



Tasmania

Building Regulation *Advisory Notes*

Building Standards & Regulation
Workplace Standards Tasmania

Department of Justice
30 Gordons Hill Road or PO Box 56, Rosny Park 7018
web: www.wst.tas.gov.au/building email: wstinfo@justice.tas.gov.au

Issued: August 2007

Number: 01 of 2007

These advisory notes are issued as and when is necessary to assist in the interpretation of Tasmanian building legislation and to keep the Industry informed of developments occurring with the Building Code of Australia and its reference documents.

Changed requirements for owner builders from 1 July 2007

From 1 July this year, changes have been made to the laws affecting owner builders. The important change is that the Director of Building Control must verify the eligibility of owner builder(s) before a building surveyor can issue a Certificate of Likely Compliance. This is at an early stage in the building process, well before requesting a building permit.

The building surveyor will ask for a report on the owners' eligibility to be an owner builder from the Director of Building Control. The Director's report will confirm owner builder or otherwise and provide an Owner Builders Registration Number.

Start work notices from Owner builders are still required to be sent to the Director and will be used to verify the Register and for audit purposes.

Why make these changes

- A pre-registration process has been introduced which has the advantage of allowing land owners to determine their eligibility to be owner builders before committing themselves to contracts or other legal and financial obligations.
- The changes will not diminish the existing rights of genuine owner builders to build on their own land.
- The pre-registration process will ensure that people who do not fit the legal requirements to be an owner builder are identified before they apply for a building permit or commence construction.

The good, the bad and the ugly



The Human Rights and Equal Opportunity Commission has produced a new CD aimed at designers, builders, building surveyors, access consultants and access advocates.

The good the bad and the ugly looks at thirteen examples of common mistakes made in applying today's Building Code of Australia (BCA) in areas such as handrails on stairs, use of

tactile ground surface indicators, signage, visual indicators on glazing, and kerb rails on ramps.

To order a free copy of this CD contact—
publications@humanrights.gov.au or telephone 1300 369 711.

The material is also available on the Commission's website and will be updated from time to time so check this website for updates.
http://www.humanrights.gov.au/disability_rights/buildings/good.htm

Please circulate to

Contents

- ◆ Changed requirements for owner builders
- ◆ The good, the bad and the ugly
- ◆ "Minor alterations and minor repairs"
- ◆ Conditions on Building Permits
- ◆ Occupancy Permits
- ◆ Start Work Notices
- ◆ Building Code of Australia
- ◆ Sub-floor ventilation
- ◆ Installation of services and equipment in fire isolated stairways
- ◆ BCA energy efficiency requirements
- ◆ Cladding systems
- ◆ Amendments to section 31 of the Strata Titles Act 1998
- ◆ Questions and Answers
- ◆ CodeMark
- ◆ Maintenance of essential safety & health feature & measures
- ◆ Energy efficiency—demonstrating compliance
- ◆ General Information
- ◆ More information

“Minor Alterations and Minor Repairs”

Building Standards and Regulation (BSR) have been requested by building surveyors and Permit Authorities to provide further clarification of the intent of s60(2)(b) of the *Building Act 2000* in relation to what constitutes “minor alterations and minor repairs”. This clarification has been sought to provide for a consistent outcome in interpreting this section of the Act.

Section 60(2)(b) provides for a building surveyor to determine that a Building Permit is not required for building work which in his/her opinion consists of “minor alterations or minor repairs”. (Note: It is not a decision of the Permit Authority or a Council.)

To determine the intent of s60(2)(b) it is appropriate to look at the relevant parts of the objectives of the *Building Act 2000* as follows -

- (a) to establish, maintain and improve standards for the construction of buildings.
- (b) to facilitate –
 - (i) theefficient application of national uniform buildingstandards.
- (c) to protect the safety and health of people who use buildings.
- (e) to provide an efficient and effective system for issuing building, permits and administeringbuilding safety matters.....

(Ref. Second reading speech Legislative Council Hansard 17/10/2000)

It is apparent from these objectives that the intent of any building permit process developed under the provisions of the Act is for the process to be efficient and effective and provide for the administration of uniform national building standards (BCA) while protecting the health and safety of persons using buildings.

The exclusion of building work in the form of minor alteration or minor repair from the building permit process, after examination of the risk associated with the protection of persons using the building work by an expert, is appropriate and a way of improving the efficiency and effectiveness of the process.

Therefore, in considering the extent of minor alteration or minor repair to be excluded from the building permit process the above objectives and intent needs to be considered.

What is a minor alteration?

What does the term ‘minor’ mean in the context of the legislation? The Macquarie Concise Dictionary includes the meaning of “minor” as – *lesser, as in size, extent, or importance.*

Extending this to building work could mean that the work is comparatively small in size and in extent, and has comparatively little importance to the protection of the safety and health of persons using the building work.

In relation to “alteration” there is no definition in the Act or the Regulations, however, by virtue of r.3(6) of the *Building Regulations 2004* we can look to the Building Code of Australia (BCA) for a meaning as follows –

Alteration, in relation to a building, includes an addition or extension to a building.

(Note: An alteration does not include the erection of a building.)

Therefore by using the above we can construct a meaning for “minor alteration”.

A minor alteration [under s60(2)(b)] includes an addition or extension to a building, (which includes part of a building, a structure or part of a structure) that compared to the existing building is small in size and extent and has little importance to the protection of the safety and health of persons using the building.

What are minor repairs?

Under r.4(1) of the *Building Regulations 2004*, an exemption from the building permit process also applies to–

the repair or maintenance of an existing building if the work is done for maintenance purposes using similar materials, equipment, installations and components to those being replaced;

This exemption is specific and the criteria included must apply to the repair work before it can be exempted under this provision.

The repair work referred to in s60(2)(b) however, is different from the above repair work as it is not limited to the criteria referred to above.

For instance it could be repair work that is proposed to be undertaken which does not use similar materials, equipment and components to those being replaced, as the material today is unavailable. As the material and installation is different it is appropriate that it be treated differently from the exempted work and require some initial assessment for suitability. This type of assessment could be considered under the minor repair provisions of s60(2)(b).

(Continued on page 3)

Again using the above we can construct a meaning for “minor repair”.

A minor repair [under s60(2)(b)] to a building, (which included part of a building, a structure or part of a structure) would, compared to the existing building, be small in size and extent and have little importance to the protection of the safety and health of persons using the building.

What other issue are to be considered?

Having determined , what are “minor alterations and minor repairs”, there are also however, other issues that a building surveyor should consider in relation to the wider provisions of the Act (rather than in isolation from them), before making a decision under s60(2)(b) such as—

- *Does the proposed building work require specialist design input?*
- *Would the proposed building work be of interest to a Reporting Authority?*
- *Would the proposed building work be of interest to a Function Control Authority?*
- *Is the proposed building work to a building on the Heritage Register?*
- *Is the proposed building work in a landslip area or on land subject to flooding?*
- *Is the proposed building work built over any services or easements?*
- *Does the proposed building work involve the demolition or removal of asbestos?*
- *Does the proposed building work impact on the protection of any adjoining property?*
- *Are there any other matters that a Permit Authority would need to take into account under s71 and r18?*
- *Does the cost of the proposed building work trigger the payment of the Building Permit Levy?*
- *Does the proposed building work trigger a change in a building’s Occupancy Permit?*
- *Does the proposed building work impact on the maintenance of essential safety and health feature and measures of the building?*

If it is apparent after consideration of these matters that any one of them requires action, then it may not be appropriate for the building work to be treated as “minor alteration or minor repair” but be required to go through the normal building process.

What administrative processes apply?

The only statutory requirement under the *Building Act 2000* is for the building surveyor to notify the Permit Authority under s60(3) if any building work consists of minor alterations or minor repairs.

There are no statutory requirements for the form of this advice. However, the advice should be in writing and sufficient to inform the Permit Authority of the details of the building work that has been determined as “minor alteration and minor repair”.

The process a building surveyor goes through in determining such a decision is up to him/her, however, it would be appropriate that the process is formally documented. For instance, the documents should include application details, sketches, drawings and specification of the building work if relevant to explain the work , a summary of the issues considered and decisions made. In making a decision it might also be appropriate to include relevant conditions.

What are some examples of where s60(2)(b) may be applied?

Examples would include but are not limited to -

- Upgrading a building to provide disability access such as ramps, lifts etc.
- Upgrading for a new bathroom or kitchen
- Providing or extending an opening in an existing internal wall
- Replacing a tiled roof with metal sheet roofing
- Replacing weatherboarding with an alternative sheeting.
- Replacing timber windows in existing openings with new aluminium or plastic windows
- Cutting in a new door or window in an existing wall
- Constructing a deck as part of a house less than 1m high

Example of building work which are not “minor alterations and repairs” -

- Adding a new room on to an existing building
- Developing the roof space of a building into an Attic Room.
- Underpinning a building

References:

- *Building Act 2000*
 - Section 60—Building permit required
 - Section 71—Consideration of application for building permit
- *Building Regulations 2004*
 - Regulation 3—Interpretations
 - Regulation 4—Certain buildings and building work exempt
 - Regulation 18—Granting of building permits
- Second Reading Speech—Legislative Council 17/10/2000
- Building Code of Australia (BCA) 2007
 - Part A1—Interpretation
- The Macquarie Concise Dictionary—Third Edition

Conditions on Building Permits

In the granting a Building Permit for building work, a Permit Authority may make the Permit subject to any “*relevant and reasonable conditions*” in relation to that building work [Ref. s72(2) - *Building Act 2000*].

Evidence has been provided to BSR that some Permit Authorities are going beyond this provision of the Act. These Permit Authorities are issuing Permits with conditions on a whole range of issue such as -

- Repeating large numbers of sections of the *Building Act 2000* as conditions on the Building Permit instead of including them as advice
- Extending responsibility for an action to an owner when clearly it is a responsibility of the builder or owner builder
- Including standard Clauses which require compliance with a provision of the Act when clearly the documents show compliance which apparently has not been checked by the Permit Authority
- Including standard Clauses which clearly are not relevant to the specific building work
- Including standard Clauses requiring further checking which should be part of the normally assessment process of the Permit Authority
- Extending the provisions of the *Building Act 2000* beyond the intention of the Act

- Including conditions that are in conflict with the responsibility of the building surveyor under the Act
- Requiring compliance with specific BCA provisions which are the responsibility of the building surveyor under the Act and not a Permit Authority
- Requiring documentation for work which is outside the power and responsibility of the Permit Authority
- Calling up Development Permits in total without providing a copy of the Permit to the building surveyor or identifying those conditions which are specifically relevant to the building work and impacts on this work

What are ‘relevant and reasonable conditions’

The Macquarie Concise Dictionary, Third Edition defines ‘relevant and reasonable’ as follows - Relevant—*bearing upon or connected with the matter in hand* and reasonable—*not excessive*.

Therefore the conditions must have a bearing upon or a connection with the building work and are not excessive. Also if Permit Authorities are relying on building surveyors to deal with their conditions they must be clear and unambiguous and be within their expertise to deal with.

Occupancy Permits

Background

An Occupancy Permit signifies that a building surveyor is satisfied that a building is suitable for occupation. The *Building Act 2000* requires the issue of an occupancy permit prior to occupation of new buildings, alterations (including additions and extensions) and for a change of use of a building.

An occupancy permit is not a statement that all the building work is necessarily complete. Nor is it a certificate that states that all building work complies with the Building Code of Australia. An occupancy permit is issued when a building is “suitable to occupy” from a health and safety point of view.

An occupancy permit should only be issued when items affecting health and safety are in place and capable of being operational. These may include things such as the water supply, sanitary and cooking facilities, smoke alarms, safety glass, stairs, handrails and balustrades.

Are there problems with issuing Occupancy Permits?

Concerns have been expressed to the Director of Building Control by some Permit Authorities that in some instances building surveyors have issued occupancy permits for a dwelling when the plumbing permit and special plumbing permit had not been complied with, and water and sanitation facilities may not have been connected or operable.

Anecdotal advice is that building surveyors may have been placed under pressure from builders to issue the occupancy permit, so that a progress payment could then be demanded from the building owner.

The *Building Act 2000* gives building surveyors discretion to issue occupancy based on their professional opinion, if they are satisfied that the building or part of the building is suitable for occupation.

(Continued on page 5)

However the following items are a reminder of some matters to consider before a building surveyor issues an Occupancy Permit:

- He/she is satisfied that the building is suitable for occupancy;
- He/she is satisfied that all necessary reports from a Reporting Authority have been obtained and considered;
- He/she is satisfied that services such as gas,

electricity, cooking and washing facilities, water, sewerage and drainage insofar as they are necessary to make the building *suitable for occupation*, have been installed and are operational;

- He/she has listed all the features and measures essential for the safety and health of the building's occupants that are to be maintained under section 120 of the *Building Act 2000*, and the specified level of performance of those features and measures.

Start Work Notices

Sending or receiving Start Work Notices

Some building surveyors have expressed concerns to the Director of Building Control that Start Work Notices are not being provided by builders or that some building surveyors are not asking for them. The following is a reminder to all builders, owner-builders and building surveyors of how to use this Notice correctly.

What are Start Work Notices for?

Before starting any building work, or allowing building work to commence, a Building Start Work Notice is required to be lodged with the building surveyor responsible for the project. Once completed and lodged, the builder may commence construction.

What is a Start Work notice?

A Start Work Notice (Approved Form number 39) is sent to the building surveyor. It provides details of building work, the name of the builder, his/her accreditation number, or that they are an owner-builder.

This Form is available from www.wst.tas.gov.au/building
<http://www.wst.tas.gov.au/attach/bsrbactappro-1.pdf>

When do I provide the Start Work notice to the building surveyor?

All builders and owner-builders must provide this at least two days before starting work.

What if I do not provide a Start Work Notice?

The Act provides fines for non-compliance:

- Individuals - \$5,000
- Companies - \$25,000

The General Manager of a council or the Director may also serve an infringement notice.

Can Start Work notices be submitted with an electronic signature?

Yes, the *Building Regulations 2004* provide that a document is "in writing" if it is handwritten or typed and it is sent by post, fax or email.

Is there a special requirement for owner-builders?

Yes, a building surveyor must forward to the Director of Building Control a copy of a Start Work Notice received from an *owner-builder* within two working days of receiving that Notice.

Building Code of Australia

Error in Clause 3.6.4.5 of Volume 2 BCA 2007 - Bathroom, ensuite and spa room glazing

The reference to Table 3.6.4 Clause 3.6.4.5(a)(i) and (ii) is not correct. The reference should be to **Table 3.6.5**.

Editorial transcription error in BCA 2008 - Light coloured roofs

In BCA 2006 there were two concession scenarios for light coloured roofs in climate zones 1, 2 and 3; one for Class 2 to 4 buildings and another for Class 5 to 9 buildings.

After industry representation the ABCB Office carried out computer modelling that showed a benefit for Class 5 to 9 buildings in climate zone 5 so a third scenario i.e. J1.3(b)(iii) was proposed to, and accepted, by the States and Territories. Following publication of BCA 2007 it was found that the additional wording to achieve this change resulted in the concession for light coloured roofs on commercial buildings in climate zones 1, 2 & 3 (principally J1.3(b)(ii) being inadvertently removed from BCA 2007.

(Continued on page 6)

The removed sub-clause will be reinstated for BCA 2008. In the meantime the States and Territories were advised and asked to inform practitioners that the old (ii) is still a valid option as a performance solution, based on a well established reference document, i.e. BCA 2006.

The proposed reinstated wording for BCA 2008 is:

J1.3 Roof and ceiling construction

- (a) A roof or ceiling that is part of the *envelope* must achieve the *Total R-Value* specified in **Table J1.3** for the direction of heat flow.
- (b) The *Total R-Value* specified in Table J1.3 is reduced—
 - (i) in *climate zones* 1, 2 and 3, for a Class 2 or 3 building, Class 4 part of a building or Class 9c *aged care building* with a roof

- upper surface solar absorptance value of not more than 0.55, by R0.5; and
- (ii) in *climate zones* 1, 2 and 3, for a Class 5 to 8, 9a and 9b building with—
 - (A) a roof upper surface solar absorptance value of not more than 0.55, by R0.5; or
 - (B) a roof upper surface solar absorptance value of not more than 0.35, by R1.0; and
- (iii) in climate zone 5, for a Class 5 to 8, 9a and 9b building with—
 - (A) a roof upper surface solar absorptance value of not more than 0.55, by R0.25; or
 - (A) a roof upper surface solar absorptance value of not more than 0.35, by R0.5.

Sub-floor ventilation — BCA Volume 2, Clause 3.4.1.2

This advice has been issued to answer questions received by Building Standards and Regulation on the requirements for sub-floor ventilation under Clause 3.4.1.2 of Volume 2 of the Building Code of Australia (BCA) and to assist building practitioners in the interpretation of the Clause.

Sub-floor ventilation is required by the BCA to be provided to enclosed sub-floor spaces, especially where there are timber floors. As moisture from the soil under the floor is expelled into the enclosed air, it raises the relative humidity of the air and the moisture in turn is absorbed into the timber framing and floor members. This can lead to decay of the timber members and flooring.

Ventilation is necessary to reduce the relative humidity of the air by replacing it with new dry outside air.

How can sub-floor ventilation be calculated?

BCA Clause 3.4.1.2(e) states:

The sub-floor ventilation openings in internal and external walls must be in accordance with Table 3.4.1.2 for the climatic zones given in Figure 3.4.1.2.

BCA Clause 3.4.1.2(f) states:

Where ventilation is obstructed by patios, paving or the like, additional ventilation must be provided to ensure that the overall level of ventilation is maintained.

The area amount of sub-floor ventilation can be calculated by the following steps:

1. *Determine the climatic zone for the location given in Figure 3.4.1.2.*

For Tasmania the climate zone is Zone 3.

2. *Determine the minimum rate of sub-floor ventilation per metre of wall from Table 3.4.1.2.*

For Zone 3 (Tasmania) where the ground under the sub-floor space is sealed with an impervious membrane the rate is 3000mm² per metre of wall and where no membrane is provided is 6000mm² per metre of wall.(The usual case.)

3. *Determine the length of wall.*

Where the sub-floor space extends over the whole floor area of a building, the length of wall is determined by adding together the lengths of the perimeter external walls.

However, where ventilation of a sub-floor space is obstructed (by patio paving or the 'like' or other concrete floors or enclosed spaces) then to ensure the overall level of ventilation of the sub-floor space is maintained (ie. as if there were no obstructions) the length of the wall is determined by adding together the lengths of the perimeter external walls and the lengths walls of the obstructions of the sub-floor space.

4. *Calculate the area of sub-floor wall ventilation.*

By multiplying the length of wall determined above by the relevant rate you can determine the area amount of sub-floor ventilation required.

(Continued on page 7)

Where should the ventilation be located?

BCA Clause 3.4.1.2(a) states:

The sub-floor space must—

- (i); and
- (ii) *be cross-ventilated by means of openings; and*
- (iii) *contain no dead air spaces; and*
- (iv); and
- (v) *have evenly spaced ventilation openings in accordance with Figure 3.4.1, Diagram a.*

The location of the ventilation can be determined as follows:

1. *Determine which walls the sub-floor ventilation can be provided in.*

If the sub-floor space extends over the whole building, the perimeter walls of the building are external walls and can be provided with sub-floor ventilation openings.

Where however, ventilation of the sub-floor space is obstructed then only the external walls that are not obstructed can be provided with sub-floor ventilation openings.

2. *Distribute the ventilation openings throughout the external walls.*

Where the sub-floor space extends over the whole building, cross-ventilation can be provided by evenly distributing the ventilation openings around all external walls and within 600 mm of the corners of the building.

Where however, ventilation of the sub-floor space is obstructed, cross-ventilation is critical

and ventilation openings need to be evenly distributed in opposite walls and corners to balance the amount of ventilation openings for incoming air on one side of the building to outgoing air on the other side of the building. The sub-floor space should not contain dead air spaces.

Where it is not reasonably practicable to provide a balanced amount of fixed ventilation openings for incoming air and outgoing air or avoid dead air spaces, the ventilation of the sub-floor space will require further intervention and make up air, which could be by mechanical or other means.

What other requirements apply to sub-floor ventilation?

BCA Clause 3.4.1.2(g) states:

- Where the ground or sub-floor space is excessively damp or subject to frequent flooding, in addition to the requirements of (a) to (f)—*
- (i) *the area of sub-floor ventilation required in (e) must be increased by 50%; or*
 - (ii) *a sealed impervious membrane must be provided over the ground; or*
 - (iii) *Durability Class 1 or 2 timbers or H3 preservative treated timbers in accordance with AS 1684 Parts 2, 3 or 4.*

To determine if this requirement applies, either the condition of the site has to be known prior to construction commencing, or it becomes apparent on excavation of the site. If the ground or sub-floor space is excessively damp or subject to frequent flooding then the sub-floor ventilation must comply with one of the three options.

Installation of services and equipment in fire isolated stairways

It has been reported to Building Standards and Regulation that a potentially dangerous practice has been on the increase with the installation of general communication equipment and wiring, together with general electrical and plumbing services in and through the fire isolated stairways of existing buildings. It has been noted that the fire isolated walls surrounding a stairways have been breached by these services (and left unsealed) and the installation of communication equipment has reduced the clear stairway exit width.

Fire isolated stairways are designed to ensure that persons using them for escape from a building are protected as far as is reasonably possible, from the effects of fire and smoke and they have a clear and safe path to egress the building.

Clause D2.7 of the Building Code of Australia (BCA) strictly controls the installation of equipment and services in exits and paths of travel and does not [except for special fire related equipment or services] permit them to be installed in or through a fire isolated stairway.

It is therefore conceivable that by the installation of this equipment and these services, users safety could very well be compromised in a fire emergency by allowing smoke to penetrate into the stairway or combustion to occur from faulty equipment.

Building practitioners and property owners need to be aware of this practice and should take action by advising the relevant authority if it becomes known to them.

BCA Energy Efficiency Requirements

It has now been over 3 years since the energy efficiency requirements for new dwellings and alterations and additions to new dwellings came into the BCA. Whilst there were transitional provisions applying in the beginning, all new dwellings and alterations and additions to dwellings should now be fully designed in accordance with the BCA requirements.

The design documentation needs to include sufficient information for them to be assessed as compliant with the BCA by the building surveyor and should be specific on the requirements. The builder should not be left to work out what is needed. Builders should then be installing the energy efficiency measures in accordance with the design documents, the BCA and good workmanship.

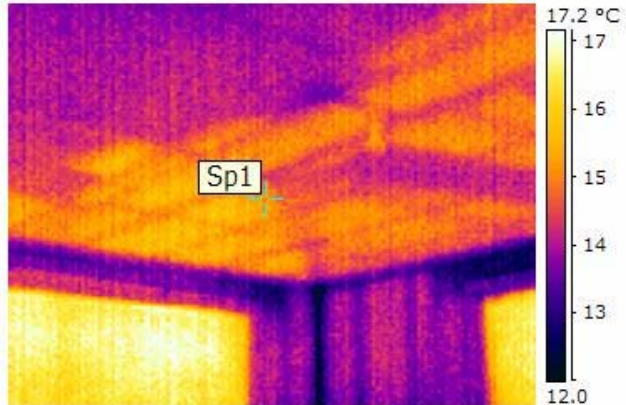
It has come to the notice of Building Standards and Regulation that some new buildings are not being built in accordance with the requirements. Post occupancy inspections have revealed numerous deficiencies.

Typical examples of poor or neglected installation of insulation are shown in the attached photos.

Remember there is more to the energy efficiency provision than ceiling insulation. Don't forget wall insulation, under floor insulation and insulation of services. Then there is draft proofing- construction, exhaust fans, chimneys and flues, windows and doors.

It is time these requirements were designed, documented, installed and checked properly.

And don't forget that energy efficiency requirements now also apply to all Class 2, to 9 buildings.



Infra red camera photo reveals all! (Taken on a hot day.)



Poorly installed insulation



Insulation has not been included on vertical walls to fully insulate the ceiling space.



Insulation not installed.

Cladding Systems

In Tasmania the use of polystyrene sheeting as part of an external wall cladding system for Class 1 buildings (single dwellings) has dramatically increased in recent years. Similar cladding systems have been found deficient overseas with waterproofing problems very expensive to fix.

These cladding systems are not included as a Deemed to Satisfy (DTS) solution in the **Building Code of Australia** (BCA). They therefore must be assessed as an alternative solution according to one or more of the assessment methods included in the BCA. Documentary evidence is required to be presented at application stage for a Certificate of Likely Compliance in a form that a building surveyor can assess and satisfy him/herself that the material, form of construction or design meets the performance requirements of the BCA or is shown to be a least equivalent to the DTS provisions.

(For example a CSIRO Appraisal or CodeMark certification.)

In assessing compliance the building surveyor is then required to follow the processes outlined in 1.0.8, 1.0.9 & 1.0.10 of BCA Volume 2.

Many responsible manufacturers of these cladding systems have opted to have their products assessed and reported on by third party experts and can provide the necessary documentary evidence of their product and system's compliance with the BCA to a building surveyor. These reports can be used as evidence that supports the use of the material, form of construction or design. Other manufacturers provide no evidence.

It is apparent from anecdotal evidence that some building surveyors are accepting products and systems for use on dwellings from these other manufacturers without assessing the products and systems as alternative solutions and verifying their compliance with the BCA. This practice needs to stop and the processes in the BCA followed.

Amendment to Section 31 of Strata Title Act 1998

As a result of a review of the *Strata Title Act 1998* amendments have been made to this Act.

During the review of the Act a number of concerns were raised regarding the assessment and treatment of strata proposals. In particular, there were a number of different views on how a strata proposal is to be assessed and treated under the previous legislation. During the consultation phase of the review, councils also raised concerns about their ability to deal with applications for certificates of approval under the previous provisions.

To promote a consistent approach, the Act now includes a number of amendments to assist councils and developers in the assessment and treatment of strata proposals.

Section 31 of the Act provides criteria against which a council assesses an application for a certificate of approval which is required prior to lodgment of the strata plan with the Recorder of Titles for registration. In particular, councils did not believe they had sufficient powers to assess a strata proposal. In response to these concerns the bill amends section 31 by including additional criteria for council to apply.

The Minister for Primary Industries and Water in his Second Reading speech noted in relation to the legislative intent applying to existing buildings the following -

*Under the amended section 31, where the proposal relates to an existing building for which a change of use is proposed, council will be required to assess whether all requirements under the Building Act 2000 for a change of use have been complied with, and that there has been substantial compliance with all other requirements under that act relating to the scheme and to any buildings existing at the date of the application. In particular, council will be required to consider safety requirements including provision for fire exits and requirements for sanitary facilities. **This provision does not affect existing buildings for which no change of use is intended and no building work is required. In other words, councils cannot impose new requirements over a building if the use of that building has not changed. Any attempt to impose additional requirements imposes a retrospective element to the legislation that was never intended.***

(BSR emphasis.)

[Ref: Hansard—Strata Titles Amendment Bill 2006 (No. 40)]

The legislation is not about upgrading existing buildings where an existing building is strata titled around existing sole occupancies as this would not trigger a change to the use of the building. However, if the strata title is not around existing sole occupancies then there is a change of use occurring to the building which would require assessment under the change of use provisions of the *Building Act 2000*.

Questions and Answers

Since the introduction of the new Building Act 2000, and the Building Code of Australia, Building Standards and Regulation has had numerous calls for information and advice on the Regulations and the BCA. For the benefit of all users of the Regulations and the BCA, a summary of the advice given is included. The purpose is to promote consistency of interpretation between all users of the Legislation.

Q. Can a building surveyor appointed to exercise the powers of building surveyor for a project act as agent for the owner as provided for in the Building Act 2000?

A. NO. Building surveyors have a statutory function to receive applications from, and to issue certificates (such as certificates of likely compliance, occupancy permits and certificates of final inspection) to owners as well as to issue building notices and building orders on owners. If building surveyors were the agents of owners, then any certificates, notices and order would be to, and on themselves. The payment for the additional role of agent would also result in the building surveyor having a direct pecuniary interest in the person associated with the building work, which is prohibited under the Act.

This does not restrict a building surveyor forwarding onward, documents signed by an owner to a permit authority.

Q. What is the installation, and maintenance requirements for 'Heat Pumps' used for heating and cooling in buildings (other than Class 1a dwellings or where the system only services a single occupancy unit in a Class 2 or 3 building or Class 4 part of a building.)

A. The BCA includes specific requirements in relation to the provisions of hot water, warm water and cooling water systems in **Part F2** and for mechanical ventilation systems in **Part F4**. A 'heat pump' could be used to satisfy any of these provisions of the Code. Both include *performance requirements* and *deemed-to-satisfy provisions*.

The BCA also deals with the maintenance of the mechanical ventilation systems and the maintenance of hot water, warm water and cooling water systems required by **Part F2** and **Part F4** in **SECTION I MAINTENANCE** under **PART I1 Equipment and Safety Installation**.

The BCA requirements are linked to the *Building Regulations 2004* by reference through **Schedule 4** of the **Director's Specified List** (Director of Building Control) dated 18 June 2004 and further linked and included on **Approved Form 46**.

There are a number of scenarios where 'heat

pumps' could be used.

1. Incorporated into a hot, warm or cooling water system; or
2. Incorporated into a mechanical ventilation system; or
3. Incorporated into a combination of a hot, warm or cooling water system and a mechanical ventilation system; or
4. Installed as a self contained packaged heating and cooling existing ventilated air in a room or building.

1. From the BCA provisions it is apparent that if a 'heat pump' is incorporated into a hot water, warm water and cooling water system in a building (**other than a system only serving a single sole-occupancy unit in a Class 2 or 3 building or Class 4 part**), the 'heat pump' under the DTS provisions must be installed in accordance with AS/NZS 3666.1 and maintained in accordance with AS/NZS 3666.2.

2. Similarly if a 'heat pump' is incorporated into a mechanical ventilation system (including an air-conditioning system) in a building, the 'heat pump' under the DTS provisions must be installed to comply with AS 1688.2 and AS/NZS 3666.1 and maintained (**other than a system only serving a single sole-occupancy unit in a Class 2 or 3 building or Class 4 part**) in accordance with AS/NZS 3666.2.

3. If the system is a combination of 1 and 2 above then the 'heat pump' would have to comply with AS 1688.2 and AS/NZS 3666.1 and AS/NZS 3666.2 as appropriate.

4. This system would involve non-ducted air and therefore there is no regulatory requirement for the installation or maintenance of the 'heat pump'. This is similar to the situation in 1 and 2 where a system only serving a single sole-occupancy unit in a Class 2 or 3 building or Class 4 part is exempt from the BCA requirements.

This advice only applies to 'heat pumps' in relation to the maintenance of equipment and safety of the installation. It does not include advice of the maintenance of 'heat pumps' in relation to the provisions for energy efficiency in Part I2 of the BCA. This advice also only applies to new building work.

CodeMark



The purpose of this advice is to inform building practitioners of a new trans-Tasman product certification scheme named CodeMark. The CodeMark scheme has been developed over a number of years by the Australian Building Codes Board (ABCB) in consultation with key stakeholders, including State and Territory Governments and industry.

What is CodeMark?

CodeMark is a new building product certification scheme for Australia and New Zealand. Third-party CodeMark certification bodies evaluate and certify products to ensure they meet specified requirements of the Building Code.

CodeMark strengthens the entire building supply chain and gives users the confidence that their building products comply. Building materials, forms of construction and designs can come under the scheme.

Why CodeMark?

CodeMark has been developed to provide industry with a single, National product certification scheme that can efficiently evaluate any product regulated by the Building Code. For building practitioners, CodeMark helps to build confidence with benefits such as:

- Legislated product acceptance by building control authorities (product opinions, appraisals etc. do not have this legislated acceptance);
- Managing legal liability;
- National operation across Australia and soon in New Zealand, therefore increasing market potential and improving efficiency;
- Confidence for designers, architects, builders, building control authorities, consumers and others who specify, use, approve or invest in CodeMark certified products; and
- Underpinning the performance-based Building Code through facilitating the use of new and innovative products.

How does the CodeMark scheme work?

The ABCB and New Zealand's Department of Building and Housing manage the scheme in their respective countries. The Joint Accreditation System of Australia and New Zealand (JAS-ANZ) accredits certification bodies, who in turn evaluate and certify building products. Current CodeMark certified products and CodeMark certification bodies in Australia are listed at www.abcb.gov.au

What legal status does CodeMark certification have in Australia?

Each State and Territory has legislation requiring building control authorities to accept products that have a current Certificate of Conformity issued under the CodeMark scheme, subject to the product complying with the Certificate of Conformity including any conditions and limitations. For Tasmania the relevant legislative provisions are in sections 3, 56, 68(2), 177(2), and 185(2) of the *Building Act 2000*.

In addition to the above requirements, each State and Territory has legislation adopting the Building Code of Australia (BCA), which contains provisions regarding Certificates of Conformity issued under the CodeMark scheme. BCA Volume One A2.2 and BCA Volume Two 1.2.2 provide that a current Certificate of Conformity issued under the CodeMark scheme is one form of evidence that can be used to support that the use of a material, form of construction or design meets a Performance Requirement or a Deemed-to-Satisfy Provision of the BCA.

Before relying on a Certificate of Conformity, users should ensure that the use of the product is within the scope of the Certificate, that any conditions and limitations on the Certificate are satisfied and that the Certificate is current.

Further information:

If you require further information on Tasmanian legislation relating to the CodeMark scheme, you should contact Building Standards and Regulation.

Otherwise, to find out more information about the CodeMark scheme for Australia:

- Visit www.abcb.gov.au
- Email codemark@abcb.gov.au
- Call 1300 134 631

Maintenance of essential safety and health features and measures

Section 120 of the *Building Act 2000* places obligations on owners or occupiers of commercial building to maintain the essential safety and health features and measures for their buildings.

For new buildings, a building surveyor determines the essential safety and health features and measures to be maintained and provides a schedule (Approved Form 46) to the owners or occupiers of those features and measures.

For existing buildings the onus is on an owner to determine or have determined the appropriate maintenance requirements for their building. Many building owners have engaged a building surveyor, engineer or maintenance specialist to determine the essential safety and health features and measures for their buildings. In determining the requirements, Approved Form 46 has been used as a basis .

On receiving the schedule of maintenance requirements for a new building owners and occupiers will have available to them detailed documentation on the relevant safety and health feature for their building which can be referred to in interpreting the maintenance requirements. They would also have their builder, engineer or architect available to them to seek advice from.

However, for an existing building this is not generally the case, and owners and occupiers are having difficulty in relating the scheduled items to those in their building. Generally in these cases no other details or explanations are being provided with the Form. It is apparent from this that Form 46 can be used as a basis for advice, however it is not appropriate in its current form to be used solely as advice to an owner or occupier of an existing building.

To provide clarity in their advice to owners or occupiers of existing buildings, building surveyors, engineers and maintenance specialists should develop their own schedules which could be based on the schedules in Form 46 but not use Form 46. The developed schedules should include more details to explain what the measures and features are in their building and where they are located in the building.

Some building surveyors, engineers and maintenance specialist have already developed their own schedules and even provide photographic records of the items to be maintained. A simple referral to the BCA or an Australian Standard is insufficient information for many owners and occupiers.

The Australian Building Codes Board is proud to announce its next National Conference



BUILDING AUSTRALIA'S FUTURE 2007

**Surfers Paradise, Marriott Resort,
23–26 September 2007**

You will have the opportunity to hear experts in the industry present on a range of topics including Threats and Natural Hazards, Sustainability, Topical Australian Standards in the BCA and Clarity in Performance

Fill out a Registration Form now at www.abcb.gov.au or contact 1300 134 631

Energy efficiency—demonstrating compliance

This advice is issued to advise building surveyors, energy assessors and other building practitioners of the current thermal calculation methods (energy rating software) that can be used to analyse the energy rating of buildings in accordance with the Building Code of Australia (BCA).

Compliance with the energy efficiency performance requirements of the BCA by an alternative solution may be demonstrated using the following assessment methods -

- The verification methods, including calculation of a building's annual thermal energy performance using a thermal calculation method; or
- Documentary evidence described in Part A2 of Volume 1 of the BCA or Part 1.2 of Volume 2; or
- Expert judgement.

If a verification method under JV1 (Volume 1) or V2.6.2.1 (Volume 2) is used, thermal energy calculations must be made using energy rating software that complies with the appropriate Australian Building Codes Board (ABCB) Protocol.

However, building surveyors may approve compliance with the performance requirements when an assessment is undertaken using other energy rating software that does not satisfy the Protocol. This can be done using expert judgement or by documentary evidence.

The BCA lists ABCB Protocol for Energy Rating Software as follows –

- BCA 2006 Volume 1, Specification A1.3 – Protocol for Building Energy Analysis Software Version 2006.1; and
- BCA 2005 Volume 2, Part 1.4 - Protocol for House Energy Rating Software, Version 2005.1.

The suppliers of the following software packages have advised the ABCB that their software meets the ABCB Protocol for House Energy Rating Software Version 2005.1 -

- FirstRate (v3.5);
- BERS (v.3.2); and
- NatHERS (v.2.32).

This list may not be exhaustive. There may be other suppliers of House Energy Rating Software that meet the protocol who have not advised the ABCB of their validation process.

The products listed previously are first generation software and will in the future be phased out in favour of second generation software. AccuRate and BERSPro are second generation software products suitable for providing housing thermal energy ratings. BSR recommends second generation software products be used in preference to first generation software products.

The ABCB Protocol for House Energy Rating Software Version 2006.1 is suitable for assessing second generation software. The supplier of the BERS software has advised the ABCB that BERS Pro 4.1 meets this Protocol.

The following software suppliers have informed the ABCB their software meets the ABCB Protocol for Building Energy Analysis Software Version 2006.1 -

- Beaver / ESP from ACADS-BSG;
- ES Apache from Bassett Applied Research;
- TAS from Lincoln Scott Australia Pty Ltd;
- DOE Suite including eQUEST, VisualDOE and Energy Plus from US Department of Energy through Team Catalyst in Australia;
- ICE from Umow Lai & Associates Pty Ltd;
- TRACE 700 from Trane; and
- Carrier E20-II from Carrier.

Software providers are responsible for validating their product and advising the ABCB accordingly. Providers are also responsible for upgrading the software and validating the upgrade to correct any deficiencies or faults.

For software to comply with the protocol, software providers must produce evidence of suitability. This will include -

- Compliance with the BCA's Performance Requirement;
- Proof of appropriate testing and quality assurance; and
- Provision of a training program for users.

The ABCB protocols can be accessed at - <http://www.abcb.gov.au>

Building surveyors assessing applications should be satisfied that the software being used is suitable for application on the building type and classification being assessed. The software being adopted should be suitable for the climatic zone and building type.

Building surveyors also need to be satisfied that

(Continued on page 14)

persons undertaking assessments under these software programs are appropriately qualified to issue the assessments.

The Director of Building Control's *Certificate of Others Determination* dated 12 July 2004, lists the qualifications and expertise required by a person issuing an Energy Efficiency Certificate on which a building surveyor can rely on.

It has been reported to BSR that building surveyors are being requested to accept energy assessments of the star rating for houses which are simply written on plans without relevant

certification documentation or even details of the software program used being provided. It has also been reported that some energy assessments have been carried out using early demonstration models of the programs which would not comply with the ABCB Protocols as no output is able to be printed from the program.

These practices are unacceptable and inappropriate. Sufficient documentation must be provided to building surveyors to enable them to properly assess compliance with the energy efficiency provisions of the BCA.

General Information

CSIRO Appraisals

The CSIRO has recently advised that following the launch of the ABCB's CodeMark Scheme, a decision has been made to discontinue CSIRO Appraisals.

While no further Appraisals applications will be accepted by the CSIRO they have advised that they will support their existing appraisal holders during this period of transition to CodeMark.

The Appraisal Scheme will be phased out by the end of 2009.

Scoping Studies

The Commonwealth Department of Environment and Heritage has recently release two studies -

- Scoping Study to Investigate Measures for Improving the Environmental Sustainability of Building Materials
- Scoping Study to investigate measures for improving the Water Efficiency of Buildings

They are available for download from the Australian Greenhouse Office website at:

<http://www.greenhouse.gov.au>

For more information

The *Building Act 2000* and the *Building Regulations 2004* can be downloaded from <http://www.thelaw.tas.gov.au>

The Building Code of Australia (BCA 2007) can be purchased through the Australian Building Codes Board web site : www.abcb.gov.au or by calling 1300 857 522.

Further information can be obtained from Workplace Standards Tasmania Helpline
Phone: 1300 366 322 (inside Tasmania) or (03) 6233 7657 (outside Tasmania) or by FAX to (03) 6233 8338
or from: 30 Gordons Hill Road, Rosny Park, TAS 7018 or P O Box 56 Rosny Park, TAS 7018 Australia

Email: wstinfo@justice.tas.gov.au
Web site: www.wst.tas.gov.au/building

This document has been produced and published by Building Standards and Regulation of the Department of Justice . Although every care has been taken in the production of the work, neither the Crown in the right of the State of Tasmania nor any servant or agent of the Crown accepts responsibility for any loss or damage suffered at any time by any person as a result of any error or inaccuracy in the publication whether or not the error or inaccuracy has resulted from negligence or any other cause.