Department of Building and Housing
Te Tari Kaupapa Whare

Determination 2010/096

Refusal to issue a code compliance certificate for fire repairs to a house at 2/29 Maxine Place, St Helliers, Auckland

1. The matters to be determined

1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004[1] ("the Act") made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing ("the Department"), for and on behalf of the Chief Executive of that Department.

1.2 The parties

1.2.1 The parties to this determination are:

- the owners R and M Fay ("the applicants"), acting via a project manager
- the Auckland City Council ("the authority"), carrying out its duties as a territorial authority or building consent authority.

1.2.2 I consider that the following are persons with interest in this determination:

- the builder engaged by the insurance company to complete the building work, Men at Work Ltd ("the builder")
- the insurance company for the fire repairs, represented by the loss adjuster, Mike Hill Loss Adjusters Ltd ("the loss adjuster").

1.3 This determination arises from the decision of the authority to refuse to issue a code compliance certificate for two-year-old fire repairs to a house ("the fire repairs"), because it is not satisfied that the building work complies with certain clauses[2] of the Building Code (First Schedule, Building Regulations 1992). The authority's concerns about compliance relate to the weathertightness of the cladding installed to part of one elevation of the house.

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[1] The Building Act, Building Code, Compliance documents, past determinations and guidance documents issued by the Department are all available at www.dbh.govt.nz or by contacting the Department on 0800 242 243.

[2] 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.

1.4 The matter to be determined[3] is therefore whether the authority was correct to refuse to issue a code compliance certificate. In deciding this, I must consider whether the wall cladding applied to the fire repairs ("the cladding") complies with Clause E2 External Moisture and Clause B2 Durability of the Building Code. The cladding includes the components of the system (such as the cavity, the backing sheets, the coating, the windows, junctions with the roof cladding, junctions with the original deck, and the flashings), as well as the way the components have been installed and work together.

1.5 In making my decision, I have considered the submissions of the parties, the report of the expert commissioned by the Department to advise on this dispute ("the expert") and the other evidence in this matter.

2. The building work

2.1 The building work considered in this determination consists of fire repairs to an existing two-storey high house on a north-sloping site in a medium wind zone for the purposes of NZS 3604[4]. The house steps down the slope, with a part upper floor to the south, a part basement to the north and an asymmetrical gable to the main roof.

2.2 The house was built about 10 years ago; and the fire damage in 2007 was limited to the roof and the upper two levels of the west elevation. The fire repairs included:

- new roof framing and cladding
- new timber wall framing to the west walls of the ground and upper floors, including a timber-framed 'chimney' to the east lounge wall
- new exterior wall and chimney claddings to the restored framing
- associated interior wall and ceiling linings and repainting of all exterior walls.

2.3 Construction of the house is generally conventional light timber frame, with a concrete slab and concrete block retaining wall and foundations to the basement, monolithic wall claddings, profiled metal roof claddings, and aluminium windows. The 20^{o} pitch gable roofs have no verge projections above the west walls.

2.4 The decks

2.4.1 An original deck projects to the north from the living room; extending around the northwest corner and along the west wall, above the basement walls. The north deck above the basement garage is unchanged by the fire repair work. The original clad balustrades and basement walls are unchanged, apart from cleaning and repainting.

2.4.2 The west deck has a spaced timber floor and the underside is open. The deck floor intersects with the repaired west walls and this junction has been altered as part of the fire repair work.

[3] Under sections 177(1)(b) and (2)(d) of the Act
[4] New Zealand Standard NZS 3604:1999 Timber Framed Buildings

2.5 The wall claddings

2.5.1 The original and new claddings are a form of monolithic cladding system known as EIFS[5], which consists of 40mm polystyrene backing sheets finished with a proprietary coating system. In the original unchanged walls, the backing sheets are fixed directly to the framing over the building wrap, to which a mesh-reinforced plaster system has been applied.

2.5.2 The EIFS to the repaired walls matches the appearance of the original and is also finished with a mesh-reinforced plaster system. The new EIFS is installed over polystyrene battens that form a cavity between the cladding sheets and the building wrap to the framing. The new EIFS is a recognised proprietary system that includes purpose-made flashings to windows, edges and other junctions.

2.6 Given the construction of the original house in about 2000, I consider that the original wall framing is likely to be untreated. The expert noted that the framing of the re-clad areas was concealed, but the project manager provided the authority with copies of timber invoices that indicate the replaced framing is H1.2 treated timber.

3. Background

3.1 The authority issued a building consent (No. BLD 2007/2044901) for 'Fire damage repairs – replacement of roof, partial cladding on one elevation, cleaning. New solid fuel heater' on 26 October 2007. One of the conditions attached to the building consent included the following requirements for the cladding system:

> **Installer Producer Statements – Construction (PS3)** are required from licensed/trained contractors for installation of cladding and application of coatings.
>
> **Manufacturer/Supplier Certification/Warranty** is required from the manufacturer/supplier for the installed cladding system.
>
> **Council will require producer statement from the installer prior to issue of Code Compliance Certificate.**

3.2 The authority carried out various inspections of the fire repairs, which included the wall wraps and cavity on 29 January 2008 and the wall cladding on 7 and 13 February 2008. Following completion of the wall cladding, the original builder went into liquidation and the cladding installers refused to supply a producer statement and warranty for the cladding system as they had not been paid by the liquidators.

3.3 The last inspection recorded for the original builder was on 16 April 2008; and it is not clear how long progress was delayed before the builder took over the completion of the building work, as no further inspections were recorded.

3.4 On 18 January 2010 the authority wrote to the insurance loss adjuster for the fire repairs, noting that no application for a code compliance certificate had been received for the work and a final inspection could be requested if required. A final inspection was subsequently carried out on 9 February.

3.5 In a letter to the applicant dated 11 February 2010, the authority confirmed that the final inspection had 'passed' and attached an application form for a code compliance

[5] Exterior Insulation and Finish System

certificate. The project manager completed the application on 20 April 2010 and supplied some of the outstanding documentation. Further correspondence followed regarding the required documentation.

3.6 In a letter to the authority dated 8 June 2010, the project manager attached all of the required documentation apart from that related to the wall cladding. The project manager also attached a letter from the installers that explained:

> ...why they will not provide either a guarantee for workmanship or a Producer Statement. The work was clearly carried out by [the installer] and never paid for by their client [the original builder] as they unfortunately went into liquidation before this job could be completed. There is no reason to assume that the work was not carried out correctly as it appears that all relevant inspections were carried out as required.

3.7 Further correspondence followed with no resolution, as the authority maintained its position that:

> ...to be satisfied on reasonable grounds concerning the cladding we do require producer statement and warranty documentation to be presented for consideration before we are in a position to progress the Code Compliance process.

3.8 The Department received an application for a determination on 16 July 2010.

4. The submissions

4.1 The project manager outlined the background of the situation and submitted copies of:

- the drawings and specification
- the inspection records
- the correspondence with the authority
- various producer statements, invoices and other information.

4.1.1 The authority forwarded a CD-Rom, entitled 'Property File'. The property file contained some documents pertinent to this determination including:

- the building consent
- the letter to the loss adjuster dated 18 January 2010.

4.2 Copies of the submissions and other evidence were provided to each of the parties.

4.3 A draft determination was issued to the parties for comment on 22 September 2010. Both parties accepted the draft without comment.

5. The expert's report

5.1 As mentioned in paragraph 1.5, I engaged an independent expert to assist me. The expert is a member of the New Zealand Institute of Architects. The expert inspected the wall cladding to the fire repairs on 8 September 2010 and provided a report dated 13 September 2010.

5.2 General

5.2.1 The expert noted that the fire repairs had generally been carried out to a good standard, with adequate flashings.

5.2.2 The expert noted some minor changes from the consent drawings, including:

- the saddle flashings over the existing deck joists
- the barge and roof to wall junction details
- the chimney wall to roof junction details.

5.3 The junctions with the existing deck

5.3.1 The expert noted that new stainless steel saddle flashings were installed over the original deck joists, with a flashing extending from the back of the new cavity out and over the deck stringer. The base of the cladding was finished with a uPVC base moulding and clearances from the decking were satisfactory.

5.3.2 The expert noted that, while risking galvanic corrosion from water passing over the new stainless steel flashings onto the original galvanised joist hangers, the latter are accessible and can be monitored and replaced in the future if necessary. The expert considered that the finished detail is at least as good as, and likely to be better than, the deck to wall junction prior to the fire repairs.

5.4 The roof to wall junctions

5.4.1 The expert noted that the end of the apron flashing above the small gable included a stop end to close off the junction with the EIFS cladding, although there was no separate kickout flashing to divert water run off away from the end of the gutter. However, taking account of the wind zone and the cavity, the expert considered that the detail was likely to remain weatherproof providing the sealant is maintained.

5.4.2 At the chimney junction, the expert noted that the wide barge flashing turned up beneath the chimney cladding, with a stop end at the side and the flashing extended up to the low gable ridge. The expert noted that the junction appeared satisfactory.

5.4.3 The expert also noted that a gap had been provided between barge boards and the wall cladding, providing an effective anti-capillary gap at the junction. However, the expert pointed out that paint bridging the gap in some areas should be cut away.

5.5 Windows and doors

5.5.1 The windows and doors are recessed by the thickness of the cladding and have proprietary uPVC head flashings, with slots to vent and drain the cavity above. The expert noted that additional shelter to the heads was provided by the projecting plastered ‘bell’, which matches the original windows.

5.5.2 The expert removed a small section of plaster at the sill to jamb intersection of the kitchen window, noting that proprietary uPVC jamb and sill flashings were installed, with sealant at the junctions. The expert noted that the details accorded with the drawings and appeared satisfactory.

5.6 Moisture levels

5.6.1 The expert inspected the interior of the house, noting no visual signs of moisture entry or deterioration. The expert carried out non-invasive moisture testing through the interior linings and all readings were low.

5.6.2 The expert took four invasive moisture readings from the interior, using long probes to record moisture levels at about 20mm from the outer face of the framing below two window sills and in bottom plates below. The readings varied from 9% to 13%. As the inspection was at the end of winter and followed heavy rain, the expert expected these readings to represent peak moisture levels.

5.7 Commenting specifically on the wall cladding, the expert considered that minor maintenance work was required to:

- repair several small cracks at the outer edge of the cladding at the window sills
- clear out paint bridging the gap at the barge boards
- monitor the condition of the sealant at the stop end of the apron flashing.

5.8 A copy of the expert's report was provided to the parties on 14 September 2010.

6. Weathertightness

6.1 Weathertightness performance

6.1.1 Taking account of the expert's report, the cladding generally appears to have been installed in accordance with good trade practice and to the manufacturers' instructions. I note the expert's comments in paragraph 5.7, and I accept that these areas may be attended to as part of normal maintenance of the house.

6.2 Weathertightness conclusion

6.2.1 I consider the expert's report establishes that the current performance of the building envelope is adequate because it is preventing water penetration through the claddings at present, and that there are also no cladding faults on the house likely to allow the ingress of moisture in the future, providing maintenance work is carried out to the areas outlined in paragraph 5.7. Consequently, I am satisfied that the house complies with Clauses E2 and B2 of the Building Code.

6.2.2 Effective maintenance of claddings is important to ensure ongoing compliance with Clauses B2 and E2 of the Building Code and is the responsibility of the building owner. The Department has previously described these maintenance requirements (for example, Determination 2007/60).

6.3 The expert has also noted various detail changes from the consent drawings and I leave these to the parties to resolve.

7. The decision not to issue a code compliance certificate

7.1 The authority has stated that its reason for refusing to issue a code compliance certificate is the lack of a producer statement and warranty for the wall cladding (see paragraph 3.7). However the project manager has explained that it is not possible to provide this documentation, due to the liquidation of the original builder and the subsequent non-payment of the cladding installers.

7.2 I accept that the building consent conditions required the provision of a producer statement and warranty for the wall cladding (see paragraph 3.1), but I also accept that these documents cannot be provided due to circumstances beyond the applicants' control. I must therefore consider whether the authority is acting reasonably by continuing to demand this documentation.

7.3 There is no basis in the Building Act 2004 for an authority to demand a producer statement as a condition for establishing compliance and for issuing a code compliance certificate. Accordingly, I do not believe that, in this case, the request to provide a producer statement can be enforced in terms of a refusal to issue the code compliance certificate.

7.4 Though the authority was entitled to accept the producer statement if it was offered, it should not have relied on it to the exclusion of other evidence that demonstrated code compliance. The authority carried out inspections of the repair work, which included three inspections of the cladding system together with a satisfactory final inspection. I consider the authority was entitled to rely on the expertise of its inspectors and the inspections are sufficient to provide the authority with reasonable grounds for concluding that the wall cladding complied with the Building Code, without the need for further documentation.

7.5 In my view the receipt of a producer statement by an authority does not lessen its liability in establishing code compliance. An authority accepts a producer statement at its discretion in the belief that the author of the producer statement is creditable.

7.6 As I believe that the wall cladding to the fire repairs as completed is code compliant and that the authority cannot demand a producer statement before it will issue a code compliance certificate, I am of the opinion the authority should now issue a code compliance certificate for the building work.

8. The decision

8.1 In accordance with section 188 of the Building Act 2004, I hereby determine that the wall cladding to the fire repairs complies with Clauses E2 and B2 of the Building Code and accordingly, I reverse the authority's decision to refuse to issue a code compliance certificate.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 28 October 2010.

John Gardiner
Manager Determinations