

Advisory Notices are issued to assist in the interpretation of the Planning, Development and Infrastructure Act 2016

TECHNICAL: Removal of wind speed data from government mapping systems

This Advisory Notice provides advice about the removal of wind speed data that was previously available on State Government mapping systems including [Location SA Viewer](#) and the [South Australian Property and Planning Atlas](#). It further details the appropriate process for determining wind speed categories for the design, assessment and construction of buildings.

Background

The wind speed data previously available on the [Location SA Viewer](#) and the [South Australian Property and Planning Atlas](#) webpage was developed for use with the South Australian Housing Code (SAHC), which formed part of the Building Rules under the *Development Act 1993*. The SAHC was withdrawn in 2012 as part of the state's commitment to reducing the number of state variations within the National Construction Code. Following the withdrawal, the wind speed data remained for the purposes of providing general guidance only and had no legal status. From 2012 onwards wind speed categories were required to be determined in accordance with the relevant standards within the National Construction Code (NCC).

Discussion

The adoption of the Planning and Design Code under the *Planning, Development and Infrastructure Act 2016* (PDI Act) required a review of existing data layers, and the addition of some new layers to implement the state-wide planning reforms. The wind speed data layers were identified as being both obsolete and no longer required for statutory purposes and were therefore removed from both [Location SA Viewer](#) and the [South Australian Property and Planning Atlas](#).

Determination of wind speed categories

A building or structure must be designed and constructed to withstand a combination of dead and live loads, including wind actions. The magnitude of these actions must be determined in accordance with either AS/NZS 1170.2 *Structural design actions* (all classes of buildings) or AS 4055 – *Wind loads for housing* (domestic buildings only). Relevant wind regions are detailed in the maps provided within the Standards, with versions of the maps also provided within the NCC.

The Standards include complex mathematical calculations, and it is critical that the person making the determination can apply the Standards appropriately. It is therefore recommended that an appropriately qualified engineer be engaged to determine the magnitude of the wind actions, a process that will involve a site-specific assessment be undertaken. The site assessment and the determination of the subsequent actions will ensure that structural members and connections are designed to withstand the wind pressures imposed on the building at the site.

The determination process must be fully documented and incorporated with the application information provided to the Accredited Professional engaged to undertake the building rules assessment.

Recognition of previous wind speed categories

In certain instances where the wind speed has previously been determined for a particular allotment, the data may be considered acceptable in determining appropriate construction practices without requiring a new site assessment. An example would be where a home was designed and constructed based on a specific wind speed and sometime later the owner proposes to construct an addition to the home. If the parameters that determined the original wind speed, such as shielding, have not substantially changed, it may be acceptable to design the addition to the home based on the previously determined wind speed. Building owners and practitioners are recommended to consult with the relevant Accredited Professional to determine if this approach is acceptable.

The basis of accepting a previously determined wind speed assessment must be fully documented. Practitioners, including Accredited Professionals, should exercise caution and give regard to the version of the Australian Standard used to determine the original wind speed and to what degree, if any, the requirements of the Standard, and the site specifics, have changed.

Further information

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