



Determination 2019/004¹

Regarding the decisions to refuse to issue a code compliance certificate and to issue a notice to fix in respect of a solid fuel heater installed in a house at 679 Main South Road, Islington, Christchurch

Summary

This determination concerns an as-installed solid fuel heater and whether it was installed with the clearance behind it that was described in the manufacturer's installation instructions. The determination considers the compliance of heater and a notice to fix issued in respect of this work.

1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004² (“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 director of the home heating installation business that carried out the building work, M Chilton, who along with the owner, was issued with a notice to fix in respect of it. The director is the applicant in this determination (“the applicant”)
 - the owner of the property that the building work relates to, R Prakash (“the owner”)
 - Christchurch City Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.
- 1.3 The determination arises from a dispute between the parties as to whether a solid fuel heater (“the heater”) installed in the owner's house complied with Building Code Clause C2 Prevention of fire occurring, in particular Clause C2.2. The authority considered that it didn't comply and refused to issue a code compliance certificate for the building work, issuing instead a notice to fix in relation to it.

¹ This determination is subject to a clarification under section 189 of the Building Act 2004. The determination was originally issued on 18 February 2019. The clarification amends the Summary (on page 1) and paragraph 2.9.

² 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 matters to be determined³ are:

- whether the authority correctly exercised its powers of decision-making in refusing to issue a code compliance certificate for the building work
- whether the authority correctly exercised its powers of decision-making in issuing a notice to fix in relation to the building work
- whether the as-built building work complies with Clause C2.2 of the Building Code.

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

2. The building work and background

2.1 The owner’s house is a single-story dwelling in a suburban setting. The applicant applied to the authority for a building consent to install a solid fuel heater in the living-room of the owner’s house.

2.2 The plans and specifications accompanying the application included a floor plan showing where the heater was to be installed and the manufacturer’s ‘specifications and installation instructions’ for the heater (“the manufacturer’s instructions”). The consented plan is shown in Figure 1 (with the solid fuel heater labelled as “fire”).

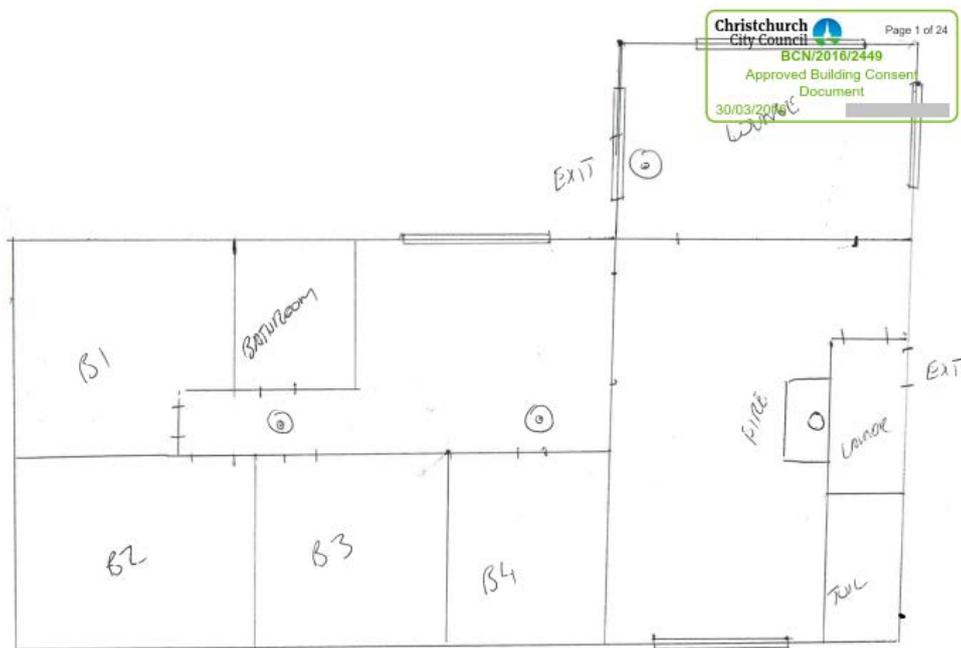


Figure 1: Consented floor plan showing the solid fuel heater (not to scale)

2.3 The submitted plan shows the heater being installed within the room space of the owner’s living-room, with the wall behind it unaltered. The plan did not contain any measurements showing the distance between the heater and the wall.

2.4 However, the manufacturer’s instructions specify ‘minimum safe installation clearances to combustible materials’ of 100mm, for the distance from the back of the heater to the ‘combustible wall’ behind it. The instructions also refer to how this

³ Under sections 177(1)(a), 177(2)(d) and 177(2)(f) of the Act.

- distance can be reduced when a heat shield is installed that conforms with AS/NZS 2918⁴ tables 3.1 and 3.2. For the clearances at the side of the heater, the instructions specify a 320mm minimum gap.
- 2.5 The authority granted the building consent (number BCN/2016/2449) on 30 March 2016. The consent was for the installation of a ‘freestanding dry wood burner’, as an alteration to the existing dwelling.
- 2.6 The applicant proceeded to install the heater, which is a freestanding solid fuel burning ‘convection type’ fire and was installed with the manufacturer’s flue kit.
- 2.7 However, the heater was not installed in accordance with the consented plans. Instead, the heater is set into an alcove. The applicant advises that the alcove was constructed by a licenced building practitioner, in liaison with the applicant, at the time the heater was installed.
- 2.8 The alcove is timber framed and measures 520mm deep (from the face of the living room wall to the front of the framing timber) and 1280mm wide. There is a gap of 139mm between the front of the timber framing on the rear wall of the alcove and the back of the heater, as installed.
- 2.9 The alcove’s timber wall framing has 9mm thick calcium silicate insulation board direct fixed to it, on all three sides of the alcove. 100mm thick schist⁵ veneer lining has been installed over the insulation board. The lining covers all three walls of the alcove, and extends around the corner to also cover a section of the living-room walls on either side of the alcove. The residual gap between the back of the heater and the surface of the schist cladding at the rear of the alcove is 30mm. At the sides the gap is significantly more; it is only the 30mm gap at the rear of the heater that is in dispute.
- 2.10 The applicant applied for a code compliance certificate for the building work on 12 April 2016. The applicant filed a construction statement with the application certifying that the heater had been installed in accordance with the manufacturer’s instructions and in compliance with the Building Code, and noting the distances between the back of the heater and the surrounding wall framing and lining.
- 2.11 The authority inspected the building work on 27 April 2016. The inspection failed because the clearance at the back of the heater was less than 100mm. The authority also noted that the building work had not been carried out in accordance with the consented plans, and that the heater had been ‘installed into an alcove surrounded by a non-vented schist wall, with a trapped cavity’. The applicant queried this decision and the authority carried out a further inspection on 17 May 2016, which again failed for the same reason.
- 2.12 Correspondence then passed between the parties as to what was required in order to establish compliance.
- 2.13 The applicant was of the view that the manufacturer’s instructions had been complied with, in that the distance between the rear of the heater and ‘the nearest combustible material’, as required by these instructions, had been ‘achieved or exceeded’ and that there was nothing in either the instructions or AS/NZS 2918 that prevents non-combustible materials (namely the schist) being used within this clearance space.

⁴ Australian and New Zealand joint standard AS/NZS 2918:2001 Domestic solid fuel burning appliances - Installation

⁵ Schist is a foliated metamorphic rock made up of plate-shaped mineral grains that are large enough to see with an unaided eye.

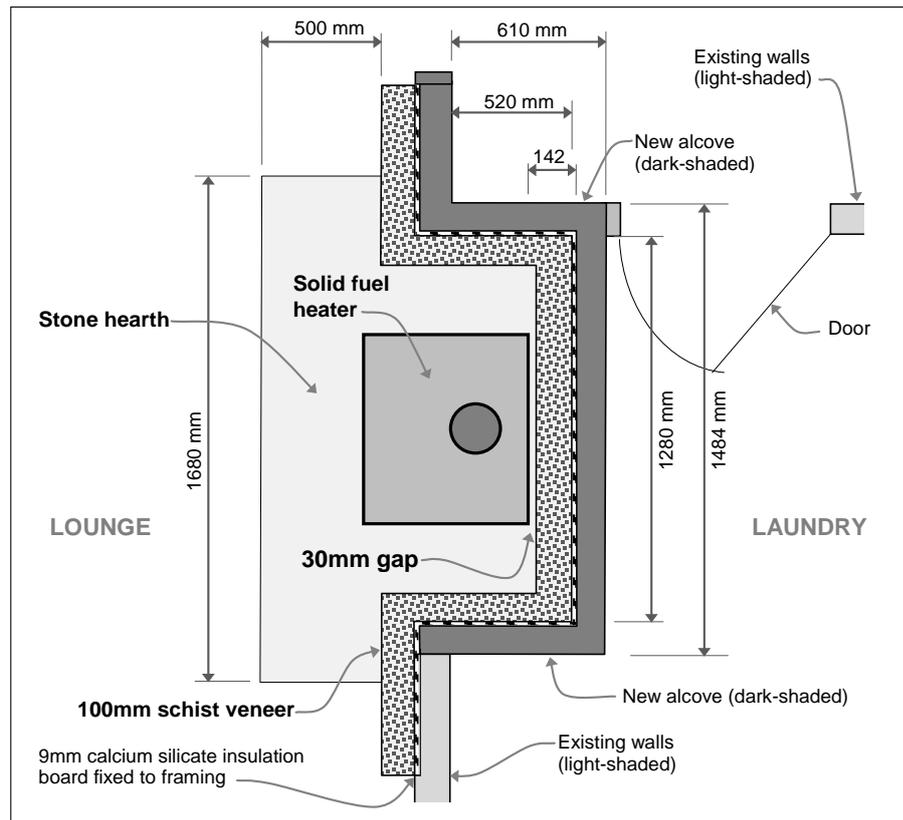


Figure 2: Plan of the solid fuel heater as installed (not to scale)

- 2.14 The authority was of the view that as the building consent had originally been ‘processed under C/VM1’⁶, any supporting documentation that fell outside the consent would need to be treated as an alternative solution. The authority suggested that a statement by the manufacturer under section 14G of the Act may be a means of establishing compliance.
- 2.15 On 27 May 2016, the manufacturer of the owner’s solid fuel heater (“the manufacturer”) provided an email stating that:
- ...we are comfortable with non-combustible materials placed behind the appliance provided the actual distance from the appliance to the nearest combustible material is achieved or exceeded. [Neither] Our installation manual nor the AS/NZS 2918:2001 have any mention of non-combustible materials being hazardous inside clearances distances with no air space...
- All manufacturers’ clearances must be achieved to combustible materials as specified in our installation instructions. If this is the case with [this] installation we have no concerns with the surrounding masonry or non-combustibles.
- 2.16 The authority replied to the manufacturer on 27 May 2016 that what it required was a statement from the manufacturer under section 14G confirming that it had viewed or otherwise satisfied itself that the installation of the owner’s heater complied with the Building Code. The authority stated this was required in this case because of the absence of an Acceptable Solution for masonry within C/VM1 and the ‘site specific products’ (namely the schist veneer) used in the installation.
- 2.17 The manufacturer replied to the authority on 30 May 2016 that it was not its responsibility to comment on whether the installation of the owner’s heater was

⁶ Verification Method C/VM1 Verification Method for Solid Fuel Appliances

- compliant with the verification method or the Building Code. They were merely offering a perspective, but stated that in their opinion the non-combustible materials in this instance are not a concern.
- 2.18 On 27 May 2016, the authority also sought advice from the professional trade association representing New Zealand manufacturers, retailers and installers of domestic wood burning appliances (“the heating association”). The authority sought the heating association’s advice about the manufacturer’s statement in its email of 27 May 2016, as to whether it made a difference to the clearance required if there was no ‘clear air space’ between the fire and combustible materials.
- 2.19 On 16 June 2016, the applicant emailed the authority requesting that a code compliance certificate now be issued, given the manufacturer’s advice. A year later, the applicant followed up on this request in an email dated 16 June 2017.
- 2.20 On 11 August 2017, the heating association emailed the authority stating that it supported the applicant’s and manufacturer’s position:
- ...As the clearance to the combustible is maintained as per the manufacturer’s installation instructions, so there is no issue. The installation instructions that have been tested and approved to the various applicable codes are what must be followed.
- 2.21 The authority replied to the heating association’s email on 14 August 2017 seeking clarification as to whether:
- ...the test clearances from an appliance to combustible surfaces was through open ‘air’ and not solid materials. Is it [the heating association’s] stance that heat would be transmitted the same through solid (non-combustible) material at the same rate as open air spaces?
- 2.22 A representative of the heating association then contacted the authority to discuss the matter. The culmination of this was that on 27 November 2017 the authority received email advice from the heating association. The emails contained a discussion about the matter among the association’s technical committee. The emails expressed various views including that:
- if the manufacturer approved ‘this particular installation’ then that should be sufficient to establish compliance
 - further tests should be carried out to establish the actual impact that using non-combustible materials within the air gap had on compliance, and that this could potentially be done by the manufacturer
 - under AS/NZS 2918 an air gap was required between the heater and the combustible surface and that if, as in this case, the air gap was reduced the “combustible” surface would become the surface of the masonry. The manufacturer’s assertion that the non-combustible materials did not affect the size of the clearance was incorrect.
- 2.23 On 1 March 2018, the authority sent the applicant a reminder letter that a code compliance certificate for the building work had not yet been issued.
- 2.24 Further correspondence then passed between the parties, during which the authority restated its position that the manufacturer’s statement of 27 May 2016 did not “provide satisfactory grounds to demonstrate a means of compliance”, and referred to the heating association’s emails and its advice that the installed heater should be tested to establish compliance.

- 2.25 On 3 April 2018, the authority sent the applicant a letter under section 95A of the Act, refusing to issue a code compliance certificate for the building work on the grounds that the authority was unable to ‘ascertain the completion of your building work in accordance with the granted building consent’.
- 2.26 On 4 April 2018, the authority issued a notice to fix regarding the building work. The particulars of contravention or non-compliance cited in the notice were as follows.

Particulars of contravention or non-compliance

Building Act 2004 Sections 17 and 40

The [authority] has observed building work under BCN/2016/2449 (Inspection notice dated 27/04/2016 & 17/05/2016) that has been constructed other than in accordance with this consent, and also without approved documentation to demonstrate the means of compliance with the New Zealand Building Code clauses C2.2 and C2.3.

In particular regarding the reduced clearances for this installation and the compliance with: [Clauses C2.2 and C2.3 of the Building Code].

To remedy the contravention or non-compliance you must:

Undertake remedial building work to bring the installation back into compliance with the building consent and the Building Code.

Or

Provide appropriate testing and supporting documentation to demonstrate means of compliance with Building Code clauses C2.2 and C2.3.

This notice to fix must be complied with by 1st May 2018.

- 2.27 Following the issue of the notice to fix, correspondence passed between the parties as to the adequacy of the evidence that had so far been provided by the applicant to show that the building work complied. The authority maintained the view that more robust evidence was needed, specifically:

In this situation we expect either (or both) of the following to be presented to us for consideration:

- A test report of the detail used; and/or
- A professional opinion on compliance from someone with a strong background in the thermal dynamics of materials, and in particular heating devices. This will need to be supported with justifications for that opinion.

Once we receive adequate information compliance can be reconsidered, however at present the refusal of the code compliance certificate and the notice to fix both still stand.

- 2.28 The applicant provided further advice from a member of the heating association to the effect that the installation should be accepted as compliant. The applicant requested that the authority withdraw the notice to fix, on the grounds that it had been issued in error, as insufficient time had been allowed to respond to the section 95A letter. The applicant referred to advisory comment contained within Determination 2013/015⁷ in support of his position.
- 2.29 The applicant also suggested several other sources of information that might help the authority to resolve the matter, but the authority declined to withdraw the notice to fix.
- 2.30 The applicant applied for a determination on 27 May 2018. The Ministry accepted the application on 1 June 2018, and wrote to the parties confirming the matter to be

⁷ Determination 2013/015: The refusal to issue a code compliance certificate and simultaneous issue of a notice to fix for a 14-year-old house (8 April 2013)

determined and advising the applicant that some of the matters the applicant had sought a determination about fell outside the scope of the determination process under the Act.

3. The initial submissions

3.1 The applicant's submission

- 3.1.1 The applicant included a submission with the application for a determination. The submission described the building work and set out the background to the dispute.
- 3.1.2 With respect to the reduction in clearances between the back of the heater and the combustible wall framing, the applicant stated that there had been no reduction, and the clearance remained 139mm. In the manufacturer's instructions, an air gap was required when a heat shield was used to enable the clearances to be reduced, but there had been no reduction in the current case, so no heat shield was required.
- 3.1.3 With respect to the authority's assertion that the manufacturer's instructions required a 100mm 'air space' between the rear of the appliance and the wall behind it, the applicant stated that:

There is no requirement in the manuals, or the AS/NZS 2918:2001, that a clearance must consist entirely of an air gap. The only requirements for an air gap or ventilation are specifically referred to in the Standard. Specifically, air gaps are only necessary in the context of heat shield construction when a reduction in clearances is required between the heat sensitive material and the appliance. For example if the appliance were positioned closer than 100mm the manufacturer specifies an air gap when reducing the specified clearances from page 4. Similarly, the AS/NZS 2918:2001 specifies an air gap when reducing clearances under Table 3.1 and 3.2.

This installation requires no reduction in clearances because the actual clearance between the appliance and the heat-sensitive material exceeds the minimum by at least 39mm. Therefore, it is submitted, that the appliance is installed in accordance with the installation instructions, and the consent granted for the installation.

In this context, the applicant also discussed the nature of the laboratory test rigs used to determine the clearances required behind appliances.

- 3.1.4 The applicant went on to discuss the authority's request for a statement from the manufacturer under section 14G of the Act, and to discuss the scope of the manufacturer's responsibilities under that section. The applicant was of the view that the authority should have accepted the manufacturer's assertion, in its email of 27 May 2016, that the heater as installed would comply with the Building Code, particularly given that this statement had been supported by some members of the heating association. The applicant also stated that if the authority was not satisfied with the manufacturer's statement, it ought to have gone back to the manufacturer directly 'for a full and frank discussion of these concerns'; and in particular, should have accepted the manufacturer's offer to visit its factory.
- 3.1.5 With respect to the installation of the heater, the applicant concluded that:
- a 100mm clearance was not required to 'facilitate the cooling effect of convection air'. Instead 'The safety clearance is determined by a localised spot reaching 65°C (plus ambient), which in the case of convection fires is typically about 400mm above the appliance's surface'
 - various past standards support the use of masonry on top of combustible materials with a reduced clearance and no need for heat shielding

- given these points and the manufacturer’s statement as to compliance, the authority ‘ought to be satisfied on reasonable grounds that the installation complies with the Building Code’.
- 3.1.6 The applicant then went on to consider the authority’s decision to issue a notice to fix for the building work. The applicant submitted that the notice had been issued in error because the building work did in fact comply with the Building Code, and the process followed was inappropriate, as ‘the Notice to Fix was issued contemporaneously with the section 95A notice’. The applicant stated that the authority had previously outlined an alternative process, which it should have followed, and referred to Determination 2013/015 to support his contention that the two notices should not be issued at the same time.
- 3.1.7 The applicant sought various ‘remedies’, some of which are outside the scope of the matters that I am able to determine under section 177 of the Act.
- 3.1.8 With his submission, the applicant enclosed copies of:
- the building consent and associated documentation
 - the application for a code compliance certificate
 - the applicant’s producer statement
 - the authority’s inspection reports
 - correspondence between the parties, and between the parties and the manufacturer and the heating association
 - the applicant’s request for official information from the authority
 - the authority’s section 95A letter refusing to issue the code compliance certificate
 - the notice to fix
 - excerpts from past standards relating to clearances between masonry and heating appliances
 - the laboratory test report dated 5 March 2013, relating to the model of heater installed in the owner’s house (“the laboratory test report”). The tests detailed in the report were conducted for the manufacturer to establish this model of heater’s compliance with the Building Code, when installed in accordance with the specifications in the report. The report specifies that ‘the temperature rise above ambient temperature of monitored surfaces shall not exceed 65°C for the high fire test and 85°C for the flash fire test’.

3.2 The authority’s submission

- 3.2.1 The authority made a submission dated 7 June 2018 in response to the application for a determination.
- 3.2.2 With respect to the issue of whether the heater as installed will comply with the Building Code, the authority submitted that it did not have ‘reasonable technical grounds’ to decide that the building work complies, nor did it have ‘the in-house technical expertise to make this decision on sound engineering grounds’. This was the reason that it requested ‘suitable evidence of compliance’.
- 3.2.3 With respect to its decision to refuse to issue a code compliance certificate for the building work, the authority stated that as nearly 2 years had passed since the

building consent had been issued, and as ‘there were issues that had not been resolved at that point’, the code compliance certificate was refused. The authority acknowledged that the section 95A letter advising of the refusal decision did not contain all of the reasons for the refusal, but stated that these reasons would have been apparent from the communications between the parties at the time. The authority concluded that, in its opinion, at the time of the refusal, ‘the work did not comply with the consented documents, therefore the refusal of the code compliance certificate was correct’.

- 3.2.4 With respect to the notice to fix, the authority submitted that the notice was submitted because ‘significant correspondence’ had preceded the refusal to issue a code compliance certificate, which ‘indicated that the matter was at an impasse’. The notice to fix was appropriate because the heater as installed did not comply with the consented documents. In particular, the placement of the insulation board and the schist veneer wall between the heater and the combustible materials was ‘different to what would be expected from the details that were approved’; and all references to reduced clearances in the manufacturer’s instructions included an air gap. Although the as-built heater ‘may well comply with the building code’, the authority did not have reasonable grounds to accept this.
- 3.2.5 In addition, the authority stated that the notice to fix provided for two remedies. The building work could be altered so that it complied with the consented documents, or the applicant could provide evidence of compliance. The authority stated that as the work had been carried out ‘without any application to amend the consent, nor any consultation with the [authority] to consider a minor variation’, the notice could have required the applicant to apply for a certificate of acceptance for the building work. However, due to the nature of the work, the authority considered ‘that the option of providing evidence of compliance was appropriate even though it was after the fact’.
- 3.2.6 The authority considered that the primary issue that needed to be considered was whether ‘the opinions that were provided formed reasonable grounds to decide that the work complied with the Building Code’. The authority was in the process of preparing a policy that would require ‘statements of professional opinion’ to be written by ‘suitable qualified and competent professionals’ and that ‘suitably qualified’ would ‘vary from job to job’. None of the correspondence relating to the building work had indicated what ‘specific qualifications or experience any of the parties have in order for their opinion to be relied on’. The authority ‘strongly refute[s]’ the suggestions in the applicant’s submissions that the authority ‘should accept whatever the manufacturer is prepared to put in writing’. The authority went on to state, in conclusion, that:
- Professional opinions can be used as part of forming ‘reasonable grounds’ decisions, however [an authority] needs to take care to determine that the opinion is in fact a professional opinion (i.e the person giving the opinion is recognised as having the necessary skills and experience so that it can be relied on). We have not been provided with sufficient justification to show that the opinions provided could be relied on.
- 3.2.7 The authority also enclosed a copy of the consented floor plan for the building work (refer Figure 1).

4. The expert’s report

- 4.1 As mentioned in paragraph 1.5, I engaged an independent expert, who is a senior fire safety engineer, to assist me. The expert reviewed the documentation related to the

determination, including all of the original consent documents and the parties' submissions, and carried out an in-situ fire test on the owner's heater.

- 4.2 The test was in accordance with testing procedures described in AS/NZS 2918 Appendix B, with modifications as necessary to accommodate the installation conditions, in order to establish whether the heater as installed complied with Clause C2.2 of the Building Code. The test was conducted on 14 August 2018. The owner was present during the test.
- 4.3 The expert provided a written report dated 24 September 2018, and a copy of the report was sent to the parties on 26 September 2018.
- 4.4 In the report, the expert confirmed that the wall construction surrounding the heater was as advised by the applicant and that there was a 30mm gap between the rear of the heater and the schist wall cladding. Thermocouple temperature readings taken throughout the test period showed that:
- The temperature behind the schist on the combustible framing did not exceed 30°C, therefore would not be expected to exceed the 90°C required by the New Zealand Building Code (NZBC) Fire Safety Clause, C2.2 during normal operation of the heater.
- 4.5 The expert noted that the temperature measured on the surface of the wall during the test differed to those recorded in the laboratory test report (it was lower), and that the reason for this was that 'the schist forms a large heat sink which will absorb the heat from the fire and dissipate it through the mass of the material'. In contrast, the laboratory tests used a sheet of plywood as a backing wall.
- 4.6 The expert concluded that the heater as installed complied with Clause C2.2 of the Building Code.
- 4.7 In response to a query from the Ministry, the expert clarified that:
- both the schist wall cladding and the insulation board beneath it 'would be expected to be non-combustible'
 - the test in AS/NZS 2918 states that the distance from the wall is 'as in practice', with the choice about the actual distance left to the person having the test done. In the tests that formed the basis of the laboratory test report for the owner's heater, this distance was 100mm.
- 4.8 In an email dated 26 September 2018, the authority accepted the expert's report and indicated that it would be prepared to issue a code compliance certificate for the building work based on it.
- 4.9 In an email dated 27 September 2017, the applicant suggested a minor amendment to the wording of the expert's report.
- 4.10 Following discussions with the Ministry, the applicant confirmed that he wished to continue with the application for a determination, looking in particular at the authority's decisions to issue a notice to fix and the authority's request for a manufacturer's statement under section 14G.

5. The draft determination and the submissions received in response

- 5.1 The draft determination was issued to the parties for comment on 22 November 2018.

5.2 The applicant's submission

5.2.1 The applicant responded on 6 December 2018 and did not accept the draft determination. He reiterated several points from his earlier submissions, and requested that the wording of the final determination be altered to reflect these. These points related to:

- the expert's test results and report
- how the safety clearance behind a convection fire is determined
- the clearances shown on the consented plans and contained in the manufacturer's instructions
- the scope of sections 14G and 117 of the Act, and the matters that can be considered under the determinations process.

5.3 The authority's submission

5.3.1 The authority responded on 27 November 2018 and accepted 'the majority of the draft determination'. However, it also made several comments on the draft, which it asked to be taken into account, as follows.

- In general alterations or variations to consented building work should be approved before they are carried out. Although there may be situations where changes occur on site before 'it is reasonably practicable to engage with' the authority, this was not one of them. The authority's willingness to treat the variation as a minor one in the current case is a 'pragmatic way of providing approval', but should not be used as a precedent.
- The circumstances in the current case are different from those considered in Determination 2013/015. There was significant correspondence that preceded the refusal of the code compliance certificate and the situation was at an impasse. Without the notice to fix there would have been no progress, even with the refusal of the code compliance certificate.

5.4 The owner's submission on the draft

5.4.1 The owner responded on 19 December 2018 and did not agree with the draft determination and supported the applicant's submissions on it, without making further comment.

5.5 I have taken the parties comments into account and amended the determination as appropriate.

6. Discussion

6.1 The applicant has requested a determination about various matters relating to the building work, including its code compliance and the authority's actions in declining to issue a code compliance certificate and instead issuing a notice to fix in relation to it. Some of these matters are outside the scope of the matters that I am able to determine under section 177 of the Act. However, I have taken these matters into account and discussed them as relevant in relation to the matters to be determined.

6.2 The compliance of the building work

6.2.1 This determination has arisen from the installation of the heater in the owner's house, done otherwise than in accordance with the building consent, and in particular from the applicant's decision to modify the installation resulting in the reduced clearance between the rear of the heater and the wall behind it.

6.2.2 The applicant is of the view that the distance from the back of the heater to combustible material meets the manufacturer's instructions as the schist cladding material is non-combustible and its presence does not adversely affect compliance.

6.2.3 The authority is of the view that it did not have reasonable grounds to conclude the building work complies with Clause C2.2. The work was consented on the basis of the manufacturer's instructions, which specified a minimum safe installation clearance to combustible materials of 100mm, and as additional material had now been placed between the back of the heater and the combustible material it has reduced the size of the air gap. Both Verification Method C/VM1 and AS/NZS 2918 are silent as to the impact that this has, and the authority has received conflicting professional opinions as to whether the addition of the schist wall cladding in the clearance gap would affect compliance.

6.2.4 The relevant clause of the Building Code is C2.2, which states:

The maximum surface temperature of *combustible building materials* close to fixed appliances using controlled combustion and other fixed equipment when operating at their design level must not exceed 90°C.

6.2.5 Paragraph 1.1 from the Verification Method for Clause 2.2 (being C/VM1) states:

1.1 Solid Fuel Appliances

Limiting heat transfer

1.1.1 Compliance with NZBC Performances C2.2 and C2.3 may be verified for solid fuel burning appliances by meeting the appropriate test requirements of AS/NZS 2918.

6.2.6 Appendix B of AS/NZS 2918 sets out the method for testing solid fuel heaters for compliance with Clause C2.2. This essentially involves placing the heater in front of a specimen wall and using thermocouples positioned on the wall to record the temperature rise it experiences under high and flash fire conditions. A heater will comply if the maximum temperature rise recorded on the wall does not exceed 65°C (high fire) and 85°C (flash fire). The distance that the heater is placed from the specimen wall is left up to the person conducting or seeking the test, but should be "as in practice".

6.2.7 The report from this laboratory test was relied on by the manufacturer to demonstrate the compliance of this model of heater when installed at a distance of 100mm from combustible materials. This was also the test emulated by the Ministry's expert for the purposes of preparing his own report on the as-built installation.

- 6.2.8 From the test results, the expert has concluded the owner's heater, as installed, complies with clause C2.2. In his report, he mentions that the schist veneer would act as a 'heat sink', which will absorb and dissipate some of the heat from the fire, drawing it away from the combustible framing materials beyond. I agree that due to the schist veneer's properties, including its thickness and thermal mass, this is likely to be the case, and that to a certain degree it is also likely to function as a heat shield.
- 6.2.9 Given this propensity to both reflect and absorb heat I acknowledge that a longer test period may have led to the schist veneer reaching a steady-state temperature. However, in response to this assertion the expert has advised that:
- The room temperature reached for the test conducted was in the region of 30°C and it was unlikely that an owner would continue to run the heater at full load with the room at this temperature.
 - The entire schist veneer wall would have acted as a heat sink which had a substantial capacity to absorb heat.
- 6.2.10 I recognise there was still a significant gap between the maximum temperature recorded by the expert (30°C) and the 90°C maximum allowed for in the Building Code, and accordingly I agree with the expert that the testing demonstrates that the as-built heater complies.
- 6.2.11 The applicant and the authority are also both now satisfied that this aspect of the dispute has been resolved and the authority has indicated that it is prepared to issue a code compliance certificate based on the expert's report.

6.3 The authority's decision to refuse to issue code compliance certificate

- 6.3.1 Having established that the heater as installed does comply with Clauses C2.2, then the question becomes whether the authority was correct to refuse to issue a code compliance certificate in respect of it.
- 6.3.2 Under section 94 of the Act, an authority must issue a code compliance certificate if it is satisfied on reasonable grounds that the building work complies with the building consent.
- 6.3.3 In this case, the building work was not constructed in accordance with the consent. The heater was installed in an alcove, rather than in front of a flush wall. In addition, schist veneer cladding had been added within the space between the rear of the heater and the wall behind, with the effect of reducing the air space from that indicated by the manufacturer's instructions. Accordingly, the authority was correct in the first instance to refuse to issue the code compliance certificate.
- 6.3.4 In its submission on the draft determination, the authority has submitted that the applicant should have sought its approval for the alteration to the consented plans, before it proceeded with the work. I agree that this is the case. The applicant, in making an application for a building consent, had relied on the specifications in the manufacturer's instructions, which were in turn based on testing under AS/NZS 2918, to establish compliance. Having relied on these specifications to establish compliance, it was not open to the applicant to unilaterally vary them without providing supplementary testing or a professional opinion to establish that the new specifications would also comply, or without giving the authority the opportunity to review them.

- 6.3.5 However, even though the as-built installation did not comply with the consented plans, and I have found that the authority was justified, in the first instance, in refusing the code compliance certificate on these grounds, it was still open to the authority to treat the variation between the as-built building work, and the consented building work, as a minor variation under section 45A of the Act.
- 6.3.6 I have considered what constitutes a minor variation, as compared with work requiring a formal consent amendment, and the implications of this in several previous determinations. In essence, if a variation to a building consent is considered to be minor, then a building consent authority is not required to issue an amended building consent in respect of it (section 45A(3)(b)). This means that an authority can still issue a code compliance certificate for the building work, based on the original building consent, provided the building work that represents the variation also complies with the Building Code.
- 6.3.7 If, however, a variation to a building consent is considered to be other than minor, then the party seeking the variation must apply for an amendment to the building consent in respect of it, and the code compliance certificate would be issued in relation to the amended consent. (I note this option is not available in the current case because the building work has already been completed.) The decision as to whether a variation is minor or not rests with the building consent authority to consider under section 45A and the Building (Minor Variations) Regulations 2009.
- 6.3.8 The significance of this in the current case is that, if the authority is satisfied that the variation to the building work only represents a minor variation to the consent, then it can still issue a code compliance certificate for the building work, based on the original consent, provided it is satisfied that the building work as varied still complies with the Building Code.
- 6.3.9 In its submission, the authority has indicated that it was willing to treat the variation as minor, provided it has sufficient evidence that the building work complies. In the authority's opinion, it did not have such evidence.
- 6.3.10 Accordingly, the issue I must decide is whether the authority had sufficient evidence before it to be satisfied on reasonable grounds that the as-built building work complied with Clause C2.2 of the Building Code.
- 6.3.11 The applicant is of the view that it did, and that the authority should have accepted the manufacturer's statement in its email of 27 May 2016 and subsequent emails that the inclusion of non-combustible materials between the rear of the heater and the combustible materials would not affect the clearance required or compliance.
- 6.3.12 The authority has submitted that it was not prepared to accept this statement, as it did not have any evidence of either the manufacturer's qualifications to make this statement or the test data that it was based on. For similar reasons, it did not accept the various assertions by the members of the heating association that the heater as installed would comply and the manufacturer's statement could be relied on. In its view, something more was required.
- 6.3.13 The applicant has interpreted the authority's refusal to accept this evidence as an attempt to dictate the nature of the statement that a manufacturer can make under section 14G of the Act. He has requested a determination about the purpose of section 14G and a building consent authority's ability to direct what it must contain. This is not a matter that I am able to make a determination about under section 177.

- 6.3.14 I can, however, comment on the authority's consideration of the manufacturer's statement in making its decision about the code compliance certificate. In this regard, I note that there is no obligation on an authority to accept a manufacturer's statement as definitive. The authority's responsibility under section 49 is to be "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". A manufacturer's statement under section 14G may be one of the sources of information that an authority looks to, but the authority is not obliged to accept it, if it does not satisfy the authority on reasonable grounds that compliance will be achieved.
- 6.3.15 In the current case, I consider that the authority was correct to ask for additional information to back up the manufacturer's statement in its emails. The authority considered that the statement was insufficiently robust, as it was not backed up by evidence, expertise or data to support it. When the authority sought to establish the credibility of the statement with the heating association, it received conflicting advice as to whether it should be relied on.
- 6.3.16 In these circumstances, I consider that the authority acted correctly in not accepting the statement as providing reasonable grounds for compliance. For the same reasons, the authority was correct not to rely on those statements from the members of the heating association that supported compliance. The applicant has submitted that this is tantamount to the authority 'requiring the manufacturer to make a statement of compliance under section 14G as a precondition of issuing a code compliance certificate'. I do not accept that this was the case. The authority was seeking to satisfy itself that it could rely on the submitted evidence as to compliance, and I agree with the authority's conclusion that it could not.
- 6.3.17 Accordingly, I consider the authority was correct to consider that it could not be satisfied on reasonable grounds that the as-built building work would comply with the Building Code, and as a result also decided correctly in refusing to issue the code compliance certificate.
- 6.3.18 In his submission, the applicant suggested that if the authority was not satisfied with the manufacturer's statement, then it should have gone back to the manufacturer to seek clarification. This is not the authority's responsibility. It is for the applicant to gather and present information as to how compliance is to be achieved, and for the authority to assess, and accept or reject that evidence.

6.4 The authority's decision to issue a notice to fix

- 6.4.1 I turn now to the question of the notice to fix. The applicant submits that 'the circumstances did not warrant contemporaneous issuing of the section 95A and section 164 notices' due to 'the support shown for the installation' (which I take to mean the evidence the applicant had gathered to demonstrate compliance) and the absence of 'reasonable grounds' for the authority to consider the heater did not comply under section 164(1)(a) of the Act.
- 6.4.2 Under section 164(1)(a), an authority has the power to issue a notice to fix where it considers on reasonable grounds that an owner (or other specified person) is contravening or failing to comply with the Act or Building Code.
- 6.4.3 In its submission, the authority has stated that the notice to fix was issued because the building work had not been carried out in accordance with the building consent, as required under section 40 of the Act. This along with the lack of 'approved

documentation to demonstrate the means of compliance' are the particulars of contravention cited in the notice.

- 6.4.4 As discussed in paragraph 6.3, I consider that the authority was correct in its assessment that the building work had not been carried out in accordance with the consent. In the first instance, this would appear to give the authority grounds for issuing the notice to fix.
- 6.4.5 However, the applicant has also raised concerns relating to the timing of the issue of the notice to fix. The applicant considers that the authority was not justified in issuing the notice so promptly, within 24 hours of the refusal to issue a code compliance certificate. In his submission, he refers to Determination 2013/015 to support this assertion.
- 6.4.6 Determination 2013/015 concerned a situation where an authority refused to issue a code compliance certificate and issued a notice to fix in the same letter. That determination considered the nature of a notice to fix and the seriousness of the offence it contained, which reflected the main purpose of the notice, namely 'to ensure compliance and provide effective penalties for those that do not comply'. Paragraph 4.2.6 of that determination stated:
- In my view, an authority will not normally issue a notice to fix at the same time as issuing written notice under section 95 unless the particular circumstances warrant it. The issue of a notice to fix should not necessarily be seen as an expected sequential step in the regulatory process following the issue of a notice under section 95A. In addition, the processes under section 95A and 164 should not be dealt with by simply rolling them together automatically issuing a notice to fix and including the reasons for the refusal in the notice to fix, without considering why it is necessary to issue the notice to fix.
- 6.4.7 I consider that reasoning still to be valid, and that it will not normally be appropriate to issue a notice to fix immediately after a section 95A notice. Something more is required than just the refusal to issue a code compliance certificate to trigger the need for a notice to fix, and an authority should turn its mind to both the seriousness of the offence that a notice to fix encapsulates and why one is required.
- 6.4.8 Determination 2013/015 went on to state:
- [Paragraph 4.2.7]
- Similarly, on a final inspection when an authority refuses to issue a code compliance certificate the usual response should be the provision of a notice with reasons for the refusal under section 95A. Then, if an owner fails to carry out the work that will be the appropriate time for an authority to consider whether to issue a notice to fix.
- [Paragraph 4.2.8]
- There will of course be some circumstances when it will be appropriate to issue a notice to fix at the same time as refusing to issue a code compliance certificate. For example, if the breach is significant, the building work is unsafe or is likely to become unsafe, or there have been repeated breaches by the owner of the Act or Building Code.
- 6.4.9 Such is not the situation here. In this case, the parties had been in significant dialogue before the issue of the section 95A letter and notice to fix, and the applicant had been proactively providing information in an attempt to establish compliance. In its submission the authority has stated that the parties were at an impasse. I assume it issued the notice in an effort to expediate a resolution of the matter. However, in my opinion, the section 95A refusal letter could have had the same effect and, given the serious nature of a notice to fix, the authority should have given the applicant time to

respond. If the applicant had still failed to remedy the situation, then the authority could have moved onto enforcement through a notice to fix.

- 6.4.10 As it is, the authority has not given time for the section 95A notice to fulfil its intended function; namely to alert the applicant to the areas of the building work that in the authority's opinion have not been demonstrated to comply with the Building Code, and to give the applicant an opportunity to consider how to remedy the situation. In addition, the authority has accepted in its submission that the section 95A letter did not adequately set out the reasons for the refusal, and this would have exacerbated the situation. It is important that section 95A notices are sufficiently detailed and specific so that the recipient is clear what issues require addressing.
- 6.4.11 Accordingly, I conclude that the authority did not properly exercise its powers of decision-making in issuing the notice to fix. In particular, I am not satisfied that in issuing the notice at essentially the same time as it refused the code compliance certificate, the authority has specifically considered 'the particular reasons' for issuing the notice. This goes to the heart of the requirement in section 164 for an authority to have 'reasonable grounds'. This requirement cannot be met where an authority does not sufficiently consider the grounds and issues a notice to fix automatically.
- 6.4.12 There was no basis in the current case for the notice to fix to be issued with urgency, and the authority should have allowed itself time to be satisfied that the breach of the Act would continue, despite the issue of the section 95A letter, before it took further enforcement action. In its submissions, the authority has stated that it was satisfied that 'there would have been no progress' without the notice to fix. This is an assumption on the behalf of the authority, and it should have allowed itself time to be satisfied that this was in fact the case, instead of using the notice to fix as a tool to fast-track the process.

7. The decision

7.1 In accordance with section 188 of the Act, I hereby determine that:

- the authority was correct in refusing to issue a code compliance certificate, and I confirm that decision
- the authority incorrectly exercised its powers of decision in issuing the notice to fix, and I reverse that decision
- the as-built building work complies with Clause C2.2 of the Building Code.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 18 March 2019.

Katie Gordon
Manager Determinations