

**Supplementary
Submission
No 30A**

INQUIRY INTO APARTMENT DESIGN STANDARDS

Organisation: City of Yarra

Date Received: 29 October 2021

8.4 Submission to the Inquiry into Apartment Design Standards

Executive Summary

Purpose

The purpose of this report is to seek Council's approval for a submission to the *Victorian Legislative Assembly Environment and Planning Standing Committee* in relation to the *Better Apartment Design Standards*.

The submission is to respond to the following *Terms of Reference* statements:

- (a) improvements that can be made to the liveability in apartments and apartment building developments, including communal areas; and
- (b) initiatives undertaken by other states or nations that have improved apartment design standards.

Key Issues

The officer report provides an analysis of the existing *Better Apartment Design Standards* contained within Planning Schemes and whether they are delivering liveable apartments and where the provisions can be improved.

The officer report also provides recommendations out of this analysis for the basis of suggested improvements to the apartment provisions.

The recommendations provided are intended to form the basis of a Council submission to the Inquiry.

Financial Implications

There are no financial implications for Council.

8.4 Submission to the Inquiry into Apartment Design Standards

Reference	D21/142592
Author	Amy Hodgen - Senior Coordinator Statutory Planning
Authoriser	Manager Statutory Planning

Purpose

1. The purpose of this report is to seek Council's approval for a submission to the Victorian Legislative Assembly *Environment and Planning Standing Committee* that are looking into the *Better Apartment Design Standards* contained within Planning Schemes.
2. The submission is to respond to the following *Terms of Reference* statements:
 - (a) improvements that can be made to the liveability in apartments and apartment building developments, including communal areas; and
 - (b) initiatives undertaken by other states or nations that have improved apartment design standards.
3. The officer report provides comments in relation to the current standards contained in the *Apartment Design Standards*, and also highlights where improvements are highly desirable.

Critical analysis

History and background

4. Some background to design standards for Apartments is useful for context.
5. In 2017, the Minister for Planning introduced the **Better Apartments Design Standards (BADS)** into the *Victorian Planning Provisions*. This is part of the Yarra Planning Scheme.
6. The intent for these new controls was to improve the internal design of new apartments and make them more liveable and sustainable. This was in response to general concerns that apartment developments were not providing safe, liveable and healthy environments.
7. These controls were introduced into the Yarra Planning Scheme (**the Scheme**) on 13 April 2017 via Amendment VC136 at clauses 55.07 (apartment developments up to 4 storeys) and clause 58 (apartment developments of five or more storeys).
8. Amendment VC136 also introduced the following definition for an 'Apartment' at clause 73.01 (general terms) of the Scheme:

A dwelling located above the ceiling level or below the floor level of another dwelling and is part of a building containing two or more dwellings.
9. Amendment VC139, gazetted on 29 August 2017, introduced *new* guidelines for apartment developments: *Urban Design Guidelines for Victoria* (DELWP 2017) and subsequently deleted redundant references to the Design Guidelines for Higher Density Residential Development (DSE 2004).
10. In August 2019, the Department of Environment, Land, Water and Planning (**DELWP**) released a discussion paper on the next phase of the apartment standards for feedback. This involved a review of the following five elements:
 - (a) green space;
 - (b) high quality building facades;
 - (c) protection from wind impacts;
 - (d) attractive engage streets; and

- (e) better managed construction impacts.
- 11. A report was presented to Council on 24 September 2019 (refer to attachments) with a recommended response. This was largely supported by Council subject to some minor refinements (refer to minutes in the attachments).
- 12. On 1 March 2021, DELWP released a soft launch of the updated standards to BADS (refer to attachments), which have been designed to address four main policy aims:
 - (a) provisions of communal green space and improving landscaping;
 - (b) use of high-quality building facades;
 - (c) protection of streets from wind impacts; and
 - (d) creation of attractive and engaging street frontages.
- 13. **These elements have not yet been updated within the Planning Scheme, however, DELWP indicated that this was likely to occur before the end of 2021.**
- 14. Recently, on 22 September 2021, Council was invited by the *Victorian Legislative Assembly Environment and Planning Standing Committee* to make a submission to its Inquiry into the current Apartment Design Standards. The closing date for submissions is Sunday, 31 October 2021.

Discussion

- 15. The following report is an analysis of the current Apartment Development provisions contained within the Scheme at Clause 55.07 and Clause 58.
- 16. Recommendations are also identified where improvements could be made to the liveability of apartments.
- 17. These recommendations are based on officer experiences with previous apartment applications, and also some examples drawn from planning controls in other states such as NSW and WA as well as an international example (London).
- 18. The following analysis of the current Apartment Design Standards is made under specific headings; and the recommendations are collated in the Officer Recommendation to comprise the basis of a submission by Council to the Inquiry.

Integration with the street

- 19. Standard D5 (Integration with the street) currently lacks detail, however, this is proposed to be improved by the draft update to BADS released in March of this year.
- 20. Whilst the revised standard does include greater guidance, such as limiting blank walls and concealing car parking and waste from the street, it does not address building services (gas/substations/water metres), which can affect a development's integration with the street (particularly on narrow sites). These services are often not properly considered until after development has been approved and undermines the integrity of the building's relationship with the street.

Recommendation

- (a) Update Standard D5 to require services to be integrated within the development and to comprise a maximum of 10% of the frontage.

Climate comfort

- 21. Standard B35/D6 (Energy efficiency) includes guidelines for maximum cooling loads, however, these are calculated as an average across the entire apartment. In doing so, this fails to consider excessive heat gain to individual rooms, particularly bedrooms.
- 22. To improve passive energy design and reduce reliance on mechanical cooling systems, a recommendation is to require external shading devices or energy efficient glazing to all north, east and west facing habitable room windows.

Recommendation

- (a) Update Standard B35/D6 to require external shading devices or energy efficient glazing to be provided to all north, east and west facing habitable room windows.

Communal Open Space

- 23. Standard B36/D7 (Communal Open Space) is currently only required for developments of 40 or more dwellings and requires either 2.5sqm per dwelling or 250sqm, whichever the lesser.
- 24. The proposed update to the BADS released March of this year sought to amend this to require communal open space for developments of 10 or more dwellings. This amendment is supported.
- 25. The proposed changes to BADS would require communal open space to be provided at 30sqm for 10 dwellings and 2.5sqm for every dwelling over 12 dwellings or 220sqm, whichever the lesser. This is supported subject to the maximum area being retained at 250sqm.
- 26. Also, under the proposed changes to BADS, the additional area of communal open space required for developments of 13 or more dwellings, may be provided either indoors or outdoors, and may also consist of multiple separate areas of communal open space. This suggests that large developments would only need to provide 30sqm of outdoor space with the remaining requirement being provided indoors, which would be grossly insufficient for a large apartment development. Whilst there is value to good internal communal spaces, it should not be in lieu of adequate external communal open space.
- 27. Internal communal spaces can contribute to the amenity and liveability of apartment occupants, providing large spaces in which to entertain guests or meet other residents such as dining rooms with kitchen facilities, cinema rooms, gyms and co-working areas.
- 28. It is also important for there to be good connectivity between internal and external communal spaces, which improves outlook and functionality of the spaces. An example of well-connected communal open and internal spaces is provided in the image below of Planning Permit PLN16/0922 at No. 1-57 Wellington Street & 71-77 Victoria Parade, Collingwood.

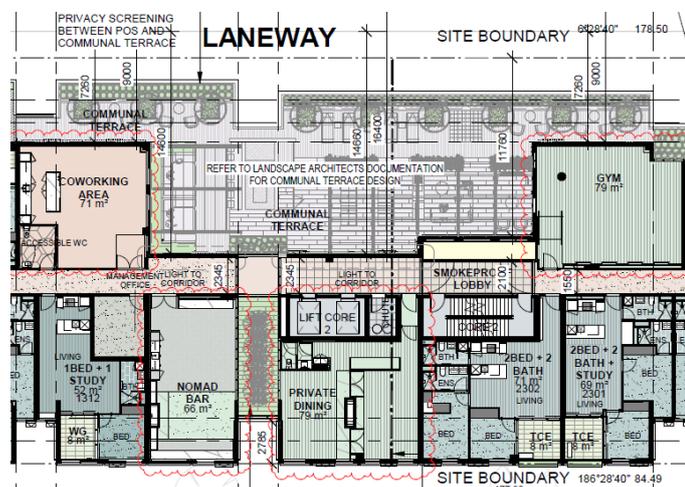


Figure 1: Communal spaces in PLN16/0922 – 1-57 Wellington Street & 71-77 Victoria Parade, Collingwood

- 29. It is recommended that Standards B36/D7 are amended to require internal communal spaces in addition to external open spaces at the same rate i.e. 30sqm for 10 dwellings with an additional 2.5sqm for every dwelling above 12 dwellings, or 250sqm, whichever the lesser.
- 30. To avoid ambiguity, it is also recommended that the standard be renamed to ‘Communal Spaces’.
- 31. An existing standard requires communal open space to be located to minimise noise impacts on new and existing dwellings. The expectations of this standard are vague. It is recommended that this be clarified via more quantifiable criteria e.g. distance from bedrooms.

Recommendation

- (a) Standard B36/D7 to retain the maximum Communal Open Space area as 250sqm;
- (b) Support the proposed amendments to BADS released March 2021 requiring communal open space to be provided for developments of 10 or more dwellings;
- (c) Object to communal open space above 30sqm being transferable to internal communal areas;
- (d) Standard B36/D7 to require internal communal space in addition and equivalent to the revised requirements for external open space (increasing to 250sqm);
- (e) Rename Standard B36/D7 to 'Communal Spaces' to avoid ambiguity; and
- (f) Quantifiable locational criteria to minimise noise impacts on new and existing dwellings.

Overlooking/Building Separation

32. Standard D14 (Building Separation) is vague. While it seeks to avoid direct views into habitable room windows and private open space, there are no parameters e.g. such as those found within Clauses 54 & 55 leaving developers, planning officers and the community unsure of reasonable overlooking outcomes.
33. Furthermore, while Standard D14 suggests that buildings should be sited to ensure adequate daylight into new habitable room windows, it provides no protection for existing habitable room windows e.g. within existing adjacent apartment buildings, which may be impacted.
34. Assessing adequate daylight also requires daylight modelling to be provided and standards to be met. This should be stipulated to ensure new development does not unreasonably impact the amenity of existing apartments and similarly that there is a benchmark for daylight standards in new developments.
35. Standard D15 (internal views) only refers to overlooking to a lower level dwelling directly below. The standard is vague i.e. omits detail similar to that found within Clause 54/55 (ResCode) and does not require any protection for adjacent apartments.
36. The poor direction within these standards risk apartment occupants being exposed to unreasonable overlooking.

Recommendations

- (a) Update standard D14 to ensure buildings are sited to ensure adequate daylight is retained for existing habitable room windows (as well as proposed);
- (b) Require daylight modelling to be provided when certain specified separation distances are not achieved for both existing and proposed habitable room windows; and
- (c) Include more prescriptive measures for assessing overlooking e.g. similar to clause 54/55.

Noise impacts

37. Standards B40/D16 has an unreasonably high threshold for road noise, with many high-frequency roads not achieving the applicable 40,000 Annual Average Daily Traffic Volume (AADTV) threshold for acoustic protection. For example, Hoddle Street (between Langridge St & Victoria Pde) has an AADTV of 32,000 vehicles and typical main Roads such as Smith Street (Between Alexandra Pde & Johnston Street) has an AADTV of 6,200 vehicles and Johnston Street (Between Wellington St & Hoddle St) has an AADT of 7,100 vehicles.
38. Based upon acoustic reports received for applications along these streets, additional acoustic measures have been required to ensure adequate noise protection is achieved. The standard should be modified to require acoustic protection for developments abutting main roads with lower AADT volumes, such as 5,000 AADTV.
39. The noise level criteria within Standards B40/D16 is considered to provide insufficient noise protection and would not meet the recently updated EPA Noise Protocol: '*Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises*

and entertainment venues'. This is because the noise levels within the Standard are based on a whole day or night average, whereas the Noise Protocol levels are averaged over the loudest 20 minutes. The potential impact of this is that existing businesses within the industrial zone may be required to control their emissions due to a new apartment development nearby, potentially at a considerable cost. It is therefore recommended that Standard B40/D16 is updated to align with the updated EPA Noise Protocol.

40. Standards B40/D16 also need to have consideration for vibration particularly for development proximate to railways servicing freight trains. With policy support for developments along trainlines, consideration needs to be given to vibration as it can be detrimental for amenity. It is also not an issue that can necessarily be resolved via retrofitting a development.
41. The current standards do not consider potential noise sources from within apartment developments, which may be detrimental to amenity. The NSW design guidelines, for example, include consideration of noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas, requiring these to be located at least 3m away from bedrooms. A similar standard should be considered.

Recommendation

- (a) Revisit the threshold for roads to include sites abutting main roads of a lower order than 40,000 AADTV, i.e. 5,000 AADTV;
- (b) Revise standards to align with the updated EPA Noise Protocol: '*Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues*';
- (c) Standards to require the consideration of vibration for developments proximate to railways servicing freight trains; and
- (d) Standards to consider noise sources within apartment developments, such as garage doors, driveways, service areas, plant rooms, active communal open spaces and circulation areas, such as requiring these to be located at least 3m away from bedrooms.

Accessibility

42. Existing Standards B41/D17 relating to accessible apartments are supported to meet the needs of people with limited mobility, however, clarity is required for some of the standards.
43. The following standard is ambiguous '*a main bedroom with access to an adaptable bathroom*'. It is unclear whether 'access' an adaptable bathroom needs to be connected to the main bedroom or to demonstrate a 1.2m clear path.
44. The standard requiring a clear 1.2m wide path through the dwelling should be clarified to ensure that it is clear of usable areas e.g. minimum living room areas.
45. The current Accessibility Objective also omits Decision Guidelines, which are provided for all other objectives and standards in Clause 55.07 and 58. This would assist in understanding considerations prior to determining an application and it is recommended that they be added.

Recommendation

- (a) Standard B41/D17 to clarify whether 'access' to an adaptable bathroom needs to be directly connected i.e. ensuite to the main bedroom or otherwise provide a 1.2m clear path; and
- (b) Include Decision Guidelines into the Accessibility standard of B41 & D17.

Building entry and circulation

46. The design standards for building entry and circulation offer minimal guidance, resulting in some cases, narrow and long corridor spaces. For example, the former *Guidelines for Higher Density Residential Development*, which have since been removed from the Scheme, included the following design suggestions:

- (a) Ensure that the main entry and individual dwelling entries allow for the delivery or removal of large furniture items;
 - (b) Ensure service lifts can accommodate large furniture items to the upper levels; and
 - (c) Quality internal circulation spaces:
 - (i) have a generous height and width to maximise space and light; and
 - (ii) are articulated by small lobbies, if corridors are exceedingly long.
47. Standard D18 omits the above guidance to the detriment of circulation spaces.
48. In addition to the above design suggestions, it is recommended that minimum common corridor dimension for both width and length are specified. It is recommended that these be a minimum of 1.8m and 2.1m at lift lobbies to support comfortable passing and delivery/removal bulky furniture. It is further recommended that the length of corridors is reduced to a maximum length of 18m as borrowed from the Western Australia planning standards.
49. In the NSW design guidelines, corridors greater than 12m in length from the lift core should be articulated. Design solutions may include a series of foyer areas with windows and spaces for seating or wider areas at apartment entry doors and varied ceiling heights. These design solutions are recommended to ensure high quality internal spaces.
50. The provision for wider and articulated corridors was a concern raised within the Victorian Civil and Administrative Tribunal (**the Tribunal**) decision of CP Alphington Development Pty Ltd v Yarra CC [2018] VCAT 1725, with the Tribunal making the following comments at Paragraph 55:
- (a) *Mr McGurn shared the concern of Council regarding the length of the eastern corridor at Level 2 and 3 and put that whilst it is 1.8 metres in width, it is extensive in length and has a daylight source at the southern end only. Mr McGurn recommends the provision of a break and an additional natural light source to provide 'relief' and a better level of amenity to this area. We agree with this recommendation and will require this change. We will include a condition that requires a break in the building to provide further ventilation, light and relief to a long walkway.*
51. There are also no standards to protect the amenity of dwellings abutting circulation spaces. Also, borrowing from the Western Australia planning standards, a 1.5m separation from any windows is recommended.

Recommendations

- (a) Introduce greater design guidance within the Building entry and circulation standards as previously provided within the former *Guidelines for Higher Density Residential Development*; and
- (b) Include more prescriptive criteria for corridor widths and lengths e.g. 1.8m wide and 2.1m at lift lobbies and 18m maximum corridor length, with corridors over 12m including articulation, such as foyer areas, spaces for seating, wider sections near entry doors and varied ceiling heights.

Private Open Space

52. Standard B43/D19 (Private Open Space) introduced a sliding scale for balcony areas relative to the number of bedroom within an apartment. Additional areas are also now required where cooling and heating units have been provided. These changes are supported.
53. However, the wording within the standard does not clarify that minimum areas must be meet as a single usable area and achieving the minimum dimension as shown in the *Apartment Design Guidelines for Victoria* (see image below). It is recommended that this is integrated into the standard.

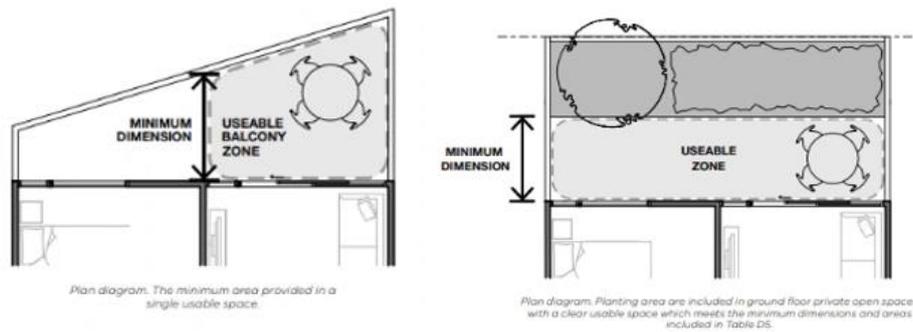


Figure 2: Images from p70 of the *Apartment Design Guidelines for Victoria*

54. The proposed update to the BADS standards released in March this year seeks to reduce the minimum balcony areas where orientated to the north or south (standard refers to orientation of the dwelling, but it is assumed that this is meant orientation of the balcony). To the north, balconies to apartments of all sizes would only need to be 8sqm and 1.7m in depth and to the south, balconies to apartments of all sizes would only need to be 8sqm and 1.2m in depth. The reason for this reduction is unclear, however this is strongly discouraged as it will significantly reduce the amenity of these apartments, particularly those with a southerly balcony orientation.
55. The updated BADS would not require balconies for developments above 40m, requiring instead larger living and bedroom areas. It is assumed that is due to the micro-climate at this height. Whilst few developments in Yarra would currently exceed this height, it is suggested that winter gardens should also be encouraged as an alternative.

Recommendations

- (a) Update Standards B43/D19 to show minimum floor areas to comply and include useable balcony areas to meet minimum dimensions as per practice note;
- (b) Delete proposed amendments to BADS reducing balcony sizes with a southerly or westerly orientation; and
- (c) Encourage winter gardens for developments over 40m.

Storage

56. Standard B44/D20 introduced requirements for minimum storage within the dwellings. This is supported as it has increased cupboard space provided within apartments, with apartments now providing generous built in robes for all bedrooms, bathroom and kitchen cabinetry and often linen closets.
57. However, the standard does not require a minimum consolidated area of storage, which is also important for storing bulky items such as strollers, ski equipment or surf boards. It is therefore recommended that storage volumes required in addition to the minimum internal storage is to be provided as a consolidated storage unit i.e. 3m³ for studios, 4m³ for 1 bedroom, 5m³ for 2 bedroom and 6m³ for 3 or more bedroom apartments.

Recommendation

- (a) Storage, in addition to minimum internal storage, to be provided as a consolidated storage unit i.e. 3m³ for studios, 4m³ for 1 bedroom, 5m³ for 2 bedroom and 6m³ for 3 or more bedroom apartments.

Functional layout/ Room depth

58. Standards B46/B24 (Functional layout) introduced minimum bedroom and living room sizes, which have significantly improved the amenity of apartments, however, it is recommended that living area dimensions include both a width and depth (similar to bedrooms) to avoid elongated spaces with narrow depths.
59. It is noted that the updated BADS proposes to introduce minimum areas for bedrooms, this is also supported.

- 60. A shortfall of the standards is that there is no requirement to allocate space in apartments for a dining table or any guidance on kitchen location. This could be addressed by introducing minimum dimensions for open plan living spaces, inclusive of kitchens and a dining area into Standard B47/B25 or/as well as minimum total apartment floor areas.
- 61. The NSW guidelines include a design guideline that *kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)*. It is encouraged that a similar standard is introduced for all apartments into the Functional layout.
- 62. There is also insufficient guidance in the Scheme for studio apartments, with often these suffering from poor internal amenity, with only a 10sqm living area required to meet the standard. Studios are again becoming increasing common as a housing option within development and more guidance is required to ensure a minimum amenity level is achieved.
- 63. In both the NSW and London planning guidelines, for example, minimum floor areas are nominated for various apartment sizes, including studios, as illustrated in the tables below:

Number of bedrooms (b)	Number of bed spaces (persons (p))	Minimum gross internal floor areas and storage (sqm)			
		1 storey dwellings	2 storey dwellings	3 storey dwellings	Built in storage
1b	1p	39 (37)*			1
	2p	50	2b	2b	1.5
2b	3p	61	1b	1b	2
	4p	70	1b	1b	
3b	4p	74	1b	1b	2.5
	5p	86	1b	1b	
	6p	95	1b	1b	
4b	5p	90	1b	1b	3
	6p	99	1b	1b	
	7p	108	1b	1b	
	8p	117	1b	1b	
5b	6p	103	1b	1b	3.5
	7p	112	1b	1b	
	8p	121	1b	1b	
6b	7p	116	123	129	4
	8p	125	132	138	

*Where a studio / one-bedroom one-person one-bedspace (i.e. one single bedroom) dwelling has a shower room instead of a bathroom, the floor area may be reduced from 39 sqm to 37 sqm, as shown bracketed.

Figure 3: excerpt from London planning regulations

Apartment type	Minimum internal area
Studio	35m ²
1 bedroom	50m ²
2 bedroom	70m ²
3 bedroom	90m ²

Figure 4: excerpt from NSW planning regulations

Recommendations

- (a) Introduce minimum widths for living spaces;
- (b) Introduce minimum open plan dimensions i.e. to accommodate a dining table and kitchen;
- (c) Include a standard that kitchens are not be located as part of the main circulation space (such as hallway or entry space); and
- (d) Introduce minimum apartment floor areas, particularly for studio apartments.

Windows

64. Standards B48/D26 (windows) introduced requirements that addressed poor internal amenity outcomes caused by “saddleback” bedroom layouts. This has resulted in a notable improvement to apartment floor layouts in recent developments. The standards also assist in discouraging bedrooms with borrowed light.
65. The Standards, however, do not take into consideration windows to an external wall that faces onto a covered or inset balcony. These can have significant impacts on daylight levels, particularly at lower levels. It is recommended that a standard is added to account for windows affected by covered or inset balconies. This should also require the submission of daylight modelling to assess those affected apartments.

Recommendation

- (a) Include standards to address windows facing onto a covered or inset balcony and requirements for daylight modelling to be provided.

Natural Ventilation

66. Standards B49/D27 requires breeze paths up to a maximum of 18m. It is recommended that this be reduced to 15m to align with the cross flow ventilation requirements of Built Environment Sustainability Scorecard (BESS).

Recommendation

- (a) Reduce the maximum breeze path for cross-ventilation from 18m to 15m to align with BESS.

Wind

67. Presently, there is no specific guidance on wind impacts within the *Apartment Development Standards*. The proposed updated BADS released in March of this year proposes to introduce new standards and a practice note for assessing wind. This is supported.
68. In Council’s submission to the draft BADS standards released in 2019, Council raised several concerns that have not been addressed in the proposed BADS released in March this year.
69. Including a standard stating that ‘*development should not cause unsafe wind conditions*’ suggests that there may be situations where unsafe wind conditions may be accepted. This is ambiguous and could result in dangerous outcomes. The second standard ‘*development should achieve comfortable wind conditions*’ should be applied to all situations, i.e. also to communal and private open spaces, to ensure all outdoor areas are usable at all times.
70. The ‘comfortable’ criteria within the Table refers to a “mean speed” rather than a “specific direction” criteria. Melbourne’s wind climate experiences strong northern and westerly wind gusts, however, other wind directions are typically milder. Using an average speed across all directions will mask more severe wind impacts from northerly and westerly winds, resulting in uncomfortable and potentially, unsafe, spaces.
71. Greater guidance is required to establish where sitting, standing and walking criteria is to be met. Informed by advice from various Wind Consultants, it is standard practice to apply:
 - (a) Walking comfort for footpaths and other pedestrian thoroughfares;
 - (b) Standing comfort for building entrances, communal terraces and open space; and
 - (c) Sitting comfort for outdoor café seating.
72. However, more recently, Council has been advocating for sitting comfort for seating areas in communal terraces and private open spaces. The requirement for sitting comfort criteria within communal open space was supported by the Tribunal in SMA No. 17 Pty Ltd v Yarra CC [2020] VCAT 1364, which made the following comments at paragraph 111-113 (emphasis added):

- (a) *The key concerns relating to the wind impacts are in respect of the rooftop communal open space area. The evidence is that walking criterion is an acceptable outcome for this area. The Council does not agree, arguing that sitting criterion should be achieved;*
 - (b) *The rooftop space is an important area and will make a notable contribution to residents' amenity given its size, proportions, landscaping, opportunity for views and solar access. It will provide an attractive option for occupants and their visitors as an alternative to the individual balconies; and*
 - (c) *According to the evidence, it is possible to create areas within the rooftop communal open space that achieve the sitting criteria, with reference being made to the use of vegetation and screens. We consider that an acceptable outcome would be achieved by ensuring that the designated sitting area (comprising a table and seating) is designed to meet the sitting criterion in order for occupants to experience comfortable conditions while in this part of the rooftop open space. This outcome would be conducive to the intended use and provide an acceptable level of amenity to encourage residents to occupy this area.*
73. In light of the above decision by the Tribunal, it is recommended that the standards are amended to encourage 'sitting criteria' to be met for seating areas within communal and private open space areas.
74. The proposed wind standard states that sitting areas can be supplemented by landscaping. While landscaping to further bolster microclimate amenity is supported, it should not be relied upon to achieve minimum wind requirements as it is too variable i.e. trees may fail or vegetation may otherwise not grow with the density of foliage required.
75. The proposed wind standard indicates that wind mitigation elements should be located within the site boundary, unless consistent with the preferred future development of the area. Wind mitigation measures outside the site boundary are not supported as it creates an unreasonable burden on public or adjacent private land to maintain wind mitigation element.
76. Additionally, wind mitigation measures are often an afterthought in the design of a building. It is recommended that a standard is required to also ensure that wind mitigation measures are appropriately integrated into the design of the building.
77. The proposed decision guidelines for the wind standard do not require consideration of existing conditions. There may be situations where existing conditions already exceed comfort levels and therefore it may not be possible for a proposed development to achieve the comfort criteria in these cases. This should be included as a decision guideline to consider this circumstance.

Recommendations

- (a) Within updated BADS, remove reference to '*development should not exceed safety criteria...*' and amend standard to require that in all areas '*development should not exceed comfortable criteria*' i.e. including private open space and communal open space;
- (b) Comfortable wind criteria to be based upon specific direction criteria rather than mean wind speeds from any direction;
- (c) Identity how the comfort criteria is to applied as follows:
 - (i) Walking comfort for footpaths and other pedestrian thoroughfares;
 - (ii) Standing comfort for building entrances, passageway areas of communal and private open space area; and
 - (iii) Sitting comfort for outdoor café seating, seating areas within communal and private open space areas;
- (d) Minimum criteria for sitting areas achieved without reliance on vegetation;
- (e) Remove reference to wind mitigation measures provided outside site boundaries;

- (f) Include within the proposed standard that wind mitigation measures to be appropriately integrated into the design of the building; and
- (g) Include the consideration of existing wind conditions in the decision guidelines.

Student accommodation

- 78. There are presently no guidelines relating to student accommodation.
- 79. It is noted that some Planning Schemes, such as Melbourne, Stonnington and Monash, have individual local policies. It is recommended that a state-wide Particular Provision be introduced.

Recommendation

- (a) Introduce State-wide guidelines for student accommodation.

Sustainable Design

- 80. A significant part of improving liveability of apartments relies on environmentally sustainable design. Council officers acknowledge that separate work is concurrently being done in this space, with a focus toward carbon-neutral developments. Coordination between the standards is necessary to ensure an integrated outcome.

Recommendation

- (a) Coordination and integration with energy efficient and sustainable development policies and guidelines.

Community and stakeholder engagement

- 81. Council Officers have consulted acoustic engineers, SLR consulting and have referred to previous advice received from wind engineers MEL consultants.
- 82. The following planning controls have been considered in the preparation of the report:
 - (a) State Policy 7.3 Residential Design Codes Volume 2 – Apartments: Department of Planning Lands and Heritage (Western Australia)- [SPP-7-3-R-Codes-Apartments \(dplh.wa.gov.au\)](https://dplh.wa.gov.au);
 - (b) Part 4 Design the building – *Department of Planning and Environment* (New South Wales) - [Apartment Design Guide: Part 4 \(nsw.gov.au\)](https://www.dpe.nsw.gov.au); and
 - (c) Housing Design Quality and Standards – Supplementary Planning Guidance (London, UK) - [hdspg_2020_module_c.pdf \(london.gov.uk\)](https://www.london.gov.uk).

Policy analysis

Alignment to Community Vision and Council Plan

- 83. The proposed amendments to the apartment standards support several broad Council intents regarding amenity and liveability.

Climate emergency and sustainability implications

- 84. The submission seeks to encourage sustainable design outcomes via improved passive environmental design encouraging increased daylight and reduced heat gain.

Community and social implications

- 85. The submission seeks to encourage improved apartment living standards, which include through the provision of better communal spaces within new developments.

Economic development implications

- 86. None anticipated.

Human rights and gender equality implications

- 87. Amenity of housing is important for residents.

Operational analysis

Financial and resource impacts

88. There are no financial implications in lodging a submission.

Legal Implications

89. Nil.

Conclusion

90. The submission highlights several improvements are desirable to apartment liveability from the *Better Apartments Standards* introduced in 2017.

91. However, further improvement is recommended to various standards to achieve better internal amenity, greater sustainability and liveability for residents in apartment developments.

RECOMMENDATION

1. That Council:

- (a) note the inquiry by the *Victorian Legislative Assembly Environment and Planning Standing Committee* in relation to the *Better Apartment Design Standards*;
- (b) note the officer report providing an analysis of the 'Apartment Design Standards';
- (c) authorise officers to submit a response to the Inquiry into the Apartment Design Standards in accordance with this report, including the following key recommendations:

Integration with the street:

- (i) Update Standard D5 to require services to be integrated within the development and to comprise a maximum of 10% of the frontage.

Climate comfort:

- (i) Update Standard B35/D6 to require external shading devices or energy efficient glazing to be provided to all north, east and west facing habitable room windows.

Communal open space:

- (i) Standard B36/D7 to retain the maximum Communal Open Space area as 250sqm;
- (ii) Support the proposed amendments to BADS released March 2021 requiring communal open space to be provided for developments of 10 or more dwellings;
- (iii) Object to communal open space above 30sqm being transferable to internal communal areas;
- (iv) Standard B36/D7 to require internal communal space in addition and equivalent to the revised requirements for external open space (increasing to 250sqm);
- (v) Rename Standard B36/D7 to 'Communal Spaces' to avoid ambiguity; and
- (vi) Quantifiable locational criteria to minimise noise impacts on new and existing dwellings.

Overlooking /building separation:

- (i) Update standard D14 to ensure buildings are sited to ensure adequate daylight is retained for existing habitable room windows (as well as proposed);
- (ii) Require daylight modelling to be provided when certain specified separation distances are not achieved for both existing and proposed habitable room windows; and

- (iii) Include more prescriptive measures for assessing overlooking e.g. similar to clause 54/55.

Noise impacts:

- (i) Revisit the threshold for roads to include sites abutting main roads of a lower order than 40,000 AADTV, i.e. 5,000 AADTV;
- (ii) Revise standards to align with the updated EPA Noise Protocol: '*Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues*';
- (iii) Standards to require the consideration of vibration for developments proximate to railways servicing freight trains; and
- (iv) Standards to consider noise sources within apartment developments, such as garage doors, driveways, service areas, plant rooms, active communal open spaces and circulation areas, such as requiring these to be located at least 3m away from bedrooms.

Accessibility:

- (i) Standard B41/D17 to clarify whether 'access' to an adaptable bathroom needs to be directly connected i.e. ensuite to the main bedroom or otherwise provide a 1.2m clear path; and
- (ii) Include Decision Guidelines into the Accessibility standard of B41 & D17.

Building entry and circulation:

- (i) Introduce greater design guidance within the Building entry and circulation standards as previously provided within the former *Guidelines for Higher Density Residential Development*; and
- (ii) Include more prescriptive criteria for corridor widths and lengths e.g. 1.8m wide and 2.1m at lift lobbies and 18m maximum corridor length, with corridors over 12m including articulation, such as foyer areas, spaces for seating, wider sections near entry doors and varied ceiling heights.

Private open space:

- (i) Update Standards B43/D19 to show minimum floor areas to comply and include useable balcony areas to meet minimum dimensions as per practice note;
- (ii) Delete proposed amendments to BADS reducing balcony sizes with a southerly or westerly orientation; and
- (iii) Encourage winter gardens for developments over 40m.

Storage:

- (i) Storage, in addition to minimum internal storage, to be provided as a consolidated storage unit i.e. 3m³ for studios, 4m³ for 1 bedroom, 5m³ for 2 bedroom and 6m³ for 3 or more bedroom apartments.

Functional layout/room depth:

- (i) Introduce minimum widths for living spaces;
- (ii) Introduce minimum open plan dimensions i.e. to accommodate a dining table and kitchen;
- (iii) Include a standard that kitchens are not be located as part of the main circulation space (such as hallway or entry space); and
- (iv) Introduce minimum apartment floor areas, particularly for studio apartments.

Windows:

- (i) Include standards to address windows facing onto a covered or inset balcony and requirements for daylight modelling to be provided.

Natural Ventilation:

- (i) Reduce the maximum breeze path for cross-ventilation from 18m to 15m to align with BESS.

Wind:

- (i) Within updated BADS, remove reference to '*development should not exceed safety criteria*' and amend standard to require that in all areas '*development should not exceed comfortable criteria*' i.e. including private open space and communal open space;
- (ii) Comfortable wind criteria to be based upon specific direction criteria rather than mean wind speeds from any direction;
- (iii) Identify how the comfort criteria is to applied as follows:
 - a. Walking comfort for footpaths and other pedestrian thoroughfares;
 - b. Standing comfort for building entrances, passageway areas of communal and private open space area; and
 - c. Sitting comfort for outdoor café seating, seating areas within communal and private open space areas;
- (iv) Minimum criteria for sitting areas achieved without reliance on vegetation;
- (v) Remove reference to wind mitigation measures provided outside site boundaries;
- (vi) Include within the proposed standard that wind mitigation measures to be appropriately integrated into the design of the building; and
- (vii) Include the consideration of existing wind conditions in the decision guidelines.

Student accommodation:

- (i) Introduce State-wide guidelines for student accommodation.

Sustainable design:

- (i) Coordination and integration with energy efficient and sustainable development polices and guidelines.

Attachments

- 1 Report to Council 24 September 2019 - Review of BADS
- 2 Council meeting minutes (Action Sheet) 24 September 2019 - Review of BADS
- 3 Updated BADS - Soft Launch March 2021