

Medium-rise compliance

Going higher may help to provide much-needed housing, but there are concerns about how to demonstrate compliance when the guidance is often limited to buildings up to 3 storeys.

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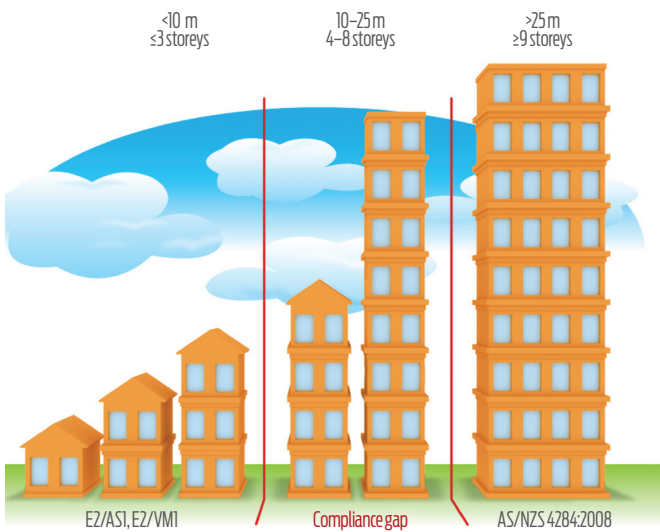


Figure 1: Medium-rise buildings currently have unclear compliance pathways for several clauses of the Building Code, including E2 External moisture.

TALLER BUILDINGS, such as apartment blocks, are one answer to the push for higher housing density in areas such as Auckland. However, buildings taller than 3 storeys (particularly those in the 4-8 storey range) currently pose challenges for the industry. These include how to demonstrate compliance with the Building Code at the consenting stage and how to deliver a building that actually works.

Compliance gap for medium-rise

Let's consider the issue of weathertightness or, more specifically how to demonstrate that a medium-rise building will meet the requirements of clause E2 *External moisture* of the Building Code.

Acceptable Solution or Alternative Solution

The basic approach is to use either an Acceptable Solution or an alternative method (this becomes an Alternative Solution when consented).

The scope of E2/AS1, the Acceptable Solution to clause E2, is limited to buildings of 3 storeys or fewer, so all medium-rise buildings fall outside this. This leaves an alternative method, which can be achieved in several ways. However, each way of proving an alternative method currently has some issues associated with it. What we find is that we have a compliance gap for medium-rise buildings.

Verification Methods and other testing limitations

One way of demonstrating that an alternative method complies with the Building Code is to use a Verification Method. For weathertightness, the existing Verification Method, E2/VM1, is also limited to buildings of 3 storeys or fewer, and so isn't directly applicable.

Another test option is AS/NZS 4284:2008 *Testing of building facades*. This standard describes a suite of tests that can be performed on a façade that cover not just water penetration but also factors such as structural and seismic performance.