ABCB

Mandatory inspections

Model guidance on BCR recommendation 18

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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.

All responses to BCR recommendations have been developed in accordance with the Building Confidence National Framework with input from industry and governments. Figure 1 lists the outputs developed under the Framework, and where to find them.

State and territory governments have agreed to consider implementation of all BCR endorsed responses. This process will take time depending on each government's regulatory reform agenda, and may be undertaken in stages.

The model guidance for *Mandatory Inspections* represents a nationally agreed response to BCR recommendation 18. This recommendation states "that each jurisdiction requires mandatory on-site inspections of building work at identified notification stages".

The BCR notes that there are significant differences across jurisdictions in the number of inspections required and the notification stages. This ranges from no *mandatory inspections* to very few inspections for domestic buildings, and many jurisdictions rely on the *statutory building surveyor* to determine which inspections are appropriate for commercial buildings. This makes it difficult for regulators to know what level of oversight is occurring, whether it is adequate and if NCC compliance is being achieved. This also gives rise to the potential for the current process to undermine public confidence in the regulatory system or in the compliance of constructed buildings.

Inspections are generally the statutory responsibility of the building surveyor engaged to provide the *building approval,* but in Victoria and NSW the statutory inspection function can be delegated to a registered building inspector[1], and in some jurisdictions the building surveyor can rely on certification following inspection from other practitioners, most commonly the structural designer.

Identified concerns with the current process include:

- insufficient inspections conducted during construction to ensure compliance with the *building approval*
- inspections only reviewing a proportion of the construction
- potentially insufficient numbers of suitably qualified persons to conduct inspections
- potential conflicts of interest that might exist when a private building surveyor, who is paid by the client, inspects the building work
- suitability of documentation including documentation of decisions, non-compliances discovered and steps taken to rectify construction, and
- in the circumstance where *statutory building surveyors* set the *mandatory inspections* (as is common with commercial buildings), whether appropriate inspections are nominated and conducted due to competition in pricing and service.

Matters relating to the *statutory building surveyor's* role and the potential for a conflict of interest have been considered as part of the response to BCR recommendations 9 and 11.

Submissions from stakeholders in response to the public comment draft, have informed the final development of this model guidance. The nationally consistent adoption of this model, requiring *mandatory inspections*, would provide significant benefit to a national building industry and assist those practitioners who already work or plan to work across borders.

Defined terms used in this document are shown in italics. The definitions can be found in the Building Confidence Glossary.

[1] Victoria and NSW separately register individuals with building surveyor qualifications as building inspectors to support the statutory functions of registered building surveyors. The National Registration Framework includes this inspection function in statutory building surveying assessment work and restricts this work to registered building surveyors. The inspection function has not been separated out or identified as being separate to that of a building surveyor.

Figure 1 – Building Confidence Implementation Framework - Outputs

Each of the outputs listed in Figure 1 can be accessed on the ABCB website.

Contents

Adoption of model guidance

As a model, this guidance does not have any force until adopted by a jurisdiction. States and territories may have regard to the content of the model. This may include amending or adopting the model for application in their jurisdiction.

The model guide needs to be read in conjunction with the relevant legislation in a jurisdiction. It is written in generic terms and is not intended to override legislative requirements.

Purpose

The need for independent inspection of building work forms part of the *building approval*, construction and certification process. Inspection of building work is undertaken to confirm compliance with the approved documentation, which should prevent issues such as rectification of completed buildings work including associated costs. Non-compliance that is not identified can result in:

- death or injury to building occupants
- loss of confidence in the construction industry
- loss of value for affected buildings and possible rectification costs
- loss of accommodation provided by the building (either temporarily or permanently), and
- higher than necessary insurance premiums (or inability to obtain insurance) for industry practitioners because a high proportion of buildings with defects will increase the risk to insurers.

The purpose of *mandatory inspections* and the development of model guidance is to ensure a more robust and nationally consistent approach to the inspection of building work during key notification stages of the building construction process. Inspection of building work aims to:

- detect any observable non-compliance issues
- ensure the building is built 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, and
- ensure the building is suitable for occupation and use, prior to an occupancy certificate being issued.

Other benefits of nationally consistent *mandatory inspections* and accompanying documentation includes the opportunity for standardised data collection. Data collection on inspections could be used to inform future regulatory reform in response to the identification of common non-compliances. It could also be used to inform continuing professional development and the auditing and compliance regimes of the regulator.

This Framework has been developed to provide national model guidance for *Mandatory Inspections*. The Framework consists of eight principles, which address matters described in the BCR and as identified through public consultation. This Framework outlines the context and objectives for each principle and provides model guidance on recommended legislative provisions for consideration by state and territory governments.

Principles

Principles for Mandatory Inspections	
1	Minimum mandatory inspections to be informed by risk
2	Minimum mandatory inspections are regulated for all buildings to ensure construction compliance
3	The statutory building surveyor is responsible for mandatory inspections
4	Mandatory inspections to be conducted at key notification stages
5	Minimum percentage of building work must be inspected for each mandatory inspection
6	Mandatory inspections can be conducted virtually
7	Compulsory documentation for all mandatory inspections
8	Controls for non-compliance or unsatisfactory inspections

Principle 1 – Risk based mandatory inspections

Minimum mandatory inspections to be informed by risk

Objective

That minimum *mandatory inspections* are determined using a risk-based approach.

Context

The purpose of requiring *mandatory inspections* is to determine if construction has been undertaken in accordance with the *building approval* documentation, and is compliant with the NCC and any other relevant legislation. *Mandatory inspections* increase the probability that defects are identified and rectified, resulting in lower costs for the end user and enhanced public confidence. Minimum *mandatory inspections* must be prescribed for all buildings.

The use of a risk framework will ensure that application of the process is targeted to identify *mandatory inspections* for those buildings where NCC non-compliance would present an increased health or life safety risk, and therefore this risk should be mitigated.

A risk based approach should be used to ensure the right level of resources, time, effort and costs are directed to inspections. It is recommended that the ABCB's proposed 'Definition of Building Complexity' (building complexity) be used as the risk framework that determines the extent of *mandatory inspections*. At the time of publication this definition was in the process of being considered for inclusion in NCC 2022.[2] Figure 2 shows how building complexity applies to *mandatory inspections*.

[2] A definition of building complexity is being considered for inclusion in the 2022 edition of the National Construction Code (NCC). The proposed definition was made publicly available for comment, including in the NCC 2022 Public Comment Draft Stage 1. A final decision on the definition phrasing, and whether it is included in the NCC, will be made in mid-2022.

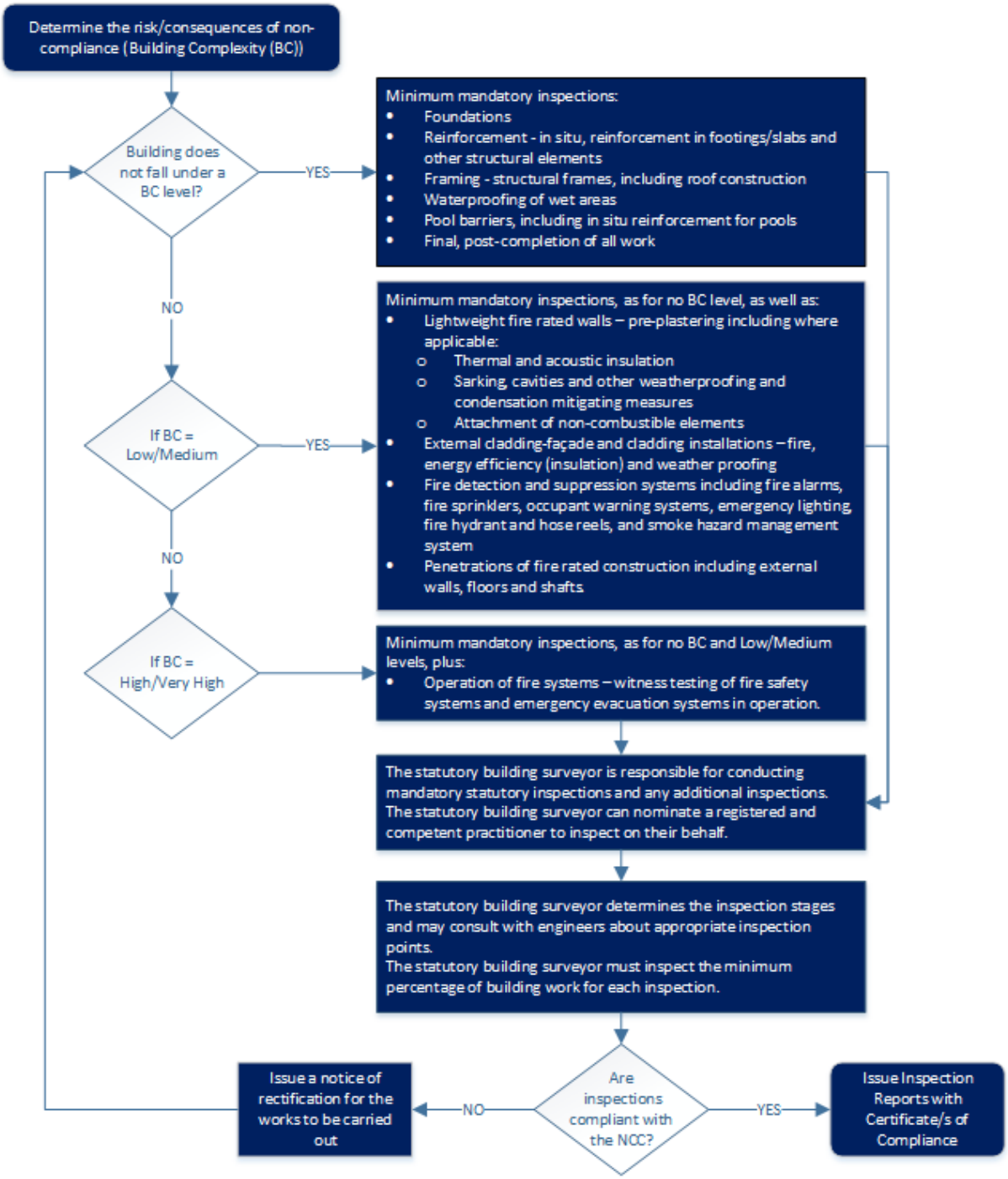
Legislative provisions

It is recommended that:

1. The NCC building complexity definition be used to determine a building's risk profile and *mandatory inspections* based on that risk.

2. The *statutory building surveyor* is responsible for confirming the building's complexity level.

Figure 2 – Risk model to determine minimum mandatory inspections



Principle 2 – Regulated mandatory inspections

Minimum mandatory inspections are regulated for all buildings to ensure construction compliance

Objective

That *mandatory inspections* are regulated for all buildings to ensure adequate construction compliance. The number of inspections to be undertaken is aligned to the building's complexity level and the *statutory building surveyor* has the ability to require additional *mandatory inspections* prior to issuing a *building approval*.

Context

The list of inspections in Figure 2 and Table 1 is modelled on the existing inspection regimes in the jurisdictions, but includes inspection of additional construction elements that are known to either contribute to non-compliance or are considered necessary to address recent construction innovation. It addresses those minimum *mandatory inspections* nominated in the BCR to ensure adequate design compliance is achieved.

Further, *mandatory inspections* are added as the risk and consequences increase. It is recommended that the *statutory building surveyor* consult with the designers regarding the inclusion of additional inspection points beyond the prescribed mandatory list. Additional inspections may be required to account for the complexity of the design or construction methods, design innovation, the nature of *Performance Solutions,* the extent of innovative systems and materials, the use of prefabricated components/off-site construction, integration of offsite construction into the building, or where products are considered complex to install and have the potential to impact life safety.

Building inspections traditionally focus on 'on-site' construction work. More recently, it is common for the construction of buildings to involve an element of off-site fabrication including modular components. Precast concrete panels, structural steel and timber frames have historically been prefabricated off-site. More recently components such as bathroom pods, including all framing, plumbing, electrical, tiling and waterproofing

are being prefabricated. It is becoming increasingly common for bathroom pods to be constructed in factories, transported to site and integrated into multi-storey apartment buildings where they are connected to the building's water and electricity supply.

Prefabrication of components or modular construction must comply with the NCC and relevant standards, similar to on-site construction, and should be subject to minimum *mandatory inspections*. As prefabrication becomes more common and materials and products are sourced internationally, the *statutory building surveyor* or inspecting practitioner needs to be assured that the prefabricated building elements comply with the NCC and relevant standards.

Where a product, such a bathroom pod, is constructed off-site and is a certified product[3], there would be no requirement for the *statutory building surveyor* to inspect it, but consideration should be given to inspection post installation/integration of the product. Where the product is not certified (i.e. is constructed off-site) and includes stages of work requiring *mandatory inspection*, the *statutory building surveyor* must inspect the product during construction and at installation. To ensure the *building approval applicant* and the regulator is aware of which *mandatory inspections* must be undertaken, they should be listed on the *building approval* documentation.

Legislative provisions

It is recommended that:

1. Minimum *mandatory inspections* are regulated for each building complexity level to confirm that adequate construction compliance has been achieved.

2. The building complexity level must be agreed by the *statutory building surveyor*.

3. The *statutory building surveyor* has discretion to require additional inspections on account of the complexity of the design or construction methods, design innovation and the nature of *Performance Solutions,* the extent of innovative systems and materials, the use of prefabricated components/off-site

[3] See NCC Evidence of Suitability

construction, integration of offsite construction into the building, or where products are considered complex to install and have the potential to impact life safety.

4. Prefabricated components and modular construction must be inspected where their construction incorporates stages identified in the list of *mandatory inspections* and they are not certified as being compliant with the NCC and relevant standards.

5. The *statutory building surveyor* consults with relevant design practitioners regarding the need for additional inspections.

6. The *statutory building surveyor* must not reduce the minimum *mandatory inspections* listed in Table 1 for the building's specific complexity level, where the building incorporates relevant construction.

7. All *mandatory inspections* must be listed on the *building approval* documentation.

Table 1 - Mandatory inspections for all Building Complexity (BC) levels

Building does not fall under a BC level	Low or medium BC	High or very high BC
foundations	**foundations**	**foundations**
reinforcement in situ reinforcement in footings/slabs and other structural elements	**reinforcement** in situ reinforcement in footings/slabs and other structural elements	**reinforcement** in situ reinforcement in footings/slabs and other structural elements
framing structural frames, including roof construction	**framing** structural frames, including roof construction	**framing** structural frames, including roof construction
N/A	**lightweight fire rated walls** pre-plastering including where applicable: - thermal and acoustic insulation - sarking, cavities and other weatherproofing and condensation mitigating measures	**lightweight fire rated walls** pre-plastering including where applicable: - thermal and acoustic insulation - sarking, cavities and other weatherproofing and condensation mitigating measures

Building does not fall under a BC level	Low or medium BC	High or very high BC
	- attachment of non-combustible elements	- attachment of non-combustible elements
waterproofing of wet areas	**waterproofing** of wet areas	**waterproofing** of wet areas
pools pool barriers including in situ reinforcement for pools	**pools** pool barriers including in situ reinforcement for pools	**pools** pool barriers including in situ reinforcement for pools
final post-completion of all building work	**final** post-completion of all building work	**final** post-completion of all building work
	External cladding façade and cladding installations – fire, energy efficiency (insulation) and weather proofing	**External cladding** façade and cladding installations – fire, energy efficiency (insulation) and weather proofing
	fire detection and suppression systems including fire alarms, fire sprinklers, occupant warning systems, emergency lighting, fire hydrant and hose reels, and smoke hazard management system	**fire detection and suppression systems** including fire alarms, fire sprinklers, occupant warning systems, emergency lighting, fire hydrant and hose reels, and smoke hazard management system
	Penetrations of fire rated construction including external/internal walls, floors and shafts	**Penetrations of fire rated construction** including external/internal walls, floors and shafts
		Operation of fire systems witness testing of fire safety systems and emergency evacuation systems in operation

Further comment

The list of inspections in Figure 2 and Table 1 do not discuss in detail what is expected of each inspection. For example, the foundation stage does not describe what must be inspected during a foundation inspection, such as the depth of the footing and the soil bearing capacity. It is recommended that further detail be provided on what each inspection stage should include as part of implementation of the proposed requirements.

Principle 3 – Role of statutory building surveyor

The statutory building surveyor is responsible for mandatory inspections

Objective

That the *statutory building surveyor* is responsible for ensuring that all *mandatory inspections* are conducted.

Context

The *statutory building surveyor*, engaged to perform the statutory *building approval* function, is responsible for conducting the mandatory statutory inspections that arise on account of the building complexity level and any additional required inspections.[4] Where the *statutory building surveyor* requires expert advice, the *statutory building surveyor* can allow the engagement of an appropriate practitioner to undertake the relevant inspection(s) (e.g. a structural engineer for structural inspections, and a fire systems engineer for sprinkler systems). This could also include an independent building surveyor, independent designer, a designer who participated in the design phase of the building or government approved registered practitioner. 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 BCR recommendations 1 and 2 of the National Registration Framework to be qualified to conduct the inspections.

Legislative provisions

It is recommended that:

[4] See BCR recommendation 10: Code of conduct for building surveyors and BCR recommendations 9 and 11: Building surveyor integrity and their role in enforcement.

1. *Mandatory inspections* are to be undertaken for the purpose of confirming compliance with the issued *building approval*.

2. The *statutory building surveyor*, engaged to perform the statutory *building approval* function, is responsible for ensuring that all *mandatory inspections* are undertaken.

3. Consistent with the conduct expected of the *statutory building surveyor*[5], they must:

    a. not undertake inspections if not competent to do so;

    b. not undertake inspections when there is a conflict of interest (pecuniary, professional or private interest);

    c. not perform poor quality inspections, a reduced number of inspections or inspect only a portion of building work noting the minimum mandated percentage of building work that must be inspected under Principle 5; and

    d. ensure that a practitioner permitted to undertake an inspection on their behalf holds the relevant registration and competency[6] to undertake the inspection.

4. The *statutory building surveyor* must not fail to undertake mandatory inspections or must ensure that another registered building practitioner undertakes *mandatory inspections* when requested by the *building approval applicant*.

5. The *statutory building surveyor* has the authority to permit another registered building practitioner to undertake a *mandatory inspection* on their behalf.

6. Where the *statutory building surveyor* has permitted a *mandatory inspection* to be carried out on their behalf, the practitioner undertaking the inspection must

[5] See BCR recommendation 10: Code of conduct for building surveyors and BCR recommendations 9 and 11: Building surveyor integrity and their role in enforcement.
[6] See BCR recommendations 1 and 2: National Registration Framework

seek and obtain instructions from the *statutory building surveyor* about the process and procedure for undertaking and documenting the inspection prior to carrying out the inspection.

7. The practitioner undertaking the inspection on behalf of the *statutory building surveyor* must submit a completed inspection report and *certificate of construction compliance*, to the *statutory building surveyor*, certifying that the building work was inspected and complies (or does not comply) with the *building approval* documentation.

8. The practitioner undertaking the inspection on behalf of the *statutory building surveyor* must notify the *statutory building surveyor* in writing of any non-complying elements of construction and the *statutory building surveyor* must not authorise building work to continue until non-compliances are resolved to their satisfaction.

9. The *statutory building surveyor* must issue an inspection report or review the inspection report and *certificate of construction compliance* (to ensure these inspections are completed correctly and determine if the *mandatory inspection* was passed or required rectification) where another practitioner has conducted the inspection.

10. A practitioner inspecting building work on behalf of the *statutory building surveyor* must declare any conflicts of interest and should act with honesty and integrity at all times.

Principle 4 – Notification stages for mandatory inspections

Mandatory inspections to be conducted at key notification stages

Objective

That all *mandatory inspections* are conducted on-site (or virtually where permitted) at key notification stages when required by legislation.

Context

Inspections are conducted after the commencement of construction work and when the work reaches mandatory notification stages. The *statutory building surveyor* is to identify key notification stages for the minimum *mandatory inspections* (Figure 2 and Table 1) within the *building approval* documentation. This should include any additional inspections deemed necessary by the *statutory building surveyor*. Some inspections include multiple stages and inspection points.

It is important that under these circumstances all *mandatory inspections* are undertaken for each stage and not just at the final inspection. Examples of notification stages include: foundation prepared prior to placement of vapour barriers, reinforcement and concrete; structural concrete elements after fitting of reinforcement and prior to concrete placement; structural framework prior to sheeting; wet areas prior to application of waterproofing membrane; wet area membranes applied prior tiling; and lightweight fire- rated wall systems, which must be inspected (if used to achieve NCC compliance) both pre and post sheeting.

The *statutory building surveyor* must document the notification stages and inform the *building approval applicant* of those stages. The builder or *building approval applicant* must notify the *statutory building surveyor* when those stages are reached, indicating they are ready for inspection of the relevant building work. This does not preclude the *statutory building surveyor* from visiting the site and undertaking other inspections not listed on the *building approval* documentation.

Legislative provisions

It is recommended that:

1. Legislation prescribe all *mandatory inspection* stages including those relevant to the level of building complexity.

2. The *statutory building surveyor* is responsible for nominating and documenting the applicable *mandatory inspections* and notification stages as part of the *building approval* documentation.[7]

3. The *statutory building surveyor* is responsible for ensuring all *mandatory inspections* are undertaken, upon being notified of reaching a mandatory notification stage, as detailed in the *building approval* documentation.

4. If inspections are not undertaken, as per the prescribed notification stages, the *statutory building surveyor* must record in writing as to why the inspection was not undertaken and what action should be undertaken to verify that the relevant building work was satisfactory.

[7] Jurisdictions may choose to mandate inspection stages.

Principle 5 – Extent of mandatory inspections

Minimum percentage of building work must be inspected for each mandatory inspection

Objective

That a sufficient proportion of building work is inspected to confirm the building has been constructed in accordance with the *building approval* documentation.

Context

While it is recommended that 100 per cent of building work is inspected for every type of *mandatory inspection* (Figure 2 and Table 1), it is not always possible or feasible, particularly in the case of commercial buildings (Class 2 - 9 buildings). Building work associated with *mandatory inspections* for Class 1 and 10 buildings must be inspected to 100 per cent. Inspections for Class 2-9 buildings must include a representative percentage of the building work, to be reasonably certain that the whole building is likely to comply with the *building approval* documentation.

The minimum percentage of building work inspected for each *mandatory inspection* except the final inspection (post-completion of all building work) in Class 2-9 buildings is 30 per cent, with a minimum of 20 per cent per storey. 100 per cent of the final inspection post-completion of all building work must be inspected.

If any of the inspections uncovers instances of non-compliance, the issue(s) must be resolved across all instances of the non-compliance. This requires reinspection of all remedied building work. If the *statutory building surveyor* finds further non-compliance for a *mandatory inspection* type, 100 per cent of building work for that *mandatory inspection* type must be inspected.

Legislative provisions

It is recommended that:

1. For Class 1 and 10 buildings 100 per cent of building work is inspected for all *mandatory inspections*.

2. For Class 2-9 buildings, a minimum 30 per cent of building work is inspected with 20 per cent per storey for each *mandatory inspection,* except the final inspection, post-completion of all building work.

3. 100 per cent of the final inspection post-completion of all building work must be inspected.

4. Where an inspection uncovers multiple instances of non-compliance, the issue(s) must be resolved and all remedied building work re-inspected. If the *statutory building surveyor* finds further non-compliance, 100 per cent of building work for the mandatory inspection stage must be inspected.

5. The *statutory building surveyor* must not reduce the minimum percentage of building work that must be inspected for each *mandatory inspection*.

Further comment

An alternative approach for governments is to prescribe a sliding scale of minimum percentage of building work inspected for the various building complexity levels (Figure 2 and Table 1). For example, it is recommended that for buildings that do not fall under a building complexity level, a minimum of 25 per cent of building work is inspected for each *mandatory inspection*, low and medium building complexity levels require a minimum of 50 per cent of building work is inspected for each *mandatory inspection*, and high and very high building complexity levels require that a minimum of 75 per cent of building work is inspected for each *mandatory inspection*. Reinspections as a result of major non-compliance require 100 per cent of remedied building work to be inspected for that *mandatory inspection* type. The final inspection requires 100 per cent of the building work is inspected irrespective of building complexity level.

The *statutory building surveyor* can determine a greater percentage of building work for *mandatory inspections,* but must not reduce the minimum recommended percentages. It is recommended that for additional inspections requested at the discretion of the *statutory building surveyor* or by a design practitioner, a greater percentage of building work should be inspected for buildings with higher building complexity levels.

Principle 6 – Virtual inspections

Mandatory inspections can be conducted virtually

Objective

That *mandatory inspections* can be conducted virtually as an alternative to on-site inspections.

Context

Mandatory inspections should generally be conducted in person, on-site and at the prescribed notification stages. Some inspections have multiple inspection stages for which the *statutory building surveyor* or registered practitioner delegated by the *statutory building surveyor* must be present on-site. For example, construction of lightweight fire rated walls or wet area water proofing where an assessment of the substrate is needed prior to applying an appropriate water proofing agent or treatment that would also require inspection post membrane and prior to tiling.

There are instances when access to a building site maybe difficult particularly in remote locations or the *statutory building surveyor* may not be able to get on-site to allow for the progress of building work in a timely manner. For such circumstances, alternative approaches are supported for *mandatory inspections* where permitted by the regulator.

Alternatives to on-site inspections include video inspections, photographic evidence or drone inspection technology, such as those permitted in some jurisdictions for non-*mandatory inspections*. This will also allow for real time inspections ensuring building work can progress in a timely manner and with appropriate oversight. The photographic evidence and other information requirements must be provided along with the inspection report, and must clearly state the inspection type, areas inspected, percentage of relevant construction inspected and how the inspection was conducted.

Where a regulator permits *mandatory inspections* to be conducted virtually, it is recommended that the *statutory building surveyor* must agree to undertake the inspection virtually, and must nominate a registered and competent practitioner to undertake the virtual inspection (on-site) on their behalf.

Legislative provisions

It is recommended that:

1. *Mandatory inspections* must be carried out by the *statutory building surveyor* or a practitioner carrying out the inspection on behalf of the *statutory building surveyor*, in person and on-site unless the *statutory building surveyor* agrees to the inspection being conducted virtually and where permitted by the regulator.

2. Where inspections are conducted virtually on behalf of the *statutory building surveyor*, the *statutory building surveyor* must nominate a registered and competent practitioner[8] to conduct the inspection (on-site) and the extent of the inspection must be overseen and controlled by the *statutory building surveyor*.

3. All data recorded during a virtual inspection must be stored and form part of the documentation lodged with the building regulator and provided to the *building approval applicant*. Further details on documentation are in Principle 7.

Further comment

The option for virtual inspections and the use of technology to support it is currently limited to non-*mandatory inspections*. Public consultation suggested that virtual inspections can be expanded for *mandatory inspections*. Where virtual inspections are permitted by the regulator, sufficient controls must be in place to ensure practitioners uphold their duty and ethical obligations in conducting inspections on behalf of the *statutory building surveyor* and that virtual inspections do not compromise the quality of building outcomes. Regular auditing would need to be in place to ensure that virtual inspections are of similar or better quality to in-person inspections on-site and would inform future use of technology for other inspections.

[8] See BCR recommendations 1 and 2: National Registration Framework

Principle 7 – Documentation for mandatory inspections

Compulsory documentation for mandatory inspections

Objective

That all *mandatory inspections* are documented and inspection records provided to the relevant parties.

Context

Detailed documentation must be prepared for each *mandatory inspection* to confirm that all *mandatory inspections* have been completed at prescribed stages, including inspection of the minimum percentage of building work. Inspection reports should form part of documentation that is submitted to the regulator and copies should be retained by both the *statutory building surveyor* and the *building approval applicant*. A copy of the inspection report should also be sent to the owner where they are not the applicant.

Certificates of construction compliance (Figure 3) must be provided to the *statutory building surveyor* by a practitioner who undertakes *mandatory inspections* on behalf of the *statutory building surveyor*, stating that the work has been inspected and assessed for compliance with the NCC. These certificates must be recorded by the *statutory building surveyor* along with the relevant inspection reports.

To enable progression beyond the *mandatory inspection* stage, an inspection report is to be provided to the builder.

Legislative provisions

It is recommended that:

1. Inspection reports are prepared at the completion of each inspection.
2. Inspection reports must be lodged with the building regulator and provided to the *building approval applicant*.

3. A practitioner undertaking inspections on behalf of the *statutory building surveyor* must provide a *certificate of construction compliance* along with the relevant inspection report(s).

4. Inspection reports must detail:

    a. date of inspection

    b. who completed the inspection

    c. who was present for the inspection

    d. how the inspection was conducted (on-site, virtual)

    e. details of the site (address), the building and the relevant *building approval*

    f. notification stage (e.g. foundation, reinforcement, framing, waterproofing, final) and areas inspected

    g. the compliance of the feature(s) inspected with the NCC and the endorsed design documentation, including details of any areas of non-compliance

    h. the outcome(s) of the inspection, including any required alteration or rectification work

    i. information on whether a reinspection is required

    j. test certificates, reports, information and the like for products, materials or components to support the observable construction

    k. certificates or reports from professional engineers or other recognised experts that were sourced for the inspection.

Figure 3 – Declarations and certificates

Document	Declaration of Compliance		Certificate of Compliance	
	Design	**Construction / Installation**	**Design**	**Construction / Installation**
Definition	Is a document that: (a) is provided by the *registered* person who is responsible for the design work; and (b) states the design complies with the NCC and other prescribed requirements.	Is a document that: (a) is provided by the *registered* person who is responsible for the construction or installation work; and (b) states the construction or installation work complies with the *building approval* documentation and other prescribed requirements.	Is a document that: (a) is provided by an appropriately *registered* and, where necessary independent, person who has examined and assessed design work; and (b) states that the design complies with the NCC and other prescribed requirements.	Is a document that: (a) is provided by an appropriately *registered* and, where necessary, independent person who has examined and assessed construction or installation work; and (b) states that their examination and assessment confirms the construction or installation work complies with the *building approval* documentation, the NCC, and 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. Legislation may require an *assessment* to be undertaken by a *registered* practitioner who is independent to the design or construction process.	
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 approval* or *occupancy approval* and kept as part of the building records[3].		Must be recorded by the *statutory building surveyor* 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 *building surveyor* or other person relying on the advice.	

Notes on figure

1. A *statutory building surveyor* making a statutory *assessment* may rely on a Certificate of Compliance. A *statutory 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, state or territory 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.

Principle 8 – Non-compliant or unsatisfactory mandatory inspections

Controls for non-compliance or unsatisfactory inspections

Objective

That unsatisfactory inspections are documented and communicated to the *building approval applicant*. Where the non-compliance is not remedied it should be reported to the building regulator and the building owner.

Context

There will be situations where an inspection identifies building work that has not been completed in accordance with the *building approval* documentation. An inspection is considered unsatisfactory when the building or the inspected element of the building:

- is incomplete or not all necessary components of the building work were able to be inspected
- is not consistent or not in accordance with the approved plans and associated documentation to the extent necessary under relevant legislation
- does not meet the requirements of the NCC, or
- requires further confirmation or verification on the installation method, products used or the like.

In such circumstances the inspection should not be recorded as satisfactory. The *statutory building surveyor* must issue a written direction for rectification of building work, or outline steps necessary for approval of completed work (e.g. variation of *building approval*) if appropriate. Depending on the extent of departure from the *building approval* documentation a variation to the original approval may be required. A copy of the written direction should be sent to the *building approval applicant*. A written direction for building work and reinspection is required when:

- the building work is incomplete or unable to be inspected
- serious non-compliances or issues observed during the inspection
- if the non-compliance or issue will be covered and unable to be inspected later in the construction phase, or

- suitable access was not provided to reasonably undertake the inspection.

When the work has been rectified and reinspected, the *statutory building surveyor* should record that the written direction was complied with and provide an inspection report. Alternatively, if the notice of rectification is not complied with, the *statutory building surveyor* must give written notice of this failure to the building regulator and the *building approval applicant*.

The *statutory building surveyor,* who is bound by a code of conduct[9], ensures inspections are carried out to the required standard and non-compliance issues are addressed. In order for the process of inspections to be fully effective, the enforcement actions of *statutory building surveyors* need to be coordinated with the regulatory powers and functions of the state or territory government.

Legislative provisions

It is recommended that:

1. All *mandatory inspections* must be documented.
2. Where non-compliant work has been identified, the *statutory building surveyor* must issue a written direction for building work to be brought into compliance.
3. The *statutory building surveyor* must notify the building regulator if the *building approval applicant* has failed to notify the *statutory building surveyor* of a mandatory notification stage.
4. The *statutory building surveyor* must issue enforcement notices if work proceeds past a notification stage where a written direction for building work has not been complied with and notify the building regulator and the *building approval applicant*.
5. The construction work cannot proceed until the written direction to comply has been followed.

[9] See BCR recommendation 10: Code of conduct for building surveyors

6. The *statutory building surveyor* may require demolition or destructive testing where work has been covered up or compliance is not readily apparent.

7. The *statutory building surveyor* must notify the *building approval applicant* if the construction intentionally departs from the approved design and request updated documentation for review and approval.[10]

8. An inspection report(s) indicating compliance is not granted until the *statutory building surveyor* is satisfied that the work undertaken is in accordance with the *building approval* documentation.

[10] See BCR recommendations 13-16: Design acceptance