Industry Submission –
Apartment Amenity Design Measures

SUMMARY

1. Position Summary

According to Plan Melbourne, Melbourne's population is expected to grow by 3.4 million people to 7.7 million by 2051. To accommodate this growth, Melbourne will need to provide 1.6 million more dwellings. As such, apartments have an important role in servicing the housing needs of our population now and in the future.

In principle, the Urban Development Institute of Australia (Institute) is supportive of a mixture of market based and policy/ performance based approaches to delivering *Better Apartments*. However, as stated in our previous submission, in developing and implementing any approach, the Institute urges the State Government abide by the following principles:

- The significant role apartments play in in delivering an affordable housing option in desired locations is to be maintained or improved;
- Development outcomes which are predominately driven by choice and preferences of the market are allowed to continue;
- Liveability is properly considered in the context of three components, being: interior amenities, building amenities and locational amenities; and
- Recognise the role of development outcomes which are largely driven by existing regulatory instruments and allow these to remain the responsibility of the relevant regulator (i.e the Australian Building and Construction Board is responsible for the Building Code of Australia)

In reviewing the proposed apartment design measures which were provided to the Institute as part of the Industry Reference Group consultation process, the Institute found that these principles have largely been ignored. The following points are a summary of the general issues identified in the Institute's review of the proposed measures:

1. The proposed design controls fail to acknowledge the impact of the controls on design and construction cost, and in doing so, ignores the potential negative impacts on affordability. A study of a recently constructed development in South Yarra indicated that applying just a few of the proposed measures will result in an average price increase of around $123,000 per apartment. The cost of each design measure must be properly assessed by a qualified quantity surveyor if the government is to fully understand the impact the proposed design controls may have on the affordability of housing.
2. The proposed design controls will restrict the urban development industry's ability to respond to the changing needs and preferences of the broader apartment market with innovation and the flexibility required to meet consumer demands;
3. The proposed design controls ignore existing and well entrenched regulatory provisions which already address key design outcomes such as ventilation, energy efficiency and ceiling height. No attempt has been made to assess if and if so, how, existing regulatory provisions such as the National Construction Code deliver an unacceptable outcome.
4. The proposed design controls extend beyond the role of the planning system. Instead of imposing measures to ensure 'acceptable' outcomes are achieved, the measures deliver what the

Department of Environment, Land, Water and Planning (DELWP) and the Office of the Victorian Government Architect (OVGA) considers to be an 'ideal' outcome. In doing so the proposed design controls create a barrier to entry for design, quality and in turn, affordability.

5. The proposed design controls do not properly consider the whole design process or final produce, when adding the sum of its parts. Implementation of all or majority of provisions would be impossible or rare; and
6. The proposed design controls do not properly differentiate between different types of apartment development and their contexts.

The Institute has engaged a number of its members across the planning, architecture and development sectors of the industry to undertake a hypothetical options analysis of the impact of design controls. We have established that in their current form, the proposed apartment design controls would likely result in the following direct impacts:

- The proposed design controls will increase in the average price per apartment by more than $123,000 due to increased cost of design and construction, as well as increased development risk;
- The controls would significantly reduce the size of the apartment market by pricing out buyers who can currently enter the market at the affordable end, being the less expensive end. These buyers actively trade off on design features more likely to be associated with the higher end of the market, in order to achieve ownership; and
- The controls would reduce apartment building activity.

These outcomes are of great concern to the urban development industry and are counterproductive to the overall strategy for Melbourne's growth as identified in Plan Melbourne and Plan Melbourne Refresh.

2. Recommendations

The Institute recommends that:

1. Government works with the industry to develop consumer facing material and information to better inform members of the public seeking to purchase apartments off the plan.
2. The DELWP and OVGA review the basic amenity provisions delivered through the National Construction Code (NCC) to determine their ability to deliver acceptable building outcomes. Any proposed changes should be addressed by the Australian Building Code Board and subject to their regulatory impact analysis.
3. The DELWP and the OVGA review, document and showcase examples of good design to assist in the development of design measures that are more suitable for planning schemes. This should include examples of affordable development products to ensure proposed designs don't lead to an all luxury apartment market.
4. The DELWP and OVGA undertake a comprehensive cost/benefit analysis of any proposed design controls to better inform this process and to facilitate an honest conversation with the community about the cost of design standards. The cost/benefit analysis should also consider the social and economic impacts reducing affordability will have on Melbourne's population and economic growth.

5. Modelling of any proposed design controls must analyse how development in a number of different scenarios can feasibly meet all or a large majority of the provisions while meeting the need of the current apartment market. This will need to be broken down into demographic targets and location to ensure that the industry is able to:
    a. provide apartment which can house a wider demographic; and
    b. deliver apartments within the CBD and Melbourne's inner, middle and outer suburbs.

ABOUT US

Urban Development Institute of Australia (Victoria)

The Urban Development Institute of Australia (Institute) is the peak industry body for the urban development sector. In Victoria, we provide over 320 member companies with the benefits of policy and advocacy, industry intelligence, networking and business building.

Our members include developers, consultants, financial institutions, suppliers, government authorities and utilities. Together we drive industry discussion and debate and inform all levels of government to achieve successful planning, infrastructure, affordability and environmental outcomes.

SUBMISSION

1. Purpose

The discussion from State Government around the purpose of introducing apartment amenity design measures stems from the perception that the quality of apartments needs to be improved. Based on the public discussion on apartments, it is assumed that the basis for introducing more stringent apartment design measures is proceeding on the following misconceived assumptions:

- Development is failing to deliver apartment housing the population wants and needs;
- Existing regulations and provisions are failing to deliver an acceptable development outcome; and
- Design guidelines are needed to ensure that apartments deliver additional value to owners and occupiers.

In response to those assumptions, the DELWP and OVGA have proposed a set of apartment amenity design controls that will deliver what they consider to be an 'ideal' development outcome for apartments.

Delivering a suitable housing product to the population

Relevancy of issue

Melbourne's apartment market has only existed for the past 20-25 years. The market acceptance of apartments as desirable dwellings based on their location, size and other benefits is still emerging in Melbourne. In the past three years, the apartment market has matured significantly and it now offers home owners and investors a very housing product.

Anecdotally, in 2014 and 2015, when apartment design became a key issue for the Andrews Government, the proportion of 1 or 2 bedroom apartments being delivered was as high as 90 – 100%. This high proportion of smaller products would only ever be sustainable if the market continued to demand 1 or 2 bedroom apartments.

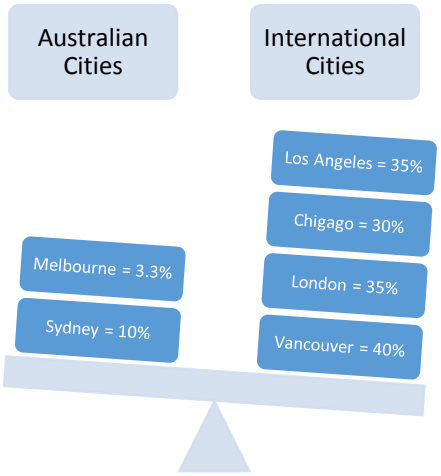
However, in recent times a shift in preferences within the apartment market has developed and there has been a tangible increase in demand for 3 bedroom apartments. In response, the development industry has successfully introduced different products to cater for the much more diverse apartment market.

Before seeking to intervene in the industry's ability to respond to the demands of the housing market, it is essential that the DELWP and OVGA understand that Melbourne's apartment market is still maturing. For example, less than 10 years ago the average apartment rates were around 4,000 per annum. By 2010, this had grown to 10,000 approvals per annum. By 2014, approvals were over 14,000, making up nearly one third of all housing approvals in Melbourne.

Due to its transition towards maturity, consumer and investor preferences in the apartment market are continually changing. Limiting the ability for the development industry to deliver products directly reflecting market preferences will impact this transition and slow down building activity.

Some may argue that as the market matures, the government is responsible for ensuring that the diversity of apartment types and sizes meets the needs of the future population. This argument ignores the fact that according to the Institute's Research Partner, Charter Keck Cramer, apartments in buildings (four storeys or more) as a percentage of total housing stock in Melbourne is only 3.3%. This figure is 10% in Sydney, 30% in Chicago, 35% in Greater London, 40% in Toronto and Vancouver and 35% in Los Angeles.

Due to the low proportion of housing stock attributed to apartments, it is argued that the apartment market would balance itself out long before it reaches 10% as seen in Sydney. At present, stipulating the size and type of dwelling would do more harm to the apartment market then good, particularly when requirements don't align with preferences of the market.



Market led design

As mentioned above, changes in market preferences and demand largely leads to changes in what is provided. Due to the tight requirements guiding development funding and project financing, a failure by government policy to recognise what the larger population wants and needs can render the industry unable to deliver feasible projects which respond to consumer and investor demand..

As highlighted in our previous submission, a development is often required to sell around 90% or more of a project before finance can be obtained and before construction can even begin. Due to this, the market ultimately decides whether an apartment development proceeds.

If government intervention restricts the industry's ability to provide apartments that the market is willing and able to purchase or rent, this will lead to further restriction on the ability of projects to secure development funding and meet project financing requirements, leading to a slowdown in apartment building activity.

The best way to change the size, type and design of apartments without impacting activity, is to influence consumer and investor preferences. The Institute's view is that Government should seek to inform and advise consumers seeing to purchase or invest in the apartment market.

Recommendation 1: *Government works with the industry to develop consumer facing material and information to better inform members of the public seeking to purchase apartments off the plan.*

Inadequate evidence base

To help the department identify the right mechanisms to promote high quality apartment living opportunities in Victoria, the DELWP and OVGA undertook a survey of the community.

Firstly, the survey's purpose was inadequate in that it sought to identify the right mechanisms for promoting high quality apartment living. Instead the survey should have sought to identify any gaps between current and expected future market preferences and apartment products.

The survey requested respondents to answer a series of questions, many of which requested respondents to rank the level of importance each element or issue is to them. This approach merely identified how important each of the element or issue was to the respondent rather than if the respondent could identify a problem or believed there was a negative issue with the current provisions. Furthermore, the survey excluded major considerations for choosing to buy or live in an apartment including price point, availability of stock and other factors that drive the decision making process of consumers and investors.

While the survey findings briefly touches on the fact that owners and occupiers are willing to trade off internal amenity for location, the survey does not address one of the most important factors that determines choice….affordability.

Failing to include the full scope of choices, linking one choice with another (i.e. increased size equals increased price), the survey provides a wishlist that creates an outcome that conflicts with the real

choices that people make (i.e. affordability, location, etc.). Addressing all the items of the wish list may deliver on its purpose of identifying the mechanisms for promoting high quality apartments. However, it does not deliver mechanisms for promoting the delivery of acceptable apartments which can meet the needs of the broader apartment market.

Level of concern amongst apartment dwellers

If there was a considerable issue with the amenity of apartments within Melbourne, it would be reasonable to expect there would have been a significant response from apartment dwellers. This was evident in the split between apartment dwellers (300 respondents) and non-apartment dwellers (600 respondents) who responded to the DELWP's initial survey.

The low level of response from apartment dwellers indicates a lower level of concern amongst those who have a personal experience either living, renting or investing in an apartment. Due to the level of objections apartment development receives within inner and middle suburbs, the higher response rate amongst non-apartment dwellers should be treated with caution. It is a concern of the Industry that a vocal minority maybe using 'amenity' and 'liveability' as a reason to oppose suburban apartment development.

Ultimately, if an apartment product is perceived by the market to be of poor quality, it will either sell for less or not sell at all. The danger of producing poor quality apartments is that developers may have trouble meeting finance requirements such as pre-sales or fail to deliver an expected return on investment, and a project would be unlikely to proceed.

Uncertainty around demographics of respondents

Despite requests by the Institute, the raw data (other than data restricted due to privacy laws) collected from the survey has not been provided by the DELWP and OVGA. It is a concern of the Institute that the demographics of apartment dwellers that responded to the survey does not adequately reflect the demographics of the market the industry wants and needs to house.

As people of varying demographics have different housing preferences, the survey needed to adequately capture the choices and preferences of the market that is likely to reside in apartment dwellings. Failing to do so will inevitably lead to the development of design controls that will in practise, fail to meet the needs and preferences of consumers and investors.

Acceptability of existing measures

There are existing regulations and provisions that address many of the elements raised by the Better Apartments Discussion Paper and the proposed design measures. For example the National Construction Code (NCC) Volume 1 sets out contains requirements for multi-unit residential development. Some of the elements the proposed measures are seeking to address are featured in the following sections of the NCC Volume 1:

- Section D – Access and Egress, Part D3 – Access for People with a Disability;
- Section F – Health and Amenity,
  - Part F3 – Room Heights
  - Part F4 – Light and Ventilation
  - Part F5 – Sound Transmission and Insulation
- Section J – Energy Efficiency
  - Part J0 – Energy Efficiency
  - Part J1 – Building Fabric
  - Part J2 – Glazing
  - Part J3 – Building Sealing
  - Part J5 – Air-Conditioning and Ventilation Systems
  - Part J6 – Artificial Lighting and Power

In seeking to propose additional design measures to address elements such as natural ventilation, ceiling heights, noise, energy efficiency, etc. the DELWP and OVGA have not provided any assessment as to how the NCC does not represent an acceptable outcome.

It is difficult to surmise that the after the process that is undertaken to develop each edition of the NCC, that the outcomes that it delivers could be considered unacceptable. Unlike majority of the provisions introduced within the planning scheme, the changes to the NCC go through a Regulation Impact Analysis. The key steps of the regulation impact analysis involve describing the nature and extent of the problem; stating the intended outcomes of proposed action; identifying a range of feasible policy options that are capable of addressing the problem; undertaking cost benefit analysis of these options to identify the option that would deliver the greatest net benefits to society; and consultation to incorporate the views of parties affected by the proposal.

Recommendation 2: *The DELWP and OVGA review the basic amenity provisions delivered through the National Construction Code (NCC) to determine their ability to deliver acceptable building outcomes. Any proposed changes should be addressed by the Australian Building Code Board and subject to their regulatory impact analysis.*

Adding value to buyers and occupiers

Proponents of more stringent standards on apartment design argue that it would improve the value of apartments to occupants and owners. This is based on the premise that each design measure is valued by everyone and that the increased value can continually increase. Such an argument ignores how individuals value a good or service.

For the individual owner, investor or renter of an apartment dwelling, value is defined as the maximum amount of money they are willing and able to pay for the ownership or lease of an apartment. As what a person is able to pay for housing is limited, so too is the value that can be

added to housing. If the cost of buying or leasing an apartment is above what an individual is willing and able to pay, the person will seek an alternative housing option.

Instead of increasing the value of apartments, the increased costs associated with the proposed apartment amenity design measures will increase the cost of housing. If consumers and investors are unable to absorb the additional costs, demand on alternative housing options will increase and market activity for apartment development will decrease.

Ideal vs Acceptable Outcomes

To assist the DELWP to determine an adequate purpose for apartment design measures, the Institute has provided an analysis of *Knox City Council v Tulcany Pty Ltd* case as observed in *[2010] VSC 583 Rozen v Macedon Ranges Shire Council & Anor*:

> *"The planning scheme does not require an ideal outcome as a prerequisite to a permit. If it did, very few, if any permits for development would ever be granted and there would be difficult differences of opinion as to whether the outcomes were in fact ideal. The Tribunal is entitled to grant a permit where it is satisfied that the permit will result in a reasonably acceptable outcome having regard to the matters relevant to its decision under the planning controls"*

The above statement further highlights the need for the apartment amenity design measures to represent an acceptable outcome as opposed to identifying an ideal outcome. At present, a large proportion of the proposed measures seeks to deliver what the DELWP and OVGA perceive to be an 'ideal' development outcome.

Should the Government continue with the proposed design controls, fewer apartments will be built, and those that are built will be done so at a significantly greater retail price than presently available.

To further demonstrate how the proposed apartment design controls fails to meet the acceptable standards test, the Institute commissioned Plus Architecture to undertake work that identifies the following:

- Impact on the availability of suitable development sites within two precincts intended for residential development/ redevelopment;
- Yield potential and feasibility of potential development sites (un-amalgamated and amalgamated);
- Yield impact the proposed measures would have had on a recently constructed development; and
- Impact the proposed measures would have had on apartment buildings recently approved by the Minister for Planning, the Hon. Richard Wynne.

In summary, the research came to the following conclusions:

- Within the St Kilda Road and Forrest Hill precincts, the imposition of the amenity design measures as proposed would significantly reduce the number of sites that could be developed;
- Yield potential for residential development would be significantly reduced should the proposed design measures be implemented. In one case example, the yield potential for a

building recently constructed in South Yarra would be reduced by as much as 190 dwellings (more than half of current yield);
- Even if two sites were hypothetically amalgamated within the identified precincts, the potential yield of a site is significantly reduced to the point that makes feasibility difficult or non-existent. One case example demonstrates that the value of a hypothetically amalgamated site, developed for residential purposes is significantly less than the market value of the existing office buildings;
- Development proposals, recently approved by the Minister for Planning would not be feasibly developed if the proposed design measures were imposed.

The case examples provided by Plus Architecture further demonstrates that the proposed apartment amenity design measures represents what the DELWP and OVGA considers an ideal design outcome, not a reasonably acceptable design outcome.

Recommendation 3: *The DELWP and the OVGA review, document and showcase examples of good design to assist in the development of design measures that are more suitable for planning schemes. This should include examples of affordable development products to ensure proposed designs don't lead to an all luxury apartment market.*

2. Role of Apartments

Liveability

As raised in our previous submission, 'liveability' needs to be considered in the context of three components:

- Interior amenities: the amenities located inside the walls of the apartment;
- Building amenities: the amenities that the building provide for apartment occupants situated within; and
- Locational amenities: the amenities provided by the location in which the apartment building is sited.

Due to locational amenities and building amenities that apartment dwellings within inner city locations provide, lesser interior amenities not seen in a suburban setting might be acceptable.

The proposed apartment amenity design measures does not properly consider the full context of what 'liveability' means for apartment dwellers. Instead, the proposed measures focus on how the design outcome will deliver what the DELWP and OVGA considers to be the ideal level of amenity.

Affordability

The discussion around apartments must first recognise that the most significant role apartment's play in the broader housing market is one of affordability and diversity. For many low and middle-income households, the price and rental cost of detached and semi-detached dwellings in Melbourne's inner and middle suburbs, means that an apartment is a more affordable means of housing in locations where housing prices may be unaffordable.

According to research undertaken by Charter, the current median price for a 46-50m2 one bedroom apartment is $411,000. This is more affordable than 70% of detached housing and 58% of all existing units and flats sold in Melbourne last year. [1]

Furthermore, research conducted for the *Context Report* identified that in a survey of 70 new one-bedroom apartments sold in Melbourne's inner east, 49% were below 50m^2 and sold for less than $500,000.

According to the Real Estate Institute of Victoria, in the June quarter of 2015, there were 78 suburbs with a median house price of more than $1 million. Within areas such as these, apartments are the lowest cost option for residents. [2]

To demonstrate the direct impact the proposed measures have on affordability, the Institute, with Plus Architecture, have produced a full cost analysis of the apartment development at 2 Yarra Street, South Yarra, which was completed in 2015. Within this development a one bedroom apartment was priced at as little as $330,000. The Institute's analysis shows that if the Government's apartment design controls were applied to this development, the average apartment purchase price would have be increased by a minimum of $123,000 per dwelling.

The Institute has consistently advocated for a full cost benefit assessment to be undertaken by the Government which demonstrates the cost impact of any proposed design controls. To date, this has not been done.

The Government must be willing to have an honest conversation with the Victorian community about the cost impost of any proposed design controls. There is a price tag on every design proposal and unless the Government engages the community in an honest and transparent discussion about this fact, the debate will undoubtedly be won or lost on the emotive opinions of a minority few at the expense of those wanting to live or investment in an apartment.

In the absence of any such analysis, the Institute views the consideration of proposed apartment design controls is premature. As such, we would like the opportunity to reconsider any options once a full cost benefit analysis on the proposed measures have been conducted.

Recommendation 4: *The DELWP and OVGA undertake a comprehensive cost/benefit analysis of any proposed design controls to better inform this process and to facilitate an honest conversation with the community about the cost of design standards. The cost/benefit analysis should also consider the social and economic impacts reducing affordability will have on Melbourne's population and economic growth.*

[1] Department of Environment, Land, Water & Planning, 2015, *"Better Apartments: Minister's Forum Context Report*", July 2015, pp.11
[2] Real Estate Institute of Victoria, 2015, "Million Dollar Suburbs, last viewed 31 July 2015, https://www.reiv.com.au/PROPERTY-DATA/High-Performers/Million-Dollar-Suburbs

3. Implementation Issues

Delivering 'Better Penthouses' not 'Better Apartments'

One of the unintended consequences the proposed amenity design measures would result in is the potential premium market apartment products. The premium apartment market already delivers a majority of the measures proposed. Imposing the same level of amenities provided to the premium market could potentially lead to a slowdown of economic activity due to the small size of the premium apartment market.

Furthermore, imposing the proposed amenity design measures will segregate a significantly large proportion of the current apartment market. Such an action would lead to even further strains on housing affordability and make home ownership increasingly unattainable.

Delivering a premium product as expected through the proposed measures, the price of apartments would rise by more than $123,000. Such an increase would shut out a large proportion of consumers and investors from the apartment market.

The role of the planning system is to ensure the delivery of acceptable outcomes. The delivery of only premium apartment products through the proposed measure further illustrates that these measures seek to achieve a perceived 'ideal' outcome, not limit development to acceptable outcomes.

The whole is not greater than the sum of its parts

As shown in the attached case examples and studies, application of the proposed apartment design measures drastically reduces the number of developable sites, decreases the number of apartments that can be developed, and creates impossible and infeasible building envelopes. In applying a small proportion of the measures proposed a large majority of recently approved and highly commended development would not possibly be approved.

To develop a set of measures that at a minimum results in an acceptable development outcome, you would expect a majority of acceptable development could feasibly meet the majority of provisions. Unfortunately, as the case examples and studies show, this is not the case with the apartment design measures.

In reviewing the proposed measures, it has become apparent that they were drafted without consideration of the whole. The result, a set of measures that are unrealistic and impractical.

Recommendation 5: *Modelling of any proposed design controls must analyse how development in a number of different scenarios can feasibly meet all or a large majority of the provisions while meeting the need of the current apartment market. This will need to be broken down into demographic targets and location to ensure that the industry is able to:*

a. *provide apartment which can house a wider demographic; and*
b. *deliver apartments within the CBD and Melbourne's inner, middle and outer suburbs.*

One size does not fit all

The proposed apartment amenity design measures treats all apartment development within all locations in the same way. It takes no account of the urban (or suburban) context of the development site. A four storey apartment development in the middle or outer suburban area is a very different product than a 20+ storey development within the CBD or inner areas.

For a multi-unit development up to four storeys, the proposed measures are significantly more onerous than requirements in Clause 55. There has been no consideration as to the locational and development settings that determines marketability (can it be sold?) and feasibility.

Additionally, the NCC provides for a basic level of amenity for residential buildings. If there is genuine concern over the amenity delivered through the national and state regulations, a proper review of the amenity issues and solutions should be raised by the government and investigated by the responsible apolitical authorities.

Restricting market activity

The proposed design measures are so restrictive that even many high quality, apartment buildings would not have been possible. A large proportion of the high quality apartment buildings in St Kilda Road and Forest Hill, in addition to buildings approved by the current Minister for Planning do not comply with the proposed measures.

The over emphasis on building separation and setbacks will result in substantial limitation on the development potential of sites, rendering many as undevelopable. The minimum width for an efficient building envelope is 20 metres, a site would need to be 32 metres wide for a 4 storey building and 44 metres wide for a building greater than 8 storeys. Sites of this width are rare within activity centres and inner city renewal locations.

The lack of sites that can be developed for residential apartment purposes would mean a significant decrease in the supply of apartments. A constraint on supply will mean that affordable apartment products would be removed from market.

Affordable Housing: Higher demand, lower ability

As a result of a significant segment being shut out of the apartment market due to constraint of supply and the provision of premium apartment products, affordable housing providers will have a significantly greater role.

However, due to the imposition of the proposed design measures, affordable housing providers are unlikely to provide an affordable product to those they are currently servicing in addition to those that have been priced out of the market. Both the private and public sector will find it difficult to provide affordable housing under the proposed provisions.

4. Design Measures

Group of Measures 1: Building Separation

The proposed measures aim *to ensure that buildings are adequately separated and provide reasonable and equitable access to daylight, privacy and outlook*. To meet this aim, the DELWP and OVGA propose measures which impose significant separation distances for buildings, habitable rooms and balconies.

Imposing such significant and stringent measures would have a significant impact on the availability of developable sites and fails to consider site specific conditions.

In addition to not considering site specific conditions, the proposed design measures impose stricter building separations on apartments than what is applied to other types of housing. For example, a house, townhouses or duplexes are able to be separated by as little as 2m.

Measure 1 Issues:
The below table demonstrates how the imposition of *Measure 1* would require potential development sites to have significantly larger widths. With a vast majority of sites having site widths less than the identified minimum site widths, much of Melbourne would be difficult or impossible to develop.

Building Height	Minimum setback	Minimum site width
Up to 12 m	6 m	32 m
25 m	9 m	38 m
Over 25 m	12 m	44 m

Building height	Heritable room/balcony to habitable room/balcony	If neighbour 5m setback min size width is
Up to 12 m	12 m	34 m
25 m	18 m	46 m
Over 25 m	24 m	58 m

Note: an efficient apartment building is at a minimum 20 metres wide.

Measure 2 Issues:
Proposed design measures is likely to have similar impacts on the minimum site width for developable land with a slight reduction where abutting a laneway. If two 25m plus buildings, abutting the same laneway can be separated 18 metres from each other to meet the aim of the provisions, how does two 25m plus buildings sharing a side boundary fail to meet the aim of the provisions if separated 18 metres to 23.9 metres from each other.

Measure 3 Issues:
Proposed measures only considers the built form of neighbours. Thereby, it disproportionately advantages first movers with the ability to further constrain the development opportunities of neighbouring sites.

Group of Measures 2: Daylight – Dwelling Setback and Frontage

The proposed measures aim:

To ensure that each dwelling receives an adequate amount of daylight.
To allow adequate daylight into dwellings and communal spaces.

Majority of the measures proposed for setback and frontage duplicates the measures proposed for building separation. The key difference being the minimum widths applied to apartment dwellings.

Measure 1 Issues:
Given the length of the façade is fixed, wider apartments equals less apartments. The proposed minimum widths can lead to 19% less apartments on the façade of the development.

To meet the preferred sizes, the depth of the apartments is less, but the core and circulation remains the same. As a result there will be approximately 15% less sellable area per core/ equating to greater construction costs per apartment.

This results in a decrease in the efficiency of constructing apartment dwellings from 85% to 70% which can be equated to approximately $13,500 cost increase per apartment. Applying a return on investment at 20%, the price of an apartment to be feasible will need to increase by$16,200.

Below is a table comparing the proposed minimum dwelling widths with development currently receiving permits.

Dwelling size	Minimum dwelling width	Currently receiving permits
Studio	4.2 m	4 m (5% more apartments)
1 bedroom	7 m	6.2 m (13% more apartments)
2 bedroom	10 m	8.1 m (23% more apartments)

Measure 2 Issues:
In addition to the same issues identified for building setbacks, it is unclear if setback from centreline of streets or lanes only references side or rear streets and lanes, or also front streets.

Group of Measures 3: Daylight – Light Wells and Courtyards

The proposed measures aim *to provide adequate daylight to dwellings from light wells.*

Measure 1 Issues:
Point 2 prescribes that light wells be painted in light reflective colour. How is it appropriate or reasonable for planning permits to specify and prescribe elements that are temporary and difficult to enforce.

Point 3 seeks to provide an opportunity for useable space at ground level does not add to the aim of the measures. Furthermore it ignores the potential noise issues that can arise from active use of the ground level of a light well.

Point 4 seeks to address any privacy issues in light wells and does not add anything to the aim of the proposed measures. Any privacy issues can be acceptably resolved through the use of louvres and other similar methods of screening.

Measure 2 Issues:
The Institute agrees with the statement that 'living areas should not rely on a light well as the primary source of daylight".

The proposed minimum dimensions takes away the ability to maximise the efficiency of buildings without improving access to daylight. For example, a light well of 1.5m by 6m can be better than a 3m by 3m light well due to position.

Introducing measures for secondary lighting to a living room or bedroom would unlikely lead to better apartments if it results in more buildings incorporating secondary lighting. Any proposals where secondary lighting to living rooms and bedrooms should be assessed on a case by case basis.

Group of Measures 4: Daylight – Ceiling Height

The proposed measures aim *to ensure that the ceiling heights allow adequate daylight into habitable rooms.*

Currently with the provision of services and thickness of ceilings the average height from floor to floor is 3 metres. Any increases to the minimum floor to ceiling height will add additional costs to apartments and reduce yield in areas where there is a minimum building height expressed in metres.

Measure 1 Issue:
The proposed measure will increase the average floor to floor height to 3.2m adding cost to development and reducing yield where building heights are expressed in metres.

For example, a floor to ceiling height of 2.7m will delete an entire floor from all development with an 18 metre mandatory height limit.

Imposing a floor to ceiling minimum height limit of 2.65 maybe appropriate within living areas as service pipes can avoid crossing over living areas. However, due to service pipes needing to transfer over bedrooms, adding additional minimum floor to ceiling height would have a significant impact on cost.

3.2m floor to floor is an extra 6% in height. This results in additional façade, structural material, walls, and finishes. This all leads to a 5% increase in the construction costs per each apartment, which equates to approximately $13,500. Factoring in a return on investment of 20%, the measure will increase the price of an apartment to increase by $16,200.

Group of Measures 5: Daylight – Room Depth

The proposed measures *aim to ensure that the dimensions of habitable rooms allow adequate access to daylight*. In seeking to deliver this aim, the proposed measures clearly provides what the DELWP and OVGA considers to be the most ideal outcome.

Measure 1 Issues:
If the ceiling height is required to be 2.7 metres high, the depth of a room cannot exceed 6.7 metres. South facing habitable rooms have a maximum depth of 5.4 metres deep.

The significantly prescriptive nature of these provisions further supports our concerns that the proposed measures seek minimum standards beyond what is considered reasonably acceptable. This argument is further supported by the prescriptive manner in which the measure prescribes the location of a kitchen.

A large luxury apartment is ideally 10.2 metres from window to back of the kitchen. While the proposed measures could work for small apartments, it constrains many of the luxury apartments being built in addition to the average three bedroom apartments.

The proposed measures if complied would increase the width of apartments thereby reducing efficiency. It is estimated that the increase in apartment widths would add on average an additional $15,000 to the cost of an apartment.

The most efficient apartment building is 20m wide with an average apartment depth of 8m. These measures reduce the average depth to 6.1m. This results in a 3% drop in the efficiency of the floor plate adding 3% to the cost of construction. This will increase the average cost per apartment by approximately $8,100. Factoring in a return on investment of 20%, the measure will increase the price of an apartment to increase by $9,720.

Group of Measures 6: Daylight – Daylight Access

The proposed measure aims *to ensure that each dwelling receives adequate amount of daylight*.

Supporting the introduction of the proposed measures, the DELWP and OVGA make a few assumptions about the preferences of occupants. One assumption is that everyone wants bright bedrooms and that saddlebag apartments have no benefits.

However, it is not uncommon for people to want darker rooms with occupants of brighter rooms making it darker through blackout blinds and other screening. Additionally, some of the benefits of a saddlebag room comes from its distance from the source of noise, heat and cold. The proposed measures will take away any choice the consumer has in owning or renting an apartment that meets their preferences.

Furthermore, the requirement for modelling adds additional cost and time to a project. The requirement to undertake daylight modelling and the requirement for 70% of a room to have a particular daylight factor is considered excessive and unnecessary. For example, a 3 by 3.5m bedroom with a 1 by 1.5m window and a 900mm eave would not comply with this requirement.

The last paragraph doesn't make sense. Essentially when it doesn't achieve the average daylight factor for 70% of its floor area it should demonstrate that it achieves an unknown daylight level for a unknown percentage of its floor area.

The excessiveness of the stated requirements and the ambiguity of the proposed fall back measure suggests that there is uncertainty as to how to properly address daylight access. As such, there is very little confidence in all measures seeking to address daylight.

Group of Measures 7: Daylight – Windows

The proposed measures aim *to ensure windows to dwellings provide adequate direct daylight*. However, proposed measures appear intent on removing saddlebag bedrooms.

In many developments, the use of saddlebag increases the efficiency of apartment buildings. Removing saddlebag bedrooms from apartment development will lead to a reduction of yield by approximately 20%. The reduction in yield of this amount will lead to the increase of apartment prices and/or the reduction of apartment development activity.

Furthermore, the measures seeking to remove or reduce saddlebag apartments fails to recognise the benefits they have. A large proportion of occupants of saddlebag apartments prefer the increased distance from the source of noise, heat and cold.

As the primary purpose of bedrooms is for rest, a large proportion of the market prefer less bright bedrooms. Removing saddlebags not only increases the cost of development due to inefficiencies, it also removes choice from the market.

Measure 1 Issues:

In most cases, the space providing access to daylight would need to be a minimum of 1.5m (common length being at about 3 metres). This goes beyond what is considered reasonably acceptable, a width of 1 metre is adequate for a saddlebag bedroom. Extending the width of the space providing access to daylight will either reduce the width of living areas or increase the width of apartments, both measures are considered an undesirable outcome for liveability and affordability purposes.

Measure 2 Issues:

See broader comments regarding the removal of saddlebag bedrooms.

Group of Measures 8: Daylight – Daylight to Internal Communal Areas

The proposed measures aim *to allow adequate daylight into internal communal areas*. Both the aim and proposed measures appear to be based around what the DELWP and OVGA considers the ideal outcome, not the acceptable outcome.

As identified within the Public Engagement report, entries and circulation is identified as 'least important', while daylight is listed as 'most important'. If daylight to entries and circulations were of any reasonable level importance, the Entry & Circulation issue raised in the discussion paper would be expected to have a higher level of importance. The reason entries and circulations don't have any significant level of importance is because there is little to no value other than getting to allow access to apartments.

Measure 1 Issues:

It has been identified that to meet the proposed measures an additional 15 square meters of corridor is needed on average (7.5 deep x 2m wide). This area could have been used as net sellable area. At a cost of $3,000 per sqm, this equates to an additional $45,000 per floor. If there are 8 apartments per floor, the additional construction cost per apartment will be $5,625. Factoring in a return on investment of 20%, the measure will increase the price of an apartment by $6,750.

Furthermore, to meet fire safety requirements, majority of stairwells are required to be sealed and closed. Windows are not allowed.

Group of Measures 9: Dwelling Amenity – Dwelling Size

The proposed measures *aim to encourage dwelling with functional space that meets the needs of residents*. However, the basis in which the DELWP and OVGA have proposed minimum sizes ignores the size of dwellings, principal bedrooms and living rooms within a large proportion of existing housing, apartment or otherwise.

Proposing measures that seeks to increase the size of apartments, principal bedrooms and/or living rooms further demonstrates that the proposed measures fail to identify an acceptable outcome. Furthermore, prescribing minimum sizes and dimensions doesn't ensure good design, just bigger rooms.

Measure 1 Issues:

The minimum dimensions for principal bedrooms produces a bedroom that is much larger than what is provided in many detached housing. Currently, a 2.8 by 3.6 metre bedroom is considered acceptable.

Increasing the minimum size of a principle bedroom of an apartment by 1.2 square metre increases the cost of apartments by approximately $12,000. This is based on a sales rate of $10,000/sqm which is commonly required to meet the requirements of the bank.

Prescribing dimensions for Living rooms, in addition to bedroom sizes, in addition to room depth is extremely limiting and will restrict innovation and add to the cost/price of apartments.

Measure 2 Issues:

Dwelling size	Minimum internal area	Comment	Impact
Studio	37 sqm	Acceptable	
1 bedroom	50 sqm	More than 5m2 from an acceptable 45m2	+$50K in purchase price
2 bedroom	65 sqm	More than 7m2 from an acceptable 58m2	+$70K in purchase price
3 bedroom	90 sqm	Acceptable	

To ensure an adequate return on investment, developments will be providing products that will ensure a higher price per square metre. As such, imposing the minimum apartment sizes as proposed will likely result in more delivery of:

- 1 bedroom with study instead of the more affordable 1 bedroom apartments; and
- 2 bedroom, 2 bathroom apartments instead of the more affordable 2 bedroom, 1 bathroom apartments.

Such a measure will shut out a significant sector within the apartment market making housing attainability a pipe dream.

Measure 3 Issues:
Please see comments above.

Group of Measures 10: Dwelling Amenity – Storage
The proposed measures aim *to ensure that adequate storage is provided for each dwelling*.

M*easure 1 Issues:*
It is considered that the 6m^3 of externally accessible storage is derived from ResCode. The purpose of requiring 6m3 of for housing was to ensure that adequate storage was available for lawnmower/bicycles, garden tools, bins etc. (Please refer to explanatory note). The reasons that 6m3 of storage is required for housing does not apply to apartments. Apartments have separate bicycle storage, communal bins and minimal to no outdoor/garden maintenance needs.

Proposing measures that delivers an outcome which was intended for purposes not relevant to apartments is inappropriate and ill-conceived.

Measure 2 Issues:
The commonly accepted storage cage at the end of a car park bay is 2.6m wide by 0.6m deep by 2.2m high, which equals 3.6 cubic metres. It occupies 1.56sqm of basement floor area. For 3 bedroom apartments the commonly accepted storage amount is double (3.12sqm floor area). The proposed provisions will have an added cost to development. The below provides some estimates around the cost associated with the proposed requirements:

Dwelling size	Total minimum storage area	Extra cost
Studio	6m3 (= 2.7 sqm floor area)	+$2100
1 bedroom	6m3 (= 2.7 sqm floor area)	
2 bedroom	8m3 (= 3.6 sqm floor area)	+$3300
3 bedroom	10m3 (= 4.54 sqm floor area)	+$2300

Additional storage within the basement:
Basement cost $1300/sqm
Additional floor area = 1.14sqm x $1300 = $1,482
Additional storage cage = $250
Total = $1732 plus 20% return on investment = $2,078.

Measure 3 Issues:
The proposed provisions will have an added cost to development. The below provides some estimates around the cost associated with the proposed requirements:

Dwelling size	Total minimum storage area	Extra cost (@ $10k/sqm)
Studio	6m3 (= 2.5sqm floor area)	+$25K
1 bedroom	6m3 (= 2.5sqm floor area)	+$25K
2 bedroom	8m3 (= 3.3sqm floor area)	+$33K
3 bedroom	10m3 (= 4.2sqm floor area)	+$42K

To incorporate the additional storage space, apartment sizes would likely need to be increased. Assuming the storage area has a ceiling height of 2.4m.

Group of Measures 11: Dwelling Amenity – External Noise Impacts

The proposed measures aim *to ensure that each dwelling has appropriate protection from unreasonable external noise*. While the Institute agrees with the aim, the DELWP and OVGA have not provided any evidence which suggests that the current Building Code of Australia does not represent an acceptable outcome in addressing external noise.

Measure 1 Issues:
Requirement is unclear and subject to inconsistent implementation.

Measure 2 Issues:
It is difficult to assess acoustics as required to meet the provision due to the period of assessment 8 to 16 hours, and that assessment cannot be accurately undertaken until after completion of development.

Group of Measures 12: Dwelling Amenity – Internal Noise Impacts

The proposed measures aim *to minimise the noise transfer within new development.* The NCC also addresses this issue with minimum standards on material, wall/ floor thickness, etc. required to be incorporated within the building.

As raised above, the DELWP and OVGA have yet to provide any evidence which substantiates any need to incorporate additional provisions than what is required through the NCC.

Measure 1 Issues:
Amend paragraph to state: Noise sources, such a mechanical plant should not be located near bedrooms of immediately adjacent existing dwellings or new bedrooms within the development, unless acoustically treated.

Measure 2 Issues:
See above. Additionally, provide justification and evidence that the current NCC requirements ensures an acceptable outcome regarding internal noise.

Group of Measures 13: Dwelling Amenity – Outlook and Privacy

The proposed measures aim:

- *To ensure that each dwelling is provided with an appropriate outlook from habitable rooms and balconies.*
- *To limit views into private open space and habitable room windows within the development and adjoining land.*

Measure 1 Issues:
The current town planning rules specifies 9m. This is acceptable.

Measure 2 Issues:
Please refer to comments regarding building separation and setbacks. The proposed measures is more restrictive than clause 55 for development up to 4 storeys.

Measure 3 Issues:
There is no definition as to what is considered a direct view. Furthermore, the same comments on building separation applies.

Group of Measures 14: Energy Efficiency and Solar Access – Energy Efficiency and Thermal Comfort

The proposed measures aim:

- *To achieve and protect energy efficient dwellings and high density residential buildings.*
- *To ensure the orientation and layout of development reduces fossil fuel energy use and makes appropriate use of daylight and solar energy.*
- *To minimise the urban heat island effect.*
- *To promote the ability for an occupant to effectively manage the thermal environment of a dwelling.*

In proposing a set of measures, the DELWP and OVGA have not given recognition to current energy efficiency requirements provided in the NCC. While there are reports that the NCC has not been able to deliver the intended energy efficiency rating of new dwellings, this was identified as being due to compliance issues, not design issues. Further consideration is needed regarding the NCC.

Furthermore, the aim to protect energy efficient dwellings suggests that existing or first movers can inhibit the development potential of new development.

Measure 1 Issues:
Some of the measures proposed do not make sense, are difficult to assess or expensive to implement. For example, how is the occupant able to change the layout of rooms to control the thermal environment.

Furthermore, to provide shading from the summer sun will require external blinds which cost an additional $3,000 per window.

These measures go beyond what is required by the NCC, in what ways does the outcomes in the NCC fail to provide an acceptable outcome?

Measure 2 Issues:
Reflective roofs are often an amenity issue in high density areas due to the potential impact on neighbouring apartments. Additionally, green roofs are expensive to establish and maintain.

See above for comments on other requirements.

Measure 3 Issues:
The NCC already addresses maximum cooling load.

Group of Measures 15: Energy Efficiency and Solar Access – Solar Access to Dwellings and Private Open Space

The proposed measures aim *to ensure the orientation of buildings within the development provide adequate solar access to dwellings and private open space*.

Measure 1 Issues:
Same as previous comments on Energy Efficiency and Solar Access.

Measure 2 Issues:
Between the times of 9am to 3pm, majority of the population are at work, at school or undertaking some other activity. Understanding that the purpose is for passive heating, there are other acceptable measures rather than requiring direct sunlight for a large majority of dwellings.

Proposed measure is expected to reduce efficiency from 85% to 70% equating to an additional construction cost of approximately $15,000 per apartment. Furthermore, the proposed measure fails to account existing buildings that can affect the proportion of north facing apartments that have access to direct sunlight.

Group of Measures 16: Energy Efficiency and Solar Access – Solar Access to Communal Open Space

The proposed measures aim *to ensure the orientation of buildings within a development provides adequate solar access to communal open space*. Depending on the site's orientation and constraints, this aim would result in the removal of communal open space.

Majority of the measures proposed in this group relate to dwellings and private open space. The irrelevance of these measures suggest that there is little if any consideration of how the measures provide an acceptable outcome to meet the aims of the design standards. Instead, the measures support our argument that the DELWP and OVGA are proposing measures that would individually deliver what they perceive would be an ideal outcome for each of the elements.

Measure 1 Issues:
Measures have nothing to do with solar access to communal open space.

Measure 2 Issues:
Communal open space would rarely be used during the times of 9am to 3pm for the same reasons identified in out comments for "solar access to dwellings and private open space.

Group of Measures 17: Energy Efficiency and Solar Access – Natural Ventilation

The proposed measures aim *to ensure effective natural ventilation of dwellings and common areas within the building*. The NCC currently addresses ventilation in a number of ways depending on the type of room and its features. One particular requirement is that where there is no ceiling fan, the room must achieve effective cross ventilation.

In proposing its own design measures, the DELWP and OVGA have yet to assess how the NCC fails to provide an acceptable outcome.

Measure 1 issues:
Dual aspect dwellings are more expensive to heat, cross ventilation opening will add costs. To create a cross ventilated apartment requires an extra 9sqm of façade at $3,000 per sqm. This equates to $27,000 per dwelling for the cost of construction. With a 20% return on investment, the price of the average apartment will increase by $32,400.

Requiring all habitable rooms less than 80 metres above ground level would rule out a number of acceptable floor plans. At a minimum the living area should be required to have an operable window/ sliding doors to allow natural ventilation flow. All other ventilation requirements must meet the acceptable standards set by the NCC.

As discussed previously, entry and circulation areas are of very little importance. Measures requiring lobbies and corridors to be provided with natural ventilation adds little or no added benefit to the liveability of apartments.

Measure 2 issues:
Requiring only 60 percent of dwellings below 35 metres would increase the average price per dwelling by approximately $32,400.

Group of Measures 18: Outdoor Space – Private Open Space

The proposed measures aim:

- *To provide adequate private open space for reasonable recreation needs of residents functional and useable private outdoor areas for individual dwellings.*
- *To allow solar access into the scheduled private open space of dwellings*.

The private open space needs of residents differ depending on the building amenities on offer, and the location of the building to amenities such as parks, restaurants, etc. It would be costly and inefficient to have a standard requirement applied to all apartment dwellings to have a certain sized and dimensioned private open space area that remains unused for all or majority of the year.

Measure 1 Issues:
Within tall towers, balconies or roof tops are not always possible and/or practical.

Screening of air conditioning condensers can provide practical outcomes for private open space areas. Some examples include building a seat around the condenser or turning the screening into a breakfast bar. Both are useable and functional areas that should be incorporated within the private open space measurements.

Limitations on including AC condenser units within the private open space measurements will either require large building envelopes of ducted heating/cooling to all apartments. If adding a pump and extra pipes to each apartment, this will result in additional $5,000 per apartment. If a central cooling tower is installed it will add $8,000 - $10,000 of cost per apartment.

Measure 2 Issues:
What evidence is there that highlights that the private open space requirements for residents on these ground level or podium is greater than those above ground level. It is still acceptable for dwellings at the ground or podium level to have private open space no greater than that which is required for apartments above the ground and podium levels.

The following table provides specific comments on the proposed minimum private open space areas.

Dwelling type	Area	Minimum width	Comments
1bedroom	8 sqm	2m	1.6m width is acceptable
2 bedroom	10 sqm	2m	8sqm is acceptable Additional cost above is $3000 per apartment
3 bedroom	12sqm	2.5m	8sqm is acceptable Additional cost above is $6000 per apartment

Note that balconies on average cost $1,500/sqm

There is a conflict with the requirements within measure 2. Most podiums will have dwellings located less than 35m above ground. The requirements allow private open space less than 35m above ground to be between 8-12 sqm, while apartments at the podium level must have a private open space area no less than 15 sqm.

An additional conflict includes the requirement to orientate private open space to maximise solar access while at the same time provide adequate shading.

Conflicts such as these does not provide confidence that these measures have been properly tested and modelled. There is a concern that these measures have been developed in isolation with little to no consideration of the overall outcome and its achievability.

Group of Measures 19: Outdoor Space – Communal Open Space

The proposed measures aim:

- *To encourage developments that provide useable open space for the communal benefit of residents*
- *To integrate the layout of development with any public and communal open space provided in or adjacent to the development.*

Depending on locational amenities, communal open space is not always required to provide residents with adequate recreational opportunities. Additionally, where communal open space is needed and provided, integrating them with public or other communal open space raises issues of safety and insurance.

Measure 2 Issues:
Requiring all development with 20 or more dwellings to have 2.5 sqm of communal open space or 100sqm whichever is the lesser will add significant costs both to construction and maintenance. Providing communal open space costs approximately $1,500 per sqm, at 100 sqm this is $150,000. With 40 dwellings this will equate to $3750 per apartment plus body corporate fees for maintenance.

Group of Measures 20: Outdoor Space – Landscaping

The proposed measures aim:

- *To encourage development that respects the landscape character of the neighbourhood;*
- *To provide appropriate landscaping*
- *To provide for the retention or planting of canopy trees in areas with suitable soil depth.*

Measure 1 Issues:
The proposed requirements are considered to allow for an acceptable outcome.

Measure 2 Issues:
Landscaping requirements depend on the context in which they are located. For example the landscaping character for a development within the CBD would be significantly different to the landscaping character needed within Eltham.

Measure 3 Issues:
Requiring 20% permeability in areas such as the CBD, Southbank and most of inner Melbourne is not achievable. Within these areas a 100% site coverage is common.

Group of Measures 21: Diversity and Access – Diversity

The proposed measures aim *to encourage a range of dwellings sizes and types in high density residential development*. This is a restrictive aim as it fails to recognise the importance of building the housing people need and want.

As discussed previously, the buyer and renter decides on the size and type of housing the industry provides because if it isn't sold it won't get built and for investors if it won't get rented it won't get bought.

The government (both local and state) isn't equipped with the relevant knowledge and resources to understand and respond to market preferences.

All Measures
All measures are considered inappropriate as it restricts the industry's ability to respond to market preferences.

Group of Measures 22: Diversity and Access – Building and Dwelling Entry

The proposed measures aim:

- *To provide each dwelling and building with its own sense of identity;*
- *To ensure developments are designed to allow appropriate passive surveillance of streets and common areas.*

Measure 1 Issues:
Requirements within measure 1 are considered to deliver an acceptable outcome.

Measure 2 Issues:
Providing direct visual connection between pedestrian entries and lift lobbies is not always possible. Furthermore, providing a direct link to lift lobbies can sometimes take away from the character of the building, particularly where the path from the entrance and lift lobby takes a person on a journey.

Group of Measures 23: Diversity and Access – Internal Circulation

The proposed measures aim *to ensure the internal layout of buildings provides for the safe and efficient movement of residents*. Considering the low level of importance associated with entries and circulation, the Institute would only support acceptable measures that ensure safety.

Measure 1 Issues:
Natural light and ventilation does not provide any added value to safety than other forms of light or ventilation. Measure is expected to add $6,750 to the price of an apartment with little to no benefit.

Corridor length does not improve the safety of residents. A 25m corridor would restrict the number of dwellings per core to six or seven. For example, a floor plate of 14 apartments previously needed one scissor stair and two lifts. Now it will need two stairs and four lifts. At approximately $25,000 per lift per floor, this will equate to approximately $3,500 per apartment.

A visible, safe and attractive staircase from entry level to a minimum of four storeys cannot be provided as part of compliance with fire safety standards. As such, this provision would requirement development to incorporate a staircase in addition to fire safety stairwells. This will incorporate additional costs to development and would likely increase insurance costs due to increased risk of injury.

Measure 2 Issues:
The proposed measure will increase the number of lifts for a 300 apartment development from an acceptable number of 4 lifts to 8 lifts. A lift costs in the order of $250,000, this equates to an additional cost of $1 million or $3,300 per apartment.

Group of Measures 24: Diversity and Access – Safety

The proposed measures aim *to ensure the layout of development provides for safety and security of residents and property*. The Institute supports all the requirements proposed in measure 1.

Group of Measures 25: Diversity and Access – Accessibility and Universal Design

The proposed measures aim:

- *To consider the needs of people with limited mobility in the design of developments and layouts*
- *To provide housing that can be adapted to meet the changing needs of occupants over time.*

Measure 1 Issues:
In what ways do the staircases within a development needs to be adaptable. The NCC controls how stairs are developed for safety.

For what purpose is a toilet on the ground level needed for all apartment development. This adds additional costs the overall development and additional maintenance costs.

How is the specifications of a shower a planning matter. For those that need it, the provision of a hobless (step free) shower recess can be incorporated retrospectively, or can be requested by a buyer at the off the plan sales stage.

Requiring all dwellings to incorporate reinforced walls around the toilet, shower and bath is expected to increase the cost of an apartment by approximately $8,640. An additional 300mm width to the bathroom wall would need to be continued over the depth of the apartment. At $3,000/sqm x 2.4sqm this equates to $7,200. A return on investment at 20% increases the average price of an apartment by $8,640.

Instead of requiring all apartments to incorporate this measure, they can be incorporated retrospectively or requested at the by the buyer at the off the plan sales stage.

Measure 2 Issues:
Please refer to our comments regarding type and size of apartments. Requiring 20% of a certain type of dwelling merely adds additional cost and risk to a project which then is reflected in higher prices. Currently, approximately 90% of apartments are purchased off the plan. Specific design needs of a buyer can be addressed at this stage of the development.

Requiring 20% of a type of dwelling to meet the needs of a very specific market does not guarantee availability. All dwellings are able to be purchased by the open market.

Furthermore, the proposed requirements raised a number of questions:

- How did the state government come to the figure of 20%?

- Why would government require certification of dwellings (silver standard performance rating) from a non-statutory authority (Liveable Housing Australia)?

Measure 3 Issues:
See above comments regarding the requirement for silver standard performance rating.

Group of Measures 26: Diversity and Access – Diversity of Use

The proposed measures aim *to encourage all developments to accommodate a mix of uses and potential changes of use or occupation.*

According to Plan Melbourne, Melbourne's population is expected to grow by 3.4 million people to 7.7 million by 2051. To accommodate this growth, Melbourne will need to provide 1.6 million more dwellings.

Considering the above statistics, apartments are critical to managing the growth of our city and servicing the housing needs of our population now and in the future. Due to the current and future demands for housing, requiring apartment development, particularly the residential component of apartment development to be adaptable to other uses is unnecessary, inefficient and costly.

Measure 1 Issues:
The need to provide adequate floor to ceiling heights at the ground level and first floor levels depends on location. Apartment development within purely residential areas should not be required to have different ceiling heights at the ground and first floor.

There are extra costs associated with additional floor to floor heights. For example, in a mixed use area where a council may impose a 4m floor to floor height for each level in the podium. This would result in a 33% increase in the height of a building (if permitted), which adds to additional construction costs from a larger façade, more structural material, walls and services. This will add approximately 25% to the cost of construction which on average is amounts to $62,500 per apartment, approximately.

Measure 2 Issues:
See comments above. Proposed requirements on ground floor and first level is expected to add an additional $20,000 per apartment from increased construction costs and decreased efficiency. Furthermore, the provision on car parks is expected to increase the costs to about $2,000 per apartment. Extra height equals extra cost. See above.

Group of Measures 27: On-Site Facilities – Bicycle Parking

The proposed measures aim *to provide safe and convenient bicycle parking areas for residents*.

Measure 1 Issues:
Each bike takes up an area of approximately 1.25 sqm which can equate to approximately $2000 per bike within a carparking area.

An acceptable rate of 0.5 bicycle spaces per unit would reduce the cost per apartment by $1,000.

Measure 2 Issues:
An increase from 0.5 bicycles per apartment to 2 bicycles per apartment will increase the cost per apartment by approximately $3,000.

Has the DELWP or OVGA undertaken and studies on the bicycle storage needs of apartment dwellers?

Group of Measures 28: On-Site Facilities - Site Service
The proposed measures aim:

- *To ensure that site services can be installed and easily maintained.*
- *To ensure that site facilities are accessible, adequate and attractive.*
- *To facilitate waste recovery and recycling opportunities for general and organic waste.*
- *To reduce waste sent to landfill*
- *To integrate waste management systems into the design of buildings.*

Measure 1 Issues:
Requiring vehicle circulation within the site for garbage collection is not possible or feasible for a large majority of projects.

Requiring development to implement best practices for waste management systems further demonstrates how the proposed measures are going beyond their purpose and requiring what is perceived to be the ideal outcome, instead of the acceptable outcome.

Waste management plans are currently prepared by waste engineers and assessed by council. The Institute sees no additional value in changing this scenario.