

Rely on the right standard

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In an effort to fast track certification approvals, some shed makers are resorting to standards that were not actually framed to cover the realities of those structures rather than using AS/NZS 1170.

Shed designers who design a series of buildings intended for a range of applications (and building classes) should use AS/NZS1170.2.

Using the correct standard will mean the correct building is supplied, but some unprofessional shed companies use the Australasian housing standard to describe their sheds as the housing standard is better known by certifiers.

Apart from being lighter in weight, sheds vary greatly in size, height, length and geometric shape from house structures.

As a consequence, a certifier may approve a shed that is incorrect on the basis of knowing what is required for housing in the

local area. The reality is that houses are constructed quite differently to sheds and the design range permitted by that standard is limited in scope.

For instance, using housing wind speed nominations for sheds is highly inappropriate.

For determination of wind actions, AS/NZS 1170.2 is referenced in both Volume 1 and 2 of the Building Code of Australia (BCA). AS/NZS 1170.2 may be used to determine wind actions in virtually all situations for all building classes and all importance levels.

But AS 4055 (Wind Loads for Housing) referenced only in Volume 2 is limited by its Scope (housing) and Limitations (length, width, height and roof pitch). AS 4055 is only applicable for structures with an Importance Level 2 since annual probability of exceeding has been taken as a one in 500 chance.

If a building is not a house or is larger than the AS 4055 geometric limitations, or has an importance level higher than two, AS 4055 cannot be used for determining wind actions and AS/NZS 1170.2 must be used.

The BCA A3.1: defines “The classification of a building or part of a building determined by the purpose for which it is designed, constructed or adapted to be used” A ‘shed’ could be designed or adapted as virtually any class of building.

The BCA Volume 1 covers Class 2 to 9 buildings, some Class 10b structures and disabled access requirements in all buildings.

The BCA Volume 2 covers Class 1 and Class 10a buildings. A Class 10a building is “a non-habitable building being a private garage, carport, shed or the like”.

Designs developed using AS/NZS 1170.2 are legitimate for Class 10a sheds used in residential areas and should not be required to be referenced to AS 4055. The system of wind speed classes (i.e. N2, C1) is defined only in AS 4055 and is not used or referred to in AS/NZS 1170.2.

