



ABCBC

Inspection and certification of fire safety systems Installation

Discussion paper on BCR recommendation 19

August 2021

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Inspection and certification of fire safety systems installation

Preface

The [Building Confidence Report](#) (BCR), published in April 2018, made 24 recommendations to Building Ministers to address systemic issues in the Australian building industry. Building Ministers established the BCR Implementation Team within the Office of the Australian Building Codes Board (ABCB) to work with governments and industry to respond to the recommendations with a focus on national consistency where possible.

The BCR Implementation Team's work aims to establish national best-practice models in response to BCR recommendations. If implemented, the responses will strengthen compliance with the National Construction Code (NCC), better protecting the interests of people who own, work in, live in and use Australian buildings.

The discussion paper for *Inspection and certification of fire safety systems installation* represents a nationally consistent approach to BCR recommendation 19. This recommendation states *“that each jurisdiction requires registered fire safety practitioners to design, install and certify the fire safety systems necessary in commercial buildings”*.

Background

The BCR notes that while fire safety is one of the most important elements of a building's design, fire safety usually presents the highest risk to occupants when subject to non-compliance. This BCR recommendation identifies a number of critical issues including:

- There is no nationally consistent process for fire systems design, installation and certification.
- Not all fire safety practitioners currently require registration across Australia.
- Active fire protection systems are being favoured over passive fire systems. Proper installation and maintenance of these systems is critical to occupant safety.
- Fire safety engineers are often engaged to prepare fire safety engineering designs that include complex Performance Solutions on critical safety matters. Their involvement is often limited to specific Performance Requirements and their advice is generally not sought on an overall fire safety strategy. This has the potential to impact the safety of the building's occupants.
- Most states and territories do not require a registered fire safety engineer to inspect building work to ensure that the fire engineering design has been constructed as designed. This often forms part of the building surveyor's role when undertaking mandatory building inspections.
- Although it is common for building surveyors to require commissioning certificates from fire safety installers or the builder, only a few jurisdictions (QLD, NSW, SA and Tasmania) mandate that these certificates be provided as part of the final sign-off of a commercial building.
- Legislation regulating the design, installation and certification of fire safety systems in commercial buildings is not sufficiently strict, as recognised in the BCR, and requires a more rigorous approach.

Responses to this discussion paper will inform the development of model guidance that will be provided to state and territory governments for consideration and implementation as appropriate.

Addressing the BCR Recommendation - Linkages to other BCR work

BCR Recommendation 19 has substantial overlap with other BCR recommendations to the extent that some elements of BCR recommendation 19 have already been addressed. **Table 1** below identifies the linkages to other BCR recommendations and identifies the outstanding items specific to BCR Recommendation 19.

Table 1: Matters to be addressed – BCR Recommendation 19

Matters raised in BCR relating to BCR recommendation 19	How matters raised are to be addressed
<p>The system is fragmented, with no nationally consistent process for fire systems design, installation and certification. Registered fire safety practitioners must design, install and certify fire safety systems in commercial buildings.</p>	<p>BCR recommendations 1 and 2- The National Registration Framework (NRF) proposes the registration of fire safety practitioners involved in the design, construction and approval of a building, including <i>fire safety designers (fire safety engineers)</i>, fire systems designers and fire systems installers.</p> <p>The NRF details the scope of work and competencies required to perform the design, installation and certification of fire safety systems. These roles were developed in consultation with NFIA, AFAC and FPAA.</p> <p>Outcome: <i>It considered that this matter has been addressed under BCR recommendations 1 and 2. The NRF requires that all fire safety practitioners involved in the design, installation and certification of a building's fire safety system are registered and competent.</i></p>
<p>A registered fire safety engineer should be required to certify that the building work undertaken is consistent with the fire safety engineering design, in particular where Performance Solutions have been used.</p>	<p>BCR Recommendations 13-16- Design Acceptance includes a new process for building approval documentation including the requirement for all building practitioners responsible for an aspect of design to provide a <i>Declaration of Design Compliance</i> and where required by the statutory building surveyor, a <i>Certificate of Design Compliance</i>. Together these requirements ensure a <i>fire safety designer</i> has 'certified' the building design documentation.</p>

Matters raised in BCR relating to BCR recommendation 19
How matters raised are to be addressed

BCR Recommendation 17- Independent third party review of the building design relies on registered *fire safety designers (fire safety engineers)* independently reviewing *the fire safety design* of a building for complex designs.

BCR Recommendation 18- Mandatory inspections relies on a prescribed list of inspections including those related to fire safety elements.

Fire safety designers are to inform the building surveyor of any additional fire safety inspections and notification stages for inspections.

The response to recommendation 18 also states, where the building surveyor does not have sufficient expertise to perform the inspections related to fire safety, a registered *fire safety designer* can undertake the inspection on behalf of the building surveyor.

Outcome: *It is considered that this matter has been addressed. The proposal in response to BCR recommendations 13-16 Design Acceptance requires that all fire safety designers declare their designs to be compliant.*

In addition recommendation 17 ensures that fire safety designs in complex buildings, are independently reviewed.

BCR Recommendation 18 ensures that the statutory building surveyor or fire safety designer must perform mandatory inspections of fire systems, including any additional fire systems required by the Performance Solution to ensure they have been built as per the design. The fire safety designer can also nominate additional mandatory inspections.

The building surveyor should be advised of the required notification stages for inspection by the fire safety engineer.

A registered fire safety engineer may need to inspect the building at various stages in order to be able to issue a final certificate.

BCR Recommendation 18- Mandatory inspections, includes a prescribed list of inspections related to a building's fire safety elements. *Fire safety designers (fire safety engineers)* are to inform the building surveyor of any additional fire safety inspections and notification stages for inspections.

The BCR recommendation 18 model guidance also states, where the building surveyor does not have sufficient expertise to perform the inspection related to the fire safety design, a registered *fire safety designer* can perform the inspection.

Outcome: *It is considered that this matter has been addressed. The BCR recommendation 18 model*

Matters raised in BCR relating to BCR recommendation 19
How matters raised are to be addressed

guidance proposes that the fire safety designer advise the building surveyor of any additional mandatory inspections relating to the building's fire safety design and can undertake mandatory inspections when requested by the building surveyor.

Mandatory, independent certification of the testing and commissioning of fire safety systems must be carried out by registered practitioners.

Outcome: *This matter is yet to be addressed in response to BCR recommendation 19. Model guidance will be developed recommending independent certification of the testing and commissioning of fire safety systems and that it be undertaken by registered fire systems installers as detailed in the NRF (Outstanding item – discussed in this paper).*

That 'necessary fire safety systems' are independently tested.

Outcome: *This matter is yet to be addressed in response to BCR recommendation 19. The table (Attachment A) identifies the fire safety systems that could be installed in a building. Once agreed, the list of systems that should be independently tested will be included in model guidance (Outstanding item - discussed in this paper).*

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Purpose

BCR recommendation 19 and the installation, testing, certification and maintenance of fire safety systems, impacts building occupant safety.

The requirement to test, inspect, certify and maintain fire safety systems aims to:

- detect any observable non-compliance issues;
- ensure that the systems are installed in accordance with the relevant approvals, plans and specifications of the design;
- ensure the building is compliant with the NCC and applicable standards including any other relevant jurisdictional requirements;
- ensure the building is suitable for occupation and use prior to an occupancy certificate being issued; and
- ensure that the building continues to operate as design through ongoing inspection and maintenance.

This discussion paper acknowledges the interdependencies associated with the BCR recommendations. It also reflects on those matters relating to BCR recommendation 19 that have been addressed in response to other BCR recommendations. The paper explores the outstanding matters identified in BCR recommendation 19 that are yet to be addressed, which are described in Table 1. It does not cover fire system design matters such as fire brigade vehicular access as it is not considered to be a system requiring independent installation, testing and commissioning.

The paper is presented as five principles, which are considered fundamental to the installation, testing, certification and maintenance of fire safety systems. The paper provides context and objectives to support each principle. Finally, the paper recommends a number of matters to be considered by stakeholders. Stakeholder input will assist in the development of model guidance and will provide a robust,

transparent and a nationally consistent model to the inspection and certification of fire safety systems installation.

Glossary

Note: Definitions in this section are subject to change following finalisation of the BCR Glossary of Terms being developed in response to BCR Recommendation 22.

ABCB means Australian Building Codes Board

BCR means [Building Confidence Report](#)

Building approval means the final certification that is required before building activity can commence, where building activity includes construction of new buildings, alterations and additions to existing buildings, the relocation of buildings between sites and other structural work.

Building approval process means the statutory process for the approval of building work.

Building approval applicant means the individual or entity who applies for the *building approval*. Often the building owner or an agent of the owner.

Certificate of Design Compliance means a document provided by an appropriately registered and independent person who has examined and assessed a component of design work for compliance with the NCC stating that the component complies with stated performance requirements of the NCC and/or any other prescribed requirements.

Certificate of Construction or Installation Compliance means a document provided by an appropriately registered and independent person who has inspected or tested construction or installation work stating that the construction or installation work has been carried out in accordance with the approved documentation or complies with stated performance requirements of the NCC and/or any other prescribed requirements.

Declaration of Design Compliance means a document provided by the registered person responsible for the design work stating that it complies with the requirements of the NCC and/or any other prescribed requirements.

Declaration of Construction or Installation Compliance means a document provided by the registered person, responsible for the work, stating that the construction or installation work has been carried out in accordance with the building approval documentation and/or any other prescribed requirements.

Fire safety design¹ means engineering work that requires, or is based on, the application of fire safety engineering principles and data to a design for a building other than engineering work that is done only in accordance with a prescriptive standard.

Fire safety designer² means an individual registered in the discipline of fire safety design engaged to undertake *fire safety design work*.

Fire safety system means one or any combination of the methods used in a building to facilitate fire safety, including but not limited to:

- a) warn people of an emergency
- b) provide for safe evacuation
- c) restrict the spread of fire
- d) control or extinguish a fire

and includes both active and passive systems.³

Fire systems design⁴ means the development of construction design documentation, specifications and reports for a prescribed fire services system for a building but does not include professional engineering design work.

Fire systems designer⁵ means an individual registered in the discipline of fire systems design engaged to undertake *fire systems design work*.

¹ Fire safety design is the same as fire safety engineering design

² Fire safety designer is the same as fire safety engineer

³ Refer Table 2 for a list for fire safety systems covered by this paper.

⁴ Fire systems design is the same as fire systems engineering design

⁵ Fire systems designer is the same as fire systems engineer

Fire systems installation means the construction, installation, replacement, alteration routine servicing, maintenance, testing or commissioning of any part of a system used for firefighting or fire detection.

Fire systems installer means an individual registered in the discipline of fire systems installation engaged to undertake *fire systems installation work*.

Maintenance schedule means details of relevant essential building services and the maintenance requirements for those, where maintenance requirements include the level of performance that the essential building service must achieve to fulfil its purpose; and the frequency and type of inspection, testing and maintenance required for the essential building service.

Mandatory inspection means the independent assessment of building work, at prescribed notification stages, to verify that the building work has been carried out in accordance with the approved building documentation and relevant building legislation.

Occupancy approval means the final certification that is required before a building can be occupied.

Plumbing work means the construction, installation, replacement, repair, alteration, routine servicing, maintenance, testing or commissioning of any part of a prescribed system for a building.

Plumber means an individual registered in the discipline of plumbing engaged to undertake *plumbing work*.

Professional engineering design work means engineering work that requires, or is based on, the application of engineering principles and data to a design for a building other than engineering work that is done only in accordance with a prescriptive standard.

Statutory building surveying work means approval work, independent design review, independent construction or installation inspection and certifying, which relevant legislation requires be done by a registered building surveyor.

Statutory building surveyor means an individual registered in the discipline of building surveying engaged to undertake *statutory building surveying work*.

Principles

Principles	
1	Installation and testing, certification and maintenance of nominated fire safety systems is regulated
2	Installation and testing of fire safety systems is undertaken by registered practitioners
3	Certification of fire safety systems is mandatory and undertaken by independent and registered practitioners
4	Statutory building surveyor is responsible for inspecting fire safety systems prior to issuing an occupancy approval or final certificate
5	Routine maintenance of essential fire safety systems is regulated, undertaken by registered practitioners and reported to the building regulator annually.

Principle 1- Installation and testing, certification and maintenance of nominated fire safety systems is regulated

Objective

That the installation and testing, certification and maintenance of specific fire safety systems is regulated by governments.

Context

Fire safety systems are not uniformly inspected across commercial buildings in Australia. Where inspected, compliance is generally determined by the *statutory building surveyor*. While it is common for the *statutory building surveyor* to require certificates from *fire systems installers* or the builder, only a few jurisdictions (QLD, NSW, SA and Tasmania) mandate that these certificates be provided as part of the final sign-off of a commercial building. Routine maintenance of fire safety systems is also not regulated in all jurisdictions and there is a risk that the fire safety systems may not perform as intended if not regularly maintained. More recently, active fire safety systems are being favoured over passive fire safety systems in meeting the NCC's Performance Requirements. Proper installation and testing, certification and maintenance of these systems is critical to ensure regulatory compliance and ongoing occupant safety.

The list provided at **Attachment A** details all the critical fire safety systems that should be subject to scrutinised installation and testing, certification and maintenance. The list is intended to facilitate a nationally consistent approach and scope. It also captures both active and passive systems that should be tested to ensure integrity of the fire safety systems' design is maintained and the fire safety systems will perform as intended.

Recommendations

1. That the installation and testing, certification and maintenance of the fire safety systems listed in **Attachment A** is regulated by governments.

Consultation Questions

1. Do you agree that the installation and testing, certification and maintenance of the fire safety systems listed in **Attachment A** should be regulated?
2. Are there any additional fire safety systems not captured in the list? If so, what are they?
3. Do you agree that fire extinguishers and/or mechanical air handling systems do not require a *declaration of installation compliance* unless where requested by the *statutory building surveyor*? If no, provide alternative suggestions on how these systems should be regulated for installation, testing and certification.

Principle 2- Installation and testing of fire safety systems is undertaken by registered practitioners

Objective

That registered and competent *practitioners*, as per the National Registration Framework (NRF)⁶, are responsible for the installation and testing of specified fire safety systems.

Context

Not all fire practitioners currently require registration across Australia. Where there are requirements for registration of practitioners, they are not consistent. In some jurisdictions registration is obtained through accredited schemes run by industry associations (e.g. Fire Protection Association Australia (FPAA) accreditation scheme- FPAS). Nationally, there are insufficient controls and accountability over the installation and testing of fire safety systems.

⁶ BCR recommendations 1 and 2: [National Registration Framework](#)

It is noted that plumbing qualifications and registration allow plumbers to perform work on fire services including hydrants, hose reels and in some cases sprinkler systems. These functions are reflected in the NRF.

The NRF prescribes the minimum competency requirements for the installation and testing of fire safety systems (**Attachment A**). *Fire systems installers* and *plumbers* are to meet the requirements of the NRF⁷ to undertake specific work. Upon completion of the installation and testing of a fire safety system, a *fire systems installer* or *plumber* is to provide a *Declaration of Installation Compliance* stating that the construction or installation work has been carried out in accordance with the building approval documentation and any other prescribed requirements (Figure 1). The proposed list of systems that require installation and testing by registered *fire systems installers* or *plumbers* are provided at **Attachment A**.

The NRF separates fire systems installers into separate sub-categories, depending on the type of work to be undertaken, as set out below.

Fire Systems Installation - Occupations Covered

- Fire sprinkler systems installer
- Fire hydrant and hose reel systems installer
- Fire detection and alarm systems installer
- Emergency and exit lighting systems installer
- Passive fire and smoke systems installer

** Installation of fire sprinkler systems and fire hydrant and hose reel systems are restricted to registered fire systems installers and plumbers. Fire systems installation is generally defined as commencing at the plumbing system isolation point (i.e. where the isolation device is installed to separate out the plumbing system from the water-based fire protection system). The defined isolation point can vary dependent on a number of factors including the type of system and*

⁷ BCR recommendations 1 and 2: [National Registration Framework](#)

building class, age of the system, the relevant Australian Standards applying and other such variables.

Recommendations

1. A *fire systems installer* or *plumber* must be registered and competent, and meet the minimum requirements of the NRF⁸.
2. Only a *fire systems installer* or a *plumber* in the case of a fire sprinkler system or fire hydrant and hose reel system that forms part of a cold water service of a property that is not isolated from the drinking water supply, undertakes the installation and testing of fire safety systems.
3. A *fire systems installer* or *plumber* must provide a *Declaration of Installation Compliance* to the statutory building surveyor upon completion of the installation and testing of the fire safety systems listed in **Attachment A**.
4. That the *Declaration of Installation Compliance* forms part of the *building approvals documentation* and must be provided prior to the issue of the *occupancy approval*.

Consultation Questions

1. Do you agree with the recommendation that the *fire system installer* or *plumber* must test the installed fire safety systems and provide a *Declaration of Installation Compliance*? If no, please provide alternative suggestions.

⁸ BCR recommendations 1 and 2: [National Registration Framework](#)

Principle 3 – Certification of fire safety systems is mandatory and is undertaken by independent and registered practitioners

Objective

That registered and competent *practitioners* as per the NRF⁹, who have not participated in the original installation and testing of fire safety systems, undertake mandatory, independent certification of fire safety systems.

Context

As described in the BCR, it is important that installed fire safety systems are subject to independent certification to ensure they perform as designed in the event of a fire. An independent *fire systems installer* or *plumber*, nominated by the owner or *building approval applicant*, should be responsible for the independent certification of fire safety systems. The *statutory building surveyor* should be satisfied that the *fire systems installer* or *plumber* nominated is independent and competent¹⁰.

The independent *fire systems installer* or *plumber* should be registered in the jurisdictions where the work is to be undertaken and hold the necessary qualifications and experience¹¹ to perform independent work. It is a requirement that the independent *fire systems installer* or *plumber* has not been involved in the installation to ensure a non-biased process. An independent construction or installation inspection carried out by a registered *fire system installer* is a trade-level assessment of post-construction compliance for the purposes of routine maintenance and services. The qualification and experience requirements of the independent *fire systems installer* or *plumber* for certification work may need to be higher than the Certificate III qualification. Some

⁹ BCR recommendations 1 and 2: [National Registration Framework](#)

¹⁰ BCR recommendations 1 and 2: [National Registration Framework](#), BCR recommendation 10: [National model code of conduct for building surveyors](#)

¹¹ BCR recommendations 1 and 2: [National Registration Framework](#)

jurisdictions may have separate qualification requirements for independent inspection and certification of fire safety system registration.

The independent *fire systems installer* or *plumber* should act in the public interest and ultimately be accountable to a jurisdiction's building regulator. The *statutory building surveyor*, when satisfied with the level of independence, accepts the independent *fire systems installer's* or *plumber's Certificate(s) of Installation Compliance* and includes it as part of the *building approval* documentation.

A list of fire safety systems subject to mandatory, independent certification is provided at **Attachment A**.

Recommendation

1. An independent, registered and competent *fire systems installer* or *plumber*, in accordance with the NRF¹², be required to certify the fire safety system installations specified in **Attachment A**.
2. The owner or *building approval applicant* be responsible for engaging the independent *fire systems installer* or *plumber* to certify the installation.
3. The independent *fire systems installer* or *plumber* provides a *Certificate of Compliance* (Figure 1) to the *statutory building surveyor* certifying that the installation has been completed in accordance with the approved plans and any other relevant legislation.
4. The *Certificate of Installation Compliance* is to form part of the building approval documentation and must be provided prior to the issue of the *occupancy approval*.
5. The independent *fire systems installer* or *plumber* must declare they are independent of the originating fire systems installer including by not having participated in any component of the installation and testing.

¹² BCR recommendations 1 and 2: [National Registration Framework](#),

6. The independent *fire systems installer* or *plumber* should declare any real or potential conflict of interest with the *statutory building surveyor*.
7. The *statutory building surveyor* should not refuse the work of a registered and competent fire systems installer or *plumber* as per the NRF¹³ unless the practitioner does not meet the competency requirements or is not registered.
8. The *statutory building surveyor* should not perform the role of an independent *fire systems installer* or *plumber* for those systems that require mandatory independent certification.

Consultation Questions

1. Do you agree that the certification of the fire safety systems listed in **Attachment A**, should be undertaken by an independent and registered *fire systems installer* or *plumber*? If no, please provide further comment.
2. Should the independent certification be undertaken by a *fire systems installer* or *plumber* with a Certificate IV qualification or should any additional qualification requirements be left to the discretion of the individual jurisdiction?
3. Are the requirements for an independent *fire systems installer* or *plumber* adequate to ensure no conflict of interest and independence exists between the original *fire systems installer* or *plumber* and independent *fire systems installer* or *plumber*? If no, please provide further comment.
4. Should the independent *fire systems installer* or *plumber* be independent of the entity (e.g. company or business) that performed the installation or can it be another employee from the same entity? If yes, please provide further comment.
5. Do you agree that the owner or *building approval applicant* should engage the independent *fire systems installer* or *plumber*, ensuring they are competent and registered as per the NRF? If no, explain why.

¹³ BCR recommendations 1 and 2: [National Registration Framework](#)

Principle 4 – Statutory building surveyor is responsible for inspecting certified fire safety systems prior to issuing an occupancy approval or final certificate

Objective

That the *statutory building surveyor* visually inspects the fire safety systems as part of the *building approval* process and prior to issuing an *occupancy approval* or final certificate.

Context

The *statutory building surveyor*, engaged to perform the *statutory building approval* function, is responsible for inspecting all the fire safety systems (both active and passive systems) as per the *fire safety design*. **Attachment A** includes a list of all the systems that should be inspected and documented by the *statutory building surveyor* in addition to those systems that should be independently certified. While the *statutory building surveyor* can rely on the independent certification, it is recommended the *statutory building surveyor* also visually inspects the fire safety systems to ensure they are constructed as designed.

For example, hose reels are installed as per the location specified on the *building approval* documentation. Another example is services (electrical, mechanical) penetrating fire rated building elements are properly treated and sealed, in accordance with the approved building product data to maintain the fire resistance of the element penetrated. This is consistent with the model guidance developed for BCR recommendation 18¹⁴.

¹⁴ BCR recommendation 18: [Mandatory Inspections](#)

Mandatory inspections (BCR recommendation 18¹⁵) includes a prescribed list of inspections related to a building's fire safety elements. *Fire safety designers* are to inform the *statutory building surveyor* of any additional fire safety inspections and notification stages for inspections. The response to BCR recommendation 18 also states, where the *statutory building surveyor* does not have sufficient expertise to perform the inspections related to fire safety, a registered *fire safety designer* is required to perform the inspections. It is expected that the practitioner is registered by the jurisdiction in which they are operating and meets the qualifications and experience requirements listed in the NRF¹⁶.

Recommendation

1. The *statutory building surveyor* is responsible for inspecting the certified fire safety systems, as specified in **Attachment A**, to verify that they are constructed and/or installed as per the *building approval* and *fire safety design*.
2. *Fire safety designers* (fire safety engineers) are to inform the *statutory building surveyor* of any additional fire safety inspections required and the notification stages for inspection.
3. Where the *statutory building surveyor* does not have sufficient expertise to perform the inspections, the *fire safety designer* can undertake the inspection on behalf of the *statutory building surveyor*.

Consultation Questions

1. Do you agree on the role of the *statutory building surveyor* in relation to visual inspections of certified fire safety systems installation? If no, provide suggested alternatives.
2. Should a *fire safety designer* undertake the inspection of fire safety systems involving Performance Solutions prior to occupancy approval or should this be

¹⁵ BCR recommendation 18: [Mandatory Inspections](#)

¹⁶ BCR recommendations 1 and 2: [National Registration Framework](#),

the role of the *statutory building surveyor*? If no, provide suggested alternatives.

Principle 5 – Routine maintenance of essential fire safety systems is regulated, undertaken by registered practitioners and reported to the building regulator annually

Objective

That essential fire safety systems are regularly maintained to ensure they continue to operate as designed in Class 2-9 buildings.

Context

Maintenance of fire safety systems is not regulated uniformly across Australia. Fire safety systems play a critical role in ensuring life safety and protection to property and should be subject to annual testing and maintenance to ensure they continue to operate as intended. The *fire safety design* for a building typically includes both active and passive systems. Most systems rely on ongoing, periodic maintenance, which is detailed in Australian Standards (AS) such as the AS 1851 series.

In addition, there are often maintenance requirements stipulated by the *fire safety designer* for specific Performance Solutions as part of the fire engineering design. Maintenance requirements for fire safety systems should be documented by the *statutory building surveyor* on the *occupancy approval* or final certificate. The list of systems to be maintained is expected to be broader than those systems listed in **Attachment A**. Jurisdictions often specify minimum maintenance requirements through legislation.

Routine maintenance activities should be conducted by a registered and competent *fire systems installer* or *plumber*. Maintenance activities should be recorded and included in a building manual. The model guidance developed in response to BCR recommendation 20 proposes that the original building manual (created prior to

building occupancy) be stored by governments but maintained by the building owner and be subject to auditing and compliance activities by regulators.

Ongoing maintenance should be supported by the production of annual maintenance statements for all the maintenance activities specified in the *occupancy approval*. The maintenance statements should confirm the inspections and activities performed to ensure all required systems are maintained in accordance with the specified standards and at specified intervals. Maintenance statements should be lodged with the state or territory building regulator annually.

Recommendation

1. The *statutory building surveyor* prescribes on the *occupancy approval*, those fire safety systems requiring routine maintenance, including the necessary maintenance intervals and the standard to which maintenance must be undertaken.
2. Routine maintenance of specified fire safety systems should only be undertaken by a registered *fire systems installer* or *plumber*.
3. The owners of all Class 2-9 buildings are required to lodge with the state or territory building regulator, annual maintenance statements confirming that maintenance has been undertaken as per the *occupancy approval*.

Consultation Questions

1. Do you agree that the *occupancy approval* should state which fire safety systems must be maintained and to which standard and maintenance interval?
2. Do you agree that the maintenance of specified fire safety systems should only be undertaken by registered *fire systems installers* or *plumber*?
3. Do you agree that annual maintenance statements should be prepared and lodged with the state or territory building regulator for Class 2-9 buildings?

Figure 1 Declarations and certificates

Document	Declaration of Compliance		Certificate of Compliance	
	Design	Construction/ Installation	Design	Construction/Installation
Definition	A document provided by the registered person responsible for the design work stating that it complies with the requirements of the NCC and/or any other prescribed requirements.	A document provided by the registered person, responsible for the work, stating that the construction or installation work has been carried out in accordance with the building approval documentation and/or any other prescribed requirements.	A document provided by an appropriately registered, and where necessary, independent person who has examined and assessed a component of design work for compliance stating that the component complies with stated Performance Requirements of the NCC and/or any other prescribed requirements.	A document provided by an appropriately registered, and independent person who has inspected or tested construction or installation work stating that the construction or installation work has been carried out in accordance with the building approval documentation and/or complies with stated Performance Requirements of the NCC and/or any other prescribed requirements.
Who provides	A registered building practitioner responsible for the work.		A registered building practitioner at an appropriate level in the relevant occupation.	
Who receives	A person who contracted the work or who will rely on the work.		A person who contracted the assessment or who will rely on the assessment ¹ .	
How recorded	Must be provided to the building approval authority ² when seeking a building or occupancy approval and kept as part of the building records ³ .		Must be recorded by the <i>statutory building surveyor</i> or other person relying on the certificate to make a statutory assessment of building compliance ⁴ .	
Legal effect	Holds the person responsible for the work liable for its compliance.		Holds an expert liable for advice. Indemnifies the <i>statutory building surveyor</i> or other person relying on the advice.	

Notes on Figure 1

1. A building surveyor making a statutory assessment may rely on a *certificate of compliance*. A building surveyor may choose not to rely on a certificate of compliance if not satisfied.
2. The legal entity that issues the *building approval*. This may be a private building surveyor, a local government or other body, depending on each jurisdiction's relevant legislation.
3. The building records may be kept by a different legal entity from the *building approval authority*. In most jurisdictions the building records are kept by the relevant local or state government.
4. Building approval legislation in each jurisdiction will state whether the *statutory building surveyor* keeps the assessment records or includes them in the building records

ATTACHMENT A

Fire safety systems requiring installation, testing, inspection, certification and maintenance.

Table 2 is a list of active and passive fire safety systems that require installation, testing, inspection, certification and maintenance.

The table identifies which practitioners are responsible for particular actions. It also nominates which systems require installation and testing, and mandatory independent certification. The table identifies those systems which require inspection by the *statutory building surveyor* during the final inspection. Maintenance is not limited to this list of systems but prescribes the minimum list of systems that must be subject to routine maintenance.

Table 2: Fire safety systems requiring installation, testing, inspection, and certification

Fire Safety System	Installation and testing by the fire systems installer	Mandatory independent certification by Independent fire systems installer	Inspection by the statutory building surveyor – Visual only
Building occupant warning systems for emergency purposes	Yes, appropriately qualified emergency and exit lighting systems installer	Yes, appropriately qualified emergency and exit lighting systems installer	Yes, equipment location as per approved design
Emergency lighting and exit signage	Yes, appropriately qualified emergency and exit lighting systems installer	Yes, appropriately qualified emergency and exit lighting systems installer	Yes, locations as per the approved design
Fire and smoke rated construction (for tested systems includes all access panels, doors and penetrations)	Yes, appropriately qualified passive fire and smoke systems installer	Yes, appropriately qualified passive fire and smoke systems installer	Yes, may require multiple inspections during construction stages
Fire alarm monitoring connection	Yes, appropriately qualified fire detection and alarm systems installer	Yes, appropriately qualified fire detection and alarm systems installer	No
Fire detection and alarm systems	Yes, appropriately qualified fire detection and alarm systems installer	Yes, appropriately qualified fire detection and alarm systems installer	Yes, equipment location as per approved design
Fire extinguishers	No	No	Yes, equipment location as per approved design*
Fire hose reel system	Yes, appropriately qualified fire hydrant and hose reel systems installer or appropriately qualified plumber	Yes, appropriately qualified fire hydrant and appropriately qualified hose reel systems installer or plumber	Yes, equipment location as per approved design

Fire Safety System	Installation and testing by the fire systems installer	Mandatory independent certification by Independent fire systems installer	Inspection by the statutory building surveyor – Visual only
Fire hydrant system	Yes, appropriately qualified fire hydrant and hose reel systems installer or appropriately qualified plumber	Yes, appropriately qualified fire hydrant and hose reel systems installer or appropriately qualified plumber	Yes, equipment location as per approved design
Fire sprinkler system	Yes, appropriately qualified fire sprinkler systems installer or appropriately qualified plumber	Yes, appropriately qualified fire sprinkler systems installer or appropriately qualified plumber	Yes, equipment location as per approved design
Mechanical air handling systems (impacting fire systems design including smoke exhaust system, dampers and air pressurisation systems)	No	No	Yes equipment location as per approved design*

* The installer for this system is not registered under the NRF. The building surveyor may request a Declaration of Installation Compliance from the practitioner undertaking the installation and testing of this system.

* appropriately qualified means the relevant qualification and experience requirements to perform the scope of work.