extension of the life of a building to which subsection (2) applies unless satisfied, on reasonable grounds, that the building—

⁹ Clause B2.3.1(a) of the Building Code establishes that the life of a building will be not less than 50 years.

- (a) has been altered in accordance with the condition; and
- (b) complies with section 112.

4.3 The original specified intended life of the house

- 4.3.1 The specified intended life for this house was set at 15 years. As noted in the first determination and on the code compliance certificate itself (refer paragraphs 2.4 and 2.8 respectively), this was to run from 11 July 2001, the date when the original building consent for the house's construction was issued.
- 4.3.2 The authority recorded the specified intended life of the house on the building consent. However, it did not record the condition that the building must be altered, removed, or demolished on or before the end of this specified intended life, as required by section 113(2). The requirement to include this condition is compulsory and the authority's failure to do so was obviously an oversight.
- 4.3.3 However, given that this condition is mandatory when granting a building consent for a building with a specified intended life of less than 50 years; that it is referred to in the first determination, which involved the same parties as the current determination; and that the authority has included a cross-reference to the first determination in the code compliance certificate for the house (which also mentions the specified intended life), in my opinion it can be taken as an implied condition of the consent.
- 4.3.4 I note for the future, however, that where the authority is granting building consent for a building with a specified intended life, this condition should be included in the consent, to alert potential future owners.

4.4 The application to extend the specified life

- 4.4.1 In my view, the parties' correspondence and submissions raise three issues relating to the application to extend the specified intended life of the applicants' house. The first is that the applicants made the application after the original specified intended life of their house had expired. The second is that the applicants have not fulfilled the condition of the consent, in that they have not altered, removed or demolished their house. The third is the building's compliance with section 112. I discuss each of these issues in turn below.

The late application

- 4.4.2 In its letter of 8 October 2018 to the applicants, and in its submission, the authority has expressed doubt as to whether it has the power to consent to an extension of a specified intended life of a building in situations where the previous intended life has expired.
- 4.4.3 In my opinion, there is no reason why an authority cannot extend the intended life of a building in this situation, provided the conditions in section 116(3) are met.
- 4.4.4 Nothing in sections 113 to 116 expressly stipulates that an owner must apply for an extension before the previous intended life expires. Section 114(3) does so by implication, by making it an offence for an owner to extend the life without first gaining consent. This in itself does not prohibit the authority subsequently consenting to an extension, once an application is made, even if it is late.
- 4.4.5 In other words, an owner who wishes to avoid committing an offence must apply for an extension to the specified intended life of their building before the existing life

expires. The Act specifies what the owner should do, but the owner's failure to do it in no way limits the powers of the authority.

The condition in the consent

- 4.4.6 This brings us to the question of the condition in the consent and the provisions in sections 113 and 116 relating to this condition.
- 4.4.7 Section 113(2) makes it clear that in any situation where an authority grants a building consent for a building with a specified intended life of less than 50 years, it must make the consent subject to the condition that "the building must be altered, removed, or demolished on or before the end of the specified intended life".
- 4.4.8 Section 116 specifies that where a building consent for a building with a specified intended life has been issued subject to a condition that it must be altered, then an authority cannot extend the life of the building unless it is satisfied on reasonable grounds that the condition has been complied with.
- 4.4.9 In its submission, the authority has asked for guidance on what would happen in a situation where an owner wishes to extend the life of their building (i.e. does not want to remove or demolish it), but does not want, or I assume need, to alter it. In my opinion, this would depend on the reason that the specified intended life had been applied to the building in the first place; in other words what the inclusion of the condition was intended to achieve.
- 4.4.10 Turning to the applicants' house, the reason that the specified intended life (and the attendant condition) was applied to the house was because of uncertainty at the time construction was completed about the ongoing performance of the external walls in terms of Clauses B2 and E2 of the Building Code. The nature of the walls and their cladding meant that the authority could not be reasonably satisfied that the building would continue to comply with these clauses for the standard intended life of a building of 50 years. Through amending the consent for a lesser specified intended life, and imposing the condition around alteration, removal or demolition, the aim was to create a mechanism whereby the future compliance of the house could be checked and ensured.
- 4.4.11 In order to ensure that the house did continue to comply, the applicants have had to carry out a regular maintenance and repair regime, including repainting the interior and the exterior of the house, and resealing the windows. Additional repairs have been required as a result of the damage caused by the earthquakes. The applicants have ensured that these measures are achieving the desired compliance through another regime of testing.
- 4.4.12 I consider that these measures are sufficient to fulfil the condition in the consent that the building must be altered on or before the end of its specified intended life. The term "alter" is defined in section 7 of the Act as:

alter, in relation to a building, includes to rebuild, re-erect, repair, enlarge, and extend the building

The term repair is not defined, which means that it must be given its usual and ordinary meaning in the context of the text where it occurs. In the Oxford Dictionary, this meaning is given as:

Repair

VERB

Restore (something damaged, faulty, or worn) to a good condition.

- 4.4.13 Looking at these definitions, I consider that the work carried out on the applicants' house clearly comes with them. Some of this work has been to fix damage and some to restore faulty or worn elements of the building. This work directly relates to the reason for the specified intended life. As a result, the condition in the consent requiring the building to be altered before the specified intended life expired is fulfilled.
- 4.4.14 The authority has queried what should happen in situations where a building is nearing the end of its specified intended life but has not been demolished or altered. This is not the situation with the applicants' house, and as determinations are decided on the facts of each case, the following comments are not intended to be definitive.
- 4.4.15 In my opinion, the correct approach for an authority to take in such a situation would again come back to the reason for the specified intended life and the reasons that the condition had not been fulfilled. It may be, for example, that no alteration was in fact needed for a building to comply. In this situation, the authority may chose to take a pragmatic approach, and agree to an extension of the specified intended life of the building despite the condition, on the face of it, not being fulfilled. This is the approach suggested by the authority in its submission, and is one I support. Such an approach would, in my view, be preferable to refusing to extend the specified intended life, when the underlying compliance reasons for giving the building a specified intended life had been met.
- 4.4.16 At the other end of the scale, would be a scenario where no alterations have been completed, despite these clearly being required in order that the building achieves the level of compliance required. In this situation, the authority may be justified in refusing to extend the building's life. If the owner continued to use the building, the authority would be able to issue a notice to fix for breach of section 116(1). The notice would form part of the property file, and the authority would then have discretion as to whether to enforce it.

The application of section 112

- 4.4.17 Section 116(3) of the Act provides the territorial authority must not give consent to the extension of the specified life of the building unless it is satisfied, on reasonable grounds, that the building – (a) has been altered in accordance with the condition; and (b) complies with section 112.
- 4.4.18 The relevant provision in the current case is section 112(1)(i), which states:
- 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...
- 4.4.19 In other words, the combined impact of sections 116 and 112 is that an authority cannot extend the life of a building with a specified intended life unless it is satisfied, on reasonable grounds, that not only has the building been altered in accordance with the condition in the consent, but that after the alterations the building complies as nearly as reasonably practicable, with the provisions of the Building Code that relate to means of escape from fire.
- 4.4.20 In its letter of 8 October 2018, the authority gave as one of its reasons for refusing to extend the specified life that the applicants had not provided sufficient information

about how the house would comply, as nearly as is reasonably practicable, with the provisions of the Building Code that relate to means of escape from fire.

- 4.4.21 In their submission, the applicants have expressed concern at having to ‘comply with later building code requirements not needed in the original building consent’, which I have taken to be a reference to this requirement.
- 4.4.22 Under section 116(3), this requirement is something that an authority must be satisfied about. It is mandatory for an authority to take section 112 into account when extending a building’s specified life. Accordingly, the authority was correct to raise it with the applicants, and to point out that they needed to provide information to show how the requirement in section 112(1)(a)(i) would be met.
- 4.4.23 Where there is scope for discretion is in the interpretation of what is required for the building to comply ‘as nearly as reasonably practicable’. I have considered what is meant by this term in numerous previous determinations¹⁰, which the parties may find useful as guidance. Given that the applicants’ house is a dwelling, the requirements relating to means of escape from fire are not particularly onerous, and the building has not undergone extensive alterations, it is likely that the requirements are already being met. However, this does not absolve the applicants of the responsibility for demonstrating this to the authority as part of the application for an extension.

4.5 How consent should be given

- 4.5.1 The authority has also sought guidance on the correct mechanism for an authority to use when extending the specified intended life of a building.
- 4.5.2 Again, I am of the opinion this depends on the circumstances of the particular case and the reasons that the building was granted a specified intended life in the first place.
- 4.5.3 The authority has stated that it favours an approach whereby it simply gives written permission for the building to remain for a further specified period. This may be appropriate in situations where the reason behind the specified intended life are no longer valid or where a building is approaching the general intended life of building of 50 years.
- 4.5.4 However, it may not be adequate in situations where, for whatever reason, ongoing compliance checking and inspection is required, in which case a more formal request from the owner may be necessary. In some circumstances the request for an extension may need to be supported with information that the building has and will continue to achieve the required performance criteria. This will enable the authority to consider submitted evidence and inspect the building if required before agreeing to extend the life (or not).
- 4.5.5 Section 116 provides for the authority to give “written consent” and there is no provision in the legislation that sets out what form that should take. However, it should be clear from the written consent the period of time the consent is given for and any conditions that the consent is subject to and what is to happen to the building at the end of the specified period.
- 4.5.6 I note here that at the time the first determination was issued, straw bale construction systems were relatively new and untested in New Zealand, and the use of a specified intended life for such buildings provided a pragmatic solution to address

¹⁰ Determination 2018/32 Regarding open risers in an existing building undergoing alterations (11 July 2018)

uncertainties of performance in New Zealand conditions. Since that time, straw bale buildings have become more common and subsequent determinations have taken a different approach.

4.5.7 Instead of including a specified intended life in building consents, authorities can grant building consent where the documentation supporting the consent includes a maintenance schedule for the straw bale system¹¹. Such a schedule should include any maintenance requirements specific to the system used, as well as regular:

- monitoring of the exterior envelope
- inspection of the plaster on the straw bale walls, including a repair methodology
- monitoring of the moisture levels in the straw bales themselves.

The need for the maintenance schedule should be recorded on the property file and in any LIM issued for the property.

4.5.8 In this way it is made clear what constitutes “normal maintenance” for the purpose of compliance with Clause B2.3.1 and that responsibility for the maintenance to ensure ongoing compliance of the building rests with the owner. In addition, any future potential owners are alerted to the specific maintenance requirements that apply.

4.6 The evidence available to the authority

4.6.1 The second matter I must look at in considering the authority’s exercise of its powers of decision is whether it had sufficient information available to it at the time to extend the specified intended life of the house. This would in turn depend on whether the information enabled the authority to be satisfied on reasonable grounds that the external wall and cladding system used on the house had and would continue to comply with the relevant clauses of the Building Code.

4.6.2 I consider that at the time the authority made its decision it did not have sufficient information. The applicants were aware, as a result of the first determination, that the function of the specified intended life was to enable them to demonstrate the ongoing compliance of the house, and that the maintenance regime outlined in that determination would help serve this purpose. In applying for an extension for the life of the house it was the applicants’ responsibility to demonstrate that the regime had been followed and that the external wall and cladding system had and would continue to achieve compliance.

4.6.3 While I acknowledge the steps that the applicants have taken, it was not sufficient for them to merely list those steps. Something more tangible by way of evidence was and is required to support the contention that the building has and will continue to comply. At the least, the authority would have needed to see the data related to the moisture readings, as well information as to how and where the readings had been taken. Receipts, records and visual evidence relating to the maintenance and repairs would also have been useful.

4.6.4 As this information is no longer available, the authority is unlikely to be able to assess, based on a visual assessment alone, whether the external walls and cladding comply and can be expected to comply for the extended life of the building. Something more is now required and it is the applicants’ responsibility to provide evidence of compliance. This may take the form of moisture testing in areas

¹¹ Determination 2010/136 Refusal to issue a building consent for a house with straw bale walls (22 December 2010)

considered to be at high risk of moisture ingress, and an opinion from a specialist with expertise in this type of construction on the likely performance of the building over the period of time specified in the application.

- 4.6.5 The applicants can then re-apply for an extension of the specified intended life of their house. I suggest that the parties agree in advance what form this application should take.
- 4.6.6 It is for the applicants to specify the period of time they are seeking approval to extend the specified intended life of their house, and this period will run from 12 July 2016. I strongly suggest that the application be accompanied by a detailed maintenance and monitoring schedule, as discussed in paragraph 4.5.7 of this determination, that takes into account the period of time for which the applicants wish to extend the specified intended life of the house. The authority can then take that information into account, along with current knowledge of the performance of this type of construction, in considering the requested period of extension and whether to consent to the extension. The maintenance schedule should also be noted on the property file and any LIM report issued for the property, along with details of this determination and the first determination.

5. The decision

- 5.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the authority was correct to refuse to give consent to an extension of the specified intended life of the applicants' house under section 116 of the Act, and I confirm that decision.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 3 May 2019.

Katie Gordon

Manager Determinations