Building Act 2016

Director’s Guidelines – Obligation to upgrade existing buildings

I, Andrew Timothy Goldsworthy, in my capacity as Acting Director of Building Control, and acting pursuant to Section 19(1)(a) of the Building Act 2016, hereby make the following guidelines:

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<td>Guidance on extensions to or upgrades of existing buildings to comply with the Building Act 2016, Building Regulations 2016 and the current National Construction Code</td>
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<td>For the purposes of 19(3) of the Act, this Guideline was published on <a href="http://www.cbos.tas.gov.au">www.cbos.tas.gov.au</a> on 18 March 2019 and applies from the date of approval.</td>
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Andrew Timothy Goldsworthy
A/Director of Building Control
1. Scope

This Guideline is to assist all parties involved in new building work on an existing building to determine the extent to which the remainder of the existing building needs to be upgraded to comply with the Building Act 2016, Building Regulations 2016 and the current National Construction Code.

2. Background

The Building Act 2000 required all building work and maintenance on existing buildings to comply with current standards when the work was carried out. However, even if the work was significant, there was no obligation to upgrade the remainder of the building to be consistent with the new work. Therefore, situations were arising where the new work was compromising the performance of the existing building due to a mismatch in standards.

To address this issue, the Building Act 2016 provides that if building work on an existing building over a 3-year period comprises more than half of a building's original volume, then the entire building must be upgraded to comply with current laws. Building surveyors have some discretion to consent to partial compliance for the existing building in certain circumstances (see clause 7 of this Guideline and section 53(3) of the Building Act 2016).

3. Buildings generally do not need upgrading if compliant when constructed

In general, if building work was performed in accordance with the standards that were in force when the work was done, the building does not need to be upgraded when standards change. The building is taken to comply with the Building Act 2016, Building Regulations 2016 and National Construction Code, as provided by section 12 of the Building Act 2016.

Despite this provision, an existing building may need to undergo work because of a building order issued by a permit authority, council general manager or building surveyor due to non-compliance issues such as the building being unsafe, dilapidated, illegal, a fire hazard or unfit for occupancy. These orders are issued under Part 18 of the Building Act 2016.

4. When existing buildings need to comply with current standards

Any new work done on an existing building needs to comply with current requirements (Building Act 2016, Building Regulations 2016 and National Construction Code) when the work is undertaken.

Further, as discussed below, the existing building may also need to be upgraded to comply with current standards if section 53 of the Building Act 2016 is triggered.

5. How to calculate whether the threshold for upgrading an existing building is triggered

5.1 What is the threshold

An existing building may need to be upgraded if proposed new building work, together with previous building work approved or carried out on the building in the past 3 years, comprises more than 50% of the volume of the original building.

This requirement was introduced by section 53 of the Building Act 2016 which came into effect on 1 January 2017.

To work out whether the upgrade threshold has been met it is necessary to calculate the:

- volume of the new building work (see clauses 5.2 and 5.3 of this Guideline);
- volume of any prior building work (see clauses 5.2 and 5.4 of this Guideline); and
• volume of the original building (see clauses 5.2 and 5.5 of this Guideline).

5.2 Calculating volume

The volume of a building is calculated by adding up the volume of each of its rooms and other spaces. This includes but is not limited to:

• internal rooms;
• mezzanine areas;
• roof spaces;
• basement areas; and
• parts of the building that are not enclosed by walls but which contribute to the fire load or impact on the amenity of the building or the health and safety of its occupants such as decks or balconies.

Volume is calculated by multiplying floor area by height.

• Floor area is measured within the finished internal walls of a space. This includes parts of the space occupied by partitions, columns, fixtures, fittings, cupboards or other furniture. If there are no walls surrounding the space, floor area is the area of the surface designed to be used.

• The height of a room is measured from the floor surface to the true ceiling, not to any false ceiling which may be in place. If there is no ceiling, you measure to the highest point of the space internally. If the space has no covering, the height of the space is the minimum ceiling height that would be required for a building of that class under the National Construction Code.

If a space is an irregular shape, then it should be broken down into regular shapes, and the volume of each shape calculated using standard mathematical formulas. For instance, if you have a room with a vaulted ceiling, you should first calculate the volume of the rectangular prism which comprises the room. You then calculate the volume of the triangular prism that comprises the ceiling, and add the two together to get the volume of the room.

The true ceiling height is always used to calculate volume, even if the building work does not affect the full height of the ceiling. This means that if the height of the building work is below ceiling level, true ceiling level is still used to calculate volume.

5.3 Calculating volume of new building work

The method in clause 5.2 above for calculating volume should be applied to the dimensions of the area where the proposed new building work is to be carried out to determine the volume of this work.

New building work is the proposed building work that the owner (or their agent) intends to have carried out on an existing building. For the purposes of this Guideline, building work is defined as additions and alterations to existing buildings including work that is classified as low risk work under the Director’s Determination on Categories of Building and Demolition Work.

• Additions are any construction or change to an existing building which increases its external dimensions and/or cubic contents, including adding on non-habitable structures.

• Alterations are an internal or external change to the appearance, function, layout, fixtures, materials or design of an existing building. This includes adding floor area within the confines of the existing building (e.g. adding a mezzanine floor internally). It also includes converting existing rooms to other uses (e.g converting an existing attic into a bedroom). It does not include:
  o demolishing or removing buildings or their parts; or
work which increases the external dimensions and/or cubic contents of a building (as this would constitute an addition).

Under section 53(1A) of the Building Act 2016, repair works do not count as ‘new building work’ if:

- the work is being done to repair damage caused by fire, wind, flood, storm or the subsidence of land; and
- the damage has not been caused by an act or omission of the owner/occupier; and
- the work is necessary for the building to be suitable for habitation or safe for occupation for the purpose it was used for prior to the damage; and
- the work is to restore the building to the condition it was in prior to the damage; and
- the materials, components, equipment and installation used are substantially similar to those used in the part of the building being repaired prior to the repairs.

If only part of a room is being worked on, the volume of the work is calculated by multiplying the floor area of the part of the room being worked on by the true ceiling height. For example, if a new kitchen was being installed in a restaurant, the floor area of the kitchen being installed would be calculated, and then multiplied by the room’s true ceiling height.

Designs prepared by a licensed building designer should show the dimensions and volume of the new building work.

### 5.4 Calculating volume of prior building work

The method in clause 5.2 of this Guideline for calculating volume should then be applied to the parts of the building where prior building work has been performed to determine its volume.

Prior building work is building work (alterations or additions as defined in clause 5.3) approved or carried out on an existing building in the last 3 years. This 3-year period is counted back from the date that the owner (or their agent) applies for a certificate of likely compliance for the new building work. This includes any building work done before the current owner took over ownership of the building.

Designers should enquire with the council to find out what year additions and alterations were made to a building, as this will determine whether they are counted as part of the prior building work from the previous 3 years that contributes to the 50% threshold, or whether instead they are part of the ‘original building’.

Any building work which commenced (start work authorisation issued) prior to 1 January 2017 is not counted towards the 50% threshold as the Building Act 2016 was not in force yet. Instead, the sections of the building which were altered/added on during this work are considered part of the volume of the original building (see clause 5.5 below). For further explanation of this, there is some guidance from the Director available here:


If only part of a room was worked on, the volume of the work is calculated by multiplying the floor area of the part of the room worked on by the true ceiling height.

If parts of the building are under different ownership, the prior building work comprises the part(s) of the building worked on in the past 3 years which are owned by the owner proposing to do the new building work, or one of their associated entities. It also comprises those parts of the building (and service infrastructure within the building) worked on in the past 3 years which constitute common property in a strata scheme under the Strata Titles Act 1998 (Tas).

Designs prepared by a licensed building designer for the new building work should show the dimensions and volume of any prior building work.
Work done in the previous 3 years to repair damage caused by fire, wind, flood, storm or the subsidence of land does not count as ‘prior building work’ if it meets the criteria in section 53(1A) of the Building Act 2016. These criteria are set out in clause 5.3 above.

5.5 Calculating volume of the original building

The method in clause 5.2 for calculating volume should then be applied to the dimensions of the original building to get its volume.

The original building consists of the constituent parts that together make up one building of one predominant National Construction Code classification. This includes but is not limited to:

- parts of the building separated by fire compartments;
- parts of the existing building which will be altered as part of the proposed new building work (proposed additions to the building are not counted here); and
- parts of the building where prior building work was carried out in the previous 3 years (not including any additions made to the building in the previous 3 years unless a start work authorisation was issued for this work prior to 1 January 2017).

Additions are defined in clause 5.3 of this Guideline above.

If parts of the building are under different ownership, the original building only comprises the part(s) owned by the owner proposing to do the new building work, or one of their associated entities and parts of the building (and service infrastructure within the building) which constitute common property in a strata scheme under the Strata Titles Act 1998 (Tas).

Designs for the new building work prepared by a licensed building designer should show the dimensions and volume of the original building.

5.6 When the upgrade threshold is met

Designs prepared by the licensed building designer for the new building work should show the dimensions and volume of this work, as well as the dimensions and volume of the prior building work and original building as defined by clauses 5.3-5.5 of this Guideline. The designer can then add up the volume of the new building work and the prior building work.

If parts of a building where prior building work was carried out in the past 3 years will be worked on again as part of the new building work, these areas only need to be counted once towards the 50% volume calculation. For example, if an entire room was renovated two years ago, this would be prior building work which counts towards the 50% threshold. If the entire room will be worked on again as part of the new building work, you don’t have to count the room towards the 50% threshold again, otherwise it would be counted twice. However, if only half the room was worked on 2 years ago, and the other half is being worked on as part of the new building work, you would count both halves.

If the volume of the new building work plus prior building work is more than 50% of the volume of the original building, then the upgrade threshold has been met and the existing building needs to be upgraded to comply with current requirements (unless a building surveyor exercises their discretion to consent to partial compliance – see clause 7 of this Guideline).

For example, if an office building’s volume is 700m³, the maximum volume of any building work that can be approved or carried out over a 3-year period without invoking section 53 is 350m³. So if an extension was added on that was 250m³, section 53 would not apply and the existing building would not need to be upgraded to comply with current laws.

However, if a year later renovations were proposed for the original building and the volume of the renovated area was 200m³, section 53 would apply. This is because in a 3-year period 450m³ of the building will be worked on, which is more than half of the volume of the original building (700m³).
6. Work required when upgrade threshold is met

If section 53 applies, the entire existing building needs to be upgraded. This includes but is not limited to:

- the original building (as defined by clause 5.5 above);
- all parts of the original building where prior building work has been carried out in the previous 3 years or earlier including any alterations or additions made; and
- parts of the building separated by fire compartments.

If parts of the building are under different ownership, the requirement to upgrade the building only applies to those part(s) of the building owned by the owner proposing to do the new building work or one of their associated entities, and parts of the building (and service infrastructure within the building) which constitute common property in a strata scheme under the *Strata Titles Act 1998* (Tas). The allocation of cost and responsibilities for upgrading common property is a matter for the body corporate.

All proposed new building work must comply with current standards (see clause 4 of this Guideline).

The part(s) of the building that need upgrading must be made to comply with the current *Building Act 2016*, the *Building Regulations 2016* and the National Construction Code. The upgrade work required will depend on the current state of the building, the classification of the building and whether discretion is available to the building surveyor to consent to partial compliance (see clause 7 in this Guideline).

Once the extent of the upgrade work required on the existing building has been decided, the licensed building designer should prepare designs for the upgrade work. The owner can then submit these designs to the building surveyor with the designs for the new building work to apply for a certificate of likely compliance for the whole project.

The requirement for a full upgrade of an existing building under section 53 includes compliance with the energy efficiency provisions in the National Construction Code. There may be limited scope for improving the thermal performance of some existing buildings. However, wherever possible, compliance with performance requirements should be achieved. As a minimum, required levels of insulation should be installed in ceilings, walls and the floor if there is access to do this. Sealing of windows and doors should be undertaken and if windows are to be replaced, then thermally efficient windows should be used.

7. Building surveyor discretion to consent to partial compliance

If section 53 is invoked and an existing building is required to be upgraded to comply with current laws, a building surveyor can consent to partial compliance with the National Construction Code for the original building and any prior building work from the previous 3 years and earlier (but not for the proposed new building work).

The building surveyor can give this consent if they are satisfied that partial compliance by the existing building is appropriate after taking into account:

- the structural adequacy of the existing building;
- whether the building is a historic building;
- whether requirements have been met to reasonably provide for building amenity and the health and safety of the building’s users; and
- whether appropriate measures have been taken to prevent the spread of fire to and from adjoining buildings.

Further guidance on these criteria is provided below.
7.1 Criteria for building surveyors to consider when exercising discretion

a) Structural adequacy of the building
If the structural adequacy of the building raises concerns and the issue at hand is within the building surveyor’s area of expertise, they are able to assess whether partial compliance is appropriate based on their own understanding. For more complex structural matters, building surveyors should seek the advice of a licensed engineer. The building surveyor should obtain this advice in writing.

b) Historic buildings
If a building is historic, building surveyors are to consider the impact that a full upgrade of the existing building would have on this status and the legislative requirements that apply to historic buildings. A building is historic if it is listed on a statutory heritage list, including on the Tasmanian Heritage Register and Local Historic Heritage Codes. The Tasmanian Heritage Register is available online. The Local Historic Heritage Code forms part of the planning scheme, so council planners may be able to assist.

c) Provision for building amenity and health and safety of building users
This criterion relates to the health, safety and amenity matters that might adversely affect building users if they are not provided for. If non-compliance with the Building Act 2016, Building Regulations 2016 or National Construction Code impacts on one of these matters, the building surveyor should then consider whether reasonable provision has been made instead. In doing so, the building surveyor could consider whether the health, safety and amenity level is consistent with similar buildings in the community that are considered acceptable despite not complying with current laws.

For example, if the National Construction Code requires that two toilets be installed in a particular building, but there is only one, a building surveyor might decide that this reasonably provides for the health and amenity of the building’s occupants, as there are few occupants and there are other facilities nearby. However, if no toilet is provided, it would be difficult to argue that this reasonably provided for the building amenity and health of the building’s occupants.

d) Prevention of spread of fire
In determining whether appropriate measures have been taken to prevent the spread of fire, building surveyors should consider the acceptable levels of fire safety in similar buildings in the community. The views of the Chief Officer of the Tasmanian Fire Service may need to be obtained to assist in this decision.

7.2 Weighing up the criteria
Once an assessment has been made of each of the above criteria, the building surveyor then weighs them up to determine whether it is appropriate to consent to partial compliance with current laws.

The significance of each criterion will depend on the circumstances. Deciding whether to consent to partial compliance is not just a matter of looking at how many criteria are in favour of partial compliance and how many are against. This is because one criterion may raise serious safety issues for example which means that it is inappropriate to exercise the discretion, despite no issues being raised under the other criteria.

The decision making process should involve a holistic assessment of all of the criteria, and a practical, well-reasoned decision as to whether it is appropriate in the circumstances to consent to partial compliance.

7.3 Recording decisions to consent to partial compliance
If a building surveyor decides to exercise the discretion to consent to partial compliance with the National Construction Code for the existing building, they should record this decision in writing and advise the owner.
The written decision should include details of the assessment made of each criterion, and the reasoning behind deciding to consent to partial compliance. It should also include details of the partial compliance permitted, such as what part of the existing building it relates to and what provisions of the National Construction Code have been waived or relaxed.

Any departure from this Guideline should be justified.

7.4 Situations when a building surveyor cannot consent to partial compliance

Building surveyors have no discretion to consent to partial compliance with the National Construction Code for proposed new building work. All new work must comply fully with current laws.

Further, a building surveyor cannot consent to partial compliance with the National Construction Code for an existing building if the proposed new building work and/or prior building work (as defined by clauses 5.3 and 5.4 of this Guideline) comprised addition(s) to the building, and the floor area of the addition(s) exceeds:

- 25% of the floor area of the original building (see definitions of ‘floor area’ and ‘original building’ in clauses 5.2 and 5.5 of this Guideline); or
- 1000m².

8. Other situations which may oblige an owner to upgrade an existing building

8.1 Alteration to existing exits and paths to exits

Section 54 of the Building Act 2016 provides that if proposed building work will adversely affect any building exit or path to an exit then the remainder of the building must be upgraded to comply with Section D of Volume One of the National Construction Code. Section D provides specifications for building escapes, construction of exits and access for people with a disability. Section 54 only applies to Class 2-9 buildings as defined in the National Construction Code. Therefore it does not apply to residential homes or associated sheds.

Similar to section 53 of the Act, section 54 gives building surveyors a discretion to consent to partial compliance with the National Construction Code. Again, the building surveyor must be satisfied that partial compliance by the existing building is appropriate after taking into account the structural adequacy of the building, whether it is historic and whether reasonable provision has been made for building amenity, the health and safety of building occupants and to prevent the spread of fire to and from the building.

8.2 Change of building use

Section 55 of the Building Act 2016 provides that if a building’s use is going to change, and this changes its classification under the National Construction Code, then the building needs to be upgraded to comply with the technical specifications that apply to the new classification. If the building’s classification stays the same but the new usage gives rise to different National Construction Code requirements within that classification, then the building needs to be upgraded to comply with these requirements. Any necessary upgrade work must be completed before the building is used for its new purpose. ‘Change of use’ includes situations were a building will be re-used and a function control authority is required under another Act to provide new registration, licensing or approval for the use (e.g a hotel that closed 10 years ago is going to be reopened in the same building).

If the building’s change of use under section 55 does not require notifiable or permit building work to be carried out, then the person changing the building’s use needs to obtain a new occupancy permit for the building before using it for its new purpose. In deciding whether to issue the new occupancy permit, a building surveyor can consent to partial compliance for the building if they are satisfied that this is acceptable after taking into account building amenity, the health and safety of the building’s users and the risk of the spread of fire to and from the building.
9. Process for determining whether an existing building needs to be upgraded

Change of use of building? (see clause 8.2 of this Guideline)

Yes

Obligation to upgrade entire existing building to comply with current standards triggered (see clause 5.6/8.2)

Are alterations/additions proposed for the building which, together with building work from prev. 3 years, comprise more than 50% of the building's original volume? (see clause 5.3-5.6)

No

Does the building surveyor have discretion to consent to partial compliance? (see clause 7.4/8.2)

Yes

Is the building surveyor satisfied that it is acceptable to consent to partial compliance? (see clause 7.1/8.2)

No

Existing entire building to be upgraded to extent required by building surveyor

Yes

Existing entire building to be upgraded to comply with current laws (see clause 6)

Building upgrade to comply with NCC Vol 1 Section D unless building surveyor consents to partial compliance

No upgrading work required unless building order issued for non-compliance

No

Is building work proposed that will affect exits or paths to exits in class 2-9 building? (see clause 8.1)