COMPLIANCE PATHS – PART 1

If you're confused about how to use compliance paths in your assessments of Building Code compliance, read on.

By Greg Burn, Structure Limited, Auckland

Recent BRANZ building industry research indicates that both designers and building officials get frustrated over the extent and type of information required to support Building Code compliance, particularly when using Alternative Solutions in a building design.

Designers generally have a good understanding of what constitutes an Alternative Solution. But there seems to be some confusion about the compliance paths that can be used to ensure that sufficient relevant documentation is submitted as part of a Building Consent application. The documentation should allow building officials to accurately assess compliance and efficiently process the submission.

The two main purposes of Building Consent documentation are to:

▌ provide builders with sufficient information so they can accurately construct the building
▌ ensure that the information will allow the Building Consenting Authority (BCA) to assess and confirm compliance with the relevant clauses of the New Zealand Building Code.

The Building Code incorporates 35 technical clauses that set out the performance-based provisions for meeting the purposes of the Building Act – it is mandatory for buildings to comply with these requirements.

Designer responsibility

Although the Building Code clauses identify levels of performance that must be achieved, they don't tell you how to achieve them. The 'how' is the responsibility of the designer. The designer establishes the relevant clauses that must be complied with and then designs the building accordingly.

The designer may follow Acceptable Solutions or use Verification Methods to prove compliance. If you design and then build in accordance with an Acceptable Solution or in line with a Verification Method, the building is deemed to comply with the requirements of the relevant Building Code clause. When a 'deemed to comply' compliance path has been followed, the BCA has to accept the design as being Building Code compliant.

Alternative Solutions

But many of the Acceptable Solutions are relatively limited in scope, and there may be other reasons that lead to designers following an alternative path. For example, a desire to use different materials or details, to create a different aesthetic, or because the Acceptable Solutions may not provide a total solution.

The alternative aspects of these designs are called Alternative Solutions. They are solutions that fall outside the scope of, or are different to those provided by compliance documents.

Designers must ensure that any Alternative Solutions they incorporate in their building design are Building Code compliant. Sufficient Building Consent documentation must be provided to allow the BCA to assess and confirm compliance.

The 'proof of compliance' process

To gain their accreditation, BCAs were required to develop a range of procedures for processing Building Consent applications and confirming compliance. These procedures include means to effectively assess Alternative Solutions. Using compliance paths, BCAs assess information provided by the designer for the building (or part of the building) against Building Code requirements.

Designers must understand these compliance paths and select the relevant path or combination of paths to provide sufficient proof of compliance. To do this, the designer must clearly identify any Alternative Solution used, say why they used it and how/why they believe it complies with the relevant Building Code provisions. Sufficient supporting documentation is needed to prove compliance.

The BCA will assess this information. They don't have to accept an Alternative Solution if their assessment doesn't prove compliance. Although they shouldn't provide design advice, they must tell the designer why they believe the solution doesn't comply. Their assessment should always be on reasonable grounds and not based on personal opinion or hearsay and must always only be against the performance requirements of the relevant Building Code clause.

Nine main compliance paths

The nine main compliance paths are:

1. comparison with a compliance document
2. comparison to other documents
3. comparison with in-service history
4. expert opinion
5. comparison to a previously accepted Alternative Solution
6. product certification
7. DBH determination
8. Verification Method
9. Acceptable Solutions.

When Building Code compliance is supported by documentation using compliance paths 1–5, the assessment of compliance is at the discretion of the BCA. They may decide that the solution is not Code compliant and therefore not acceptable.

Compliance paths 6–9 are the 'deemed to comply' means of compliance. When compliance is supported using these, and if the BCA believes that the solution is within scope, they are obliged to accept it as being Code compliant.

Part 2 in the next issue of Build.