Acceptable Solutions and Verification Methods

Acceptable Solutions and Verification Methods are produced by MBIE and, if followed, must be accepted by a building consent authority (BCA) as evidence of compliance with the Building Code.

Following an Acceptable Solution or Verification Method is not mandatory. They can also be useful when demonstrating how proposed building work will comply as an alternative solution. You could use them in part or in comparison alongside other evidence.

The Building Code, Acceptable Solutions and Verification Methods follow a five-level structure that is aligned with an international approach to performance-based building regulations.

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Objective</td>
<td>The social objective the building must achieve.</td>
</tr>
<tr>
<td>2. Functional requirement</td>
<td>What the building must do to satisfy the social objective.</td>
</tr>
<tr>
<td>3. Performance criteria</td>
<td>Qualitative or quantitative criteria which the building must meet in order to comply.</td>
</tr>
<tr>
<td>4. Verification method</td>
<td>Prescriptive test or calculation method that provides one means of compliance.</td>
</tr>
</tbody>
</table>

Mandatory refers to parts of the Building Code that must be met. Acceptable Solutions and Verification Methods are non-mandatory means of compliance.


Building Code clauses generally have one or more Acceptable Solution and may also have more than one Verification Method.

Acceptable Solutions and Verification Methods are referred to by the Building Code clause and unique identification number, for example: the Acceptable Solution for Clause E2 External Moisture is known as E2/AS1 and the Verification Method for Clause G4 Ventilation is known as G4/VM1.

The exceptions to this format are the Simple House Acceptable Solution and Backcountry Huts Acceptable Solution, which both relate to more than one Building Code clause.

Additionally, the Acceptable Solutions for clauses C1 to C6 Protection from fire do not related to one particular ‘C’ clause.

Example

Below is an example of how the Building Code and Acceptable Solutions and Verification Methods work together, using Clause G8 - Artificial Light.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G8.1</td>
<td>The objective of this provision is to safeguard people from injury due to lack of adequate lighting.</td>
</tr>
<tr>
<td>G8.2</td>
<td>Spaces within buildings used by people shall be provided with adequate artificial lighting which, when activated in the absence of sufficient natural light, will enable safe movement.</td>
</tr>
</tbody>
</table>
3. Performance

G8.3 Illuminance at floor level shall be no less than 20 lux.

4. Verification Method G8/VM1

1.0 Illuminance

1.0.1 An acceptable Verification Method for the measurement of illuminance is contained in NZS 6730 Section 11. (Continues with paragraphs 1.0.2 to 1.0.5)

5. Acceptable Solution G8/AS1

1.0 Illuminance

1.0.1 To provide a minimum illuminance of 20 lux, the total wattage required per m$^2$ of floor area is shown in Table 1. (Continues with paragraphs 1.0.2 to 1.0.3)

Note: how the Building Code sets the objectives, functional requirement and performance requirement for Clause G8 Artificial light, while the Verification Method and Acceptable Solution provide practical information on one way to meet the requirements of Clause G8.

Acceptable Solutions (AS)

Acceptable Solutions give specific construction details, often for commonly used building materials, systems and methods. Designs based on them must be accepted by BCAs as demonstrating compliance with the Building Code.

Acceptable Solutions show step-by-step building methods (for example, what insulation is needed in the wall of a house to comply with the energy efficiency requirements of the Building Code).

There are other ways to demonstrate compliance, and an alternative solution can refer in part, or wholly, to an Acceptable Solution.

Verification Methods (VM)

Verification Methods are tests or calculation methods that prescribe one way to comply with the Building Code.

Verification Methods can include:

- calculation methods: using recognised analytical methods and mathematical models
- laboratory tests: using tests (sometimes to destruction) on prototype components and systems
- tests-in-situ: which may involve examination of plans and verification by test, where compliance with specified numbers, dimensions or locations is required (non-destructive tests, such as pipe pressure tests, are also included).

Find AS and VM by building element

The Building Code handbook (https://www.building.govt.nz/building-code-compliance/building-code-and-handbooks/building-code-handbook/) contains an index to show which Acceptable Solutions or Verification Methods apply to different building elements. For example:

- Solid fuel appliances........................................................................................................... C/VM1 1.1
  - see also Preparation of fire occurring
- domestic ......................................................................................................................... B1/AS3 2.0
- limited heat transfer........................................................................................................ C/VM1 1.1.1

Amendments and versions

MBIE may change Acceptable Solutions and Verification Methods at any time. Previous versions of the Acceptable Solutions and Verification Methods are made available for reference.

Check the front few pages of the most recent online version of each Acceptable Solution and Verification Method. This gives a record of
amendments. Changes are also noted alongside the text.


You can keep up to date with changes by signing up to receive our news and updates.

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Compliance Documents

The term ‘Compliance Documents’ had a particular meaning in the Building Act 2004 in relation to documents issued by MBIE. The Act was amended in November 2013 and that collective term was replaced by the terms ‘Acceptable Solution’ and ‘Verification Method’.

Acceptable Solutions and Verification Methods had already been in existence within the compliance documents issued by MBIE. ‘Compliance Documents’ will continue to be available until they are updated. The Acceptable Solutions and Verification Methods they contain will continue to be an acceptable standard of compliance with the Building Code.