

19 September 2016

VIA ELECTRONIC CORRESPONDENCE

Dear Sir/Madam,

**[REDACTED] Submission to the 'Better Apartments
Draft Design Standards'**

The [REDACTED] welcomes the opportunity to make a submission to the Better Apartments Draft Design Standards. [REDACTED] supports the implementation of design standards that can be flexibly applied to apartment buildings within Melbourne to enable whole-of-building adaptability, a resilient use of resources, an increase lifespan of buildings and performance-based provisions. In the opinion of [REDACTED], several important elements to good apartment design have been omitted from the standards, and several standards can be further improved to ensure the standards result in the best possible outcome for Victoria's future apartment stock.

Appended to this letter is the [REDACTED] submission to the Better Apartments Draft Design Standards. The response has been structured in a table format, which responds to each of the standards while also raising additional matters that as young planners we feel should be considered for any future standards incorporated into the VPPs.

If you have any comments or questions or wish to discuss any matter raised in the submission further, please contact me via [REDACTED]
[REDACTED]

Kind regards,

[REDACTED]

[REDACTED]

SUMMARY OF SUBMISSION

The [REDACTED] welcome the introduction of new standards to ensure the quality of apartment stock being delivered in Melbourne is improved and can provide for a better quality of life for future residents.

The standards should enable consideration of performance-based standards that can be flexibly applied to enable:

- Whole-of-building adaptability (e.g. floor plates that also enable adaptive reuse in future)
- Resilient use of resources (e.g. use of building design to reduce reliance on existing reticulated services and greater incorporation of passive heating and cooling systems)
- Increase the lifespan of buildings as a result of resilient resource use and adaptable floor plates
- Performance-based provisions where good design can be considered as an alternative to the recommended standard approach.

To support the final point, we request preparation of a best practice design reference document which may enable architectural prototypes to be considered as case study examples where good design requires a variation that demonstrates adherence with a provision's objective.

We submit that the concept of minimum standards should be used as a starting point in the design process. We encourage the Department to strengthen training and communication regarding application of both these standards and ResCode. It is recommended that greater information is provided regarding the intent behind some of the standards' wording and application.

The standards require greater engagement and interaction with external amenity features which are likely to have great impact on the nature of built form and its relationship to adjoining properties and the local context.

Finally, we seek greater information regarding the proposed implementation method for the guidelines. We note that the document currently refers to standards which appear to be worded as objectives and seek consistency in the wording of the document. In some instances, many standards are written as motherhood statements and in some instances do not clearly communicate the intent of the policy (i.e. the desired built form or amenity outcome).

We support the Department in this endeavour and are happy to further discuss any points raised throughout our submission in their review of the draft Guidelines.

RESPONSE TO DESIGN STANDARDS

Proposed Standard	Comments	Recommendations
Building Setbacks	➤ We support consideration of external amenity impacts to adjoining properties as well as use of a standard to enable daylight to filter throughout a development. ➤ Our discussion of the Setbacks provision raised the following points: • The continued application of setbacks using diagrams that show a 'wedding cake' style approach to meeting the standard • It is unclear whether detailed investigation has been undertaken to understand the implications of setbacks in tandem with other provisions (e.g. Light Wells, Balconies) on the 3D building footprint, that also considers implications of those two standards (in particular) on different lot sizes and orientations. • Also concern for impacts on housing affordability. • These setbacks are significant, particularly for smaller blocks. Setbacks should be site context based.	➤ We recommend that further investigation be undertaken that uses modelling to assess the standards in tandem to better understand the 3D impact of standards when applied on different sites. ➤ In addition we seek further information about the influence of controls such as this on built form outcomes, and how buildings constructed to these standards will interact with their immediate context. That is, how these buildings will engage with adjoining built form constructed under this policy, as well as in conjunction with ResCode properties.
Light Wells	➤ The intent of the policy, in seeking to deliver higher standards of access to daylight, is on balance a positive approach. Our discussion of the Light Wells provision raised the following points: ➤ It is unclear whether the intention of this policy is to discharge light wells in general (e.g. remove the	➤ Light wells be provided as secondary light sources; primary light sources should not rely on light wells (e.g. the only source of light to a habitable room) ➤ If the intention is to allow light wells to bedrooms and

	option of having light wells as a primary source of light at all) ➤ The terminology in this provision is not consistent with the planning scheme; the wording / use of terms should be revisited ➤ It is unclear whether the provision applies to habitable rooms (the term used, living rooms, is not defined in General Terms) ➤ Terms in the new provisions should be recognisable to the industry (at a minimum).	studies but not a 'main living area', this should be more clearly expressed in the objective ➤ Where light wells are to be provided, minimum dimensions or performance-based assessment standards should be considered (particularly for lower floors where less light may be accessible) ➤ Further modelling be undertaken to understand the implications of creating a light well requirement that cannot include land on adjoining properties ➤ Further modelling be undertaken to understand how this provision will work with the setbacks standard and lots of different orientations.
Room Depth	➤ We support the intent to provide for daylight access to all reaches of habitable rooms, particularly in regards to open plan living rooms which can often include living, dining and kitchen areas. Our discussion of the Room Depth provision raised the following points: ➤ The Room Depth guideline makes no mention of window size. This is integral for this standard to be holistically understood, as the size (and shape) of the window can have considerable impact on	➤ We recommend a mandatory minimum ceiling height is supported, primarily to provide for comfortable internal living spaces, while also ensuring future uses (be it currently residential or other uses in future years) have adequate interior space to utilise. ➤ In addition, we seek information regarding the window size,

	access to daylight, regardless of room ceiling height and depth. ➤ The standard states the depth of an open plan layout may be increased to 8 metres when: the dwelling is not a south facing, single aspect dwelling. It is unclear what is defined as being a 'single aspect dwelling' in relation to the inclusion of light wells as a source of light. If a dwelling were to be south facing, with a light well providing light to the rear of the open plan layout, would this still be considered 'single aspect'? ➤ A typical adult height is approximately 170-180cm tall, with an additional reach of approximately 50-60cm. This being stated, the ceiling height would be preferred to be both physically and visually perceived to be 'out of reach'. Considering this logic, we support the minimum ceiling height of 2.7m in height.	which will have an integral impact of access to daylight in all habitable room windows.
Windows	➤ A window that is visible from any point in the room is a strong policy approach, which we support in its entirety. ➤ Our discussion of the Windows provision raised the following points: ➤ Strong support for ensuring light 'snorkels' and 'saddle backs' are no longer an option. It is widely acknowledged these interior design features are inadequate in providing for high quality interior space. ➤ The standard discussion mentions a habitable room as including a 'study'. In the context of an apartment, a study (usually an inbuilt small	➤ As per the standard, we strongly support the recommendation that all habitable rooms (excluding small 'study' areas as above) should have window that is visible from any point in the room.

	desk and chair) is usually located in areas with minimum access to daylight. These study spaces are often underneath stairwells or in pockets between rooms. They are often used as storage of personal admin/items rather than true working spaces. Having regard to this, we believe these spaces should not be included under the broader umbrella of 'habitable rooms' as it is not necessary to provide these spaces with daylight.	
Storage	➤ The [REDACTED] supports a minimum total storage volume for apartments, however we believe this requirement is undermined if storage spaces are inconveniently located, inadequately designed and not secure. Different households have different space requirements that will continue to change overtime and the [REDACTED] submits that well designed storage space planning is a key factor in enabling apartments to be recognised as a viable dwelling type for people to age in place. ➤ It is the opinion of the [REDACTED] that storage space minimum volumes provides the flexibility for clever storage design however we believe further guidelines stipulating the proportion of internal and external apartment storage may ensure high-proportion of storage space is not inconveniently located. ➤ Lockable rooms rather than storage cages should be further encouraged to prevent theft.	➤ To this end, the [REDACTED] advocates for clear guidelines for implementation of storage space design with total minimum storage volumes as well as recommended guidelines for internal and external storage requirements (i.e. 60% total storage volumes contained internally).

Noise Impacts	➤ The [REDACTED] supports noise reduction measures including the minimum acoustic attenuation requirements from external sources and also dwelling layout design considering the proximity of sensitive rooms (i.e. living areas and bedrooms) to building services, communal areas and car-parking. ➤ It is the opinion of the [REDACTED] that considering the design of the building holistically (i.e. internal and external noise sources) will ensure building and apartment designs with minimised noise transmission. ➤ A key example is the noise attributed by air-conditioning units on apartment balconies. ➤ Air-conditioning units located on balconies provide both functional and economic benefits, namely that they are easily accessible for on-going maintenance and repair servicing directly reducing associated costs. The [REDACTED] also advocates that another important consideration is if apartment design standards discourage air-conditioning units to be located on private balconies where would a suitable alternative location be? Looking to other higher density buildings such as commercial buildings where air-conditioning units are commonly located in communal spaces such as the roof. If this practice is translated to the residential sector, the [REDACTED] believes that this will have significant economic, social and aesthetic implications. Large commercial style air-conditioning units will	➤ The [REDACTED] advocates for clearer requirements for specific apartment design features that contribute to noise transmission (i.e. air-conditioning units on balconies) through requiring greater acoustic attenuation measures (i.e. specific grades of insulation) if located directly adjacent habitable rooms such as living or bedrooms.
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	dramatically increase the associated up-front construction costs and ongoing maintenance fees distributed in the body corporate having a negative impact on apartment affordability. In addition, the alternative communal location prevents roof space from being used for other opportunities such as public open space communal areas.	
Energy Efficiency	➤ We support the intent of this provision with the Guidelines; energy efficient design is an important consideration towards a reduced carbon footprint. ➤ Table 1, Cooling Load illustrates a standard that should be achieved by all new apartment buildings. Although utilising a maximum cooling load may be seen as a practical method to quantify and limit the amount of energy used to maintain a room within an acceptable temperature, it is unknown how the implementation of this standard will be achieved. ➤ The use of a standard that relies upon the end product being tested by an independent expert puts a dual load on both the developer and Council's enforcement team should there be inadequate training to resolve non-compliance with these standards. ➤ In addition, it is unclear why a maximum cooling load and not on heating limits are used within the standard.	➤ Clearer implementation methods are outlined in this standard should the maximum cooling load be adopted as is ➤ A use of both maximum cooling loads and heating limits are used to inform the table.
Solar Access to Communal Open	➤ We believe solar access is one of many facets that is	➤ This standard be incorporated into the

Space	important in creating a usable communal open space. We support the need for solar access in areas of communal open space where practicable. ➤ It is assumed that this standard is concerned with increasing the amenity of future residents of apartment buildings. Adequate access to the sun is integral to the health and well-being of a person; the guidelines provide ample standards to ensure dwellings receive adequate sunlight. ➤ Although providing solar access into communal open space is an important factor in improving overall amenity, it should not be used as the basis for approving/refusing apartments, as the usability of communal open space more important. Solar Access to communal open space is only one factor that contributes to the amenity of these areas. Several developments in Melbourne (eg: [REDACTED]) provide above and beyond daylight requirements of this standard but fail to provide any benefit to residents as communal open space is not utilised. The benefits of shaded communal open space with added facilities (i.e. pool, meeting rooms etc) can be more beneficial to residents than purely an empty space with a minimum of 2 hours of sunlight a day.	standard regarding Communal Open Space to integrate standards that look to improve the overall amenity of communal open space ➤ The standard should allow room for negotiation should the standard not be achievable (i.e. allow dispensation with indoor pools, gyms, meeting rooms, cinema's etc).
Natural Ventilation	➤ We agree that natural ventilation is critical to ensuring adequate internal amenity for residents.	➤ Consideration should be given to alternative ways to achieve natural

	➤ We have concerns regarding how this will impact layout and design of apartment buildings, and any impacts on housing affordability due to potentially less apartment yield.	ventilation, other than dual aspect apartments. What are some other ways this can be achieved through design for single aspect apartments?
POS	➤ We agree that increased POS should be provided to apartments with a greater number of bedrooms. We must also ensure this space is not taken up by services.	➤ While air conditioning/heating units cannot be included in the POS calculation, perhaps there is scope to include 'services' and planter boxes etc. This will ensure the space is more usable and the increased dimensions are better utilized.
Communal Open Space	➤ Agree that better communal spaces are important to increase socializing with neighbours and increased liveability for residents. ➤ Concerns regarding how the provision of communal open space would affect housing affordability, particularly for the threshold of 20 or more dwellings.	➤ Encourage the provision of internal and outdoor communal open space to allow for greater flexibility. In this instance, is it more appropriate to title it communal space rather than communal open space? ➤ Also consider the potential to increase the threshold if the communal open space will have significant impacts on housing affordability.
Landscaping	➤ Agree that appropriate landscaping that will be properly maintained is critical for good apartment design. ➤ Concern that often times new apartment buildings propose green infrastructure without enough research into what is required to properly maintain	➤ Encourage the submission of a more detailed landscape plan earlier on in the planning process to ensure any proposed green infrastructure is properly planted and secured, and

	green infrastructure such as green walls. ➤ Also concern for planting within planter boxes- and making sure any large shrubs or trees planted within planter boxes are properly secured.	that steps have been taken to ensure the maintenance of green infrastructure and canopy trees within common property have been taken into consideration which will allow the vegetation to thrive in perpetuity.
Accessibility	➤ We support increasing the housing stock that is accessible to people with limited mobility including the ageing and disabled. This will also reduce the need for costly modifications to make dwellings accessible in the future. Accessible dwellings create more inclusive spaces for all people. ➤ We have concerns with: • Is it assumed that the kitchen is part of the living area? Should the kitchen area have minimum dimensions of 1.2mx1.2m? • Baseless showers may be more expensive than those with bases. This may impact the affordability of dwellings. • What are the general impacts of these standards on construction cost? • Why not apply the standard to all dwellings or to a percentage of all dwelling types? • No discussion of staircases. Should it be specified that accessible rooms be all on one level.	➤ Include minimum dimensions for kitchens ➤ Include requirement for all accessible rooms to all be on one level.
Dwelling Entry/Internal Circulation	➤ We support standards for entries to buildings and dwellings and standards to improve the quality of common spaces	➤ No need to require natural light in corridors and common areas ➤ No need to require

	➤ We have concerns with: ➤ Corridors are transient spaces and a requirement to provide natural light and ventilation is unnecessary. This may reduce the amount of natural light available for apartments. ➤ Corridor width and length missing from discussion	natural ventilation in corridors and common areas. ➤ Include standards for corridor width and length. ➤ Include minimum requirements for lift access. Standard should cover the amount of lifts and the size. e.g. Minimum two lifts of certain speed and size per 100 apartments.
Waste	➤ Agree that waste needs to be considered earlier on in the planning process, and the incorporation of a standard that relates to waste will improve the current system. ➤ Concerns regarding how a composting waste system will be maintained as Council often do not offer this service.	➤ Consideration should be given to providing incentives that will promote developers to implement alternative and additional waste services such as composting, garden waste, hard rubbish etc.
Water Management	➤ Agree that the collection and reuse of rainwater and greywater should be promoted. ➤ Concern that the reference document is outdated and therefore potentially irrelevant, noting the document is from 1999.	➤ Instead of the incorporation of a broad standard, perhaps additional water saving measures could be implemented and encouraged for new development- such as ways to reduce the use of main supply water.

OTHER DISCUSSION POINTS

Formatting of standards

- The draft standards appear to focus less on the influence on built form and more on the internal amenity of buildings.
- The standards are written with the terminology of objectives rather than standards. Several of these standards come across as motherhood

statements.

- Terminology used across several standards is inconsistent and does not match the scheme. For example, referencing 'living areas' rather than 'habitable rooms.'
- There should be more performance targets if the intent is to have performance based controls.

Items not covered by standards

- Although no minimum apartment sizes have been proposed, requiring a minimum room size may be beneficial to avoid small apartments with minimal usability. The impact of minimum sizes however would need to be considered in relation to housing affordability.
- Built form that is designed for people to actually engage with – e.g. lifts and hallways large enough to move large furniture; bedrooms where the door can be opened; spaces large enough for people to share.

Future-proofing apartments

- As most apartments have a lifespan of 60-100 years, there is a need to ensure that new apartment buildings have the capability of being adapted to service how modern day technology and lifestyles are changing. For example, as technology advances the capability to work from home is becoming more common, therefore apartments should be able to provide for these uses. Further, the provisions should support floor configurations that are more flexible and accommodate renters – e.g. two large bedrooms as opposed to one 'master' bedroom and one small study/child's bedroom configuration which is commonly seen.
- Further consideration should be given to flexibility and adaptability of car parking areas within basements and lower levels. As there is a strong possibility future generations will be moving away from automobile transit, how can these spaces be adapted for future reuse?

Good design

- We support an approach which considers to the lifespan of buildings and the legacy of built form and building typologies these standards may have on our cities and suburbs.
- Innovation credits supported- the idea of design uplift- good design means bonuses or similar.
- Consideration should be given to clever design fixes to address matters like overlooking. Scope to include 'better design options' as a reference document to assist developers in producing creative design solutions rather than those simply checking the box of standards.
- Potential for a credit based system and design uplift.
- Demonstration should be given to the longevity of design.