



Australian  
Institute of  
Architects

## Australian Institute of Architects

Response to:

Better Apartments – draft  
Design Standards

**Submission to  
Victorian Dept.  
Environment, Land,  
Water and Planning**

**September 2016**

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## **SUBMISSION BY**

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## **PURPOSE**

This submission is made by the Victorian Chapter of the Australian Institute of Architects (the Institute) to the Department of Environment, Land, Water and Planning in response to an invitation to comment on the Better Apartments Draft Design Standards released in August 2016.

At the time of the submission the office bearers of the Victorian Chapter are: Vanessa Bird (President), Peter Malatt (Immediate Past-President), Karen Alcock, Amy Muir, Robert Goodliffe, Kim Irons, Rowan Opat, Tim Leslie, Rosemary Burn, Monique Woodward, Adam Pustola, Fiona Winzar and Thomas McKenzie. The Manager of the Victorian Chapter is Alison Cleary.

This submission was developed by Vanessa Bird and Karen Alcock, with input from the Victorian Chapter's Access Committee, Sustainable Architecture Forum and individual members of the Large Practice Forum.

## **INFORMATION**

The Australian Institute of Architects (the Institute) is an independent voluntary subscription-based member organization with approximately 11,800 members who are bound by a Code of Conduct and Disciplinary Procedures. The Institute's Victorian Chapter has approx. 3,000 members.

The Institute, incorporated in 1929, is one of the 96 member associations of the International Union of Architects (UIA) and is represented on the International Practice Commission.

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## **1. Introduction**

The Australian Institute of Architects (the Institute) is an independent national member organisation with approximately 11,800 members across Australia and overseas. 3,000 of these are based in Victoria. The Institute exists to advance the interests of members, their professional standards and contemporary practice, and expand and advocate the value of architects and architecture to the sustainable growth of our communities, economy and culture. The Institute actively works to maintain and improve the quality of our built environment by promoting better, responsible and environmental design.

We appreciate the opportunity to respond to Better Apartments: Draft Design Standards. The Institute is highly supportive of the ongoing efforts of the Victorian Government, through both the Department of Environment, Land, Water and Planning, and the Office of the Victorian Government Architect, to introduce mechanisms that promote sustainable, high quality apartment living opportunities.

## **2. Executive Summary**

We welcome the latest version of the Better Apartments Draft Design Standards and agree that minimum standards are required to protect the public interest and improve the quality of apartments. After consulting many of our members who between them have designed thousands of Melbourne's apartments and are familiar with hundreds of different sites and many apartment typologies, we welcome and support most of the liveability objectives contained in the draft.

We are however disappointed by the lack of mechanisms that encourage or recognise design as a critical ingredient to achieving apartments that deliver beyond base amenity. The Draft Standards are silent on design excellence or design in general.

Architecture plays a crucial role in sustaining and enhancing the wellbeing of individuals, families and societies. The architectural profession plays a major role in shaping all aspects of the built environment for the betterment of all. We believe mandating innovative, site specific design responses should be at the foundation of the standards.

### **2.1 Design Excellence**

It is fundamental to understand that apartments are a complex building type that need trained professionals to design them. Standards can only go so far toward assuring true amenity and

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liveability.

Unfortunately, design preparation and assessment requirements in the Draft Standards are weak or non-existent and the proposed verification requirements lack clarity. It is highly unlikely that design quality will be improved because there is:

- No requirement to use an architect for the design of projects
- No provision for a Design Review Process (DRP) to support the assessment of best practice projects.

Architects are designers, not verifiers. Rather than legislating for architects to check drawings it is critical that the Act be changed so that we design them, and are engaged continuously from the design phase through to completion. International best practice stipulates the use of an architect on apartment projects, and without this Victoria risks losing its status as a design state and Melbourne its status as the world's most liveable city.

Victoria is acknowledged historically for its design leadership, its universities have some of the best architectural degrees in Australia, and this is recognized internationally. Government needs to acknowledge this by demonstrating confidence in the hundreds of graduates its own institutions are producing.

## 2.2 Design Review Process (DRP)

The draft Design Standards propose that project assessment is to be made by the Responsible Authority, with training courses provided. A far better outcome will be achieved by supporting the Responsible Authority in their assessment with an expert Design Review Process. Invest in our existing experts to assess design alternatives rather than trying to turn planners into architects. Statutory planners have no training in design assessment. Their training is in assessing compliance to regulation. Conversely they receive little support when varying the metrics in the Standards which will have to be defended at VCAT. This makes them understandably risk adverse. A DRP with statutory weight is best placed to do this. The success of a DRP is evident through the many good examples that have benefited from the DRP through the Office of the Victorian Government Architect (OVGA).

Councils typically will have a number of internal referrals they make during the planning process including traffic, waste management and sustainability, we propose that in a similar way the Design Review Process becomes a mandated prerequisite step prior to decision making.

A number of metropolitan municipalities employ architects to provide design advice for larger

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developments or alternatively engage consultants on an as-needs basis. Manningham's Sustainable Design Panel process requires all projects over 15 units or \$5,000,000 to be reviewed at a round table meeting during the application process but has no statutory weight. The panel includes council officers, architects, urban designers and environmental experts. There are a number of models that could be adopted, we recommend that it should become a mandatory step for projects over a certain size. For smaller or rural councils the Review Panel could be a shared resource across a number of municipalities.

*Architects are the experts in the field but they need to be supported by planning regulation that both allows them flexibility to innovate, and empowers them to resist the pressure of a poor brief.*

The Standards provide support for basic items but if a Design Review Process was mandated and supported with appropriately qualified members it will encourage developers to look for design innovation rather than just 'ticking the box'. The DRPs will support developers to push for better alternative models of housing which will lead to a greater variety of apartment stock and a more diverse city.

### 2.3 Unintended consequences of the Draft Design Standards

We are supportive of the initiative, and the majority of the Standards. In our detailed responses below we have tried to understand the logic or reasoning behind the individual Standards and assess their impact on Melbourne's future development. We have concluded that many are reasonable, some need minor modification and a few need major modification.

Primary to the public/community consultation process were concerns about space and daylight, and we believe they remain unaddressed. While we agree that size is not the only determiner of good design, design excellence and innovation must be demonstrated before deviating from minimum metric standards. Therefore guidelines regulating minimum apartment sizes, or at least minimum living room sizes, should be included.

Architects are used to working with regulation however as they stand the Draft Standards don't provide any certainty that better apartments will be delivered. 85% of CBD apartments are bought by investors, and developers will continue to build as small as they can. This is an issue for Melbourne's long term viability because apartments are held as strata titles in many hands and therefore unlikely to be turned over. They are our long term building stock and will remain with us for many decades to come.

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The Draft Standards in their current form have the potential to deliver badly designed apartments due to what could be seen as a number of unintended consequences. These include (but not limited to):

- due to lack of minimum sizes, living rooms and second bedrooms can still be very small;
- building setbacks don't respond to urban context of immediate surroundings;
- no requirement for apartments above 35m to have private open space (not clear why, considering openable windows recommended to 80m);
- communal open space requirements are too low for very large developments (100m<sup>2</sup> is low for development that may include hundreds of apartments).

We also note from discussions with several award winning firms that the room depth standard will result in making some larger apartments, aimed at the owner occupier, non-compliant. Depending on the site proportions a well-designed 60m<sup>2</sup> one bedroom apartment may have a room depth of 9-10m, or a larger 90m<sup>2</sup> two bedroom apartment may have a room depth of 10-11m. With the market becoming more sophisticated and with an ageing population seeking larger apartments, when downsizing their family home, we question the restriction and possible reduction in size to make larger apartments comply. We understand there is a need to weed out small badly designed apartments but see little benefit in restricting depth on large apartments. We therefore propose considering that the Standards apply only to one bedroom apartments under 55m<sup>2</sup> and two bedroom apartments under 80m<sup>2</sup>. See below example of larger apartment with good amenity:



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We also conclude that there is little or no opportunity (except VCAT) for alternative solutions to be considered. The lack of alternative and performance based approaches for assessing apartment amenity is a serious issue. We know from our members that statutory authorities are already using the draft guidelines as a default mandatory requirement. Alternative and innovative, merit worthy solutions will be restrained without performance based measures for assessing alternatives and without a Design Review Process. With Victoria producing the largest number of architectural awarding winning projects both nationally and internationally, restricting innovation and the evolution of design thinking is a serious error.

Certainty is a key component of good legislation and decision making. Research based metrics along with an alternative performance based approach is required. The planning process must make referral to VCAT the exception rather than the rule to reduce delays and the cost of housing.

### **3. The Standards – the detailed response**

In this section we provide commentary against each of the draft Standards, beginning with whether or not we view the Standard as either reasonable or needing modification.

#### **3.1 Building Setback (Modify)**

The Building Setback provision is the most debated and difficult Standard. Setbacks should relate to context, and most members believe this sits best in Overlays at local municipal level.

The objectives and outcomes of this Standard appear to be in conflict with each other. The objectives of the Standard are to maintain privacy and daylight to apartments, but the outcome will be an increase in amenity at footpath level and more site consolidation. The lack of a clear or measurable objective will make it difficult to offer performance based alternatives.

The metrics of the Standard are not consistent: Why is privacy more important the higher up in a building you are? How is the depth of the floor plate considered? What roles does existing character of a streetscape play? How does this apply to renovating existing buildings?

As it is written this Standard raises more questions than it answers. The ensuing debate between street 'character' objectives and 'amenity' objectives will be deferred to VCAT which is a poor outcome. Is character of the street more important than daylight? It is also unclear how the setback provision works in conjunction with Standard B18 in Clause 55. With so many unanswered questions we believe it should be removed from the Standards or an alternative Standard used to protect amenity.

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We note that overlays will continue to operate to respond to ‘*specific built form issues such as heritage, environment, and other local design objectives.*’ We understand that the requirements of an Overlay take priority over the Apartment Standards. This means, for example, nothing changes to setbacks on St Kilda Road. The problem lies in Municipalities changing their DDOs to align with the Apartment Standards and thus making many areas unsuitable for development. This will limit the availability of potential sites in the middle suburbs, and impact negatively on Melbourne’s ability to evolve into a more sustainable higher density city.

The ambiguity between the objectives and outcomes of this Standard create the following issues:

- Setback should be context specific and not mandated by an apartment design guideline
- The Standard will adversely affect the capacity for higher density housing in areas not currently the subject of comprehensive development controls. The Standard is contradictory to Melbourne’s imperative to develop as a higher density, more sustainable city of the future
- The heights chosen seem arbitrary and there is no science or reasoning given. The length or depth of a site is not considered when this will be a significant factor in planning a site
- Outlook for apartments is not acknowledged and is an important amenity consideration
- Reduced setbacks to be considered where habitable rooms are not facing each other or where non habitable rooms interface with a side or rear boundary
- Existing buildings are exempt from this Standard
- As proposed the Standard will likely lead to site amalgamation
- This Standard is contrary to good urban design which should demand site specific responses.

### 3.1 Building Setback Recommendations:

An alternative tool should be used to determine apartment amenity and building setback. Building Setback should sit in the Local Planning Scheme.

### **3.2 Light wells (reasonable)**

The expectations are reasonable and desirable. We support this Standard.

This Standard unfortunately highlights the inconsistencies in the Standards relating to daylight. When analysed, the results show that the daylight conditions for the three Standards relating to daylight are quite different. It does not appear as if a performance criteria was used to generate this specific Standard.

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### 3.3 Room Depth (modify)

We support the introduction of a Standard that seeks to control adequacy of daylight to apartments. We propose the wording of the Standard needs to be modified and a definition of 'adequate' be provided. The Standard adopts a 'deemed to satisfy' approach without reference to the multitude of critical factors which can effect daylight. The most important of these are window sizes and glass colour, design components which have a great influence over daylight levels in an apartment.

The result of ratios being used for room depth to determine ceiling height means a minimum ceiling height of 2.4m is required for room depths up to 6m (rather than the preferred 2.7m). Better designed apartments acknowledge apartment size and layout rather than ratio as it's the whole space that makes the apartment better designed and increases liveability.

The Standard as drafted places severe restrictions on how an apartment can be planned. For example, in order to accommodate a dining table and living space in front of an island bench a dimension of 6.5 / 7m is necessary. Adding 2.5 depth for a kitchen requires a room depth of a minimum of 9.0m. The example apartment included in the Standards does not allow space for a dining table, which is a prerequisite of the vast majority of apartment purchasers of larger apartments.

It should also be noted that an adverse impact of this Standard is that some apartments would become smaller due to the pressures created by yield, frontage and room depth. We suggest that this Standard should only apply to minimum unit areas or have concessions for apartment size.

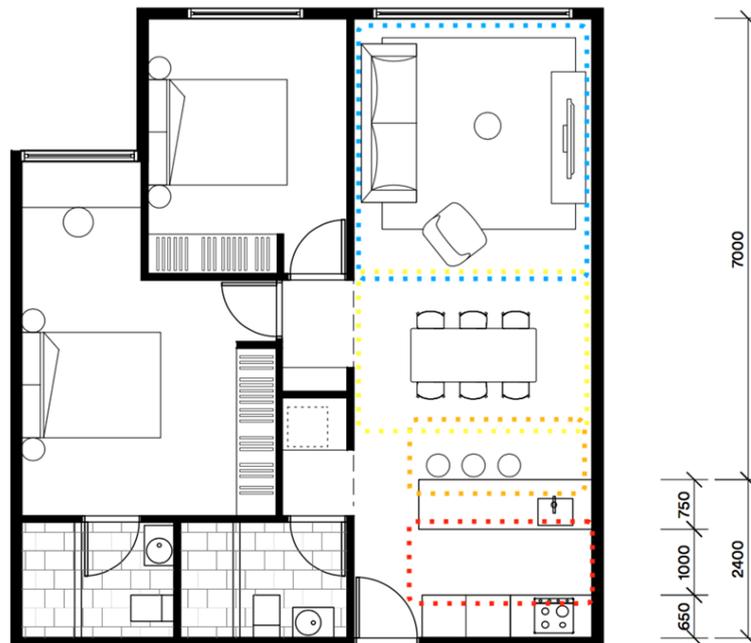
#### 3.3 Room Depth Recommendations:

- Room Depth can be increased to 9m to accommodate a dining table when the following requirements are met:
  - Kitchen is furthest from the window
  - The window has a minimum area of  $Xm^2$  or a lux level of X is achieved in the living area
  - The ceiling is 2.7m (can be reduced to accommodate services).
- Dual aspect living rooms should have a depth of 14m when the following requirements are met:
  - Kitchen is furthest from the window
  - The window has a minimum area of  $Xm^2$  or a lux level of X is achieved in the living area
  - The ceiling is 2.7m (can be reduced to accommodate services).
- Consider rooms with more than one orientation or rooms that have secondary windows.
  - As well as the 'deemed to satisfy' option the Standard should offer an alternate,

performance based, method for achieving the objective (such as minimum lux level). We recommend that defined, understood and measurable metrics for daylight be ascribed to habitable rooms. These metrics should be carefully considered and realistic and be provided by a specialist consultant.

- Distinction should be made for different daylight provision Standards according to the use of particular habitable rooms. For example, it is widely recognised by existing best practice daylight standards that the daylight levels in a bedroom are not the same as in a living room. Lower levels of light are desirable in bedrooms. Similarly, kitchens are task orientated environments and people will invariably use lights. A percentage of the room could achieve the depth ratio.
- Higher ceiling heights should be required on ground and first floor of mixed-use apartment buildings to ensure longer term adaptability for other uses.
- Consider applying this standard to units of a minimum areas or have concessions for larger apartment sizes.

See example below for diagram of proposed room depth in larger apartments:



### 3.4 Windows (Modify)

We support the intention to preclude habitable rooms that do not have direct access to daylight. However requiring that a window should be visible from any point in a bedroom or study is unnecessary and an overly simplistic control that won't necessarily deliver better amenity. We

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recommend that a window visible from 85% of the room is a far more reasonable and practical Standard that will not adversely affect resident's amenity.

We also note that a well-designed 'snorkel' can provide a place for a study desk or reading chair. It also provides opportunity for expressed rebates in building facades in low rise developments to achieve vertical articulation in residential zones where Neighbourhood Character is important.

We note that the Standard does not reference window size or glass colour. If the Standard is based on a minimum window size of 10% (as required under the NCC) concessions should be available for larger windows or where they can be supported with daylight modelling.

As the Standard is presented the impact on yield and affordability will be significant and it will inadvertently lead to a standardisation of apartment types. More examples of different design solutions are required.

#### 3.4 Windows Recommendations:

- Access to daylight in a bedroom or study must be via a space of not less than 1.2m wide and a total depth to width ratio of no greater than 1.5:1 where the depth is measured from the external face of the building. The window must be visible from 85% of the room.
- Distinction should be made for different daylight provision standards according to the use of particular habitable rooms. For example, it is widely recognised by existing best practice daylight standards that the daylight levels in a bedroom are not the same as in a living room. Lower levels of light are desirable in bedrooms. Similarly, kitchens are task orientated environments and people will invariably use lights.
- A daylight modelling performance standard should be added to assist with performance based assessments.

See following page for example of bedroom with minimal snorkel and 85% window visibility:



### 3.5 Storage (**reasonable**)

The expectations are reasonable and desirable. We support this Standard.

Storage is an important component of liveability, the Standard is reasonable and offers scope for designers to accommodate the spatial requirements in a number of ways that will benefit future residents.

#### 3.5 Storage Recommendations:

- Consider a percentage of storage to be within the apartment
- Clarify the definition of the *excluded storage* in kitchen, bathroom, bedroom and *other utility storage*.

### 3.6 Noise Impacts (**reasonable**)

The expectations are reasonable and desirable. We support this Standard.

Ideally this should be part of the NCC. We understand the difficulty in making changes to the NCC and suggest that the only way to implement this item is to condition it in planning permits. Compliance can only be tested once apartments are complete. This highlights the need for

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design verification at Practical Completion and an Architect continually engaged throughout the project.

### **3.7 Energy efficiency (reasonable)**

The expectations are reasonable and desirable. We support this Standard.

A number of councils have adopted the BESS system for assessing amenity and energy efficiency during the planning stage. This allows for Deemed to Satisfy Assessment and Performance Based Assessment. A potential improvement would involve guidelines on appropriate interpretation.

### **3.8 Solar Access to Communal Outdoor Space (reasonable)**

The expectations are reasonable and desirable. We support this Standard.

### **3.9 Natural Ventilation (modify)**

The 15m breeze path is not consistent with similar legislation in NSW that requires 18m. It is unclear where this figure has been generated from. The 15m metric is very restrictive in planning an apartment and would make cross ventilating some perfectly reasonable three-bedroom apartments impossible.

It is also noted that the metric is very blunt and does not reference air differential and its role in creating air movement.

#### 3.9 Natural Ventilation Recommendation:

- The Standard be changed to: at least 50% of dwellings with a finished floor level less than 35 metres in height should be naturally cross ventilated. The length of a breeze path through the dwelling should be a maximum of 18m
- A performance based measurement be added to the Standard.

### **3.10 Private open space (modify)**

This Standard is supported in principle although we are surprised that minimum balcony sizes have been proposed but the Standards are silent on minimum apartment sizes or more specifically living room sizes.

We are concerned that the combined pressure of the accessibility Standards, which define bedroom and bathroom sizes, and the increased balcony sizes, will result in an impact on the size of living areas. We also question why larger (15m<sup>2</sup>) balconies are required on podiums?

In addition, we are concerned that the Standards could result in apartments above 35m (not on

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a podium or roof) having no private open space as the Standards are silent on them. Consider winter gardens as an option to extend the living area on higher apartments.

It would be refreshing to see options to provide larger, better quality apartments with no balconies or smaller balconies in locations that support this or in buildings where they are good quality, shared facilities.

#### 3.10 Private Space Recommendations:

- Design guidance should recommend increased communal areas to be provided where the number and size of balconies are reduced
- Design guidance should outline situations where balconies may not be appropriate such as near high polluting road or rail noise sources, in high wind conditions and in heritage buildings.

#### **3.11 Communal Open Space (modify)**

This Standard is supported in principle but we believe the metrics should be refined and the title changed to Communal Space as the requirements include interior and exterior spaces.

The Standard requires 100m<sup>2</sup> of open space for all developments of 20 apartments or more. This is insufficient for large developments that may contain hundreds of apartments but potentially onerous on smaller apartment building where larger balconies or greater private amenity may be more appropriate.

#### 3.11 Communal Space Recommendations:

- Increase the trigger point for the standard to 30 or 40 apartments
- Add a metric for larger developments. For example: for developments of over 200 apartments 1% of the NSA should be provided as communal areas. Including interior and exterior areas.

#### **3.12 Landscaping (modify)**

We support the objective of this Standard, and agree that new development should be responsive to its landscape context and retain significant vegetation and provide canopy trees. This is a Standard that is difficult to unilaterally apply to every site in Victoria. We believe that landscape should relate to and reflect character. For this reason we propose that this Standard best sits at local Council level in Overlays pertaining to specific local character and urban design objectives.

#### 3.12 Landscaping Recommendation:

- Landscaping should sit in the Local Planning Scheme.

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### **3.13 Accessibility (modify)**

This Standard is supported in principle. We acknowledge that the objective is to provide better designed environments for a range of people but due to increase in bedroom and bathroom size (along with mandating storage size and balconies) it will have the unintended consequence of reducing living spaces. Hence our call for mandated minimum apartment sizes. We also believe the percentage should be expressed as a percentage of the total number of apartments.

#### 3.13 Accessibility Recommendation:

- Consider nominating that a fixed percentage of the total number of apartments must be accessible.
- Consider a minimum living room dimension
- Reference and/or use the Liveable Housing Design Guidelines, Silver Performance Level Elements as the bench mark design standard rather than a summary. These incorporate flexible design solutions that allow adaptability for a variety of occupants (impaired mobility or other disabilities).

### **3.14 Dwelling entry and internal circulation (reasonable)**

The expectations are reasonable and desirable. We support this Standard but suggest the following additions:

- Consider the urban context
- Be designed to improve safety for residents, visitors and the public.

### **3.15 Waste and Waste Management (reasonable)**

The expectations are reasonable and desirable. We support this Standard but suggest the following additions:

- Bin enclosures should be located away from the front of developments
- Waste Management plans should encourage the effective management of waste to minimize landfill by including effective waste/recycling separation systems.

## **4. Conclusion**

*Architects are the experts in the field but they need to be supported by planning regulation that both allows them flexibility to innovate, and empowers them to resist the pressure of a poor brief.*

Architecture plays a crucial role in sustaining and enhancing the wellbeing of individuals, families and societies. The architectural profession plays a major role in shaping all aspects of

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the built environment for the betterment of all. We believe mandating innovative, site specific design responses should be at the foundation of the Apartment Design Standards.

The Institute has a long standing position of supporting the implementation of apartment design Standards and similar planning legislation in all jurisdictions. We see this current initiative in Victoria as the beginning of a new framework aimed at encouraging innovative design solutions which lead to improved affordability, housing diversity, and improved living standards – now and into the future.

Affordability is not to be confused with profitability when we are setting the agenda for the future liveability of our city. Through innovation and design, architects are addressing issues related to affordability every day. The Standards must support this by aspiring to design excellence, mandating architects, and acknowledging different apartment typologies and different urban contexts that required different design responses.

Affordability includes the cost of ongoing energy consumption and building maintenance (costs that are not borne by the developer), all of which can be reduced through quality design. By adopting performance based design quality Standards that can be applied in a flexible way we encourage innovative design solutions which lead to improved affordability, housing diversity, and improved living standards.

We look forward to providing significant input into the ongoing process of developing and delivering sustainable residential solutions for Victoria. We welcome the opportunity to work with the Department, the Office of the Victorian Government Architect and fellow industry representatives to achieve an outcome that will lead to appropriate Standards for apartment development in Victoria.

As a final recommendation, we would urge the Government to introduce the Standards on an interim basis for a 12 month trial period, during which time testing and VCAT assessments will be made. The outcomes could then be reviewed and incorporated. This will ensure consistency with the introduction of the C270 Amendments and allow for the resolution of any extra unseen consequences that may become obvious in that period.