

# City of Melbourne Submission

## Inquiry into apartment design standards

### 1.0 Introduction

#### 1.1 Inquiry into apartment design standards

The Parliament of Victoria is undertaking an investigation into apartment design standards with a focus on amenity for residents.

#### Terms of Reference

On 4 August 2021 the Legislative Assembly agreed to the following motion:

That this House refers an inquiry into apartment design standards to the Environment and Planning Standing Committee for consideration and report no later than 30 March 2022\* and the Committee should consider better apartment design standards, in a global context including, but not limited to, an examination of the:

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

#### 1.2 Inquiry focus

While the most recent updates and investigations of current standards for good apartment design have focused on the impacts on streetscape, neighbourhood character and public realm amenity, the current investigation is focused on the liveability of apartments.

The City of Melbourne is the highest density municipality in Victoria and has more apartments than any other municipality in the state. The City of Melbourne's response to this review is based on the experience of its planners and related professionals in assessing applications for apartment buildings under Clause 58 of the Planning Scheme. The structure of this submission is therefore based on the structure and themes covered in Clause 58.

## **2.0 Current apartment living standards in Victoria**

### **2.1 Recommended action to better understand current apartment living standards in Victoria.**

In order to understand the perspectives and needs of apartment dwellers, they should be surveyed to see what they like about apartment living and what can be improved. The following is recommended:

- Post occupancy surveys of occupants of new apartments built under current apartment standards in the planning scheme
- Post occupancy surveys of living conditions for occupants living in apartments built before the current apartment living standards.
- Survey of occupants living older building stock. Older apartments may not comply with or may exceed current apartment living standards.
- Survey of apartment managers.

These surveys should be conducted with consideration of metrics of measurement for liveability including satisfaction of functionality, space, comfort, security, privacy and quality of living.

### **2.2 Recommended improvements to current Apartment Design Standards in Victoria**

The standards currently in all Victorian planning schemes are comprehensive in terms of overall objectives and the issues addressed. Nevertheless there are matters which are not addressed, or inadequately regulated so the standards to meet the objectives are not sufficiently enforceable.

The City of Melbourne questions the use of 'should' in the standards throughout Clause 58 – and suggest adopting the 'is to' 'are to' model which is more directive, and has been raised through the Smart Planning Process.

We provide the following detailed review of provisions within Clause 58, having regard to the following:

- Recent development applications assessed by the City of Melbourne
- An informal survey of members of the City of Melbourne's statutory planning team who have provided anecdotal evidence of extent of compliance with Clause 58 standards.
- Established values and standards within the City of Melbourne for high quality and high amenity design.
- Comparisons with other national or international standards where relevant.

Based on the survey of members of the City of Melbourne's statutory planning team, under many of the themes is an indication of the extent to which developers challenge the particular standard. Where a theme that is particularly important to the liveability of apartments, is regularly challenged, the City of Melbourne considers that the particular requirement, for example minimum floor to ceiling heights, should be mandatory.

The introduction of mandatory minimum standards can facilitate a quality lifestyle for apartment dwellers, including considerations of wellbeing, flexibility, accessibility, security and sense of ownership and 'home'. This is discussed in more detail under each theme.

## **58.02 Urban Structure**

Under this clause, the following is considered with relation to internal amenity and liveability:

- Dwelling diversity
- Integration with street

### *58.02-3 Dwelling diversity objective*

This objective should be strengthened to require an across-the-board mix of types/sizes in relation to the composition of individual apartment schemes including upper limits on the proportion of studio or one bedroom units and/or a minimum requirement on the proportion of two or three bedroom units to be included in apartment schemes in the form of a range, to allow for flexibility in response to market conditions.

Dwelling mix should be based on number of units in the development as well as the demography and housing strategy of the local area, with greater guidance on what an appropriate mix would consist of.

Apartments should also be designed to be flexible so that they can be amalgamated or converted for use for another purpose.

### *58.02-5 Integration with the street objective*

This objective is about integrating the layout of development with the street.

This objective includes high level standards to ensure connectivity between the development and the street / wider precinct. Due to the general nature of the requirements of the standard, it is very uncommon for applicants to apply for a variation.

The objective does not consider the more detailed issue of connectivity of the individual apartments with the street. This is also important and direction on this matter should be included.

Achieving a sense of connection with the neighbourhood, while also maintaining privacy and security is an important consideration in liveability.

In recent development proposals at the City of Melbourne, entire dwellings or a part of a dwelling (including habitable rooms such as bedrooms and living areas) have been proposed to be located below ground level. This is often with the intent of increasing yield in areas which may have a mandatory height limit.

While light-courts can be included to address daylight impacts, this does not address the other impacts of below ground habitable spaces to liveability, including:

- Reduced sense of connection to the street and neighborhood

- Impacted outlook and privacy with consideration of prospect (capacity to observe) and refuge (to feel protected). A passerby will have the ability to look into the space, without the reciprocal ability for the apartment dweller to observe street activity.
- Limited ability to facilitate an appropriate physical barrier / separation from the street - ground level dwellings may be afforded privacy and security through a high fence or planting at the threshold between private and public space. For a below ground dwelling, a high fence (to the street), may further obstruct daylight and outlook from the apartment, while a very low fence will impact privacy and security.
- Reduced daylight, sunlight and air penetration through the space - a window to a subterranean light-court is not likely to provide an equal level of amenity than an above ground window.

While some spaces can be appropriately located below ground (gyms, home theaters, and cellars), bedrooms and primary living spaces should be located above ground with opportunity for a street presence or outlook.

We recommend a standard is included to ensure that all habitable rooms are visually and physically connected to the street or ground level.

### **58.03 Site Layout**

Under this clause, the following is considered:

- Energy efficiency
- Communal open space
- Solar access to communal outdoor space
- Safety
- Landscaping

#### *58.03-1 Energy efficiency objective*

In Council's experience, requests for variations to this standard are rare.

However, the City of Melbourne maintains that the current provisions do not go far enough.

Sustainability including energy efficiency, and integrated water and stormwater management is not a matter for apartment buildings alone but for all buildings. We continue to advocate for sustainability measures to apply across all development types and commend to the Committee, the City of Melbourne's proposed Amendment C376 Sustainable Building Design which considers all aspects of sustainable development in a holistic manner.

Given the climate change predictions of the next century, homes need to be built that are able to stay comfortable while minimising energy consumption. Issues of social equity and affordability need to be considered to avoid the locked in costs associated with higher energy consuming homes.

The siting and orientation of a building is an important aspect of bioclimatic design, which is directly related to the improvement of internal living conditions by ensuring thermal comfort and air-quality. This is an important matter for consideration in apartment design, and we commend its inclusion within current apartment design standards.

Buildings that achieve these standards are more comfortable for occupiers and also have reduced running costs.

The current proposed NCC2022 will mandate 7 star NatHERS for energy performance with high efficiency appliances for heating, cooling, hot water and so forth. The work of CSIRO has shown that most Victorian apartments are already meeting the 7 star proposed NCC2022 requirement, while around 1/3 are already at 7.5 stars. We advocate going to 7.5 star (as in proposed Amendment C376) and testing the viability of 8 stars to provide better performing buildings, that are more comfortable, lower cost operationally, that can become zero net energy and are future proofed for changes in climate.

#### *58.03 - 2 Communal open space objective*

This theme concerns the provision of quality communal space.

Variations to this Standard are frequently sought by developers due to the large area that needs to be set aside.

Further standards and guidance around the usability and quality of the space should be considered together with mandated controls around minimum dimensions.

Communal open spaces should be designed to allow for maximum flexibility and usability, with minimised slopes and level changes. Waterproofing and design for ease of maintenance must be considered to avoid maintenance costs being reflected in high owners corporation fees.

Where it can be reasonably expected that families and children will occupy apartments, the recreational needs of children should be considered. Children's play needs around the apartment building should be catered for, through considering opportunities for safe, private areas, with seating for parents / guardians, and within sight of the apartment building.

Minimum areas for communal open spaces should be mandated, as well as strong standards for quality, usability, maintenance and passive surveillance.

We recommend strengthened provisions around specific communal facilities, such as bathrooms with a bath (for families), rentable rooms for visitors, and uni-sex communal toilets for the building.

#### *58.03-3 - Solar access to communal outdoor open space objective*

In Council's experience, variations to this Standard are routinely sought. Reasons include a site context comprising other tall buildings and a propensity for communal open space to be located on the southern side of a building to reduce overshadowing of neighbouring properties to the south.

Stronger requirements around the siting and orientation of communal outdoor open spaces are required. The orientation and position of space to avoid excessive overshadowing and inhabitable wind conditions must be considered.

#### *58.03- 4 Safety objective*

This Standard is not considered to be overly onerous and is met in practically all planning applications necessitating a Clause 58 assessment.

The site layout of an apartment development is directly related to safety. This objective should provide further emphasis on the importance of ensuring that there are no entrapment spaces with potential safety implications across any pedestrian movement zones. Unsafe spaces could occur within planting zones (as covered within the current standard), but also recessed carpark entries, deep and narrow entries to a communal lobby, or any communal movement zone lacking passive surveillance.

#### *58.03-5 Landscaping objectives*

Under this theme the objectives are:

- To encourage development that respects the landscape character of the area.
- To encourage development that maintains and enhances habitat for plants and animals in locations of habitat importance.
- To provide appropriate landscaping.
- To encourage the retention of mature vegetation on the site.
- To promote climate responsive landscape design and water management in developments that support thermal comfort and reduces the urban heat island effect.

Very few applications within the central city or City of Melbourne's urban renewal areas (for example Arden Macaulay) or areas such as West Melbourne have been able to meet the requirement to provide canopy trees in deep soil at ground level. We commend to the Committee the City of Melbourne's Green Factor Tool which is embedded in proposed Amendment C376. While preferring canopy trees, this tool provides a range of options in which a development can provide good green cover and achieve the nominated Green Factor Score.

We note that there is a need to emphasise irrigation of planted areas through Clause 58. The City of Melbourne requires Green Infrastructure Management Plans for complex landscape proposals as standard practice, and this would specify requirements for irrigation. From research of completed multi residential proposals, there is a strong correlation between irrigated outcomes and successful vegetation growth. We encourage guidance articulating this need, with emphasis on use of non-potable water.

#### **58.04 Amenity impacts**

Under this clause, the following is considered with relation to internal amenity and liveability:

- Building setbacks
- Internal views

- Noise

#### *58.04 -1 building setback objectives*

A current gap in Clause 58 is an evidence-based mandatory requirement for spatial separation between buildings. Spatial separation is the single biggest contributor to occupant amenity, as it impacts outlook, privacy, ventilation and daylight, as well as shaping buildings in a way that enables a range of co-benefits with respect to landscaping and communal open space.

The non-measurable requirements of the Standard means that applicants in practically all instances argue that their proposal complies with the Standard. As a result, it is a frequent point of dispute between the permit applicant and Council, where Council does not consider it has been met.

For some developments, inadequate separation between facing windows to habitable rooms leads to the overreliance of privacy screens and obscure glazing. This has the effect of reducing daylight penetration and outlook of units. These screens or obscure glazing measures are often fixed, limiting the ability of apartment dwellers to control their internal environment.

Adequate setbacks between buildings is required in order to ensure internal amenity. Mandatory controls for a minimum separation distance between apartments and facing windows should be introduced.

#### *58.04-2 Internal views objective*

This standard requires that windows and balconies should be designed to prevent overlooking of more than 50 per cent of the private open space of a lower-level dwelling directly below and within the same development.

Variations to this Standard are frequently required due partly to the location of larger terraces on lower levels of an apartment building.

#### *58.04-3 Noise impacts objectives*

This Standard is met in practically all planning applications necessitating a Clause 58 assessment.

### **58.05 On-Site Amenity and Facilities**

Under the above clause the following are considered:

- Accessibility
- Building entry and circulation
- Private open space
- Storage

### *58.05-1 Accessibility objective*

The objective of this theme is to ensure the design of dwellings meets the needs of people with limited mobility.

Variations to this Standard are very common in planning applications necessitating a Clause 58 assessment.

If, as a community, we are serious about a society with opportunities for all and universal access, there should be a mandatory minimum percentage of apartments that have to comply with the standards in this objective. While it may not be feasible for all apartments to comply with all the specified minimum standards for accessible design within this objective, a number of minimum requirements could be included to ensure a high standard of accessibility and flexibility is achieved to all apartments.

### *58.05 - 2 Building entry and circulation objectives*

Due to the general nature of the requirements of the standard, it is very uncommon for applicants to apply for a variation.

The City of Melbourne recommends an additional provision requiring separation of pedestrian and bicycle access from vehicle access to minimise potential conflicts between pedestrians, cyclists and vehicles.

Within apartment buildings, hallways and shared circulation areas should be appropriate in scale and should not be unduly narrow. They should be well lit, with some natural light, where possible and adequate ventilation. Movement about the apartment building should be easily understandable by all users by keeping internal corridors short with good visibility along their length. Further provisions around robust, external grade materials should be included to ensure these spaces are durable and maintain quality throughout the lifetime of the building. Where possible, external breezeway / gallery style corridors with high level of passive ventilation should be considered for increased amenity and connection to environment.

### *58.05 - 3 Private open space objective*

This objective is focused on ensuring a minimum area of open space for private dwellings.

Variations to this Standard are frequently required by developers due both to the minimum area and minimum balcony dimensions required. Many applications also fall short of the minimum requirements due to the exclusion of heating / cooling units from the minimum area calculations.

Consideration should be given to mandatory requirements for private open space.

There is no provision covering the amenity and quality of these spaces. To ensure apartment liveability, these spaces should be designed with the way they are intended to be used by building occupants (for drying laundry, play equipment, furniture for pets, external dining etc.)

Wind conditions within private open spaces, including balconies and terraces, are often inadequate to facilitate stationary activity or permanent furniture. Recent development applicants have noted the importance of educating apartment dwellers about wind conditions and the need to move and store non-fixed furniture indoors when not in use. This is not a viable



option for apartment dwellers, who will most likely need to optimise the use of internal space and storage.

Private open spaces are still not required to be assessed against the comfortable wind criteria as *'private resident can choose to retreat indoors during uncomfortable wind conditions'*. To ensure optimal apartment liveability, we do not believe that the protection of wind conditions to private open spaces should be omitted.

A mandatory provision for achieving wind criteria that enables stationary activity and loose furniture in private open spaces should be considered.

#### *58.05 - 4 Storage objective*

The objective of this standard is to provide adequate storage facilities for each dwelling.

Variations to this Standard are very common in planning applications necessitating a Clause 58 assessment.

Apartments should provide storage for bulky items outside individual units (i.e. at ground or basement level) in addition to minimum apartment storage requirements. Secure, ground floor storage space allocated to individual apartments and located close to the entrance to the apartment block or building is particularly useful. This form of storage may be used for equipment such as, for example, bicycles or bicycle equipment, children's outdoor toys or buggies. However, such storage is not expected to satisfy bicycle parking requirements.

Further provisions requiring bicycle parking space per an apartment should be considered to promote sustainable transport modes, and to ensure apartment dwellers will not be required to store bicycles on balconies or within private open space.

#### **58.06 Detailed Design**

Under this clause, the following is considered with relation to internal amenity and liveability:

- Common property
- Site services
- Waste and recycling

The City of Melbourne has no specific recommendations around these provisions.

#### **58.07 Internal amenity**

Under this clause, the following is considered with relation to internal amenity and liveability:

- Functional layout
- Room depth
- Windows
- Natural ventilation

The standards under this Clause affect the liveability of the apartment more than all the others and because of this should include minimum mandatory standards.

#### *58.07 - 1 Functional layout objective*

This provision provides minimum dimensions for internal bedrooms and living spaces (excluding dining areas, kitchen and wardrobes).

Variations to this Standard are sometimes sought in planning applications necessitating a Clause 58 assessment, particularly in developments with smaller apartments.

For comparison, the New South Wales government apartment design guidelines have minimum size requirement for different types of dwellings (studio, one bedroom apartment, two bedroom apartment, etc.). This is also a common provision of apartment design standards internationally.

In Ireland there is a specific minimum for studio, one bed, 2 bed etc. The majority of all apartments in any proposed scheme of 10 or more apartments must exceed the minimum floor area standard for any combination of the relevant 1, 2 or 3 bedroom unit types, by a minimum of 10% (any studio apartments must be included in the total, but are not calculable as units that exceed the minimum by at least 10%). Similar provisions could be introduced into Clause 58.

In recent development applications in Melbourne, when minimum dimensions are complied with they generally result in overall dwelling sizes comparable to the minimum size requirements stipulated by the City of Sydney, while also protecting individual room sizes. For this control to be effective in ensuring generous and useable apartments, dimensions should be introduced for other crucial spaces, such as kitchens and dining areas (with consideration of spatial dimensions to specifically accommodate specific furniture such as dining tables, sufficiently sized kitchen benches and storage), and compliance with this standard should be mandatory.

#### *58.07 – 2 Room depth*

This objective integrates standards to ensure that room depth and ceiling height allow adequate daylight penetration into a space.

Variations to this Standard are frequently sought in planning applications necessitating a Clause 58 assessment.

Floor-to-ceiling height affects the internal amenity of apartments, in terms of sunlight / daylight, storage space, and ventilation. This is most significant at ground level, where the potential for overshadowing is greatest. Ground level floor to ceiling height will also influence the future adaptability of individual apartments for potential alternative uses, which will vary depending on location.

The City of Melbourne recommends minimum floor-to-ceiling heights for all rooms, regardless of room depth.

Single aspect apartments appear to be the norm for most developments. Where single aspect apartments are provided, the number of north facing units should be maximised, with west or east facing single aspect units also being acceptable. Living spaces in apartments should provide for direct sunlight for some part of the day. South facing single aspect apartments may

be considered, where overlooking a significant amenity such as a public park, garden or formal or a water body or some other amenity feature.

Particular care is needed where windows are located on lower floors that may be overshadowed by adjoining buildings.

#### *58.07-3 – Windows*

This objective is to allow adequate daylight into single aspect habitable rooms.

Variations to this Standard are frequently sought in planning applications necessitating a Clause 58 assessment.

The provision of inadequate natural light and inadequate windows are one of the problems associated with apartment living.

This objective should include a provision within the decision guidelines to consider when screening or use of opaque glazing to windows can impact daylight penetration or outlook. A window with a fixed screen may also impact ventilation.

The definition of an 'external wall' should also be updated to exclude walls to light wells. The current definition allows rooms to rely solely on a window to a light well with no minimum dimension. Controls should be strengthened overall to deter the use of light wells for daylight provisions, and when a light well is included, it should comply with strong minimum standards, including:

- Minimum dimensions as proportionate to depth
- Used to provide daylight access to bedrooms only
- Provide useable space at the ground level
- Bedroom windows in separate dwellings that face light wells should be staggered to avoid direct overlooking

For amenity and wellbeing windows need to be appropriately shaded depending on orientation, issues of glare, natural light and overheating can be managed through well designed window and shading systems. Best practice for shading is external horizontal to the north, external vertical movable shading to the east and west and internal to the south.

#### *58.07-4 Natural ventilation objectives*

This objective is to encourage natural ventilation of dwellings and to allow occupants to effectively manage natural ventilation of dwellings.

Variations to this Standard are frequently sought in planning applications necessitating a Clause 58 assessment.

Natural ventilation is a foundation of apartment amenity, quality and sustainable design and stronger controls around minimum standards should be sought.

### 3.0 Conclusion

From the above it is clear that while Clause 58 of the Planning Scheme covers most matters relating to liveability of apartments, more guidance on specific matters is needed as well as mandatory minimum standards.

In order to improve current apartment liveability the following should be introduced into Clause 58:

- Require a mix of apartment types/sizes
- Ensure all habitable rooms are visually and physically connected to the street.
- Strengthen energy efficiency requirements, and consider integrating the City of Melbourne's proposed Amendment C376 Sustainable Building Design.
- Minimum areas for communal open spaces should be mandated, as well as strong standards for quality, usability, maintenance and passive surveillance
- Stronger requirements around the siting and orientation of communal outdoor open spaces are required - excessive overshadowing and inhabitable wind conditions must be considered
- The safety objective should provide further emphasis on the importance of ensuring that there are no entrapment spaces
- For tree planting and landscaping the City of Melbourne's Green Factor Tool which is embedded in proposed Amendment C376 is recommended
- Mandatory controls for a minimum separation distance between apartments and facing windows should be introduced
- Introduce minimum standards for accessible design
- Introduce mandatory requirements for private open space as well as provisions for the amenity, wind conditions and quality of these spaces
- Consider additional minimum proportional requirements for key spaces such as dining and kitchen areas to ensure sufficiently sized and functional apartments.
- Introduce minimum floor-to-ceiling heights for all rooms, regardless of room depth
- The definition of an 'external wall' should be updated to exclude walls to light wells and controls should be strengthened to deter the use of light wells for daylight provisions
- Natural ventilation is a foundation of apartment amenity and minimum standards should be sought.