# Guideline

For assessing buildings with combustible cladding

VERSION 3 NOVEMBER 2019



# **Table of Contents**

1.	. Background1					
2.	. Scope					
		e				
	_	tatus of this guideline				
5.	Definit	ions and terms used in this guideline	3			
	5.1	Abbreviated terms	3			
	5.2	General terms	3			
		Definitions found in Part 4A of the Regulation	4			
	5.4	Definitions found in other materials	7			
6.	Applica	ation of the Regulation	8			
	6.1	Which buildings don't require registration?	8			
	6.2	Which buildings are captured by Part 4A of the Regulation?	8			
	6.3	Detailed information about the criteria for in-scope buildings	9			
	6.3.1	The building is of class 2 to 9	9			
	6.3.2	The building is of type A or type B construction	9			
	6.3.3	The building was built or cladding was altered within the specified period	10			
	6.3.4	The building is privately-owned	10			
7.	Registe	ering a building	12			
	7.1	How will I know to register?	12			
	7.1.1	Notification by letter	12			
	7.1.2	Notification through media advertising	12			
	7.2	How do I register?	12			
	7.3	When do I have to register by?	12			
8.	Overvi	ew of the Regulation	13			
	8.1	The combustible cladding checklist	13			
	8.1.1	Combustible cladding checklist – Parts 1, 2 & 3	14			
	8.2	Obligations imposed by the online system	16			
	8.2.1	What obligations are imposed on building owners?	16			
	8.2.2	What obligations are imposed on building industry professionals?	20			
	8.2.3	What obligations are imposed on fire engineers?	20			
	8.3	Administrative matters	21			
	8.3.1	Change of ownership [s.16ZC to s.16ZG]	21			
	8.3.2	Extensions of time $[s.16Q(2),(3),(4), s.16T(3),(4),(5), s.16W(2),(3),(4) \& s.16X(4),(5),(6)]$	22			
	8.3.4	Responsibility for acts and omissions of agents [s.16ZO]	22			
	8.3.5	Penalties [Generally]	22			
	8.3.6	Order to obtain various statements and BFSRA [s.16ZJ, 16ZK & 16ZL]	22			
	8.3.7	Notice about compliance period [s.16ZM]	23			
	8.4	Other important regulatory matters	23			

# Guideline for assessing buildings with combustible cladding

	8.4.1	Giving documentation to the QBCC	23
	8.4.2	Further explanation relating to affected private buildings	24
	8.5	Replacing an original checklist	26
9.	Inform	ation to assist building owners to complete the checklist	28
	9.1	Completion of combustible cladding checklist Part 1 (Questions 1 to 4)	28
	9.2	Completion of combustible cladding checklist Part 2 (Questions 5 and 6)	39
	9.3	Completion of combustible cladding checklist Part 3 (Questions 7 to 10)	40
10	. Inforr	nation for building industry professionals	43
	10.1	Engagement as a building industry professional	43
	10.2	Completion of the building industry professional statement	44
	10.3	Regulatory obligations	44
	10.4	About the Questions	45
11	. Inforr	nation for fire engineers	51
	11.1	Engagement as a fire engineer	51
	11.2	About the building fire safety risk assessment (BFSRA)	52
	11.2.1	BFSRA Component 1	53
	11.2.2	BFSRA Component 2	54
	11.2.3	BFSRA Component 3	59
	11.2.4	BFSRA Component 4	60
	11.3	Completion of the fire engineer statement	62
	11.4	Regulatory obligations	62
12	. Cladd	ing Materials Library	63
	12.1	Materials sampling	64
۸	n a n aliv	. ^	6F

# 1. Background

Building design innovations over the past two decades have seen new building materials enter the Australian market. Of note are the developments made in cladding products for use on the external walls of buildings.

Larger buildings are traditionally designed to contain fire spread by a combination of active and passive means. However, fire events throughout the world have provided graphic examples of the rapid and extensive fire spread possible when a building fire involves external walls incorporating combustible materials. The behaviour of these fires has challenged the traditional understanding of fire spread in buildings.

Investigation of the use of combustible materials in external walls has shown these materials can contribute significantly to fire growth resulting in:

- fire spread to other areas in the building (beyond the original intended area of containment) more rapidly than expected
- fire spread overwhelming the fire safety systems provided in the building more rapidly than expected
- falling debris hazards
- degradation of material leading to combustible material dripping or detaching while flaming causing secondary fires or burn hazards.

These events have given rise to heightened community concerns over the risks posed to building occupants and responding emergency personnel. In response, the Queensland Government has introduced changes to the *Building Regulation 2006* which commenced 1 October 2018. These changes require owners of particular buildings to undertake an assessment of the material used on the external walls of their building. This will identify which buildings are affected by *combustible cladding* and whether cladding rectification work is likely to be required to achieve an acceptable level of safety.

# 2. Scope

The scope of this guideline is limited to matters relevant to the changes to the *Building Regulation 2006* (the Regulation) introduced by the *Building and Other Legislation (Cladding) Amendment Regulation 2018*, the *Building (Cladding) Amendment Regulation 2019* and the *Building and Other Legislation Amendment Regulation 2019*.

The content of this guideline cannot be used to inform the application of legislation other than that noted above, or the assessment of building development applications submitted on or after 1 October 2018. For these building development applications the relevant BCA assessment provisions should be applied.

#### **NOTE:**

Information relating to Parts 1 and 2 of the Combustible Cladding Checklist is retained in this revision of the guideline to inform the replacement checklist process introduced in the *Building and Other Legislation Amendment Regulation 2019*. Refer to section 8.5 of this guideline for further information.

# 3. Purpose

The purpose of this guideline is to provide owners of particular *private buildings* (or their authorised agents – see 8.3.3 and 8.3.4 of this guideline for information about authorised agents), building industry professionals and fire engineers with information on how to meet their respective obligations under the Regulation to complete the *combustible cladding checklist*.

Information obtained from the combustible cladding checklist will:

- give building owners the necessary information to make informed decisions about any fire safety risks associated with their building due to the materials used in the external walls
- inform future policy decisions to address potential risks associated with combustible cladding.

The information in this document supplements and extends the guidance material contained on the Safer Buildings website established for the administration of Part 4A of the Regulation.

# 4. Legal status of this guideline

This guideline is made under section 258 of the *Building Act 1975* which provides for guidelines to be made to help achieve compliance with the Act.

Sections 16Q to 16ZG of the Regulation set out the responsibilities of owners of a *private building* (including a *new owner*).

The information contained in this guideline can assist the building owner with compliance with the Regulation. However, owners are required to comply with the Regulation, despite the content of the guideline. Owners should not assume that compliance with the guideline will be compliance with the Regulation.

Section 16ZH of the Regulation sets out the obligations of engaged *building industry professionals* and Sections 16ZHA and 16ZI of the Regulation set out the obligations of engaged *fire engineers*.

Building owners of an in-scope *private building* are required to engage these practitioners to provide formal statements (in the respective approved forms) and a report (fire engineer) that will allow the building owner to complete Parts 2 and 3 of the *combustible cladding checklist*.

# 5. Definitions and terms used in this guideline

A number of definitions and terms used in this guideline have special meanings. They can be grouped as follows:

- abbreviated terms used in this guideline
- general terms used in this guideline
- definitions as contained in Part 4A, section 16O and other sections of the Regulation
- definitions found in other materials.

# 5.1 Abbreviated terms

Act means the Building Act 1975.

Regulation means the *Building Regulation 2006*.

BCA where the term appears in this guideline means the *Building Code of Australia 2016 - Volume 1*Amendment 1 which is part of the *National Construction Code* unless the context suggests otherwise.

**BFSRA** means a building fire safety risk assessment.

# 5.2 General terms

Explanation of these terms is included only to further inform guideline users. Where similar or identical terms are defined in legislation then the legislated definition shall take precedence and apply in the context of the relevant legislative requirements.

## What is cladding?

Cladding is a skin or covering attached or applied to the external wall (outside) of a building to protect the building from the effects of weather. Usually cladding will be non-loadbearing (that is, not supporting any structural building loads but able to withstand applied wind loads). It may also contribute to the sound and thermal insulation of a building.

A key feature is the aesthetic appeal of cladding. It is often used to improve the appearance of buildings. Other characteristics of note include the malleability (ability to bend or shape the material) and light weight properties of some types of cladding. The terms 'façade' or 'façade covering' can also be used in lieu of 'cladding'.

Cladding can be installed by fixing the material directly to a support frame on the building or as part of a composite (manufactured) unit comprising the cladding material, a frame and a backing sheet or back pan.

There are many different types of cladding products available and some of these are further discussed in the commentary in this guideline (see section 9.1 of this guideline, Question 4).

# What is cladding rectification work?

Building work undertaken to an *affected private* building to reduce the *cladding fire risk*.

## What is an external wall?

An *external wall* is the outer wall of a building. In the BCA, clause C1.9(a)(i) extends the term to include all components incorporated in the external wall including the façade covering, framing and insulation.

# What is an external wall assembly?

**External wall assembly** is an all-inclusive term referring to all components in the external wall:

- the cladding material including its framing system and fixing method
- any spandrel or other internal wall located behind the external cladding
- any insulation/sarking material(s) installed
- any cavities and cavity barriers incorporated within the external wall.

# What is meant by the term 'in-scope building'?

An *in-scope building* is a *private building* that requires registration and assessment under the Regulation.

# 5.3 Definitions found in Part 4A of the Regulation

The following terms, contained in Part 4A of the Regulation, are often used in this guideline.

It is important to understand that the precise meaning of any defined term must be determined in the context of its use in the Regulation.

In instances where a defined term found in Part 4A of the Regulation is cited in this guideline, it will be *italicised* for easy identification.

Some defined terms in the Regulation do not provide a meaning but instead cross-reference the relevant section of the Regulation where the term is talked about in further detail.

An example of this is the term 'building fire safety risk assessment'. This guideline will follow a similar protocol and, where applicable, will refer to that part of the guideline where the term's meaning is further explained.

In the Regulation –

affected private building means a private building that has combustible cladding forming part of, or attached or applied to, an external wall or another external part of the building other than the roof.

approved way, for giving the QBCC a document, means-

- (a) using the online system to give the document to the QBCC; or
- (b) if the QBCC Commissioner approves another way for giving the document to the QBCC and publishes the way on the QBCC's website giving the document to the QBCC in the way approved.

Refer to section 8.4.1 of this Guideline for more information on this term.

**building fire safety risk assessment** (also referred to as the BFSRA) has its meaning detailed in section 11 of this guideline.

# building industry professional -

- (1) A building industry professional is -
  - (a) a building certifier level 1; or
  - (b) a person who holds a license of 1 or more of the following classes under the QBCC Act –
    - (i) builder open;
    - (ii) building design open;
    - (iii) fire safety professional; or
  - (c) a practising architect under the *Architects Act 2002;* or
  - (d) a practising professional engineer under the Professional Engineers Act 2002 registered in 1 or more of the following areas of engineering –
    - (i) civil engineering;
    - (ii) fire engineering;
    - (iii) fire safety;
    - (iv) structural engineering.
- (2) Also, for a private building that is no more than 3 storeys and has a total floor area of less than 2,000m<sup>2</sup>, a *building industry* professional includes
  - (a) A building certifier level 2; and
  - (b) A person who holds a license of 1 or more of the following classes under the QBCC Act –
    - (i) builder medium rise;
    - (ii) building design medium rise.

**building industry professional statement** has its meaning detailed in section 10 of this guideline.

cladding fire risk, for a private building, means a risk of injury or illness happening to a person-

- (a) arising from fire or smoke, or falling debris related to a fire, at the building; and
- (b) relating to cladding forming part of, or attached or applied to, an external wall or another external part of the building other than the roof.

#### **NOTE:**

For the purposes of this Regulation, a cladding fire risk is established when a fire engineer has determined through a BFSRA assessment, that the fire performance of the external wall assembly, in the event of a fire at the building, will contribute to the **defeat** of one or more aspects of the building's fire strategy. To further clarify, if the BFSRA and the subsequent fire engineer statement inform:

- a defeat of one or more aspects of the building's fire strategy (i.e. the answer to Q8b = YES), then this means that the building has a cladding fire risk; or
- doubt as to whether one or more aspects of the building's fire strategy will be defeated, (i.e. the answer to Q8b = FURTHER FIRE ENGINEERING ASSESSMENT IS REQUIRED), then this means that the building has a cladding fire risk; or
- no defeat of one or more aspects of the building's fire strategy (i.e. the answer to Q8b = NO), then this means the building does not have a cladding fire risk

Further information about this term is contained in sections 8.4.2, 9.3 and 11.2.2 of this guideline.

combustible cladding means cladding that -

- (a) is made of a material of a kind that is not mentioned in the BCA, clause C1.9(e)(i),(ii), (iii), (iv) or (v); or
- (b) is deemed to be combustible under AS1530.1-1994 (Methods for fire tests on building materials, components and structures, Part 1: Combustibility test for materials), sections 3.4(a), (b) or (c).

#### NOTE:

For the purpose of assessing combustible cladding under the Regulation, BCA2016 (Vol 1 Amdt 1) clause C1.9(e)(vi) has been deliberately excluded from subclause (a) of the definition of combustible cladding in section 160. This means that the ability to consider bonded laminated materials as suitable for use as a *deemed-to-satisfy solution* where non-combustible material is required no longer applies.

For clarity, bonded laminated materials will be deemed as combustible unless they can satisfy the requirements of AS1530.1-1994.

It is necessary that building industry professionals and fire engineers engaged by building owners give due regard to these changes when preparing their prescribed statements.

combustible cladding checklist (part 1) means the checklist of that name on the online system.

combustible cladding checklist (part 2) means the checklist of that name on the online system.

combustible cladding checklist (part3) means the checklist of that name on the online system.

completed for a checklist, means -

- (a) the checklist is filled out on the online system by the building owner; and
- (b) the filled-out checklist is -
  - (i) printed; and
  - (ii) signed and dated by the building owner in the presence of a qualified witness; and
  - (iii) signed and dated by the qualified witness.

**fire engineer** means a practising professional engineer under the *Professional Engineers Act 2002* registered in either or both of the following areas of engineering –

- (a) fire engineering;
- (b) fire safety.

*fire engineer statement* has its meaning detailed in section 11 of this guideline.

*Fire safety risk mitigation measure,* in relation to a private building, means a measure that reduces the risk of -

- (a) a fire at the building; or
- (b) injury or illness to a person arising from a fire at the building.

#### Examples-

- immediate, or more frequent, servicing and maintenance of the fire safety system of a building
- the removal of vegetation, vehicles or other flammable things from a building
- the removal of material forming part of, or attached to, an external wall or another external part of a building
- the carrying out of emergency evacuation drills
- partial or complete evacuation of a building

*leasehold interest holder*, for a lot in a private building, means a person who holds a leasehold interest in the lot.

**lot owner**, for a lot in a private building, means a person mentioned in schedule 2, definition *owner*, of a building or structure, paragraphs (a)(i), (b)(i), (c)(i), (d)(i) or (e)(i) of the Act.

**new owner,** for a private building, means the person who owns the building immediately after ownership of the building changes.

online system means the online system established by the department for the administration of this part. Note: The website containing the online system is www.saferbuildings.qld.gov.au.

# private building means a building -

- (a) that is-
  - (i) a class 2, 3, 4, 5, 6, 7, 8 or 9 building; and
  - (ii) of a type A or type B construction; and
- (b) for which a building development approval was given, after 1 January 1994 but before 1 October 2018, for building work –
  - (i) to build the building; or
  - (ii) to alter the cladding on the building; and
- (c) that is owned by-
  - (i) only 1 or more private entities; or
  - (ii) 1 or more private entities and 1 or more other entities, if the private entities jointly hold more than 50% interest in the building.

# private entity means an entity that is not -

- (a) The State, the Commonwealth, or another State; or
- (b) An agent, authority, instrumentality or other entity of the State, the Commonwealth, or another State.

**proof of agency document**, for an agency, means a document, in the approved form, evidencing the agent's authority to act for the owner.

**QBCC investigator** means an investigator appointed under the *Queensland Building and Construction Commission Act 1991*, section 104B.

*qualified witness* means a person mentioned in the *Oaths Act 1867*, section 13(1)(a), (b) or (c).

**relevant local government,** for a private building, means the local government in whose local government area the building is situated.

relevant provision means section 16Q(1), 16T(1), 16W(1) or 16X(1).

# 5.4 Definitions found in other materials

These following terms originate from or are defined in legislation or codes, for example, in the Act or the BCA.

Any explanation of these terms within this guideline is provided to assist and inform users. The meaning of any of these terms shall remain consistent with the definition found in and the context of the source legislation or codes unless this guideline indicates otherwise.

**building class** or **classification** is based on the use(s) present in a building and is determined in accordance with the BCA, Part A3. More information on building class is given in section 9.1 of this guideline.

**deemed-to-satisfy provisions** means provisions which are deemed to satisfy the *performance requirements*.

**deemed-to-satisfy solution** means a method of satisfying the *deemed-to-satisfy provisions*.

**performance requirement** means a requirement which states the level of performance which a performance solution or deemed-to-satisfy solution must meet.

**performance solution** means a method of complying with the *performance requirements* other than by a *deemed-to-satisfy solution*.

**type of construction** means the minimum type of fire-resisting construction required for a class 2 to 9 building.

**type A construction** means the type of construction referred to as Type A construction in the BCA, part C1 and Specification C1.1.

**type B construction** means the type of construction referred to as Type B construction in the BCA, part C1 and Specification C1.1.

# 6. Application of the Regulation

This section provides an overview of which buildings the Regulation will apply to.

# 6.1 Which buildings don't require registration?

Building owners do not have to register using the online system if their building is:

- a private, single detached dwelling (commonly referred to and used as a single dwelling or house)
  used for residential purposes (a class 1 building which is not located above or below another
  dwelling, or another class of building other than a private garage), or
- one of a group of two or more private attached dwellings situated side by side to another attached dwelling (commonly class buildings referred to and used as a duplex, townhouse or row housing), or
- a private carport/garage or shed used in association with a dwelling (a class 10a building).

More information is given in section 9.1 of this guideline.

# 6.2 Which buildings are captured by Part 4A of the Regulation?

Part 4A of the Regulation applies to a building:

- that is a class 2 to 9 building, and
- that is of type A or type B construction, and
- for which a building development approval was given, after 1 January 1994 but before 1 October 2018, for building work to build the building or to alter the cladding on the building, and
- that is privately-owned.
- These criteria are discussed in more detail in section 6.3 of this guideline.

## How have existing buildings been captured to require assessment using the online system?

To effectively gauge the extent of affected buildings in Queensland, provisions have been included in the Regulation to ensure all in-scope buildings are captured.

Part 4A, section 16N(1)(a) of the Regulation clarifies that existing private buildings, regardless of the fact that they were previously given a building development approval under the Act, are to comply with Part 4A of the Regulation. Part 4A, section 16N(1)(b) of the Regulation further clarifies that existing private buildings, regardless of the fact that the building development approval relied upon a current *recognised certificate* (such as a *certificate of conformity* as prescribed under section 51(2) of the Regulation), are to comply with Part 4A of the Regulation.

This means that previous acceptance of *combustible cladding* on the basis of a CodeMark or similar certificate (either as a means of meeting a Deemed-to-Satisfy (D-t-S) provision or as 'product verification' under any "Evidence of Suitability" provisions) does not exclude the building from assessment using the *online system*.

# Why have these buildings been captured?

The use of *combustible cladding* on buildings is a safety concern for all Queenslanders. The Regulation has been amended to provide a framework to identify which private buildings in Queensland are affected by combustible cladding. Buildings meeting the above criteria are within the scope of the Regulation's application and require assessment.

The identification of buildings with combustible cladding will:

- inform building owners that their building may present a safety risk due to the materials used in the external walls, and
- place Queensland in a position to be responsive in ensuring safe building standards are developed to address potential risks associated with combustible cladding.

# 6.3 Detailed information about the criteria for in-scope buildings

Building owners must register their building and complete an assessment using the *online system* if their building meets **all** of the following characteristics.

# 6.3.1 The building is of class 2 to 9

Part 4A of the Regulation only captures buildings that are of class 2 to 9 as defined under the BCA.

The classification of a building is determined by the purpose for which it is designed, constructed and adapted to be used. A building may have one or more classifications.

More information is given in section 9.1 of this guideline.

# 6.3.2 The building is of type A or type B construction

Part 4A of the Regulation only captures buildings that are of type A or type B construction as defined under the BCA.

## How will the Regulation do this?

The Regulation requires owners of buildings captured under Part 4A of the Regulation to register and complete an assessment using the *combustible cladding checklist*. The *combustible cladding checklist* is accessed through a secure *online system* hosted at <a href="www.saferbuildings.qld.gov.au">www.saferbuildings.qld.gov.au</a>. This will guide building owners through the process to determine if their building has combustible cladding.

Section 8 of this guideline provides further information about the website.

## How do I determine the class and type of construction for a building?

To determine the building class and type of construction requires some knowledge of the BCA. To assist building owners, the first part of the *combustible cladding checklist* will determine this information based on the answers provided to the first four questions. Buildings that do not meet the required characteristics will not have to proceed past the first part of the process.

Alternatively, the following information may be available to inform building owners:

- building development application and approval information
- building plans and specifications
- building operation and maintenance manuals
- Certificate of Classification for the building.

# 6.3.3 The building was built or cladding was altered within the specified period

Part 4A of the Regulation only captures buildings where a building development approval was issued for the building's initial construction or to alter the cladding after 1 January 1994 and before 1 October 2018. This includes buildings that have not commenced construction or are in the process of being constructed on 1 October 2018.

# 6.3.4 The building is privately-owned

Part 4A of the Regulation only captures buildings that are privately-owned. A building is privately-owned when one or more private entities hold registered interests over the building. A *private entity* does not include the Commonwealth or State nor their agent, authority, instrumentality or the like that may represent on their behalf. Buildings owned by local governments are considered privately-owned.

Privately-owned buildings may require to be registered using the *online system*.

# Am I a private building owner?

Only a building owner or their authorised agent can register and use the *online system*. For the purposes of Part 4A of the Regulation, an owner is:

- Where the building and land is owned by the same private entity or entities; the private entity or entities are the owner of the building and responsible to register. Only one entity need register.
- Where the building owner is a different entity to that of the entity owning the land upon which the building is situated, the entity owning the building is considered the owner responsible to register.
- Where there are multiple buildings on a site, each entity owning a building is the owner of that building and is responsible to register.
- Where there are multiple lots over a parcel of land, for example apartments, the body corporate is considered to be the owner of the building and is responsible to register.

- Where there are multiple bodies corporate involved over a site, the principal body corporate for a building is responsible to register the building.
- Where a local government is the owner of the building, the relevant local government is responsible to register.
- Where there is more than one entity owning the building, the building is considered a privately-owned building where the joint private holdings exceed more than 50 percent interest in the building.

**NOTE:** Where an authorised agent is representing an owner, the owner is responsible for the registration and the completion of the *combustible cladding checklist*, notwithstanding the tasks being undertaken by the agent. Section 8.3.3 of this guideline contains further information on this requirement.

# What if I am a building owner who lives interstate or overseas?

Owners of private buildings in Queensland who live interstate or overseas still have to register on the Safer Buildings website and complete the assessment process. An agent can be engaged to act on the owners behalf to undertake this process. Authorisation for this is required and the steps for this process are outlined in 8.3.3 of this guideline.

# What if I am selling my building?

Up until the point where a change in ownership occurs, an owner is still responsible to register. Further information on this is provided in 8.3.1 of this guideline.

# Can I seek expert advice prior to registering?

Prior to registration building owners may seek expert assistance to help determine whether their building requires registration and assessment using the *online system*. However, If the building meets all four of the above characteristics, the Regulation requires that the building must be registered and assessed.

# 7. Registering a building

The following provides further information relating to the registration process. Other relevant information is also contained in sections 6, 8 and 9 of this guideline.

# 7.1 How will I know to register?

# 7.1.1 Notification by letter

Owners of identified buildings may be provided with a notice (letter) from the Queensland Building and Construction Commission (QBCC) advising that their building may require registration. These buildings were identified using a range of databases and it is possible that some owners of in-scope buildings may not receive a letter.

# 7.1.2 Notification through media advertising

The government has undertaken an awareness campaign through print media across Queensland and in some nationwide publications. The government is also working with industry bodies to keep their members informed. If you think your building may be in-scope, or if you would like more information, refer to the Safer Buildings website.

# 7.2 How do I register?

Registration is available through <a href="www.saferbuildings.qld.gov.au">www.saferbuildings.qld.gov.au</a>. To register as the building owner or as their agent, an email address and a password will need to be provided to create an account. To ensure the security of the account, users will be required to verify their details.

Following this, the details of the property can be added to the account. Building-specific data will also be required. Note that where there are multiple buildings on the site, information will be required for each building including a unique name for easy identification.

# 7.3 When do I have to register by?

Buildings identified in section 6.2 of this guideline must be registered and complete Part 1 of the *combustible cladding checklist* by 29 March 2019.

Building owners are encouraged to register their building as soon as possible to give enough time to complete all the necessary components of Part 1.

# 8. Overview of the Regulation

# The Regulation:

- identifies which buildings are captured for assessment
- establishes an *online system* to register and complete the *combustible cladding checklist* (see section 8.1 of this guideline)
- sets out responsibilities required of relevant parties to the assessment process (see section 8.2 of this guideline)
- identifies that buildings must be assessed regardless of there being a previous building development approval for building work under which cladding was included in, or attached or applied to, the building, or
- a current recognised certificate for cladding that is included in, or attached or applied to, the building (see section 6.2 of this guideline), and
- provides for administrative matters required to support Part 4A of the regulation (see section 8.3 of this guideline).

# What is the Safer Buildings website?

The Safer Buildings website at <a href="www.saferbuildings.qld.gov.au">www.saferbuildings.qld.gov.au</a> contains the *online system* established for the administration of Part 4A of the Regulation. The website includes a three-part checklist (the *combustible cladding checklist*) which must be used to assess whether buildings have combustible cladding.

The Regulation requires owners of *private buildings* to register with the *online system* for this purpose.

# 8.1 The combustible cladding checklist

The Safer Buildings website includes the *combustible cladding checklist* which is shown graphically in Figure 1. This figure also shows the key compliance dates associated with Part 4A of the Regulation.

The *combustible cladding checklist* is an assessment tool developed to enable *private building owners* to identify whether or not their building is affected by combustible cladding.

# How does the combustible cladding checklist help the building owner make this assessment?

The *combustible cladding checklist* comprises 10 questions grouped into three parts. The building owner is responsible for completing the checklist using the *online system*, although an agent can be authorised to complete the checklist.

The technical complexity and level of assessment required increases as building owners progress through each part of the checklist. Therefore, the Regulation requires building owners to engage a building industry professional and fire engineer respectively to assist with Parts 2 and 3 of the combustible cladding checklist.

As the building owner moves through the *online system*, and depending upon the data provided, there will be various points where the system may automatically determine that no further assessment is required.

To complete each part of the checklist, the building owner will be required to download, sign (before a witness) and upload a declaration for each building.

# 8.1.1 Combustible cladding checklist – Parts 1, 2 & 3

# ART 1

# This part comprises four questions based broadly on the requirements of the BCA.

- The questions have been developed so that building owners are able to provide responses about their building that indicate if the building may be affected by combustible cladding and therefore require further assessment using a subsequent part of the *combustible cladding checklist*.
- These questions will assist in determining if the privately-owned building is class 2 to 9, its approximate size, the number of levels in the building and what materials have been used on the outside of the building (where known).
- There are multiple sources of information available to assist owners with completing this part of the *combustible cladding checklist*. In addition to this guideline, links are provided to factsheets and relevant explanatory information is provided within the website.
- An owner may also choose to seek advice from a *building industry professional* at this stage to assist with, for example, measuring floor areas or determining levels.

# This part comprises two questions, questions 5 and 6.

- These questions require a deeper knowledge and understanding of the BCA requirements and require a *building industry professional* to be engaged to assist the owner. The *building industry professional* will confirm the information provided by the owner in Part 1 and complete the approved form required for Part 2 (*building industry professional statement*).
- The questions in this part have been developed so that the building industry professional can
  provide the owner with responses that indicate if the building may be affected by combustible
  cladding.
- The owner will then rely on the information in the approved form to complete Part 2 of the combustible cladding checklist using the online system.
- The *online system* will use the responses to these questions to determine if a building can exit from the process or must proceed to Part 3 of the checklist as the building may be an *affected private building*.

# This part comprises four questions, questions 7, 8, 9 and 10.

- These questions require specialist knowledge and the application of fire engineering principles.
- The owner is required to engage a *fire engineer* to provide the necessary technical assessment and information required to answer these questions. The owner will then rely upon the *fire engineer's* report and information in the approved form (*fire engineer statement*) to complete this part of the *combustible cladding checklist* using the *online system*.
- NOTE: There are two components to this part of the combustible cladding checklist:
  - A. engagement of a fire engineer
  - B. completion of Part 3 of the checklist.
- The questions in this part have been developed so that the *fire engineer* can provide the owner with responses informing about whether or not their building is an *affected private building*.
- The *online system* will use the responses to these questions to determine if the building can exit from the process, or if it is considered an *affected private building*.

# **ART 2**

# ART 3

# **COMBUSTIBLE CLADDING CHECKLIST**

www.saferbuildings.qld.gov.au

## **REGULATION COMMENCES 1 October 2018**

REQUIRED



# Combustible Cladding Checklist Part 1

- Register your building on the website
- Complete questions 1 to 4

To be completed by 29 March 2019



Building Industry Professional

# Combustible Cladding Checklist Part 2

- · Engage a Building Industry Professional
- · Complete questions 5 and 6
- · Upload a Building Industry Professional Statement

To be completed by 31 July 2019



IF REQUIRED



# Combustible Cladding Checklist Part 3(A)

- Engage a Fire Engineer
- Give details to QBCC using the Safer Buildings website

To be completed by 31 October 2019





# Combustible Cladding Checklist Part 3(B)

- Complete questions 7 to 10
- Upload a Fire Engineer Statement
- · Upload a Building Fire Safety Risk Assessment

To be completed by 3 May 2021

The Combustible Cladding Checklist has 3 parts. Building owners may not have to complete all 3 parts. Where no combustible external cladding has been used, building owners can exit after part 1. The Safer Buildings website will indicate whether you need to complete parts 2 and 3 of the checklist.

FIGURE 1: Combustible Cladding Checklist

# 8.2 Obligations imposed by the online system

Certain activities (steps) must be *completed* by the building owner, the *building industry professional* and the *fire engineer* (the parties to this process).

To further describe the process, the following subsections outline the obligations imposed by the regulation and what steps each party must undertake to complete the *combustible cladding checklist* process.

# 8.2.1 What obligations are imposed on building owners?

The obligations outlined in this section of the guideline (section 8.2.1) relate to the provisions contained in Part 4A, Division 2, Subdivisions 1, 2, 3 and 4 of the Regulation.

#### **NOTE:**

The *Building and Other Legislation Amendment Regulation 2019* introduced changes that now require building owners to give certain checklists, forms or other documents to the QBCC in the *approved way*. This new provision allows the QBCC Commissioner to approve another way for giving documents to the QBCC (as an alternative to "using the online system" – the only way stipulated in the previous requirements).

Where applicable, these changes are identified in the following steps by the inclusion of "or by another approved way" in the relevant location. Also, refer to section 8.4.1 of this guideline for further information.

# Combustible cladding checklist (Part 1)

- A building owner must register their building by using the *online system* in the manner described in section 7 of this guideline. If the site contains more than one building, each building that is captured by the Regulation must be identified by its unique name in the building owner's account.
- 2) After registering and prior to commencing the combustible cladding checklist Part 1 questions, the building owner will be asked by the online system if the building was built or had its cladding altered after 1 January 1994 and before 1 October 2018. If the building owner answers 'NO', the online system will automatically refer the building owner to a Statutory Declaration to be completed and the building will then exit the system.
- If the building has not exited the process, the building owner is to complete questions 1 to 4 in Part 1 of the checklist using the *online* system.

Once the responses have been given, the system will automatically determine whether the building may be considered an affected building.

If the *online system* indicates the building is not affected, the building owner is directed to complete steps 4 and 5 below before the building can exit the system.

If the *online system* determines the building may be an affected building, the building owner is required to complete steps 4 and 5 below before being directed by the *online system* to proceed to Part 2 of the *combustible cladding checklist*.

#### **NOTE:**

The above steps must be completed by 29 March 2019. If an extension of time is required, an application must be made to the QBCC using the approved form. If an extension has been granted by notice from the QBCC, completion is required by the period stated in the notice.

See section 8.3.2 of this guideline for more information on this subject.

- 4) The building owner must provide a copy of the *completed* checklist results of Part 1 to the QBCC using the *online system*. In order for the checklist to be considered properly *completed*, the Part 1 checklist must be filled out on the *online system*, printed, signed and dated in the presence of a qualified witness, who must also sign and date the printed form. The building owner must then upload the signed printed form onto the *online system*.
- 5) The building owner must keep the *completed* combustible cladding checklist (Part 1) for a minimum of seven (7) years (from the date of giving the results to the QBCC) and, if applicable, also keep the record in a storage place required by the *Building Fire Safety* Regulation 2008.

# Combustible cladding checklist (Part 2)

- 6) If the *online system* indicates the building may be affected through responses provided in Part 1, the building owner is to commence Part 2 by engaging a *building industry professional* to assist with the next series of questions.

  The *building industry professional* is to
  - The building industry professional is to provide the building owner with a building industry professional statement in the approved form (available on the online system) following assessment of the building.
- 7) The owner must provide a copy of the building industry professional statement to the QBCC by uploading the document using the online system.
- 8) The building owner is to complete Part 2 by responding online to the questions in a manner strictly in accordance with the building industry professional statement.

  The building industry professional may determine the building is unaffected. In this case the building owner is required to complete steps 9 and 10 listed below before the building can exit the system.

  If the building industry professional has determined the building may be affected, the building owner is required to complete steps 9 and 10 listed below and then proceed to Part 3 of the combustible cladding checklist.
- 9) The building owner must provide a copy of the completed checklist results of Part 2 to the QBCC using the online system or by another approved way.

- In order for the checklist to be considered properly *completed*, the Part 2 checklist must be filled out on the *online system*, printed, signed and dated in the presence of a qualified witness, who must also sign and date the printed form. The building owner must then upload the signed printed form onto the *online system* or by another *approved way*.
- 10) The building owner must keep the completed combustible cladding checklist (Part 2) and building industry professional statement for a minimum of seven (7) years (from the date of giving the results to the QBCC) and, if applicable, also keep the records in a storage place required by the Building Fire Safety Regulation 2008.

#### **NOTE:**

The above steps must be completed by 31 July 2019. If an extension of time is required, an application must be made to the QBCC using the approved form. If an extension has been granted by notice from the QBCC, completion is required by the period stated in the notice.

See section 8.3.2 of this guideline for more information on this subject.

# Combustible cladding checklist (Part 3)

- 11) If the *online system* determines the building may be affected after Part 2 of the checklist is completed, the building owner will have to commence Part 3 by engaging a *fire engineer* to assist with the next series of questions in this part.
- 12) Upon engagement of the *fire engineer*, the owner is required to provide QBCC with the practitioner's name and registration number using the *online system*.

#### **NOTE:**

This step must be completed by 31 October 2019. If an extension of time is required, an application must be made to the QBCC using the approved form. If an extension has been granted by notice from the QBCC, completion is required by the period stated in the notice. (See section 8.3.2 of this guideline for more details).

The fire engineer is to provide the building owner with a fire engineer statement in the approved form (available on the online system) and a copy of the Building Fire Safety Risk Assessment (BFSRA) following assessment of the building.

- 13) The building owner must provide a copy of the BFSRA to the QBCC by uploading the document using the *online system* or by another *approved way*.
- 14) The building owner must provide a copy of the *fire engineer statement* to the QBCC by uploading the document using the *online* system or by another approved way.
- 15) The building owner is required to complete Part 3 by responding online to the questions in a manner strictly in accordance with the *fire engineer statement*.

If the *fire engineer statement* states there is not a cladding fire risk for the building, the building owner is required to complete steps 16 and 17 listed below before the building can exit the *online system*.

#### **NOTE:**

If the *fire engineer statement* states there is a cladding fire risk for the building, the building owner is still required to complete step 16 and step 17 in relation to the *combustible cladding checklist (Part 3)*.

16) The building owner must provide a copy of the completed checklist results of Part 3 to the QBCC using the online system. In order for the checklist to be considered properly completed the Part 3 checklist must be filled out on the online system, printed, signed and dated in the presence of a qualified witness, who must also sign and date the printed form. The building owner must then upload the signed printed form onto the online system or by another approved way.

# NOTE:

The above steps must be completed by 3 May 2021. If an extension of time is required, an application must be made to the QBCC using the approved form. If an extension has been granted by notice from the QBCC, completion is required by the period stated in the notice. (See section 8.3.2 of this guideline for more details).

17) The building owner must keep the *completed* combustible cladding checklist (Part 3), BFSRA and *fire engineer statement* for a minimum of seven (7) years (from the date of giving the documents to the QBCC).

In addition, where the *fire engineer statement* states there is a *cladding fire risk* for the building, the building owner is required to complete steps 18 and 19.

- 18) The building owner must keep a copy of the *fire engineer statement* and the BSFRA until whichever is the later of:
  - a) the day the *combustible cladding* is removed from the building
  - the day a building certifier gives the building owner a compliance certificate stating the combustible cladding complies with the BCA
  - a minimum of seven (7) years after a copy of the documents are given to the QBCC.
- 19) The building owner must display an affected private building notice in the approved form (available on the online system) about the building being affected. The notice is to be displayed in a conspicuous position and securely attached to a wall, or the internal side of a door, near the main entry point to the building. If the building has a fire indicator panel another copy of the notice is to be securely attached to a wall, or the internal side of a door, that is adjacent to the panel.

## **NOTE:**

The notice, or notices, must be displayed within 60 business days after the BFSRA is given to the building owner and must remain in place until either the combustible cladding is removed from the building, or until the day a building certifier gives the building owner a notice stating that the combustible cladding complies with the BCA.

Step 20 or 21 must also be completed if applicable.

- 20) In cases where the affected private building comprises two or more lots (for example, an apartment building) and where a body corporate roll is kept, the owner must give a copy of the BSFRA to:
  - a) each owner of a lot in the building within
     60 business days after the BFSRA is given
     to the building owner (body corporate)
  - each leasehold interest holder of a lot in the building within 60 business days after the BFSRA is given to the building owner (body corporate), or
  - for another person, within 60 business days after the person's name is entered onto the body corporate's roll.
- 21) Where there is no body corporate roll kept for the building, the building owner must, within 60 business days of receiving the BSFRA, leave a copy of the assessment at, or post a copy of the assessment to, the address of each lot in the building.

# **NOTE:**

Steps 20 and 21 no longer apply if any of the following happens before the period for complying with the requirements mentioned in each step ends:

- a. the combustible cladding is removed from the building
- a building certifier gives the building owner a notice stating that the combustible cladding complies with the BCA
- c. Seven (7) years have passed since a copy of the BFSRA was given to the QBCC.

The above mentioned steps comprise the owner's obligations.

# 8.2.2 What obligations are imposed on building industry professionals?

## Combustible cladding checklist (Part 2)

Section 16ZH of the Regulation requires the *building industry professional* to prepare and sign a *building industry professional statement* about the private building which will determine if the building is affected by combustible cladding.

The building owner will use this statement to complete the questions for the *combustible cladding checklist* (Part 2).

The statement must be in the approved form which is available from the *online system* on the Safer Buildings website. The building owner may download the approved form and provide a copy to the *building industry professional*.

This building industry professional must, within five (5) business days after signing the statement, give a copy to:

- 1) the owner of the building, and
- 2) the QBCC; and
- 3) the relevant local government

The building industry professional must keep a copy of the statement for a minimum of five (5) years after the statement is signed.

#### NOTE:

Building owners must complete their obligations in relation to the *combustible cladding checklist* (Part 2) by 31 July 2019. In circumstances where a replacement checklist part is given under s16ZQ of the Regulation, refer to section 8.5 of this guideline for further information.

# 8.2.3 What obligations are imposed on fire engineers?

# Combustible cladding checklist (Part 3)

# **Regulation s.16ZI provisions**

Section 16ZI of the Regulation requires the *fire* engineer to prepare, date and sign a building fire safety risk assessment (BFSRA) and a fire engineer statement about the private building. These documents will confirm whether the building is an affected private building.

The building owner will use the *fire engineer* statement to complete the questions for the combustible cladding checklist (Part 3).

The *fire engineer statement* must be in the approved form which is available from the *online system* on the Safer Buildings website. The building owner may download the approved form and provide a copy to the *fire engineer*.

Refer to section 11 of this guideline for details concerning the content and requirements for the BFSRA and the *fire engineer statement*.

If the *fire engineer* prepares and signs a BFSRA or a *fire engineer statement*, the *fire engineer* must, within five (5) business days after signing the BFSRA or the statement, give a copy of the assessment or statement to:

- 1) the owner of the building, and
- 2) the QBCC, and
- 3) the *relevant local government* for the building.

The fire engineer must keep a copy of the BFSRA or fire engineer statement for a minimum of five (5) years after the assessment or statement is signed.

# Regulation s.16X(2)(a) provisions

Section 16X(2)(a) of the Regulation requires that the BFSRA be signed and dated by the *fire engineer*.

# Regulation s.16X(3)(b) provisions

Section 16X(3)(b) of the Regulation requires that the *fire engineer statement* be prepared and signed by the *fire engineer* on the same day as the BFSRA.

# Regulation s.16X(3)(c) provisions

Section 16X(3)(c) of the Regulation requires that the *fire engineer statement* state whether or not there is a *cladding fire risk* for the building. More information about what a *cladding fire risk* means is available in sections 5.3, 9.3 and 11.2.2 of this guideline.

#### **Regulation s.16ZHA provisions**

If the *fire engineer* decides that a *fire safety risk mitigation measure* should be put in place at the building, section 16ZHA of the Regulation requires that the *fire engineer* must, within 5 business days of making that decision, either:

- prepare and sign a BFSRA for the building stating the recommendation (noting that under s.16X(3)(b), the fire engineer statement must also be signed and that the fire engineer's obligations under s.16ZI) are triggered; or
- notify the QBCC, in the approved form (Form 74), of the recommendation. Refer to section 5.3 of this guideline for the definition of fire safety risk mitigation measure.

It is important to note the trigger for compliance with this provision: the *fire engineer* decides a fire safety risk mitigation measure should be put in place at the building. This could occur either:

- when the BFSRA is prepared and the answer to Q10 of the combustible cladding checklist is "YES", or
- at an earlier time before the BFSRA is prepared, for example during an inspection of the building, following a review of building documentation or following testing of the cladding materials.

Refer also to section 11.2.4 of this guideline for further information on this subject.

## **NOTE:**

Building owners must give the QBCC the fire engineer's details using the Safer Buildings website (combustible cladding checklist Part 3A) by 31 October 2019 and complete their obligations in relation to the combustible cladding checklist (Part 3B) by 3 May 2021. In circumstances where a replacement checklist is given under s16ZQ of the Regulation, refer to section 8.5 of this guideline for further information.

# 8.3 Administrative matters

The Regulation administers several other important matters regarding buildings captured by Part 4A of the Regulation (also referred to in this section as **this Part**).

## 8.3.1 Change of ownership [s.16ZC to s.16ZG]

Where the ownership of a *private building* subject to Part 4A of the Regulation changes after 1 October 2018 but before the original building owner has complied with one or more of the *relevant provisions*, the original owner must:

 give the new owner a 'Notice' (in the approved form available from the website)

- about what parts of the *combustible cladding checklist* have been completed before the change of ownership, and
- give the new owner copies of each document given by or to the original owner under this Part, and
- give the QBCC a copy of the 'Notice' given to the new owner.

The *new owner* is then responsible for meeting the building owner's obligations under the Regulation, for example, completing the *combustible cladding checklist*, the keeping of all records/documents required by this Part as well as displaying the affected building notice (if applicable).

It is important for a *new owner* to review and be satisfied that all relevant documents have been provided by the original owner.

# **8.3.2** Extensions of time [s.16Q(2),(3),(4), s.16T(3),(4),(5), s.16W(2),(3),(4) & s.16X(4),(5),(6)]

Building owners who require additional time to complete any part of the *combustible cladding checklist* may apply for an extension of time by completing the approved form available from the Safer Buildings website.

The extension must be applied for at least 28 days prior to the end of the applicable compliance period.

#### **NOTE:**

Further information relating to extension of the compliance period is available on the website at https://www.saferbuildings.qld.gov.au/help/resources

# 8.3.3 Proof of agency [s.16ZN]

A building owner may engage an agent to act on their behalf.

In cases where an owner's private building has no body corporate, there is an approved form available from the website (Form 43 - Proof of Agency) that must be used to evidence the agent's authority to act for the owner.

In cases where an owner's building comprises two (2) or more lots and the agent is the body corporate manager, the approved form (Form 43 - Proof of Agency) must also be accompanied by a separate document (appointment document) evidencing the body corporate manager's authority to act for the owner.

The authorised agent must give a copy of the *proof of agency document* (and if the agent is a body corporate manager, the appointment document) by uploading the completed document using the *online system*.

# 8.3.4 Responsibility for acts and omissions of agents [s.16ZO]

It is important for a building owner to understand, when authorizing an agent to act on their behalf, that under this Part, a building owner is held responsible for any act done or omitted to be done by the authorized agent unless the owner proves they could not have, by the exercise of reasonable diligence, prevented the act or omission.

# 8.3.5 Penalties [Generally]

Building owners and their engaged practitioners are required to comply with their respective responsibilities under Part 4A of the Regulation. Any non-compliance may be considered an offence against the Act. The Regulation nominates maximum penalties that can be imposed in instances where a building owner, building industry professional or fire engineer is convicted of an offence.

Penalties have been attached to relevant provisions requiring an action and can also apply for providing false or misleading information. Different requirements in this Part have different penalties, and may be in the form of an infringement notice issued under the *State Penalties Enforcement Regulation 2014* or through prosecution.

In addition to the requirements of the Regulation, disciplinary action under other legislation may apply, for example, a notice directing an offender to undertake a required action or for failing to comply with professional requirements under a code of conduct which may be prescribed under another Act.

# 8.3.6 Order to obtain various statements and BFSRA [s.16ZJ, 16ZK & 16ZL]

In instances where a person is convicted of an offence under the Regulation, the court is empowered to order a relevant person to either complete the checklist, or obtain and provide either a building industry professional statement, a fire engineer statement or a BFSRA, as the case may be.

# 8.3.7 Notice about compliance period [s.16ZM]

This provision of the Regulation empowers the QBCC, in circumstances where they believe there is a cladding fire risk for the building, to give the building owner a notice to complete a relevant part of the combustible cladding checklist within a time period stated in the notice.

This time period would then override the stated compliance periods contained within the Regulation or extensions of time previously granted.

# 8.3.8 Giving a replacement checklist [s.16ZQ]

This provision of the Regulation allows for a private building owner to request, or the QBCC to require that an original checklist be replaced by a new completed checklist. For more information on this provision, refer to section 8.5 of this guideline.

# 8.4 Other important regulatory matters

# 8.4.1 Giving documentation to the QBCC

#### **NOTE:**

This section further clarifies how documents are to be given to the QBCC by the building owner.

Changes to the Regulation now require building owners to give certain documents to the QBCC in the 'approved way'.

# What is the 'approved way'?

Building owners can give a document to the QBCC by:

- uploading the document using the online system, or
- if the QBCC Commissioner approves another way for giving the document to the QBCC and publishes the way on the QBCC website, by giving the document in the way approved on the QBCC's website.

# NOTE:

From time to time, the QBCC Commissioner may approve another way to give a document to the QBCC. It is suggested that building owners check the QBCC website before giving a document to the QBCC to confirm their intended method for giving the document is consistent with the information published on the QBCC's website. Section 5.3 of this guideline contains an extract of the definition of approved way as it appears in the Regulation.

Are there any other documents that the building owner must give the QBCC in addition to the completed combustible cladding checklists, building industry professional statement, fire engineer statement and BFSRA?

Where applicable, the Regulation also requires the building owner to give other documents to the QBCC in the approved way:

• a compliance notice, in the approved form, stating an affected private building notice is being displayed [s.16ZA(4) of the Regulation]

## Guideline for assessing buildings with combustible cladding

- a copy of the compliance certificate from a *building certifier* stating the combustible cladding complies with the BCA [s.16ZA(5) of the Regulation]
- a replacement checklist [s.16ZQ(3) and (4)]
- any other documentation the Regulation or the QBCC may require during the course of completing the 'Safer Buildings' checklist program

# 8.4.2 Further explanation relating to affected private buildings

#### **NOTE:**

This section expands on the information contained in section 5.3 of this guideline in relation to affected private buildings, buildings with a cladding fire risk and the obligation to display an affected private building notice.

# What Is an 'affected private building'?

A *private building* is considered to be affected under the Regulation if the building has *combustible cladding* forming part of, or attached or applied to, an external wall or another external part of the building other than the roof. However, as mentioned in section 5.3 of this guideline (refer to the explanatory note following the definition of *cladding fire risk*) a *cladding fire risk* is only established when a *fire engineer* has determined through a BFSRA that:

- the fire performance of the building's external wall assembly will contribute to the defeat of one or more aspects of the building's fire strategy, or
- Further fire engineering assessment is required to determine if the combustible material in the building's external wall assembly is a *cladding fire risk* for the building.

For clarification, is it possible for a building to be considered an 'affected private building' but not have a 'cladding fire risk' existing for the building?

Yes, it is possible. Although *combustible cladding* may be present, unless its presence contributes to the defeat of one or more aspects of the building's fire strategy a *cladding fire risk* does not exist for the building.

# What information is provided by the fire engineer for Part 3 of the Combustible Cladding Checklist?

Both the fire engineer statement and the BFSRA will inform the building owner:

- if there is a cladding fire risk for the building, and
- whether or not further fire engineering assessment is required to identify options that will achieve an acceptable level of fire safety for the building, and
- whether or not fire safety risk mitigation measures are required while further fire engineering assessment is being made and/or building work (cladding rectification work) is completed.

# When do building owners have to display an affected private building notice?

Section 16X(3)(b) of the Regulation requires the *fire engineer* to state (in the *fire engineer statement* based on assessments made within the BFSRA) whether or not there is a *cladding fire risk* for the building.

## Guideline for assessing buildings with combustible cladding

Where the *fire engineer statement* confirms a *cladding fire risk* exists in the building, sections 16Z and 16ZA of the Regulation require the building owner to display an affected private building notice in the approved form (available on the online system).

#### **NOTE:**

The above provisions contained in the Building and Other Legislation Amendment Regulation 2019 replace the previous requirement where it was a statement in the BFSRA that triggered the display of an affected private building notice.

# Where must the affected private building notice be displayed?

Section 16ZA(2) of the Regulation sets out the location/s where the notice/s must be displayed within the building. This information is summarised in Step 19, section 8.2.1 of this guideline which also sets out the time frame for compliance to occur.

## **NOTE:**

Section 16ZB of the Regulation requires the building owner to provide a copy of the BFSRA to tenants, lot owners and body corporates if the *fire engineer statement* states there is a *cladding fire risk* for the building. This requirement is summarised in Steps 20 and 21, section 8.2.1 of this guideline which also sets out the time frame for compliance to occur.

# What if my building is deemed to have a cladding fire risk?

Combustible cladding on buildings has become a safety concern for Queenslanders because its behaviour in a fire has proven to be an unacceptable risk to life and safety.

All Queenslanders have the right to feel safe and secure in the environments where they live, work and visit. The Safer Buildings website has been established to provide an assessment tool that will identify *affected private buildings*. The process will also give building owners the necessary information to make informed decisions about any fire safety risks associated with their building due to the materials used in the external walls.

A building owner may incur liability if their building is found to be affected by *combustible cladding* after completing the online assessment. Under the Regulation a building that has a *cladding fire risk* must display an *affected private building notice* in the approved form until either:

- the combustible cladding is removed from the building, or
- a building certifier gives the building owner a compliance certificate stating the *combustible cladding* complies with the BCA.

# Is a building approval required for cladding rectification work?

Amendments to section 4 of the Regulation have been made to remove any *building work* involving the altering of cladding forming part of or attached or applied to an external wall or other external part of a building other than a roof, from being considered *accepted development* under Schedule 1 of the Regulation.

This means that buildings undergoing cladding rectification/alteration works will require a building development approval.

# 8.5 Replacing an original checklist

#### **APPLICATION:**

The following requirements introduced by the *Building and Other Legislation Amendment Regulation 2019* apply if a person has given the QBCC one or more of the following documents (identified in the Regulation as the *original checklist*) and the original checklist needs to be replaced:

- a completed combustible cladding checklist (part 1)
- a completed combustible cladding checklist (part 2)
- a completed combustible cladding checklist (part 3)

# Can I resubmit a combustible cladding checklist for a part (replace the original checklist previously given)?

Owners of private buildings who have already given the QBCC one or more completed combustible cladding checklists may wish to make changes to an original checklist. In these circumstances the building owner may apply to the QBCC Commissioner for permission to do so.

If the request is granted, the owner may then give a replacement checklist to the QBCC. The replacement checklist must be of the same type as the original checklist and must be given to the QBCC –

- in the approved way, and
- within the time period stated in the QBCC response.

Information on giving a document in the approved way is provided in section 8.4.1 of this guideline.

## What does "the replacement checklist must be of the same type" mean?

Without limiting the meaning of the requirement in the Regulation, the following are relevant matters:

- the replacement checklist will be for the same part as the original checklist (either part 1, part 2 or part 3)
- the replacement checklist must address the same combustible cladding checklist questions as the original checklist
- should the replacement checklist be for parts 2 or 3, the owner may be required to engage a *building industry professional* (for part 2) or *fire engineer* (for part 3) to provide the necessary statements (Form 34 and 35) and BFSRA to support the responses to the checklist questions

# **NOTE:**

Matters and considerations applicable to the giving of an original checklist as outlined in other sections of this guideline (for example, sections 9, 10 and 11) also apply when giving a replacement checklist.

# Can the QBCC require me to replace a checklist previously given?

If the QBCC Commissioner reasonably suspects there are errors or omissions in a previously submitted checklist, the Regulation allows the QBCC to give a notice to the owner of the building stating the suspected error or omission and requiring the owner to address the matter by either:

- providing an explanation stating why the original checklist was correct; or
- giving the QBCC a replacement checklist that is of the same type as the original checklist and which corrects the suspected error or omission.

Should assistance from a *building industry professional* or *fire engineer* be necessary for this undertaking, the owner is required to seek their respective input to completing the replacement checklist or part. The owner is then required to give the replacement checklist to the QBCC within the time period stated on the notice and to submit it in the *approved way*. Information on giving a document in the *approved way* is provided in section 8.4.1 of this guideline

#### **NOTE:**

The QBCC Commissioner may remove a document or entry from the online system if considered reasonable in the circumstances.

# 9. Information to assist building owners to complete the checklist

This section provides information that will assist building owners to:

- complete Part 1 of the combustible cladding checklist (Questions 1 to 4) using the online system
- understand the requirements and process for submitting a completed combustible cladding checklist (Part 1) using the online system
- understand the requirements for building owners in relation to Part 2 of the *combustible cladding checklist* (Questions 5 and 6) where a *building industry professional* must be engaged to assist with completing this Part
- understand the requirements for building owners in relation to Part 3 of the *combustible cladding checklist* (Questions 7 to 10) where a *fire engineer* must be engaged to assist with completing this Part.

# 9.1 Completion of combustible cladding checklist Part 1 (Questions 1 to 4)

The following information will assist building owners to understand the underlying technical requirements used to develop Questions 1 to 4 and provide other guidance on how to answer each of the questions.

## QUESTION 1:

# What is your building used for?

This question asks building owners to nominate what is the use of their building. Those familiar with the BCA will know that it talks about 'classification' or 'class of building' when referring to building use. For the purposes of this question the term 'use' has the same meaning as 'class' or 'classification'.

The *building owner* is required to select the appropriate building use from the 12 options available. Note that some buildings can have a number of uses in different parts of the one building so it may be necessary to make multiple selections.

The website also has a number of icons representing different building uses. These are reproduced below along with more detailed information on the building uses.

For buildings constructed after 1 July 1997, a Certificate of Classification is required to be displayed near the entrance of the building (s.108A of the Act). The Certificate of Classification will assist by identifying the classification(s) relevant to the building as long as the use hasn't changed since the certificate was issued.

A copy of the Certificate of Classification may be available from the *relevant local government*. A Certificate of Classification is not required to be given for a single detached class 1a (house) or a class 10 (shed, carport, etc) building. Where such documentation is not available, some explanation has been included for each of the uses to assist building owners when answering the question.



- 1. Apartments Buildings that contain two or more sole occupancy (self-contained) units each being a separate dwelling are identified as class 2 buildings in the BCA. To be a class 2 building each dwelling must be located above or below another dwelling or common area. Examples of a class 2 building include:
- a. an owner-occupier using the dwelling exclusively as their own residence. The owner-occupier's mail would typically be delivered to the building.
- b. an owner-occupier using the dwelling exclusively for their own weekend or holiday accommodation.
- c. a tenant occupying the dwelling on a long-term basis under a residential tenancy agreement under the *Residential Tenancies Act 1994*.



- 2. *Motel, Hostel* class 3 buildings. Buildings that provide long-term or transient accommodation for a number of unrelated people in which the length of stay is unimportant. Some class 3 buildings may be frequently let for short periods. Examples of a class 3 buildings include:
- a. the residential parts of hotels and motels
- b. dormitory accommodation, in schools or elsewhere, noting that a dormitory is generally (but not always) considered to be a sole-occupancy unit
- c. bed-and-breakfast accommodation, a boarding house, guest house, hostel or lodging house
- d. backpacker's accommodation
- e. a building which houses elderly people (which is not an aged care building) or other people who require special care such as children or people with disabilities
- f. workers' quarters, including shearers' or fruit pickers' accommodation, or hotel workers' accommodation
- g. a residential part of a detention centre
- h. serviced apartments.



- **3.** *Hospital* a class 9a building; also known as a health-care building. A building whose occupants or patients are undergoing medical treatment and generally need physical assistance to evacuate the building during an emergency. Examples include:
- a. a public or private hospital
- b. a nursing home or similar facility for sick or disabled persons who require full-time care
- c. clinics, day surgeries and procedure units where the occupants or patients may be incapable of movement and require the assistance of another person to evacuate (and medical supervision for a period after treatment)
- d. any parts of the buildings mentioned above that are set aside as a laboratory.



- **4. Assembly Building** a class 9b building. A building used for the gathering of persons for the purposes of amusement, deliberation, dining, drinking, education, entertainment, instruction or awaiting transport. Examples include:
- a. theatres, cinemas and halls
- b. churches
- c. sports stadiums and venues
- d. nightclubs, discotheques, bar areas providing live entertainment and/or containing a dance floor, public halls, dance halls and other places of entertainment
- e. bus and railway stations

**NOTE:** schools are considered separately in the next category.



**5. School** – a class 9b building. An educational building which includes but is not limited to a primary or secondary school, college, university or similar educational establishment, early childhood centre, kindergarten, preschool or child-minding centre. A trade workshop or laboratory that is part of a primary or secondary school is also considered a class 9b building.



**6. Aged Care Facility** – a class 9c building. A building used for residential accommodation of aged persons who, due to varying degrees of incapacity associated with the ageing process, are provided with personal care services and 24-hour staff assistance to evacuate the building during an emergency. If the building does not provide these services, it is not an aged care building and would potentially be an ordinary class 3 (motel/hostel) or 9a (hospital) building.



- 7. Offices a class 5 building. A building used for professional or commercial purposes to conduct business relating to administration, clerical services, consulting and other client services not related to retail sales. Office buildings can hold single or multiple companies/businesses. Examples of office buildings include:
  - a. professional chambers or suites
  - b. legal offices
  - c. government offices
  - d. advertising agencies
  - e. accountants' offices
  - f. architecture/engineering offices



- **8.** Carpark/Warehouse a Class 7 building. These are generally broken up into two types of buildings, a carpark or a warehouse. A carpark is class 7a and a warehouse is class 7b building.
- a. *Carpark* a class 7a building. A building that is used for the parking of motor vehicles but is not used for the servicing of vehicles, other than washing, cleaning or polishing. A carpark can be a whole building or part of a building that contains another use/classification. It is a building that is not associated with a house (class 1) and contains more than three vehicle spaces on one level.
- b. **Warehouse** a class 7b building. A building used for storage or used for the display of goods or produce for sale by wholesale. 'Wholesale' means the sale to people in the trades or in the business of 'on-selling' goods and services to another party (including the public).



- **9. Shops** a class 6 building. A building or part of another building used for the sale of goods by retail or the supply of services direct to the public. Examples of shops include:
- a. an eating room, café, restaurant, milk or soft-drink bar
- b. a dining room, bar area that is not an assembly building, shop or kiosk part of a hotel or motel
- c. a hairdresser or barber's shop, public laundry, or undertaker's establishment
- d. a market or saleroom, showroom or service station
- e. a vehicle dealership, servicing department/workshop, or parts sales.



- 10. Factory/Laboratory a class 8 building.
- a. A laboratory, but not one that is part of a primary or secondary school or part of a class 9a (hospital) building; or
- b. A building in which a handcraft or process for the production, assembling, altering, repairing, packing, finishing, or cleaning of goods or produce is carried on for trade, sale or gain.



- **11.** *House* a class 1a or 1b building. Buildings that fall into these classifications are not located above or below another dwelling, or another class of building other than a private garage (class 10a).
- a. A class 1a building is a single dwelling being a detached house or one of a group of two or more attached dwellings, each being a building, including a row house, terrace house, townhouse or villa unit.
- b. A class 1b building is a boarding house, guest house, hostel or the like which has a total floor area less than 300m<sup>2</sup> and in which not more than 12 people would ordinarily reside. It also includes four or more single dwellings located on one allotment and used for short-term holiday accommodation such as cabins in caravan parks.



**12.** *Carport, Shed* – a class 10a building. A non-habitable building being a private garage (i.e. not more than three vehicles and associated with a house), carport, shed or the like. These may be standalone buildings or structures that are not occupied frequently or for extended periods.

#### **QUESTION 2:**

#### How many levels are in your building (including ground level)?

The required response is to select one of the provided tick boxes:

- 1. one,
- 2. two, or
- 3. three or more.

**NOTE:** This question refers to levels and while there may be some similarities to other terms used to describe the levels in a building, it differs from the definition of a *storey* and the method of calculating *rise* in *storeys* as prescribed in the BCA. The term 'level' is used here for simplicity purposes, to provide for an easier understanding.

Level – A space within a building situated between one floor and the floor above, or if at the top of the building, the ceiling or roof. A level is also a roofed or unroofed space that could be used by people for living, work, storage, recreation, vehicle parking, etc. A level is not included if:

- a. it is situated at the top of the building and contains only heating, ventilating or lift equipment, water tanks, or similar service units or equipment
- b. it is situated wholly below the finished ground level. (i.e. basements)
- c. it is situated partially below the finished ground level and all parts of the external wall of that level are less than one metre above the ground.

NOTE: If b. and c. above cannot exclude the lower level it must be counted in the level calculation.

Figure 2 illustrates how the definition above is applied. Note that while levels is a commonly used term, the definition above is an abridged version of the BCA requirements for storey and rise in storeys.

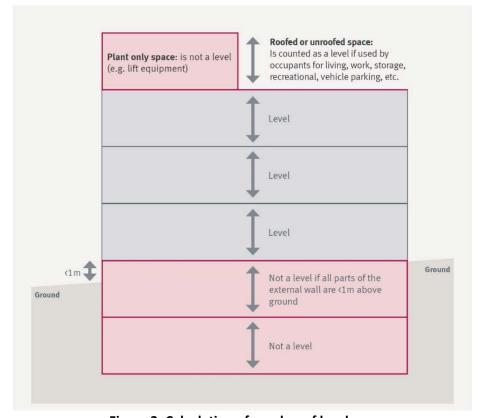


Figure 2: Calculation of number of levels

#### QUESTION 3:

#### What is the total floor area of your building?

This question requires the calculation of the total floor area of the building. This is not intended to be an exact measurement but the response must identify the approximate floor area using one of the three options (tick boxes) provided:

- <2.000m²</p>
- between 2,000m<sup>2</sup> and 3,000m<sup>2</sup>, and
- >3,000m<sup>2</sup>.

Some documentation may exist within your building records that identifies the floor area of the building.

Where this is not available, for most buildings the floor area measurement will involve a simple length x width calculation.

There may be several ways to achieve this, such as physical on-site measurement, using available design documents, using evacuation diagrams (where available), using Google earth measuring tool, etc.

The measurement is intended to be the gross floor area and the following includes some explanation and examples of what is included in the floor area.

Some building owners or building owner representatives may use terms like 'net lettable area' (NLA) or 'net usable area' (NUA) in their businesses.

While these may give an indication of the floor area of the building, they should not be used as the sole measurement in answering this question as in some instances, the inclusion of areas outside of the NLA or NUA may significantly increase the floor area of the building.

To help understand what floor area means, the following definitions are provided:

- 1. Total Floor Area The sum of the floor area of all levels in the building (measured in m<sup>2</sup>).
- 2. Floor Area The area of a level measured (reference Figure 3):
  - a. Within the external walls of the building (Floor Area A)
  - b. If there are no external walls, an area or space under a roof (i.e. balcony, covered area (Floor area B)
  - c. On any level above ground level, an area that is not covered by a roof, but is used by occupants or the public for any reason i.e. outdoor terrace, rooftop venue, rooftop vehicle park (Floor area C).

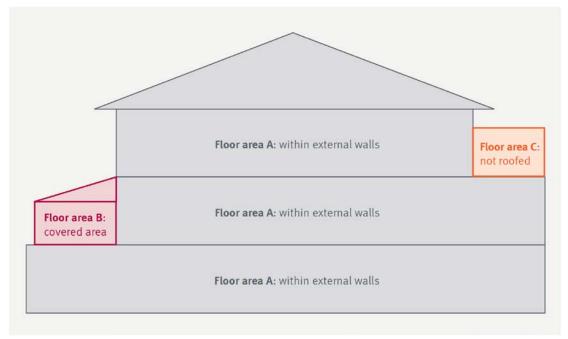


Figure 3: Floor area example

The online checklist uses the answers provided to questions 1, 2, and 3 to do a background logic check to determine if the building requires further assessment.

If the logic calculation determines no further assessment is required, this will prompt the *online system* to automatically exclude the building from further consideration and provide a declaration form for the *building owner* to sign and upload onto the website. This document will signify completion of the online checklist for this building.

If the logic calculation determines further assessment is required, the website will progress the building owner onto question 4.

#### **QUESTION 4:**

Select the building materials that are used for your external wall cladding, soffits and building attachments (such as architectural features, sun shades, awnings).

This question asks what type/s of material are used on the external wall cladding on the building. Tick boxes are provided and multiple options will likely need to be selected to answer this question.

The materials listed against the tick boxes are:

- 1. Aluminium Composite Panels (ACP)
- 2. Rendered Expanded Polystyrene (EPS) or bonded laminate or composite panels with a core comprised of EPS or similar material
- 3. Plywood or High-Pressure Laminates (HPL)
- 4. Concrete (including pre-cast/tilt-up concrete, but excluding a rendered surface finish)
- 5. Solid masonry (stone, brick or concrete block)
- 6. Glass (including glass curtain walls and/or aluminium-framed windows)
- 7. Metal wall sheeting (metal used in a single sheet and not as part of a bonded laminate or composite panel)
- 8. Fibre cement sheeting
- 9. Materials other than those listed above
- 10. Unsure of all cladding materials used on the building.

If there is any doubt about the materials installed on the building, it is recommended that a *building industry professional* be engaged to assist with identifying the materials. Alternatively, select the 'UNSURE OF ALL CLADDING MATERIALS USED ON THE BUILDING' option.

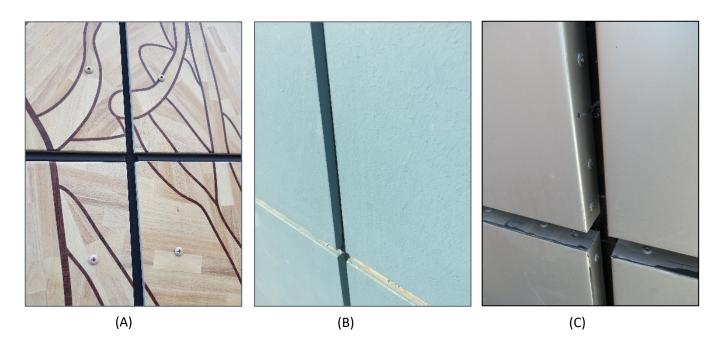


Figure 4: Close-up examples of external wall cladding

(A) compressed fibre cement, (B) fibre cement sheeting, and (C) aluminium composite panels.

These examples illustrate that it can be difficult to identify the cladding material used.

[Note: Images for illustrative purposes only - it should not be assumed that these represent combustible cladding].

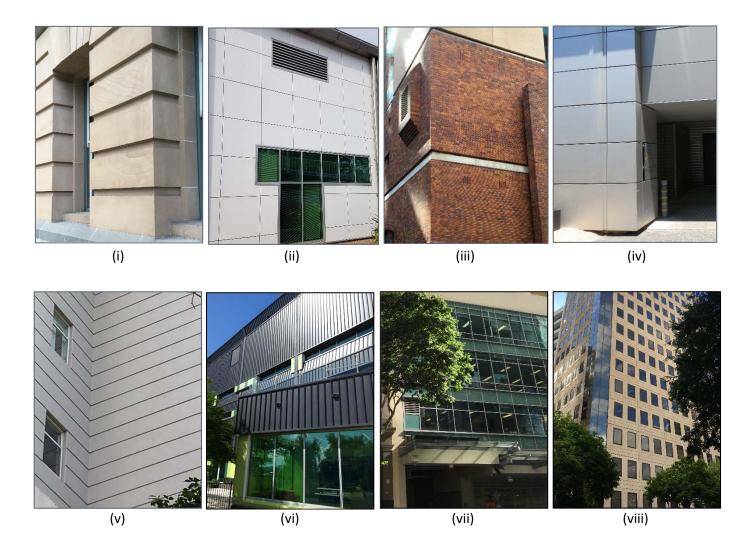


Figure 5: Queensland buildings with various types of external wall materials/cladding

(i) solid masonry (stone), (ii) compressed fibre cement sheeting (iii) solid masonry (brick),(iv), ACP cladding, (v) concrete and glass, (vi) metal wall sheeting and glass,(vii) glass curtain wall, and (viii) glass and precast concrete.

[Note: Images for illustrative purposes only - it should not be assumed that these represent combustible cladding].

The following explanations provide more detail on different building terms used in this question.

- External Wall Cladding is one or many materials that is often used to improve the appearance of a building. It also separates the building structure and interior from external elements such as weather.
- Soffits a lining material on the underside of any external horizontal or sloping surface of construction (also called eaves).
- Attachments anything attached to the building but outside of the external wall cladding including but not limited to:
  - a. sunshades a fixed or moveable material or object to prevent or reduce the transfer of unwanted sun to the building interior
  - b. awnings a roof-like structure projecting from the external wall of a building, but not a shade structure supported in part by a wall.
  - c. signs signage on the external wall that extends beyond one level.

#### Guideline for assessing buildings with combustible cladding

However, attachments do not include elements such as:

- a gutter, downpipe or other plumbing fixture or fitting
- b. an electrical switch, socket-outlet, cover plate or the like
- c. a light fitting
- d. a part of a security, intercom or announcement system
- e. wiring
- f. paint or lacquer.
- Architectural features unique design details and/or components generally used for decorative purposes. These could be attachments or form part of the external wall cladding.
- Glass curtain wall a type of external wall cladding that is generally made solely from glass and supported by a metal frame (generally aluminium). The glass may be framed or unframed.
- Bonded laminate a material comprising of layers of materials that are bonded together using an adhesive.

- Composite panel generally made from three layers of material (a low-density core and a thin skin layer bonded to each side). The core can be various material. The skin is generally a metal material i.e. aluminium or steel (also called sandwich panel).
- 8. Rendered EPS or wall systems with a rendered surface finish wall systems where a premixed cement based (or similar) product is applied over another building material (such as EPS sheeting) to create a surface finish that can be fine or coarse, textured or smooth, natural or coloured, pigmented or painted.
- High pressure laminates (HPL) panels typically made by pressing resin impregnated cellulose fibres at high temperature and pressures. The products have one or more decorative layers.

Further information in relation to the assessment of materials is provided in section 10 of this guideline.

### What happens if the online system determines the building is not affected?

In cases where the *online system* determines the building is not affected, the website will automatically register an exclusion of the building from further consideration. For completion of this Part of the checklist, in this instance the owner is required to carry out steps 4 and 5 as mentioned in section 8.2.1 of this guideline. Completion of these steps will exit the subject building from the *online system* and the building owner has *completed* their regulatory obligations for that building.

### What happens if the online system determines the building may be an affected building?

Should the *online system* determine that the building may be an affected building, the owner is also required to carry out steps 4 and 5 as mentioned in section 8.2.1 of this guideline. The *online system* will then take the building owner to Part 2 of the checklist.

Completion of these steps marks the completion of Part 1 of the checklist. If Part 1 cannot be completed within the required timeframe, a building owner can apply to the QBCC for a time extension. Please refer to section 8.3.2 of this guideline.

# 9.2 Completion of combustible cladding checklist Part 2 (Questions 5 and 6)

Following the completion of Part 1, the *online system* may require the building owner to complete Part 2 of the checklist.

The intent of Part 1 of the checklist was to identify buildings that may be affected by seeking responses to four broadly-based questions. Part 2 of the checklist requires a *building industry professional* to undertake an assessment using specific technical requirements that will confirm if a building may be affected.

This part comprises two questions that will provide an owner with further opportunities to identify that their building(s) require no further assessment using the *online system*.

# Why must a building industry professional be engaged for Part 2 of the checklist?

The questions in Part 2 require consideration by a person who has the appropriate knowledge and experience to assess the building's attributes against BCA requirements.

Given their technical complexity, this part requires the building owner to engage the services of a building industry professional, such as a building certifier or architect (see definition for who meets this level of expertise).

The intent is for the owner to rely on information in the *building industry professional statement* provided by the practitioner to complete Part 2 of the *combustible cladding checklist*.

# Should building owners confirm the competency of a building industry professional?

The owner should confirm with the *building industry professional* if they are competent to address these questions.

To ensure they have the appropriate qualifications required by the Regulation, an owner should undertake a licence and registration search with the relevant licensing body of the practitioner. Because several fields of practitioners are able to provide the expertise sought for this Part, cross referencing the licence class of the practitioner against the requirements listed in the definition section of this guideline should assist in the verification.

# What documents do building owners give the building industry professional to commence?

When the building industry professional has been engaged, the building owner may download the building industry professional statement (Approved Form 34) from the website for completion by the building industry professional.

This statement must be used to inform on the building's 'Type of Construction' (Question 5) and provide advice on whether any *combustible cladding* products are contained within the external wall or another external part of the building (Question 6).

This statement is to be completed and signed by the building industry professional and given to the building owner.

# What do building owners do when they receive the building industry professional statement?

The building owner is required to transmit the building industry professional's responses to Question 5 and 6 (where applicable) from the building industry professional statement using the online system or by another approved way.

This requirement constitutes step 8 as mentioned in section 8.2.1 of this guideline.

**NOTE:** This same procedure also applies when undertaking a replacement checklist for this part.

# What happens if the building is determined to not be affected?

Where the responses confirm the building is not affected, the building is excluded from further consideration.

The owner must complete Part 2 by carrying steps 7, 9 and 10 as mentioned in section 8.2.1 of this guideline.

Completion of these steps will exit the subject building from the *online system* and the building owner has *completed* their regulatory obligations for that building.

**NOTE:** This same procedure also applies when undertaking a replacement checklist for this part.

#### What happens if the building may be affected?

Should the *building industry professional* determine and then inform that the building may be affected, the owner must complete Part 2 of the checklist by carrying out steps 7, 9 and 10 as mentioned in section 8.2.1 of this guideline.

The building owner will then need to proceed to Part 3 of the checklist.

Completion of these steps marks the completion of Part 2 of the checklist. If Part 2 cannot be completed within the required timeframe, a building owner can apply to the QBCC for a time extension (please refer to section 8.3.2 of this guideline).

# 9.3 Completion of combustible cladding checklist Part 3 (Questions 7 to 10)

If the building may still be an affected building following the completion of Part 2, the building owner is required to complete Part 3 of the checklist.

The building owner is required to engage a *fire engineer* to undertake a *building fire safety risk assessment* and prepare a *fire engineer statement* for Part 3 of the *combustible cladding checklist*.

Part 3 has four questions (Questions 7 to 10). The responses provided to Question 7 and, if required, Question 8, may identify that a building requires no further assessment.

If a building is not excluded by the end of Question 8, it is considered an *affected private building* and Questions 9 and 10 must be answered.

These final two questions provide information about any further action(s) required to achieve an acceptable level of fire safety for the building.

# Why must a fire engineer be engaged for Part 3 of the combustible cladding checklist?

To complete Part 3 of the checklist a comprehensive understanding of 'fire safety engineering' is needed.

This can only be provided by a *fire engineer* with appropriate qualifications, knowledge and experience in these matters.

The intent is that the building owner may rely upon the competency and expertise of such professionals when completing the questions for Part 3.

### Can any fire engineer complete the work?

RPEQs are bound to the Board of Professional Engineers of Queensland (BPEQ) Code of Practice for Registered Professional Engineers by the *Professional Engineers Act 2002* (Qld).

This Code of Practice requires that RPEQs work within their area of competence and not misrepresent their competence.

# Should building owners confirm the competency of a fire engineer?

The owner should confirm with the *fire engineer* if they are competent to address these questions.

As a means to verify competency, an owner should undertake a registration search with the Board of Professional Engineers of Qld (BPEQ) and ensure they are appropriately licenced and/or registered as a *fire engineer* or *fire safety engineer* as required by the Regulation.

Confirming the registration of the practitioner will assist in the verification.

The Queensland Government has also worked closely with the University of Queensland and other industry and academic partners to provide a suite of tools that will assist and inform fire engineers in completing the BFSRA and *fire engineer statement*.

The 'External Fire Spread Risk in Tall Building Design' is a Continuing Professional Development (CPD) course directly applicable to the evaluation of *combustible cladding* on buildings.

Developed by the University of Queensland, University of Maryland (USA), and the University of Edinburgh (UK), the course has been run three times at the University of Queensland's St Lucia campus.

Further information is available at: https://www.civil.uq.edu.au/fire-externalspreadcpd

The owner may want to ask the *fire engineer* if they have completed this course, although it should be noted that it is not a mandatory requirement.

# What must building owners do when they have engaged the fire engineer?

Once the *fire engineer* has been engaged, the building owner is required to provide the QBCC with the practitioner's name and registration number using the *online system* by 31 October 2019.

If this aspect cannot be completed within the required timeframe, a building owner can apply to the QBCC for a time extension (please refer to section 8.3.2 of this guideline).

**NOTE:** The fire engineer's details will also have to be provided in the *approved way* when undertaking a replacement checklist for this part.

# What documents must building owners obtain from the fire engineer?

The owner is required to provide the QBCC with two documents prepared by the *fire engineer*:

- a report about the cladding (a BFSRA), and
- a statement (the fire engineer statement) in the approved form.

The owner may download a *fire engineer statement* (Approved Form 35) from the *online system* for use by the *fire engineer*. Contained within this statement are the questions underpinning the BFSRA assessment.

**NOTE:** The requirements for the BFSRA are set out in section 11 of this guideline.

# What do building owners do when they receive the fire engineer statement and the BFSRA?

The owner is required to transmit the fire engineer's responses to the questions from the *fire engineer* statement using the *online system* or by another approved way.

**NOTE:** This same procedure also applies when undertaking a replacement checklist for this part.

# What happens if the building can exit from the online system based on the answer provided at either Question 7 or 8b?

Where the answer provided to Question 7 and, if required, Question 8b confirms that the building is not at risk and the building owner is not required to continue with the assessment, the *online system* will automatically exclude the building from further consideration.

The owner must then complete Part 3 of the online checklist by carrying out steps 13, 14, 15, 16 and 17 as mentioned in section 8.2.1 of this guideline.

Completion of these steps will signify completion of the online checklist for the subject building and a completion of the building owners regulatory obligations for that building.

# What happens if the building is determined to have a cladding fire risk?

Where it is determined that a *cladding fire risk* exists for the building, the owner must then complete Part 3 of the checklist by carrying out steps 13, 14, 15, 16, 17, 18, 19and, if applicable step 20 or 21 as mentioned in section 8.2.1 of this guideline.

Completion of these steps will signify the end of the combustible cladding checklist assessment for the building and the building owners regulatory obligations in relation to the online assessment are completed.

However, as a *cladding fire risk* for the building has been determined and stated in the *fire engineer statement* (form 35), the building owner is obligated to display a notice in the approved form for the building (an *affected private building notice*).

# 10. Information for building industry professionals

This section provides information that will assist building industry professionals to:

- provide the necessary advice and documentation to building owners to complete Part 2 of the *combustible cladding checklist* (Questions 5 and 6) using the *online system*
- understand the technical requirements and considerations associated with Questions 5 and 6 of the *combustible* cladding checklist
- understand the process for submission of a completed *building industry professional statement* in the approved form (Approved Form 34)
- understand the regulatory obligations placed upon building industry professionals by Part 4A of the Regulation where they are engaged by building owners.

# 10.1 Engagement as a building industry professional

By 31 July 2019, the building owner is required under section 16T(1)(b) of the Regulation to give to the QBCC a building industry professional statement about whether or not the building may be an affected private building.

To enable this requirement, an owner has to engage the services of a *building industry professional* to inform them on the answers to Questions 5 and 6 of the *combustible cladding checklist*.

### Who qualifies as a building industry professional?

The Regulation defines which licenced and/or registered practitioners are able to be engaged by building owners to provide a *building industry professional statement* (refer section 5 of this guideline).

A building industry professional must:

- only perform work within the scope of their licence class or registration, and
- have a sound knowledge of the BCA and its application to buildings.

Best practice requires the contract of engagement to be in writing and include the relevant property details.

Accompanying the engagement, it is recommended that all necessary and available documentation pertaining to the building's design and construction including records for building approvals and Certificates of Classification be obtained to assist the practitioner.

It may be necessary to obtain an 'Extract of Building Records' from the *relevant local government* as well as from the building's builders and designers.

The intent is to facilitate the best outcome possible for the *building industry professional* when giving consideration to these questions.

# 10.2 Completion of the building industry professional statement

The building industry professional statement records building owner details, building property description details, the building industry professional's answers to Questions 5 and 6 and their license or registration details.

The statement is a declaration by the *building industry professional* taking responsibility for the answers provided to each question (that they are true and correct). Therefore, the form must be completed and signed by the *building industry professional*.

The statement is in a format relevant for the building owner to be able to complete Questions 5 and 6 of the combustible cladding checklist (Part 2) using the online system.

The intent is for the building owner to rely upon the answers given by a practitioner with technical qualifications that support knowledge of the BCA requirements relevant to Questions 5 and 6.

**NOTE:** The *building industry professional* should ensure that they are using the current version of the approved form (Form 34) to address the requirements of the Regulation.

# 10.3 Regulatory obligations

When the statement has been completed, the *building industry professional* must, within five (5) business days, give a signed copy to the:

- building owner, and
- QBCC, and
- the relevant local government in which the building is situated.

The *building industry professional* must also keep a copy of the statement for at least five (5) years after the statement is signed. Penalties may apply for failure to comply with any of these requirements.

In circumstances where a replacement checklist is being provided for the combustible cladding checklist (part 2), the *building industry professional* should be mindful of:

- the regulatory requirements in relation to the building industry professional statement, and
- that the QBCC Commissioner will have stated a time period for giving the replacement checklist.

The engaged building industry professional must:

- provide relevant and correct information on the statement;
- act in the interest of the public and in accordance with the prescribed Code of Conduct applicable to their licence or registration.

# 10.4 About the Questions

Questions 5 and 6 require the engaged *building industry professional* to determine the building's 'type of construction' and provide an opinion on whether any *combustible cladding* forms part of or is attached or applied to an external wall or another external part of the building.

The significance of these two building attributes is that they will determine whether the building will remain inscope and require further assessment by a *fire engineer* in Part 3 of the *combustible cladding checklist* assessment process.

#### **QUESTION 5:**

#### Is the building of Type A or B construction?

The Regulation captures class 2 to 9 private buildings of 'Type A or B Construction'. The *building industry professional* is:

- to determine the building's 'type of construction' in accordance with the BCA
- when doing so give regard to any BCA provisions that may influence the type of construction of buildings
- to recognise that the questions in Part 1 of the combustible cladding checklist are broadly based on the BCA
  requirements and more detailed application of the BCA in response to this question could exclude the
  building from further assessment

Although not an exhaustive list, the following are items that may need to be considered:

- the building's classification(s) as prescribed in BCA Part A3
- 2. the *rise in storeys* of the building as prescribed in BCA clause C1.2
- 3. the type of construction as prescribed in BCA clause C1.1 and Table C1.1
- 4. whether multiple classifications as prescribed in BCA clause C1.3 apply and which may affect the type of construction
- 5. if mixed types of construction as prescribed in BCA clause C1.4 apply and which may affect the type of construction
- any concessions given in BCA clause C1.5 that may apply and which may affect the type of construction
- 7. BCA clause C1.7 if the building is an open spectator stand
- compartment floor area and volume limitations prescribed in BCA clause C2.2 and Table C2.2 and the affects these limitations may have upon the Type of Construction of the building
- 9. large isolated building considerations prescribed in BCA clauses C2.3 and C2.4 as

- they may relate to the *rise* in storey and the Type of Construction
- the existence and size of any fire compartments for class 9a and 9c buildings as they may relate to the type of construction of the building
- separation by fire walls as they may relate to fire compartment floor area and volume limitations
- 12. separation of classifications in the same storey as they may relate to the type of construction requirements
- 13. separation of classification in different storeys as they may relate to type of construction requirements
- protection of openings and the affect they may pose to compartmentation and type of construction requirements
- an approved Performance Solution having an effect on the type of construction of the building (e.g. a Performance Solution for exceeding a fire compartment floor area/volume limitation as prescribed in BCA Table C2.2)

#### **QUESTION 6:**

Does the building contain any *combustible cladding* or products with combustible content in the *external wall assembly*, or in attachments to the *external wall assembly*?

# What components or elements of the building does the building industry professional need to consider in answering this question?

This question mentions combustible cladding, products with combustible content in the *external wall assembly*, or in attachments to the *external wall assembly*. The meaning of the term *external wall assembly* is explained in section 5.2 of this guideline.

Literal application of the definition to this question would require the *building industry professional* to inspect all components of the external wall. However, the intent is that Parts 1 and 2 of the *combustible cladding checklist* focus primarily on the materials used for the external wall *cladding* forming part of, or attached or applied to, an external wall or another external part of the building other than the roof (refer also to the explanation of *cladding* given in section 5.2 of this guideline). Therefore, it is the cladding material itself as well as any external elements fixed or attached to the outside of the external wall that are of primary interest in this question.

# What should the building industry professional also consider when answering this question?

The building industry professional should also be mindful of the content of Question 4 which asked the building owner to select the building material(s) used for external wall cladding, soffits and building attachments (such as architectural features, sunshades and awnings).

Therefore, in addition to the investigation they have to undertake to answer Question 6, the *building industry professional* should be aware of and review all of the building elements/materials identified by and forming the basis of the answer provided by the building owner at Question 4.

#### Why do the questions mention soffits and building attachments in addition to the external wall cladding?

External fire spread in a building (beyond the original intended area of containment) can occur more rapidly than expected when materials with combustible content are used as a finish or lining to a wall, or in a sign, sunshade or other external building attachment or element that extends horizontally or vertically along an external wall of a building.

Combustible materials used as a lining to the underside of external (typically horizontal) soffits can also contribute to external fire spread when located adjacent to the external wall(s) of a building. Combustible materials located adjacent or above required exits can also represent a fire safety risk.

The purpose of the combustible cladding checklist questions is to identify buildings where the location and extent of materials with combustible content will constitute an undue risk of fire spread via the facade of the building, or are located near or directly above a required exit so as to make the exit unusable in a fire event. The two key considerations are:

- Is the material attached to the external wall, and
- Will the material contribute to external fire spread?

#### Does the building industry professional have to undertake invasive inspections or materials testing?

Only visual inspection of external elements is required to answer the questions in Part 2 of the checklist.

Testing of materials is only required when identified as a requirement by the fire engineer engaged to undertake Part 3 of the checklist.

# What technical standard should a building industry professional use to determine the suitability of the building components/elements of interest?

As a general approach, *building industry professionals* should use the provisions of BCA2016 Volume 1 Amendment 1 to establish the requirements for technical compliance.

The following, although not an exhaustive list, identify aspects that may need to be considered by the *building industry professional*. Guidance is also provided in relation to the application of various BCA requirements.

#### 1. Determining if the cladding is combustible

The *building industry professional* must determine if there is any *combustible cladding* on the building's external walls or another external part of the building other than the roof.

#### **BEST PRACTICE**

To do this, **best practice** for the *building industry professional* would include a combination of the following:

- visual inspection of the building for evidence of combustible cladding on the external walls
- a review of documentation relating to the building's design and specifications, façade engineering specifications and the like, to confirm 'as-built' alignment or non-alignment with approval documentation
- consider whether product substitution or unapproved changes of the cladding system(s) has occurred

**NOTE:** Product substitution of a component of a building's external wall assembly during construction and renovation has been identified nationally and in Queensland as a common industry practice. It is important to ensure the evidence supporting the identification of any materials used in the external wall(s) is representative of the building's current state. This may not necessarily be the product(s) identified in the as-approved plans or specifications.

- consider Part 4A section 16N(1)(a) of the Regulation which clarifies that existing private buildings, regardless of the fact that they were previously given a building development approval under the Act, are to comply with Part 4A of the Regulation
- consider Part 4A section 16N(1)(b) of the Regulation which clarifies that existing private buildings, regardless of the fact that their building development approval relied upon a current recognised certificate (such as a certificate of conformity as prescribed under section 51(2) of the Regulation), are to comply with Part 4A of the Regulation
- Consider the definition of *combustible cladding* as it appears in the Regulation and is explained in section 5 of this guideline.

If it cannot be established whether the cladding material is combustible, this question should be answered "NOT SURE".

#### 2. Assessment of soffits and building attachments

As previously mentioned, Question 4 of the checklist broadens the considerations required by asking building owners to not only consider the *external wall* cladding, but to also select the building materials used for *soffits* and building *attachments* (such as *architectural features*, *sunshades* and *awnings*).

**NOTE:** Explanation of these terms is also provided on pages 32 and 33 of this guideline.

If these building elements contain combustible materials or linings, they may contribute towards external fire spread via a building's façade and, potentially, the defeat of a building's fire safety strategy.

A building may have lined soffits and/or other ancillary elements (attachments) forming part of its construction. These elements may be attached to or be adjacent external walls, or be located near or above a required exit, or bridge across horizontal or vertical internal fire compartmenting elements (floors or walls), and be extensive in size or in quantity. Examples include:

- A porte-cochere or covered building entry (canopy or awning)
- A lined soffit where part of the external wall of the building is set back from the external building line (wall)
   above
- An extensive awning (including an associated façade if applicable) fixed to the external wall of the building
  and used to cover footpaths, outdoor spaces or balconies or to provide cover to passenger set down areas
  and parking bays
- Attachments that extend horizontally or vertically in or adjacent the outside plane of the external wall and which may include
  - o sunshade devices and screens
  - o blinds
  - o shade hoods or shade structures cantilevered off the external wall (not just anchored/supported by the wall)
  - Other architectural features (including ornamental mouldings e.g. rendered EPS decorative features)
  - Advertising signs or billboards

Generally a shade sail using a building for one or more of its anchor points would not be considered an attachment but the *building industry professional* should review the installation against any relevant BCA requirements. Assessment against BCA clause C1.14(i) (mentioned just below) may be of assistance.

**NOTE:** Roofs are excluded from being considered in Part 4A of the Regulation and are excluded from the definition of an *affected private building*. However, this exclusion would apply where the roof is at the top of a building but not necessarily for all roofs, particularly those situated at lower levels and/or in close proximity to external walls, above required exits or bridging across a fire wall compartmenting a building. Moreover, there may be instances where in the context of the BCA fire-resistance level (FRL) requirements, concessions may have been given to such roofs in buildings of Type A construction through the operation of BCA Specification C1.1 clause 3.5.

#### **BEST PRACTICE**

For the purposes of the Regulation, best practice for ensuring compliance of soffits, awnings, signs and other ancillary attachments listed above, should involve an assessment being made against NCC BCA2016 Volume 1 Amendment 1. The following considerations may be of assistance:

BCA Clause C1.14 sets out compliance matters for ancillary elements. Regard should be given to their extent and other limitations permitted by this provision. For example-

- BCA Clause C1.14(i) requires awnings, sunshades, canopies, blinds or shading hoods, if made of combustible material, to
  - o Serve only a storey at ground level or a storey immediately above a storey at ground level, and
  - o Not serve an exit where in the event of a fire, the exit is rendered unusable
  - Meet the fire hazard property requirements prescribed under Table 4 of BCA Specification C1.10
     as if it were an internal element

- BCA Clause C1.14(h) requires a sign, if made of combustible material to
  - o Not extend beyond one storey and one fire compartment
  - Be separated vertically from other signs by at least two storeys
  - o Achieve a group number of 1 or 2 as set out in BCA Specification C1.10

Should these limitations be exceeded, this question should be answered 'YES' and the building status will remain as "may be an affected building" at the completion of Part 2 of the checklist in the online system.

### 3. BCA concessions for fire-protected timber and the framing materials for certain class 2, 3 and 5 buildings

- BCA Clause C1.13 Fire-protected timber: concessions are given for the use of combustible materials in certain walls, provided compliance with BCA Specification C1.13a is achieved - (applicable to class 2, 3 and 5 buildings)
- BCA Specification C1.1, where concessions are also given by **clauses 3.10** and **4.3** for use of combustible materials in certain walls (applicable to class 2 and 3 buildings)

These concessions effectively allow a class 2, 3 or 5 building to have its external walls constructed of materials other than concrete or masonry.

#### **BEST PRACTICE**

For the purposes of the Regulation, best practice for ensuring compliance should include assessment involving:

- Obtaining evidence that confirms these BCA concessions were applied as part of the building development approval
- Once confirmed, consideration of the cladding material of the external wall may be given, without any
  further assessment being made of the materials used for the external wall framing.

If there are any doubts about whether these concessions were applied to the construction of the wall, this question should be answered 'YES' and the building status will remain as "may be an affected building" at the completion of Part 2 of the checklist in the online system.

If it cannot be established whether the cladding is made of combustible materials, this question should be answered 'NOT SURE' and the building status will remain as "may be an affected building" at the completion of Part 2 of the checklist in the online system.

#### 4. Vertical/horizontal garden walls in a building

For the purposes of the Regulation, an external wall containing vegetation should be considered as consisting of combustible content.

# 5. Balustrades incorporating timber or other combustible products (e.g. Perspex)

BCA Specification C1.1, clause 2.5 (f) sets out general concessions for balconies and verandahs. This clause should be used as the basis of assessment to determine if a building contains combustible materials in its balcony construction.

If it is concluded that the concessions cannot be applied to any element, or the limitations in the concession given are exceeded, this question should be answered 'YES' and the building status will remain as "may be an affected building" at the completion of Part 2 of the checklist in the online system.

### 6. External wall cladding with combustible backing sheets

For the purposes of assessment under the Regulation, where any non-combustible cladding sheet is backed by combustible sheet material serving as a stiffener or for another purpose (e.g. plywood whether bonded to the cladding sheet or not), the cladding system should be considered as combustible.

#### 7. Traditional building materials

For the purposes of assessment under the Regulation, the following traditional building materials commonly used in building facades are generally considered to be non-combustible:

- glass (including laminated glass)
- masonry (for example concrete blocks/bricks, clay bricks, calcium silicate bricks, terra cotta blocks, solid gypsum blocks)
- natural stone bricks/blocks
- metal sheeting (used as a single sheet and not as part of a bonded laminate or composite panel)
- concrete (including precast and tilt up concrete)
- steel or other metal

BCA Specification A2.3 explains how fire-resistance levels (FRLs) are to be determined and spells out how FRLs apply to specific building elements and materials.

#### 8. Ceramic tiles

For the purposes of assessment under the Regulation, ceramic tiles may be considered as non-combustible materials. However, in making an assessment the *building industry professional* should consider the relevance of BCA clauses C1.9(a), C1.10(c)(i) and (iv), and C1.14(a) and (m) to the building.

### 9. What does it mean to "alter" the cladding on a building?

Under the Regulation one of the criteria to determine if a building requires assessment is whether a building development approval was issued "to alter the cladding on the building".

Refer to Regulation s160 – definition of *private building*.

For the purposes of assessment under the Regulation, to alter means "to make or become different in some respect, to change".

#### **FOR EXAMPLE**

Where a building development approval was given (after 1 January 1994 but before 1 October 2018) to remove the cladding material and replace it with an identical product (that is, like-for-like replacement for maintenance purposes only), in these circumstances this would not be considered as altering the cladding on the building.

This situation may occur with older or heritage buildings.

# 11. Information for fire engineers

This section provides information that will assist fire engineers to:

- provide the necessary advice and documentation to building owners to complete Part 3 of the combustible cladding checklist (Questions 7 to 10) using the online system
- understand the technical requirements and considerations associated with preparing a building fire safety risk
  assessment (BFSRA) and its relevance to answering Questions 7 to 10 in Part 3 of the combustible cladding
  checklist
- understand the process for submission of a completed *fire engineer statement* in the approved form (Approved Form 35)
- understand the process for submission of a completed BFSRA
- understand the regulatory obligations placed upon fire engineers by Part 4A of the Regulation where they are engaged by building owners.

# 11.1 Engagement as a fire engineer

By 31 October 2019, the building owner is required to engage a *fire engineer* to undertake a BFSRA and complete a *fire engineer statement* for any building that has reached Part 3 of the *combustible cladding checklist*.

To enable the building owner to complete the *combustible cladding checklist* (Part 3) the *fire engineer* is required to undertake two activities:

- 1. prepare a building fire safety risk assessment report, and
- 2. complete a fire engineer statement in the approved form (Approved Form 35).

The BFSRA is used by the *fire engineer* to determine the answers to Questions 7 to 10 on the *fire engineer* statement. The building owner then uses the fire engineer's answers on the *fire engineer statement* to update Questions 7 to 10 (Part 3 of the *combustible cladding checklist*) in the *online system*.

The building owner is required to complete Part 3 of the combustible cladding checklist by 3 May 2021.

#### Who qualifies as a fire engineer?

The Regulation defines which practising professional engineers are qualified to be engaged by building owners to provide a BFSRA and a *fire engineer statement* (refer to section 5 of this guideline).

A suite of tools is available to assist and inform fire engineers required to complete the BFSRA and *fire engineer statement*. These include:

- a CPD course directly applicable to the evaluation of combustible cladding on buildings
- a Materials Library (refer section 12 of this guideline).

Knowledge of the risk associated with external fire spread will enable a *fire engineer* to make the assessments required for the BFSRA.

# 11.2 About the building fire safety risk assessment (BFSRA)

The BFSRA is an assessment report which contains four (4) main components and is prepared by the *fire engineer*. The *fire engineer* needs to provide:

- 1. expert opinion whether a previously *approved performance-based solution* has addressed the *relevant considerations*
- 2. expert evaluation of material and assembly fire performance against the existing building's fire strategies
- 3. expert opinion whether building work is likely to be required to rectify the potential risk
- 4. expert opinion of what, if any, *fire safety risk mitigation measures* are recommended to reduce the present risk.

It is important that the information contained in the BFSRA report aligns directly with the questions contained on the *fire engineer statement* which in turn informs the *combustible cladding checklist* (Part 3). A sample 'Table of Contents' for a BFSRA report is included in Appendix A.

#### Do all of the BFSRA components have to be addressed?

There are two intermediate points at which a building can exit from Part 3 of the *combustible cladding checklist* without having to complete all four questions (7 to 10).

Firstly, if a 'YES' response is provided for Question 7 on the *fire engineer statement*, a building will not require any further consideration by the *fire engineer*. In these circumstances the *fire engineer* does not have to address components 2, 3 and 4 in the BFSRA.

Secondly, if a 'NO' response is provided for Question 8(b) on the *fire engineer statement*, a building will not require any further consideration by the *fire engineer*. In these circumstances the *fire engineer* does not have to address Components 3 and 4 in the BFSRA.

#### 11.2.1 BFSRA Component 1

#### QUESTION 7:

Does the building have an approved performance-based solution that has addressed the relevant considerations for fire spread in the external wall assembly of the building?

The *fire engineer* is to provide an expert opinion on whether the building was subject to, and approved based on, an existing fire engineering assessment which addresses the relevant performance-based requirements of the BCA for external fire spread in buildings.

The *fire engineer* must ensure that the approved fire engineering assessment did not rely on a recognised certificate (such as a *certificate of conformity* as prescribed under section 51(2) of the Regulation) for product verification.

If the existing performance-based solution in place confirms that the external façade materials are fit-for-purpose, no further assessment is required.

#### What are the relevant considerations?

These are the matters that should be evaluated to demonstrate that an existing external wall assembly and the *fire strategy* of an *affected building* are compatible.

This evaluation should not rely on approval pathways no longer considered appropriate such as:

- D-t-S or performance-based solutions relying solely on evidence of suitability under the CodeMark Scheme (refer Regulation s16N(1)(b) and 16N(2)
- deemed "non-combustible" bonded laminated materials (refer clause C1.9(e)(vi) of the BCA)
- 'Attachments' permitted to have some degree of combustibility without fire engineering assessment (refer National Construction Code, BCA2016, Volume 1 Spec C1.1 clause 2.4).

Following this evaluation the *fire engineer* must complete Question 7 on the approved form (Approved Form 35). Where a 'YES' response is provided, the *fire engineer* should sign and date the form and provide the original form to the building owner.

# What is an existing approved performance-based solution?

An approved performance-based solution is an existing design report, supported by a suitably competent and qualified *fire engineer*, that has been relied upon for a building to achieve approval for occupation.

Many buildings in Queensland have been approved based on an approved Performance Solution that addresses departures from the National Construction Code.

#### When are the relevant considerations addressed?

A fire engineer should review available documentation to determine if the approved Performance Solution quantified the consequences of exposing the components of a building's external wall assembly to fire with respect to the capacity to contribute to the defeat of the building's fire strategy.

#### Answering 'YES'?

Answering 'YES' to this question is intended to be an acknowledgement that the *fire engineer* has:

- reviewed all relevant documentation associated with an existing approved performance-based solution for the building
- 2. verified that the *fire engineer* who prepared the existing report has undertaken a suitable and sufficiently detailed quantification of the building's fire strategy
- verified that the fire engineer who prepared the existing report has undertaken a suitable and sufficiently detailed quantification of the fire performance of the components of a building's external wall assembly
- 4. verified that the *fire engineer* who prepared the existing report has applied engineering methods to mitigate the resulting risk.

#### Any doubts about what to answer?

This question should be answered 'NO' if the *fire* engineer has:

- not been informed of an approved performance-based solution for the building;
- not reviewed all relevant documentation associated with an approved performancebased solution for the building; or
- any doubts given recent fire events and contemporary industry knowledge, regarding
  - a. the suitability of the quantification, if any, of the approved performancebased solution;
  - the suitability of the engineering methods applied to mitigate the resulting risk
  - c. any other aspect of the BFSRA.

#### Answering 'NO?

Where a 'NO' response is provided to Question 7, the *fire engineer* is to proceed to the second BFSRA component which requires a fire engineering assessment to be made.

#### 11.2.2 BFSRA Component 2

Both parts of Question 8 have to be answered.

#### QUESTION 8a:

Have you obtained test data relating to the combustibility of the material that makes up the cladding including the insulation or sarking located behind the cladding?

Testing is to be done with reference to risk management practices and based on test data relating to the reaction of cladding material/s to conditions produced by a fire, including any backing insulation material/s used in the external wall assembly.

The *fire engineer* is to confirm that, in the context of the relevant considerations for external fire spread in buildings, the materials used in the external wall assembly are compatible with the existing fire strategy for the building and no further assessment is required.

#### Must materials be tested?

Existing test reports and/or technical literature may be available to quantify ignition properties of a material. However, testing boundary conditions and assumptions must also be analysed to provide context to the test result and support engineering conclusions associated with the responses to Questions 8a and 8b.

#### What about existing test certificates?

Traditional industry practices for the specification and use of products may only have required part of the reaction of a material and/or assembly to conditions produced by a fire.

For the purposes of the engineering conclusions associated with the BFSRA, materials performance should be supported by quantitative test data.

#### What materials should be tested?

The components of building's external wall assembly should be interpreted broadly to include any individual materials or parts of combined assemblies that constitute any part of an external wall.

This should include any attachment or ancillary element to the outside of a building. This is deliberately broad in the acknowledgement that any material capable of reacting to conditions produced by a fire has the capacity to contribute to the defeat of a building's fire strategy.

NOTE: Section 16X subsections (2)(b) and 2(c) of the Regulation require the BFSRA to include an assessment of the combustibility of the cladding material and, if the cladding is assessed to be *combustible cladding*, an assessment of the combustibility of the insulation or sarking located behind the cladding.

#### What fire performance should be known?

At a minimum, the chemical composition and the capacity to react under conditions produced by a fire, including by contributing fuel, facilitating fire spread and/or producing falling or flaming debris.

#### What does chemical composition provide?

Determining chemical composition provides a means of material identification that may be informative through comparison to other materials of similar composition that have been fully characterised for fire performance.

However, this information is, of itself, insufficient to quantify fire spread that is possible with respect to a building.

#### What does capacity to react to a fire provide?

Determining capacity to react under conditions produced by a fire, including by contributing to fuel, facilitating fir spread and/or producing falling or flaming debris and allowing materials to be broadly characterised into one of two categories:

- material will not react under conditions produced by a fire; or
- 2. material will react under conditions produced by a fire.

Category 1 materials are unlikely to individually have the capacity to contribute to the defeat of a building's fire safety strategy under conditions produced by a fire.

Category 2 materials are likely to individually have the capacity to contribute to some degree, towards the defeat of a building's fire strategy under conditions produced by a fire.

The category of material will be able to be determined by the fire engineer by interpreting test data obtained in accordance with section 12 of this guideline.

## Is fast and effective testing available?

The University of Queensland has developed a Material Screening Test protocol based on fire engineering science principles to rapidly characterise the chemical composition and capacity to react under conditions produced by fire of common components of a building's external wall assembly.

For further information contact the University of Queensland Fire Safety Engineering Research Group (<a href="https://www.civil.uq.edu.au/fire">www.civil.uq.edu.au/fire</a>).

#### How many and what size samples do I need?

Product substitution during the construction and renovation of buildings has been identified as an issue nationally and in Queensland. As a result, the materials installed on site may not necessarily be the product/s identified in the approved design documentation.

The cladding material sampling and testing procedure outlined in section 12 of this guideline is a suitable test method that can be applied to obtain data. **Table 1** provides a guide for obtaining a suitably pragmatic range of test specimens based on the characteristics of the building.

Undertaking testing using the sampling guide is intended to provide contemporary evidence of the actual materials present and support confident conclusions by fire engineers.

#### Answering 'YES'?

Answering 'YES' to this question is intended to be an acknowledgement that the *fire engineer* has:

- identified all components of a building's external wall assembly
- concluded the chemical composition of each component, based on test data evidence (it is also required that all applicable materials are selected from the list provided), and
- concluded the capacity for each component to react under conditions produced by a fire, including by contributing fuel, facilitating fire spread and/or producing falling or flaming debris, based on test data evidence.

#### Any doubts about what to answer?

This question should be answered 'NO' if the *fire* engineer has:

- Not made conclusions based on test data evidence, or
- Any doubts, given recent fire events and contemporary industry knowledge, regarding:
  - a. the completeness of the identification of the components of a building's external wall assembly
  - b. the suitability of the test data evidence being relied upon, or
  - c. any other aspect of the BFSRA.

#### QUESTION 8b:

Will the fire performance of the external wall assembly contribute to the defeat of one or more aspects of the building's fire strategy?

# What are the aspects of a building's fire strategy?

A building's fire strategy (i.e. how a building will respond or perform in the event of a fire) takes into account a combination of aspects including, but not necessarily limited to:

- 1. detection of fire
- 2. notification of occupants
- 3. occupant egress
- 4. capacity for fire growth (e.g. the presence of suppression systems)
- 5. smoke management
- 6. compartmentation
- 7. structural integrity
- 8. fire brigade notification
- 9. fire brigade access
- 10. conditions during fire brigade operations
- 11. firefighting equipment.

#### When is an aspect of the fire strategy defeated?

It is possible to determine if a building's fire safety strategy will be defeated by:

- firstly, examining the potential impact that a fire in a building's external wall assembly will have on each aspect of a building's fire strategy
- secondly, conservatively evaluating these findings against the fire performance test data for the materials that make up the wall assembly, and
- using this information to characterise the building into one of three categories:
  - A. a building that does not rely, to any degree, on the prevention of fire spread via the components of a building's external wall assembly
  - B. a building that does rely on the prevention of fire spread via the components of a building's external wall assembly but contains no Category 2 materials
  - C. a building that does rely on the prevention of fire spread via the components of a building's external wall assembly which contains Category 2 materials.

Category A or B buildings are unlikely to result in the defeat of one or more aspects of the building's fire strategy as either fire spread is a design consideration or no material with capacity to react under the conditions tested are present.

Category C buildings are considered likely to have the potential to result in the defeat of one or more aspects of the building's fire strategy.

#### Answering 'YES'?

Answering 'YES' to this question is intended to be an acknowledgement that the *fire engineer* has:

- concluded that one or more aspects of the building's fire strategy relies on the prevention of external fire spread via the components of the building's external wall assembly, supported by appropriate engineering justification
- concluded that one or more components of the building's cladding has the capacity to react when exposed to conditions produced by a fire, supported by an appropriate level of engineering justification, and
- concluded that, if the components of the building's cladding ignited, the fire could defeat one or more aspects of the building's fire strategy, supported by appropriate engineering justification.
- 4. concluded that as a result of the fire possibly defeating one or more aspects of the building's fire safety strategy, there is a *cladding fire risk* for the building.

#### Answering 'NO'?

Answering 'NO' to this question is intended to be an acknowledgement that the *fire engineer* has:

- concluded that no aspect of the building's fire strategy relies on the prevention of external fire spread via the components of the building's external wall assembly, supported by an appropriate level of engineering justification, or
- concluded that no components of the building's external wall assembly have the capacity to react when exposed to conditions produced by a fire, based on test data evidence, or
- concluded that as a result of no aspect of the building's fire safety strategy being defeated, there is no *cladding fire risk* for the building.

#### Any doubts?

This question should be answered 'FURTHER FIRE ENGINEERING ASSESSMENT REQUIRED' in all other cases, regardless of whether that fire engineering assessment has already occurred (but did not form part of an approved performance-based solution) or is occurring concurrently to the BFSRA.

In this circumstance, it is to be considered that a *cladding fire risk* exists for the building.

#### What action is required now?

Following this assessment the *fire engineer* must complete the approved form, Questions 8(a) and 8(b).

Where a 'NO' response is provided to Question 8(b), the *fire engineer* should complete, sign and date the *fire engineer statement* approved form and provide the original form to the building owner.

In this instance, the *fire engineer statement* must state that there is **no** cladding fire risk for the building.

Where either a 'YES' or a 'FURTHER FIRE ENGINEERING ASSESSMENT IS REQUIRED' response is provided to Question 8(b), the *fire engineer* is to proceed to the third BFSRA component because the existing materials in the external facade and the existing building fire strategy are incompatible.

Upon completing all components of the BFSRA, the *fire engineer* must state in the *fire engineer* statement, that there is a cladding fire risk for the building.

#### 11.2.3 BFSRA Component 3

#### QUESTION 9:

Is building work likely to be required to rectify issues related to the fire performance of the external wall assembly?

The *fire engineer* is required to provide information in the BFSRA report about whether building work is likely to be required to rectify issues related to the fire performance of the external wall assembly.

**NOTE:** This only requires the *fire engineer* to give an indication of whether building work will be required. There is no need to identify what the actual rectification work will be.

#### What is building work?

Building work is a key definition of the Act and includes the building, repairing, altering, underpinning (whether by vertical or lateral support), moving or demolishing of a building or other structure.

It should be noted that amendments to section 4 of the Regulation have been made which clarify that altering cladding attached to or applied to an external wall or other external part of a building, other than a roof, is not accepted development work for the *Planning Act* and building development approval is required.

This may be satisfied, for example, where:

- components of a building's external wall assembly are likely to be removed and/or replaced
- 2. Active and/or passive fire safety systems are likely to be installed in or around the building
- existing active and/or passive fire safety system/s in or around the building are likely to be modified.

# Answering 'NO'?

Answering 'NO' to this question is intended to be an acknowledgement that the *fire engineer* has:

- a sufficient understanding of the current external fire spread risk associated with the building, and
- concluded that no building work as defined by the Act is likely to be required to sufficiently mitigate the current external fire spread risk associated with the building.

#### Any doubts?

This question should be answered 'YES' if the *fire* engineer:

- does not have a sufficient understanding of the current external fire spread risk associated with the building, or
- has any doubts, given recent fire events and contemporary industry knowledge, regarding:
  - a. the current external fire spread risk associated with the building
  - the suitable mitigation benchmark for rectification of external fire spread risk, or
  - c. any other relevant matter.

#### 11.2.4 BFSRA Component 4

#### QUESTION 10:

Will Fire Safety Risk Mitigation Measures be required while further fire engineering assessment and/or building rectification work is completed?

The *fire engineer* is required to provide information in the BFSRA report about what (if any) fire safety risk mitigation measures are required.

NOTE: This requires the fire engineer to list the actual measures that are considered necessary to implement.

### What are Fire Safety Risk Mitigation Measures?

A fire safety risk mitigation measure is any system or strategy implemented, for a limited period, to reduce the likelihood of fire occurrence and/or to reduce the consequence of a fire if it was to occur.

This may include, but not be limited to:

- 1. increased security
- increased maintenance of critical fire safety systems
- removal of vegetation, car parking, smoking areas, or other fuel sources from the building surrounds
- 4. increased emergency evacuation drills
- immediate removal of some parts of the external wall assembly
- 6. part or whole shut down of the facility.

# When should the Fire Safety Risk Mitigation Measures be implemented?

These measures are recommended to improve the fire safety of the building until further fire engineering investigation is carried out (and cladding rectification work undertaken if required). Therefore, they should be implemented immediately the BFSRA is received by the building owner.

### Answering 'YES'

Should the fire engineer decide that one or more fire safety risk mitigation measures are to be implemented, then within 5 business days of deciding, the *fire engineer* must either:

- complete, sign and submit the BFSRA and fire engineer statement to the owner stating the recommendations, or
- notify the QBCC in the approved form, of the recommendations. The approved form is available on the safer building website as is referred to as 'Form 74'

For more information concerning the fire engineer's obligations, refer to section 8.2.4 of this guideline.

#### Answering 'NO'?

Answering 'NO' to this question is intended to be an acknowledgement that the *fire engineer* has:

- a sufficient understanding of the current external fire spread risk associated with the building, and
- concluded that no fire safety risk mitigation measures are likely to be required to sufficiently mitigate the current external fire spread risk associated with the building until long-term cladding rectification work is completed.

#### Any doubts?

This question should be answered 'YES' if the *fire* engineer:

- does not have a sufficient understanding of the current external fire spread risk associated with the building, or
- 2. has any doubts, given recent fire events and contemporary industry knowledge, regarding:
  - the current external fire spread risk associated with the building,
  - the suitable mitigation benchmark for rectification of external fire spread risk, or
  - any other relevant matter.

#### What action is required now that the BFSRA has been completed?

Following completion of the BFSRA report, the *fire engineer* must complete Questions 9 and 10 on the *fire engineer* statement approved form, sign and date the form and provide the original form and BFSRA to the building owner.

Production of the BFSRA and *fire engineer statement* is mandatory. However, the implementation of the fire safety risk mitigation measures and completion of any further fire engineering assessment or any necessary rectification work are at the discretion of the owner.

#### NOTE:

If applicable, the BFSRA may be used as a reference document to inform the extent of work required for a cladding rectification project.

# 11.3 Completion of the fire engineer statement

Section 16ZI of the Regulation requires the *fire engineer* to prepare a *fire engineer statement* in the approved form (Approved Form 35). The statement is a declaration by the *fire engineer* which consolidates the outcomes of the BFSRA in a format relevant for the building owner to complete Questions 7 to 10 of the *combustible cladding checklist* (Part 3) using the *online system*.

Based on the responses provided by the *fire engineer* to Questions 7 to 10 on the statement, the *building owner* will either have no further action at this point or the building will remain identified as having a *cladding fire risk*.

#### What is the fire engineer taking responsibility for?

The statement is a declaration that the information provided by the *fire engineer* on the form is true and correct.

Therefore, by signing the *fire engineer statement* the *fire engineer* is expected to take responsibility for certain engineering conclusions associated with each response.

# 11.4 Regulatory obligations

The Regulation imposes the following timeframes on the fire engineer's involvement in the *combustible cladding checklist* (Part 3) process:

- 1. By 31 October 2019 the building owner must, by using the *online system*, give the QBCC the name and registration number of the *fire engineer* engaged by the owner to comply with the Regulation Part 4A, subdivision 3.
- 2. The building owner must, by using the *online system*, or another *approved way*, provide a copy of the BFSRA and *fire engineer statement* to QBCC by 3 May 2021.
- 3. If the *fire engineer* prepares and signs a BFSRA, or a *fire engineer statement*, for the purposes of sections 16X or 16ZL of the Regulation, the *fire engineer* must give the BFSRA or statement to the owner of the building, the QBCC and the *relevant local government* within five (5) business days after the BFSRA or statement is signed, and
- 4. In circumstances where both a BFSRA and a *fire engineer statement* is prepared for the purposes of sections 16X or 16ZL of the Regulation, the *fire engineer* must sign the BFSRA and the *fire engineer statement* on the same day, and give the owner of the building, the QBCC and the *relevant local government* within five (5) business days after the BFSRA and statement is signed, and
- 5. The *fire engineer* must keep a copy of the BFSRA or *fire engineer statement* for at least five (5) years after the BFSRA or statement is signed.

Penalties may apply for failure to comply with the requirements of points 3 and 4 above.

#### NOTE:

The building owner may make an application, in the approved form, to the QBCC Commissioner to extend the period for complying (with points 1 and 2 above). The application must be made at least 28 days before the end of the period.

# 12. Cladding Materials Library

The Queensland Non-Conforming Building Products Audit Taskforce in collaboration with The University of Queensland (UQ) have proposed a framework to provide a robust methodology to assess the fire hazard of cladding materials in existing buildings.

As part of the project the University has created a database (Cladding Materials Library) for use by competent *fire* engineers assessing the fire hazards of cladding materials on existing buildings.

The Materials Library provides publicly available quantitative data for different cladding panels, insulation and sarking materials. This data provides fire engineers with a tool to complement a comprehensive risk assessment based on the risk posed by any *combustible cladding* material which has undergone the 'screening testing'.

The website, managed by The University of Queensland Fire Safety Engineering Research Group, is available at https://claddingmaterialslibrary.com.au

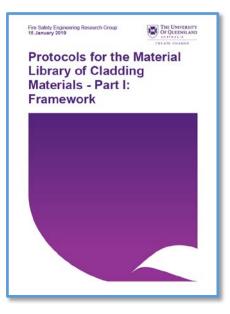
A series of reference documents (protocols) has also been developed to support the Cladding Materials Library. Relevant links are contained within the website:

- Part I: Framework
  - A review of the fire safety issues involving combustible cladding and an extended overview of the framework developed for the Cladding Materials Library.
- Part 2: Sample preparation and testing methodologies
  - Highlights the process required for preparing the samples in order to carry out the different tests that the screening testing and the detailed testing protocols are based on.
- Part 3: Sensitivity studies
  - Provides a series of calibration and sensitivity studies carried out the project for the screening testing protocol.
- Part 4: Use and interpretation
  - Provides a series of guidelines on an adequate use and interpretation of the Cladding Materials
     Library

Will the Cladding Materials Library data be considered suitable evidence for the purpose of meeting the BCA's relevant standards of fire safety and compliance?

BCA clause A2.2 sets out the various forms of evidence that can be provided to support the use of a material or form of construction as being fit for the purpose for which they are intended.

The Cladding Materials Library is being generated by UQ as a source of technical information for use by fire engineers in the assessment, design and specification of cladding systems as part of a BFSRA or Performance Solution. It does not replace the need for practitioners to apply their expert opinion in relation to the fire safety of a particular building. BCA clause A5.2(1)(e) (NCC BCA2019 Volume 1) identifies a certificate or report from a professional engineer as evidence of suitability.



# 12.1 Materials sampling

To confirm the composition of cladding materials used on a building, small samples (e.g. 40 mm diameter cores) need to be collected from both the cladding panel and any backing insulation material.

The number of samples required for testing will be based on an assessment of the building grouping as indicated in Table 1 – Requirement for Cladding Material Sample Collection. As a guide, the number of samples should provide for a representative selection across each building taking into account the number of building elevations being sampled, likely or identifiable variations in materials in a building, different UV exposures and other weathering effects, different ages of materials, etc.

The following provides an indicative sample range. It should be noted that in some cases, additional samples will be required in order to ensure that all cladding materials on a building are assessed and added to the Materials Library:

- Low-rise / minor complex
  - o two samples (minimum) and up to six samples (maximum) to ensure representation
- Mid-rise / moderate complex
  - o six samples (minimum) and up to 10 samples (maximum) for representation
- High-rise / major complex
  - o 10 samples (minimum) and up to 15 samples (maximum) for representation.

Wherever cladding material samples are taken, the core hole should be plugged using a suitably sized non-combustible button style plug and completely sealed with a compliant fire-retardant silicon sealant material (e.g. Sikaflex Firerate or similar). The plug should ensure a tight fit and weatherproofing of the wall assembly must be maintained.

Table 1 Requirement for Cladding Material Sample Collection

Building Grouping	Sample Collection Requirement	Suggested Samples	Sample Range
Height 1-2 levels Floor area <2000m²	Lowest and highest points (low sample to be diagonally opposed to high sample point)	2 (minimum requirement)	2 to 6 samples
	Colour variations (are more than 20 panels of the same colour used?)	1 - 2 per colour variation	
	Cladding volume (is the use of cladding product/s extensive?)	1 extra if extensive	
	Staged construction work (if yes, collect samples from lowest and highest points)	2 per stage (minimum requirement)	
Height 3-9 levels Floor area >2000m² and <10,000m²	Lowest, mid and highest points (low sample to be diagonally opposed to high sample point)	3 (taken from 1-2 sides of building)	6 to 10 samples
	Colour variations (are more than 20 panels of the same colour used?)	1 - 2 per colour variation	
	Cladding volume (is the use of cladding product/s extensive?)	3 additional samples if extensive product use	
	Staged construction work (if yes, collect samples from lowest and highest points)	2 per stage (minimum requirement)	
Height 10 or more levels Floor area >10,000m <sup>2</sup>	Lowest, mid and highest points (low sample to be diagonally opposed to high sample point)	3 (taken from 2 sides of building)	10 to 15 samples
	Colour variations (are more than 20 panels of the same colour used?)	1 - 2 per colour variation	
	Cladding volume (is the use of cladding product/s extensive?)	3 additional samples if extensive product use	
	Staged construction work (if yes, collect samples from lowest and highest points)	2 per stage (minimum requirement)	

# **Appendix A**

# **EXAMPLE - TABLE OF CONTENTS FOR BUILDING FIRE SAFETY RISK ASSESSMENT**

#### **SUMMARY OF KEY FINDINGS**

### 1. INTRODUCTION

- a. General
- b. Project description
- c. Relevant Stakeholders

### 2. REVIEW OF EXISTING FIRE ENGINEERING ASSESSMENTS (Q7)

# 3. REVIEW OF MATERIALS USED IN THE EXTERNAL WALL ASSEMBLY (Q8a)

- a. Identification of materials used
- b. Test data

# 4. EVALUATION OF COMPATABILITY OF EXTERNAL WALL ASSEMBLY (Q8b)

- a. Overview of existing fire safety systems
- b. Overview of building fire safety strategy

### 5. FUTURE ACTION REQUIRED (Q9)

- a. Further fire engineering assessment
- b. Likely building rectification work

### 6. FIRE SAFETY RISK MITIGATION MEASURES (Q10)

- a. Preventative measures
- b. Protective measures

### 7. CLADDING FIRE RISK ASSESSMENT

- 8. CONCLUSION
- 9. REFERENCES

### **APPENDICES**

Department of Housing and Public Works 13 QGOV (13 74 68) www.hpw.qld.gov.au

