# Proposed ResCode Deemed to Comply provisions

**Banyule City Council Submission – September 2024** 



# Introduction

The following submission is made on behalf of Banyule City Council in response to the Invitation for feedback on the Proposed ResCode Deemed to Comply provisions on 27 August 2024.

# **Submission**

# Deemed to Comply ResCode Standards

Detailed feedback in relation to the Clause 55 Standards is provided in Appendix A. This feedback generally applies to the corresponding Standards in Clause 54.

Key findings include:

- The standards are not sufficiently clear to operate as deemed to comply standards. Further work is required to ensure all standards are clear, concise and practical for all users including planning officers, community members & industry professionals.
- The standards place a disproportionate weighting on supporting development as opposed to good development outcomes that protect or provide for good amenity. There are opportunities to provide a better balances of this through revisions to the standards.
- The deemed to comply standards result in a tick a box exercise that do not achieve high quality character and development outcomes, with many of the revised standards resulting in a lesser outcome than the current standard.
- Sufficient time must be given to Council's to update and amend their planning scheme to prepare for the proposed changes, including schedules to the zones and/or Neighbourhood Character Overlays.

In addition to the comments provided in Appendix A, it is suggested that if the standards are to be updated, the numbering of the standards is revisited to avoid gaps between standards where one has been removed and standards with decimals i.e. Air Pollution B24.1 to make this clearer and easier to use.

# **Environmentally Sustainable Development**

The proposed ResCode changes introduce new requirements for shading devices, 'solar ready' requirements for roof top areas and natural ventilation. The changes are a positive step however, it will be important that DTP progress consideration of the Elevating Targets request and Stage 2 of Environmentally Sustainable Development roadmap 2023.

# Removal of Third Pay Appeal Rights to VCAT

One of the most significant issues resulting from the proposed amendments is the removal of third-party appeal rights to VCAT by the community when all deemed to comply standards have been satisfied. With notice requirements remaining as is, third parties will still be able to lodge objections to an application. However insufficient information has been provided to demonstrate how this will work in a practical sense if the deemed to comply standards have been satisfied. This includes what weight (if any) Council can place on these submissions.

In objecting to a deemed to comply application, objectors are given the reasonable expectation that their feedback can be considered. However, this does not appear to be the case, with no opportunity given to Council to require changes that are deemed to comply.

This results in a process that is misleading in nature and undermines the public notification process of the Planning and Environment Act 1987. With third party appeal rights being removed, the requisite 'checks and balances' that is mandated by the Planning and Environment Act 1987 are not being provided. This is fundamental to the planning system in Victoria in providing a fair and transparent planning process.

# **Consultation**

The workshops facilitated by DTP were undertaken in November 2023 and June 2024 with a number of Councils, including Banyule. These two workshops primarily concentrated on discussions concerning the codification of ResCode. No detail or draft provisions was provided by the Department at the workshops. Similarly, no clear direction was provided on the future direction of the codification format was provided.

Given the significance of the changes proposed, the initial two week notice period to officers is not considered sufficient to provide meaningful comments on the merits of the amendments to ResCode and whilst an extension has been provided, it remains inadequate for the substantial change in policy proposed.

It is also understood that DTP has engaged developers, planning consultants and architects without engaging the broader community. In the interests of providing a fully transparent and accountable process, a robust engagement process must be undertaken. This process is imperative in providing an opportunity for officers, the community and industry professionals to provide meaningful feedback, which will add value to the process.

Community participation in the planning scheme amendment process is also a key objective (Objective h) of the Planning and Environment Act 1987. Without this engagement, this objective has not been satisfied.

# **Conclusion**

It is acknowledged that the introduction of 'Deemed to Comply' ResCode provisions has some merit in streamlining planning assessments for residential development. The introduction of ESD related standards is viewed favourable and aligns with Council strategy, which aim to reduce carbon emissions and address climate change. However, the proposed changes have a number of fundamental flaws which have the potential to oversimplify some standards to enable them to become 'Deemed to Comply' standards. Other standards have become more complex in nature, making them difficult to understand by all stakeholders including planning officers, industry professionals and the community.

Furthermore, the proposed removal of appeal rights (where standards are met) adds further complexity and uncertainty to the planning process for the community, with any concerns received in the form of an objection not being able to be considered. This is in direct conflict to the core fundamentals of Victoria's planning system, which promotes community participation and transparent decision making.

# Appendix A: Officer feedback in response to proposed changes to Clause 55

Planning scheme

clause and standard

**Existing Standard** 

Neighbourhood character Clause 55.02-1 Standard B1	The design response must be appropriate to the neighbourhood and the site.  The proposed design must respect the existing or preferred neighbourhood character and respond to the features of the site.	Not appliable. Standard B1 is proposed to be removed.	Stakeholders mostly agreed that that neighbourhood character policies are not providing better design outcomes than those that can be achieved through other ResCode standards, are holding up planning permit approvals and resulting in poor design. In response to this, this standard is proposed to be removed, and siting and design standards are proposed to be updated to ensure that development provides for good internal amenity for occupants and external amenity for neighbours.  The valued character of our neighbourhoods and the ability to specify local variations to standard planning controls to protect it will be retained in the planning system with the Neighbourhood Character Overlay.
zones and Clause 65	It is understood that it would be difficult to amend Neighbourhood Charac is, however the removal of Standard B1 is opposed unless sufficient time is paracter in response to the proposed removal of Standard B1.		
Residential policy Clause 55.02-2 Standard B2	An application must be accompanied by a written statement to the satisfaction of the responsible authority that describes how the development is consistent with any relevant policy for housing in the Municipal Planning Strategy and the Planning Policy Framework.	Not applicable. Standard B2 is proposed to be removed.	Stakeholder feedback was that the requirements of this standard are included in other parts of the planning scheme such as zone objectives and decision guidelines. This standard is proposed to be removed to reduce duplication of assessmen in the planning scheme.
Officer Comments:	The PPF and MPS will remain as policy considerations under the Zone.		
Dwelling diversity Clause 55.02-3 Standard B3	Developments of ten or more dwellings should provide a range of dwelling sizes and types, including:  Dwellings with a different number of bedrooms.  At least one dwelling that contains a kitchen, bath or shower, and a toilet and wash basin at ground floor level.	Developments of ten or more dwellings include at least:  One dwelling that contains a kitchen, a toilet, a wash basin, and a bath or a shower at ground floor level.  10 per cent of dwellings with 1 bedroom.  10 per cent of dwellings with 2 bedrooms.  5 per cent of dwellings with 3 bedrooms.	Infrastructure Victoria's 2023 report <i>Our home choices</i> found that a greater diversity of apartment and townhouse sizes is required to encourage more people to live in established suburbs closer to existing infrastructure in line with <i>Plan Melbourne 2017–2050's</i> aim of providing 70% of new homes in established suburbs.

• Increasing the percentages of each dwelling type, including increasing the percentage for three bedroom dwellings noting that a ten dwelling development would not require any three bedroom dwellings.

Proposed deemed to comply standard

**Rationale** 

• Requiring one dwelling to have a bedroom at ground level in addition to a kitchen, toilet, a wash basin and a bath/shower.

Reducing the threshold to five dwellings to increased diversity across developments of less dwellings.

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Infrastructure Clause 55.02-4 Standard B4  Officer Comments:	Development should be connected to reticulated services, including reticulated sewerage, drainage and electricity, if available.  Development should not unreasonably exceed the capacity of utility services and infrastructure, including reticulated services and roads.  In areas where utility services or infrastructure have little or no spare capacity, developments should provide for the upgrading of or mitigation of the impact on services or infrastructure.  This removal of Standard B4 is supported.	Not applicable. Stando	ard B4 is proposed to be	e removed.	Stakeholders mostly agreed that the requirements of this standard are addressed at other stages of the planning process such as subdivision and are included in other parts of the planning scheme such as state and local policy and zone objectives and decision guidelines. This standard is proposed to be removed to reduce duplication of assessment.
Integration with the street Clause 55.02-5 Standard B5	Developments should provide adequate vehicle and pedestrian links that maintain or enhance local accessibility.  Development should be oriented to front existing and proposed streets.  High fencing in front of dwellings should be avoided if practicable.  Development next to existing public open space should be laid out to complement the open space.		rd B5 is proposed to be nis standard are propos Standard.		This standard is proposed to be removed in response to stakeholder feedback that the requirements of this standard are included more appropriately in other ResCode standards such as front fences and dwelling entry.
Officer Comments:	This removal of Standard B5 is supported noting that it is addressed through	gh other standards.			
Street setback Clause 55.03-1 Standard B6	Walls of buildings should be set back from streets:  At least the distance specified in a schedule to the zone, or  If no distance is specified in a schedule to the zone, the distance specified in Table B1.  Porches, pergolas and verandahs that are less than 3.6 metres high and eaves may encroach not more than 2.5 metres into the setbacks of this standard.	<ul> <li>if no distance is spe specified in Table E Porches, pergolas and</li> </ul>	ce specified in the zone; ecified in a schedule to 31. verandahs that are les ich not more than 2.5 m	the zone, the distance s than 3.6 metres high	The proposed street setback standard is in response to stakeholder feedback.  More consistent street setbacks are proposed to increase certainty and allow more efficient use of sites to support more housing development  A minimum 6 metre setback has been proposed from the front street to allow for sufficient opportunities for landscaping and the planting of canopy tree and car parking to be provided on site.
		Development context  There is an existing building on one abutting allotment facing the same street and no existing building on the other abutting allotment facing the same street, and the site is not on a corner.  There is no existing building on either of the abutting allotments facing the same street, and the site is not on a corner.	Minimum setback from front street  The same distance as the setback of the front wall of the existing building on the abutting allotment facing the front street or 6 metres, whichever is the lesser.  6 metres for streets in a Transport Zone 2 and 4 metres for other streets.	Minimum setback from side street  Not applicable  Not applicable	A greater setback is proposed for developments on streets in a Transport Zone 2 to provide adequate separation along principal and arterial roads.
		The site is on a corner.	If there is a building on the abutting allotment facing the front street, the same distance as the setback of the front wall of the	The same distance as the setback of the front wall of any existing building on the abutting allotment facing the side street	

		or 2 metres, whichever		
	the abutting allotment	is the lesser.		
	facing the front street			
	or 6 metres, whichever			
	is the lesser.			
	If there is no building			
	on the abutting			
	allotment facing the			
	 front street, 6 metres			
	for streets in a			
	Transport Zone 2 and			
	4 metres for other			
	streets.			

Officer Comments: This revised standard is not supported in its current form. The proposed reduction to the Street setback standards with a proposed reduction from nine metres to six metres for front setbacks and from three metres to two metres is a blunt and unnecessary approach. A blanket reduction in street setbacks does not take into consideration the diversity of our streetscapes, site constraints or landscape opportunities and will have an unreasonable impact on our public realm. As with the proposed removal of Neighbourhood Character, if this change is to go ahead sufficient time must be given for schedules to the zones to be amended to protect streetscapes, otherwise the standard should specify different setback requirements for different zones rather than a blanket 6 metres i.e. retain the 9 metre requirement for Neighbourhood Residential Zones. The proposed 2 metre setback for side street is also not supported and does not provide sufficient planting opportunity for trees.

# Building height Clause 55.03-2

Standard B7

The maximum building height should not exceed the maximum height specified in the zone, schedule to the zone or an overlay that applies to the land.

If no maximum height is specified in the zone, schedule to the zone or an overlay, the maximum building height should not exceed 9 metres, unless the slope of the natural ground level at any cross section wider than 8 metres of the site of the building is 2.5 degrees or more, in which case the maximum building height should not exceed 10 metres.

The maximum building height does not exceed the maximum height specified in the zone, schedule to the zone or an overlay that applies to the land.

If no maximum height is specified in the zone, schedule to the zone or an overlay, the maximum building height does not exceed the height specified in Table B1.1, unless the slope of the natural ground level is 2.5 degrees or more for a width greater than 8 metres, in which case the maximum building height at this location does not exceed the height specified in Table B1.1 by more than 1 metre.

## Table B1.1 Building height

Zone	Height
Neighbourhood Residential Zone	9 metres
General Residential Zone Township Zone	11 metres
Residential Growth Zone Mixed Use Zone	13.5 metres

The changes to this standard clarify its operation as a deemed to comply standard. The maximum building heights align with the building heights in the zones, except for the Mixed Use Zone.

Unless specified in a schedule to the zone, the Mixed Use Zone does not apply a maximum building height. The maximum height in a Mixed Use Zone is proposed to be 13.5 metres, consistent with the Residential Growth Zone and the purpose of the Mixed Use Zone to provide housing at higher densities.

If a different building height is specified in a schedule to the zone, that building height becomes the deemed to comply requirement for the purposes of this standard.

If an overlay specifies a different building height requirement, the requirements of that overlay applies.

A maximum building height for each residential zone is specified in the standard to increase certainty and clarity about building heights.

The phrasing of the slope of the land is redrafted to be clearer.

**Officer Comments:** The revised standard appears to largely double up with Zone requirements, except for Mixed Use Zone. As Building height must meet the zone requirements, this standard as a 'Deemed to Comply' standard adds little value. The standard also fails to specify the number of storeys as per the zone requirements.

Site coverage Clause 55.03-3 Standard B8	The site area covered by buildings should not exceed:  The maximum site coverage specified in a schedule to the zone, or  If no maximum site coverage is specified in a schedule to the zone, 60 per cent.	<ul> <li>The site area covered by buildings does not exceed:</li> <li>the maximum site coverage specified in a schedule to the zone; or</li> <li>if no maximum site coverage is specified in a schedule to the zone, the percentage specified in Table B12. the percentage specified in Table B12.</li> <li>Table B1.2 Site coverage</li> </ul>		
		Zone	Area of site covered by buildings	
		Neighbourhood Residential Zone	60 per cent	
		General Residential Zone	70 per cent	
		Township Zone		
		Residential Growth Zone Mixed Use Zone	80 per cent	

**Officer Comments:** A tiered approach is supported; however, the proposed increase to site coverage as high as 80% in Residential Growth Zones and 70% in General Residential Zones will result in a significant loss of green space and canopy cover. This will not only adversely impact the visual amenity of our residential areas but will also require infrastructure upgrades to accommodate additional stormwater. A reduction in green spaces and canopy cover will also contribute to the escalating heat island effect in our residential precincts. The 70 per cent standard in General Residential Zone will conflict with mandatory Garden Area requirements for many sites.

Permeability and stormwater management
Clause 55.03-4
Standard B9

The site area covered by the pervious surfaces should be at least:

- The minimum area specified in a schedule to the zone, or
- If no minimum is specified in a schedule to the zone, 20 percent of the site.

The stormwater management system should be designed to:

- Meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).
- Contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.

The site area covered by water permeable surfaces is at least:

- the minimum specified in the zone; or
- if no minimum area is specified in a schedule to the zone, 20 per cent of the site.

The stormwater management system is designed to:

- Meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater – Best Practice Environmental Management Guidelines (Victorian Stormwater, 1999).
- Direct flows of stormwater into treatment areas, garden areas, tree pits and permeable surfaces, with drainage of residual flows to the legal point of discharge.

To ensure adequate management of stormwater\_20% permeability is retained for all sites. The use of the term 'water pervious' is clearer than 'pervious'.

The 20 per cent permeability standard is retained to help minimise minor flood risk, reduce stormwater runoff and improve water retention outcomes.

The existing cooling related clause has been redrafted with input from the DEECA Water Group to be more specific and provide more meaningful requirements to support tree health and cooling outcomes.

Officer Comments: The revised standard is supported.

	Buildings should be:  Oriented to make appropriate use of solar energy.  Sited and designed to ensure that the energy efficiency of existing dwellings or small second dwellings on adjoining lots is not unreasonably reduced.  Sited and designed to ensure that the performance of existing rooftop solar energy systems on dwellings or small second dwellings on adjoining lots in a General Residential Zone, Neighbourhood Residential Zone or Township Zone are not unreasonably reduced. The existing rooftop solar energy system must exist at the date the application is lodged.  Living areas and private open space should be located on the north side of the development, if practicable.  Developments should be designed so that solar access to north-facing windows is maximised.		An assessment by ARUP found that orientation of the building to favour north facing windows for living areas is required to achieve a 7 Star compliant, cost effective and low embodied carbon outcomes. Good orientation is essential to improve passive design and reduce the dependence on added insulation to achieve 7 star. This will result in more design flexibility and savings in construction costs to achieve a 7 star NatHERS rating.  The ARUP review found that optimising the dwelling orientation on a poorly oriented lot can improve the NatHERS rating by 0.1-0.2 Star.  Assessments found the current clause to living areas and private open space to the north side of the development can be difficult to achieve in all case. To provide more design flexibility the clause was amended to focus on orientation of the living area windows. To allow for lots with south-facing backyards to comply, a minimum the 25% of north-facing living room window orientation was adopted. Analysis by Sustainability Victoria found "A little bit of north window goes a long way. The first few square metres in any room produce most of the heating energy savingsThis means that even small north windows to any room are beneficial and there is no need to devote the entire north wall to windows if this is not practical or affordable".		
Open space objective Clause 55.03-6 Standard B11	If any public or communal open space is provided on site, it should:  Be substantially fronted by dwellings, where appropriate.  Provide outlook for as many dwellings as practicable.  Be designed to protect any natural features on the site.  Be accessible and useable.	Not applicable. Standard B11 is proposed to be removed.	This standard has been deleted and incorporated into design detail and communal open space standards.		
Officer Comments:	The removal of this standard is supported noting that it has been incorporate	ated into other standards.	1		
Safety Clause 55.03-7 Standard B12	Entrances to dwellings and residential buildings should not be obscured or isolated from the street and internal accessways.  Planting which creates unsafe spaces along streets and accessways should be avoided.  Developments should be designed to provide good lighting, visibility and surveillance of car parks and internal accessways.  Private spaces within developments should be protected from inappropriate use as public thoroughfares.	Not applicable. Standard B12 is proposed to be removed.  Some of the requirements in this standard are proposed to be incorporated into the Dwelling Entry Standard 26.	Refer to <b>Dwelling Entry</b> Standard 26		
fficer Comments: The removal of this standard is supported noting that it has been largely incorporated into other standards.					

# Landscaping

Clause 55.03-8 Standard B13 The landscape layout and design should:

- Protect any predominant landscape features of the neighbourhood.
- Take into account the soil type and drainage patterns of the site.
- Allow for intended vegetation growth and structural protection of buildings.
- In locations of habitat importance, maintain existing habitat and provide for new habitat for plants and animals.
- Provide a safe, attractive and functional environment for residents.

Development should provide for the retention or planting of trees, where these are part of the character of the neighbourhood.

Development should provide for the replacement of any significant trees that have been removed in the 12 months prior to the application being made.

The landscape design should specify landscape themes, vegetation (location and species), paving and lighting.

Development should meet any additional landscape requirements specified in a schedule to the zone.

Development retains each existing:

- Significant tree, including any significant tree removed from the site 12 months prior to the application being made.
- Canopy tree of at least 5 metres in height and with a trunk circumference of 0.5 metres measured at 1.4 metres above ground level and is not a significant tree.

Where retained trees provide a canopy cover area of at least 10 per cent of the site area or 12 square metres, whichever is the greater, all other remaining canopy trees that are not significant trees may be removed.

All new canopy trees are:

- Consistent with a tree type specified in Table B1.3.
- Located in an area of decompacted soil to a depth of at least one metre, mixed with 20 per cent organic matter, and with the minimum volume, dimension and depth specified in Table B1.4; or located in planters with the minimum volume, dimension and depth specified in Table B1.4.
- Provided root barriers located parallel to the walls of a new and existing building on the lot, opposite each tree for the length of the minimum canopy diameter specified in Table B1.3.
- Outside the minimum setback distances specified in Table B1.5.

Canopy trees, significant trees and landscaped areas are irrigated by an irrigation system with a timer and on/off mechanism.

Water supply to the irrigation system is from either:

- if available, reticulated recycled water; or
- supplemented with rainwater from a tank.

Development meets any additional landscape requirements specified in a schedule to the zone.

# Table B1.3 Tree Types

Tree type	Minimum canopy diameter at maturity	Minimum height at maturity
Α	4 metres	6 metres
В	8 metres	8 metres
С	12 metres	12 metres

This new standard requires retention of trees which provide a minimum tree canopy cover. The updated standard supports *Plan Melbourne* Action 91 on Cooling and Greening. It also implements the intent of planning policy (Clause 15.01-2 Building design) including to "Ensure development provides landscaping that responds to its site context, enhances the built form, creates safe and attractive spaces and supports cooling and greening of urban areas."

This new draft clause is based on the current landscaping standards for apartments, adapted to apply to developments of single dwellings and small second dwellings on a lot.

The 10 per cent canopy cover standard can be accommodated within the existing 20 per cent permeable area requirement in the VPP.

The VPP will introduce a planning permit to remove, destroy or lop any canopy tree in residential areas of a specific size, including exemptions similar to the Table of exemptions set out in clause 52.17 (Native Vegetation).

The tree canopy cover area in square metres is calculated by multiplying 3.14 by the canopy radius squared. The canopy radius is half of the canopy diameter.

Table B1.4 – Soil requirements for trees

Tree type	Deep soil	Planter soil	Depth of planter soil
A	8 square metres (minimum plan dimension 2.5 metres)	8 cubic metres (minimum plan dimension 2.5 metres)	0.8 metre
В	30 square metres (minimum plan dimension 4.5 metres)	30 cubic metres (minimum plan dimension 4.5 metres)	1 metre
С	68 square metres (minimum plan dimension 6.5 metres)	68 cubic metres (minimum plan dimension 6.5 metres)	1.5 metres

Where multiple trees share the same section of soil the total required amount of soil can be reduced by 5 per cent for every additional tree, up to a maximum reduction of 25 per cent.

Table B1.5 Minimum setback distance from a building

Tree type	Minimum setback distance from a building
А	2 metres
В	4 metres
С	6 metres

The minimum setback distance is measured from the tree trunk to the closest outer wall.

**Officer Comments:** The intent of the revised standard is supported and there is merit to the new requirements. However, the new standard does not introduce any planting requirement beyond replacement planting with no minimum new planting requirements specified. Furthermore, the requirements are overly complicated and difficult to understand for both permit applicants and assessing officers. A simplified standard should be considered that achieves the same result. In addition to this, further comments are provided below:

- A definition of significant tree is required.
- A consistent method of calculating canopy cover is required.
- The requirements for soil, root barriers, irrigation will simply form notes on plans and will be difficult to confirm on site and enforce.
- The enforcement of planting locations, if trees are planted in the incorrect location, will result in trees being relocated on site and potentially impact their ongoing viability.
- How can a removed significant tree be retained?
- The new setback requirements for tree planting would prevent planting of large canopy trees in front setbacks if those setbacks were the new minimum of 6m.
- Depth of planter soil at 0.8m conflicts with one metre requirement specified earlier in standard.

N d	if the width of the street frontage is less than 20 metres, 40 per cent of the street frontage.  No more than one single-width crossover should be provided for each dwelling fronting a street.  The location of crossovers should maximise the retention of on-street car parking spaces.  The number of access points to a road in a Transport Zone 2 or a Transport Zone 3 should be minimised.	<ul> <li>33 per cent of the street frontage, or</li> <li>40 per cent of the street frontage if the width of the street frontage is less than 20 metres.</li> <li>No more than one crossover is provided for each dwelling fronting a street.</li> <li>The number of access points to a road in Transport Zone 1, Transport Zone 2 or Transport Zone 3 is not increased. The location of crossovers does not require the removal of a street tree.</li> </ul>	To simplify the standard, the requirements for habitable room windows to be setback from accessways or car parks in the existing parking location standard B15 has been incorporated into this standard.  Requirements for garages to be recessed from the front wall of the dwelling has been included in this standard to manage visual impacts to streetscapes.
I .	Developments must provide for access for service, emergency and delivery vehicles.	Habitable room windows with sill heights of less than 3 metres above ground level are setback from accessways and car parks by at least:  1.5 metres; or  if there is a fence with a height of at least 1.5 metres between the accessway or car park and the window, 1 metre; or  1 metre where window sills are at least 1.5 metres above.  This standard does not apply if the accessway or car park is used exclusively by the resident of the building with the habitable room.  Garages are setback by at least 0.5 metres behind the front wall of the dwelling, facing the frontage.	

this to one metre and	his to one metre and restricting double garages to avoid outcomes where these become prominent features in streetscapes.						
Parking location Clause 55.03-10 Standard B15	Be reasonably close and convenient to dwellings and residential buildings.     Be secure.     Be well ventilated if enclosed.  Shared accessways or car parks of other dwellings and residential buildings should be located at least 1.5 metres from the windows of habitable rooms. This setback may be reduced to 1 metre where there is a fence at least 1.5 metres high or where window sills are at least 1.4 metres above the accessway.	Not applicable. Standard B15 is proposed to be deleted.	Some of the requirements in this standard are proposed to be incorporated into the Access Standard 14.  Refer to Access standard B14.				

**Officer Comments:** The removal of this standard is supported noting that it has been largely incorporated into other standards.

# Side and rear setbacks

Clause 55.04-1 Standard B17 A new building not on or within 200mm of a boundary should be set back from side or rear boundaries:

- At least the distance specified in a schedule to the zone, or
- If no distance is specified in a schedule to the zone, 1 metre, plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres.

Sunblinds, verandahs, porches, eaves, fascias, gutters, masonry chimneys, flues, pipes, domestic fuel or water tanks, and heating or cooling equipment or other services may encroach not more than 0.5 metres into the setbacks of this standard.

Landings having an area of not more than 2 square metres and less than 1 metre high, stairways, ramps, pergolas, shade sails and carports may encroach into the setbacks of this standard.

#### Diagram B1 Side and rear setbacks

A new building not on or within 200mm is setback from side or rear boundaries:

- · at least the distance in a schedule to the zone; or
- if no distance is specified in a schedule to the zone, in accordance with standard B17.1 or B17.2 below.

This standard is only met if the building is setback in accordance with either standard B17.1 or B17.2, not both standards.

#### Standard B17.1

The building is setback at least 1 metre, plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres.

#### Standard B17.2

If the boundary is not to the south of the building, the building is setback at least 3 metres up to a height not exceeding 11 metres and at least 4.5 metres for a height over 11 metres.

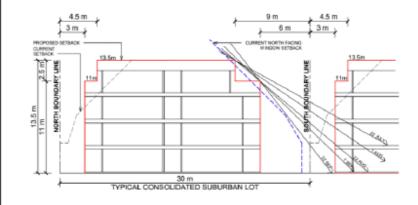
If the boundary is to the south of the building, the building is setback at least 6 metres up to a height not exceeding 11 metres and at least 9 metres for a height over 11 metres.

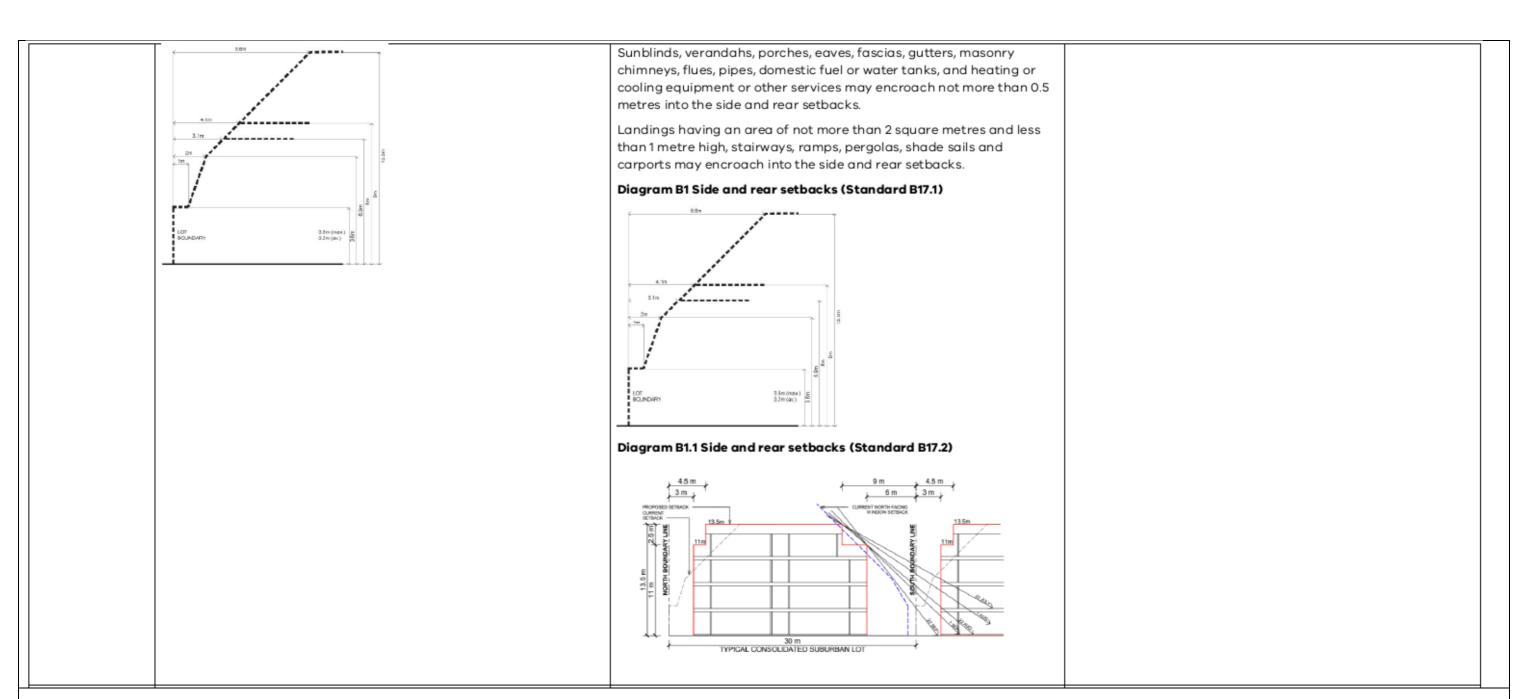
For this standard a south boundary is a boundary that is to the south of the new building.

The existing numerical side and rear setbacks requirements have been retained due to their ability to regulate amenity impacts such as solar access, overshadowing and visual bulk as well as the space for landscaping that they provide.

An alternative option for side and rear setback is proposed (B17.2). This is to encourage apartment typologies and will allow a moderate increase to floor area at third storey and a very substantial increase in feasibility and floor area at the fourth storey.

A specific condition for south boundaries can also be adopted to increase feasibility for four storey apartments and to increase daylight access and liveability outcomes for neighbours.





**Officer Comments:** This change is opposed. It is unclear why two standards are proposed and how the new standard B17.2 has been developed. Whilst there is some merit to a separate setback standard for four storey developments, the application of B17.2 to two and three storey buildings, reduces the existing setback requirements under B17.1 at the upper levels to the detriment of adjoining properties.

The format of the standard also needs revisions as it is unclear with how it is currently worded as to whether the encroachments apply to both setback standards or only B17.2.

#### A new wall constructed on or within 200mm of a side or rear boundary A new wall constructed on or within 200mm of a side or rear boundary Walls on The standard has been amended to improve clarity and of a lot or a carport constructed on or within 1 metre of a side or rear of a lot or a carport constructed on or within 1 metre of a side or rear boundaries simplicity. The standard slightly increases the permissible boundary of lot should not abut the boundary: boundary of lot may abut the boundary: length to support denser housing, but not in a way that impacts Clause 55.04-2 For a length of more than the distance specified in a schedule to for a length of the distance specified in a schedule to the zone; or on liveability. the zone; or if no distance is specified in schedule to the zone, the length does Standard B18 The calculations also allow a small increase in permissible wall If no distance is specified in a schedule to the zone, for a length of not exceed the greater of the following distances: on boundary length to facilitate increased housing: more than: - 15 metres. - 10 metres plus 25 per cent of the remaining length of the For a 25m deep lot the current Rescode allows 13.75 metres 50 per cent of the boundary length. boundary of an adjoining lot, or while the proposed method would allow 15 metres. - the length of an existing or simultaneously constructed Where there are existing or simultaneously constructed walls For a 30m deep lot the current Rescode allows 15 metres boundary wall on an abutting lot. or carports abutting the boundary on an abutting lot, the while the proposed method would allow 15 metres. A new wall may fully abut a rear lane where the wall does not exceed For a 50m deep lot the current Rescode allows 20 metres length of the existing or simultaneously constructed walls or 3.6 metres. while the proposed method would allow 25 metres. carports whichever is the greater. A new wall or carport may fully abut a side or rear boundary where the slope and retaining walls or fences would result in the effective height of the wall or carport being less than 2 metres on the abutting The height is simplified to 3.6 metres rather than retaining the A new wall or carport may fully abut a side or rear boundary where property boundary. complicated averaging system. The slight increase in height slope and retaining walls or fences would result in the effective height has very little impact on amenity, testing has shown. of the wall or carport being less than 2 metres on the abutting The height of a new wall constructed on or within 200mm of a side or property boundary. rear boundary or a carport constructed on or within 1 metre of a side or rear boundary does not exceed: 3.6 metres; or A building on a boundary includes a building set back up to 200mm from a boundary. · the height of an existing or simultaneously constructed wall The height of a new wall constructed on or within 200mm of a side or rear boundary or a carport constructed on or within 1 metre of a side or rear boundary should not exceed an average of 3.2 metres with no part higher than 3.6 metres unless abutting a higher existing or

**Officer Comments:** The revised standard is a general improvement on the current standard, however the maximum height of 3.6m and removal of the average of 3.2 metres is opposed as a 3.6 metre height for the length of the wall has the potential to significantly impact on the amenity of neighbouring properties.

# Daylight to existing windows

Clause 55.04-3 Standard B19 Buildings opposite an existing habitable room window should provide for a light court to the existing window that has a minimum area of 3 square metres and minimum dimension of 1 metre clear to the sky. The calculation of the area may include land on the abutting lot.

simultaneously constructed wall.

Walls or carports more than 3 metres in height opposite an existing habitable room window should be set back from the window at least 50 per cent of the height of the new wall if the wall is within a 55 degree arc from the centre of the existing window. The arc may be swung to within 35 degrees of the plane of the wall containing the existing window.

Where the existing window is above ground floor level, the wall height is measured from the floor level of the room containing the window.

Buildings opposite an existing habitable room window provide an area clear to the sky to the existing window that has a minimum area of 3 square metres and minimum dimension of 1 metre. The calculation of the area may include land on the abutting lot.

Where the existing window is above ground floor level, the wall height is measured from the floor level of the room containing the window.

Stakeholder feedback was that the existing standard provides appropriate amenity protection.

The light court component of the standard has been retained as it provides an appropriate level of protection.

The requirement for walls or carports more than 3 metres in height opposite an existing habitable room window to be set back from the window at least 50 per cent of the height of the new wall has been removed as it places unreasonable requirements on the protection of windows, that are appropriately protected by setback standards.

Officer Comments: The revised standard provides clearer wording, however there is concern regarding the removal of the setback requirement with the potential for this to significantly impact the amenity of adjoining properties.

-			F
North-facing windows Clause 55.04-4 Standard B20	If a north-facing habitable room window of an existing dwelling or small second dwelling is within 3 metres of a boundary on an abutting lot, a building should be setback from the boundary 1 metre, plus 0.6 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres, for a distance of 3 metres from the edge of each side of the window. A north-facing window is a window with an axis perpendicular to its surface-oriented north 20 degrees west to north 30 degrees east.	<ul> <li>Where a north-facing habitable room window of a neighbouring dwelling or small second dwelling is within 3 metres of a boundary on an abutting lot:         <ul> <li>A new building is to be set back from the boundary by at least 1 metre, plus 0.6 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres. This setback is to be provided for a distance of at least 3 metres from the edge of each side of the window.</li> <li>For buildings that meet the Standard B17.2 setback, the building is setback from the boundary by at least 1 metre. This is for a distance of at least 3 metres from the edge of each side of the window.</li> </ul> </li> <li>For this standard a north-facing window is a window with an axis perpendicular to its surface oriented from north 20 degrees west to north 30 degrees east.</li> </ul>	The standard has been retained with the option for an alternative setback where they adopt the B17.2 setback. This will ensure adequate sunlight to lower storey habitable rooms on adjoining development.
Officer Comments:	The revised standard is opposed due to a lack of clarity how it applies to S1	tandard B17.2. The current wording suggests the setback for north facing v	windows is less than the requirement of B17.2.
Overshadowing open space Clause 55.04-5 Standard B21	Where sunlight to the secluded private open space of an existing dwelling or small second dwelling is reduced, at least 75 per cent, or 40 square metres with minimum dimension of 3 metres, whichever is the lesser area, of the secluded private open space should receive a minimum of five hours of sunlight between 9 am and 3 pm on 22 September.	The area of private open space that is not overshadowed by the new development is greater than:  50 per cent, or  25 square metres with a minimum dimension of 3 metres, whichever is the lesser area, for a minimum of five hours between 9 am and 3 pm on 22 September.	The standard is proposed to focus on the extent of overshadowing for all private open space rather than the specified secluded private open space area to improve clarity and certainty and prevent adverse outcomes and unintentional non-compliances.  References to 'secluded private open space' are proposed to be replaced with 'private open space' to remain consistent with
	If existing sunlight to the secluded private open space of an existing dwelling or small second dwelling is less than the requirements of this standard, the amount of sunlight should not be further reduced.		changes to the private open space standard and overlooking standard.

**Officer Comments:** The changes to the standard are opposed. The changes could result in complete overshadowing to private open space located to the side and rear of any dwellings provided with private open space in the front setback. It is suggested that the 50 per cent requirement includes a minimum dimension.

#### Overlooking

Clause 55.04-6 Standard B22 A habitable room window, balcony, terrace, deck or patio should be located and designed to avoid direct views into the secluded private open space of an existing dwelling or small second dwelling within a horizontal distance of 9 metres (measured at ground level) of the window, balcony, terrace, deck or patio. Views should be measured within a 45 degree angle from the plane of the window or perimeter of the balcony, terrace, deck or patio, and from a height of 1.7 metres above floor level.

A habitable room window, balcony, terrace, deck or patio with a direct view into a habitable room window of an existing dwelling or small second dwelling within a horizontal distance of 9 metres (measured at ground level) of the window, balcony, terrace, deck or patio should be either:

- Offset a minimum of 1.5 metres from the edge of one window to the edge of the other.
- Have sill heights of at least 1.7 metres above floor level.
- Have fixed, obscure glazing in any part of the window below 1.7 metre above floor level.
- Have permanently fixed external screens to at least 1.7 metres above floor level and be no more than 25 per cent transparent.

Obscure glazing in any part of the window below 1.7 metres above floor level may be openable provided that there are no direct views as specified in this standard.

Screens used to obscure a view should be:

- Perforated panels or trellis with a maximum of 25 per cent openings or solid translucent panels.
- Permanent, fixed and durable.
- Designed and coloured to blend in with the development.

This standard does not apply to a new habitable room window, balcony, terrace, deck or patio which faces a property boundary where there is a visual barrier at least 1.8 metres high and the floor level of the habitable room, balcony, terrace, deck or patio is less than 0.8 metres above ground level at the boundary.

A habitable room window, balcony, terrace, deck or patio that is located with a direct view into a habitable room window, balcony, private open space of an existing dwelling or small second dwelling within a horizontal distance of 6 metres:

- is offset a minimum of 1.5 metres from the edge of the habitable room window or balcony; or
- has a sill height of at least 1.5 metres above floor level; or
- has a visually obscure balustrade to at least 1.5 metres above floor level; or
- has external screens to at least 1.5 metres above floor level; or
- has fixed elements that prevent the direct view, such as horizontal ledges or vertical fins.

Direct views are measured at a height of 1.5 metres above floor level and within:

- a 45 degree horizontal angle from the edge of the new window or balcony; and
- a 45 degree angle in the downward direction.

Screens provided for overlooking are no more than 25 per cent transparent. Screens may be openable provided that this does not allow direct views as specified in this standard.

This standard does not apply where a direct view is obstructed by a wall or fence.

The standard reduces the distance where overlooking must be considered from 9 metres to 6 metres to provide more equitable amenity outcomes for residents in new dwellings.

The standard facilitates better design for new dwellings especially on smaller sites, where internal amenity outcomes would be reduced due to screening requirements.

Where screening is required, the standard provides more alternatives to address overlooking, including screening, opaque balustrades, ledges and fins.

Refer to Standard B28 – Private open space for more information.

**Officer Comments:** Opportunities to improve internal amenity are supported, however the proposed changes have not found the correct balance between this and protecting the amenity of adjoining properties through both the reduction from 9 metres to 6 metres and reduction in screening height to 1.5 metres. The introduction of alternative screening measures is supported i.e. horizontal ledges and vertical fins, and openable provided does not allow direct views

# Internal views

Clause 55.04-7 Standard B23 Windows and balconies should be designed to prevent overlooking of more than 50 per cent of the secluded private open space of a lower-level dwelling or residential building directly below and within the same development.

Within the development, if there is a direct view from a balcony or habitable room window to:

- a living room window of another dwelling, there is a horizontal separation of at least 7.5 metres; or
- a balcony or habitable room window of another dwelling, there is a horizontal separation of at least 6 metres.

This does not apply to a direct view from a projecting balcony to another projecting balcony on the same level or levels below.

This standard is proposed to be changed to provide certainty about privacy expectations between dwellings on the same site.

The requirements of the standard promote the use of building separation to provide privacy and disincentives the use of screening for internal views to allow for better solar access and outlooks for new dwellings.

The standard identifies that balconies do not require the same degree of amenity protection that habitable room windows require and allow a reduced setback of 3 metres where

Within the development, a habitable room window or balcony that is located with a direct view into a habitable room window or balcony of another dwelling:

is offset a minimum of 1.5 metres from the edge of the habitable room window or balcony; or

has a sill height of at least 1.5 metres above floor level; or

has a visually obscure balustrade to at least 1.5 metres above floor

level; or

has external screens to at least 1.5 metres above floor level; or

- have fixed elements that prevent the direct view, such as horizontal ledges or vertical fins; or
- for side-by-side balconies, is horizontally separated by at least 3 metres.

Direct views are measured at a height of 1.5 metres above floor level and within:

- a 45 degree horizontal angle from the edge of the new window or balcony.
- a 45 degree angle in the downward direction.

Screens provided for this standard are to be no more than 25 per cent transparent. Screens may be openable provided that this does not allow direct views.

This standard does not apply where a direct view is obstructed by a wall or fence.

balconies are side by side on the same floor level or the use of screening.

Officer Comments: The comments in response to B22 apply to this standard. Additionally, the requirements of this standard appear to offer greater protection than that of B22.

#### Noise impacts

Clause 55.04-8 Standard B24 Noise sources, such as mechanical plant, should not be located near bedrooms of immediately adjacent existing dwellings or small second dwellings.

Noise sensitive rooms and secluded private open spaces of new dwellings and residential buildings should take account of noise sources on immediately adjacent properties.

Dwellings and residential buildings close to busy roads, railway lines or industry should be designed to limit noise levels in habitable rooms.

Noise sources, such as mechanical plant, are not located near immediately opposite or adjacent to bedrooms of existing dwellings or small second dwellings, unless a solid barrier is in place in front or surrounding the source to provide a line of sight barrier to transmission of noise to relevant bedrooms.

A dwelling or residential building within a noise influence area specified in Table B2 is designed and constructed to achieve the following noise levels:

- Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am.
- Not greater than 40dB(A) for living areas, assessed as an LAeq,16h from 6am to 10pm.

A bedroom or living area of a dwelling or residential building does not need to meet the specified noise level requirements if it is fully screened from noise sources by the building, another solid structure, or the natural topography of the land.

If a proposed ground level private open space is located in a noise influence area specified in Table B2, the dwelling, residential building, or another solid structure that is at least 1.8 metres in height, is located between the noise source and the private open space.

Table B2 Noise influence area

This new clause responds to the commitment in the <u>ESD</u>
Roadmap to apply the existing apartment noise design standards to other residential developments and other noise sensitive land uses. The primary focus of the clause is to ensure new residential developments located near transport corridors and industrial zones are designed to achieve internal noise exposure standards

The new standard implements planning policy 13.05-1 Noise management to "Minimise the impact on human health from noise exposure to occupants of sensitive land uses (residential use, child care centre, school, education centre, residential aged care centre or hospital) near the transport system and other noise emission sources through suitable building siting and design (including orientation and internal layout), urban design and land use separation techniques as appropriate to the land use functions and character of the area."

These provisions have been prepared with input from ARUP consulting and EPA Victoria. They are supported by a draft Practice Note that includes standardised construction measures that can be used to demonstrate compliance without the need for use of a specialist noise consultant. Spatial layers have been prepared showing all relevant road and rail corridors.

Noise Source	Noise Influence Area
Zone interference	
Industry	300 metres from the Industrial 1 and 2 zone boundary
Roads	
Freeways, tollways and other roads carrying 20,000 Annual Average Daily Traffic Volume	300 metres from the nearest trafficable lane
Freight Network	
Railways	
Railway servicing passengers in Victoria	80 metres from the centre of the nearest track
Railway servicing freight outside Metropolitan Melbourne	80 metres from the centre of the nearest track
Railway servicing freight Metropolitan Melbourne	135 metres from the centre

The 20,000 Annual Average Daily Traffic Volume (AADT) matches the threshold applied in NSW and responds to feedback that the 40,000 AADT to DTP and the Parliamentary Inquiry into Apartment Standards that the 40,000AADT used in the apartment standards did not account for a range of busy roads.

**Officer Comments:** Whilst there is merit to revising this standard to improve amenity for residents in areas subject to noise, the proposed requirements are onerous and difficult to determine when they are applicable. This standard needs to be simplified and could be focused on certain measures being provided i.e. double glazing to ensure that amenity is protected rather than the needs for an acoustic assessment to be provided to demonstrate compliance. The provision of acoustic assessments will add to the cost of applications for both developers and assessors. Information on how to confirm the Noise Influence Area needs to be readily available.

tunnels are excluded.

#### Air pollution

Clause 55.04-9 Standard B24.1 A dwelling or residential building in an air pollution influence area specified in Table B2.1 provides:

closest part of the dwelling. Sections of roads and railway lines in

- fixed air cleaning equipment to service all habitable rooms, incorporating high-efficiency particulate air (HEPA) filters or equivalent; or
- ducted mechanical ventilation for the supply of outdoor air in compliance with Australian Standard AS 1668.2 The use of ventilation and air conditioning in buildings and locate any building air intakes and openable windows of habitable rooms on the side of the dwelling or residential building facing away from the air pollution source.

If in an air pollution influence area specified in Table B2.1 the dwelling, residential building, or another solid structure that is at least 1.8 metres in height, is to be located between the air pollution source and any ground level private open space of a dwelling or residential building.

# Table B2.1 Air pollution influence area

Air pollution source	Air pollution influence area
Roads	

The primary focus of the clause is to ensure new residential developments located near transport corridors are designed to minimise resident exposure to air pollutants from transport.

This new clause responds to the commitment in the <u>ESD</u>

<u>Roadmap</u> to 'Implement siting and design standards to reduce impacts of air and noise pollution from transport corridors on building occupants'.

The new standard also responds to planning policy 13.06-1 Air auality management to "Minimise air pollutant exposure to occupants of sensitive land uses near the transport system through suitable siting, layout and design responses" and related statements in the Victorian Air Quality Strategy.

These provisions have been prepared with input from ERM consulting and EPA Victoria. Permit applicants will be supported by guidance materials.

The approach has also been informed by major reviews by the WHO and EU on air pollution and children's health, the US Health Effects Institute review of Long-Term Exposure to Traffic-Related Air Pollution and a range of Australian studies.

		Freeways, tollways and other roads carrying 20,000 Annual Average Daily Traffic Volume Roads included in the Principal Freight Network	50 metres from the nearest trafficable lane	
		Railways		
		Railway servicing passengers or freight using diesel locomotives	50 metres from the centre of the nearest track	
		Rail stabling yards for diesel locomotives	300 metres from the centre of the nearest track	
		The air pollution influence area is most source to the closest part of the dwe railway lines in tunnels are excluded	elling. Sections of roads and	
Officer Comments:	There is merit to a standard relating to Air Pollution however the proposed	standard is difficult to understand, asso	ess and confirm on site and enforce	2.
Accessibility Clause 55.05-1 Standard B25	The dwelling entries of the ground floor of dwellings and residential buildings should be accessible or able to be easily made accessible to people with limited mobility.	Not appliable. Standard B25 is propo	osed to be removed.	The standard is proposed to be removed to reduce unnecessary regulation. The silver standard for accessibility required by the new National Construction Code 22 applies.
	The removal of the accessibility standard is opposed. Whilst the National Couilding surveyor signing off a variation based on compliance with endorsec	• •	9	nfirm after the issues of a town planning permit and endorsed plans,
Dwelling entry Clause 55.05-2 Standard B26	Entries to dwellings and residential buildings should:     Be visible and easily identifiable from streets and other public areas.     Provide shelter, a sense of personal address and a transitional space around the entry.	Entries to dwellings (other than apart buildings with no communal entrance  A ground level entry door to each street, an accessway or shared well access a covered area over an entry doo.  An entry to a dwelling is to be sep	e have all of the following: dwelling that is visible from a alkway. or of at least 0.5 metre deep.	The standard has been amended and incorporates requirements of other standards including safety and building entry and circulation. This removes duplication of assessment and helps provide clearer assessment requirements.  The drafting of the standard has been revised to allow the standard to be implement the objectives of the clause in a deemed to comply standard.
		<ul> <li>Apartment developments have all of</li> <li>A ground level entry door, entry g clearly visible from the street.</li> <li>A covered area over an entry doo deep.</li> <li>An entry door or lobby is to includ clear views to inside.</li> <li>At least one source of natural light shared corridors and lift lobbies.</li> </ul>	ate, or entry walkway that is or of a depth of at least 0.5m de at least one window that allows	

**Officer Comments:** The proposed standard should be revised to require a larger covered area i.e. minimum depth of one metre.

# Daylight to new windows

Clause 55.05-3 Standard B27 A window in a habitable room should be located to face:

- An outdoor space clear to the sky or a light court with a minimum area of 3 square metres and minimum dimension of 1 metre clear to the sky, not including land on an abutting lot, or
- A verandah provided it is open for at least one third of its perimeter, or
- A carport provided it has two or more open sides and is open for at least one third of its perimeter.

Each habitable room has a window that faces a light court or outdoor space that is clear to the sky and complies with Table B2.2.

# Table B2.2 Light Court or outdoor space used by a dwelling

court or outdoor space	Minimum dimension perpendicular to the habitable room window or balcony	Minimum area
3.6 metres or less	1 metre	3 square metres
6.9 metres or less	2 metres	6 square metres
13.5 metres or less	3 metres	9 square metres

In this standard, the dimension and area of a light court or outdoor space:

- Does not include land on an adjoining lot.
- May include either:
  - a verandah or balcony, if it is open for at least one third of its perimeter; or
  - a carport, if it has two or more open sides and is open for at least one third of its perimeter.

A window may provide daylight to a bedroom from a smaller secondary area within the bedroom where the window is clear to the sky and the secondary area has:

- A minimum width of 1.2 metres.
- A maximum depth of 1.5 times the width, measured from the external surface of the window.

The additional light court requirements will provide additional requirements for a deeper light court.

The proposed changes clarify that a habitable room is to have a window that faces a light court or open space including basement habitable rooms.

The size of the light court will help improve liveability when compared with tall narrow light courts that are commonly being provided.

Officer Comments: The intent of this standard is supported, however clarification as to what 'clear to sky' is required, and if this conflicts with Standard B30.2. These standards could potentially be merged.

# Private open space

Clause 55.05-4 Standard B28 A dwelling or residential building should have private open space of an area and dimensions specified in a schedule to the zone.

If no area or dimensions are specified in a schedule to the zone, a dwelling or residential building should have private open space consisting of:

- An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room, or
- A balcony of 8 square metres with a minimum width of 1.6 metres and convenient access from a living room, or
- A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.

The balcony requirements in Clause 55.05-4 do not apply to an apartment development.

A dwelling or residential building has private open space of an area and dimensions specified in a schedule to the zone.

If no area or dimensions are specified in a schedule to the zone, a dwelling or residential building has private open space with convenient access from a living room consisting of:

- an area at ground level of at least 25 square metres with a minimum dimension of 3 metres; or
- an area on a podium or similar of at least 15 square metres, with a minimum dimension of 3 metres; or
- a balcony with at least the area and dimensions specified in Table B2.3; or
- an area on a roof of at least 10 square metres, with a minimum dimension of 2 metres.

### Table B2.3 Private open space for a balcony

Dwelling Type	Minimum Dimension	Minimum Area
Studio or 1 bedroom dwelling	1.8 metres	8 square metres
2 bedroom dwelling	2 metres	8 square metres
3 or more bedroom dwelling	2.4 metres	12 square metres

At least 70 per cent of dwellings in a development are to have a portion of private open space of 6 square metres, with a minimum dimension of 1.8 metres that has at least 2 hours of direct sunlight between 9 am and 3 pm on the 22 September measured at floor level, or at balustrade height if there is a solid balustrade. If in calculating the number of dwellings the result is not a whole number, the required number of dwellings is to be rounded down to the nearest whole number.

If a cooling or heating unit is located on the balcony the required area is increased by 1.5 square metres.

An area for clothes drying is provided within the private open space.

The existing standard is problematic and key issues include:

- The use of term secluded private open space is limiting and disincentives / prevents good ground level open space at the front of a dwelling.
- The 40 square metres is a large minimum requirement and this in turn disincentives ground level open space as developers prefer to provide an 8 square metre balcony

Ground level open space has a range of benefits including opportunities for permeability, planting, and encourages ground level living. The current standard disincentives this outcome resulting in disbenefits for future occupants.

The proposed standard reduces the area of private open space from 40 square metres to 25 square metres. Testing has found that providing 25 square metres provides a liveable outcome for future occupants. This is more in-line with the planning rules under other states.

The proposal removal of the requirement to provide secluded private open space at the side or rear of a dwelling provides greater flexibility in the location of private open space on a site, including within the front setback and incentives ground level open space.

The designation of space for an open air clothes drying line supports the opportunity for future occupants to save energy by not having to rely on a clothes drying appliance. It does not require installation of a clothes line, only allocating of space to allow for this option.

**Officer Comments:** This change is opposed. The proposed removal of 'secluded' private open space, with front yards to be considered areas of private open space will result in poor planning outcomes, with increased pressure for the erection of high front fences to provide privacy. Reduced open space from 40 square metres to 25 square metres will also unreasonably impact the amenity of future occupants. Consideration should be given to increasing balcony areas for 2-bedroom dwellings. The solar access provisions are inadequate and discourage designs to achieve good solar access to private open space.

# Solar access to open space

Clause 55.05-5 Standard B29 The private open space should be located on the north side of the dwelling or residential building, if appropriate.

The southern boundary of secluded private open space should be set back from any wall on the north of the space at least (2 + 0.9h) metres, where 'h' is the height of the wall.

Not applicable. Standard B29 is proposed to be removed.

Private open space solar access requirements are proposed to be included in Standard B28 – Private Open Space to simplify requirements

**Officer Comments:** The removal of the standard is supported on the basis it is incorporated into the above standard. Refer to comments above regarding solar access.

Storage objective	Standard B30:	_		o usable and secure storage	This standard is derived from standard B44 at 55.07-10 which
Clause 55.05-6	Each dwelling should have convenient access to at least 6 cubic	that is at least the total minimum storage volume that is specified in Table B2.4. This may include kitchen, bathroom and bedroom storage.			
Standard B30	metres of externally accessible, secure storage space.	Table B2.4 Stor		atin com and bearcom storag	The proposed storage volumes will be achievable for all dwelling typologies and will improve the liveability for occupants.
		Dwelling Typ	Total minimum storage volume	Minimum storage volume within the dwelling	
		Studio	8 cubic metres	5 cubic metres	
		1 bedroom dwelling	10 cubic metres	6 cubic metres	
		2 bedroom dwelling	14 cubic metres	9 cubic metres	
		3 or more bedroom dwelling	18 cubic metres	12 cubic metres	
Officer Comments: T	The revised standard is supported in principle, however, is difficult to chec	k compliance and	enforce.		
Room depth Clause 55.05-7	Single aspect habitable rooms should not exceed a room depth of 2.5 times the ceiling height.	the ceiling heig		room does not exceed 2.5 time xternal surface of the habitab	le taken from 55.07 and will provide for better amenity for
Standards B30.1	<ul> <li>The depth of a single aspect, open plan, habitable room may be increased to 9 metres if all the following requirements are met:</li> <li>The room combines the living area, dining area and kitchen.</li> <li>The kitchen is located furthest from the window.</li> <li>The ceiling height is at least 2.7 metres measured from finished floor level to finished ceiling level. This excludes where services are provided above the kitchen.</li> <li>The room depth should be measured from the external surface of the habitable room window to the rear wall of the room.</li> </ul>	The depth of a sincreased to 9 r the room co the kitchen the ceiling h	single aspect, open plan metres if all the following ombines the living area, o is located furthest from neight is at least 2.7 metr	, habitable room may be g requirements are met: dining area and kitchen; and	occupants.
)			and the state of t		
officer Comments: 1	he revised standard is supported; however, a definition of single aspect is	·			
Solar access to new windows Clause 55.05-8	NEW - ESD	North facing windows are shaded by eaves, fixed horizontal shading devices or fixed awnings with a minimum horizontal depth of 0.25 times the window height.			These measures support planning policy objectives (Clause 15.01-2 Building design) to "Improve the energy performance obuildings through siting and design measures that encourage
Standard B30.2		1	xtend horizontally beyon least half the depth of t	nd the top sides of north facir he eave.	Passive design responses that minimise the need for heating, cooling and lighting."
		East and west facing windows are to be shaded by adjustable external blinds, awnings or pergolas with deciduous vines.			These provisions are based on passive solar design principles the Sustainability Victoria Energy Smart Housing Manual and further tested through ARLIB modelling.
		External struct	tures located within 5.5 r	metres of the primary north	further tested through ARUP modelling.

in winter.

facing living area are not to have a solid roof that blocks solar access

ARUP modelling found fixed shading/eaves on the north blocks

solar gains in summer months, reducing the cooling demand and associated operational costs. An eave depth of 25% of the height of the window is considered sufficient to manage the cooling demand in summer, without causing a disproportionate

increase in the heating demand in winter months.

Applying this standard as a planning provision secures good energy outcomes that are cost effective in terms of building and operational costs.

West facing and to a lesser extent east facing windows are a source of significant heat gain in summer months. The external adjustable shading standard in included as a means of securing a cost-effective solution to manage this. ARUP modelling found the annual cooling demand reduced by 13-40% when external adjustable shading is used on east and west windows.

Locating outdoor covered structures in front of north facing windows prejudices the passive solar design outcomes. ARUP estimates this such structures located to the north of living areas may reduce the NatHERS rating by 0.4-0.5 star (The preferred option is to locate external covered structures to the east and west). External structures to the north facing windows can be constructed if they incorporate appropriately angled louvres or deciduous sines that support passive solar outcomes. The 5.5 m setback distance for structures with solid roofs is derived from the Energy Smart Housing Manual (SV, 2020) for the distance cast by a single storey building (p 22).

**Officer Comments:** This new standard is supported and introduces a positive change with respect to shading windows. Wording should be changed to 'a minimum horizontal depth of 0.25 times the distance from the windowsill to the base of the shading device' as most cases there is gap between the window and the eave which needs to be accounted for in this distance. Clarity is required as to how it may impact clear to sky requirements of other standards. This also has the potential to contradict BESS requirements, where shading is optional.

Rooftop solar				
energy				
generation area				
Clause 55.05-9				

Standard B30.3

NEW - ESD

In this standard, rooftop solar energy area means an area provided on the roof of a dwelling to enable the future installation of a solar energy system.

A rooftop solar energy area is provided for each dwelling which:

- Has a minimum dimension of 1.7 metres.
- Has a minimum area in accordance with Table B2.5
- Is orientated north, west or east.
- · Is positioned on the roofline.
- Is free of obstructions within twice the height of the obstruction, measured at the base and centre point of the structure.

Table B2.5 - Minimum rooftop solar energy generation area

Number of bedrooms	Minimum roof area
1 bedroom dwelling	15 square metres
2 or 3 bedroom dwelling	26 square metres
4 or more bedroom dwelling	34 square metres

This provision responds to the ESD Roadmap goal to "Investigate measures to support 'solar ready' building design to support future installation of rooftop solar systems".

The rationale of the standard is to protect future opportunities for residents to install solar panels through designating well oriented and unobstructed areas of the room for this purpose. It complements operation of the government's Solar Homes rebate program and supports the option of the whole of home compliance option under the National Construction Code 2022.

ARUP assessed a range of dwelling types and all dwellings assessed can accommodate the proposed rooftop solar energy generation area.

**Officer Comments:** This new standard is supported and introduces a positive change. Consideration should be given to the introduction of requirements for switchboard requirements and cabling for future installation of solar panels. This should also be included in Clause 54. The final dot point needs to be clarified as it is not clear how this is to be assessed.

ventilation Clause 55.05-10 Standard B30.4		<ul> <li>A maximum breeze path through the dwelling of 18 metres.</li> <li>A minimum breeze path through the dwelling of 5 metres.</li> <li>Ventilation openings with approximately the same size.</li> <li>The breeze path is measured between the ventilation openings on different orientations of the dwelling.</li> </ul>	costs of mechanical ventilation and cooling. In Victoria the main advantage of ventilating the house is to remove heat by opening windows to let in cooler air after a cool change.  This standard is based on existing provisions adopted in the apartment standards, but the allowance that only 40% of dwellings need to comply has been removed as there is more scope for cross flow ventilation with townhouse developments.
	This new standard is supported and introduces a positive change. Clarificate standard applies in Air Pollution areas.	ition is required as to what a breeze path is, if the breeze path can be acros	s more than one level if there can be more than one door in the
Design detail Clause 55.06-1 Standard B31	The design of buildings, including: Facade articulation and detailing, Window and door proportions, Roof form, and Verandahs, eaves and parapets, should respect the existing or preferred neighbourhood character. Garages and carports should be visually compatible with the development and the existing or preferred neighbourhood character.	<ul> <li>Where a development fronts a street, an accessway or a public open space:</li> <li>Passive surveillance is provided in the form of a direct view from a balcony, or a habitable room window. The building's mass is articulated as follows: <ul> <li>Any wall with a length of more than 15 metres is not blank.</li> <li>Any wall with a length of more than 30 metres has a variation in its alignment.</li> <li>25 per cent of the area of any façade with a length of more than 30 metres is recessed by at least 1.5 metres.</li> <li>A roofline is not flat for longer than 30 metres without variation.</li> <li>Articulation of materials provides: <ul> <li>any facade with a length of more than 10 metres includes a minimum of two materials; and</li> <li>no single material is used for more than 75 per cent of the façade; and</li> <li>areas of glass for windows are not included in this calculation.</li> </ul> </li> <li>Articulation provides three or more of the following: <ul> <li>Eaves that projections from the building's façade by at least 0.5 metres,</li> <li>Sunhoods, sunshades, fins, sun awnings,</li> <li>Pergolas, roofed porches, verandahs, entry awnings,</li> <li>Balconies,</li> <li>Decorative balustrades, screens, fences, or fenestration</li> <li>Materials with expressed texture that can cast shadows,</li> <li>Prominent visual contrast that includes a prominent change of</li> </ul> </li> </ul></li></ul>	Most stakeholders agreed that design detail should be retained and improved to manage and improve urban design outcomes. The existing standard is very difficult to objectively assess, it's complex in nature and open to interpretation.  The recommended changes simplify the standard to improve readability and certainty with assessment. The proposed requirements identify applicable design components which are expected to broadly improve the visual amenity of developments and neighbourhoods.

in external walls of the building, that provide:

Dwellings have openable windows, doors or other ventilation devices

This new standard is aimed at reducing the operational energy

costs of mechanical ventilation and cooling. In Victoria the main

**Officer Comments:** The introduction of a 'Deemed to Comply' standard for design has the potential to create poor design outcomes and a cookie cutter approach to development. Whilst the intent of the standard is clear and supported in part, it creates a complicated assessment and a high level of detail to be provided by permit applicants to confirm the standard has been met. The objective is to encourage design detail that respect the exiting and preferred neighbourhood character however the revised standard fails to include any reference to existing design elements, so it is questionable if the proposed standard meets the objective. Furthermore, the requirement for multiple materials may be in breach of restrictive covenants related to materials.

material or colour.

Natural

ventilation

NEW - ESD

Front fences Clause 55.06-2 Standard B32	A front fence within 3 metres of a street should not exceed:     The maximum height specified in a schedule to the zone, or     If no maximum height is specified in a schedule to the zone, the maximum height specified in Table B3.  Table B3 Maximum front fence height  Street Context  Meximum front fence height		the maximum h     if no maximum     maximum heigh	A front fence within 3 metres of a street does not exceed:     the maximum height specified in a schedule to the zone; or     if no maximum height is specified in a schedule to the zone, the maximum height specified in Table B3.  Table B3 Maximum front fence height			Well-designed front fences improve streetscape, passive surveillance and amenity outcomes.  Stakeholders support lower, transparent fences with flexibility to mitigate traffic noise sources.  The new standard requires fence heights proportional to
	Streets in a Transport Zone 2 2 metres  Other streets 1.5 metres	Street context	fence height - fence height  25 per cent zero per cent	Maximum front fence height – zero per cent transparent		transparency and offers dispensations for fences with at least 25 transparency and located along main roads.	
			Streets in a Transport Zone 2	2 metres	1.8 metres		
			Other streets	1.5 metres	1.2 metres		
Common property Clause 55.06-3 Standard B33	areas.	clearly delineate public, communal and pri ere provided, should be functional and cap ent.	deleted.	Not applicable, Standard B33 – Common Property is proposed to be deleted.			This standard is proposed to be deleted. Requirements for common property are included in other standards including Standard B26 - Dwelling Entry and Standard B36 - Communa Private Open Space.
Officer Comments:	The removal of the stand	ard is supported on the basis it is covered th	nrough the subdivision proc	ess.			
Site services objective Clause 55.06-4 Standard B34	provide sufficient space facilities for services to economically.	of dwellings and residential buildings shou se (including easements where required) ar so be installed and maintained efficiently an osures, mailboxes and other site facilities	site facilities.  Site facilities include meters are screene	No more than 20 per_cent of the width of the frontage is allocated to site facilities.  Site facilities including air conditioning units, water meters and gas meters are screened from view from the street or located behind a fence. Screens provide no more than 25 per cent transparency.			Site services such as water and gas meters are often poorly coordinated, poorly integrated and often prevent good outcomes.  A new standard is proposed for bin and recycling enclosures – see below.
	development.	size, durable, waterproof and blend in with	Post requirements.	ided in a location and	format that meets Au	ıstralia	
1							

Officer Comments: This standard requires revision to remove reference to gas meters and include consideration of electricity meters.

Waste and recycling objective	New -
Clause 55.06-5 Standard B34.1	

ESD

Individual areas for bin storage for each dwelling or a shared area for bin storage for use by each dwelling is to provide for the following:

- Food and garden organics.
- Mixed recycling.
- Glass recycling.
- Residual waste (general rubbish).

Areas for bin storage meet the minimum dimensions specified in Table B3.1.

Table B3.1 Bin storage area dimensions

Type of area for bin storage	Minimum area	Minimum depth	Minimum height
Individual and shared waste areas for up to 3 dwellings	1.74 square metres per dwelling	0.8 metre	1.8 metres
Shared for 4 or more dwellings	1 square metre per dwelling	0.8 metres	1.8 metres

Development that includes a shared area for bin storage:

- Locates that area within 40 metres of a kerbside collection point.
- Provides bin washing facilities, including a tap and a drain.
- Provides a continuous path of travel from dwellings to the bin storage area that is free of steps and obstructions.
- Provides signage to direct residents to the shared area for bin storage and provide information about what material to place in which bin.

Internal storage space of at least 25 litres for a 1 bedroom apartment, 30 litres for a 2 bedroom apartment, or 35 litres for a 3 bedroom apartment, with a minimum depth of 250 millimetres with convenient access to kitchen areas, must be provided within each dwelling to enable the separation of food organics, mixed recycling, glass recycling and residual waste (general rubbish).

These standards support implementation of the new fourstream household waste and recycling system which is part of Victoria's circular economy policy, Recycling Victoria: a new economy.

The provisions in large part implement planning policy (Clause 15.01-2 Building design) to "Ensure the layout and design of development supports resource recovery, including separation, storage and collection of waste, mixed recycling, glass, organics and e-waste". The need for these planning scheme amendments was also highlighted in the ESD Roadmap.

Townhouse developments within the 5-8 dwelling on a lot range are likely to have a combination of communal or individual bin storage. The minimum 5 square metres provides a baseline area for communal storage. Bin space per dwelling can be reduced due to space efficiencies - dwellings are likely to share bins (particularly food/organics and glass services), therefore the bin space required per dwelling reduces from 1.8 sqm (4 bins) to 1 sqm.

Unless there is individual street frontage, townhouse developments of more than 9 dwellings will start to have too many bins for safe kerbside collection (e.g. 9 dwellings would have 36 bins in total). Waste and recycling arrangements will need to be customised on a case by case based for developments of this scale.

To support the new household four bin system, new dwelling design should provide sufficient space within kitchens or another convenient location of at least **two days'** worth of garbage, recyclables, separated glass and food and organics, according to Sustainability Victoria's Multi-Unit Development waste guide, a Planning Scheme Reference Document. The two days' waste storage requirements consider elderly or mobility-impaired residents - for instance, an elderly person relying on domestic assistance to take their bins to communal areas once a week.

**Officer Comments:** The introduction of a new standard for waste and recycling is supported. Consideration should be given to the following:

- Minimum waste storage areas for up to 3 dwellings being 1.8sqm as the high majority of three dwelling developments will have individual bins.
- Depth dimension of 0.8 metres is inadequate for many 660L bins.
- Kerbside collection is challenging for development of four or more dwellings on a single lot due to the width of the frontage, street trees, utilities. Onsite collection must be accommodated for including turning of waste vehicles on site.
- Gradient requirements for continuous path of travel.

# **Energy efficiency**

Clause 55.07-1 Standard B35 Buildings should be:

- Oriented to make appropriate use of solar energy.
- Sited and designed to ensure that the energy efficiency of existing dwellings or small second dwellings on adjoining lots is not unreasonably reduced.
- Sited and designed to ensure that the performance of existing rooftop solar energy systems on dwellings or small second dwellings on adjoining lots in a General Residential Zone, Neighbourhood Residential Zone or Township Zone are not unreasonably reduced. The existing rooftop solar energy system must exist at the date the application is lodged.

Living areas and private open space should be located on the north side of the development, if practicable.

Developments should be designed so that solar access to northfacing windows is optimised.

Dwellings located in a climate zone identified Table B4 in should not exceed the maximum NatHERS annual cooling load specified in the following table.

Dwellings located in a climate zone identified in Table B4 do not exceed the maximum NatHERS annual cooling load.

# Table B4 Cooling load

NatHERS climate zone	NatHERS maximum cooling load MJ/M2 per annum
Climate zone 21 Melbourne	30
Climate zone 22 East Sale	15
Climate zone 27 Mildura	54
Climate zone 60 Tullamarine	22
Climate zone 62 Moorabbin	21
Climate zone 63 Warrnambool	12
Climate zone 64 Cape Otway	14
Climate zone 66 Ballarat	23

Note: Refer to NatHERS zone map, Nationwide House Energy Rating Scheme (Commonwealth Department of Environment and Energy).

This clause is amended to remove previous clauses that are difficult to translate into a deemed to comply format for apartment developments. Measures to achieve the defined cooling load outcomes will support many of the previous provisions that have been removed. Passive solar design for winter is more difficult to achieve for apartments due to site constraints.

These changes update the cooling load factors in the current standard to minimise inconsistency, but also ensure there is not a reduction in building energy performance as a result of this amendment. Where the cooling load figure in NCC2022 is lower than the current planning standard, the NCC figure is used (East Sale, Mildura, Warrnambool, Cape Otway); where the existing planning standard cooling load figure is lower than the NCC figure, the current planning standard is retained. DTP, DEECA and the Australian Building Codes Board are undertaking further work to resolve these inconsistencies.

**Officer Comments:** The revised standard is supported noting its consistency with the NCC 2022.

# Communal open space

Clause 55.07-2 Standard B36 A development of 10 or more dwellings should provide a minimum area of communal outdoor open space of 30 square metres.

If a development contains 13 or more dwellings, the development should also provide an additional minimum area of communal open space of 2.5 square metres per dwelling or 220 square metres, whichever is the lesser. This additional area may be indoors or outdoors and consist of multiple separate areas of communal open space.

Each area of communal open space should be:

- Accessible to all residents.
- A useable size, shape and dimension.
- Capable of efficient management.
- Located to:
  - Provide passive surveillance opportunities, where appropriate.
  - Provide outlook for as many dwellings as practicable.
  - Avoid overlooking into habitable rooms and private open space of new dwellings.
  - Minimise noise impacts to new and existing dwellings and existing small second dwellings.

Any area of communal outdoor open space should be landscaped and include canopy cover and trees.

A development of 10 or more dwellings provides a minimum area of communal outdoor open space of 30 square metres with a minimum dimension of 3 metres.

If a development contains 13 or more dwellings, the development provides an additional minimum area of communal open space of 2.5 square metres per dwelling or 220 square metres, whichever is the lesser. This additional area may be indoors or outdoors and consist of multiple separate areas of communal open space.

Changes have been made to make it deemed to comply standard.

**Officer Comments:** The standard should be revised to align with how this is considered through BADS guidelines. The wording is unclear, and it could be interpreted that developments of 13 or more dwellings, do not require any outdoor communal open space, rather than the requirements for these developments being in addition to the requirements for 10 or more dwellings.

Solar access to communal outdoor open space Clause 55.07-3 Standard B37	The communal outdoor open space should be located on the north side of a building, if appropriate.  At least 50 per cent or 125 square metres, whichever is the lesser, of the primary communal outdoor open space should receive a minimum of two hours of sunlight between 9am and 3pm on 21 June.	At least 50 per cent or 125 square metres, whichever is the lesser, of the communal outdoor open space receives a minimum of two hours of sunlight between 9 am and 3 pm on 21 June.	The requirement for communal open space be located on the north side of a building has been deleted. This is because an open space located to the east of the building but with good solar access would be equally good but would not comply.
Officer Comments:	The standard should be revised to increase the hours and use the Septem	ber equinox to be consistent with other standards.	
Landscaping Clause 55.07-4 Standard B38	Development should retain existing trees and canopy cover.  Development should provide for the replacement of any significant trees that have been removed in the 12 months prior to the application being made.  Development should:  Provide the canopy cover and deep soil areas specified in Table B5. Existing trees can be used to meet the canopy cover requirements of Table B5.  Provide canopy cover through canopy trees that are:  Located in an area of deep soil specified in Table B6. Where deep soil cannot be provided trees should be provided in planters specified in Table B6.  Consistent with the canopy diameter and height at maturity specified in Table B7.  Located in communal outdoor open space or common areas or street frontages.  Comprise smaller trees, shrubs and ground cover, including flowering native species.  Include landscaping, such as climbing plants or smaller plants in planters, in the street frontage and in outdoor areas, including communal outdoor open space.  Shade outdoor areas exposed to summer sun through landscaping or shade structures and use paving and surface materials that lower surface temperatures and reduce heat absorption.  Be supported by irrigation systems which utilise alternative water sources such as rainwater, stormwater and recycled water.  Protect any predominant landscape features of the area.  Take into account the soil type and drainage patterns of the site.  Provide a safe, attractive and functional environment for residents.  Specify landscape themes, vegetation (location and species), irrigation systems, paving and lighting.  Table B5 Canopy cover and deep soil requirements  Site area  Located in area and second the soil type and drainage patterns of the site.  Table B5 Canopy cover and deep soil requirements  Site area  Located in area and second the soil type and drainage patterns of the site.  Table B5 Canopy cover and deep soil requirements  Site area  Located in area and second the soil type and drainage patterns of the site.  Located in area and second the soil typ	Development retains existing trees and canopy cover.  Development provides for the replacement of any significant trees that have been removed in the 12 months prior to the application being made.  Development:  Provides the canopy cover and deep soil areas specified in Table BS. Existing trees can be used to meet the canopy cover requirements of Table BS.  Provides canopy trees that are:  Located in an area of decompacted deep soil to the depth of one metre, mixed with 20 per cent organic matter and the minimum volume, dimension and depth specified in Table B6.  Where deep soil cannot be provided, canopy trees are to be located in planters with the minimum volume, dimension and depth specified in Table B6.  At least consistent with the canopy diameter and height at maturity specified in Table B7.  Planted so that minimum setback distances from a building are provided as specified in Table B7.  Planted in an area that is not on an easement, over buried services such as sewer pipes, or under overhead power cables.  Ensures 50 per cent or more of the planted trees are flowering species, or where only one tree is required, it is to be a flowering species.  Provides root barriers parallel to the walls of a new or existing building on the lot opposite each tree for the length of the minimum canopy diameter as specified in Table B7.  Ensures uncovered outdoor areas use paving and ground surface materials that are porous, permeable or have a solar reflectance index greater than 29.  Canopy trees, significant trees and deep soil landscaped areas (as specified in Table B5) are irrigated by an irrigation system with a timer and on/off mechanism.  Water supply to the irrigation system is from either:  if available, reticulated recycled water; or  supplemented with rainwater from a tank.	The existing landscaping provision for apartments four storeys and less are retained in large part, with amendments to quantify or codify the provision, but retain the intent.  In addition the deep soil provision for individual trees has been reviewed based on further analysis undertaken for DTP by the University of Melbourne, Green Infrastructure Research Group (Burnley Campus). As a result the deep soil area requirements for individual trees as been reduces, but to account for reduced deep soil availability, it is specified the loaning site needs to be decompacted and 20% organic matter by volume added to support healthy tree growth over the longer term.  For paved or hardstand areas a SRI of 29 has been specified. This is equivalent to a standard untinted concrete mix as highe SRI values (as adopted by the Green Building Council of Australia) could create too much surface glare.  This new standard supports Plan Melbourne Action 91 on Cooling and Greening. It also implements the intent of planning policy (Clause 15.01-2 Building design) including to "Ensure development provides landscaping that responds to its site context, enhances the built form, creates safe and attractive spaces and supports cooling and greening of urban areas."

Canopy cover

Deep soil

Site area

Site area	Canopy cover	Deep soil
1001 - 1500 square metres	50 square metres plus 20% of site area above 1,000 square metres Include at least 1 Type R tree	7.5% of site area
1501 - 2500 square metres	150 square metres plus 20% of site area above 1,500 square metres Include at least 2 Type R trees or 1 Type C tree	10% of site area
2501 Square metres or more	350 square metres plus 20% of site area above 2,500 square rectres Include at least 2 Type R trees or 1 Type C tree	15% of site area

## Table B6 Soil requirements for trees

Tree type	Tree in deep soil Area of deep soil	Tree in planter Volume of planter soil	Depth of planter sell
A	12 equare metres (mm. plan dimension 2.5 metres)	12 cubic metres (min. plan dimension of 2.5 metres)	0.8 metre
R	49 equare metres (min. plan dimension 4.5 metres)	28 cubic metres (min. plan dimension of 4.5 metres)	1 metro
С	121 square motres (min. plan dimension 6.5 metres)	64 cubic metres (min. plan dimension of 6.5 metres)	15nete

Note: Where multiple trees share the same section of sell the total required amount of sell can be reduced by 3% for every additional tree, up to a maximum reduction of 25%.

# Table B7 Tree types

Thee types	Minimum canopy diameter at maturity	Minirum height at meturity
A	4 metres	6 metres
В	8 metres	8 metres
С	12 metres	12 metres

1000 square metres or less	5% of site area Include at least 1 Type A tree	5% of site area or 12 square metres whichever is the greater
1001 – 1500 square metres	50 square metres plus 20% of site area above 1,000 square metres Include at least 1 Type B tree	7.5% of site area
1501 – 2500 square metres	150 square metres plus 20% of site area above 1,500 square metres Include at least 2 Type B trees or 1 Type C tree	10% of site area
2501 square metres or more	350 square metres plus 20% of site area above 2,500 square metres Include at least 2 Type B trees or 1 Type C tree	15% of site area

# Table B6 Soil requirements for trees

Tree type	Deep soil  Minimum area and dimension of deep soil	Planter soil  Volume and minimum dimension of planter soil	Depth of planter soil
A	8 square metres (min. plan dimension 2.5 metres)	8 cubic metres (min. plan dimension of 25 metres)	0.8 metre

		В	30 square metres (min. plan dimension 4.5 metres)	30 cubic metres (min. plan dimension of 4.5 metres)	1 metre	
		С	68 square metres (min. plan dimension 6.5 metres)	68 cubic metres (min. plan dimension of 6.5 metres)	1.5 metre	
		Where multiple tr amount of soil ca up to a maximum	n be reduced by	ne section of soil		
		Table B7 - Tree ty	pes			
		Tree types	Minimum cano diameter at m	py Minimum I aturitymaturity	heightat	
		A	4 metres	6 metres		
		В	8 metres	8 metres		
		С	12 metres	12 metres		
		Table B7.1 Minim	um setback dista	nce from the buil	ding	
		Tree type		Minimum setbo	ack distance	
		А		2 metres		
		В		4 metres		
		С		6 metres		
		The minimum set closest outer wall		measured from th	ne tree trunk to th	e
Officer Comments: I retention and planting	Refer to comments in relation to Standard B13. At least this standard include.	des tree planting re	equirements. Cor	nsideration should	be given to havin	g one clear and concise standard for landscaping including both tree
Integrated water and stormwater management	Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use.	Buildings are desi such as flushing t				Minor changes to clarify non-potable dual pipe supply must be connected to end uses in the building.
Proposed ResCode Dec	emed to Comply provisions   Banyule City Council Submission – September	2024	05510141			

-			
Clause 55.07-5	Buildings should be connected to a non-potable dual pipe reticulated	Where a non-potable dual pipe reticulated water supply is available	
Standard B39	water supply, where available from the water authority.	from the water authority, buildings are connected to end uses	
	The stormwater management system should be:	including toilet, laundry and garden water supply.	
	<ul> <li>Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).</li> <li>Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.</li> </ul>	The stormwater management system is:  Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).  Direct flows of stormwater into treatment areas, garden areas, tree pits and permeable surfaces, with drainage of residual flows to the legal point of discharge.	
Officer Comments:	The revised standard is supported on the basis it is an improvement on the	e existing standard.	
Access	Vehicle crossovers should be minimised.	Not applicable. Standard B40 – Access is proposed to be removed.	This standard has been consolidated with standard B14- Access
Access Clause 55.07-6	Vehicle crossovers should be minimised.  Car parking entries should be consolidated, minimised in size,	Not applicable. Standard B40 – Access is proposed to be removed.	This standard has been consolidated with standard B14- Access to simplify assessment.
		Not applicable. Standard B40 – Access is proposed to be removed.	
Clause 55.07-6	Car parking entries should be consolidated, minimised in size, integrated with the façade and where practicable located at the side	Not applicable. Standard B40 – Access is proposed to be removed.	
Clause 55.07-6	Car parking entries should be consolidated, minimised in size, integrated with the façade and where practicable located at the side or rear of the building.  Pedestrian and cyclist access should be clearly delineated from	Not applicable. Standard B40 – Access is proposed to be removed.	
Clause 55.07-6	Car parking entries should be consolidated, minimised in size, integrated with the façade and where practicable located at the side or rear of the building.  Pedestrian and cyclist access should be clearly delineated from vehicle access.  The location of crossovers should maximise pedestrian safety and the	Not applicable. Standard B40 – Access is proposed to be removed.	

**Officer Comments:** The removal of the standard is supported on the basis it is consolidated with standard B14 - Access.

# Noise impacts

Clause 55.07-7 Standard B41 Noise sources, such as mechanical plants should not be located near bedrooms of immediately adjacent existing dwellings or small second dwellings.

The layout of new dwellings and buildings should minimise noise transmission within the site.

Noise sensitive rooms (such as living areas and bedrooms) should be located to avoid noise impacts from mechanical plants, lifts, building services, non-residential uses, car parking, communal areas and other dwellings.

New dwellings should be designed and constructed to include acoustic attenuation measures to reduce noise levels from off-site noise sources.

Buildings within a noise influence area specified in Table B8 should be designed and constructed to achieve the following noise levels:

- Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am.
- Not greater than 40dB(A) for living areas, assessed LAeq,16h from 6am to 10pm.

Buildings, or part of a building screened from a noise source by an existing solid structure, or the natural topography of the land, do not need to meet the specified noise level requirements.

Noise levels should be assessed in unfurnished rooms with a finished floor and the windows closed.

Noise sources, such as mechanical plants are not located immediately opposite or adjacent to bedrooms of existing dwellings or small second dwellings, unless a solid barrier is in place in front or surrounding the source to provide a line-of-sight barrier to transmission of noise to relevant bedrooms.

Dwellings within a noise influence area specified in Table B8 are designed and constructed to achieve the following noise levels:

- Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am.
- Not greater than 40dB(A) for living areas, assessed as an LAeq,16h from 6am to 10pm

A bedroom or living area of a dwelling is not required to meet the specified noise level if it is fully screened from noise sources by the building, another solid structure, or the natural topography of the land.

If a proposed ground level private open space is located in a noise influence area specified in Table B8, a dwelling, residential building, or another solid structure that is at least 18 metres in height is located between the noise source and the private open space.

Table B8 Noise influence area

The existing noise provision for apartments four storeys and less are retained in large part, with amendments to quantify or codify the provision, but retain the intent.

The 20,000 Annual Average Daily Traffic Volume (AADT) matches the threshold applied in NSW and responds to feedback that the 40,000 AADT to DTP and the Parliamentary Inquiry into Apartment Standards that the 40,000AADT used in the apartment standards did not account for a range of busy roads.

An additional clause has been added to address attenuation of noise to private open space.

Clauses relating to attenuating noise from internal sources has been removed as this is now adequately covered by the National Construction Code.

These provisions have been reviewed with input from ARUP consulting and EPA Victoria. They are supported by an update to Planning Practice Note 83 that includes standardised construction measures that can be used to demonstrate compliance without the need for use of a specialist noise consultant. Spatial layers have been prepared showing all relevant road and rail corridors.

	T				
	Table B6 Noise influence area Noise source	Noise influence area	Noise Source	Noise influence area	
	Zone Interface		Zone interface		
	Industry	300 metres from the industrial 1, 2 and 3 sone boundary	Industry	300 metres from the Industrial 1 and 2 zone boundary	
	Roads		Roads		
	Freeways, tollways and other roads carrying 40,000 Annual Averag Daily Traffic Volume	as 300 metros from the nearest trafficable lane	Freeways, tollways and other roads carrying 20,000 Annual	300 metres from the nearest trafficable lane	
			Average Daily Traffic Volume		
	hoise source	Noise influence area			
	Rafways	<u> </u>	Roads included in the Principal		
	Railway servicing passengers in Victoria	00 metres from the centre of the nearest track	Freight Network		
	Railway servicing freight outside Metropolitan Metrourne	50 metres from the centre of the nearest track	Railways		
	Railway servicing freight in Netropolitan Nelbourne	115 metres from the centre of the reasest track	Railway servicing passengers in Victoria	80 metres from the centre of the nearest track	
	Note: The noise influence area should be measured from the close	next part of the halding to the noise source.			
			Railway serving freight outside Metropolitan Melbourne	80 metres from the centre of the nearest track	
			Railway servicing freight in Metropolitan Melbourne	135 metres from the centre of the nearest track	
			The noise influence area is measu closest part of the development. S tunnels are excluded.	red from the noise source to the ections of roads and railway lines in	
fficer Comments:	This duplicates with Standard B24.				
Accessibility	At least 50 per cent of dwellings shou	ıld have:	Not applicable. Standard B42 is pr	oposed to be removed.	The National Construction Code addresses the design
lause 55.07-8	<ul> <li>A clear opening width of at le</li> </ul>	ast 850mm at the entrance to the			requirements included in the existing Standard B42.
Standard B42	<ul> <li>the dwelling entrance to the r</li> <li>bedroom, an adaptable bath</li> <li>A main bedroom with access</li> </ul>	room and the living area. to an adaptable bathroom.			
	B9.	oom that meets all of the n A or Design B specified in Table			
		option B 20mm wide door opening located opposite est.			

		Design option A	Design option B
	Door design	Ether:	Ether:
		A slide door, or	A side door, or     A door that opens outwards, or     A door that opens inwards and has readily removable hinges.
	area	A minimum area of 1.2 metres by 1.2 metres.     Located in front of the shower and the tollet.     Clear of the toilet, basin and the door.	A clear circulation area that is:  A minimum width of 1 metre.  The full length of the bethroom and a minimum length of 2.7 metres.  Clear of the toilet and basin.  The circulation area can include a shower area.
		A clear path with a minimum width of SOOme from the door opening to the circulation area.	Not applicable.
			A hobiess (step-free) shower that has a removable shower screen and is located on the furthest wall from the door opening.
		A tallet located in the corner of the room.	A toilet located closest to the door opening and clear of the circulation area.

**Officer Comments:** Refer to earlier comments in relation to the removal of the Accessibility Standard.

Storage Clause 55.05-6 Standard B44	Each dwelling should have convenient access to usable and secure storage space.	 To simplify the planning scheme all storage requirements are proposed to be included in Standard B30 – Storage.
	The total minimum storage space (including kitchen, bathroom and bedroom storage) should meet the requirements specified in Table B1L	

**Officer Comments:** The removal of the standard is supported on the basis it is covered through Standard B30.

#### Developments should include dedicated areas for: A shared area for bin storage for use by each dwelling provides for: Waste and The existing waste and recycling provisions at clause 55.07-11 Waste and recycling enclosures which are: Food and garden organics. recycling are retained in large part, with amendments to quantify or - Adequate in size, durable, waterproof and blend in with the Mixed recycling. codify the provision, but retain the intent. Clause 55.07-11 development. Glass recycling. In addition, the waste materials storage allowances have been Adequately ventilated. Standard B45 Residual waste (general rubbish). revised following review and site assessments by DEECA Waste. Located and designed for convenient access by residents and made easily accessible to people with limited mobility. A baseline minimum 5 square metres of bin space is needed to Areas for bin storage meet the minimum dimensions specified in Adequate facilities for bin washing. These areas should be ensure enough bin storage space and bin access is provided for Table B11.1. adequately ventilated. small to medium scale developments. Collection, separation and storage of waste and recyclables, Table B11.1 Bin storage area dimensions To simplify the standard, reference to design response requiring including where appropriate opportunities for on-site collection vehicles not needing to reverse into the site to collect management of food waste through composting or other waste Number of Minimum shared Minimum Minimum waste bins (to reduce noise impacts on residents and recovery as appropriate. dwellings height storage area depth neighbours) has been moved into an application requirement. Collection, storage and reuse of garden waste, including opportunities for on-site treatment, where appropriate, or off-15 or less 0.7 square metres per 0.8 metres 2.7 metres site removal for reprocessing. dwellings dwelling in a shared Adequate circulation to allow waste and recycling collection waste storage area vehicles to enter and leave the site without reversing. Adequate internal storage space within each dwelling to enable 16 to 55 0.5 square metres per dwelling, plus 5 square the separation of waste, recyclables and food waste where dwellings metres in a shared waste storage area as appropriate. specified in an approved waste management Waste and recycling management facilities should be design and plan. managed in accordance with a Waste Management Plan approved by the responsible authority and: 0.5 square metres per dwelling, in a shared waste 56 or more Be designed to meet the better practice design options dwellings storage area as specified in an approved waste specified in Waste Management and Recycling in Multi-unit management plan. Developments (Sustainability Victoria, 2019). Protect public health and amenity of residents and adjoining premises from the impacts of odour, noise and hazards Enclosed areas for bin storage are ventilated by: associated with waste collection vehicle movements. natural ventilation openings to external air, with dimensions of openings to be at least 5 per cent of the area for bin storage; or a mechanical exhaust ventilation system. Bin washing facilities, including a tap and a drain, are provided. A tap or drain are provided to wash bins. A continuous path of travel, free of steps and obstructions, is provided from each dwelling to areas for bin storage. Signage is provided to direct residents to areas for bin storage and provide information about what material to place in which bin. Internal storage space of at least 0.07 cubic metres with a minimum depth of 250 millimetres with convenient access to kitchen areas, is provided within each dwelling to enable the separation of food organics, mixed recycling, glass recycling and residual waste (general rubbish). Officer Comments: It is suggested that the accessibility of bins (size, height) for those with limited mobility is incorporated as are hard waste collection areas.

Theer comments. It is suggested that the accessionity of birts (size, height) for those with infinited mobility is incorporated as are hard waste concentrated

#### Standard B46 Provide an area in addition to the minimum internal room Provide an additional area of at least 0.8 square metres to dimensions to accommodate a wardrobe. accommodate a wardrobe. Table B12 Bedroom dimensions Table B12 Bedroom Dimensions Minimum width Bedroom type Minimum depth Bedroom Type Minimum Width Minimum Depth Main bedroom 3 metres 3.4 metres Main bedroom 3 metres 3.4 metres All other bedrooms 3 metres 3 metres 3 metres 3 metres All other bedrooms Living areas (excluding dining and kitchen areas) meet the minimum Living areas (excluding dining and kitchen areas) should meet the internal room dimensions specified in Table B13. minimum internal room dimensions specified in Table B13. Table B13 Living area dimensions Table B13 Bedroom Dimensions Minimum width Dwelling type Minimum depth Dwelling Type Minimum width Minimum Area 3.3 metres Studio or 1 10 square metres Studio & 1 10sam 3.3 metres bedroom dwelling bedroom dwelling 3.6 metres 2 or more bedroom 12 square metres 2 or more 3.6 metres 12 sqm dwelling bedroom dwelling **Officer Comments:** The revised standard is supported. It is noted that it is intended to apply to all developments but located in Clause 55.07 which only applies to apartment developments. Windows Not applicable. Standard B48 is proposed to be removed. Incorporating the requirements into Standard B27 - Daylight to Habitable rooms should have a window in an external wall of the new windows simplifies the planning scheme. building. Clause 55.07-14 Standard B48 A window may provide daylight to a bedroom from a smaller secondary area within the bedroom where the window is clear to the sky. The secondary area should be: A minimum width of 12 metres. A maximum depth of 1.5 times the width, measured from the external surface of the window. **Officer Comments:** The removal of the standard is supported on the basis it is covered through other standards. Natural The design and layout of dwellings should maximise openable Not applicable. Standard 49 is proposed to be removed. Incorporating requirements into to Standard 30.4 – Natural ventilation windows, doors or other ventilation devices in external walls of the ventilation. building, where appropriate.

· Meet the minimum internal room dimensions specified in Table

This standard will now apply to both clause 55 and 55.07

ensure good internal amenity is provided to occupants.

applications. This is in response to stakeholder feedback to

Bedrooms:

B12.

Bedrooms should:

B12.

Meet the minimum internal room dimensions specified in Table

Functional layout

Clause 55.07-12

Clause 55.07-15 Standard B49	At least 40 per cent of dwellings should provide effective cross ventilation that has:  A maximum breeze path through the dwelling of 18 metres.  A minimum breeze path through the dwelling of 5 metres.  Ventilation openings with approximately the same area.  The breeze path is measured between the ventilation openings on different orientations of the dwelling.		
Officer Comments:	The removal of the standard is supported on the basis it is covered throug	gh other standards.	
Building entry and circulation Clause 55.07-16 Standard B50	<ul> <li>Entries to dwellings and buildings should:</li> <li>Be visible and easily identifiable.</li> <li>Provide shelter, a sense of personal address and a transitional space around the entry.</li> <li>The layout and design of buildings should:</li> <li>Clearly distinguish entrances to residential and non-residential areas.</li> <li>Provide windows to building entrances and lift areas.</li> <li>Provide visible, safe and attractive stairs from the entry level to encourage use by residents.</li> <li>Provide common areas and corridors that: <ul> <li>Include at least one source of natural light and natural ventilation.</li> <li>Avoid obstruction from building services.</li> <li>Maintain clear sight lines.</li> </ul> </li> </ul>	Not applicable. Standard B50 is to be removed.	To simplify the assessment the requirements in the standard have been included within Standard B26 – Dwelling Entry.
Officer Comments:	The removal of the standard is supported on the basis it is covered throug	h other standards.	
Integration with the street Clause 55.07-17 Standard B51	Developments should provide adequate vehicle and pedestrian links that maintain or enhance local accessibility.  Development should be oriented to front existing and proposed streets.  High fencing in front of dwellings should be avoided if practicable.  Development next to existing public open space should be laid out to complement the open space.	Not applicable. Standard B51 is proposed to be removed.	To simplify the assessment the requirements in the standard have been included within Standard B26 – Dwelling Entry.
Officer Comments:	The removal of the standard is supported on the basis it is covered throug	gh other standards.	
Site services Clause 55.07-18 Standard B52	Development should provide adequate space (including easements where required) for site services to be installed and maintained efficiently and economically.  Meters and utility services should be designed as an integrated component of the building or landscape.  Mailboxes and other site facilities should be adequate in size, durable, weather-protected, located for convenient access and integrated into the overall design of the development.	Not applicable. Standards B52 is proposed to be removed.	To simplify the assessment the requirements in the standard have been included within Standard B34 – Site Services.
Officer Comments:	The removal of the standard is supported on the basis it is covered throug	gh other standards.	<u>,                                      </u>

External walls and materials 55.07-19 Standard B53	External walls should be finished with materials that:  Do not easily deteriorate or stain.  Weather well over time.  Are resilient to the wear and tear from their intended use.	Not applicable. Standard B53 is proposed to be removed. replaced with Standard Design Detail.	Incorporating the requirements into Standard B31 – Design detail simplifies the planning scheme.
	External wall design should facilitate safe and convenient access for maintenance.		
Officer Comments:	The removal of the standard is supported on the basis it is covered throug	h other standards.	
Building separation Clause 55.07-20 Standard B54 (new standard)	Not applicable	Within a site, buildings are separated by at least the following distances:  • by at least 6 metres up to 11 metres height,  • plus an additional 1.5 metre setback to each building for heights above 11 metres, except where a building taller than 9 metres height, is located to the north of another building, in which case the buildings are separated by at least the following distances:  • 9 metres up to 11 metres of height,  • plus an additional 3 metres setback for heights above 11 metres to a north building, and an additional 1.5 metre setback for heights above 11 metres to any other building.  Sunblinds, eaves, fascias, gutters, masonry chimneys, flues, pipes, domestic fuel or water tanks, heating or cooling equipment and other services may encroach not more than 0.5 metres into the side and rear setbacks.  Stairways, ramps, pergolas, shade sails, and carports may encroach into the side and rear setbacks.	The building separation within a site requirement seeks to provide opportunities for light, air and outlook whilst ensuring that there is appropriate visual separation between buildings. Based on the B17.2 side and rear setback standards, it was considered appropriate to apply a variable setback dimension that increases with the height of the building

Air pollution Clause 55.07-21 Standard B55	NEW - ESD	A dwelling or residential building within an air pollution influence area specified in Table B14 provides:  • fixed air cleaning equipment to service all habitable rooms, incorporating high efficient particulate air (HEPA) filters or equivalent; or  • ducted mechanical ventilation for the supply of outdoor air in compliance with Australian Standard AS 1668.2 The use of ventilation and air condition in buildings and locate any building air intakes and openable windows of habitable rooms on the side of the dwelling or residential building facing away from the air pollution source.  If within an air pollution influence area specified in Table B14, a dwelling, residential building or another solid structure that is at least 18 metres in height, is to be located between the air pollution source and any ground level private open space of a dwelling or residential building.  Table B14 Air pollution influence area  Air pollution source  Air pollution influence area  Air pollution source  Air pollution influence area  Freeways, tollways and other roads carrying 20,000 Annual Average Daily Traffic Volume  Roads included in the Principal  Freight Network		The primary focus of the clause is to ensure new residential developments located near transport corridors are designed to minimise resident exposure to air pollutants from transport.  This new clause responds to the commitment in the ESD Roadmap to 'Implement siting and design standards to reduce impacts of air and noise pollution from transport corridors on building occupants'.  The new standard also responds to planning policy 13.06-1 Air quality management to "Minimise air pollutant exposure to occupants of sensitive land uses near the transport system through suitable siting, layout and design responses" and related statements in the Victorian Air Quality Strategy.  These provisions have been prepared with input from ERM consulting and EPA Victoria. Permit applicants will be supported by guidance materials.  The approach has also been informed by major reviews by the WHO and EU on air pollution and children's health, the US Health Effects Institute review of Long-Term Exposure to Traffic-Related Air Pollution and a range of Australian studies.
				through suitable siting, layout and design responses" and related statements in the Victorian Air Quality Strategy.  These provisions have been prepared with input from ERM consulting and EPA Victoria. Permit applicants will be supported by guidance materials.  The approach has also been informed by major reviews by the WHO and EU on air pollution and children's health, the US Health Effects Institute review of Long-Term Exposure to
		Railways		
		Railway servicing passengers or freight using diesel locomotives	50 metres from the centre of the nearest track	
		Rail stabling yards for diesel locomotives	300 metres from the centre of the nearest track	
		The air pollution influence area is measured from the air pollution source to the closest part of the dwelling. Sections of roads and railway line sin tunnels are excluded.		