

Determination 2023/023

Regarding the refusal to issue a notice to fix for a concrete slab foundation at 92A Kaitawa Road, Otaki

Summary

This determination considers the authority's decision to not issue a notice to fix for a concrete slab foundation after complaints were made by the owner.

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

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

1. The matter to be determined

- 1.1. This is a determination made under due authorisation by me, Andrew Eames, Principal Advisor, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry¹.
- 1.2. The parties to the determination are:
 - 1.2.1. the owner of the property where the building work was carried out, R Hamilton ("the owner")
 - 1.2.2. Kāpiti District Council, carrying out its duties as a territorial authority or building consent authority ("the authority").
 - 1.2.3. P Bolton, of Base Consulting Ltd ('the engineer') as a licensed practitioner concerned with the relevant building work.
- 1.3. This determination arises from the authority's decision to 'pass' a pre-slab inspection for a concrete slab foundation ('concrete slab') for the owner's house.

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

The owner considers the authority erred in making these decisions and should instead have issued a notice to fix² in respect of the concrete slab.

- 1.4. The matter to be determined³ is whether there was a failure to issue a notice to fix for the building work to the concrete slab.
- 1.5. This determination only considers the building work to the concrete slab. I note concerns raised have been by the owner about other aspects of the building work, including steel portal connections. A notice to fix was issued by the authority 29 November 2019 in relation to that later work only. These are matters outside the scope of this determination.

2. The building work and background

- 2.1. On 26 June 2018, the authority issued a building consent (BC180164) for the construction of a new dwelling on the owner's property. The plans show a simple rectangular two-storey dwelling on a specific engineer designed concrete slab foundation. A structural engineering company provided a Producer Statement – Design (PS1)⁴ dated 12 February 2018 for the structural elements of the building as shown in the plans, including the foundation plans.
- 2.2. On 7 August 2018, the authority conducted a pre-slab inspection of the foundation. The concrete slab had not yet been poured, so the formwork⁵ and reinforcing steel were visible (see Figure 1). The inspection was noted as 'failed' because the engineer's details and a Producer Statement – Construction Review (PS4) for the completed concrete slab were not available as required. All other aspects of the inspected foundation, including the vapour barrier and reinforcing steel were indicated as passed on the inspection report.
- 2.3. Later that day, a representative of the engineer inspected the foundation. The engineer's site visit record noted that the reinforcing for the slab was in place, that in the north-east corner the foundation was 15 to 25 cm shallower than shown on the plans; and that water had pooled in some of the internal pad foundations (refer to Figure 2). The remainder of the work was noted to be in accordance with the plans.

² A notice to fix is a statutory notice requiring a person to remedy a contravention of Act or regulations under the Act. The requirements and description of a notice fix are set out in the later discussion section.

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

⁴ A producer statement is a statement of professional opinion based on specialist expertise. While producer statements are well-established and widely used, they have no particular status under the Building Act 2004. They are used as one source of information when making decisions on compliance with the Building Code. A PS1 refers to a statement provided for a design. A PS4 refers to a statement provided to confirm construction review.

⁵ Formwork is a temporary mould that holds the poured concrete while it sets.



Figure 1: Photograph of formwork, reinforcing steel, and vapour barrier



Figure 2: Photograph of excess water within the internal pads

2.4. Following this site visit, the engineer confirmed in an email dated 10 August 2018 that the footing depth in the north-east corner was 'not ideal, but acceptable', and that water was to be removed from all the footings and pads before the concrete was poured. The engineer noted that the builder should provide photos to show this had been done and that 'on this basis it is acceptable to pour'.

2.5. The slab was poured on 13 August 2018.

- 2.6. The owner subsequently became concerned about the slab, as in their opinion it was not level and when it rained puddles formed on its surface. The owner states these concerns were raised with the builder, but the owner was told that the foundation was 'fine' and 'good' and built in accordance with New Zealand standards, and that a PS4 would be issued for it at the completion of the building work.
- 2.7. In late 2018, the owner engaged another independent builder to inspect the foundation ('the owner's builder'). The owner's builder reported in a letter dated 12 March 2019, that he had inspected the foundation and found it was 'not very level at all', with 'quite large discrepancies'. He concluded that the foundation did not comply with *NZS 3114:1987*⁶.
- 2.8. The owner subsequently shared the contents of this report with the authority, as on 29 March 2019 the authority emailed the builder requesting a PS4 from the engineer for the concrete slab. The builder confirmed on 1 April 2019 that this would be supplied.
- 2.9. On 9 September 2019, another company of chartered professional engineers ("the owner's engineer") emailed the authority raising concerns about other aspects of the building work that it was responsible for (the portals and their connections). In this email, the owner's engineer also noted that the 'level of tolerances' in the slab were greater than they would normally expect to see and may be contributing to the issues with the other building work; and suggested these defects should be remedied.
- 2.10. On 9 September 2019, the authority emailed the builder advising that it was looking into the building works on the owner's property, and again requesting that a PS4 be supplied for the slab's construction. The authority identified there were two failed inspections. The pre-slab inspection, which was "failed" as the engineer's details and PS4 were required. The other inspection included a "failed" pre-wrap inspection, due to the incorrect installation of steel framing, and material being left exposed for at least 6 months.
- 2.11. On 24 September 2019, the engineer provided the authority with a PS4 for the concrete slab, verifying the engineer consider the work complied with Clause B1 Structure.
- 2.12. On 28 and 29 November 2019, the owner raised concerns with the authority regarding the PS4 issued for the concrete slab. Specifically, the owner was concerned that photos should have been provided to ensure that the engineer's directions in its email of 10 August 2018 had been complied with.

⁶ NZS 3114:1987 Specification for concrete surface finishes.

- 2.13. On 29 November 2019, the authority emailed the builder advising that it required copies of 'site notes and photos' from the engineer relating to the foundation, so that it could evaluate the PS4. The email noted that the authority had not yet 'accepted the PS4, so the foundations remain a fail'. With the email, the authority also issued a notice to fix relating to the portal connections⁷.
- 2.14. On 2 December 2019, the authority again sought clarification from the builder about how the engineer had decided to issue the PS4.
- 2.15. The builder provided this clarification in an email dated 11 December 2019, in which it explained that although the contractor who constructed the slab had not taken any photos, he had confirmed that the water had been removed from the pile pads before the concrete was poured and had provided details of how he had done this. The builder had also sought confirmation from the concrete manufacturer as to the average strength of its concrete, and this exceeded the 28-day strength specified in the engineering design. The builder had provided all this information to the engineer, and the engineer had been prepared to issue the PS4 on this basis.
- 2.16. The engineer subsequently confirmed in an email to the authority dated 20 December 2019 the basis on which it issued the PS4 and reaffirmed this decision.
- 2.17. On 14 January 2020, the authority advised the owner that based on the engineer's explanation it had decided to accept the PS4 for the foundations and slab 'as providing reasonable grounds to believe the pre-slab building inspection was passed'. The authority also issued a report and site notice to this effect.
- 2.18. The owner did not accept this decision and throughout 2020 went back to the authority on numerous occasions asking it to reassess and review its decision, and to issue a notice to fix for the concrete slab foundation. The owner also provided photos that he stated were taken on the day that the foundation was poured and showed that the engineer's instructions to first remove the water from the footings and slab had not been complied with.
- 2.19. In early February 2020, the owner advised that the building work on the portals had been dismantled and was to be removed.
- 2.20. In October 2020, the builder cancelled its contract with the owner and advised that it would no longer be involved with the building work.
- 2.21. The owner subsequently applied for this determination.

3. Submissions

⁷ As noted earlier, this later building work fall outside of this determination.

The owner's submissions

- 3.1. The owner made numerous submissions in support of the application for a determination and provided documents and photographs in relation to them. The main points from these submissions can be summarised as follows:
- The work on the concrete slab was not done to the engineer's instructions. In particular, the engineer's instruction to remove the standing water from the footings before the slab was poured was not complied with. The owner has provided photos from the day of the pour showing issues with the foundations.
 - The authority accepted the engineer's PS4 on 'trust' when the engineer's instructions had not been followed. The evidence required by the authority, namely the engineer's photos and site notes, were not provided to or checked by the authority. The authority should not have accepted the engineer's assertions or the PS4, without checking the works had been properly carried out.
 - The builder did not call the authority for a re-inspection before it poured the concrete. The authority's records show a re-inspection was required, but none was carried out.

The authority's submissions

- 3.2. The authority made submissions in response to the application for a determination and provided documents and photographs in relation to them. The main points from these submissions can be summarised as follows:
- The authority considers it was not required to issue a notice to fix, as it had no basis for doing so, and therefore it has not omitted or failed to do so.
 - The authority's officer did not pass the works as compliant after the pre-slab inspection and did not approve the works to proceed (pouring of the concrete) without the engineer's inspection. The officer left the assessment of the adequacy of the foundations to the engineer.
 - There was no floor slab laid when the authority's officer inspected the building work, so it could not issue a notice to fix for the floor slab. The authority cannot issue a notice to fix for work not yet carried out and is entitled to assume the work will be carried out competently.
 - The presence of standing water during the authority's inspection would not have alerted it that the floor slab might be laid incorrectly.

- As the building work included specific design elements, the work was being monitored by the engineer. It was up to the engineer to assess whether the building work was ready for the slab to be poured.
- The purpose of requiring an engineer's producer statement for the foundations was to ensure the engineer had the opportunity to address any shortcomings or defects in the preparation for the slab and ask the builder to rectify them. The PS4 was provided, and this requirement met, so the authority could not issue a notice to fix in respect of it.
- Neither the owner nor the engineer raised any concerns with the authority at the point that the floor slab was poured or immediately afterwards. The authority had no way of knowing at this point whether the slab had been poured correctly and had no reason to enquire.
- The authority did not receive any more information about the floor slab until March 2019 when the owner informed it of their concerns that the slab had not been constructed in accordance with the plans. The owner did not allege that the slab was 'weak' until November 2019.
- The builder has advised that the engineer inspected the site before the slab was laid and issued instructions to remove the excess water. The builder confirmed that the standing water had been removed before the concrete was poured, in accordance with the engineer's site note. The authority has no reason to doubt this information is correct.
- The engineer appeared to have proper grounds for issuing the PS4, and from its investigations the authority 'was satisfied on reasonable grounds the work complied with the consent (and building code) which meant it was not necessary to issue a Notice to Fix.'
- The authority still 'does not have a clear understanding' of how the owner has determined the slab is defective. It has never received any evidence to show the slab is defective, or advice from a structural engineer that the slab will be unable to support the structural loads that were to be placed on it. Without this evidence it cannot form a conclusion that the slab is defective or issue a notice to fix.
- The authority cannot tell purely from external inspections that the engineer and builder are wrong in their assessments of compliance or in breach of their duties.
- The decision to issue a notice to fix must be 'based on reliable objective information, not on assertion'. It would not be reasonable for the council to act on the owner's unverified claims.

- 3.3. A draft determination was issued to the parties for comment on 26 May 2021.
- 3.4. On 4 June 2021 the Council accepted the decision in the draft determination, without any further comments.
- 3.5. On 12 September 2021 the engineer provided their communication with the authority from 9 September 2019. The owner's engineer at this time had stated the slab is "well out of acceptable tolerance for level", and the cause of various subsequent building issues.
- 3.6. On 14 October 2021 the owner also provided another submission, with the relevant comments noted below (in summary):
 - the water was not removed before the slab was poured
 - photographs were not produced
 - there was no engineer's inspection of the pre-slab
 - the pre-slab construction did not satisfy New Zealand Standards
 - the reinforcing in the concrete foundation was drilled through
 - the authority did not carry out another pre-slab inspection.
- 3.7. The owner also included correspondence between the parties, which noted the authority stated a notice to fix "may be issued" regarding the non-compliance.
- 3.8. The owner also included a drawing, which showed the variations to the concrete slab foundation as pictured below.

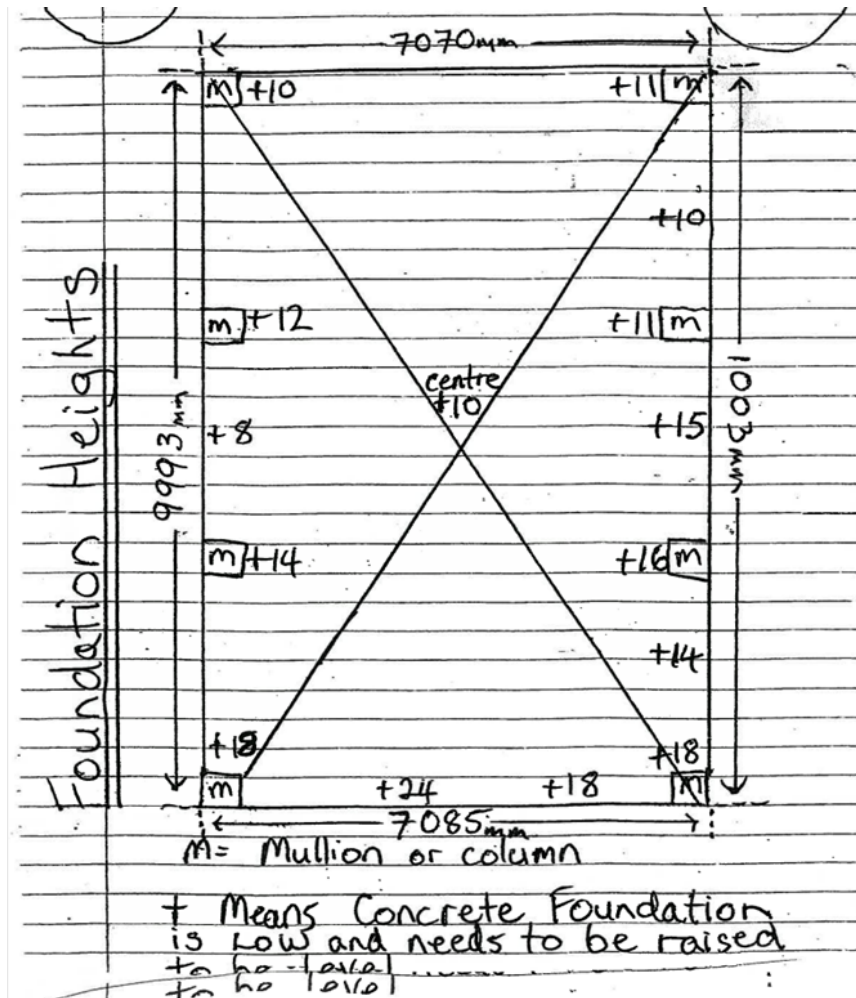


Figure 3: Diagram of variations in the concrete slab foundation (not to scale)

4. Discussion

- 4.1. The owner has applied for a determination about the authority's failure to issue a notice to fix for the building to the concrete slab, when in the owner's opinion it should have issued such a notice. The authority considers that it did not have, and has never had, grounds upon which it could issue a notice to fix for the building work to the concrete slab.
- 4.2. I note here that in the submissions the owner has raised multiple concerns around the authority's decision to accept the engineer's PS4 and to pass the pre-slab inspection based on it. I can only consider the information regarding the PS4 and the pre-slab inspection as they relate to the specific matter to be determined.
- 4.3. The relevant legislation relating to notices to fix can be found in subpart 8 of the Act, sections 163 to 168.

- 4.4. Section 163 defines what is meant in the subpart by a “specified person”, which in this case could potentially include the owner and the builder.
- 4.5. Section 164 sets out the circumstances in which a responsible authority can issue a notice to fix, with the relevant provisions in this case being as follows:

164 Issue of notice to fix

(1) This section applies if a responsible authority considers on reasonable grounds that—

(a) a specified person is contravening or failing to comply with this Act or the regulations (for example, the requirement to obtain a building consent); or

(b) ...

(2) A responsible authority must issue to the specified person concerned a notice (a notice to fix) requiring the person—

(a) to remedy the contravention of, or to comply with, this Act or the regulations; or

(b) ...

- 4.6. Accordingly, for the authority to issue a notice to fix for the building work on the concrete slab it must have grounds to consider that any specified person was contravening, or failing to comply with, the Act or the Building Code.
- 4.7. It appears that the owner first had concerns about the construction of the foundation at the point that the concrete slab was poured on 13 August 2018. Prior to this the authority had carried out a pre-slab inspection of the foundation on 7 August 2018.
- 4.8. In its submission, the authority has pointed out that it could not issue a notice to fix for the concrete slab at this point as the building work on the slab was not complete. The inspection report notes that all aspects of the concrete slab’s construction appeared to be in order, other than confirmation of the engineer’s details and provision of a PS4.
- 4.9. The inspection was ‘failed’ for administrative purposes, requiring a PS4 and the engineer’s details. The concrete slab was being constructed to a specific engineered design, and the purpose of requiring a PS4 from the engineer was to ensure the construction had been correctly carried out to that design. I consider that there was nothing at this point of the building work that appeared to be contravening the Act or Building Code to warrant the issue of a notice to fix.
- 4.10. The authority was not made aware of any concerns regarding the concrete slab until March 2019. These concerns were, in essence, that the engineer’s instructions to remove excess water from the foundation before the concrete was poured had not been followed, and that the concrete slab was not level in places.

- 4.11. Following this, the authority sought further information, including a PS4 from the engineer. When parts of the information sought were not supplied, the authority once again sought further details.
- 4.12. During the time the authority was taking these steps, the owner did not provide compelling evidence that showed how the concrete slab failed to comply with the Building Code or had not been built in accordance with the building consent. The owner's builder identified that the concrete slab was "not very level" and stated the it did not meet *NZS 3114:1987*⁸ but did not explain how this contributed to non-compliance with the Building Code. The owner's engineer provided comment in regard several aspects of the building work but many related to the compliance of the work in relation to the later installation of the steel portals. They did refer to the tolerances being "out of acceptable practice" but again did not identify any specific non-compliances with the building code in relation to the concrete slab.
- 4.13. It is important to note at this point that while the finish of the concrete slab may be unsatisfactory (from the owner's point of view), this is not the same as saying that it does not comply with the Building Code. The Building Code sets minimum performance requirements that building work must meet, but in many cases the aesthetic, quality or amenity requirements of building owners will exceed these.
- 4.14. In this case, I have not received any evidence to show the variations in the concrete slab's level or any water that may or may not have remained when the concrete slab was poured would have contributed to a loss of amenity or structural failure.⁹ An owner's additional expectations or requirements may be covered by the terms of a contract¹⁰, but are not matters that can be enforced via a notice to fix.
- 4.15. The engineer has supplied a PS4 to the effect that the concrete slab does comply, and evidence to support the structural adequacy of the slab. In the absence of evidence that the concrete slab was failing to comply with the Building Code the authority could not issue a notice to fix. This situation has not been changed by the authority's subsequent decision to pass the pre-slab inspection, based on receiving the PS4. This decision was not a binding decision as to Building Code compliance, and had the owner presented evidence to the contrary, would not have prevented the authority from subsequently issuing a notice to fix.
- 4.16. The authority has indicated that, if the owner was to have the concrete slab independently tested to establish its non-compliance, then it would be willing to consider whether it should issue a notice to fix. However, in the absence of such evidence it would not.

⁸ *New Zealand Standard 3114:1987: Specification for concrete surface finishes.*

⁹ A reference to the performance requirements set out in Clause B1 Structure which was referenced by the engineer who issued the PS4 and would likely be the relevant clause being considered in this type of dispute.

¹⁰ Sections 362A to 362V of the Building Act set out the consumer protection measures.

4.17. I do not consider there is evidence the concrete slab had specifically failed to comply with the Building Code or that it was not constructed in accordance with the building consent.

5. Decision

5.1. In accordance with section 188 of the Building Act 2004, I determine there was no failure to issue a notice to fix specifically in relation to the building work to the concrete slab.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 24 August 2023.

Andrew Eames

Principal Advisor