



E2/AS1

External Moisture Acceptable Solution E2/AS1

The Building Code clause for External Moisture (E2) requires that buildings must be built to resist leaks, damp or the accumulation of external moisture in concealed spaces.

Acceptable Solution E2/AS1 is a supporting document to the Building Code clause for External Moisture. Use it for timber-framed buildings, especially structures designed and constructed to NZS 3604 Timber-framed buildings. This solution provides one way of complying with the Building Code clause for External Moisture.

E2/AS1
changed on
1 August 2011

Changes to Acceptable Solution E2/AS1 effective 1 August 2011

These changes are included in Amendment 5 of the E2 External Moisture Compliance Document which can be downloaded from www.dbh.govt.nz/compliance-documents.



The revised E2/AS1:

- Contains many new details for roof and wall cladding materials.
- Claddings are unchanged, but there are important changes to the Drawings, Tables and Text, based on new research and changed industry practice.
- Retains the same document format so users can easily see changes.



What are the most important changes to E2/AS1?

Allowance for higher wind speeds

- Wind zone limits have been extended from 50 m/s to 55 m/s. This allows more buildings to be designed under the Acceptable Solution.
- There are extra design and construction requirements, especially for dealing with the higher wind pressures.

Wider use of drained cavities

- Drained cavities are now required with all 'monolithic' claddings and for parapets or enclosed balconies.
- Current drained cavity details are retained, but there are more specific requirements for rigid wall underlays in Extra High wind zones.
- Special requirements for incorporating different types of cavity battens as alternative solutions have been included.

E2/AS1 has been improved to work better with the revised NZS 3604. Use NZS 3604 for structure and E2/AS1 for the roof and wall claddings.



E2/AS1

External Moisture CHANGES

? What are the most important changes to E2/AS1? cont

Doors and windows

- Previous restrictions on window and door opening types have been removed, and there are more extensive details for door sills.
- Sill support bars and mechanisms are compulsory, and manufacturers of sill supports will need to disclose the loading limits of their products. Other door and window details in drained cavities are largely unchanged.
- There are changes for windows and doors in direct-fixed claddings, especially for sill flashings and details at opening jambs.
- There are changes to existing maximum opening limits, with new limits on opening areas.
- Aluminium window and door frames now require back flashings behind jamb/sill mitre joints, to be installed at point of manufacture.

Sill support bars and mechanisms are now compulsory for use with windows.

Attached garages

- Requirements for garages incorporated as part of a dwelling or similar building, are now included in the Acceptable Solution.

Soffits

Details for soffits have been added, including soffits abutting window and door heads.

Material selection tables

- Material selection Table 20 has been changed to align with the Exposure Zones in NZS 3604, with risks from industrial and geothermal atmospheres now requiring specific design.
- A new Climate Zone E for sites close to breaking surf is included, requiring designers to consult manufacturers of steel claddings.

Transition period

1 August 2011 to 31 January 2012, both current and new versions apply.
From 1 February 2012 only the new version (amendment 5) applies.



? What is an Acceptable Solution (AS)?

An Acceptable Solution details one way to comply with the relevant part of the Building Code. If you follow the solution described, your building work will meet that part of the Building Code.

Want to know more? www.dhb.govt.nz/compliance-documents

