

Purpose of this Document

This review of the *Better Apartments Draft Design Standards* accepts the process to date has determined the need for 16 additional standards, and looks specifically at the instrumentality of what is proposed to effect or cause the “desired outcome” or the “overall policy objectives which for the purpose of this review are assumed. Some consideration has been given to the logistics and procedure these standards entail to applicant, objector and authority to administer them, and from this I make 3 recommendations that should be considered prior to the adoption of these standards.

Part I. Tabular summary and recommendations.

Part II. A commentary on each of the proposed standards. The emphasis here has been to consider the likelihood that each standard will achieve its objective, benefit and the solution it proposes.

Part III. Some general commentary on the decisions that are rightfully planning and those which are building, and recommendations as to areas that might warrant further exploration.

Background

This is a response to the Victorian Government’s call for ‘public feedback’ on the proposed *Better Apartments Draft Design Standards*. These have been prepared following a period of community consultation and engagement with public and selected industry groups. Consideration has been given to the likelihood that what is proposed will achieve the objectives outlined or referenced by them. Consideration extends to consider the potential for there to be unintended or inadvertent impacts of these standards, where unwittingly they mitigate the enabling policy objective such as affordability or diversity of housing. We have noted as a concern the capacity to properly implement and enforce these standards.

Executive Summary

The standards might best be considered as an attempt to avoid “undesirable” built outcomes. This cautious approach comes at the cost of allowing better solutions. As a suite the standards are inconsistent with the ordinance (units) of other regulatory requirements for construction as they are with each other. Much of what is proposed duplicates without adding any force to the already scheduled Design Guidelines. While other proposed standards advance a lesser standard or are contrary to what is required under the provisions of the NCC which by law has precedence. Of concern is that many desired outcomes imagined by the enabling policy objectives, particularly with respect to affordability and urban consolidation, are mutually incompatible with the draft provisions as they stand.

There is confusion in what is properly a matter of planning and what is building performance. This raises a question as to the capacity for local government authority to have the level of capability to resource the enforcement and regulation of matters advanced here: matters such as noise levels or energy use. It is unfathomable how a planning authority might be asked to deem a neighbouring buildings’ power has not been unduly affected by the construction of a development without assuming a level of culpability for that. Much of what is proposed will likewise be the subject for future deliberations in a range of forums.

We note that national standards are currently being advanced to consider the performance of apartment buildings specifically with respect to energy performance in a manner that already applies to class 5 construction. With respect to access and general amenity it is irregular that any State would propose a lesser standard than the national code – without this becoming the subject of judicial clarification. It may bear considering if the acceptance of *Airbnb* has already reclassified all class 2 buildings as class 3 construction for this purpose.

These will override or make redundant what is here proposed, though these provisions, in their current form, will undoubtedly compromise the efficacy that the new standards will have as they require developments to employ the out-dated and blatantly wrong assumptions as to what constitutes current knowledge of building performance.

We recommend:

1. That a Victorian provision be developed and inserted into the NCC F4.2 Methods and extent of natural lighting;
2. Adopt a method to determine a setback on boundary where there is an existing development similar to that contained in the NSW provision that matches that condition- and that a minimum development envelop be assumed on boundaries where there is no adjoining development;
3. Stipulate a level of air exchange equivalent to that required for mechanical ventilation.

What is considered:

STATE PLANNING POLICY FRAMEWORK - CLAUSE 15 which states that Planning must consider as relevant:

Design Guidelines for Higher Density Residential Development (Department of Sustainability and Environment, 2004 in assessing the design and built form of residential development of five or more storeys.

Clause 52.35 - Urban context report and design response for residential development of five or more storeys.

STATE PLANNING POLICY FRAMEWORK - CLAUSE 54

STATE PLANNING POLICY FRAMEWORK - CLAUSE 55

DRAFT DESIGN STANDARDS- DELWP July 2016

Design Guidelines for Higher Density Residential Development (Department of Sustainability and Environment, 2004

AS 1428.1-2009

Design for access and mobility – General requirements for access – New building work 2010

Apartment Design Guide Tools for improving the design of residential apartment development NSW planning and environment July 2015

PART ONE

The draft design standards have been developed to address the specific apartment design and amenity issues raised through public consultation are:

Draft Standard • Identified problem	Strategic response	Issues identified in this review	Recommendation
1.Setback from Boundary • Adequate Daylight • Privacy	Fixed setback from boundary, from adjacent buildings.	Definition of <i>Adequate</i> in NCC is overwritten by inadequate deemed to comply provision. This should be reviewed for Victorian Provisions. The separation between sole occupancy dwellings in <i>1 Building setback</i> and <i>2 Light wells</i> is inconsistent. Area of site consumed for setback will negate overall strategic objectives for density and consolidation. The scheduled Guidelines already suggest that views be over public streets or be kept within the site.	As per NSW Apartment Design Guide, Clause 2H, match site setback on established boundary Require all windows into the site to be contained within the site ie perpendicular to boundary or default to SPPF Clause 54 .03 54.04-6 Overlooking objective provision Introduce Victorian provision in NCC requiring 5% daylight factor to 90% floor area of all habitable rooms.
2.Light wells • Adequate Daylight • Privacy	Min dimension for external light wells – not on a boundary.	Does not consider light source, window size or position of window to determine daylight. The separation between sole occupancy dwellings in <i>1 Building setback</i> and <i>2 Light wells</i> is inconsistent. Confuses settings in other standards for Privacy, Acoustics and Ventilation.	Introduce Victorian provision in NCC requiring 5% daylight factor to 90% floor area of all habitable rooms.
3.Room depth • Adequate Daylight • Privacy	Room proposition ceiling height / room depth & orientation	As daylight is caused natural illumination adequate daylight is a factor of this and the level of its transmission through a window, the size and position and qualities of the window relative to its access to daylight are none of which are factors which must be considered.	Introduce Victorian provision in NCC requiring 5% daylight factor to 90% floor area of all habitable rooms.

4.Windows <ul style="list-style-type: none"> Aspect 	View cone to window	The purpose of this standard seem to be to avoid certain room configurations, in which case the NCC clause that allows that should be addressed directly.	Introduce Victorian provision in NCC requiring 5% daylight factor to 90% floor area of all habitable rooms.
5.Storage <ul style="list-style-type: none"> Storage 	Min dimension of storage in addition to what would be <i>normally</i> expected.	The standard is only sensible if there is also a standard for min apartment dimension.	Needs to be co ordinated with draft standard 13 Accessibility.
6.Noise impacts <ul style="list-style-type: none"> Impact noise Noise sources 	A measurement of noise within the apartment once constructed.	While the problem identified is impact noise the solution only considers background noise. What is proposed is in effect a condition of building occupancy not planning. And therefore must be addressed by the relevant authority.	Review NCC for sound attenuation. Establish settings for impact noise. Amend 2005 guidelines for design of public access corridors to isolate lifts and stairs.
7.Energy efficiency <ul style="list-style-type: none"> Use of Energy Impact on adjoin properties use 	Submit and monitor energy use of adjoining development. Limit cooling load.	How would this be enforced other than a condition on the building permit?	Co ordinate with 2018 NABERS rating system for apartment is currently under development.
8.Solar access to communal open space. <ul style="list-style-type: none"> Amenity 	2 hour min sunlight to unspecified portion of communal space.	This needs to be considered with <i>1 Building setbacks, 11 Communal open space</i> and <i>12 Landscaping.</i>	
9.Natural ventilation <ul style="list-style-type: none"> Indoor air quality 	Max 15m distance between operable windows in perpendicular or parallel walls to 60% of apartments.	This seems an arbitrary figure, If ventilation of airflow is a problem that has to be solved it is to either 100% or 0% apartments. This proscription precludes desired outcomes in other standards, energy efficiency and acoustic performance of the building.	Review the rates of airflow required by the NCC for mechanical ventilation and specify the equivalent values for passive ventilation.

10.Private open space <ul style="list-style-type: none"> On site amenity 	Min dimensions for Private open space.	Min area of site development needs to be established to ensure consolidation and density objectives are not compromised.	
11.Communal open space <ul style="list-style-type: none"> On site amenity 	50-100m2 Shared open space with 2 hours sunlight.	Needs to be considered in terms of the the potential to impact on the viability of adjoin properties and therefor neighbourhood sustainability Is this a offset for community infrastructure contribution? There are formats that this might take like gallery or community room on street.	Propose this to be on the roof as the default condition – also allow the potential to relocate this and to aggregate it within a neighbourhood. Consider communal open space as part of development contribution overlay .Consider contribution and access to neighbourhood community managed facilities in lieu of onsite provision.
12.Landscaping <ul style="list-style-type: none"> Screening Neighbourhood character 		Repetition of existing SFF 54 and 55 Provisions – Complete and established Landscaping is already a standard permit condition for building completion.	No standard required
13.Accessibility		Inappropriate for a state to propose a new definition of disability at odds with AS 1428	Extend access provision for class 3 building in NCC to class 2 buildings.

PART TWO

1 Building Setbacks

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.

Daylight and Privacy are unlike things and normally would have different methods of determination. We address this standard in two parts: Daylight and Privacy

Building Setback Part 1 Daylight

That Daylight is the common element in nearly one third of the standards proposed, suggests that it is being used as an indicator or measure of amenity rather than as an objective in its own right. This in part explains why Daylight is the subject of so many of the proposed standards: 1. *Building Setbacks*, 2. *Light wells*, 3. *Room Depths*, 4. *Windows* and 7. *Energy efficiency*. The ambiguity caused by this undermines the integrity of these standards. We have elected to make specific comments on each proposed standard. We recognise that it is unlikely that all will be adopted in their current form that no one should stand without consideration.

The provisions of the NCC require an adequate level of daylight and unfortunately have a *Deemed to Comply* example. In modelling what it describes in the specific context of Melbourne this results in a lower than *adequate* level of daylight. In many respects it is the persistence of this provision that has allowed for the less than desired room arrangements that 3. *Room depth* and 4. *Windows* seek to redress. One assumes that what had been intended in this NCC clause may have been a filled in veranda for a traditional Queenslander. This however does not translate nationally. Our recommendation is that a factor for Adequate Daylight in Victoria be inserted into a state provision of the NCC.

An Adequate Daylight level can be determined by nominating a required level of task illumination i.e. a figure $E(lx)^1$, LEED (US) and BREEAM (UK) measure daylight as a factor over the percentage of the floor area. In these standards adequate daylight is 5% of external daylight (D_{ext}) to 90% of the occupiable room. These consider the combination of the quality of daylight (the aspect and position of adjoining buildings etc.), the window (its size and position in the room) and the geometry of the room. These are simple calculations that are consistent with the method of determining values necessary for Part J of the NCC, and are all that would be required.

Building Setbacks Part 2 Privacy

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.

It is unclear from this code under what conditions and to what extent one can build on the site boundary. One assumes in looking at this standard that the extent of what is setback to be the building at the window, though this would make section 2. *Light well* redundant. Are we to assume that street frontages have been built to the boundary but not the side? The NSW standard covers this extensively, though this can be shown to preclude a best use of the site. For our purpose we assume that the building envelope for each site has been first described by a Precinct Structure Plan that has designated the site within an area of strategic importance for higher density development.

The provision of Section 54 for the overlooking of privacy is a 9m cone before screening is required. This has been adapted more or less as a building offset in these proposed standards, as the distance between buildings within the site is twice the offset from the boundary. The provision in effect pertains particularly to perpendicular placement of windows, as it is as much acoustic privacy that determined this standard: 8m being the range a conversation can be heard, with visual privacy requiring a much greater distance. The principal

¹ Assume adequate measure of task illumination required for reading $E(lx)$ -500

P192 Pinpoints by ETH Zurich . Ref table Guidelines for luminance E according to visual task + 200 lx light visual task, is + 500 lx normal visual tasks medium details + 1000 lx Difficult tasks small details low contrast 100lx

Melbourne -37.8 Base Daylight 7943Lux Ref BRE <http://www.bre.co.uk/breglobal>

Note when in checked City of Yarra guidelines for Sunlight these seem out by a factor of 10

should be that windows should be perpendicular to the side or rear boundaries, rather than reduce the site area available to realise strategic policy objectives.

This standard in its current form establishes minimum lot sizes for development types. This may well be an indication of the appropriateness of developments to their settings. The effect of the offset dimensions when combined with typical apartment sizes will determine minimum plot sizes for development types:

Nom a 4 level building max height 13.5m = 400m² +

Nom a 8 level building max height 25m = 600m² +

The developable area of these sites could be as little as 20% of a 400m² site under these standards.

If the primary objective is to achieve the broader objectives of the Planning Scheme, low residential density on strategic sites would not be a desired outcome (more work could be done here in terms of determining a dwelling per hectare for different sized sites but a quick calculation puts this at max 60unit/hectare which is no better than what is achievable under the current standard for development lower than 13.5m).

Recommendations

- a) Specify a daylight factor Nom 5%, and the extent it applies to (90%) for occupiable rooms. This may take the form of a state provision within NCC.
- b) For acoustic and visual privacy requiring that windows and private open space are positioned so that views are within the site.
- c) As setback requirements limit the developable area of a site that otherwise is deemed (by other means) as a strategic objective to more intense development, the setback should be to match that of the established neighbouring property, and if there is none, then no setback is required.

If these recommendations were applied, the proposed standards *1. Building setback*, *2. Light wells*, *3. Room depth*, *4. Windows*, as well as *7. Energy efficiency* could be avoided.

2. Light wells

The standard seeks to ensure that the size and design of light wells allow adequate daylight access to an apartment.

‘Adequate daylight’ needs to be defined as a level of daylight.

It is unclear in the distinction between a setback and light well. Is it that a light well does not abut a property boundary?

The standard needs at least to be consistent with privacy provision of *1. Setback*: separation between windows of sole occupancy units, and *9. Natural ventilation*.

A determination of Daylight factor would lead to a width of window that almost certainly questions the nominated dimensions of this standard and makes the (mitigating gesture) offsetting windows redundant.

The setback provision discussed in *1. Setback* advances a figure between 12 and 18m between windows which must raise the question of the adequacy of 3m between sole occupancy units. This distance is already required by the NCC.

It is unclear if the light well tapers as the building gets higher or if the overall building height determines the dimensions at each of the height thresholds.

Recommendation

As per *1. Building setbacks*

3 Room depth

This standard seeks to ensure that each apartment is able to receive an adequate amount of daylight, including south facing single aspect apartments.

‘Adequate daylight’ needs to be defined as a level of daylight.

The assumption that there is a difference between north and south windows with respect to daylight is not verified by current model. These consistently show no difference due to aspect with respect to daylight.

Daylight is different to sunlight. The north windows in an energy efficient building as is envisaged by these

standards will be being screened (so as to be in accord with other standards such as 7 *Energy efficiency* to prevent heat load) and will be identical to south windows.

The assumption that a higher floor to ceiling will improve daylight penetration is entirely dependent on the position of the window in the wall. The higher the window in the wall the greater the room depth but the window is not considered by this standard.

$D = 2.5h$ will determine a value of effective daylight only if h is the window height. The ceiling is not the source of daylight.

Recommendation

As per 1. *Building setbacks*

4 Windows

The standard seeks to ensure that all habitable rooms have direct access to daylight by requiring a window to be directly visible from any point in the room

Adequate daylight needs to be defined as a level of daylight.

This provision seems to have been written to avoid the undesirable room arrangement permitted by the clause of the NCC which permits borrowed light. It be simpler to address this issue directly as already discussed in 1 Setbacks .

Recommendation

As per 1. *Building setbacks*

5. Storage

Each dwelling should have convenient access to usable and secure storage space (excluding kitchen, bathroom, bedroom and other utility storage

The provision calls for a fixed volume of storage in excess of a an indeterminate amount of storage . The standard would only be sensible if there is also a standard for min apartment dimensions.

Recommendation

Do not proceed with this standard

6 Noise impacts

The standard seeks to ensure that new apartments achieve a reasonable standard of acoustic performance in relation to noise transmission.

The standards proposed here as a measure are significantly lower than recommended in other jurisdictions i.e. NSW require 20dB(A) for bedrooms nominally ½ of the 30dB(A) proposed here.

The level LAeq cannot be assessed at a planning stage as it is an on-site acoustic measure of background noise that may not be achievable at any other time than when the test is done. The subscript eq is an average noise over the period. Assume that planning could somehow extend its ambit to monitor the building beyond the construction, and require a test over 8 and/or 16 hours under controlled conditions which eliminates the sharp disruptive and occasional noises caused within the building, then the criteria of this standard will still not have been verified.

Recommendation

Within the NCC, require additional attenuation specifically for impact noise if the design solution is unable to eliminate noise sources from public spaces – i.e. in instances where the lifts open directly into an access corridor.

7. Energy Efficiency

The standard seeks to ensure that new apartments are energy efficient.

The standard requires buildings should be:

- *Oriented to make appropriate use of solar energy.*

This does not have to be ambiguous: Solar energy is here considered as either a heat source and can *used* to heat water, generate electric power, passively heat interiors, dry clothes, grow plants and draw drafts (as in solar chimneys), as well as for day lighting.

The current development and of NABERS for apartments will recognise these as *total energy* in use and recognise how as a factor *appropriate use of solar energy* has been made. This will be the definitive standard from 2018, as opposed to other standards such as NatHERS which does not recognise energy performance or *use of solar energy*. There is evidence of a poor correlation of what has been modelled and realised in projects since the first generation of this program in 2004. With the adoption of NABERS it will overwrite the proposed provision of NatHERS

- *Sited and designed to ensure that the energy efficiency of existing dwellings on adjoining lots is not unreasonably reduced.*

Whilst this recognises the potential of new development to impact the performance or environmental strategies of adjoining properties, there is not procedure within what is proposed for how this can be assessed. How would a proposed development assess the existing performance of an adjoining property? Who proves what is affected and when is it to be proven that something is affected? Is the onus on the adjoining neighbour or the applicant that makes application for this? Without a value for *unreasonably* i.e. 10% this will be the subject of an open ended dispute. This provision already, and possibly correctly, assumes that the proposed standards *1. Building setback* and *2. Light wells* to already be ineffective in mitigating the impact of new development. It is possible that this standard will lead to low yielding developments due to the progression of site constraints induced by each successive boundary.

Further considerations

- On heating load limits – again these are meaningless at a planning level but can be determined at a NCC – what happens when a permit is loaded with conditions and is on-sold? This creates in effect an encumbrance on the Title.
- Things that have been found to significantly affect energy consumption include the air-tightness of the construction, natural ventilation and acoustic isolation.
- Clothes drying area (5%), adequate lighting (up to 40%), preheated water solar hot water, access to rooftop solar.
- Sky luminance varies with climate and cloud cover - from 2,000 cd/m² on a clear day with a deep blue sky to 10,000 cd/m² on a very bright day.
- Typically an objective such as proposed here would reduce energy usage from artificial light by up to 40mj/m² which represents as much as 1/3 energy needed for a low energy building @ 100-150mj/m²

Recommendation

Advance this through submission to the ABCB review of Measure 31 to 2019

<http://www.abcb.gov.au/News/2016/09/11/Energy-efficiency-initiative>

8. Solar access to open space

The standard seeks to ensure that any communal outdoor open space provided on-site for residents achieves a specific amount of direct sunlight through good orientation.

The requirement to provide this on the ground floor is in itself archaic, and like the impact on adjoining buildings implied in *1. Building setbacks* and *7. Energy efficiency*, compromises and negates the overriding strategic objectives that enable these standards.

Communal outdoor open space of between 50m² and 100m² can sensibly be provided in a number of locations including a rooftop garden, or on an upper floor with equivalent amenity and utility without compromising the efficacy of the site and that of the adjoining sites.

Recommendation

Combine *8. Solar access to Open Space* and *11. Communal open space*.

9. Natural Ventilation

The standard seeks to ensure that any communal outdoor open space provided on-site for residents achieves a specific amount of direct sunlight through good orientation.

For this to be sensible, a rate of air exchange needs to be nominated. This is assumed in the provisions of the NCC and is what is considered in calculating a method for mechanical ventilation.

There is a contradiction between ventilation of buildings, acoustic isolation and overall building performance, affecting light wells, windows and privacy as well as the acoustic privacy within an apartment. What is assumed here is an opening window where there are a variety of mechanical vents and air exchanges which achieve much greater levels of comfort and efficacy – such as the principal of *Passivehaus*.

There is no note as to what determines the value of a 15m paths say over 10 or 20m, but it obviously assumes a level of performance.

What does opposing sides mean, it only applies to 60% and there is no figure given for how these achieve a safe level of passive air exchange already required by the NCC.

10 Private open space

The standard seeks to ensure that each apartment is provided with an area of private open space that will meet the reasonable recreation and service needs of residents.

The introduction of this standard now in excess of that under the provisions of Clause 55 raises a question as to how this was not a matter for consideration previously – i.e. by what mechanism was this excised.

11 Communal open space – see 8 Solar orientation to Public open space

The standard seeks to ensure that an area of communal open space is included in new apartment buildings for the benefit of residents.

Why is this distinct from the need for appropriate solar orientation?

12 Landscaping

The standard seeks to ensure that new development is responsive to its landscape context, retains significant vegetation, maintains habitat and provides for canopy trees.

This is the most detailed standard to the point that it is almost absurd. It is difficult to fathom either what the issue is here: external screening, stormwater retention, or what its objective is.

13 Accessibility

The standard seeks to ensure that apartment developments cater to the needs of people with limited mobility by introducing minimum dimensions and design requirements for entrances, corridors, doorways, bedroom and bathroom

What is proposed in effect the same as the requirement in the NCC for a class3 building: That 25% of hotel rooms meet the requirements of AS 1428 part 1.

Generally a bespoke term such *limited mobility* is ambiguous and cannot be defended, instead accessible should be used and the standard adopted to avoid ambiguity.

14. Dwelling entry and internal circulation

The standard seeks to ensure that entries and internal common spaces are designed to provide high quality spaces that contribute to the overall amenity and functionality of the building.

These are covered in the existing reference documents (Guidelines for higher density development 2004). It is unclear how what is proposed here is significantly different and can be enforced to any greater extent. The specific issues such as separation between entrance and tenancy at a street level and proximity of entry to street would automatically be adopted by the NCC provisions which references AS 1428 should SPPF Draft provision 13 Accessibility standard be adopted.

Recommendation

As per 6.Noise mitigation, and 13.Accessibility.

15. Waste

The standard seeks to ensure that waste management facilities are well designed, and enable residents to manage

their own waste easily.

These are covered in the existing reference documents it is unclear what or how these will impose a greater level of force under the new Draft provision.

Recommendation

Consider exploring how site waste management and recycling facilities might be encouraged such as the US LEED building standards for residential apartments.

16. Water management

The standard seeks to ensure that opportunities to collect and reuse rainwater and greywater are identified and implemented in new development.

NABERS PROPOSED APT PLAN – has recently been commissioned and will be developed from 2016 sept
It is envisaged that nationwide apartments standards will come under the framework of that extends from the Building Energy efficiency disclosure act 2010 and the suite of act pertaining to disclosure and scope that have ensued <http://cbd.gov.au/overview-of-the-program/legal-framework> A level of disclosure and performance in access of the measure cited here.

Needless to say that the adoption of best practice for recycling and stormwater retention is relatively pointless in the scale of site coverage and hardstand – i.e. undercover car parking

The development of a national rating tool for apartment buildings is a key action in the City of Sydney's residential apartment sustainability plan. The plan uses data from the City's smart green apartments program – a three-year sustainability trial that took place in 30 buildings across the city from 2011–13 (<http://www.cityofsydney.nsw.gov.au/live/residents/sustainable-city-living/sustainable-apartments/smart-green-apartments>)

PART THREE

For a standard to become a clause of the VPP it is necessary that it contain the following components

1. The purpose of a clause

It is necessary that this is unambiguous. The use of words *should*, *adequate*, *unreasonably* and *purpose* is not ambiguous in law.

Should is a conversational version of shall, a variation on the archaic shalt. *Adequate* normally is the minimum level. *Unreasonable* is an amount in excess of what is to be expected and *Purpose* is a measure of intent however in planning these routinely are seen as interpretation rather than assign values.

A clause contains:

Problem- Specifically what problem is that is being addressed;

Benefit –A description of a desired outcome i.e. what will be achieved, in the form of a value;

Solution – The instrument or thing that is proposed that will cause that achievement.

In a well formulated standard the benefit and the solution are the same thing i.e. if the problem is inadequate daylight to habitable rooms then the solution is the provision of an adequate level of daylight measured as a daylight factor which combine the condition of external daylight (lux) and the required task illumination lux.

Problem – Inadequate daylight;

Benefit - Adequate daylight for purpose;

Solution - 5% of daylight to 90% of the area of habitable rooms (including bedrooms). That is, the solution and the benefit coincide. The Standard would include the method of determining daylight.

2. Standards need to be enforceable and verifiable.

Any proposed standard must consider the cost of compliance and the efficiency by which it solves its problem– i.e. if housing affordability is a significant policy objective then a cost impost due poor process should be avoided

Local government has a responsibility to implement the State strategic objectives by in effect a licence in the form of a precinct structure plans. They also may adjust the strategic settings in response to the immediate needs through the provisions of the MSS, Authority pertains only to what has been authored. For this reason many of the detailed guidelines have been routinely misunderstood and unrealised by the mechanism that allows for the appropriation of authority through the use of overlays.

There is question as to the purview or reach of planning: who is the appropriate authority to review these standards? Local Government lacks the expertise, resources or authority to consider the built performance such as is advanced in these standards. The absence of a mechanism to verify or enforce actual environmental performance is why these are being proposed. By law the building surveyor who is bound to the project until its completion has the responsibility of enforcing building performance.