

## **Building Commission**

### **Standard Cost Model Report**

#### **Sustainability provisions for domestic alterations and re-erections.**

18 September 2007

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# 1 Introduction

The Building Code of Australia (BCA) 2006 introduced national performance measures for the energy efficiency of all Class 1 dwellings<sup>1</sup> including alterations to existing dwellings. This performance measure is most commonly met by achieving a 5 Star thermal performance for the building fabric.

In Victoria, alterations to existing Class 1 buildings are exempt from the requirement to comply with the national performance measure for energy efficiency. The current Victorian Addition requires a 2–3 Star standard approximately for thermal performance of the building fabric.

This report considers the proposal to remove the Victorian variation in the BCA 2008. This will align Victoria with the national energy efficiency standard. This amendment is intended to be incorporated in the BCA 2008 edition due to come into operation on 1 May 2008.

This report details the Standard Cost Model (SCM) undertaken in relation to the proposed amendment to the BCA by assessing the changes in administrative burden on business as a result of the proposed regulatory amendment. The proposed regulatory reforms are set out in Figure 1 below.

**Figure 1.1: Proposed Regulatory Reform**

Current regulation:	BCA Volume Two - Victorian Addition Vic 1 – Sustainability
Proposal:	Removal of the current Victorian addition which does not require alterations to meet the current national energy efficiency performance measures.
Regulation measured by the SCM:	Administrative burden to <i>business</i> arising from changes to business processing of Regulation 608 of the Building Regulations 2006.

This SCM report will be publicly disclosed via the Building Commission website, [www.buildingcommission.com.au](http://www.buildingcommission.com.au) for 60 days from the date of publication.

<sup>1</sup> The Building Code of Australia 2006 defines a 'Class 1 building' as:  
 "One or more buildings, which in association constitute—  
 (a) **Class 1a** — a single dwelling being—  
 (i) a detached house; or  
 (ii) one of a group of two or more attached dwellings, each being a building, separated by a *fire-resisting* wall, including a row house, terrace house, town house or villa unit; or  
 (b) **Class 1b** — a boarding house, guest house, hostel or the like—  
 (i) with a total area of all floors not exceeding 300 m<sup>2</sup> measured over the enclosing walls of the Class 1b building; and  
 (ii) in which not more than 12 persons would ordinarily be resident, which is not located above or below another dwelling or another Class of building other than a *private garage* "

## 2 Background

Under the *Reducing the Regulatory Burden* initiative, the Victorian Government made a commitment to cut the existing administrative burden of regulation by 15 per cent over three years and 25 per cent over five years.

Progress towards achieving targeted reductions in administrative burdens will be measured using the Standard Cost Model (SCM). The SCM was developed by the Dutch Government to provide a consistent method for estimating the administrative costs imposed on business by government.

The Standard Cost Model is designed to produce indicative estimates of burdens, and to develop a strong understanding of the drivers of these costs. However the SCM is not designed to provide statistically robust data.

### 3 Mapping the regulation

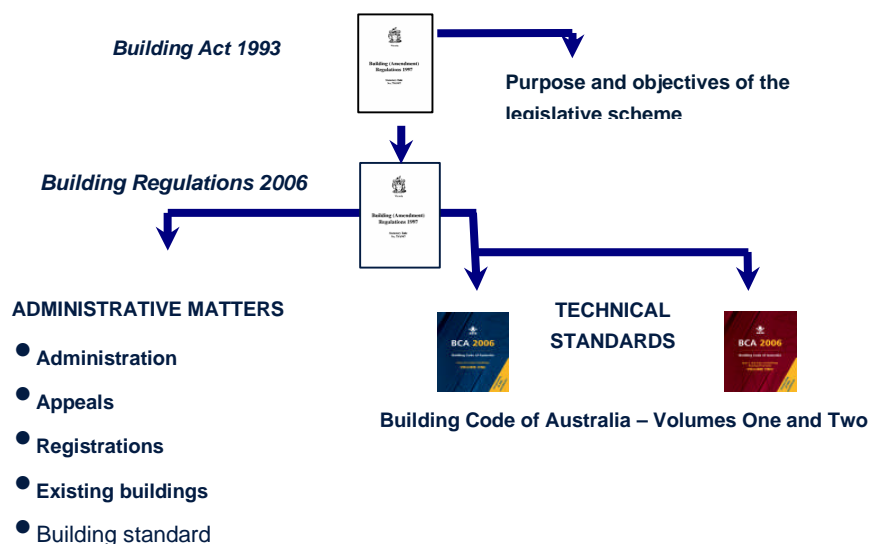
The BCA is given legal effect by legislation in each State and Territory. This legislation consists of:

- the administrative provisions necessary to give effect to the legislation; and
- subordinate legislation which regulates certain technical and amenity aspects of the construction of buildings and structures.

Each State and Territory adopts the BCA subject to the variation specific to that jurisdiction.

In Victoria, the BCA is adopted by and forms part of the Building Regulations 2006 (the Regulations). The legislative framework is detailed in Figure 2 below:

Figure 3.1: Building Legislative Framework in Victoria



## **Current Victorian Approach**

The BCA requires that all new dwellings achieve a minimum level of sustainable performance. Other than in Victoria, the national performance standard for energy efficiency applies to both new and existing Class 1 buildings. This requirement was introduced in the BCA 2006.

The current Victorian variation to Volume Two of the BCA allows for a lesser compliance level for alterations and re-erections; a 2-3 star performance level approximately.

## **Impact of Proposed Amendment**

The focus of the Standard Cost Model measurement is to assess changed requirements for *information* that businesses must provide to a Government department or agency as a direct consequence of the proposed regulatory reform. For this proposal, investigation of the administrative burden was focused on building surveyors (both private and municipal) as these professionals are responsible for administering the Act and Regulations.

In Victoria building surveyors are responsible for:

- Building Act 1993 compliance;
- compliance with the Regulations including the BCA, and
- monthly reporting to the Building Commission on building permits issued.

The proposed amendment will have no direct impact on the reporting requirements to the Building Commission, as sustainability details of a building design are not a mandated reporting matter. However, building permits, approved plans and other documents relating to the building approval and construction, process are required to be submitted to local government for record keeping. This latter requirement includes a consent for partial compliance for an alteration under regulation 608 of the Victorian Building Regulations 2006.

The process for assessing consents for partial compliance will be impacted by the proposed amendment. The following section details and quantifies the impact of this change and is the focus of the SCM measurement.

## **Partial compliance discretion**

With some minor exceptions, any proposed building work requires a building permit to be issued prior to the construction of the building. This applies to alterations to existing buildings. Building permits are issued by a registered building surveyor either at a council or in the private sector.

Checking plans and issuing a building permit before the building work starts ensures that the building, as it is proposed to be built, has met all the technical and amenity requirements of the Regulations.

When a building surveyor accepts an application for a building permit, it should be compliant with all applicable building standards. However, Regulation 608 allows building surveyors discretion to consent to *partial compliance* in relation to alterations to an existing building under certain conditions.

This discretionary power applies to all components of the Building Regulations, not just the energy efficiency provisions. Regulation 608 provides a mechanism for building surveyors to assess the impact of 'modern' regulations as they apply to an older existing building when alterations are proposed.

The Regulation provides discretion to allow partial compliance in relation to particular regulations if their impact is overly onerous or it provides minimal benefit compared to the implementation cost.

The discretion provided under the Regulations 608 is subject to certain considerations and is not applicable when the nature of the proposed building work exceeds certain criteria. For instance, when an alteration is a significant extension to an existing building (an extension to an existing building that exceeds 25% of the existing floor area or 1000m<sup>2</sup> which ever is the lesser) the new extension must comply with all relevant requirements and discretion for partial compliance is not an option.

The Building Commission's Practice Note No. 55 provides guidance to building surveyors, the building industry and consumers for the current situation regarding Regulation 608 and its application to energy efficiency matters. The Building Commission will issue an updated Practice Note prior to introduction of the proposed amendment.

The Practice Note will be updated to provide guidance and advice on the administration of Regulation 608 in relation to the proposed national energy efficiency standard. The Practice Note will not impact on the number of occasions a building surveyor determines to use their discretion under regulation 608, it merely provides guidance once that decision has been made. Nor will it add to any additional amount of time already identified by the survey to assess the consent as it will guide the surveyor through that process.

## **Current administrative burden faced by businesses**

The current administrative burden that results from the partial compliance consent process arising from Regulation 608 is outlined below.

When a building surveyor is asked to consent to partial compliance, they must undertake a number of tasks. This process is outlined as follows:

### *Mapping the process:*

The administrative process which the building surveyor undertakes in consenting to partial compliance might vary between different surveyors and jobs but the assessment method would consistently include the following:

- an assessment of the proposed design for compliance with the regulations will be undertaken. (This process is normal to the activity of a building surveyor when assessing plans with the intent of issuing a building permit and is not necessarily attributable to the process of agreeing to a partial consent. It will however identify all issues of non-compliance including those relating to sustainability, all of which are then conveyed to the applicant for action);
- the applicant will normally seek agreement from the surveyor to consent to partial compliance;
- the surveyor assesses the request against a test of 'reasonableness', that is, an assessment of the potential opportunity, cost and benefit of achieving full compliance is undertaken and a judgement made accordingly;
- the surveyor 'consents' to a level of partial compliance which is recorded in the fashion of that particular business; and
- all documents required to be lodged with the relevant council by the Regulations (including the recorded decision allowing partial compliance to regulations where the building work is an alteration), are forwarded to the council.

Where consent is given by a building surveyor for partial compliance this must be lodged with the relevant council as part of all other building permit documentation required by the Regulations. The council will then store this information and it will be archived until such time as someone requests it. The number of consents to partial compliance is not analysed by councils nor is it held by the Building Commission and as such there is no way to determine how many are issued each year.

### **Measuring the Administrative Burden**

From the five interviews conducted with building surveying firms the estimated number of annual domestic building permits for alterations or re-erections that currently require a consent for partial compliance to be provided under Building Regulation 608 varied considerably (Their answers specifically were 1%-2%, 40%, 2%-3%, 2% and 20%).

Due to the range of estimates, further consultation was undertaken with an industry expert. The industry expert consulted has worked in the building industry for over 30 years. He has experience working in the local government sector including as a Municipal Building Surveyor. He has had a professional association with one of the building industry Statutory Boards and is a director of one of Victoria's major private building surveying companies.

The industry expert estimated that the number of annual domestic building permits for alterations or re-erections that currently require a consent for partial compliance to be provided under Building Regulation 608 was currently 5%.

From the initial business interviews conducted and further consultation with the industry expert we assume for the purpose of this analysis that the number of annual domestic building permits for alterations or re-erections that currently require a consent for partial compliance to be provided under Building Regulation 608 ranges between 2% and 5%, excluding 20% and 40% as outliers.

For the interviews undertaken the time taken to assess an extension/alteration or re-erection and consent to partial compliance was estimated to be 45 minutes, based on an average charge out rate of \$200, the total administrative burden imposed on businesses as a result of this regulation is \$150 per partial compliance assessment.

If we assume from the data in Figure 3.2 that there is an average of 39,424 Class 1 domestic building permits each year for alterations and re-erections and of these 2%-5% require assessment and consent for partial compliance, the total administrative burden on businesses arising for this regulation is currently between \$118,272 and \$295,680 per annum

**Figure 3.2: Statistical data for the number of domestic building work permits**

Financial year	Extension / alteration	Re-erections
2006/2007	30,637	947
2005/2006	39,573	1,090
2004/2005	40,958	1,108
2004/2004	40,097	1,008
2003/2004	40,897	807
<b>Average</b>	<b>38,432</b>	<b>992</b>
<b>Total</b>	<b>39,424</b>	

Source: Pulse Building Commission website, [www.pulse.buildingcommission.com.au](http://www.pulse.buildingcommission.com.au)

## 4 Overview of the change to the administrative burden

From the business interviews undertaken and further consultation with an industry expert, it is expected that the number of *new* consents to partial compliance as a result of the BCA amendments will increase nominally but within the stated range. That is, 2%-5% of domestic building permits will require consent for partial compliance as with the existing Regulations.

However from the business interviews conducted, the general consensus was that although the number of *new* consents to partial compliance may only increase nominally the time taken to administer the process and consent to partial compliance will increase due to the existence of more stringent requirements. The impact of this increase is outlined in figure 4.1.

**Figure 4.1: Impact of proposed Regulation on businesses**

Information obligation	Proposed change	Net impact
Assess and consent to partial compliance under Building Regulation 608	Building surveyors will take an extra 20 minutes to assess and consent to partial compliance under the proposed Regulations	\$67 per consent for partial compliance (based on a wage rate of \$200 per hour)

*Note: The above estimates are based on data obtained via the business interviews (see appendix A).*

Figure 4.2 shows that the number of domestic building work permits for extension/alteration and re-erection is 39,424.

**Figure 4.2: Statistical data for the number of domestic building work permits**

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It is estimated that between 2%-5% of these permits require a consent to partial compliance, therefore, between 788 and 1,971 permits annually.

Using the data presented in figure 4.1 the estimated change to the regulatory burden as a result of the proposed Regulation would be as follows:

**Figure 4.3: Change to the administrative burden**

Task	Additional administrative burden imposed on businesses
Assess and consent to partial compliance under Building Regulation 608	Between: \$52,796 - \$132,057

### **Training requirements**

It is expected that training in the enhanced energy efficiency provisions for affected industry professionals will be incorporated into the Building Commission's current annual training and development program.

It is expected that this component of the training wouldn't taken more than an additional 15 minutes, assuming a wage rate of \$200 per hour and approximately 500 surveyors undertaking the training this would result in an estimated cost of \$25,000. As such, this has been treated as immaterial in this SMC analysis.

### **Overall change in administrative burden**

The proposed regulatory reform is designed to increase the energy efficiency (thermal performance) standard for alterations to existing housing from a nominal 3 Star level to the national standard in the BCA which is ordinarily achieved in Victoria by attaining a 5 Star building fabric level.

The overarching regulatory framework within which this energy efficiency standard is mandated remains unchanged. The information required to be reported to local government will not change. However the time taken to administer the process and consent to partial compliance will increase. This will impose an additional administrative burden on businesses in this industry. The additional burden is estimated to be between \$52,796 and \$132,057.

It is not expected that there will be any other additional administrative burden imposed by the proposed Regulations.

In summary, this SCM assessment has found that the total additional administrative burden that will result from the proposed changes is between \$52,796 and \$132,057.

It is important to note that the main source of this burden results from building surveyors requiring additional time to assess and consent to partial compliance which will result from more stringent requirements imposed by the proposed Regulation. However, a number of the businesses interviewed commented that they expected that this time and therefore cost will reduce over the medium term as they become more familiar with the new requirements.

## 5 Summary of SCM measurement exercise

### Empirical data collection methodology

To fully understand, and attempt to quantify, the cost impacts of the change, information was collected via telephone interviews with five building surveying firms in order to assess the potential administrative costs which might ensue.

Interviews with five Building Surveying firms in the private sector were conducted between 31 July and 11 September 2007. The size of the businesses which were the subject of the interviews ranged between 6-20 persons. The results of these interviews can be found in appendix A

From the survey of these five businesses there is no evidence to suggest that there are any segmentation issues. Charge rates of all five businesses were similar as were the estimated times that it would take a building surveyor to assess various different types of alterations (see appendix A).

### Empirical data standardisation process

Based on the information provided in the business interviews a standardisation process was undertaken to determine how long it takes or how much it costs a 'normally efficient business' to undertake the various administrative tasks. Generally the average of the responses (excluding outliers) has been assumed to represent the normally efficient business, this is outlined below.

**Figure 5.1: Current partial compliance assessment:**

Business	Data
Business 1	2-3 hours
Business 2	30 minutes
Business 3	45 minutes
Business 4	1 hour
Business 5	1 hour

For this analysis the time taken for a normally efficient business to complete a partial compliance assessment under existing Regulation is assumed to be 45 minutes. Business 1 appears to be an aberration and thus has been treated as an outlier.

**Figure 5.2: Additional time required for a partial compliance assessment with proposed changes:**

Business	Data
Business 1	2-3 hours
Business 2	15 minutes
Business 3	10 minutes
Business 4	No answer
Business 5	30 minutes

For this analysis the additional time taken for a normally efficient business to complete a partial compliance assessment following the proposed amendment to the regulations is assumed to be 20 minutes, again treating business 1 as an outlier.

**Figure 5.3: Per consent charge**

Business	Data
Business 1	\$300
Business 2	\$0
Business 3	\$200
Business 4	\$150
Business 5	\$100

For this analysis the 'per consent' charge of a normally efficient business is assumed to be \$150

**Figure 5.4: Hourly rates charged by businesses**

Business	Data
Business a	\$175
Business b	\$200-500
Business c	\$100-300
Business d	\$125
Business e	\$250

*Source: Interviews undertaken by Sam Ledger Consulting 2007.*

For this analysis the average hourly rate charged by a normally efficient business for consenting to partial compliance is assumed to be \$200 (approximate average of the estimates in Figure 5.4 above).

Of the original five businesses surveyed, not all were able to provide cost information on a hourly basis. Therefore, to increase the sample size, additional businesses were included and estimates provided are detailed in Figure 5.4 above.

**Figure 5.5: The number of domestic building work permits for alterations/re-erections that require a consent for partial compliance**

Business	Data
Business 1	1-2%
Business 2	40%
Business 3	2-3%
Business 4	2%
Business 5	20%
Industry expert	5%

For this analysis number of domestic building work permits for alterations/re-erections that require a consent to partial compliance for a normally efficient business is assumed to be within the range of 2%-5%, excluding 20% and 40% as outliers.

