



Competent fire safety practitioners

*A guide for building
certifiers*

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Executive summary

The NSW Government has recently made changes to the Environmental Planning and Assessment Regulation 2000 (Regulation) intended to improve fire safety in new and existing buildings.

These changes came into effect on 1 October 2017, although some changes did not commence immediately. An overview of the changes and the transitional arrangements is provided in Building System Circular BS17-002 at <http://www.planning.nsw.gov.au/Policy-and-Legislation/Building-Systems-Circulars>.

The changes require the involvement of a **competent fire safety practitioner** in certain specialist functions relating to the certification of building work.

The NSW Government has developed a framework that will eventually recognise industry schemes that will accredit competent fire safety practitioners. It also has scope to recognise other kinds of accredited persons as competent fire safety practitioners.

Until then, building certifiers are responsible for being satisfied that the persons fulfilling the specialist functions are competent – where relevant to the development they are certifying. It is important that this responsibility is exercised with due diligence.

This guide is designed to assist building certifiers in meeting this responsibility, and sets out three basic steps to follow:

1. Identify the specific function that the fire safety practitioner will perform.
2. Consider the fire safety practitioner's competence to perform that function, including knowledge, skills and experience.
3. Establish and record an opinion of the practitioner's competence.

This guide provides suggestions on what type of information a building certifier might need when forming an opinion of the fire safety practitioner's competence. It also makes suggestions on how building certifiers should make and keep records about this process.

Introduction

The Regulation contains provisions relating to building regulation and certification.

From 1 October 2017, the Regulation requires the involvement of a **competent fire safety practitioner**¹ in the following functions:

- endorsement of fire safety alternative solution reports (see clauses 130(2A) and 144A)
- endorsement of plans and specifications for certain fire safety systems (see clauses 136AA and 146B)
- endorsement of limited exemptions from compliance with the Building Code of Australia (BCA) for minor fire safety system works (see clause 164B).

The role of competent fire safety practitioners in these matters, and how they relate to the responsibilities of building certifiers under the Regulation, is outlined below.

Fire safety alternative solution reports

Before a proposed fire safety alternative solution² can be implemented for building work requiring development consent, and if that work relates to a Class 1b to 9 building, a report endorsed by a competent fire safety practitioner must be submitted to the certifying authority (building certifier). This requirement applies no matter when the alternative solution arises during the project.

Building certifiers receive the report and then authorise the proposal described in the report to proceed by issuing a complying development certificate (CDC) or construction certificate (CC).

Before the certifier can issue the certificate they must, among other things, form the opinion that the person endorsing the report is competent to perform that function.

Plans and specifications for 'relevant fire safety systems'

A 'relevant fire safety system' is defined in the Regulation to include a:

- hydraulic fire safety system such as a fire hydrant system, fire hose reel system, fire sprinkler system, and a wall-wetting sprinkler or drencher system
- fire detection and alarm system. Note that this does not include stand-alone smoke alarms
- mechanical ducted smoke control system.

Plans and specifications for work on 'relevant fire safety systems' must be submitted to the building certifier. This documentation can be submitted with the CDC or CC application, or after the CDC or CC is issued but must be submitted before the works commence on the relevant fire safety system.

The design of these systems must be endorsed as BCA compliant by a competent fire safety practitioner, or by a compliance certificate.³

If relying on an endorsement from a competent fire safety practitioner, the building certifier must be satisfied that the person providing that endorsement is competent to perform that function.

¹ See clause 167A for the definition of this term.

² 'Alternative solution' is also termed 'performance solution' in the BCA.

³ A compliance certificate is a statutory certificate under Part 4A of the Environmental Planning and Assessment Act 1979. They can only be issued by a certifier accredited by the NSW Building Professionals Board.

Identifying a competent fire safety practitioner

As previously outlined, competent fire safety practitioners are required to undertake the following functions:

- endorsement of fire safety alternative solution reports
- endorsement of plans and specifications for certain fire safety systems
- endorsement of limited exemptions from compliance with the Building Code of Australia (BCA) for minor fire safety system works

and the building certifier must be satisfied that the endorsing practitioner is competent.

While this can be achieved in several ways, building certifiers should follow these basic steps:

1. Identify the specific function that the fire safety practitioner will perform.
2. Consider the fire safety practitioner's competence to perform that function, including knowledge, skills and experience.
3. Establish and record an opinion of the practitioner's competence.

Appendix A provides an example of a request form that a building certifier could provide to persons seeking to be recognised as competent to provide an endorsement. This could also be used by building certifiers as a checklist.

The amendments to the Regulation also require that the building certifier record their opinion about the competence of the fire safety practitioner. **Appendix B** provides an example of how this record could be made.

Step 1 – Identify the function

The functions to be performed by a competent fire safety practitioner under the certification process for building work fall into the categories mentioned above.

Before considering a practitioner's competence, building certifiers should identify the function to be performed and be specific in terms of what it involves, since this affects what to look for in terms of competency.

Fire safety alternative solution reports

A fire safety alternative solution report presents a proposed non-standard fire safety design for all or part of a building. It also presents the justification for acceptance of that proposal. Endorsement of a report confirms that the fire safety practitioner providing the endorsement believes the proposal complies with the nominated BCA performance requirements.

Under the Regulation building certifiers must insist on a fire engineer's endorsement in specified circumstances. They could insist on this in all circumstances however, there may be situations when this may not be warranted or appropriate. For example:

- for a fire safety alternative solution relating to a minor matter where expert judgement from a suitably qualified and experienced person may suffice,
- for a design for a fire safety system such as a fire hydrant system where building services expertise is warranted, or
- for a fire safety alternative solution relating to a building product where product assessment expertise is warranted.

The fire safety practitioner providing the endorsement should have competency that corresponds with the nature and complexity of the fire safety alternative solution. Therefore, in identifying the function to be performed, be specific about the proposed alternative solution.

Plans and specifications for 'relevant fire safety systems'

The BCA sets out the standards to which 'relevant fire safety systems' must be designed, constructed and installed.

Different expertise will be required to endorse that a design for a 'relevant fire safety system' complies with the BCA for each of the types of systems covered by this term. It is unlikely one practitioner will be an expert in all types. A different level of expertise may also be required if the design is performance-based or the system forms a part of an alternative solution.

Therefore, it is important to be specific about the type of fire safety system, whether the function relates to a new fire safety system or an extension or modification to an existing system, and the basis of design compliance (i.e. deemed-to-satisfy or alternative solution).

Limited exemptions from compliance with the BCA for minor fire safety system works

The expertise required to endorse a proposed BCA exemption relating to minor works on existing 'relevant fire safety systems' may differ again. It should include system design expertise, but this will differ based on the type of system. It may also require additional expertise since the subject system is existing and may be a relatively new, or an older system.

Therefore, again, be specific. That is specific in terms of, for example, the type of 'relevant fire safety system', its age, or the standards to which the system was originally designed and installed (if known).

Step 2 – Consider competence

Once the particular function to be performed has been identified and described the next step is to consider the person's competence, including whether they have sufficient knowledge, skills and experience to perform the specific function identified in Step 1.

Appendix A provides a form that could be completed by persons wishing to provide an endorsement. The form provides an opportunity for those persons to demonstrate:

- sufficient technical knowledge relevant to the specific function identified in Step 1
- knowledge of relevant codes and standards
- knowledge of relevant laws and statutory responsibilities
- skills to perform the specific function
- experience directly relevant to the specific function.

Documentation

Fire safety practitioners should provide adequate documentation to building certifiers to demonstrate their competence to perform the function. This should include evidence of knowledge, skills and experience.

Knowledge and skills can be demonstrated through qualifications. A qualification is an official record that a person has completed a course of education or training. Examples may include a degree, diploma, certificate or other official record. The qualification should be in a discipline relevant to the function that would be performed, such as the endorsement of the design for a hydraulic fire safety system. It should be complemented by demonstration of suitable experience.

Alternatively, knowledge, skills and experience can be demonstrated by other means. For the kinds of functions referred to in this Guide these may include accreditation or registration. It should be checked that the accreditation or registration is in a relevant discipline and covers the three bases - that is, knowledge, skills and experience.

Where a person has no relevant qualifications, and is not accredited or registered, the practitioner may be able to demonstrate competence by other means such as a relevant license or suitable professional membership bound by a professional code of conduct. This should be complemented by more extensive suitable experience than would be expected if they had possessed a formal qualification.

Step 3 – Establish and record opinion

Based on the assessment of a practitioner's knowledge, skills and experience, the final step is to form an opinion about whether the person is a competent fire safety practitioner for the function that will be performed.

There is a new provision in the Regulation requiring that the building certifier record in writing that, in their opinion, the person selected is competent to perform the function.

An example of a way to record this opinion in writing is provided in **Appendix B**.

Appendix A – request form

For recognition as a competent fire safety practitioner (example)

Part 1 - Practitioner's details

Title:		Given name:		Family name:	
Business name:					
Property no:		Street:			
Suburb:				Postcode:	
Work phone:			Mobile:		
Email:					

Part 2 – Development details*

Property no:		Lot no:		DP/SP:	
Street:					
Suburb:				Postcode:	
Description of development:					
Nature of development: (new building, alterations, additions)					
Class of building: (Building Code of Australia classification of affected building or part)					

* These are the details of the project to which this application relates – and to which an endorsement will be provided.

Part 3 - Practitioner's nomination request for competency recognition

Note: Request must align with function to be performed (see step 1 of guide)

✓	Function	Brief details
	Endorse fire safety alternative solution report	Provide a brief description of nature and extent of proposed alternative solution(s) ***
	Endorse 'relevant fire safety system' plans and specifications **	Provide a brief description of kind of fire safety system and the work, including whether a new installation, or extension or modification to an existing system. ***
	Endorse proposed BCA exemption (minor works on 'relevant fire safety system') **	Provide brief description of kind of existing fire safety system and the proposed works on that system. ***

** The term 'relevant fire safety system' is defined by the Environmental Planning and Assessment Regulation 2000 (see clauses 136AA, 146B, 152A, 164B, 190B) to include a: hydraulic fire safety system; fire detection and alarm system; mechanical ducted smoke control system.

*** If the documentation has been prepared and handed to the building certifier then this entry may simply reference the documentation that provides the brief details (eg plans, specifications, report)

Part 4 - Practitioner's knowledge and skills

Note: - Complete relevant table(s) (ie 4A, 4B, 4C)

- Entries must align with function(s) to be performed (see Part 3 of this form)

4A: Endorse fire safety alternative solution reports	✓
Knowledge (I know and understand):	
Technical	
Fire science, human response to fire, fire safety systems, fire engineering, fire engineering guidelines and codes (where analysis to justify acceptance of proposal is quantitative, qualitative, or a combination of these means)	
Fire modelling and other fire engineering tools (where analysis to justify acceptance of proposal is quantitative - in whole or part)	
What is specified in Table 4B (if the proposal relates to the design of a fire safety system only)	
Materials science and building product fire testing	

4A: Endorse fire safety alternative solution reports	✓
Knowledge (I know and understand):	
Technical	
The relevant fire safety requirements of the BCA, and the requirements of the BCA relating to performance-based design	
Regulations	
The relevant local regulations, including my responsibilities under those regulations	
Skills (I can):	
Competently undertake a sufficient analysis (albeit qualitative or quantitative) to justify acceptance of a proposed fire safety alternative solution	
Read and interpret building plans	

4B: Endorse 'relevant fire safety system' plans and specifications	✓
Knowledge (I know and understand):	
Technical	
The design methods and compliance requirements (eg codes, standards) relevant to the type of fire safety system (See Part 3 of this form)	
If the design is performance-based, the requirements of the BCA relevant to performance-based designs	
Regulations	
The relevant local regulations, including my responsibilities under those regulations	
Skills (I can):	
Establish the scope of work for the design of the system	
Determine, interpret and apply design and compliance requirements	
Undertake analysis and calculations (design) and determine a design solution that meets design and compliance requirements	
Specify the design solution including materials and components that meet the design criteria, and relevant compliance requirements	

4B: Endorse 'relevant fire safety system' plans and specifications	✓
Skills (I can):	
Coordinate the design of interfacing with other systems	
Read and interpret design documentation (plans and specifications)	
Verify that design documentation illustrates and describes a compliant design solution sufficiently for authority acceptance, and for contractor installation and commissioning	
Validate that a proposed design solution meets the design criteria, and relevant compliance requirements	

4C: Endorse proposed BCA exemption (minor works on 'relevant fire safety system')	✓
Knowledge (I know and understand):	
Technical	
What is specified in Table 4A	
Regulations	
The relevant local regulations, including my responsibilities under those regulations	
Skills (I can):	
Do what is specified in Table 4B	
Determine the standard of operational performance required of an existing system	
Determine whether it is unreasonable or unnecessary to upgrade the operational performance of the existing 'relevant fire safety system' (See Part 3 of this form)	

Part 5 - Practitioner’s qualifications

The information provided under this Part must describe relevance to competence to perform function(s) nominated under Part 3 and support the claims made under Part 4.

Qualification	Relevance to competence to perform task(s) (see Parts 2, 3 and 4)

Note: Attach copies of qualifications if requested

Part 6 – Other documentary evidence of competence

The information provided under this Part must describe relevance to competence to perform function(s) nominated under Part 3 and support the claims made under Part 4.

Accreditation, registration, license	Relevance to competence to perform task(s) (see Parts 2, 3 and 4)

Note: Attach copy of document evidencing possession of accreditation, registration, license if requested

Part 7 - Practitioner's experience – specific

The information provided under this Part must describe relevance to competence to perform function(s) nominated under Part 3 and support the claims made under Part 4.

Provide a summary of relevant experience in (at least) the last five years*

[Empty box for providing a summary of relevant experience]

* Provide an attachment if this form does not provide sufficient space

Practitioner's name (print)

Practitioner's signature

Date

Appendix B – record of opinion

Competence of fire safety practitioner (example)

Environmental Planning and Assessment Regulation 2000 – Clause 167A

I, _____ (insert full name and Building Professionals Board accreditation number), being the certifying authority for the following development:

_____ (insert a brief description of the development, the address of the property to which the development relates, and details of the development consent or complying development certificate)

consider that _____ (insert full name of person deemed competent) is competent to perform the following function(s) under the *Environmental Planning and Assessment Regulation 2000* in relation to this development:

(Complete the following table)

✓	Function(s)
	Endorse the fire safety alternative solution report relating to: (insert a brief description of the fire safety alternative solution)
	Endorse plans and specifications for: (insert a brief description of the proposed fire safety system works)
	Endorse the proposed Building Code of Australia exemption relating to: (insert a brief description of the proposed fire safety system works)

I made this determination based on the following documentation:

_____ (Insert details of documentation relied upon)

Signature

Date