

Determination 2025/055

The compliance of a return section of a retaining wall with clause F4 Safety from falling

1206B Hikuai Settlement Road, Pauanui, Coromandel

Summary

This determination considers the compliance of a section of a retaining wall with Building Code clause F4 *Safety from falling*, in relation to a sudden change of level and whether the barrier is of appropriate height and restricts the passage of children under six years of age.

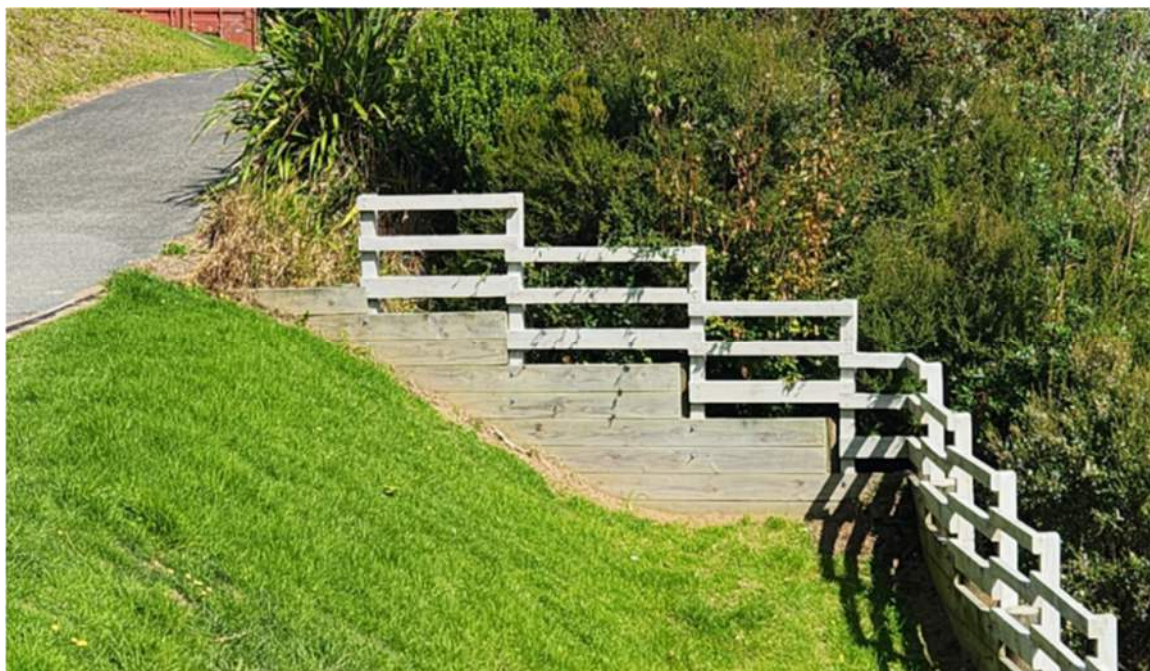


Figure 1: The retaining wall and barrier, looking toward the west

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

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

1. The matter to be determined

- 1.1. This is a determination made under due authorisation by me, Peta Hird, for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment (“the Ministry”).¹
- 1.2. The parties to the determination are:
 - 1.2.1. J & L Pausina, the owners of the property (“the owners”), who applied for this determination.
 - 1.2.2. Thames-Coromandel District Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.²
- 1.3. The matter to be determined is whether the timber barrier on the return section of a retaining wall complies with Building Code clause F4 *Safety from falling*, specifically performance criteria F4.3.1, F4.3.4(b), and F4.3.4(g). I also consider whether the limit on application of clause F4.3.1 applies to the return section of the retaining wall.
- 1.4. A previous determination 2024/008³ (“the previous determination”) has been issued for this property in relation to clause F4 *Safety from Falling* for the section of the retaining wall on the north side of the property, which connects at the western end to the return section of the wall. I refer to this determination in the background and parts of the discussion.

2. The building work and background

- 2.1. The return section of the retaining wall (“the retaining wall”) has been constructed in a north-south direction. It is perpendicular to and connects at the western corner of the main retaining wall (“the west-east retaining wall”) that was the subject of the previous determination (see Figure 1). The retaining wall has been constructed

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

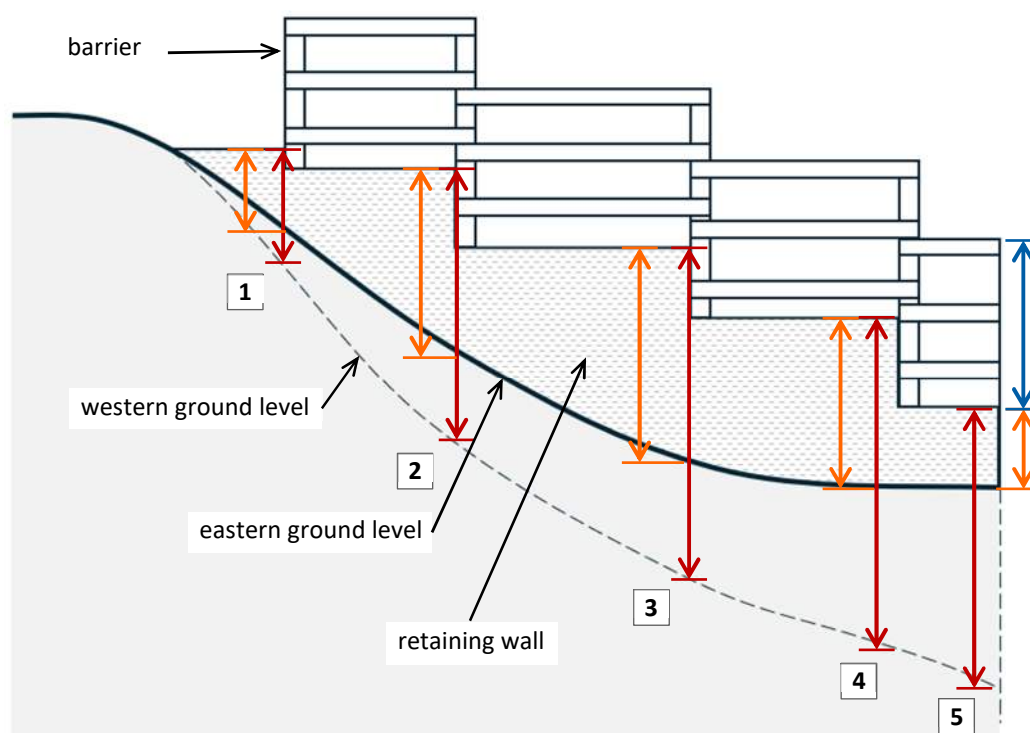
² The authority did not make any submissions in this determination.

³ Determination 2024/008 *Whether a timber barrier to a retaining wall complies with Building Code clauses F4.3.1 and F4.3.4*, 29 February 2024

in a similar manner, with timber lagging boards retaining the land on the eastern side for a length of approximately 3 metres.

2.2. The retaining wall is stepped to follow the land contour and so the height of the retaining wall varies from 0.6 to 1.7 metres (measured to the top of the lagging boards to the adjacent ground). The retaining wall begins level with the ground at the southern end.

2.3. The differences in ground levels along the length of the retaining wall are less than 1 metre, except in the northern corner where it is approximately 1420mm. On the western (lower) side of the wall, the site slopes away to the north, continuing past the west-east retaining wall.



Dimensions from the top of the retaining wall to:		
	■ western (lower) ground level	■ eastern (higher) ground level
1	600mm	500mm
2	1190mm	890mm
3	1710mm	1140mm
4	1470mm	780mm
5	1520mm	100mm
Dimension from the top of the retaining wall to the top of the barrier (■) is 900mm		

Figure 2: Diagram of the retaining wall and barrier heights (not to scale)

- 2.4. A timber barrier has been installed along the top of the retaining wall, constructed in a similar manner to that on the west-east retaining wall that was considered in the previous determination. The height of the barrier (from the top of the lagging boards) is approximately 900mm.⁴ The barrier comprises rough-sawn horizontal timber rails, with the two top boards approximately 100mm wide and the bottom rail measuring 150mm. The maximum vertical spacing between rails is 207mm.
- 2.5. The previous determination outlines the background leading up to that determination being made. No building work appears to have taken place since the previous determination was issued.
- 2.6. The owners applied for this determination for the return section of retaining wall, which was not considered in the first determination, because they continue to assert that this section of the wall complies with clause F4 *Safety from falling*.

3. Discussion

- 3.1. This determination considers the compliance of the return section of the retaining wall with clause F4 *Safety from falling*, in particular performance criteria F4.3.1 and F4.3.4(b) and (g).
- 3.2. As in the previous determination, the owners have submitted similar comments on their views about the compliance of the retaining wall and barrier.

The area is not a direct penetration of a house/building. It is reasonably far away from the deck area that is clearly a direct penetration. [We] believe the deck is adjoined to a building but the retaining wall barrier down the side is not. To access the retaining wall area from the deck, one must go down the ramp, 2 metres, then around the ramp 2-3 metres and down a set of stone steps, 4 metres. It is not a deck area or is nearby. It is not an area that affords access way or is a path to and from the property to the street. The barrier is fit for purpose and is robust, the property is not a kindergarten (frequented and purpose for children to occupy) yet is robust and has a very narrow gap. The barrier is not a style used as a seat. Access to the area is down the side, then down a path. It is safe, suitable to stop any rolling rocks, dive bottles etc. We feel it is fit for purpose, strong, tuff [sic], and is extremely safe to leave as it is.

Compliance with F4.3.1

- 3.3. Performance criteria F4.3.1 states:

Where people could fall 1 metre or more... from a sudden change in level within or associated with a building, a barrier shall be provided.

⁴ The barrier on the retaining wall is slightly lower than the barrier on the west-east retaining wall.

Limits on application

Performance F4.3.1 shall not apply where such a barrier would be incompatible with the intended use of an area, or to temporary barriers on construction sites where the possible fall is less than 3 metres, or to buildings providing pedestrian access in remote locations where the route presents similar natural hazards.

- 3.4. The previous determination concluded that a retaining wall meets the definition of a 'building' under section 8 and discussed the limits on application to F4.3.1 in relation to the west-east retaining wall. The previous determination concluded that the lawn area created by the retaining wall is associated with the dwelling and the area would not have any specialised use that a barrier would be incompatible with. The barrier was also not a temporary construction barrier, and therefore the limits on application of F4.3.1 did not apply.⁵ I consider these findings also apply to the return section of retaining wall that is the subject of this determination.
- 3.5. I must now consider F4.3.1 as it relates to the likelihood of an accidental fall from a sudden change of level of 1 metre or more associated with the retaining wall, and subject to this, the compliance of the barrier with F4.3.4(b) and (g).
- 3.6. A sudden change of level can be present before or after the building work is carried out. In this case, based on the measurements provided by the owners it appears the sudden change of level resulted from the building work associated with the construction of the retaining wall, in that fill has been placed behind the retaining wall to form the lawn area. This has resulted in a difference in ground level either side of the retaining wall. At the northern end of the retaining wall the difference in ground level is greater than 1 metre and the height of the retaining wall above the east ground level is just 100mm. In this regard I consider that there is a sudden change in level where people could fall 1 metre or more.
- 3.7. The owners have made submissions in relation to the location of the construction to the dwelling and that the frequency of children being around is low, which suggests the owners believe the current construction adequately safeguards against injury. However, the assessment is of the performance criteria and whether people could fall 1 metre or more from a sudden change of level, and if so, a barrier complying with the other performance criteria of clause F4 is required to safeguard people from injury caused by falling.
- 3.8. I note also that the meaning of "fall 1 metre or more" does not lend itself to only a vertical fall.⁶ As the term "fall" is not defined in either the Act or the Code, it must be given its normal and natural meaning. In the *Concise Oxford Dictionary*, definitions of "fall" include "descend rapidly from a higher to a lower level" and to

⁵ See paragraphs 5.14 – 5.18.

⁶ See Determination 2008/081 *Safety barrier to a deck located adjacent to a retaining wall at Oraka Beach Road, Mahia* 28 August 2008, and Determination 2014/029 *Regarding the refusal to issue a code compliance certificate for failure to comply with Building Code clause F4 for a batter slope* 12 June 2014, at paragraph 5.6.

“collapse forwards and downwards”. I note that clause F4.3.1 refers to a “sudden change of level” which in itself does not necessarily mean a vertical fall.

- 3.9. As noted in paragraph 2.2, the ground on the west (lower) side of the retaining wall slopes to the north and continues past the west-east retaining wall. Although I do not have information on the angle of the slope on the west side of the retaining wall, based on photos (including those in the previous determination), I am of the view that someone falling down the slope on the west side of the retaining wall may well continue to fall past the north end of the retaining wall, where the slope extends for several metres.
- 3.10. In conclusion, a person could fall 1 metre or more from the sudden change of level associated with the retaining wall and a barrier is required.

Compliance of the barrier with F4.3.4(b)

- 3.11. Performance criteria F4.3.4(b) requires:

Barriers shall:

...

(b) be of appropriate height

- 3.12. In the previous determination, the barrier height of 930mm was found not to comply as an acceptable solution because it did not meet the minimum height requirement set out in table 1, nor as an alternative solution because there were no compensatory features that would mean the lower height would still be effective.
- 3.13. Along the return section, the retaining wall itself is in some places up to 1140mm above the adjacent ground level to the east. However, in other places it is much lower and therefore does not on its own provide safety from falling.
- 3.14. The barrier height on the retaining wall is approximately 900mm above the lagging boards. At its lowest point, the lagging boards on the retaining wall sit 100mm above the finished ground level on the east (top) side. The overall barrier height that restricts falling will be 1000mm or more along the length of the retaining wall. Therefore, I consider the overall height of the barrier complies with clause F4.3.4(b).

Compliance with F4.3.4(g)

- 3.15. Performance criteria F4.3.4(g) requires:

Barriers shall:

...

(g) restrict the passage of children under 6 years of age when provided to guard a change of level in areas likely to be frequented by them

- 3.16. The owners have submitted that children do not frequent the property and believe children would not be able to fall through the barrier. I note here that restricting the passage of children differs from an accidental fall.
- 3.17. The previous determination discusses in paragraph 5.37 that children are likely to frequent any household at some time in its life and that “[a]lthough a current owner or tenant may not have children or be likely to have children visit, houses tend to change ownership and occupation, and therefore, the current circumstances cannot be considered a factor in the assessment of compliance”. I agree with this statement. The previous determination went on to conclude that the barrier on the west-east retaining wall does not restrict the passage of children under six years of age, based on the evidence provided (both as an acceptable solution or an alternative solution).
- 3.18. The barrier construction on the return section of the retaining wall has the same construction as that on the west-east retaining wall, with vertical gaps between horizontal members of the barrier that would not restrict the passage of children under six years of age.
- 3.19. I consider the dimensions of the retaining wall and the horizontal members of the barrier provide a readily climbable structure that would enable a child under the age of six to easily climb the barrier and either pass through or over it. In particular for the retaining wall at its southern end the lagging boards are level with the ground forming the driveway; this provides easy access to the top of the lagging where children can negotiate their way along the retaining wall to where the fall increases on the west side to more than 1 metre.
- 3.20. I therefore consider the barrier does not comply with the requirement to restrict the passage of children under six years of age.

Additional Commentary

- 3.21. The owners have made comments regarding other matters in their submissions, including requesting that “barrier heights and how substantial a barrier is to overcome, to be sanely in alignment with the seriousness of the fall height and frequency of use”. The owners also compared the need for an appropriate barrier to that of a nearby bridge and jetty, being that the bridge has “a lower order barrier... with a fall height of some 10 metres into water”.
- 3.22. I note that when considering compliance with F4.3.1, the relevant consideration is whether the circumstances are within the parameters of the performance criteria, rather than a subjective assessment of the degree of risk or injury.⁷ It is the objective of the clause F4 that discusses safeguarding people from injury caused by

⁷ Refer *Northland Regional Council v Fletcher Construction New Zealand & South Pacific Ltd* [1997] NZHC CP41/96, which considered fall heights in relation to an exemption from the requirement to obtain a building consent under the Building Act 1991.

falling, and the objective is met by complying with all relevant performance criteria.⁸

3.23. I note that Clause F4 does not consider frequency of use, instead the focus of F4 is to provide adequate barriers, where necessary, to safeguard people from injury caused by falling. While I acknowledge the owners' concerns around other potential fall-related hazards in the surrounding area, the existence of these does not diminish or alter the statutory requirements and obligations that apply to this property.

4. Conclusion

- 4.1. A barrier is required by F4.3.1 because there is a sudden change of level associated with the retaining wall that people could fall 1 metre or more from.
- 4.2. The barrier complies with F4.3.4(b) because it is an appropriate height.
- 4.3. The barrier does not comply with F4.3.4(g) because it does not restrict the passage of children under six years of age.

5. Decision

- 5.1. In accordance with section 188, I determine the timber barrier on the return section of the retaining wall does not comply with Building Code clause F4.3.4(g).

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 14 November 2025.

Peta Hird

Lead Determinations Specialist

⁸ Refer sections 16 and 18 of the Act.