

Master Builders Association of Victoria's response to *Better Apartments: Draft Design Standards*

The quality of living standards in Victoria is an important issue for the community. With the population of Greater Melbourne predicted to grow to 8 million by 2051, a further 2.2 million dwellings are expected to be required¹, a significant portion of which will be apartments. Victoria needs to embrace the population growth and implement sensible and sustainable policies that will enhance the liveability of Melbourne without worsening our housing affordability crisis.

Master Builders has welcomed the opportunity to participate in the *Better Apartments* consultation process, and would like to make a specific comment on the *Draft Design Standards* (the Draft Standards) which was released mid-August.

As initially stated in our submission to the *Draft Options* paper in July 2015, Master Builders continues to hold some significant reservations about our ability to assess the draft guidelines in the absence of a cost-benefit analysis, housing affordability impact or the population's needs being demonstrated from an evidentiary point of view. The absence of this critical information makes it very difficult to provide an informed comment on the specific draft standards.

Summary of comments and recommendations:

In general, we support an investigation into liveability standards for apartment design, where such an investigation uses a robust and data-driven view of the needs of the industry and community, to ensure that the correct balance between liveability and affordability is maintained and the industry's viability is supported.

1. Market needs: The introduction of any guidelines should be developed in the context of the shift in consumer demand for housing in Victoria – for example, for some people, additional storage or a balcony may easily be given up for the benefit of a more affordable apartment. Particularly, if it is their first apartment and they intend to move into a larger one through the course of their life. Therefore, to make appropriate, holistic and strategic planning policies, important details about the future population should be obtained.

Recommendation: Master Builders recommends that research should be conducted and released which provides useful details about Victoria's future apartment demand, including the types of apartments, geographic locations and other population data. This information should then provide the basis for what, if any, specific problems need to be addressed through apartment guidelines.

Master Builders recommends that data on apartments that are a source of concern is needed, to show how these design standards can fix these concerns. At present, the term 'dog boxes' doesn't deliver enough information to enable the design of measurable objectives for apartment design.

¹ Victoria in Future 2016: Population and household projects to 2051, Department of Environment, Land, Water and Planning, page 8



2. Housing affordability: Victoria is in the midst of a housing affordability crisis, and so the potential impact of policy decisions on the cost of building and housing should be considered. Master Builders is aware of evidence that suggests the Draft Standards could add up to \$100,000 to the overall cost of an apartment (build and land cost increases), as well as a reduction in supply of apartments by up to 40 per cent².

Recommendation: Master Builders recommends that the government provide a detailed analysis of the cost each proposed standard will have on apartment construction and housing affordability, to demonstrate the cumulative impact that all of these standards will have on costs and supply.

3. Breadth of proposed standards: The *Better Apartments* public engagement surveyed 14 categories of design and the public prioritised those areas which they considered most desirable. We note that, when they were asked to prioritise the wish list, they were not provided with the costs of those categories – and therefore the resulting prioritisation cannot be taken to be evidence of a willingness to pay for those design features. There did appear to be around five priority areas identified by the survey, but despite this, the Draft Standards address many more issues.

Recommendation: Master Builders recommends that the breadth of the design features should be reduced on the basis of the needs and cost-benefit analysis. For example, they could reflect the top public priorities identified by the *Better Apartments Public Engagement Report*.

4. Operation of guidelines: Performance based measurements may be a more effective way of achieving good design outcomes compared to prescriptive based measurements. By giving a designer the flexibility to meet a standard's objective through design, more innovative and potentially less expensive outcomes may be identified. The structure of the draft standards offer only a one sentence explanation for the objective of each area, yet provide detailed and prescriptive measurements for the standards. The lack of supporting information about the objective is likely to lead to a greater reliance by Councils on whether a design complies with the specific standards rather than meets the objective.

Recommendation: Master Builders recommends that the objectives of the draft standards are re-drafted as measurable performance based outcomes, which would then allow the prescriptive standards to be eliminated.

Master Builders considers the proposed three month transitional period to be too short, and that a two year transitional period is far more reasonable.

5. Unnecessary additional red tape: Master Builders has long advocated for reducing building red-tape and addressing housing affordability issues and we are therefore concerned with the proposal *“to introduce a checkpoint at the building permit stage where a registered architect or a registered building designer.....can verify that all relevant apartment design matters have been met”*.³ Evidence is required before adding another red tape step such as Step 4 of the Draft Standards.

Recommendation: Master Builders recommends that steps that add unnecessary red tape should be avoided, such as Step 4 of the Draft Standards.

² Craig Yelland, 'Calculating the cost of the new Better Apartments Draft Design Guidelines', 23 August 2016

³ Step 4, Page 9, Draft Design Standards

6. Impact on the Victorian economy: The importance of the building and construction sector for the Victorian economy and community should not be underestimated. Our industry is the second-largest full-time employer in the state and delivers more than 40 per cent of taxation revenues to the government. With Victoria's population growing by almost 2000 people every week, our sector must deliver the houses, roads, schools, hospitals, public transport and aged-care facilities needed to maintain the excellent living standards, that Victorians expect and deserve.

The potential loss of apartment supply combined with the potential increase in cost of apartments could have a significant impact on the building and construction industry – which in turn will impact the health of the broader Victorian economy.

Recommendation: Master Builders recommends that consideration be given to the impact changes to apartment standards could have on the Victorian building and construction industry and the broader Victorian economy.

1. Market needs

The Victorian population is expected to grow. We know that Greater Melbourne is predicted to increase to 8 million people by 2051, which would require a further 2.2 million dwellings to be built, including a significant portion of apartments.

Apartments provide a number of community benefits, including addressing concerns about housing affordability and generating higher-concentrated housing supply in areas where there is greatest demand, jobs and modern transport links.

The introduction of any guidelines should be developed in the context of the shift in consumer demand for housing in Victoria. Therefore, to make appropriate, holistic and strategic planning policies, important details about the future population should be obtained. This includes information about the types of apartments, geographic locations that dwelling growth is likely to occur and other relevant population data. These design standards assumed that all apartments will be purchased for long-term use, but a range of apartments for young people or first investors wishing to enter the market is needed. For those people, additional storage or a balcony may easily be given up for the benefit of a more affordable apartment.

This evidence is important as it will provide detail about what kind of housing will need to be built and where. For example, some smaller apartments might be attractive to younger people as short-term accommodation while some apartments might be purchase by families for a lifetime. Until the evidence can be demonstrated, an informed decision cannot be reached about whether a design standard is appropriate for future apartments.

This information would also provide valuable guidance about what geographical areas apartment guidelines should be applied. Data on existing apartments that are a source of concern, where it can be demonstrated that design standards would address these concerns, should be identified. For example, is there evidence of concerns with the design of apartments built in middle ring Melbourne suburbs? By narrowing the application of guidelines based on evidence of a problem, unnecessary cost and regulation can be avoided being mandated across the state.

Recommendation: Master Builders recommends that research should be conducted and released which provides useful details about Victoria's future apartment demand, including the types of

apartments, geographic locations and other population data. This information should then provide the basis for what, if any, specific problems need to be addressed through apartment guidelines.

Master Builders recommends that data on apartments that are a source of concern is needed, to show how these design standards can fix these concerns. At present, the term 'dog boxes' doesn't deliver enough information to enable the design of measureable objectives for apartment design.

2. Housing affordability

In the Draft Standards it is stated that:

*"The Victorian Government is committed to delivering affordable housing options that meet the long-term needs of the Victorian community"*⁴.

This raises two questions: do we know what the long term needs of the Victorian community are? Do these draft standards deliver affordable housing options?

As the cost of housing soars, housing affordability remains a critical issue for Victorians. Master Builders' figures show that there has been a 21 per cent decline in housing affordability across Victoria in the past decade. For Victorians, the relevance of cost as a determinant of the type of dwelling they live in was highlighted in research for *Better Apartments* policy conducted by the Department of Environment, Land, Water & Planning (DELWP). This research found that 28 per cent of the survey respondents lived in apartments because it was the only option, given other types of housing are unaffordable⁵.

Both the state and federal governments have discussed the importance of addressing the housing affordability crisis, and regular references to the provision of affordable housing are made throughout the Draft Standards document. However, Master Builders is concerned that the proposed draft standards will have an adverse impact on housing affordability. Evidence suggests that the standards, if introduced, will reduce the yield of apartment blocks and increase the cost of land and building- all of which will lead to an increased cost of housing.

Melbourne architect Craig Yelland examined each proposed standard and quantified their impact on future construction. Yelland's calculations concluded that the yield of every site will drop. For example, requiring bedroom windows to have direct access to daylight by requiring a window to be directly visible from any point in the room has been calculated to result in 25 per cent less apartments, to pay for the lift and core⁶. Other proposed requirements for setbacks, private open space (balconies) and ceiling heights will lead to a loss of yield. With the proposed standards in mind, Yelland concluded that a block in central South Yarra that would currently yield 357 apartments, would, under the proposed standards, be reduced to 213 apartments, which is 40 per cent less yield⁷.

The potential loss of yield could result in less apartments being built. According to Yelland, the proposed changes could lead to a reduction by up to one third of apartments being built. The combination of a growing population placing more demand on the housing system, and a possible

⁴ Page 4

⁵ Better Apartments Public Engagement Report, DEWLP December 2015

⁶ Craig Yelland, 'Calculating the cost of the new Better Apartments Draft Design Guidelines', 23 August 2016

⁷ Craig Yelland, 'Calculating the cost of the new Better Apartments Draft Design Guidelines', 23 August 2016

decrease in supply due to these standards, could lead to an increase in the cost of housing and a reduction in the amount of housing available for Victoria’s growing population.

Concern about the loss of yield was echoed in a presentation about the application of the draft standards by Mark Sheppard from David Locke Associates on 7 September 2016. Calculations were shared in the presentation that the draft standards relating to building setbacks would reduce the number of apartments being built.

According to Sheppard, the proposed changes would result in the division of development into three categories:

Properties <33m wide	Unlikely to be developed above 4 storeys (13.5m)
Properties 33-39m wide	Unlikely to be developed above 8 storeys (25m)
Properties > 39m wide	Can be developed above 8 storeys (25m)

According to Sheppard, this means that there will be fewer apartments built in the future. Properties less than 33m wide are unlikely to be developed above four storeys, and properties between 33-39m wide are unlikely to be developed above 8 storeys.

These concerns are echoed by other industry professionals. Large architecture firm Rothelowman, for example, advocate for the removal of building setbacks because *‘setbacks should be content specific and not mandated by an apartment design guideline’*⁸.

In addition to supply reduction, the costs of building are also likely to increase. In their submission Rothelowman flagged concern with the impact the standards will have on the cost of building. Their calculations demonstrate that compliance with the room depth rearrangement standard and bedroom window standard alone will add \$12,000 to the cost of building.

Based on calculations of the impact on each proposed design standard on the construction of an apartment building, Yelland concluded that:

*“As the apartment industry supply slows, prices will rise. Only once the public are willing to pay that extra \$100,000 per apartment, will development take off again”.*⁹

Given Victoria is already experiencing a housing affordability crisis, making policies that will add to the cost of housing for Victorian consumers should be treated with caution. Master Builders suggests that the proposed standards could be overly prescriptive and considered unnecessary in certain contexts. For example, the communal open space requirement seeks *to ensure that an area of communal open space is included in new apartment buildings for the benefit of residents.*

This requirement does not allow consideration to be given to how relevant the requirement is for the specific location. For example, if an apartment building is located in a short walking distance to a community park or gardens, residents may not need communal open space, as they could access the public spaces for personal use. According to Yelland’s calculations, communal outdoor space will add \$5000 to each apartment – which is a lot of money to mandate consumers to spend on an area that

⁸ Rothelowman, Review of Better Apartments Draft Design Standards 2016

⁹ Craig Yelland, ‘Calculating the cost of the new Better Apartments Draft Design Guidelines’, 23 August 2016

may not be necessary for their particular apartment block and therefore may not be utilised as intended.

If buildings are in areas where there is abundant park land, then residents may wish to forgo balconies in favour of larger living areas or communal living areas in favour of cheaper apartments. Work commissioned by Clause: 1 Property Planning and Development Services (Clause: 1 Planning) for Master Builders and Building Designers Association Victoria (attached) commented:

“While we applaud the provision of communal open space areas such as ‘party rooms’ where larger social functions can be accommodated in suburban and more remote locations, we have found that in CBD locations and sites in proximity to recreational and retail facilities, they do not receive enough use to justify their existence. We submit that while communal open space areas could be offered in developments where limited access to services but should not be mandatorily required, particularly in areas where commercial and recreational facilities are available.”

This example highlights two issues. One, that the government should provide evidence of the need for the proposed standards. This research must be accompanied by a detailed cost analysis and examination of where the future population growth will be accommodated. Until provided with evidence to the contrary, Master Builders believes that some of the proposed standards are unnecessary and have the potential to worsen the housing affordability crisis considerably. We therefore consider they should be narrowed to reduce the cost impact - this is discussed in Section 3 ‘Breadth of Standards’.

Second, the objectives for the requirements should be measurable, to allow innovative design to meet objectives (thus allowing the standards to be deleted). This is discussed in Section 4 ‘Operation of guidelines’.

Recommendation: Master Builders recommends that the government provide a detailed analysis of the cost each proposed standard will have on apartment construction and housing affordability, to demonstrate the cumulative impact that all of these standards will have on costs and supply.

Master Builders recommends that the objectives of the guidelines allow for greater discretion, to prevent irrelevant requirements being mandated and unnecessarily driving up the cost of apartments. Greater discretion should be allowed so that objectives and standards only need to be met where they are relevant.

3. Breadth of standards

Master Builders is concerned that despite the lengthy Better Apartments consultation process, the draft standards have not prioritised the key design features that are absolutely necessary for liveability, nor are they entirely consistent with the outcomes of the Better Apartments public consultation process.

Public research about introducing apartment standards was conducted and published in December 2015 by DELWP in the *Public Engagement Summary*. In the public engagement process participants were provided with a list of 14 key desirable design features and asked to rank them from most important to least important. As demonstrated in the graphic extracted from page 3 of the summary, five issues appear to be ranked as more important than others:



The top five most important issues for people included daylight, space, natural ventilation, noise and energy resources. We note that, when they were asked to prioritise the wish list, they were not provided with the costs of those categories – and therefore the resulting prioritisation cannot be taken to be evidence of a willingness to pay for those design features.

Nor were the survey respondents asked which features they would like to trade-off. As stated by Clause: 1 Planning:

“The provision of larger and broader balconies and patio areas for apartments will enhance their liveability, however the increased open areas may be at the expense of more spacious internal dimensions.”

There did appear to be around five priority areas identified by the survey, but despite this, the Draft Standards address many more items. The survey, as well as the plethora of consultation submissions, in our view reasonably provides the basis for objectives to be prioritised.

Therefore, it is recommended that the breadth of the standards be reduced to address only those issues that are absolutely necessary for liveability, as demonstrated by research and a cost-benefit analysis.

Recommendation: Master Builders recommends that the breadth of the design features should be reduced on the basis of the needs and cost-benefit analysis. For example, they could reflect the top public priorities identified by the *Better Apartments Public Engagement Report*.

4. Operation of guidelines

Master Builders repeats the call for these to be performance-based rather than prescriptive standards. This means that rather than prescriptive measurements, the policy objective should be clearly articulated and met through design outcomes.

The proposed operation of the planning provisions are set out in the Draft Standards:

The objectives describe the desired outcomes to be achieved in the completed development. An apartment development must meet all of the objectives.

A standard contains the requirement to meet the objective. A standard should normally be met. However, if a responsible authority is satisfied that an application for an alternative design solution meets the objective, the alternative design solution may be considered¹⁰.

This means that applications must meet the prescriptive standards, but there is an option for the responsible authority (usually Council) to decide whether an application's design solution meets the objective.

On examination of the contents of the Draft Guidelines, it is evident that a single sentence explaining the objective is offered for each provision. However, a detailed prescriptive explanation about the standard is provided. For example, for *Set Backs*:

The standard seeks to ensure that new apartment buildings are setback an appropriate distance from side and rear boundaries to receive an adequate amount of daylight and privacy.

Standard

A habitable room window or a balcony should be setback from a side or rear boundary at least the distance specified in Table 1.

A habitable room window or a balcony should be setback from another building within the site at least the distance specified in Table 1.

The setback is measured from the external surface of the habitable room window or the open side of the balcony, which ever is the lesser.

TABLE 1: BUILDING SETBACK

BUILDING HEIGHT	MINIMUM SETBACK FROM SIDE AND REAR BOUNDARIES	MINIMUM SETBACK FROM BUILDINGS WITHIN THE SITE
Up to 13.5 metres	6 metres	12 metres
13.5 to 25 metres	9 metres	18 metres
Over 25 metres	12 metres	24 metres

Note: The building setback requirements only apply to new apartment buildings of five or more storeys in height. Clause 55.04-1 Side and rear setbacks objective and Standard B17 will continue to apply to an application to construct two or more dwellings on a lot in a development up to four storeys (excluding a basement).

In this example, the objective requires a building to be setback in order to receive 'adequate' daylight but does not provide any further detail about what would constitute adequate daylight. The standard, however, offers prescriptive dimensions of building setbacks.

¹⁰ Better Apartments: Draft Design Standards page 8

Work commissioned by Clause: 1 Planning states that the “setback requirements of the draft standards pose a significant threat to the developability of many sites, and would render many development opportunity sites unviable based on limited building envelope available once the setback were imposed”.

In addition, it is not clear that set backs are the most appropriate means of achieving these aims – instead, the objective (using a needs analysis) needs to be defined first – and then designers need to be able to innovate to achieve those aims. Clause: 1 Planning states:

“It is also not clear whether a nexus between improved solar access/ light penetration into apartments and building setbacks exists. Window sizes, orientations, the type of development on neighbouring sites will also inform internal amenity but cannot be assessed by this standard.”

Master Builders is concerned that the lack of supporting information about the objective will leave Councils in a position where it may be difficult to judge applications against the objective- so they will be forced to rely on the prescriptive standard. Instead, the objective should be clear (eg specified lux light measurement or some other suitable metric) and this will reduce the need for prescriptive standards.

The absence of decision guidelines is noted by Master Builders. However, given the highly prescriptive nature of these standards and the very brief nature of the objectives, Master Builders does not have confidence that any decision guidelines could make it any more likely that councils would apply these objectives and standards as performance based criteria. Indeed, the standards are so prescriptive, that variations from them would be very difficult to justify given the vague nature of the objectives.

Work done for Master Builders and BDAV by Clause: 1 Planning analyses three approved (and constructed) apartment buildings against the proposed standards (they are of varying heights to demonstrate the difficulty across a broad spectrum of design). In many instances those apartments analysed fall well short of the draft design standards (see attached report by Clause: 1 Planning). The apartment complex in Brunswick, on page 11, won awards for innovative design, architectural merit and environmental sustainability measures- yet it would not be compliant with the proposed draft standards.

In Master Builders’ view, the degree of non-compliance with the standards by all of the analysed buildings shows how unlikely it is that the Draft Design Standards will be able to be applied as performance-based standards by councils. The apartments analysed by Clause: 1 Planning had around 50% or more, partial or non-complaint designs. In all three cases, the apartments were non-compliant with the set back requirements.

In our view, Councils would be unlikely to approve, or have the capability to assess, designs that vary so substantially from the standards. Accordingly, many apartments – even award winning apartments – may not go ahead under these prescriptive standards.

The lack of supporting information about the objectives could lead to the exacerbation of a number of issues in the planning system- for example long waiting times for decisions.

This view is echoed by architecture firm Rothelowman. As stated in their submission to the Draft Standards:

The absence of a performance based approach in assessing apartment quality is a serious issue and should be addressed in the adopted standards. Having extensive, first hand, experience across most of Melbourne's planning municipalities, we are firmly of the opinion that the majority of councils and councillors will use the guidelines as a default mandatory requirement. It will be difficult to have alternate solutions considered, despite any merit that they might offer, and the opportunity for innovation and progressive design will be stifled. In a state recognised for the quality of its design community this shackling of the industry would be a serious mistake¹¹.

Master Builders is concerned that councils already have long delays in decision making, which has negative flow on effect to the housing industry and broader Victorian economy. Data from the Department of Transport, Planning and Local Infrastructure's *Planning Permit Activity in Victoria Annual Report 2014/15* confirmed that only 64 per cent of the total 57,297 planning permit applications received were decided within the 60 day statutory time frame. These long timeframes suggest that Councils are already experiencing difficulty meeting timeframes. Planning delays cost Victorian builders and consumers a great deal. The VCEC 2010 inquiry found that the total costs to business of complying with land-use planning and building regulations are between \$500 million and \$875 million per year, including around \$180 million each year due to unexpected delays in planning decisions.¹² These additional planning objectives that lack detail are likely to add additional stress to the system, and could mean longer delays at Council level.

In the context of the existing time constraints and the lack of clear direction about the objectives, it could be likely that council regularly reject alternative design solutions in favour of the prescriptive standards- which could lead to even more applications ending up in dispute at VCAT. This is a serious concern in our planning system already: in 2014/15, 2,292 applications were disputed at VCAT, which is a 42 percent increase from the previous year. In Victoria 1 in 10 planning applications are appealed, compared to 1 in 83 in NSW and 1 in 1000 in Queensland¹³.

The lack of performance based measurable outcomes for each objective make it difficult for applicants to demonstrate compliance, which in turn mean that the prescriptive standards are likely to become the default measurement. As highlighted earlier, evidence demonstrates the prescriptive standards could add substantial costs to building- which could significantly worsen the affordability crisis, reduce the apartment building yields and the overall supply of future dwellings.

That is why Master Builders recommends the development of measurable outcomes for the objectives based on a thorough needs assessment. This would allow applicants to use design solutions to respond to the policy intention of the proposed standards, which could lead to more suitable and cost effective outcomes than the prescriptive standards. If the objectives are written clearly, with measurable outcomes, it would eliminate the need for the prescriptive standards.

In addition, if clear and measureable objectives that allow for performance based assessment were introduced, it could reduce the overall number of specific design standards. For example, there are

¹¹ Rothelowman, Review of Better Apartments Draft Design Standards 2016, page 1

¹² Victorian Competition and Efficiency Commission report *Local Government for a Better Victoria: An Inquiry into Streamlining Local Government Regulation* (2010)

¹³ Jane Francis Kelly, 'The Houses We'd Choose' Grattan Institute, 2011 page 32

four separate draft standards that appear to seek to address access to daylight: building setback, light wells, room depth and windows.

It makes sense that if daylight is demonstrated as being an issue for apartment, then a clear objective with measurable amount of daylight should be articulated. This would place the onus on an applicant to use design to meet the objective, offering flexibility that could lead to more cost efficient and site sensitive outcomes. Master Builders suggests that this approach could lead to better designs and better outcomes for consumers (particularly with regards to affordability), while still meeting the broader objectives of the *Better Apartments* project.

Master Builders also notes that as part of the rollout of these proposed standards, '*a minimum of three months notice will be provided*'¹⁴. Master Builders considers the process of understanding, adapting to and implementing changes to design standards to be extremely complex (especially given the lead times for finance, development and planning processes) and therefore we consider a much longer timeframe to be more reasonable. Master Builders recommends a two year transitional period be provided between when the guidelines are finalised and come into operation.

Recommendation: Master Builders recommends that the objectives of the draft standards are re-drafted as measurable performance based outcomes, which would then allow the prescriptive standards to be eliminated.

Master Builders considers the proposed three month transitional period to be too short, and that a two year transitional period is far more reasonable.

To provide some examples of how we would see this working in practice, we have taken a couple of options purely as hypothetical examples:

- **Storage:** the draft objective states it seeks to *ensure that each apartment has a reasonable amount of storage space to allow people to live comfortably and provide for different space requirements of different households*¹⁵. Master Builders suggests that a designer could demonstrate adequate space for utilities (for vacuums, brooms etc), rather than have to rely on the prescriptive standards that are outlined in the Draft Standards.
- **Daylight:** in building setback¹⁶, room depth¹⁷ etc, the objective states *that the standard seeks to allow adequate daylight access to an apartment*. Providing a lux measurement of daylight (or some other metric) for a proportion of the floor area in habitable rooms as an objective could mean eliminating all of the prescriptive standards. In addition, there should be a demonstrated reason why this is part of planning and not part of the NCC.
- **Protection from internal and external noise:** a suitable policy objective can be written – in terms of decibels of noise or specific insulation and thickness of walls. The onus would then be on the designer and builder to consider ways to achieve this policy objective. In addition, there should be a demonstrated reason why this is part of planning and not part of the NCC.

¹⁴ Better Apartments Draft Design Standards, page 10

¹⁵ Ibid, page 22

¹⁶ Ibid, page 15

¹⁷ Ibid, page 19

5. Unnecessary red tape

Master Builders has long advocated for reducing building red-tape and addressing housing affordability issues. We have already outlined the very high costs to business and the economy, from unexpected planning delays. We are therefore concerned with the proposal “to introduce a checkpoint at the building permit stage where a registered architect or a registered building designer.....can verify that all relevant apartment design matters have been met”.¹⁸

It is unclear why this verification is needed at the building permit stage, when consideration about whether the apartment design matters have been met will already have been undertaken at the planning permit stage. Evidence is required before adding yet another step into the process – not only increasing the red-tape and delays but also the costs of the process. The cost of retaining architects and designers will likely be passed on to the consumer – thus affecting housing affordability. This similar certification process in NSW has operated in practice as a ‘tick-the-box’ exercise which has merely resulted in increased costs and a layer of unnecessary red-tape. The potential ‘tick-the-box’ outcome of this type of certification process was highlighted by the NSW ARB in 2011 and 2014 when they put out statements reminding architects of their obligation to review documents that they are certifying. The NSW Architects Registration Board notices are extracted in the box below.

NSW ARB Notices

Representations concerning architectural work

Posted on 06 June 2011.

It has come to the Board’s attention that there are some individuals advertising for architects to “sign off” design/plans their behalf. There is no evidence before the Board that any architect has actually done so in breach of their professional obligations.

However, the Board reminds architects of their obligations under the **NSW Architects Code of Professional Conduct Section 22 Representations concerning architectural work** (1) *An architect should not, in the architects’ professional practice, sign as checked, approved or supervised any drawings or other documents that the architect has not in fact checked, approved or supervised* and (2) *An architect should not, in the architect’s professional practice, permit the architect’s name to be used in relation to any work, document or publication in a manner that misleadingly implies authorship of, responsibility for or agreement with the content or form of, the work, document or publication.*

Board advice to architects in Regard to their responsibilities under the State Environment Plan 65 (SEPP 65)

Posted on 23 June 2014.

SEPP 65 is the only area of practice in NSW that is restricted to architects. The SEPP aims to improve the design quality of residential apartment development in New South Wales. It recognises that the

¹⁸ Step 4, Page 9, Draft Design Standards

design quality of residential apartment development is of particular importance and public interest due to the economic, environmental, cultural and social benefits of high quality design.

The SEPP achieves this by ensuring that multi-unit residential apartment building proposals achieve an acceptable minimum standard of design quality.

The architect has obligations under the SEPP.

In preparing a development application that relates to residential apartment building, an architect must provide a *design verification*, being a written statement, in which the architect verifies that:

- he or she designed (or immediately directed the design) of the residential apartment building proposal, and
- the 10 design quality principles set out in the SEPP are achieved for the residential apartment building.

It has come to the Board's attention that there are circumstances when an architect while working in association with a building designer may potentially be in breach of the above SEPP provision relating to design verification.

Architects are reminded of their obligations set out in the NSW Architects Code of Professional Conduct, specifically:

3 The objectives of the Code are as follows:

(c) to promote community confidence in the architectural profession.

And

20 Representations concerning architectural work

(1) An architect should not, in the course of the architect's professional practice; sign as checked, approved or supervised any drawings or other documents that the architect has not in fact checked. Approved or supervised.

(2) An architect should not, in the course of the architect's professional practice, permit the architect's name to be used in relation to any work, document or publication in a manner that misleadingly implies authorship of, responsibility for, or agreement with the content or form of, the work, document or publication.

Architects are reminded that in circumstances where an architect and a building designer are working in association on a project defined under SEPP 65, they should have regard to their obligations under the Code as indicated above.

Further, architects are advised that in circumstances where the architect is providing partial services in a project defined under the SEPP they should be aware of their obligations under:

Section 7 Client agreements... The architect should ensure that the written agreement :(a) specifies the scope and nature of, and requirements for, the service to be provided.

Architects should also make themselves aware of the potential for an invalid *design verification* to be in breach of the SEPP and the NSW Environmental Planning and Assessment Act.

In addition, Step 1 identifies a possible “*more advanced training course...to accredit individuals to assess the more technical aspects of the new provisions, and performance based design*”¹⁹ for design practitioners. It is difficult to understand the justification for imposing further requirements, layers of red-tape and costs into the scheme, if these registered practitioners have already undertaken the appropriate training to become registered.

Recommendation: Master Builders recommends that steps that add unnecessary red tape should be avoided, such as Step 4 of the Draft Standards.

6. Impact on the Victorian economy

The importance of the building and construction sector for the Victorian economy and community should not be underestimated. Our industry is the second-largest full-time employer in the state and delivers more than 40 per cent of taxation revenues to the government. With Victoria's population growing by almost 2000 people every week, our sector must deliver the houses, roads, schools, hospitals, public transport and aged-care facilities needed to maintain the excellent living standards, that Victorians expect and deserve.

This submission has outlined evidence that suggests there will be a substantial loss of yield if the Draft Design Standards are introduced- a South Yarra case study is calculated to experience a 40 per cent reduction in yield under the proposed Draft Standards²⁰.

The additional cost to apartments has also been discussed – with evidence suggesting an increase of up to \$100,000 per apartment would result from the introduction of the Draft Standards²¹.

The potential loss of apartment supply combined with an increase in cost of apartments could have a significant impact on the building and construction industry. It would mean less building activity, less building and construction jobs, less taxable income. As such a significant economic contributor, a setback for the building and construction industry will, in turn, impact the health of the broader Victorian economy.

Recommendation: Master Builders recommends that consideration be given to the impact changes to apartment standards could have on the Victorian building and construction industry and the broader Victorian economy.

¹⁹ Better Apartments Draft Design Standards, page 8

²⁰ Craig Yelland, ‘Calculating the cost of the new Better Apartments Draft Design Guidelines’, 23 August 2016

²¹ Ibid

DELWP Better Apartments Draft Design Standards (May 2015)

Submission on behalf of the Building Designers Association of Victoria and Master Builders Association of Victoria prepared by Clause: 1 Planning

1. **In brief:** In light of the exponential growth rate in apartment developments in Metropolitan Melbourne, it is timely that existing apartment design standards be reformulated to adapt to the changing market and building practices. We applaud attempts to improve design and liveability standards for apartments to ensure apartment living remains an attractive and viable option as the population grows and household sizes decrease. Apartment design standards also have the potential to resolve issues of equitable development and height controls which have plagued the industry in recent years.
 - 1.1 However, the draft Better Apartment Design Standards (*the standards*) result in some unexplored impediments to typical apartment typologies and will significantly impede efficient and affordable development. Integration with some or all of the existing Clause 55 (Rescode) standards also 'doubles up' on the extent of scrutiny applied to certain aspects. In addition, the efforts of individual or collective Council groups who have developed their own energy efficiency and water conservation framework, which the standards also attempt to grapple with. We perceive that there is a level of doubling up here as well.
 - 1.2 In particular, the proposed side and rear setback standards and the wording of the requirements which imply that the numeric setbacks **must** be met (as opposed to an objective which must be met, and a standard that can be varied, which

is the current scenario) are likely to significantly reduce the yield of many sites, even when they enjoy strong strategic support for apartment style development.

1.3 In order to illustrate the extent of the impact on 'typical' apartment developments, we have assessed three approved (and constructed) apartment buildings against the proposed standards. These three developments have been approved by the relevant municipalities and found to comply with the various State and local planning policy framework, including the Design Guidelines for Higher Density Residential Development (Department of Sustainability and Environment, 2004). In many instances, the developments fall well short of the draft design standards.

2.0 Example 1: Princes Close, Prahran

In brief: 14 dwellings over six storeys, with offices at ground floor. No vehicle parking. A narrow, unique, 180 sqm site. The east (side) elevation faces public reserve (undevelopable).

	Standard In a nutshell:			Adherence to Standard.															
Building setback	Building Height	Side/Rear setback (m)	Setback to other buildings on same site (m)	Non compliant. Zero lot setbacks to side and rear boundaries, increasing to a rear setback of ~ 5 m at upper floor.															
	Up to 13.5	6	12																
	13.5 – 25	9	18																
	25 m +	12	24																
	NB Measured to window OR balcony balustrade. SPOS cannot encroach into this setback.																		
Light wells	Building height	Min Area (m2)	Min dimension (m)	N/A. No lightwells proposed.															
	Up to 13.5	9	3																
	13.5 – 25	29	4.5																
	25 m – 36 m	51	6																
	36 m + buildings should not rely on lightwells																		
Room depth	A habitable room should not exceed:			Partial Compliance. 2550 - 2800 mm stud. Examples: 7000 mm living room. 7000 mm length permitted. South facing 5500 mm living room. 5600 mm length permitted. 12000 mm living/kitchen. Meets exemption standards but still exceeds 8 m length.															
	<ul style="list-style-type: none"> • A room depth: ceiling height ratio of 2:1 for a south facing, single aspect dwelling, or • A room depth: ceiling height ratio of 2.5:1 for all other dwellings. 																		
	<table border="1"> <thead> <tr> <th colspan="3">Permitted room depth (mm)</th> </tr> <tr> <th>Stud height (mm)</th> <th>South facing</th> <th>Other orientations</th> </tr> </thead> <tbody> <tr> <td>2400</td> <td>4800</td> <td>6000</td> </tr> <tr> <td>2700</td> <td>5400</td> <td>6750</td> </tr> <tr> <td>3000</td> <td>6000</td> <td>7500</td> </tr> </tbody> </table>				Permitted room depth (mm)			Stud height (mm)	South facing	Other orientations	2400	4800	6000	2700	5400	6750	3000	6000	7500
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3000	6000	7500																	
Exemption: Max 8 m depth for an open plan living, if: kitchen furthest from window; 2700 mm stud; Not south facing																			

Windows	A habitable room should have a window in an external wall of the building that <i>is visible from any point in the room</i> . No snorkles. No saddlebacks.	Non compliant. Some internal bedrooms/studies (sliding doors connecting with living space). Some apartments are essentially studios with flexible bedroom spaces.								
Storage	In addition to kitchen, bathroom, bedroom and utility storage: <table border="1" data-bbox="376 411 902 547"> <thead> <tr> <th>Dwelling type</th> <th>Minimum storage (m3)</th> </tr> </thead> <tbody> <tr> <td>Studio – 1 bed</td> <td>6</td> </tr> <tr> <td>2 bed</td> <td>8</td> </tr> <tr> <td>3 + beds</td> <td>10</td> </tr> </tbody> </table> Can be external or internal. Examples show storage in core areas or in typical basement cages	Dwelling type	Minimum storage (m3)	Studio – 1 bed	6	2 bed	8	3 + beds	10	Compliant. 6 m3 of storage per apartment (NB combined with bike storage).
Dwelling type	Minimum storage (m3)									
Studio – 1 bed	6									
2 bed	8									
3 + beds	10									
Noise Impacts	Noise attenuation required to satisfy: <ul style="list-style-type: none"> • Below 35dB(A) for bedrooms, assessed as an LAeq over 8 hours (10pm to 6am). • Below 40dB(A) for living areas, assessed LAeq over 16 hours (6am to 10pm). May dictate how apartments are laid out to avoid external and internal noise sources.	NB. Can't be assessed based on existing information. Will require additional info to be supplied at planning permit stage.								
Energy Efficiency	Cooling loads applied to NatHERS assessment. Three climate zones for Metro Melbourne. More zones to come.	NB Can't be assessed based on existing information.								
Solar access to communal open space	Communal OS should be to the north. 50% should receive direct sunlight for two hours between 0900 – 1500 on 21 June.	No communal open space supplied.								
Natural ventilation	60% of units should cross ventilate. Max breeze path 15 m between openable windows and doors. N/A above 35 m + NGL	Partial compliance. Some cross ventilating apartments. NB no definition of cross ventilation provided.								
POS	GF apartments: 25 m2 x 3 m Podium / patio: 15 m2 x 3 m Balconies: <table border="1" data-bbox="376 1345 902 1369"> <thead> <tr> <th>Type</th> <th>Area m2</th> <th>Dimension m</th> </tr> </thead> <tbody> </tbody> </table>	Type	Area m2	Dimension m	Non compliant. Some apartments supplied with less than 8 m2 ~5 – 6 sqm. 1.2 m dimension. Upper floors afforded more spacious balconies but still fall short of standard.					
Type	Area m2	Dimension m								

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Studio – 1 bed	8	2									
2 beds	10	2									
3 beds +	12	2									
Communal open space	Developments of 20 + dwellings should have COS of 2.5 m ² / dwelling or 100 m ² , whichever is the lesser. Could be a garden/rooftop or a 'party room'. If an outdoor space, above standard applies for solar penetration.	Fewer than 20 apartments so standard does not apply.									
Landscaping	Deep soil areas (ex basements) and tree provision (n) required based on site size. Between 5% - 15% of total site area. Dimensions of 4 – 6 m	Non compliant. Zero provision for planting, 100% site coverage proposed.									
Accessibility	Dwellings 850 mm doorways Adaptable bathrooms/ bedrooms 1200 mm corridors 25% exemption for 2 bedroom dwellings.	Non compliant. Ramp entrance and lift. Some apartments capable of accommodating accessibility requirements subject to reduced living area.									
Dwelling entry and internal circulation	As before. Emphasis on division between residential entries in mixed use developments. Natural light source required in all entries, lift lobbies, stairwells, corridors.	Complies. Glazing (natural light) to lobbies, stairwells, corridors through a perforated metal screen.									
Waste	As before. WMP mandated. Compost encouraged.	Complies. WMP supplied (managed by body corporate). No composting facilities.									
Water Management	WSUD principles emphasised. Purple pipes when available.	Complies. No Raingardens supplied. No purple pipes.									

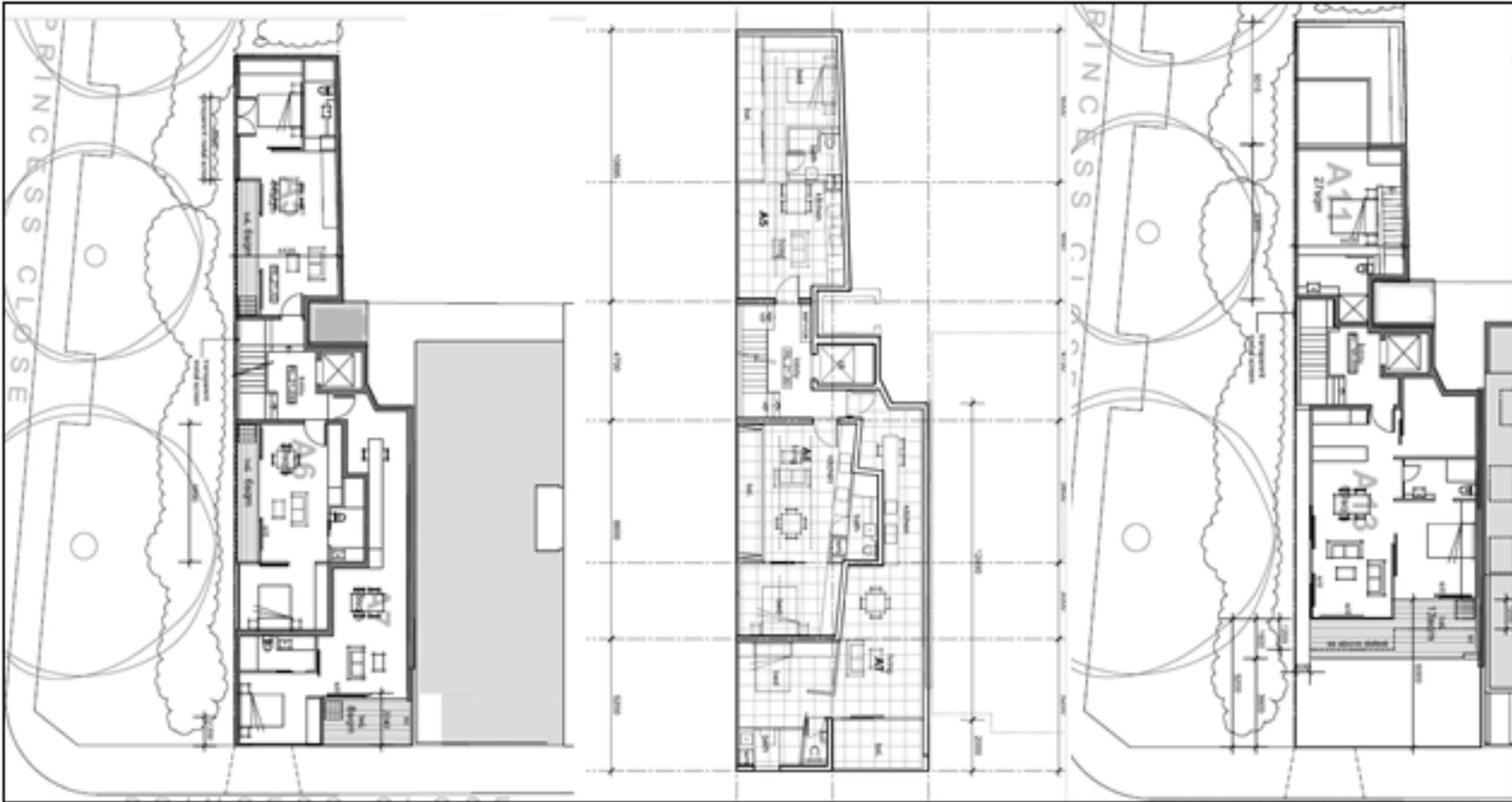


FIG. 2.1 - 2.3 SHOWING TYPICAL APARTMENT LAYOUTS FOR EXAMPLE 1 ABOVE

3.0 Example 2: Prahran Apartments

In brief: Nine apartments. Client then acquired next door site, consolidated basement and added another eight apartments (Total 17). Rear boundary faces public park. Just off Chapel Street, Prahran.

	Standard In a nutshell:	Adherence to Standard.														
Building setback	<table border="1"> <thead> <tr> <th>Building Height</th> <th>Side/Rear setback (m)</th> <th>Setback to other buildings on same site (m)</th> </tr> </thead> <tbody> <tr> <td>Up to 13.5</td> <td>6</td> <td>12</td> </tr> <tr> <td>13.5 – 25</td> <td>9</td> <td>18</td> </tr> <tr> <td>25 m +</td> <td>12</td> <td>24</td> </tr> </tbody> </table> <p>NB Measured to window OR balcony balustrade. SPOS cannot encroach into this setback.</p>	Building Height	Side/Rear setback (m)	Setback to other buildings on same site (m)	Up to 13.5	6	12	13.5 – 25	9	18	25 m +	12	24	Non compliant. Zero lot setbacks to side and rear boundaries, increasing to ~ 5 m at upper floor. (3.5 m to decks). Consolidated site lead to zero lot to 'other buildings' as well.		
Building Height	Side/Rear setback (m)	Setback to other buildings on same site (m)														
Up to 13.5	6	12														
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Light wells	<table border="1"> <thead> <tr> <th>Building height</th> <th>Min Area (m2)</th> <th>Min dimension (m)</th> </tr> </thead> <tbody> <tr> <td>Up to 13.5</td> <td>9</td> <td>3</td> </tr> <tr> <td>13.5 – 25</td> <td>29</td> <td>4.5</td> </tr> <tr> <td>25 m – 36 m</td> <td>51</td> <td>6</td> </tr> </tbody> </table> <p>36 m + buildings should not rely on lightwells</p>	Building height	Min Area (m2)	Min dimension (m)	Up to 13.5	9	3	13.5 – 25	29	4.5	25 m – 36 m	51	6	Non compliant. Some light courts provided, approx. 1.0 x 1.6 m to GFL. Voids of 1.6 m x 5.5 m above.		
Building height	Min Area (m2)	Min dimension (m)														
Up to 13.5	9	3														
13.5 – 25	29	4.5														
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Room depth	<p>A habitable room should not exceed:</p> <ul style="list-style-type: none"> • A room depth: ceiling height ratio of 2:1 for a south facing, single aspect dwelling, or • A room depth: ceiling height ratio of 2.5:1 for all other dwellings. <table border="1"> <thead> <tr> <th rowspan="2">Stud height (mm)</th> <th colspan="2">Permitted room depth (mm)</th> </tr> <tr> <th>South facing</th> <th>Other orientations</th> </tr> </thead> <tbody> <tr> <td>2400</td> <td>4800</td> <td>6000</td> </tr> <tr> <td>2700</td> <td>5400</td> <td>6750</td> </tr> <tr> <td>3000</td> <td>6000</td> <td>7500</td> </tr> </tbody> </table> <p>Exemption: Max 8 m depth for an open plan living, if: kitchen furthest from window; 2700 mm stud; Not south facing</p>	Stud height (mm)	Permitted room depth (mm)		South facing	Other orientations	2400	4800	6000	2700	5400	6750	3000	6000	7500	<p>Partial Compliance. 2700 mm stud height.</p> <p>Examples:</p> <ul style="list-style-type: none"> 3500 mm south facing hab rooms (single aspect). Compliant. 7500 mm south facing studio (not single aspect). Not compliant Max room depth permitted 6750 mm 9500 mm north facing hab room (open plan kitchen, living). Non compliant.
Stud height (mm)	Permitted room depth (mm)															
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Windows	A habitable room should have a window in an external wall of the building that <i>is visible from any point in the room</i> . No snorkles. No saddlebacks.	Non compliant. Some internal bedrooms (sliding doors connecting with living space).								
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Dwelling type	Minimum storage (m3)									
Studio – 1 bed	6									
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3 + beds	10									
Noise Impacts	Noise attenuation required to satisfy: <ul style="list-style-type: none"> • Below 35dB(A) for bedrooms, assessed as an LAeq over 8 hours (10pm to 6am). • Below 40dB(A) for living areas, assessed LAeq over 16 hours (6am to 10pm). May dictate how apartments are laid out to avoid external and internal noise sources.	NB. Can't be assessed based on existing information. Will require additional info to be supplied at planning permit stage.								
Energy Efficiency	Cooling loads applied to NatHERS assessment. Three climate zones for Metro Melbourne. More zones to come.	NB Can't be assessed based on existing information.								
Solar access to communal open space	Communal OS should be to the north. 50% should receive direct sunlight for two hours between 0900 – 1500 on 21 June.	No communal open space supplied.								
Natural ventilation	60% of units should cross ventilate. Max breeze path 15 m between openable windows and doors. N/A above 35 m + NGL	Partial compliance. Some cross ventilating apartments. Additional opportunities for compliance if light courts could be counted. NB no definition of cross ventilation provided.								
POS	GF apartments: 25 m2 x 3 m Podium / patio: 15 m2 x 3 m Balconies: <table border="1" data-bbox="376 1348 902 1372"> <thead> <tr> <th>Type</th> <th>Area m2</th> <th>Dimension m</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Type	Area m2	Dimension m				Non compliant. Some apartments supplied with less than 8 m2 ~5 – 6 sqm. 1.2 m dimension. Upper floors afforded more spacious balconies but are typically 2 – 3 bedrooms so still fall short of standard.		
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Communal open space	Developments of 20 + dwellings should have COS of 2.5 m ² / dwelling or 100 m ² , whichever is the lesser. Could be a garden/rooftop or a 'party room'. If an outdoor space, above standard applies for solar penetration.	Fewer than 20 apartments so standard does not apply.									
Landscaping	Deep soil areas (ex basements) and tree provision (n) required based on site size. Between 5% - 15% of total site area. Dimensions of 4 – 6 m	Non compliant. Deep soil areas provided (ex basement) 2.5 m wide. Denoted as containing rain gardens to serve WSUD principles as opposed to tree planting compliant with this standard. NB safety, illegal dumping. Could double as communal open space?									
Accessibility	Dwellings 850 mm doorways Adaptable bathrooms/ bedrooms 1200 mm corridors 25% exemption for 2 bedroom dwellings.	Non compliant. No lift. Stairs from all levels. Some apartments capable of accommodating accessibility requirements subject to reduced living area.									
Dwelling entry and internal circulation	As before. Emphasis on division between residential entries in mixed use developments. Natural light source required in all entries, lift lobbies, stairwells, corridors.	Complies. Glazing (natural light) to lobbies, stairwells, corridors.									
Waste	As before. WMP mandated. Compost encouraged.	Complies. WMP supplied (managed by body corporate). No composting facilities.									
Water Management	WSUD principles emphasised. Purple pipes when available.	Complies. Raingardens supplied. No purple pipes.									

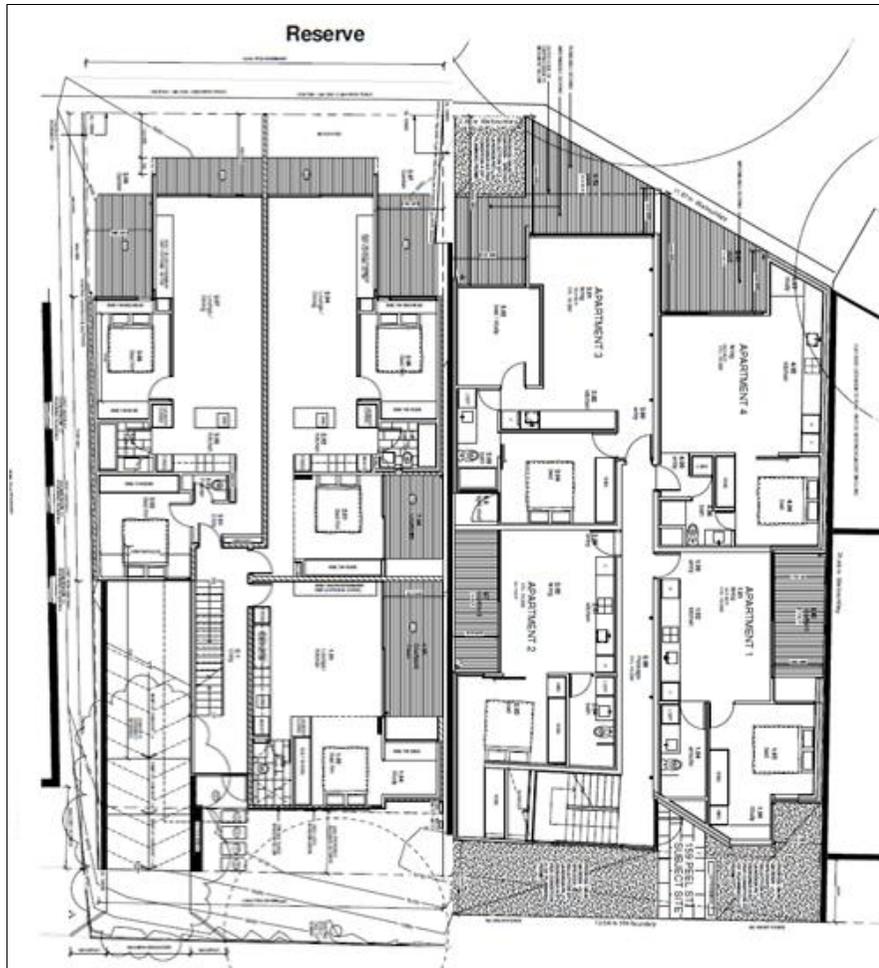


FIG. 3.1 - 3.3 SHOWING TYPICAL APARTMENT LAYOUTS FOR EXAMPLE 2 ABOVE

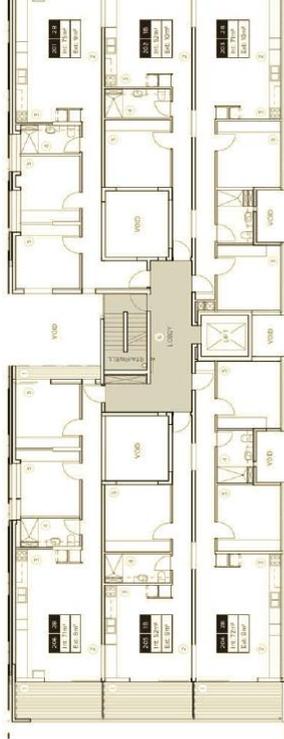
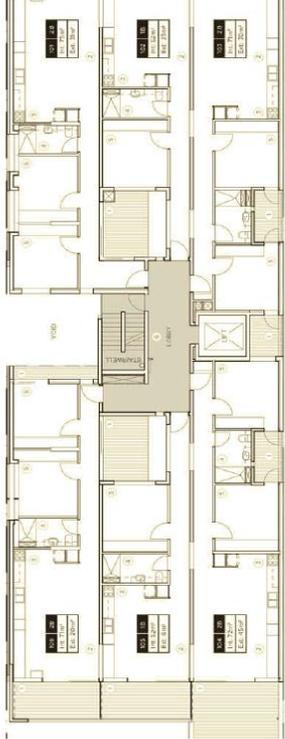
4.0 Example 3: Award winning apartment complex, Brunswick

In brief: Five level, carless development which created waves but earned accolades for its architectural merit and environmental sustainability measures. Featured ground floor studio apartments, café and shop on a corner site with north and western (unencumbered) orientation. A total of 27 apartments, with rooftop communal facilities.

	Standard In a nutshell:	Adherence to Standard.														
Building setback	<table border="1"> <thead> <tr> <th>Building Height</th> <th>Side/Rear setback (m)</th> <th>Setback to other buildings on same site (m)</th> </tr> </thead> <tbody> <tr> <td>Up to 13.5</td> <td>6</td> <td>12</td> </tr> <tr> <td>13.5 – 25</td> <td>9</td> <td>18</td> </tr> <tr> <td>25 m +</td> <td>12</td> <td>24</td> </tr> </tbody> </table>	Building Height	Side/Rear setback (m)	Setback to other buildings on same site (m)	Up to 13.5	6	12	13.5 – 25	9	18	25 m +	12	24	Non compliant. Zero lot setbacks to side boundaries. Rear setback increasing to approximately 7 m at uppermost floor.		
	Building Height	Side/Rear setback (m)	Setback to other buildings on same site (m)													
	Up to 13.5	6	12													
	13.5 – 25	9	18													
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NB Measured to window OR balcony balustrade. SPOS cannot encroach into this setback.																
Light wells	<table border="1"> <thead> <tr> <th>Building height</th> <th>Min Area (m2)</th> <th>Min dimension (m)</th> </tr> </thead> <tbody> <tr> <td>Up to 13.5</td> <td>9</td> <td>3</td> </tr> <tr> <td>13.5 – 25</td> <td>29</td> <td>4.5</td> </tr> <tr> <td>25 m – 36 m</td> <td>51</td> <td>6</td> </tr> </tbody> </table>	Building height	Min Area (m2)	Min dimension (m)	Up to 13.5	9	3	13.5 – 25	29	4.5	25 m – 36 m	51	6	Partial compliance. Substantial 4 x 5 m (approx.) void dropped into eastern side setback. Smaller voids (1.5 x 2 m) serve some bedrooms.		
	Building height	Min Area (m2)	Min dimension (m)													
	Up to 13.5	9	3													
	13.5 – 25	29	4.5													
25 m – 36 m	51	6														
36 m + buildings should not rely on lightwells																
Room depth	<p>A habitable room should not exceed:</p> <ul style="list-style-type: none"> • A room depth: ceiling height ratio of 2:1 for a south facing, single aspect dwelling, or • A room depth: ceiling height ratio of 2.5:1 for all other dwellings. 	<p>Partial Compliance. Stud height unknown. Assumed to be 2700 mm</p> <p>Examples: ~7000 mm living room. 6750 mm length permitted. (NB kitchen config not according with 'exemption' below. South facing ~7000 mm living room. 5400 mm length permitted.</p>														
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Exemption: Max 8 m depth for an open plan living, if: kitchen furthest from window; 2700 mm stud; Not south facing																

Windows	A habitable room should have a window in an external wall of the building that <i>is visible from any point in the room</i> . No snorkles. No saddlebacks.	Non compliant. Some internal bedrooms/studies accessed from voids including internal voids.								
Storage	In addition to kitchen, bathroom, bedroom and utility storage: <table border="1" data-bbox="376 448 902 587"> <thead> <tr> <th>Dwelling type</th> <th>Minimum storage (m3)</th> </tr> </thead> <tbody> <tr> <td>Studio – 1 bed</td> <td>6</td> </tr> <tr> <td>2 bed</td> <td>8</td> </tr> <tr> <td>3 + beds</td> <td>10</td> </tr> </tbody> </table> Can be external or internal. Examples show storage in core areas or in typical basement cages	Dwelling type	Minimum storage (m3)	Studio – 1 bed	6	2 bed	8	3 + beds	10	Compliant. Plentiful ground floor storage provided.
Dwelling type	Minimum storage (m3)									
Studio – 1 bed	6									
2 bed	8									
3 + beds	10									
Noise Impacts	Noise attenuation required to satisfy: <ul style="list-style-type: none"> • Below 35dB(A) for bedrooms, assessed as an LAeq over 8 hours (10pm to 6am). • Below 40dB(A) for living areas, assessed LAeq over 16 hours (6am to 10pm). May dictate how apartments are laid out to avoid external and internal noise sources.	NB. Can't be assessed based on existing information. Will require additional info to be supplied at planning permit stage.								
Energy Efficiency	Cooling loads applied to NatHERS assessment. Three climate zones for Metro Melbourne. More zones to come.	NB Can't be assessed based on existing information.								
Solar access to communal open space	Communal OS should be to the north. 50% should receive direct sunlight for two hours between 0900 – 1500 on 21 June.	Summer and winter rooftop terraces provided. South of plant, solar penetration may be impeded but likely to comply.								
Natural ventilation	60% of units should cross ventilate. Max breeze path 15 m between openable windows and doors. N/A above 35 m + NGL	Partial compliance. Few cross ventilating apartments. NB no definition of cross ventilation provided.								
POS	GF apartments: 25 m2 x 3 m Podium / patio: 15 m2 x 3 m Balconies:	Non compliant. Some apartments supplied with less than 8 m2 ~5 – 6 sqm. Dimensions not noted on plan.								

	Type	Area m2	Dimension m		
	Studio – 1 bed	8	2		
	2 beds	10	2		
	3 beds +	12	2		
	Standard convenient living room, ex utility provisions apply.				
Communal open space	Developments of 20 + dwellings should have COS of 2.5 m2 / dwelling or 100 m2, whichever is the lesser. Could be a garden/rooftop or a 'party room'. If an outdoor space, above standard applies for solar penetration.			67.5 sqm of communal open space required. Supplied via a rooftop terrace featuring bbq facilities. Communal laundry.	
Landscaping	Deep soil areas (ex basements) and tree provision (n) required based on site size. Between 5% - 15% of total site area. Dimensions of 4 – 6 m			Non compliant. Zero provision for planting, 100% site coverage proposed.	
Accessibility	Dwellings 850 mm doorways Adaptable bathrooms/ bedrooms 1200 mm corridors 25% exemption for 2 bedroom dwellings.			Non compliant. Ramp entrance and lift. Some apartments capable of accommodating accessibility requirements subject to reduced living area.	
Dwelling entry and internal circulation	As before. Emphasis on division between residential entries in mixed use developments. Natural light source required in all entries, lift lobbies, stairwells, corridors.			Complies. Glazing (natural light) to lobbies, stairwells, corridors through voids.	
Waste	As before. WMP mandated. Compost encouraged.			Unable to assess.	
Water Management	WSUD principles emphasised. Purple pipes when available.			Unable to assess.	



5.1 Currently, zero lot setbacks with light courts and voids feature heavily in apartment building typologies. These requirements are a dramatic departure from the current starting point for a typical apartment building envelope. The setback requirements of the draft standards pose a significant threat to the developability of many sites, and would render many development opportunity sites unviable based on the limited building envelope available once the setbacks were imposed. **The current wording of this standard** (as well as the remainder of the draft policies) **does not appear to contemplate flexibility for unique sites, or discretionary variation** to the numeric setback standards.

5.2 It is also not clear whether a nexus between improved solar access/ light penetration into apartments and building setbacks exists. Window sizes, orientations, the type of development on neighbouring sites will also inform internal amenity but cannot be assessed by this standard.

Light wells

5.3 The required dimensions and total areas for light wells will be significantly greater than existing regulations. This is likely to result in improved light penetration into apartments if optimally designed, but is also likely to result in reduced thermal and acoustic performance if habitable rooms from multiple dwellings on multiple floors access the light well, particularly if openable windows/ventilation is garnered from the light wells.

Room depth

5.4 Many of the apartments in our three case studies failed to meet the new room depth standard, particularly open plan kitchen/living rooms, where a maximum room length of 8.0 m is contemplated. The exemption does not contemplate galley kitchens which are not located 'furthest from the window' and does not appear to contemplate other light sources such as skylights, light wells, voids and multiple aspects which might improve solar penetration significantly. The requirements would constrain apartment layout design and do not appear to contemplate flexible spaces such as studio apartments with a sliding door which separates the bedroom from the living area. Such an apartment would need to be 6.75 m deep based on a 2700 mm stud height.

Windows

5.5 The wording of the standard does not seem to contemplate windows to light courts as compliant with this standard, dramatically reducing the types of apartment configurations which could comply with this standard. It would also prejudice 'studio' style apartments with a sliding door which sections off the bedroom space from the remainder of the apartment even though this is a common and popular product in the current market.

5.6 The size of the window does not seem to be regulated by this standard. Multiple bedroom apartments are prejudiced by this standard as compliance for a three bedroom apartment on a standard block, without the ability to incorporate snorkle and saddleback arrangements would be difficult if not impossible to achieve on many sites. It may lead to one large bedroom rather than two small bedrooms being proposed, which may not accord with household typology or lifestyle demands.

Storage

5.7 The need to provide storage capacity for apartments is acknowledged, however we question whether the prescribed volumes (up to 10 m³) are warranted, noting that bicycle storage is accommodated elsewhere. It is perceived that some of the light-locked 'core' within a building could be given over to storage rooms on each floor, as opposed to storage cages in the basement which have been identified as being prone to theft and vandalism.

Noise Impacts

5.8 We are very concerned about how this standard would be implemented, and how Council could assess this standard. The requirement to satisfy LAeq relates to ambient or 'average' noise over a long period (up to 16 hours), which will be heavily dependent on the sources of noise, which could include other residents. This is quite different from the provision of a product statement (eg for a lift model) or noise attenuation measures around the rubbish and recycling bin room to demonstrate that measures have been implemented to manage the noise impacts of building infrastructure. In order to provide a more comprehensive submission, more information is required.

Energy Efficiency

5.9 We are concerned about how these standards 'double up' on existing assessment matrices such as STEPS and BESS.

Solar access to communal open space

5.10 The use of a June 21 unit of measure to determine the extent of solar access to communal open space is unusual; Clause 55 uses September 22, and the requirement to provide solar access to a common area in mid-winter appears overly draconian. It is noted that the landscaping requirements will necessitate larger planting areas, can these spaces double up as communal open space with the addition of a picnic table or playground equipment? Can light courts or voids be counted towards communal open space?

5.11

Natural ventilation

5.12 The requirement to provide cross ventilation is troubling as the 15 m breeze path is not achievable in larger apartments. Cross ventilation is not clearly defined in the standard. The rationale behind limiting the cross ventilation requirements to buildings less than 35 m in height is not clear.

Private Open Space

5.13 The provision of larger and broader balconies and patio areas for apartments will enhance their liveability, however the increased open areas may be at the expense of more spacious internal dimensions. It is noted that balconies and patios cannot be located within the prescribed building setbacks, which once again diminishes the available development envelope.

Communal open space

5.14 While we applaud the provision of communal open space areas such as 'party rooms' where larger social functions can be accommodated in suburban and more remote locations, we have found that in CBD locations and sites in proximity to recreational and retail facilities, they do not receive enough use to justify their existence. We submit that while communal open space areas could be offered in developments where limited access to services but should not be mandatorily required, particularly in areas where commercial and recreational facilities are available.

Landscaping

5.15 Mandatory landscaping requirements may be at odds with individual Council requirements. Large (4 - 6) m wide landscaping areas located at the front, sides or rear of a development may attract antisocial behaviour, illegal dumping, and may be difficult to manage and maintain. In many instances a 6 m landscaping buffer at the front of a development site may be undesirable due to CPTED (Crime Prevention Through Environmental Design) principles or Council-managed landscaping on public land.

Accessibility

5.16 The requirement for all but 25% of two bedroom apartments to be modified to accommodate wider doorways and corridors, wheelchair accessible bathrooms and flexible bedrooms appears overly draconian and will further reduce development yield. The rationale for the dispensation for 25% of two bedroom dwellings is not explained.

Dwelling entry and internal circulation

5.17 We applaud the increased emphasis on high quality and well-rationalised dwelling entries and internal spaces. The supplied examples were all capable of providing natural light to the lobbies and lift wells, however in instances with centralised 'core' services, particularly larger sites, the provision of natural light to stairwells and corridors is likely to be problematic, and if it is achieved, it is likely to be at the expense of solar access to apartments.

Waste

5.18 This standard broadly follows existing practice, with most municipalities currently requiring Waste Management Plans to be supplied. Once again, it is stressed that some Councils have developed their own strategies to encourage waste minimisation, so in some ways this standard doubles up on those efforts. The requirement for composting facilities for apartments is likely to be met with resistance from the development community and we anticipate that ongoing management of communal composting infrastructure is likely to be problematic.

Water Management

5.19 As above, we stress that many Councils, such as the CASBE group have created their own performance standards and assessment criteria to encourage sustainable water management. It is suggested that water management performance be addressed within the existing (and emerging) Environmentally Sustainable Design (ESD) frameworks to avoid doubling up.

Conclusions

5.20 While we applaud efforts to improve the amenity and liveability of apartments, the draft standards unreasonably constrain the development potential of many otherwise viable sites. We anticipate this will result in a knock-on effect of reducing the number of apartments available in each development, affecting supply and affordability. Limited (no) flexibility appears to be available to allow for unique site contexts or innovative solutions which do not meet numeric standards to be contemplated. We also hold grave fears about the implementation of the standards in the absence of comprehensive training for both the development community and Council planners into the interpretation and application of the new standards.

5.21 The above exercise illustrates that many existing apartment building typologies are likely to fail to meet the draft guidelines, suggesting that a radical departure from existing drafting and design practices will be required. Clause: 1 Planning perceives that such drastic measures are not warranted and that fine tuning of existing standards, encouraging innovative and site-responsive design, and providing greater certainty about issues such as equitable development would better serve the needs of the future residents of these apartment buildings. We argue that slavish adherence to numeric standards and 'legislating' good apartment design will not necessarily result in enhanced apartment buildings of the future.

5.22 Thank you for the opportunity to provide this submission. We look forward to participating further in the development of the Better Apartment Guidelines. For further information about this submission please do not hesitate to contact Ashley Thompson, Clause 1 Director on 9370 9599.