

GUIDANCE

Building emergency management

GUIDANCE FOR TERRITORIAL AUTHORITIES AND DECISION-MAKERS

MARCH 2025



Ministry of Business, Innovation and Employment (MBIE) Hīkina Whakatutuki – Lifting to make successful

MBIE develops and delivers policy, services, advice and regulation to support economic growth and the prosperity and wellbeing of New Zealanders.

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1. Purpose

The purpose of this guidance is to support decision-makers and territorial authorities when managing buildings in an emergency. This document sets out a consistent, national framework for doing so, and provides detailed steps and checklists to help territorial authorities plan, prepare for and carry out rapid building assessment operations.

This guidance seeks to:

- act as a guide to the requirements of the *Building Act 2004* (the Building Act) and, where relevant, the *Civil Defence Emergency Management Act 2002* (the CDEM Act) and the *National Civil Defence Emergency Management Plan 2015* (National CDEM Plan 2015) in relation to building emergency management
- explain the requirements for managing buildings in an emergency, including roles and responsibilities of those involved in an emergency response
- · provide a framework for territorial authorities to review and update their readiness plans and procedures
- provide detail on how to conduct a rapid building assessment operation during a response
- provide guidance on how to effectively transition to the recovery phase.

What is in this document:

This document is in three parts:



Part A: How buildings are managed in an emergency and who is responsible

This section provides an overview of the building emergency management system including relevant legislation and key roles and responsibilities to help territorial authorities and decision-makers understand their obligations.



Part B: Preparing for and managing buildings in an emergency

This section gives detailed guidance for readiness and response planning, including rapid building assessments and other actions to manage buildings in an emergency. It also contains some guidance for the recovery phase, including how to apply learnings from an event to minimise risk before a future event.



Appendices: Resources for managing buildings in an emergency

The Appendices include details regarding the relevant legislation and operational checklists.

What circumstances does this guidance relate to?

This guidance relates to the following circumstances:

- if a state of local or national emergency has been declared under sections 66 to 73 of the CDEM Act, or
- if a transition period has been notified under sections 94A to 94F of the CDEM Act, and/or
- if an area has been designated for building emergency management under sections 133BC- 133BI of the Building Act.

This guidance focusses on situations where an area has been designated for the emergency management of buildings under sections 133BC- 133BI of the Building Act. It also provides guidance on corresponding powers that may be exercised if a state of local or national emergency has been declared under the CDEM Act 2002 (sections 66 to 73), or if a transition period has been notified under the CDEM Act 2002 (sections 94A to 94F).

Version control

This guidance is a 'living document'. The Ministry of Business, Innovation and Employment (MBIE) periodically updates this guidance to reflect legislative changes and insights gained from the responses to emergency events.

Document history	
Version	Alterations
Version 1 first published June 2018	
Version 2 updated December 2019	
Version 3 published January 2020	Incorporated changes due to the Building Amendment Act 2019
Version 4 published March 2025	Update includes expanded guidance on the legislative requirements outlined in subpart 6B of Part 2 of the Building Act, and updated guidance on rapid building assessment operations, response and recovery information.

You can check for the latest version of this guidance and associated information at: www.building.govt.nz

Limitations of this guidance

This document is a general guide to support compliance with the Building Act in relation to the application of subpart 6B – *Special provisions for buildings affected by emergency*. Where relevant, this guidance provides information on corresponding powers in the CDEM Act and the National CDEM Plan. While MBIE has taken great care in preparing this guide, it provides guidance only and should not be used to establish all the requirements of the Building Act on its own. Readers must refer to the Building Act, CDEM Act and/or the National CDEM Plan and relevant regulations as their primary source documents, and be aware that for specific situations or problems, it may be necessary to seek legal or other professional advice. MBIE is not responsible for the content of third-party content linked to or referenced in this document.

Features of this document

Hyperlinks are provided to cross-reference within this document and to external websites. These hyperlinks appear with a <u>blue underline</u>.

The coloured boxes below are used throughout the document to provide guidance on the relevant powers in the Building Act and CDEM Act:

Building Act guidance box

CDEM Act guidance box

2. Who is this guidance for?

MBIE has statutory obligations under the Building Act and the National CDEM Plan to support territorial authorities and decision-makers implement building emergency management powers.

This guidance is for:

- · territorial authorities
- senior decision-makers in local and central government and those involved in emergency response work including Building Control Managers/Building Response Managers and CDEM Group personnel
- Rapid Building Assessors, engineers and other building specialists.



For more information, see the section: Roles and Responsibilities

What the law says

Civil defence emergency management legislation provides the key responsibilities and mandates for managing buildings in an emergency when business as usual powers are not sufficient. This includes:

- Building Act 2004 (subpart 6B of Part 2: sections 133BA-133BZA)
- <u>Civil Defence Emergency Management Act 2002</u>
- National Civil Defence Emergency Management Plan 2015

Other relevant Acts and regulations include:

- Local Government Act 2002
- Heritage New Zealand Pouhere Taonga Act 2014
- Health and Safety at Work Act 2015
- Fire and Emergency New Zealand Act 2017
- Fire and Emergency New Zealand (Fire Safety, Evacuation Procedures, and Evacuation Schemes)
 Regulations 2018

2.1 Key terms

Key terms used throughout this document.

Table 1: Key terms

Terminology	Definition	
Building emergency management	term used to cover the entire set of processes from reduction and readiness through to response and recovery for managing buildings affected or potentially affected by disasters.	
Building Response Manager	person authorised by a territorial authority to lead the territorial authority's rapid building assessment operation.	
CDEM	Civil Defence Emergency Management	
CDEM decision-maker	under the Building Act 20024, the CDEM decision-maker is: (a) (i) the Minister responsible for administration of the CDEM Act, or (ii) a person who is appointed or otherwise authorised under section 25 of the CDEM Act to declare a state of local emergency or give notice of a local transition period (as the case may be) for the area; and (b) in sections 133BG and 133BH of the Building Act, also includes a person who, at the relevant time, is the successor in office of a person referred to in (a) (ii) above.	
CDEM Group	means a means a Group established under section 12 or established or re-established under section 22 of the CDEM Act 2002. There are 16 CDEM Groups across New Zealand as committees of elected councillors from each council within regional boundaries. CDEM Groups can be viewed as a consortium of the local authorities in a region working in partnership with emergency services, lifeline utilities and government departments, amongst other things, to: • identify and understand hazards and risks • prepare CDEM Group plans and manage hazards and risks in accordance with the 4R's (reduction, readiness, response and recovery).	
CIMS	Coordinated Incident Management System. All Aotearoa New Zealand emergency response agencies are mandated to use CIMS as the incident management framework.	
Designation	a designated area is an area approved by the relevant decision-maker under section 133BC of the Building Act to allow a responsible person to take specific actions under the Building Act to manage buildings in an emergency.	
Emergency	for the purposes of the Building Act (section 133BB), an emergency is a situation that: (a) is the result of any happening, whether natural or otherwise, including, without limitation, any explosion, earthquake, eruption, tsunami, land movement, flood, storm, tornado, cyclone, serious fire, leakage or spillage of any dangerous gas or substance, technological failure, infestation, plague, epidemic, failure of or disruption to an emergency service or a lifeline utility, or actual or imminent attack or warlike act; and (b) causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property in (or in any part of) Aotearoa New Zealand.	
Emergency Coordination Centre (ECC)	facility that operates at the regional CDEM Group level to coordinate and support one or more Emergency Operations Centres (EOC) that are activated in response to an emergency.	

Terminology	Definition
Emergency Operations Centre (EOC)	facility that operates at the local territorial authority, unitary authority, or agency level and is used to manage a response to an emergency.
Local authority	a regional council or territorial authority, as defined in the Local Government Act 2002.
Rapid building assessments	post-event building assessments undertaken either under section 92 of the CDEM Act or section 133BQ of the Building Act.
Rapid Building Assessor (RBA)	person authorised to undertake rapid building assessments.
Rapid Impact Assessment	assessments undertaken within the first 8 to 48 hours of an emergency, usually by emergency services and/or CDEM Group staff.
Responsible person	a person who is authorised by section 133BJ or 133BK of the Building Act to exercise powers under subpart 6B of Part 2 of the Act.
State of emergency	a state of national emergency (declared under section 66 of the CDEM Act) or a state of local emergency (declared under section 68 or 69 of the CDEM Act).
Transition period	a national transition period (notified under section 94A of the CDEM Act) or a local transition period (notified under section 94B of the CDEM Act).

PART A: How buildings are managed in an emergency and who is responsible



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3. What is building emergency management?

Aotearoa New Zealand experiences significant natural hazards that can damage buildings and infrastructure. The 2010-11 Canterbury earthquakes, the 2016 Hurunui/Kaikōura earthquake and Cyclone Gabrielle in 2023 are examples of emergencies that have had a serious impact on people and the built environment.

Risks to, and from, our buildings when emergencies occur need to be reduced. Building emergency management requires having co-ordinated risk reduction, readiness, response, and recovery arrangements in place that involve building owners, territorial authorities, CDEM Groups, agencies, and building professionals. Successfully managing the use of buildings during a response can protect lives and maintain public confidence during stressful times for the affected community.

Clause 77 of the National CDEM Plan specifies the objectives of building emergency management is to:

- (a) protect life and promote safety within and in the vicinity of each building
- (b) minimise damage to and loss of property
- (c) restore building functions as soon as possible to minimise social and economic consequences of the emergency
- (d) minimise losses or disruption of lifeline utility services that are in or near any building.

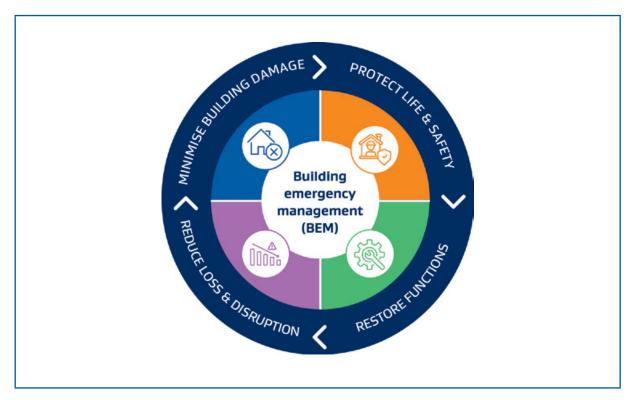


Figure 1: The objectives of building emergency management

The National CDEM Plan also outlines the **principles** underlying building management, which are to—

- adhere to the relevant statutory requirements (including the provisions of the Building Act, because it provides the primary means of reducing the risk to people in and near buildings that may arise during an emergency)
- · understand that managing buildings in an emergency is best achieved through efficient and effective management of each building and stocks of buildings on an ongoing basis
- encourage all agencies and individuals involved in building management to plan for readiness and to maintain arrangements that enable collaborative responses in an emergency
- ensure that building professionals have demonstrable levels of competence, capability, and understanding of their responsibilities in undertaking readiness and response roles to manage buildings in an emergency
- use common methods and standards for collecting and communicating information on the safety and functional status of buildings to assist building management in an emergency at national, CDEM Group, and local levels
- ensure that agencies, CDEM Groups, and territorial authorities that lead aspects of building management in an emergency provide timely information to affected communities, building owners, and occupiers
- encourage, as part of readiness, each territorial authority to collect information for each building, including information on
 - its precise location, form and materials of construction, age, use, occupancy, heritage value, and earthquake-proneness; and
 - (ii) any known critical structural weaknesses; and
 - (iii) any critical lifeline utility services located in or near it; and
 - (iv) its ownership and management arrangements.

The roles and responsibilities for managing buildings in an emergency set by the National CDEM Plan, can be managed by applying Aotearoa New Zealand's integrated approach to emergency management, known as the 4 Rs:

Table 2: The 4 Rs of civil defence emergency management

Reduction	Identifying and analysing long-term risks to human life and property from hazards; taking steps to eliminate these risks if practicable, and, if not, reducing the magnitude of their impact and the likelihood of their occurring.
Readiness	Developing operational systems and capabilities before an emergency happens, including self-help and response programs, to ensure communities are trained and ready for when an emergency occurs.
Response	Actions taken immediately before, during, or directly after an emergency to save lives and protect property, and help communities recover.
Recovery	The coordinated efforts and processes to bring about the immediate, medium-term and long-term regeneration of a community following an emergency.



(i) For more information, see The 4 Rs » National Emergency Management Agency (civildefence.govt.nz)

4. Core legislation

This section provides a high-level overview of the legislation that specifies how building emergency management should be conducted in Aotearoa New Zealand. The roles and responsibilities of central and local government agencies are specified in three key pieces of legislation. They are:

- 1 Civil Defence Emergency Management Act 2002 (CDEM Act)
- 2 National Civil Defence Emergency Management Plan Order 2015 (National CDEM Plan)
- 3 Building Act 2004 (Building Act)

4.1 The CDEM Act 2002

The CDEM Act provides a legislative framework for planning and preparation for emergencies and for response and recovery in the event of an emergency. It sets out the roles and responsibilities of the territorial authority as a member of a CDEM Group, key personnel such as a Group or Local Controller, and the duties of other agencies and lifeline utilities.

What this means is if a state of emergency or a transition period is in place under the CDEM Act, Rapid Building Assessors (RBAs) acting under the direction of the Building Response Manager (who, in turn, acts under the direction of a CDEM Controller or Recovery Manager) can assess buildings for damage. They may have powers of entry, and they can put placards on buildings to restrict or prohibit access.

Section 91 of the CDEM Act also specifies that territorial authorities acting under the direction of a Controller (or a Recovery Manager during a transition period) can require owners to obtain building assessments if they consider the buildings pose a risk of injury, or a risk to life safety or other property.



(i) For more information on the roles and responsibilities of a territorial authority under the CDEM Act, see the section: Roles and responsibilities

For more information on the CDEM Act, see: www.civildefence.govt.nz

4.2 The National CDEM Plan 2015

The National CDEM Plan identifies core functions for national management of the consequences of emergencies. It may also address the management of consequences of other emergencies not otherwise able to be managed by a lead agency.

The National CDEM Plan is made under sections 39(1) and 45 of the CDEM Act. The hazards and risks to be managed under the CDEM Act and the National CDEM Plan include any hazard that may result in an emergency.

The National CDEM Plan states the objectives, guiding principles and roles and responsibilities for building management across the 4 Rs. Territorial authorities must develop and maintain arrangements to ensure they are ready to respond to an emergency and lead recovery work to achieve the building emergency management objectives of the National CDEM Plan.

<u>Clauses 76-80</u> of the National CDEM Plan cover managing buildings prior to and during emergencies and sets out the territorial authorities' and MBIE's responsibilities for doing so.



For more detail see the section: Roles and responsibilities

For more detail on the building management requirements of the Plan, please see section 15 of the Guide to the National CDEM Plan 2015

4.3 The Building Act 2004

The Building Act provides a system and powers for quickly and effectively managing buildings during and after an emergency event. This system is set out in subpart 6B of Part 2 of the Act and allows for the designation of an area for building emergency management following an event.

Figure 2 shows the Building Act regulatory framework as a triangle with a series of tiers. The top two tiers are mandatory requirements from New Zealand legislation and include the Building Act and specific requirements set out in subpart 6B of the Act. This includes the ability for the Chief Executive of MBIE to approve a methodology for conducting post-event (rapid building) assessments, as well as the form and content of rapid building assessment forms and placards.

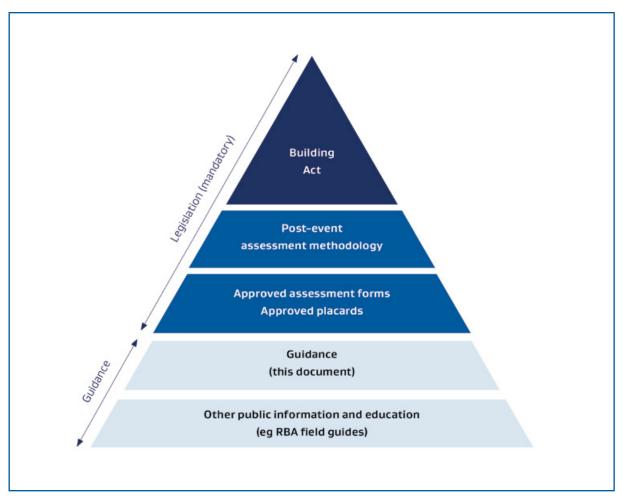


Figure 2: The Building Act regulatory system

The building emergency management powers that apply upon the designation of an area allow territorial authorities to manage buildings effectively, from the initial response to an emergency event right through to the end of recovery. The powers have also been designed to balance personal and property rights, and to ensure heritage values are appropriately recognised.

Once an area has been designated, the Building Act provides the responsible person with a number of special powers that may be exercised in respect of all buildings within that area:

What the law says:

Subpart 6B of Part 2 of the Building Act includes the following powers:

- section 133BO: power to enter building or land
- <u>section 133BP</u>: exercise of powers in secured buildings
- section 133BQ: to conduct post-event assessments (ie rapid building assessments)
- section 133BR: to evacuate buildings
- <u>section 133BS</u>: measures to keep people at a safe distance and protect buildings
- <u>section 133BT</u>: place notice and signs on buildings (ie placards)
- <u>section 133BU</u>: to direct an owner to give information
- section 133BV: urgent works to remove or reduce risks (including heritage buildings)
- section 133BW: works to remove or reduce other risks
- <u>section 133BX</u>: works for long-term use or occupation

The powers also account for situations where there are buildings or surrounding land damaged in an emergency event that pose a risk to life safety or of damage to other property. These powers allow a responsible person to restrict access to buildings where a risk is posed by the adjacent land, for example a rock fall or slip.

What this means is if the area has been designated under the Building Act, Rapid Building Assessors (RBAs) acting under the direction of the Building Response Manager (who, in turn, acts under the direction of the territorial authority) can conduct rapid building assessments and place placards on buildings to restrict or prohibit access.



: Key point:

An area does not have to be designated following an emergency event. If a state of emergency or transition period is in place, CDEM Act powers can be used to manage buildings. However, protective measures undertaken during a state of emergency or transition period without a designation, such as notices (placards) that prohibit access, lose legal force when the state of emergency or transition period ends.

4.3.1 Principles for exercise of powers under subpart 6B of the Building Act

Section 133BN of the Building Act provides direction on the principles that the responsible person must have regard to when exercising powers under subpart 6B of Part 2. The principles in section 133BN are mandatory considerations to the extent practicable in the circumstances in relation to any exercise of a power in sections 133BQ to 133BX and 133BZA. The principles are:

Table 3: The principles for exercising powers under subpart 6B of the Building Act

Section 133BN: Principles for exercise of powers

A responsible person exercising a power under any of <u>sections 133BQ to 133BX</u> and <u>133BZA</u> in relation to a building must, to the extent that is practicable in the circumstances, have regard to the following principles:

- (i) the paramount consideration in the exercise of any power is the protection of human life and safety
- (ii) actions taken should be proportionate to the risks being managed
- (iii) actions should result in minimal restriction of the ability of an owner or occupier to continue to use and occupy the property, and any restriction should be for no longer than is reasonably necessary
- (iv) decisions should be based on:
 - up-to-date information, including information about the possible occurrence of further emergencies or other relevant events and other changes in the type and severity of risks arising from an emergency
 - information about possible future events.

The principle that the paramount consideration in the exercise of those powers is the protection of human life and safety makes it clear that in exercising powers under this subpart, protection of human life and safety comes first. So, when exercising the powers relating to evacuation, post-event assessments, notices and signs (ie rapid building assessments and placards), measures to keep people safe and protect buildings and urgent works, which this guidance discusses, this principle should be firmly in mind. Consideration should be given to both short term and longer-term risks to human life and safety. For example, during a flood event, while the initial risk of flood water and debris may lessen, the ongoing risk posed by insanitary conditions as a result of damage caused by the initial event may also need to be carefully considered when assessing (and reassessing) damaged buildings and infrastructure.

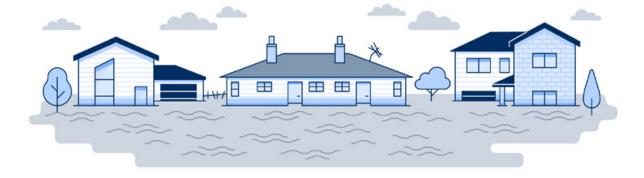
The principles that actions taken should be proportionate to the risks being managed and said actions should result in minimal restriction of the ability of an owner or occupier to continue to use their property and for no longer than is reasonably necessary requires the responsible person to regularly monitor and review the appropriate use of the powers of subpart 6B of Part 2.

For example:

During a flood event, the immediate risk to human life and safety may be the risk caused by flood waters and debris, which may require powers under subpart 6B of Part 2 to be used. However, once flood waters recede, and the risk to human life and safety may lessen, the responsible person will need to review the use of these powers (eg cordons and barricades) to determine if the restriction is still appropriate in the circumstances. The principle that any decisions on the exercise of powers should be based on up-to-date information including the likelihood of future possible events (eg more severe weather, aftershocks) is also relevant here.

(i) For more information on the powers in subpart 6B of Part 2 of the Building Act including identifying the responsible person for each power and situation, see Appendix 1

Remember, the principles apply in relation to every exercise of the powers, and if they are not considered (to the extent practicable), the responsible person may run the risk of exercising the powers unlawfully.



4.3.2 When do Building Act or CDEM Act powers apply?

The CDEM Act and Building Act both provide for powers that can be used to respond to an emergency event. However, there are differences in the way these powers are to be exercised. There are also some powers where the requirements differ. Therefore, it is important to know which Act applies in a situation, who can exercise the powers available and what the requirements are to do so. In general:

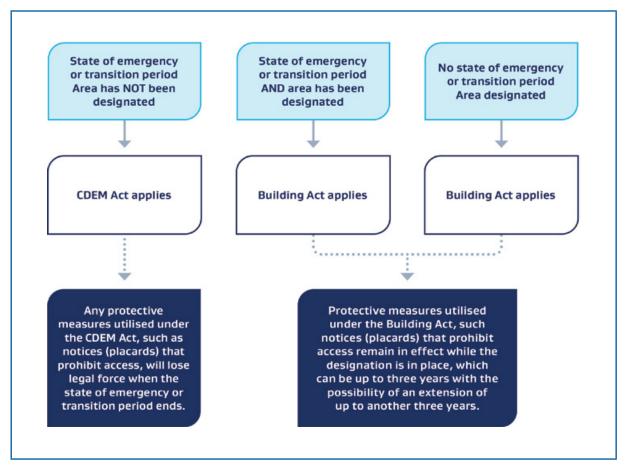


Figure 3: When the CDEM Act or Building Act applies to building emergency management

Building Act takes precedence over CDEM Act in a designated area

Once an area has been designated (whether or not there is a state of emergency or transition period in place), all building emergency management functions in that area should be managed under the Building Act. CDEM Act powers must not be used to manage affected buildings once a designation is in place, unless the responsible person considers this is needed to remove or reduce risks that cannot be addressed using Building Act powers.

What the law says:

Section 133BL of the Building Act specifies that powers under subpart 6B of Part 2 take precedence over CDEM Act powers:

- (1) A responsible person who is described in <u>section 133BK(2)</u> must not exercise powers under the CDEM Act for the purpose of managing buildings in the designated area.
- (2) Subsection (1) does not apply if the responsible person believes that it is necessary or desirable to exercise a power under the CDEM Act to remove or reduce risks posed by the building that cannot be removed or reduced by exercising a power under any of sections 133BQ to 133BX and 133BZA.

The following table sets out the powers available under the Building Act and CDEM Act and where key requirements may differ:

Table 4: Building emergency management powers as specified in the Building Act, CDEM Act and National CDEM Plan

	Is there a designation in place? Building Act applies. For who the responsible person is for each power listed below, see <u>section 133BJ</u> or <u>Appendix 2</u>	Is there a state of emergency and NO designation in place? CDEM Act and/or National CDEM Plan apply (while a state of emergency is in place)
Power	Building Act	CDEM Act or National CDEM Plan
Power to enter building or land	Section 133BO: Power to enter building or land A responsible person (or someone authorised by them – eg an RBA) may enter a building for the purposes of exercising a power under sections 133BR, 133BS, 133BT, 133BV, 133BW and 133BX. They must carry proof of identity and be able to explain why they are entering the property and under what authority if asked by the owner or occupier. Section 133BQ: Post-event assessments In addition, an RBA may enter a building for the purposes of undertaking a rapid building assessment. They: • must take reasonable steps to obtain the occupier's consent before entering a building • can use any reasonable means to access the building, provided they take reasonable steps to ensure minimal damage • must not enter a simple-unit residential building or household unit without either the occupier's consent or a warrant • must not enter any other building in the	Section 87 Entry on premise/94L: Entry on premises and places (Transition period) If a state of emergency is in force in any area, a Controller, Recovery Manager or a constable, or any person acting under the authority of a Controller or constable, may enter on, and if necessary break into, any premises or place within the area or district in respect of which the state of emergency is in force if he or she believes on reasonable grounds that the action is necessary for— (a) saving life, preventing injury, or rescuing and removing injured or endangered persons; or (b) permitting or facilitating the carrying out of any urgent measure for the relief of suffering or distress. Note the higher threshold in the CDEM Act to enter a building saving life/preventing injury, rescuing people/ urgent measures for relief of suffering or distress.
	 presence of the occupier without their consent or a warrant must leave a notice if no one is present, stating their identity, the date and time, and the purpose of entry – form is available here: Notice of post event assessment in absence of occupier An assessor also must not inspect a building or land without the occupier's consent or a warrant more than 6 months after a designation comes into force (although an extension of up to 3 months can be granted by a person who has authority to extend the designation timeframe). Where a warrant is required to carry out a rapid building assessment, the responsible person must apply to the District Court following the process set out in the Search and Surveillance Act 2012. 	Section 78: Power of entry to obtain information in urgent cases (1) This section applies if a state of emergency is in force or the Director, a Controller, or a person authorised by a Civil Defence Emergency Management Group considers that an imminent threat of an emergency exists. (2) If this section applies, a District Court Judge may, by warrant, authorise any constable to enter and search any premises, not being a dwellinghouse, to obtain information if satisfied on oath by the Director, a Controller, or a person authorised by a Civil Defence Emergency Management Group that— (a) the information is urgently required in order to prevent or limit the extent of the emergency; and (b) the person in possession of the information has refused to provide the information.

	Is there a designation in place? Building Act applies. For who the responsible person is for each power listed below, see <u>section 133BJ</u> or <u>Appendix 2</u>	Is there a state of emergency and NO designation in place? CDEM Act and/or National CDEM Plan apply (while a state of emergency is in place)
Power	Building Act	CDEM Act or National CDEM Plan
Power to enter building or land	 The application must be in writing and include: the name of the assessor/responsible person the address or other description of the building that the application is provided for under section 133BQ (10) of the Building Act 2004 the reason(s) why entry to the building is needed to carry out a rapid building assessment the period for which the warrant is sought. A judge or other issuing officer may issue a warrant if they reasonably consider that entry is necessary to carry out a rapid building assessment. Note: The Local Government Act 2002 may also provide power of entry into buildings if a state of emergency has not been declared or a transition period notified. Section 173: Power of entry in cases of emergency provides powers of entry to land and buildings and inspection if there is a sudden emergency causing, or likely to cause: loss of life or injury to a person damage to property damage to the environment danger to any works or adjoining property. 	See also: Section 79: Form and content of warrant and 80: Powers conferred by warrant. Note the higher threshold for the different type of warrant that can be issued under section 78 of the CDEM Act. This section also does not apply to dwellinghouses (ie where the vast majority of rapid building assessments would take place).
Secured buildings	Section 133BP: Exercise of powers in secured buildings A responsible person who is exercising a power under any of sections 133BQ to 133BX and 133BZA in relation to a secured building must exercise that power in accordance with instructions given to the responsible person by the officer in charge of the building.	

	Is there a designation in place? Building Act applies. For who the responsible person is for each power listed below, see <u>section 133BJ</u> or <u>Appendix 2</u>	Is there a state of emergency and NO designation in place? CDEM Act and/or National CDEM Plan apply (while a state of emergency is in place)
Power	Building Act	CDEM Act or National CDEM Plan
Rapid building assessments	Section 133BQ: Post-event assessments A responsible person may inspect the exterior and interior of a building or any land in a designated area and prepare a post-event assessment of any risks posed by or to the building. The post-event assessment must be prepared— (a) in accordance with the methodology (if any) approved by the chief executive (b) in writing and in the form (if any) approved by the chief executive.	Section 92: Power to carry out inspections, etc While a state of emergency is in force, a Controller or a constable, or any person acting under the authority of a Controller or constable may examine, mark, seize, sample, secure, disinfect, or destroy any property, animal, or any other thing in order to prevent or limit the extent of the emergency. Section 94H contains a similar power which applies during a transition period. National CDEM Plan, section 80: Managemen of buildings during response and recovery As the building consenting authority for the affected area in its district, each territorial authority is, as necessary,— (a) to lead rapid building assessments.
Evacuation	Section 133BR: Evacuation A responsible person or a constable may direct the evacuation of a building in a designated area if satisfied that evacuation is necessary to prevent the death or injury of any person in the designated area. A responsible person or a constable may give a direction under the above subsection before exercising any other power under this subpart in relation to the building.	Sections 86: Evacuation of premises and places If a state of emergency is in force and, in the opinion of a Controller or any constable, the action authorised by this section is necessary for the preservation of human life, that person or a person authorised by him or her may direct, within the area or district in which the emergency is in force,— (a) the evacuation of any premises or place, including any public place; or (b) the exclusion of persons or vehicles from any premises or place, including any public place. Section 94K contains a similar power which applies during a transition period.

	Is there a designation in place? Building Act applies. For who the responsible person is for each power listed below, see <u>section 133BJ</u> or <u>Appendix 2</u>	Is there a state of emergency and NO designation in place? CDEM Act and/or National CDEM Plan apply (while a state of emergency is in place)
Power	Building Act	CDEM Act or National CDEM Plan
Measures to keep people safe	Section 133BS: Measures to keep people at safe distance and protect building A responsible person may put in place measures that the person considers reasonably necessary— (a) to keep people at a safe distance from a building in a designated area; or (b) to protect a building in the designated area from being damaged. Measures may include— (a) the installation of a hoarding or fence to prevent people from approaching the building; and	Section 88: Closing roads and public places If a state of emergency is in force, a Controller or a constable, or any person acting under the authority of a Controller or constable, or any person so authorised in a relevant civil defence emergency management plan, may, in order to prevent or limit the extent of the emergency, totally or partially prohibit or restrict public access, with or without vehicles, to any road or public place within the area or district in respect of which the state of emergency is in force. Section 94M contains a similar power which applies during a transition period.
	 (b) measures that prevent or limit public access, with or without vehicles, to any road or other public place near the building; and (c) measures intended to prevent the building or debris from the building harming people (for example, by the collapse of a roof or wall); and (d) measures that allow limited access for a purpose that the responsible person considers appropriate. 	National CDEM Plan, section 80: Management of buildings during response and recovery As the building consenting authority for the affected area in its district, each territorial authority is, as necessary,— (b) to take steps to manage the safety of people in and near a building, either in accordance with directions of the National Controller, Group Controller, or Local Controller during a state of emergency or a Recovery Manager during a transition period or in line with its functions under the Building Act 2004 in any other emergency, including, as applicable,— (i) cordoning; and (ii) carrying out stabilisation work and barricading; and (iii) carrying out demolitions and setting up partial demolition cordoning; and (iv) requiring the mandatory evacuation of a building or the area around a building when necessary under section 86 of the Act; and (c) to fulfil its responsibilities under the Act and the Building Act 2004, including facilitating the efficient and effective recovery of building functions; and (d) to have, in carrying out the actions specified in paragraphs (a) to (c), regard to priorities for the preservation and restoration of lifeline utility services in the affected area.
Notices and signs	Section 133BT: Notices and signs on buildings A responsible person may place 1 or more signs or notices on or near a building in a designated area prohibiting or restricting the use of the building if— (1) (a) the responsible person believes that it is reasonably necessary to remove or reduce risks of injury or death; or (b) an evacuation of the building has been directed under section 133BR. (2) A responsible person may place signs or notices on or near a building informing members of the public of the risks posed by the building.	Section 92: Power to carry out inspections, etc While a state of emergency is in force, a Controller or a constable, or any person acting under the authority of a Controller or constable, may examine, mark, seize, sample, secure, disinfect, or destroy any property, animal, or any other thing in order to prevent or limit the extent of the emergency.

	Is there a designation in place? Building Act applies. For who the responsible person is for each power listed below, see <u>section 133BJ</u> or <u>Appendix 2</u>	Is there a state of emergency and NO designation in place? CDEM Act and/or National CDEM Plan apply (while a state of emergency is in place)
Power	Building Act	CDEM Act or National CDEM Plan
Direct building owner to give information	Section 133BU: Owner directed to give information A responsible person may direct the owner of a building or of any land in a designated area to give the responsible person information about the building or land if the responsible person believes that the further information is reasonably necessary to enable the responsible person to determine— (a) the risks posed by the building and whether to exercise further powers under this subpart in relation to the building; or (b) what works, if any, are needed to remove or reduce the risks	Section 76: Power to require information Power to require information (1) The Director, or a Civil Defence Emergency Management Group, or a person acting under the authority of the Director or Group, may, by notice in writing, require any person to give the Director or the Group information described in subsection (2). (2) The information referred to in subsection (1) is information that, in the opinion of the Director or the Group, as the case may be, is reasonably necessary for the exercise of civil defence emergency management by the Director or the Civil Defence Emergency Management Group, as the case may be, and that is— (a) in the possession of the person who is asked to give the information; and (b) capable of being provided without unreasonable difficulty or expense. Section 94I contains a similar power which applies during a transition period.

	Is there a designation in place? Building Act applies. For who the responsible person is for each power listed below, see <u>section 133BJ</u> or <u>Appendix 2</u>	Is there a state of emergency and NO designation in place? CDEM Act and/or National CDEM Plan apply (while a state of emergency is in place)
Power	Building Act	CDEM Act or National CDEM Plan
Works	Section 133BV: Urgent works to remove or reduce risks (1) This section applies if a responsible person believes that works in relation to a building in a designated area— (a) are reasonably necessary to remove or reduce risks posed by the building; and (b) must be carried out without delay in order to remove or reduce those risks. (2) The responsible person may carry out those works. Section 133BW: Works to remove or reduce other risks This section applies if— (a) a responsible person believes that works in relation to a building in a designated area are reasonably necessary to remove or reduce risks posed by the building; and (b) section 133BV(1)(b) does not apply; and (c) there will be ongoing disruption of a public thoroughfare or of the use of another building or of critical infrastructure because the responsible person has— (i) put in place measures under section 133BS or placed 1 or more signs or notices under section 133BT; and (ii) decided that those measures, signs, or notices must remain in place until the works referred to in paragraph (a) are carried out.	Section 85: Emergency powers of CDEM Groups (1) While a state of emergency is in force in its area, a Civil Defence Emergency Management Group may— (a) carry out or require to be carried out all or any of the following: (i) works: (ii) clearing roads and other public places: (iii) removing or disposing of, or securing or otherwise making safe, dangerous structures and materials wherever they may be. Section 94H contains a similar power which applies during a transition period.
	Section 133BX: Works for long-term use or occupation of building This section applies if— (a) a responsible person believes that works in relation to a building are reasonably necessary to remove or reduce risks posed by the building; and (b) sections 133BV(1)(b) and 133BW(1)(c) do not apply; and (c) the responsible person believes that the works are reasonably necessary to make the building safe, sanitary, and otherwise suitable to be used or occupied by people on a long-term basis.	

Continuation of placards issued under the CDEM Act when a state of emergency or transition period ends in a designated area

The decision to designate an area might not be made at the same time as any decision to declare a state of emergency or notify a transition period. In this scenario, it is possible that rapid building assessments have been completed, or other powers have been exercised under the CDEM Act to manage affected buildings before the designation came into effect.

Before a state of emergency or transition period ends, and an area has been subsequently designated, the responsible person may decide that any equivalent CDEM Act notice, direction or power should be treated as continuing in force under the corresponding part of the Building Act (subject to any conditions imposed). The decision must be made by the responsible person prior to the end of the state of emergency or transition period and should be recorded. Once this decision is made, placards restricting access to buildings do not need to be reissued following the designation of an area. The placard would be treated as if it had been issued under the relevant corresponding section of the Building Act.

Building Act:

Placards are issued under section 133BT: Notices and signs

CDEM Act:

Placards are issued under section 92: Power to carry out inspections, etc

What the law says:

On the effect of previously issued CDEM Act notices section 133BM of the Building Act specifies:

- (1) This section applies if—
 - (a) a state of emergency or transition period is in force for a part of the period during which a designation of an area under <u>section 133BC</u> is in force; and
 - (b) the responsible person—
 - (i) has exercised a power under the CDEM Act in the area before the area was designated; or
 - (ii) exercises a power under the CDEM Act in the area in accordance with section 133BL(2).
- (2) Before the state of emergency or transition period ends, the responsible person may determine that any equivalent CDEM Act notice that is issued or given in relation to a building in the area (whether or not a notice, direction, or other requirement is issued or given under this subpart in relation to the same building) should continue in force under this subpart.
- (3) If a determination is made under subsection (2), the equivalent CDEM Act notice must be treated as continuing in force under the corresponding provision of this subpart, subject to any conditions that the relevant responsible person considers necessary or desirable to remove or reduce risks posed by the relevant building.
- (4) In this section, equivalent CDEM Act notice means a notice, direction, or other requirement under the CDEM Act of a class that is substantially similar in effect to a class of notice, direction, or other requirement under this subpart.







4.3.3 Designating an area for building emergency management

What the law says:

Subpart 6B of Part 2 of the Building Act specifies:

- section 133BC: designation of areas to which this subpart applies
- section 133BD: decisions about designations (other than terminations)
- section 133BE: public notification of designations
- <u>section 133BF</u>: commencement and duration of designation
- section 133BG: periodic (90-day) review of designation
- <u>section 133BH</u>: extension of designation
- section 133BI: termination of designation

What is a designation?

A designated area is an area approved by the relevant decision-maker (see below) to allow a responsible person to take specific actions under the Building Act to manage buildings in and following an emergency.

Designating an area that has been affected by an emergency activates powers under subpart 6B of Part 2 of the Building Act for managing buildings within that designated area. These provisions allow a territorial authority to effectively manage the process from response through to recovery, providing certainty to building owners and occupiers about how the safety of their buildings will be managed after an emergency.

A designation can be in place at the same time as a state of emergency or transition period, or it can be a standalone measure.

Who can designate an area?

Who can designate an area depends on whether an area is subject to a state of emergency or transition period under the CDEM Act or not.

If the area is under a state of emergency or transition period, a designation can be made by a relevant Civil Defence Emergency Management (CDEM) decision-maker. This means either:

- the Minister for Emergency Management or
- a person appointed or otherwise authorised under section 25 of the CDEM Act to declare a state of local emergency or give notice of a local transition period for the area (usually the mayor or another decisionmaker who is appointed under these powers).

If an emergency arises and a state of emergency or transition period **is not in force**, an area can be designated by the:

- Minister for Building and Construction or
- territorial authority for the relevant area, with prior approval of the Minister for Building and Construction.

The purpose of a designation

Designating an area allows for the longer-term emergency management of buildings, as the Building Act powers that apply upon designation allow for the management of buildings, including after a state of emergency or transition period ends.



There are several reasons for using the designation powers under the Building Act:

- a national or local state of emergency only lasts for seven days unless extended or terminated. A local transition period last 28 days or 90 days for a national transition period unless extended or terminated.
- longer term management of buildings may be required (eg many damaged buildings in an area)
- the Building Act provides a flexible system and additional tools to territorial authorities to manage buildings following an emergency event
- damaged buildings may not meet the test for issuing section 124 notices.

Once an area has been designated, all building emergency management functions in the area should be managed under the Building Act. CDEM Act powers must not be used to manage affected buildings once a designation is in place, unless the responsible person considers this is needed to remove or reduce risks that cannot be addressed using Building Act powers.

When can an area be designated?

An area can also only be designated if an emergency arises, or when there is a state of emergency or transition period in force. The responsible person can only designate an area if satisfied the <u>requirements</u> in section 133BD of the Building Act are met. This requires that the decision to designate is in the public interest and is necessary or desirable for the protection of one or more of the following:

- people from death or injury
- buildings from damage or disruption to their use
- public thoroughfares from disruption
- critical infrastructure from damage or disruption
- people and buildings from insanitary conditions (if applicable) of a building in the relevant area.

The decision maker must also, to the extent practicable in the circumstances, consider:

- the scale and degree of the impact of the emergency and of its effects on buildings in the area
- the likelihood of a further emergency or any other relevant event occurring that could cause:
 - buildings in the relevant area to pose increased or additional risks
 - land in the relevant area to pose a risk to a building
- the principle that it is preferable that risks be managed, if possible, without the exercise or continued exercise of powers under subpart 6B of Part 2 of the Building Act.

Alternative regulatory options to manage building damage after an emergency include the following:

Table 5: Alternative regulatory options for managing buildings after an emergency

Legislation	Powers
 CDEM Act: sections 86-88, 91-92 (state of emergency) sections 94G-94P (transition period) 	provides powers to manage buildings including powers of evacuation, inspection, giving direction
Building Act: • sections 121 – 130 • sections 220 – 221 • section 222(1)(b)	 special provisions to manage dangerous, affected, or insanitary buildings; general provisions for carrying out building work on default; entering household units to undertake inspections with the consent of the occupier or an order of the District Court
Local Government Act 2002: • section 173	provides powers of entry to land and buildings and inspection if there is a sudden emergency



Key point:

A territorial authority can apply to designate an area even if a state of emergency has not been declared, so long as the test for designating an area is met. A designation lasts for three years unless terminated sooner or extended.

What is a responsible person and what powers do they have?

The Building Act specifies that the responsible person may exercise powers under subpart 6B of the Building Act. Once an area has been designated, who the responsible person is may depend on how and who put the designation in place. The following diagram shows who the responsible person is in different situations:

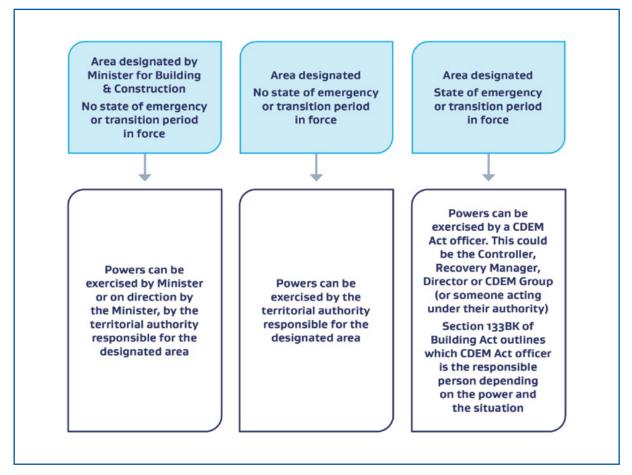


Figure 4: Who can exercise powers under subpart 6B of the Building Act

Note: If a state of emergency or transition period expires or is terminated early and a designation is in force, the responsible person will switch from the CDEM Act officer to the responsible territorial authority.

What the law says:

Section 133BJ of the Building Act specifies that responsible persons may exercise powers under this subpart:

- (1) This section and section 133BK set out who may exercise the powers under <u>sections 133BQ to 133BX</u> and <u>133BZA</u> in a designated area.
- (2) If no state of emergency or transition period is in force at the same time as the designation, the powers may be exercised,—
 - (a) if the area was designated under <u>section 133BC(1)</u>, by the territorial authority that is responsible for the designated area:
 - (b) if the area was designated under section <u>133BC(2)(a)</u>, by the territorial authority that made the designation:
 - (c) if the area was designated under section <u>133BC(2)(b)</u>,—
 - (i) by the Minister; or
 - (ii) on direction by the Minister, by the territorial authority that is responsible for the designated area.
- (3) If a state of emergency or transition period is in force at the same time as the designation, the powers may be exercised by a person described in <u>section 133BK</u>.
- (4) The Minister may give directions to a territorial authority that is exercising powers under subsection (2).
- (5) A direction given by the Minister may—
 - (a) require a power to be exercised or not to be exercised; and
 - (b) relate to any or all powers under sections 133BQ to 133BX and 133BZA; and
 - (c) relate to a specified building, a specified class of building, or all buildings in the designated area.
- (6) A territorial authority must comply with a direction.
- (7) The Minister may amend, revoke, or replace a direction at any time.

What the law says:

Section 133BK of the Building Act specifies CDEM Act officers as responsible persons:

- (1) This section sets out who may exercise powers under sections 133BQ to 133BX and 133BZA for the purposes of section 133BJ(3).
- (2) The powers may be exercised as follows:
 - (a) the power under section 133BQ (post-event assessments) may be exercised,—
 - (i) during a state of emergency, by a Controller (or a person acting under the Controller's authority):
 - (ii) during a transition period, by a Recovery Manager (or a person acting under the Recovery Manager's authority):
 - (b) the power under section 133BR (evacuation) may be exercised,
 - i) during a state of emergency, by a Controller or a constable (or a person acting under that person's authority):
 - (ii) during a transition period, by a Recovery Manager or a constable (or a person acting under that person's authority):
 - (c) the power under section 133BS (measures to keep people at safe distance and protect building) or section 133BT (notices and signs on buildings) may be exercised,—
 - (i) during a state of emergency, by a Controller (or a person acting under the Controller's authority):
 - (ii) during a transition period, by a Recovery Manager (or a person acting under the Recovery Manager's authority):
 - (d) the power under section 133BU (owner directed to give information) or section 133BZA(3)(a) (bring forward due date for provision of assessment or information) may be exercised,—
 - (i) during a state of emergency, by the Director or CDEM Group (or a person acting under the authority of the Director or Group):
 - (ii) during a transition period, by the Director or CDEM Group (or a person acting under the authority of the Director or Group):
 - (e) the power under section 133BV (urgent works to remove or reduce risks), section 133BW (works to remove or reduce other risks), section 133BX (works for long-term use or occupation of building), or section 133BZA(3)(b) (bring forward deadline for completing seismic work) may be exercised,—
 - (i) during a state of emergency, by the CDEM Group (or a person acting under the Group's authority):
 - (ii) during a transition period, by a Recovery Manager (or a person acting under the Recovery Manager's authority).
- (3) For the purposes of subsection (2),—
 - (a) a responsible person who is a Group Controller must comply with section 28(4) of the CDEM Act:
 - (b) a responsible person who is a Local Controller must comply with section 27(2) of the CDEM Act:
 - (c) a responsible person who is a Group Recovery Manager must comply with section 30A(5) of the CDEM Act:
 - (d) a responsible person who is a Local Recovery Manager must comply with section 30(2) of the CDEM Act.
- (4) In this section,—
 - CDEM Group means a Civil Defence and Emergency Management Group within the meaning of the CDEM Act Controller, Director, Group Controller, Group Recovery Manager, Local Controller, Local Recovery Manager, and Recovery Manager have the same meanings as in the CDEM Act.

Both the relevant CDEM group and territorial authority should make sure they have delegation frameworks in place to ensure the Building Response Manager and any other relevant officials are authorised to exercise building emergency management powers under the different scenarios.

How to designate an area

✓	When deciding to designate an area, the following should be considered:
	has an emergency occurred?
	is the situation an emergency as defined in section 133BB of the Building Act?
	have the <u>requirements</u> in section 133BD of the Building Act been met?

When a decision has been made to designate an area (or to seek approval to do so), a designation form should be completed and sent to MBIE. When the form is received, MBIE will review the designation request and either notify or facilitate the required approval of the Minister for Building and Construction as appropriate.

(i) Designation forms are available here: <u>Designated areas for building emergency management</u> **Building Performance**

For more detail on designation processes, including how to apply, extend, review and terminate a designation see Appendix 2



4.3.4 Dangerous, affected, or insanitary buildings and section 124 notices in a designated area

When an area is designated and the immediate emergency has passed, business as usual (BAU), such as compliance inspections, will likely resume in some or all parts of the designated area. However, while a designation is in place, some BAU processes may be impacted. For example, when an area has been designated, the actions and powers that a territory authority or a building consent authority can take and use for dangerous, affected, or insanitary buildings change.

New notices issued under section 124 of the Building Act in relation to buildings within the designated area cannot be issued while the designation is in force.

If there was a section 124 notice issued prior to the area being designated, the powers specified in Subpart 6—Special provisions for dangerous, affected, and insanitary buildings apply. This includes work carried out in accordance with an issued notice under section 124(2)(c) or under section 126, and an action in relation to the building for which a warrant has been issued under section 129(2) before the designation.

Placards and other measures used during a state of emergency can be replaced by notices under section 124 of the Building Act if the area was not or is no longer designated, but these provisions can only be used for buildings which are dangerous in the normal course of events, or insanitary, or for a building that is adjacent to, adjoining, or nearby a dangerous building.



Key point:

It is likely that buildings damaged in an emergency event will not meet the high threshold to be a 'dangerous building' under section 121 of the Building Act or an 'affected building' under section 121A of the Building Act.

Using subpart 6B powers to manage 'business as usual' in a designated area

There are similar powers in subpart 6B that could be used to achieve a similar outcome to a section 124 notice while an area is designated. As there are differences in who has authority to exercise the power, different triggers for when the power may be exercised, and different procedural requirements, it is important that the relevant decision maker has read and understands all of subpart 6B to apply the right powers, including who the responsible person is to exercise that power.

Hoarding or fence: Where section 124(2)(a) specifies that a territorial authority may put up a hoarding or fence to stop people approaching the building, section 133BS states that a responsible person may put in place measures that the person considers reasonably necessary to keep people at a safe distance from a building in the designated area. Who the responsible person is will depend on the circumstance (see above).

Notice restricting entry to a building: sections 124(2)(b),(d) specify that a territorial authority can attach a notice warning people not to approach the building, or issue a notice restricting entry. Section 133BT also gives a responsible person the power to place one or more signs or notices on or near a building in a designated area, prohibiting or restricting use of the building, where reasonably believed necessary to remove or reduce risks of injury or death. This means a red or yellow placard could be issued to restrict or prohibit entry in these circumstances. As the placards are approved by the Chief Executive of MBIE as per section 133BT(3) of the Building Act, it means that only the approved placard can be used. A territorial authority cannot use another type of notice or sign to restrict entry under section 133BT.

Requiring work to be carried out on a building:

- section 133BV allows a responsible person to carry out urgent works to remove or reduce risks in a designated area.
- section 133BW allows a responsible person to carry out or direct a building owner to carry out non-urgent works in a designated area.
- section 133BX allows a responsible person the power to direct the owner of the building to carry out works for long-term use or occupation of building.

A designation can be reduced to only the areas where damaged/placarded buildings remain. If a part of a designation is terminated, it means that BAU powers resume in the terminated areas.

What the law says:

Buildings in areas designated under subpart 6B of the Building Act:

- (1) If a dangerous or insanitary building or a building adjacent to, or adjoining, a dangerous building is located in an area that has been designated under subpart 6B, this subpart does not apply to that building while the designation is in force.
- (2) Despite subsection (1), this subpart continues to apply to the building for the purposes of—
 - (a) an action taken in relation to the building under section 124(2)(a) or (b) before the designation:
 - (b) a notice issued in relation to the building under section 124(2)(c), or work carried out in accordance with the notice or under section 126, before the designation:
 - (c) a notice issued in relation to the building under section 124(2)(d) before the designation:
 - (d) an action in relation to the building for which a warrant has been issued under section 129(2) before the designation.

Notices to fix in a designated area

A notice to fix **may still be issued** in a designated area. The relevant section in subpart 6B of the Building Act that deals with works for long-term use or occupation of a building in a designated area (section 133BX) applies where works are required to remove or reduce risks posed by the building.

A notice to fix (a section 164 notice) applies where a building owner (or person carrying out or supervising building work) is contravening the Building Act or regulations (eg reporting procedures in a compliance schedule not being met, or a building warrant of fitness that is not correct).



5. Roles and responsibilities

When an emergency event occurs, there are several agencies and stakeholders who may be required to provide building emergency management functions. Who is involved depends on severity of event, the types of buildings and infrastructure that have been damaged and whether a state of emergency has been declared or an area designated for building emergency management. They include:

- the relevant territorial authority/authorities. Their main function is to assume the overall command of building emergency management for their area, in conjunction with other emergency management personnel as required (eg Civil Defence, Fire and Emergency New Zealand and MBIE).
- **CDEM decision-maker**. This person decides if a state of emergency or transition period should be declared. This is usually the Controller, or Recovery Manager but this role can also be filled by the Minister for Emergency Management or the mayor of the relevant territorial authority.
- **Heritage NZ Pouhere Taonga**. Their function is to monitor and advise on any proposed works to damaged heritage buildings.
- **Minister for Building and Construction**. Their main role is to approve designation requests, designate an area or approve applications for urgent works on heritage buildings when required. They can also direct the exercise of powers in certain circumstances.
- **MBIE**. Their main role is to monitor the event and response, provide advice and resources and facilitate requests when required (eg designations, urgent works to heritage buildings)

The table on the following page outlines the key roles and responsibilities of each depending on whether a state of emergency or transition period has been declared or not:



Table 6: Building emergency management roles and responsibilities

Building Emergency Management Roles and Responsibilities BUILDING PERFORMANCE CDEM DECISION MAKER HERITAGE NZ POUHERE MINISTRY OF BUSINESS, INNOVATION MINISTER BUILDING **TERRITORIAL AUTHORITY (TA)** (eg Controller, Recovery Manager) & EMPLOYMENT (MBIE) & CONSTRUCTION State of Emergency (SoE) > Area wide impact assessments > May designate area If notified of proposed works > Monitor event and response > May approve applications to or Transition Period (TP). (reconnaissance) > May exercise subpart 6B powers in on heritage buildings: > Provide advice to TA and CDEM complete urgent works on specified heritage buildings > Provide advice to TA / CDEM > May recommend designation of area a designated area during SoE/TP > May provide liaison officer(s) to National **Building management** (to CDEM decision-maker) decision-maker May extend or terminate > Deploy local resources Crisis Management Centre (NCMC) & local required. > Advise CDEM decision-makers > Consult with MBIE Emergency Operations Centre (EOC)/ regional > May request support Emergency Coordination Centre (ECC) > Review (and monitor?) designation if > Provide advice to Minister May request approval for urgent works Culture & Heritage > May process designation on specified heritage buildings > Request additional support from > May coordinate and deploy rapid building > Notify Minister of designation other TAs or MBIE assessment resources > Notify public if designates area > Lead rapid assessment functions in state of > Review designation if still SOE or TP national emergency > May extend or terminate designation if still SOE or TP > Lead securing and management of > Specified person may exercise subpart 6B compromised sites for forensic investigation powers if area designated and it is SOE/TP No State of Emergency or >> Area wide impact assessments If notified of proposed works > Monitor event and response > Monitor event and response May approve designation on heritage buildings: application (or extend/ terminate) Transition Period. (reconnaissance) > Provide advice to TA and Minister > Request approval of designation > Provide advice to TA > May extend or terminate **Building management** > Respond to requests > Consult with MBIF > Deploy local resources designation required. > May coordinate and deploy rapid building May approve application to > Request additional support from > Provide advice to Minister assessment resources complete urgent works on other TAs or MBIE Culture & Heritage > Process designation > May exercise subpart 6B powers specified heritage buildings in a designated area > May give direction to TA > May request approval for urgent works on specified heritage buildings > Notify public if designates area > Review designation (if TA designated) > May extend or terminate designation with Minister's approval No State of Emergency > Provide information to MBIE/Minister If notified of proposed works > Monitor event > May designate an area & may > Follow directions of Minister (if on heritage buildings: > Advise Minister on impacts and risks or Transition Period. Minister decides to designate area) > Provide advice to Minister > Process designation by Minister > Notify public if designates area No designation. > Consult with MBIE > May coordinate and deploy rapid building > Review designation Minister believes building > Provide advice to Minister > May extend or terminate designation Culture & Heritage > May approve application to complete urgent works on specified heritage buildings > May give direction to TA > May exercise subpart 6B powers in a designated area No State of Emergency > Threat and risk assessment > If required, declare local state of If notified of proposed works > Provide advice to TA and Minister > May approve application to on heritage buildings: > Prioritise outstanding assessments emergency > May provide liaison officer(s) to EOC/ECC/ or Transition Period. > If required use CDEM powers to remove or > Consult with MBIE specified heritage buildings > Health and wellbeing of assessment Designation in place. reduce risks section 133BL of Building Act > Provide advice to TA or > May coordinate and deploy rapid building > May extend or terminate Event escalates. > Ongoing building emergency > If SOE/TP declared, extend the designation CDEM decision-maker and assessment resources designations Minister Culture & Heritage > Monitor event and response management Te Kāwanatanga o Aotearoa

5.1.1 The role of territorial authorities during risk reduction and readiness phases

Territorial authorities are required to plan for civil defence emergency management in consultation with their communities, and in collaboration with emergency services and lifeline utilities. The roles and responsibilities of territorial authorities during the risk reduction and readiness phases include:

- being a member of a CDEM Group (required by the CDEM Act)
- developing and maintaining arrangements to ensure they are ready to respond to an emergency and lead recovery work to achieve the building emergency management objectives of the National CDEM Plan. For example:
 - having a fit-for-purpose operational plan for managing buildings in an emergency
 - having the capability and capacity to establish an operational response
 - having sufficient numbers of trained RBAs
- reviewing operations and considering if changes need to be made to plans and processes as a result of debriefs and lessons learned after an event.

5.1.2 The role of MBIE during risk reduction and readiness phases

MBIE has a role as a steward of building management in emergencies and has legal obligations, roles and responsibilities under the National CDEM Plan and the Building Act. Both legislative vehicles require MBIE to have systems and functions to be in place in the event of an emergency. MBIE's responsibilities during the reduction and readiness phases include:

- manage the setting of national building standards, codes, and assurance processes that address the risks of hazards
- planning for the national coordination of building management in an emergency in consultation with the
 agencies, professional bodies, and members of the private sector that have roles, responsibilities, and
 interests in this regard
- the training and registration of qualified RBAs, who are able to be deployed across Aotearoa New Zealand
- the maintenance of rapid building assessment processes and systems, including RBA deployment and demobilisation processes
- the maintenance of sufficient capability of RBAs nationally to enable timely support to one or more CDEM Groups when local capabilities are exceeded.



5.1.3 The role of territorial authorities during response and recovery phases

During response and recovery, territorial authorities must take steps to manage the safety of people in and near a building (during a state of emergency), either in accordance with directions of the National Controller, Group Controller, or Local Controller, a Recovery Manager (transition period) or in line with its functions under the Building Act as appropriate in the circumstances. This includes:

- putting in place measures to protect buildings or keep people at a safe distance (including stabilisation work and barricades and cordons)
- · carrying out urgent works where necessary to remove or reduce risks without delay
- deciding if owners need to provide further building information
- requiring the mandatory evacuation of a building or the area around a building when necessary.

Other responsibilities include:

- set-up and management of a building assessment operation and leading rapid building assessments
- liaising with MBIE if national support is required
- determining if an area should be designated under the Building Act for longer-term building emergency management
- ensuring the health, safety and wellbeing of all RBAs and operational staff during an assessment operation (including ensuring staff have been inducted, and have sufficient tools and resources to do their job)
- reassessing placards (following remediation/repair by building owners/occupiers)
- · bringing forward seismic strengthening deadlines where necessary to remove or reduce risks
- carrying out or directing works to remove or reduce risks including where temporary safety measures are causing a disruption
- carrying out or directing works for long-term use or occupation of buildings
- seeking more detailed assessments from building owners where appropriate
- seeking advice from Heritage New Zealand Pouhere Taonga where appropriate
- conducting debriefs and ensuring an appropriate transition back to business as usual for operational staff.

5.1.4 The role of MBIE during response and recovery phases

MBIE's stewardship requirements in the response phase of an emergency include supporting, coordinating, and in certain circumstances, leading the national response. MBIE's responsibilities include during the response and recovery phases include:

- coordinating national building management support for designated areas, in consultation with CDEM,
 relevant agencies and professional bodies as required
- leading rapid building assessment functions in a state of national emergency*
- mobilising and deploying registered RBAs to support rapid building assessment operations as requested
- providing advice and guidance to affected territorial authorities, including the facilitation of designation requests and formally notifying territorial authorities of ministerial decisions
- providing guidance on rapid building assessments, and resources for RBAs including assessment forms and placards
- advising and reporting on operational building management needs and options to the Director or the National Controller
- providing building management policy advice to the Government as requested
- appointing a liaison officer to the National Crisis Management Centre (NCMC), which facilitates the central government crisis management response
- facilitating consultation with required parties regarding a request for the removal of a heritage building
- facilitating territorial authorities' 90-day reviews of designated areas
- advising the Government, during recovery after an emergency, on the requirements for facilitating the efficient and effective recovery of building stock and functions
- leading the securing and management of compromised building sites for forensic investigations (section 207C of Building Act).

*'Leading' in this context is described section 15.5 of the Guide to the National CDEM Plan

It is defined as supporting and reporting to the Local Authority Building Assessment [Response] Manager in setting up and coordinating rapid assessment teams, reporting and analysis of damage, providing stabilisation/demolition advice, and any other applicable building safety related matter.

Under a national state of emergency, some of MBIE's roles for building emergency management can change at the request of the National Controller in the National Crisis Management Centre.



6. Rapid Building Assessments

Rapid building assessments quickly establish the usability of buildings and associated infrastructure where functions may be compromised by an emergency event. The focus of rapid building assessments is on **immediate public safety**. They are a brief visual assessment that is conducted to ensure the safety of building occupants and the public. Rapid building assessments do not provide an engineering assessment service to building owners. When carrying out these assessments, actual or potential land instability and geotechnical hazards also need to be considered.

Building Act:

Rapid building assessments can be carried out under section 133BQ: Post-event assessments

CDEM Act:

Assessments can be carried out under section 92 and/or 94H of the CDEM Act: Power to carry out inspections/general transition period powers

Any person properly authorised to undertake an assessment under the CDEM Act or the Building Act (as relevant) may undertake a rapid building assessment. However, MBIE recommends:

- only trained and registered RBAs should complete rapid building assessments and placard properties and buildings
- any building officials and engineers who are not trained on rapid building assessments but who are supporting the emergency response should form part of a team with a trained assessor.



There are different types of assessments that can be completed on damaged buildings depending on the building type. These are summarised in **Table 7** below:

Table 7: Rapid building assessment types

Assessment type	Description	Assessor type	Building type	Time estimate
Level 1 rapid building assessment	A brief visual inspection of damage to individual buildings. An external inspection of building only.	Registered RBAs where possible Building consent officers, architects, structural and civil engineers.	Simple residential houses (eg timber framed dwelling. Complex residential (eg a two-storey block with two flats), non-residential).	5-20 mins
Level 2 rapid building assessment	A more detailed inspection that involves both external and internal inspection of building (if safe to enter).	Registered RBAs where possible. Teams should comprise at least one structural engineer, with input from geotechnical engineers where necessary.	Buildings with typical commercial construction details: unreinforced masonry walls, tilt-up panels). Multi-storey buildings and containing three or more residential units. Essential facilities (eg schools, hospitals, police and fire stations). Any buildings where a Level 1 assessment identifies the need for further inspection.	From 30 mins to Two hours+
Geotechnical rapid building assessment	An inspection by geotechnical professionals to assess the life safety risk posed by land instability hazards and their effects on building usability.	 Registered RBAs where possible. A geotechnical professional (eg geotechnical engineer) must be part of the team. 	Any individual properties or wider areas (multiple properties) identified as being potentially affected by land instability.	15-20 mins for an individual property. (inspection of hazards affecting multiple properties will take longer)

RBAs will observe the nature of damage and assess its impact on the ability of the building (or part) to withstand reasonably foreseeable future events, such as earthquakes, aftershocks or more flooding.



Key point:

The Building Response Manager should provide RBAs with some guidelines to follow regarding the decision-making process for placarding. This will depend on the type of hazard event, the number of assessments likely required and the risk of future events/deterioration of the environment.

Rapid building assessments primarily assess:

- the threat of overall or partial collapse due to loss of strength, stability, or stiffness of the structural system
- the threat of non-structural elements of a building, that are not part of the structural frame, becoming falling hazards (eg loose bricks from a chimney, tiles from a roof)
- the threat posed by damage to adjacent structures or land
- other threats to public safety caused by the event, such as biocontamination through leaked sewage or electrical issues.

Assessing usability is based on the damage observed in the context of the event that has occurred. It is accepted that larger events could cause failure. Reasonably foreseeable events that affect the serviceability and structural performance of buildings include:

- normal rainfall events
- normal service loading
- wind or snow loading

The focus is on applying judgment to assess future risk from damage, based on a minimum of specific knowledge about a building.

RBA teams may also make recommendations for work to be done under urgency where there is a need to demolish or secure the structure to keep the public safe or to protect adjacent property. The recommendation will go to the person authorised to exercise the power to direct or undertake works, either under the Building Act or the CDEM Act.



What the law says:

Section 133BQ of the Building Act specifies that:

- (1) A responsible person may inspect the exterior and interior of a building or any land in a designated area and prepare a post-event assessment of any risks posed by or to the building
- (2) The post-event assessment must be prepared—
 - (a) in accordance with the methodology (if any) approved by the chief executive; and (b) in writing and in the form (if any) approved by the chief executive.
- (3) If a responsible person has reasonable grounds for believing entry to be necessary for making the post-event assessment of a building, the responsible person may—
 - (a) enter a simple-unit residential building or a household unit within a simple-unit residential building only—
 - (i) with the occupier's consent; or
 - (ii) in accordance with a warrant issued under this section:
 - (b) enter any other building, any land on which any building (including land under or around a simple-unit residential building) is situated, or any other land in the designated area, at any time after taking any steps that the responsible person considers reasonable in the circumstances to obtain the occupier's consent to entry.
- (4) In entering and inspecting a building or land, or any household unit or other part of a building, a responsible person—
 - (a) may use any means that are reasonable in the circumstances; and
 - (b) must take all reasonable steps to ensure that minimal damage is caused to the building.
- (5) A responsible person who does not hold a warrant issued under this section must not enter a building in the presence of the occupier unless the responsible person has—
 - (a) told the occupier the reason for the proposed entry; and
 - (b) produced evidence of the person's identity and authority to enter for inspection; and
 - (c) told the occupier that the occupier may consent, or refuse to consent, to the entry.
- (6) If a responsible person enters and inspects a building or land in the absence of the occupier, the responsible person must, before leaving, leave in the building a notice stating—
 - (a) the responsible person's identity; and
 - (b) the date and time of entry; and
 - (c) the purpose of the entry.
- (7) A notice under subsection (6) must be in the form (if any) approved by the chief executive.

The outcome of the rapid building assessment is a completed assessment form and, in most instances, an appropriate placard. The basic assessment process is outlined below:

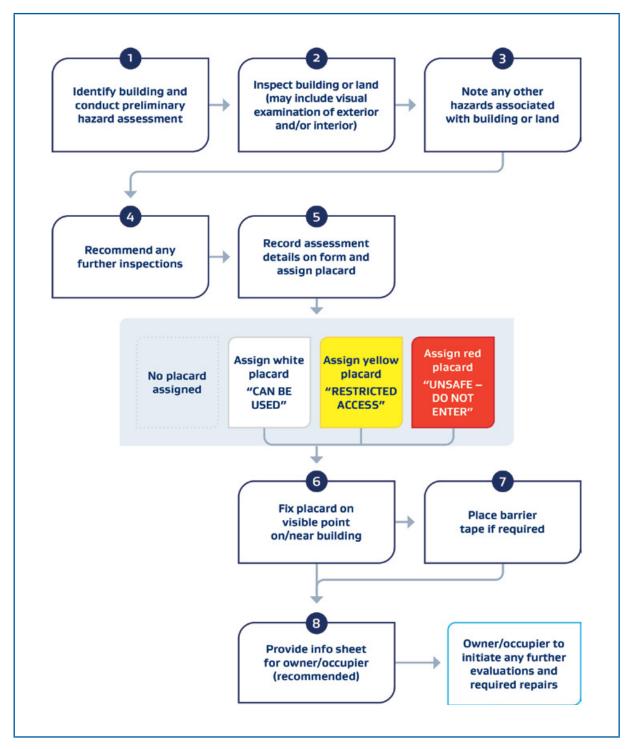


Figure 5: The basic rapid building assessment process

Whether a state of emergency, transition period has been declared and/or an area has been designated under the Building Act, **rapid building assessment operations should be carried out the same way** as far as possible, which MBIE's RBA training reflects. However, some differences may need to be accounted for:

- if a rapid building assessment operation is conducted under the Building Act, the assessor must have regard to the principles in section133BN when exercising the powers specified in 133BQ (assessments) and 133BT (notices/placards) as part of the assessment. These principles don't apply in relation to the CDEM Act, however, consideration of the principles may assist an assessor acting under the CDEM Act.
- if a rapid building assessment operation is conducted under the CDEM Act, there are some differences in the powers under this Act and under what circumstances they can be exercised (and by whom). For more detail, see the section on when do Building Act or CDEM Act powers apply?
- the rapid building assessment placards issued by MBIE allow an RBA to tick whether a placard was issued under the CDEM Act or the Building Act (see the snippet below from a red placard showing where an RBA can tick the relevant Act).

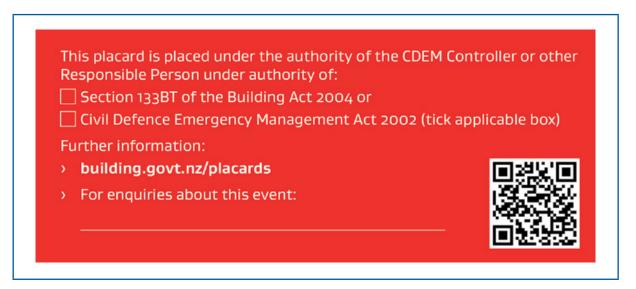


Figure 6: Red placard snippet showing authority check-boxes



Key point:

If an area has been designated, remember that Building Act powers take precedence over CDEM Act powers. This means that placards should be issued under the Building Act in a designated area even if a state of emergency or transition period is in force.

(i) For more information on the rapid building assessment process, refer to the Rapid Building Assessment Field Guides

6.1 Placards

Rapid building assessments usually result in a white, yellow or red placard being issued, which corresponds to the observed damage. There are 5 different types of placard:

Table 8: Placard types

Observed Damage	Assessment Outcome (Recorded on the assessment form)	Placard Issued	
Light or no damage (low risk)	WHITE = CAN BE USED	CAN BE USED	
No immediate further evaluation required	A white placard indicates that no damage has been observed that increases the risk to public safety for use or occupancy of the building	NO RESTRICTIONS ON ACCESS ANTIOL SOUTH DESCRIPTION OF THE PROPERTY OF THE PRO	
	This placard means: occupancy and use are permitted with no restrictions.	feature, end 1 Security of amount (pailings, wholeses, money, etc) Next steps: 1 De some finding or graft a defaulte 1 Special control or graft a defaulte 1 Special cont	
	Note: 'CAN BE USED' does NOT necessarily mean safe.	In Separation would be conditioned to be local formation of the condition	
Moderate damage (medium risk) Y1 YELLOW= RESTRICTED ACCESS – PART(S) OF BUILDING ONLY			
	 This yellow placard means access is restricted to part(s) of the building only. For example: use of the water supply needs to be prohibited if subjected to contamination. entry needs to be prohibited into certain rooms (eg falling hazard) that does not threaten the rest of the building No entry to restricted part of building until risk is reduced by repair or demolition. 	RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY CUTOR. The shoulder has been requirely injuriedly and recommendation of the should be a should be	
	Y2 YELLOW = RESTRICTED ACCESS - SHORT TERM ENTRY ONLY This yellow placard prohibits public entry, except on short term essential business to part or all of the building for emergency purposes. These may include: • removal of essential business or legal records • removal of valuables or property • short term entry for assessment or repair.	RESTRICTED ACCESS SHORTERNENTRY OUT Across the to experience by the previous phrometers for the change of the control of the change of the c	
Heavy damage (high risk)	R1 RED = ENTRY PROHIBITED This red placard prohibits entry to a building that has been severely damaged. A building with a red placard means that entry could result in risk to health or life.	DO NOT REMOVE, ALTER OR COORT THIS NOTICE DO NOT REMOVE, ALTER OR COCUPY (INIS IS NOT A CEMOUITION ORDER) This electrical has been received frequency and described and order to increase, as described and order to increase and or	
	R2 RED = ENTRY PROHIBITED This red placard prohibits entry to a building at risk from an external hazard or hazards. Typical external hazards that may make a building unsafe include: • neighbouring building in danger of collapse • risk of rock-fall or land slides • gas leaks, severed and exposed power lines.	UNSAFE THIS BUILDING IS AT RICK FROM MI CITTERNAL HAZARD DO NOT RENTED BO OCCUPY (THIS IS NOT A DEMOLITED ON DOCKE) THE SENOT RENTED TO DEMOLITED ON DOCKE) THE SENOT RENTED TO DEMOLITED ON DOCKE SENOT OF THE SENOT RENTED ON T	

Building owners, their contracted engineers and building occupiers cannot remove or change placards or alter the status of a building during a state of emergency, transition period or designation.

No placard option

Where multiple buildings or specific areas within an assigned rapid building assessment area are not affected or damaged, it may not be necessary to assess each one and issue a white placard (eg no evidence of damage in an entire street that had been allocated for assessment). The specific criteria for which a 'no placard' option is generally used is where rapid impact assessments have not been carried out AND the digital assessment form has an option to record a 'no placard' status. The responsible person (eg Building Response Manager) should provide guidance or business rules on when this option should be used.



Key point:

All placards have a QR code that directs homeowners and occupiers to MBIE's building emergency management website at www.building.govt.nz, which provides information on the rapid building assessment system. Make sure RBAs are aware of this and can advise homeowners and occupiers where to find more information.



(i) More information:

- Detail on the placarding process and criteria, see: Rapid Building Assessment Field Guides
- Placard templates are available here: Rapid building assessment resources | Building Performance
- For detail on printing placards, see <u>Readiness Step 5</u>: <u>systems</u>, <u>equipment and resources required</u> for a response

6.2 Rapid building assessment forms

An assessment form must be completed for each building that has been assessed. There are two different types of assessment form:

- rapid building assessment form (all event types) both Level 1 and Level 2 assessments
- geotechnical assessment form geotechnical assessments only.

Assessment forms may be digital (eg tablet or phone-based application such as Survey 123) or a pre-printed paper form.



(i) For more detail on the assessment forms, see the section in this document: section 7.5 – Develop a rapid building assessment operational plan

What the law says:

133BQ of the Building Act specifies:

- (1) A responsible person may inspect the exterior and interior of a building or any land in a designated area and prepare a post-event assessment of any risks posed by or to the building.
- (2) The post-event assessment must be prepared—
 - (a) in accordance with the methodology (if any) approved by the chief executive; and
 - (b) in writing and in the form (if any) approved by the chief executive.



6.3 Rapid Building Assessors

If a rapid building assessment operation is required, teams of RBAs will be sent to assess damaged buildings and existing or potential hazards. They often work in dynamic situations across changing environments. They can be deployed to unfamiliar areas with others that they may not know. RBAs are also likely to encounter people who have been displaced or traumatised. This can make for a stressful working environment.

MBIE Rapid Building Assessor training programme

MBIE is required to coordinate, train and maintain the national capability of RBAs, ensuring there is sufficient availability, expertise and leadership across the country, and there are consistent approaches to deploying or mobilising RBAs in the event of an emergency.

MBIE maintains a register of RBAs, which can be used to mobilise the appropriate resources for a particular emergency, both in terms of numbers and necessary skillsets. For example, some emergencies have a strong geotechnical element and require the involvement of geotechnical engineers and engineering geologists to assess the risks of land to buildings, as well as structural engineers to assess building structure.

There are three different tiers of RBAs as set by MBIE:

- Tier 1 Technical Leads
- Tier 2 Team Leaders
- Tier 3 Assessors.



Figure 7 below shows these tiers and the associated competency and training requirements.

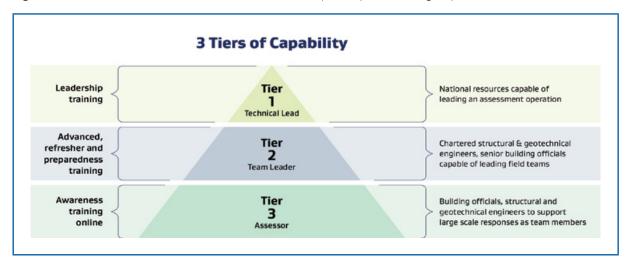


Figure 7: Rapid Building Assessor tiers of capability

It is important that RBAs have the competencies required to make quick decisions about buildings that may have been damaged after an emergency event. MBIE has developed a Rapid Building Assessor Competency Framework that specifies the level of experience, qualifications, competencies, and attributes that MBIE expects people to meet to become an RBA and be included on the MBIE register for deployment.



For more information, see: MBIE Rapid Building Assessor Competency Framework

Tier 1 Technical Lead

At least ten years' experience in building regulatory management or structural/geotechnical engineering design is required of a Tier 1 Technical Lead. This role focuses on supporting the Building Response Manager and/or Controller during an emergency event response rather than conducting rapid building assessments in the field. Tier 1 Technical Leads provide strategic advice in high pressure situations and must be able to maintain networks of contacts and stakeholders. This role requires regulatory and specialist technical knowledge and ideally recent experience managing one or more rapid building assessment methodologies (eg structural, flood, geotechnical).

Tier 1 responsibilities include:

- providing operational and technical support to territorial authorities, CDEM Controllers or CDEM Recovery Managers on the management of the rapid building assessment system in designated areas
- leading building management activity in designated areas on behalf of territorial authorities, CDEM Controllers or CDEM Recovery Managers
- advising territorial authorities and decision-makers on use of public safety measures, including placement of cordons and barricades
- assisting with mobilisation of rapid building assessment resources, and
- providing a liaison across various Emergency Operations Centre support groups as required.

Invitations are extended to suitable candidates by MBIE for inclusion on the Tier 1 register as required to maintain a sufficient national capability.

Tier 2 Team Leaders

A Tier 2 Team Leader will have a minimum of five years industry experience. This role requires specialist technical knowledge, leadership skills, and ideally recent experience managing field teams in one or more rapid building assessment methodologies (structural, flood, geotechnical).

Tier 2 responsibilities include:

- leading rapid building assessment teams within a designated area
- participating in rapid building assessment activities within a designated area
- issuing placards/signs on buildings on behalf of the responsible person in a designated area, and
- providing recommendations for public safety measures, including placement of cordons and barricades.

Tier 3 Assessors

Tier 3 Assessors should have as a minimum, graduate level engineering or Building Consent Officer experience.

Tier 3 responsibilities include:

- · participating in rapid building assessment activities as team members within a designated area; and
- providing specialist technical support to rapid building assessment teams.

RBA Training

To become a registered Tier 2 or Tier 3 RBA, an individual will need to:

meet the skills & attributes outlined in the MBIE Competency Framework



complete MBIE'S training requirements

MBIE's training programme is for applicants who meet the competency requirements as Tier 2 and Tier 3 RBAs. MBIE offers training in multiple formats, including online learning modules and face-to-face workshops.





Images from an MBIE face-to-face Rapid Building Assessor training day

(i) The introductory building emergency management learning modules can be found here: Managing buildings in an emergency course

Once training has been completed, RBAs will be added to the MBIE register and MBIE will issue registered assessors with an ID card. RBAs must maintain their competency in order to stay on the register and are expected to be available for deployment when needed.



For more information on the MBIE RBA training programme, email: BEM@mbie.govt.nz



Deployment of Rapid Building Assessors

In an emergency, MBIE can provide assistance to territorial authorities, including coordinating the deployment of additional resources.

Under a national state of emergency, MBIE will coordinate the mobilisation and deployment of RBAs including Tier 1 Technical Leads and specialist staff (eg structural and geotechnical engineers).

In a local state of emergency or undeclared event, MBIE will still provide support to territorial authorities where requested and deemed appropriate.

Staff can also be deployed between territorial authorities. Any deployment of personnel for a rapid building assessment operation within the jurisdiction of another territorial authority should be notified to MBIE.

Deployed RBAs normally provide their services in a voluntary capacity for the duration of deployment (usually 3-5 days). All deployed assessors should sign an authorisation form (see below). Should work proceed beyond the duration indicated or for purposes other than emergency response, a commercial contract should be signed between the RBA and the relevant territorial authority.

Expenses incurred for travel and accommodation for requested RBAs should be met by the territorial authority for the area the work is carried out. In a national state of emergency these costs may be met by MBIE instead.



For any questions around deployment processes, email: BEM@mbie.govt.nz

Authorisation of Rapid Building Assessors

Every RBA needs to be authorised before they can begin assessments.

For RBAs who are not already employed by the relevant territorial authority (eg engineers from private firms or assessors deployed from elsewhere in the country), authorisation is normally documented through a signed authorisation form. A sample authorisation form can be found in <u>Appendix 5</u>.

Authorisation process

The entity who will be deploying RBAs (eg a territorial authority sending some of their RBAs to another area, a private engineering firm or, in some cases, MBIE), should organise and pre-populate authorisation forms for the RBAs they are going to deploy. They should then send the pre-populated authorisation forms to the receiving territorial authority who will then add the relevant authorisation. Once authorisation has been completed, the receiving territorial authority should file the forms and, when practicable, send the completed forms back to the dispatching entity for their records.

For example, where MBIE may organise the deployment of RBAs in a national state of emergency, MBIE will coordinate and pre-populate authorisation forms and send to the receiving territorial authority, who will then organise authorisation from the Authorising Person.

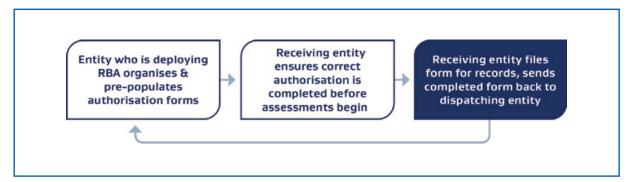


Figure 8: Example of an RBA authorisation process during an emergency event

The authorisation form specifies that the Authorising Person will:

- 1. provide the RBA with the means of identification to authorise them to do this work (if the assessor does not have an MBIE-issued identification card)
- 2. ensure the RBA is provided with appropriate safety equipment
- 3. ensure the RBA undertakes a health and safety induction prior to undertaking any assessments, including a briefing on the emergency procedures in place
- 4. ensure the RBA will be supported by at least one other person in the field
- 5. ensure the RBA is provided with the standard assessment forms and placards and any required resources.

Building Act:

'Authorising Person' is the 'responsible person' as described in sections 133BJ and 133BK

CDEM Act:

'Authorising Person' will either be a Controller (state of emergency) or a Recovery Manager (transition period).

The authorisation form specifies that an RBA will:

- 1. follow the instructions of the responsible person
- 2. not operate outside their field of expertise unless under the supervision of another suitably qualified building assessor
- 3. take reasonable care for his or her own health and safety
- 4. take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other people
- 5. not assume any obligation on behalf of the responsible person
- 6. not release confidential information received in the execution of these duties to any other party or for any other purpose save for the rapid building assessment for this event
- 7. not talk to the media or make any public statement unless authorised to do so during or after the rapid building assessment.

Rapid Building Assessor liability

When acting under the Building Act 2004, an authorised RBA is protected under <u>section 390 of the Act</u> from civil liability in respect of the assessor's services under the Act, provided they act in good faith.

When acting under the CDEM Act 2002, an authorised RBA is protected under <u>section 110 of the Act</u> from liability for any loss or damage in respect of his or her services carried out under the direction of the responsible person, other than conduct that is grossly negligent or in bad faith.

Communicating with building owners, occupants and the public

In an emergency, people may show shock or confusion and lack a clear or common purpose. This may last for weeks. Affected building owners and occupants will be dealing with their feelings about the event and the impact on them and their communities. They may have been injured. They may have lost family members or friends. Loss of access to their home or business will add more pressure.

RBAs should:

- give clear and concise information on the building assessment. For example, when explaining how placarding works, they should make sure this information explains the purpose of the placarding, the implications for building owners, and the process for changing the building's status
- explain the likely levels of damage to be expected, what this means for the building's safety or for health issues, and what to do next
- remain rational in their decisions while showing empathy. This means showing concern and understanding, but it should not detract from performing objective assessments. RBAs should avoid yielding to any pressure to re-prioritise the order of building assessments or to classify a building in a particular way. It can be effective to divide roles in an RBA team, with one assessor focusing more on the technical assessment while the other talks to the people involved.

PART B: Preparing for and managing buildings in an emergency



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7. Readiness – prepare for managing buildings in an emergency

This section is for territorial authorities to help prepare – and stay – ready for managing buildings in an emergency. Under the National CDEM Plan, each territorial authority is to:

develop and maintain arrangements, in accordance with national guidelines and procedures, for assessments, evaluations, and steps to be undertaken for managing risks to and uncertainties as to the safety of buildings in response to and recovery from an emergency.¹

Steps to achieve this

To prepare for managing buildings in an emergency, territorial authorities need to:

- have an operational plan for rapid building assessments that links with their CDEM Group plan
- identify key staff and assessors, and make sure they have the right training and resources
- have systems, equipment and resources at the ready, including up-to-date building information and field maps.

This section covers:

- developing an operating structure
- identifying an operational base
- gathering info about buildings, critical infrastructure and environment
- developing a rapid building assessment operational plan
- organising systems, equipment and resources

Useful tools include:

- readiness checklist <u>Appendix 3</u>
- equipment and resource checklist <u>Appendix 4</u>
- assessor authorisation form Appendix 5



1 National CDEM Plan, section 79(3)(c)

7.1 Roles and responsibilities during the readiness phase

Territorial authorities:

- being a member of a CDEM Group (required by the CDEM Act)
- developing and maintaining arrangements to ensure they are ready to respond to an emergency and lead recovery work to achieve the building emergency management objectives of the National CDEM Plan. For example:
 - having a fit-for-purpose operational plan for managing buildings in an emergency
 - having the capability and capacity to establish an operational response
 - gathering important information about building stock, critical infrastructure and the environment
 - having sufficient numbers of trained RBAs
 - ensuring there are sufficient systems,
 resources and equipment for a response.

MBIE:

- managing the setting of national building standards, codes, and assurance processes that address the risks of hazards
- planning for the national coordination of building emergency management in consultation with the agencies, professional bodies, and members of the private sector that have roles and responsibilities during the response phase
- the training and registration of qualified RBAs, who are able to be deployed across Aotearoa New Zealand
- the maintenance of rapid building assessment processes and systems, including RBA deployment and demobilisation processes
- maintaining a sufficient capability of RBAs nationally to enable timely support to one or more CDEM Groups when local capabilities are exceeded.

7.2 Develop an operating structure

Plan a building emergency management operating structure and outline key roles to be ready when an emergency occurs. This structure will depend upon the size and scale of the emergency response operation.

When a damage-causing emergency event occurs, a rapid building assessment operation aligned to the Coordinated Incident Management System (CIMS) should be activated by affected territorial authorities.

A Building Response Manager should lead the building assessment operation on behalf of the territorial authority. The Building Response Manager will typically be the territorial authority's Building Control Manager.

The Building Response Manager has several responsibilities as a leader to ensure a building emergency management response is swift and effective. Some example responsibilities are detailed in the table below:

Table 9: Building Response Manager responsibilities

Responsibility	Description and/or rationale
Actively communicate with the Controller	Brief and receive information from the EOC to ensure a coordinated emergency response.
Establish response routine, staff roster and handover protocol	In addressing an emergency, staff may be reluctant to stop working. Set a daily routine that normalises shift work and a handover protocol to prevent staff burnout.
Chair team meetings, inductions, and briefings/debriefings	This allows for overall building management and coordination.
Manage risk	Identify, assess and prioritise any risk that the building assessment operation is dealing with, or that may pose wider implications for managing the response.
Manage conflict and stress within the organisation	This is necessary because a degree of conflict is inevitable: people have varying perspectives and experience.



7.2.1 Coordinated Incident Management System (CIMS)

Aotearoa New Zealand uses the Coordinated Incident Management System (CIMS) structure to manage emergencies. It provides a model for the command, control and coordination of an emergency response that is flexible, modular and scalable so it can be tailored for any type or level of incident. It also provides common structures, functions and terminology to allow effective coordinated incident management across responding agencies, whilst also enabling agencies to develop their own processes, procedures and functions.

Figure 9 below shows the basic CIMS structure and the relationship between CIMS Emergency Operations Centre (EOC) functions and the Building Response Manager:

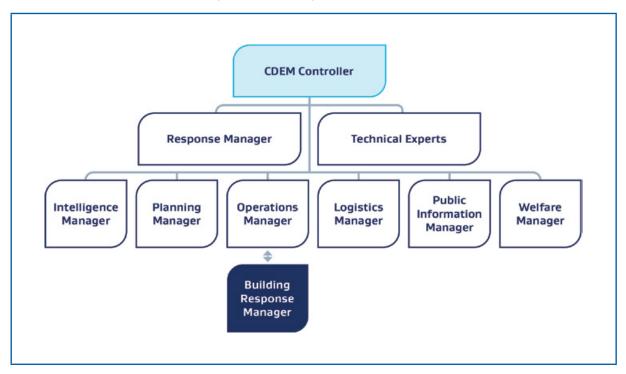


Figure 9: Example structure showing relationship between the Building Response Manager and **CIMS Emergency Operations Centre (EOC) functions**



Key point:

All emergency response agencies in Aotearoa New Zealand are mandated to use CIMS as the incident management framework.

Figures 10 and 11 show examples of recommended building emergency management operating structures, depending on territorial authority size and/or scale of event:

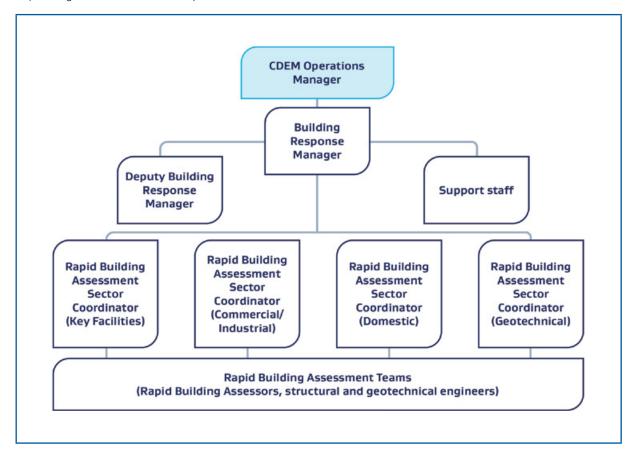


Figure 10: Example of a small to medium size response structure

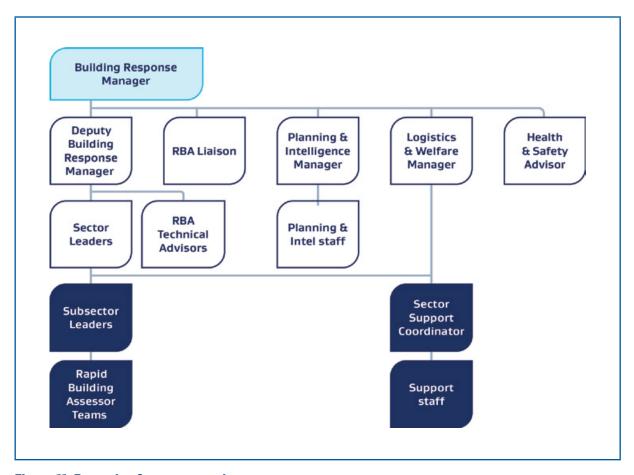


Figure 11: Example of a more complex response structure

In a large-scale operation, the responsibilities of a Building Response Manager may not be covered by one person alone. The response structure in the diagram above includes:

- Technical Advisors, who have specialised technical background (eg engineers, geotechnical, heritage). These advisors can help with reviewing situational awareness and rapid building assessment data.
- a Logistics and Welfare Manager focused on supporting the RBA teams (eg organising flights, hotels
 for assessors who were deployed from other territorial authorities, and organising food, equipment
 and supplies).
- an RBA liaison role, who can act as a go-between with MBIE, other territorial authorities and agencies sending assessors and staff to support the response, and other internal functions such as Legal.

7.2.2 Identify people and specialist skills for key operational roles

It is important that key roles (including backups) and required specialist knowledge is identified in advance and there is a process for assembling the people needed for a building assessment operation. As it is vital that an operational team can hit the ground running when an emergency event occurs, readiness planning will need to include:

- identification of the right people and skills for each function
- a contact system for key people set-up in advance
- assigned staff/functions are reviewed every six months (and contact details updated)
- liaising with neighbouring territorial authorities in case they may be needed to provide extra resources
- ensure staff have the right training and that training is kept up to date, including registered RBAs
- maintain a list of specialist resource in the area including contractors (eg structural and geotechnical engineers), who can be called upon in an emergency.

Maintain Rapid Building Assessor resource

RBAs need to be given the opportunity to consolidate and maintain their skills after completing the initial MBIE-led assessment training. Skill maintenance can include completing refresher training, participating in exercises, and helping other territorial authorities respond to emergencies.

Supporting other territorial authorities in an emergency provides staff with experience and maintains their interest.

A major event may require many trained RBAs. This is likely to involve mobilising all the trained assessors available locally as well as arranging for assessors from outside the affected area.



Engage with consulting engineers

It is also important to consider the nature of the area's building stock and whether additional specialist building knowledge could be needed in an emergency event. For example, this could be necessary for high-rise buildings, special infrastructure such as dams, or if there are specific geotechnical considerations in your area. There may be suitable specialists locally or outside expertise may be required.

As well as training staff, actively engage with local consulting engineers contracted to your territorial authority, or ones you work closely with on an ongoing basis, to help prepare for emergencies. This is particularly important for geotechnical matters, where local knowledge is essential.



(?) The three relevant technical societies: New Zealand Society for Earthquake Engineering (NZSEE), Structural Engineering Society New Zealand (SESOC) and New Zealand Geotechnical Society (NZGS) and the professional body Engineering New Zealand (ENZ) can assist.

MBIE may also be able to help with further information about suitable people and organisations to contact.



- Key point:

In areas where geotechnical risk is prominent, a territorial authority should also hold discussions on mobilisation mechanisms and coordination structures with local geotechnical engineering representatives.

Consider contracting for emergency response services

Territorial authorities typically maintain a list of civil works/building contractors for general purposes. These contractors may be needed for emergency building work (such as cordoning, shoring, securing buildings, or making them weathertight), or demolition. It could be useful to consider including the provision of emergency response services in existing service and maintenance contracts.

Territorial authorities may also need to contract services to:

- provide storage locations for debris arising from demolition
- secure storage for assets that may be vulnerable as a result of damaged buildings or demolition
- secure areas for debris subject to forensic testing and investigation
- placard reassessments (following repair or remediation).

Work closely with the Lifeline Utility Coordinator in the local CDEM Group, who will maintain links with lifeline utilities servicing the local area.

Consider availability of legal, financial, procurement and communications advice

A number of additional functions are important for supporting the response to an emergency including:

- procurement it may be necessary to enter into contracts during the emergency response, eg with RBAs or specialist engineers. It is advisable to have template contracts prepared in advance that comply with internal policies.
- legal consider whether there are suitably experienced in-house resources or whether an arrangement with an external legal firm would need to be in place.
- **financial** consider how costs incurred during the emergency response will be accounted for.
- **communications** press releases, public information and media enquiries.

7.3 Identify an operational base and other facilities

Choose a suitable location for coordinating the building assessment operation

Identify the most suitable place for coordinating a rapid building assessment operation. This should be a central building that would be expected to be usable after an emergency. It should have suitable rooms and spaces for all operations, including areas for briefing and debriefing large groups of field staff. It must have access for vehicles and supplies.

The operational base may be in the same building as the Emergency Operations Centre (EOC) if there are facilities to accommodate both functions. Ideally, both the EOC and the rapid building assessment operational centre will share communications that link back to the territorial authority's information management systems.

Identify an alternative location

Identify a second building as an alternative operational centre in case the first building choice cannot be used. Suitable sites should be evaluated on a case-by-case basis.



Key point:

Following a seismic event, certain types of buildings (which may include a territorial authority's office buildings) may be unsuitable as for use as operational centres. These could include multi-storey buildings, as necessary services such as lifts or water may not be available.

Establish an assembly point

Choose an assembly point that can be used immediately following an emergency. This might also be the operational centre. Make sure everyone who will be part of the rapid building assessment operation knows where it is.

Accommodation and support for people mobilised outside the area

If additional resource is required from outside the area (eg deployed RBAs), they will need accommodation, meals and support. It is important to have a policy and processes in place for this in coordination with the Logistics function that can be easily implemented following an emergency.



7.4 Gather information about buildings, critical infrastructure and the environment

7.4.1 Keep and maintain an inventory of building stock

It is important to identify key buildings that may need to be prioritised for assessment or specialist resource in the event of an emergency. An inventory of building information should include location, building type and vulnerability, and should be regularly reviewed and updated. Building types or areas that should be identified and recorded include:

- priority buildings and essential services such as hospitals, medical centres, supermarkets, police stations
- earthquake-prone buildings
- heritage-listed buildings
- indicator buildings
- lifeline and utility infrastructure (eg petrol stations, water supplies, dams, airports, electrical substations and telecommunication facilities)
- flood-prone and low-lying areas, known landslips and areas of instability (eg debris flows, cliff collapse, boulder roll)
- other critical facilities (eg Importance Levels and buildings specifically identified in lifelines plans).

What the law says:

Section 133BB(1) of the Building Act defines the following:

critical infrastructure means—

- (a) a priority building; or
- (b) a building or other infrastructure operated or used by a lifeline utility.

lifeline utility has the same meaning as in section 4 of the CDEM Act (an entity named or described in Part A of Schedule 1, or that carries on a business described in Part B of Schedule 1 of the Act).

priority building means a building of a kind described in paragraph (a), (b), (c), or (f) of the definition of priority building in section 133AE(1) that is located in a designated area:

- (a) a hospital building that is likely to be needed in an emergency (within the meaning of the Civil Defence Emergency Management Act 2002) to provide—
 - (i) emergency medical services; or
 - (ii) ancillary services that are essential for the provision of emergency medical services:
- (b) a building that is likely to be needed in an emergency for use as an emergency shelter or emergency centre:
- (c) a building that is used to provide emergency response services (for example, policing, fire, ambulance, or rescue services):
- (f) a building that a territorial authority has identified under section 133AF(2)(b) as having the potential to impede a transport route of strategic importance (in terms of an emergency response) if the building were to collapse in an earthquake.

secured building means—

- (a) a building that—
 - (i) is a defence area; or
 - (ii) includes a part of a building that is a defence area; or
 - (iii) is located on or in a defence area; or
- (b) any other building or a part of any other building that is used by—
 - (i) the New Zealand Defence Force; or
 - (ii) an intelligence and security agency; or
 - (iii) the Ministry of Foreign Affairs and Trade.

133BP Exercise of powers in secured buildings:

A responsible person who is exercising a power under any of sections 133BQ to 133BX and 133BZA in relation to a secured building must exercise that power in accordance with instructions given to the responsible person by the officer in charge of the building.

A detailed inventory will help to determine the best match of skills and the number of people needed to complete rapid building assessments in the area. Documenting known vulnerabilities will also help when evaluating damage more effectively and directing efforts where they are most needed.

For buildings that may need priority assessments, record the location and relevant contact details for each building. The CDEM Group Lifeline Utility Coordinator should be able to provide contact details.

Information sources include:

- building compliance schedules and annual warrant of fitness information (BWoF), for data about commercial buildings
- the national EPB register for information on earthquake-prone buildings and their ratings: https://epbr.building.govt.nz
- New Zealand Heritage List Rārangi Kōrero: www.heritage.org.nz/the-list

Identify heritage buildings and establish a process for specialist assessment support during a response

Liaising with Heritage New Zealand Pouhere Taonga and creating a process for assessing heritage buildings is important as its functions include providing advice on heritage matters in the event of a national or local emergency.

If a state of emergency is declared, Heritage New Zealand has expert advisors to assist with:

- assessment of the risk to and from heritage buildings
- identifying heritage buildings sites and areas
- assessing heritage values of buildings, sites and areas, and/or
- securing of heritage places.

The Heritage New Zealand website contains details of all places on the New Zealand Heritage List. Heritage New Zealand provides hard copies of the List to local authorities annually and an electronic update quarterly. Heritage New Zealand also maintains building files and copies of many conservation plans.

A heritage item could be listed:

- in the New Zealand Heritage List Rārangi Kōrero and/or
- in the Schedule of Significant Heritage Items in the relevant Council District Plan.

Broadly speaking, the New Zealand Heritage List Rārangi Kōrero generally encompasses items with significance at a national level, where a District Plan's schedule will include heritage items significant at a regional/local level as well as at the national level.

Some heritage items could be included in one list but not the other, so it is important to consult both and ensure there is a comprehensive stocktake of all heritage buildings and items in the area.

Galleries, libraries, archives and museums (GLAM) also contain important cultural and heritage items, so the geographical locations of these facilities should also be recorded.

To aim for the best possible outcomes for heritage structures that may have been affected by the incident, heritage specialists from the relevant territorial authority/or Heritage NZ Pouhere Taonga should be given the opportunity to act as Technical Advisors for a rapid building assessment operation. Early identification of affected heritage structures should allow such specialists to consider options for effective interventions to preserve public life safety while additionally seeking to preserve/recover heritage structures.



What the law says:

Section 7(1) of the Building Act specifies that in subpart 6B, a heritage building means:

- a building that is included on the New Zealand Heritage List/Rārangi Kōrero maintained under section 65 of the Heritage New Zealand Pouhere Taonga Act 2014; or
- (ii) a building that is included on the National Historic Landmarks/Ngā Manawhenua o Aotearoa me ōna Kōrero Tūturu list maintained under section 81 of the Heritage New Zealand Pouhere Taonga Act 2014: or
- (iii) a place, or part of a place, that is subject to a heritage covenant under section 39 of the Heritage New Zealand Pouhere Taonga Act 2014 and is registered under section 41 of that Act; or
- (iv) a place, or part of a place, that is subject to a heritage order within the meaning of section 187 of the Resource Management Act 1991; or
- (v) a place, or part of a place, that is included in a schedule of a district plan because of its heritage value.

Note: Requirements might change depending on what type of heritage building it is - see section 133BV(3) where Ministerial approval is needed for buildings in Category 1 in the NZ Heritage List.



(i) Further information about Heritage New Zealand Pouhere Taonga's role in an emergency is set out in section 15.5 of the Guide to the National CDEM Plan.

Identify potential indicator buildings

Indicator buildings are a set of buildings that are reassessed regularly during an emergency response to check for any further damage; eg from large aftershocks following a major earthquake. This systematic monitoring can help a territorial authority decide whether to review, or even restart, a rapid building assessment operation.

While a set of indicator buildings is not chosen until after the first day of assessments, there are some building types that are useful to include and can be identified ahead of time and added to the building inventory. Using buildings with detailed seismic assessments and building plans will also be helpful.

Examples of suitable building types are:

- unreinforced masonry buildings these are good examples of structures where additional damage should be visible from the outside. This form of construction is also the most susceptible to damage in smaller aftershocks
- multi-storey buildings constructed before 1976
- low-rise tilt-panel construction (retail and industrial) constructed between 1976 and 1995.



Key point:

An indicator building procedure was developed during the 2010-11 Canterbury earthquakes to guide the rapid building assessment operation after a significant aftershock.

Indicator buildings were also identified in Wellington following the 2016 Hurunui/Kaikōura earthquake, which reduced the amount of rapid building assessments initially estimated. This was possible because the earthquake shaking frequency affected one specific group of buildings and quickly established the characteristics that made this smaller set of buildings more prone to damage. This reduced the need for a large team of RBAs, and instead moved the operation on to more detailed damage evaluations arranged by the building owners.

7.4.2 Identify areas with geotechnical risks

It is important to understand local geotechnical risks associated with weather-related and seismic hazards. Reliable information is needed to support the predictive capability of scenario modelling. The coordinated collection of accurate building infrastructure and geotechnical, geomorphological, and Light Detection and Ranging (LiDAR) information will support the modelling of likely scenarios.

Useful sources for information:

- GNS Science: <u>www.gns.cri.nz</u>
- NIWA: www.niwa.co.nz
- Land Information New Zealand (LINZ) for national coverage: <u>Home | Toitū Te Whenua Land Information</u> New Zealand (linz.govt.nz)



- Key point:

The owners or operators of essential services and critical infrastructure/facilities are responsible for arranging their own assessment following an emergency. This is usually done through a priority response agreement with professional parties, such as local engineers and architects, who are trained and authorised to conduct rapid building assessments. Note these agreements in your inventory.



7.5 Develop a rapid building assessment operational plan

A well-considered, pre-prepared plan will help when mobilising and deploying people in an emergency. The purpose of an operational plan is to establish the operational procedures for a rapid building assessment operation and to ensure strategic alignment with key stakeholders. It also ensures rapid building assessment teams are effective and efficient, and risks are well managed.

A rapid building assessment operational plan should be documented, consistent with, and address issues outlined in the CDEM Group Plan. This includes identified hazards and risks and their intended management, lifeline utility services and other key vulnerabilities in the region, how response and recovery will be managed, and governance and accountability mechanisms.

Territorial authorities should also ensure there are enough managers and building officials trained as RBAs, who understand the functions and processes for managing buildings in an emergency and are capable of establishing and managing an operational response.

Planning should also include having existing relationships with other relevant agencies and the local engineering and building owner community who will be involved in any response; particularly in relation to key community resources such as hospitals, police and fire stations, care facilities, schools, and commercial facilities.

The key elements of a rapid building assessment operation include:

- liaising with MBIE for senior operational support such as Tier 1 Technical Leads or additional RBAs
- mobilising and inducting RBAs and specialist resource where required (eg engineers)
- providing resources (eg forms, placards, safety equipment and systems), and a technology platform for data capture
- carrying out rapid building assessments, managing placard status, recording field data, and plotting and analysing results for operational and public information purposes
- providing status reports to the Controller and other agencies and answering media queries
- processes for identifying and addressing health and safety issues.



(?) MBIE can provide territorial authorities with a sample operational plan template that can be used as a basis for establish processes and procedures for a rapid building assessment operation. For more information, email: BEM@mbie.govt.nz



7.5.1 Align rapid building assessment operational plan with the CDEM group plan

The Building Response Manager should lead the development of a building assessment operational plan. This should be done together with the CDEM Group and the CDEM team at the territorial authority to identify interface points such as resourcing (planned transport and operating space), information management, and communication/computer equipment needs.

The territorial authority's building assessment plan should align with the CDEM Group Plan and related local civil defence emergency management plans and procedures, but not duplicate them.

The plan should be as flexible as possible to respond to:

- unexpected distribution of building damage
- varying degrees of geotechnical impact
- · needs of the emergency services, such as Fire and Emergency New Zealand (FENZ) and Police
- requests from building owners and occupiers.

When developing the plan, use the information from <u>Readiness section 7.4</u> to help set priorities for early assessment. As discussed in that step, key buildings and infrastructure should be the first priority. Other things to consider when developing a building assessment plan include:

- ensuring delegations frameworks are in place
- information management system is in place for rapid building assessment data (eg an ArcGIS geospatial platform such as Survey 123)
- authorisation, induction, briefing and debriefing processes, sign-in and sign-out procedures are ready for RBAs and other operational staff.

If a government agency, private lifeline utility or key infrastructure operator does not have suitable arrangements in place, the territorial authority's plan should provide for rapid building assessments of these facilities. Include council-owned facilities in the plan.

Also consider how to collect information that could help build resilience against future emergencies. For example, understanding how buildings perform in an event could help inform future building policy decisions such as zoning. Information from rapid building assessments can also support the authority's longer-term resilience objectives.

The plan should address related follow-up and supporting activities, such as identifying when and how to communicate with building owners and the community about building use and management.

Test the rapid building assessment operational plan by modelling emergency scenarios

It is important to test a rapid building assessment plan and supporting resources by modelling one or more emergency scenarios (such as flooding, tsunami, or earthquake). This will help with estimating the severity and possible extent and location of building damage. Use this information to develop resources and operational planning requirements.

Ideally, these scenarios should cover small, medium and large-scale events. Exercises should draw on work completed on hazard risk awareness.

7.5.2 Health and safety

The <u>Health and Safety at Work Act 2015</u> governs health and safety in workplaces. As an employer, territorial authorities have a duty to take all practicable steps to ensure the health and safety of RBAs and other operational staff while at work. RBAs and operational staff also have responsibilities under the Act.

A responsible person (including a territorial authority running a rapid building assessment operation), may be considered a PCBU, which is a 'person conducting a business or undertaking'. The Health and Safety at Work Act imposes a number of duties on a PCBU, including the primary duty of care as set out in section 36 of the Act.

What the law says:

Section 36 of the Health and Safety at Work Act 2015 specifies that a PCBU must ensure, so far as is reasonably practicable, the health and safety of—

- (1) (a) workers who work for the PCBU, while the workers are at work in the business or undertaking;
 - (b) workers whose activities in carrying out work are influenced or directed by the PCBU, while the workers are carrying out the work
- (2) A PCBU must ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.

When used in this context, something is reasonably practicable if it is reasonably able to be done to ensure health and safety, having weighed up and considered all relevant matters, including:

- how likely are any hazards or risks to occur?
- how severe could the harm that might result from the hazard or risk be?
- what a person knows or ought to reasonably know about the risk and the ways of eliminating or
 minimising it (eg by removing the source of the risk or using control measures such as isolation or
 physical controls to minimise it)
- what measures exist to eliminate or minimise the risk (control measures)?
- how available and suitable is the control measure(s)?²

When leading a rapid building assessment operation:

- use trained RBAs who have had at least basic health and safety training
- · develop situational awareness of the operational area to identify hazards and mitigate associated risks
- ensure that operational inductions cover the known risks/hazards that have been identified
- do not deploy staff or volunteers without appropriate personal protective equipment
- do not deploy staff or volunteers on their own always deploy them in teams
- encourage active reporting of new risks/hazards
- encourage people not to take risks going into buildings with uncertain status
- ensure that RBAs are reminded to look up, as hazards can come from above as well as on the ground
- ensure that RBAs are reminded to look for signs of hazardous chemicals
- provide teams with contact details for people who can get the power or gas turned off
- record details of RBA deployment and ensure everyone is accounted for each day.

See the Response section for health and safety precautions for RBAs while in the field.

2 See: Introduction to the Health and Safety at Work Act 2015 – special guide | WorkSafe

7.6 Systems, equipment and resources required for a response

It is vital that the equipment and resources for a building assessment operation are prepared and ready ahead of time. These include:

- printed placards (red, yellow and white)
- rapid building assessment forms pre-printed in paper form, but ideally it is best to ensure the digital
 version of the forms are loaded onto the territorial authority's ArcGIS geospatial platform (eg Survey 123).
 This option will require enough tablets and chargers for RBAs to use in the field
- Personal Protective Equipment (PPE) and other resources for RBAs and operational staff including maps, torches, pens etc
- information sheets for homeowners and occupiers.

Rapid building assessment forms - digital version

An assessment form must be completed for each rapid building assessment completed. There are two different types of assessment form:

- rapid building assessment form (all event types) both Level 1 and Level 2 assessments
- geotechnical assessment form geotechnical assessments only.

Many territorial authorities will complete assessment forms using the ArcGIS Surveyl23 application. This consists of an application installed onto mobile devices and loaded with a digital form version of the hard copy forms, along with a summary dashboard in which uploaded assessments can be viewed and analysed. In order to utilise the digital version of the assessment forms:

- all RBAs will need to have the Survey123 application on their work tablets or phones and be familiar with the use of the application prior to deployment
- members of the rapid building assessment operational team can access the Survey123 application backend in order to work with the compiled data.

Digital versions of the rapid building assessment and geotechnical forms are available for territorial authorities to download onto an ArcGIS platform here: Rapid building assessment resources | Building Performance

Guidance and resources for system administrators on how to publish the assessment forms into their organisation's ArcGIS Online/Enterprise for use can be found here: <u>Digital Rapid Building Assessor templates and data dictionary</u> | Building Performance



🥂 Key point:

Territorial authorities and RBAs must use the assessment forms approved by the Chief Executive of MBIE as per section 133BQ(2)(b) of the Building Act.

This means the specified data fields must be used and completed during an assessment (digital or paper version). Territorial authorities can record additional information for their own purposes, as long as the form is completed during an assessment.

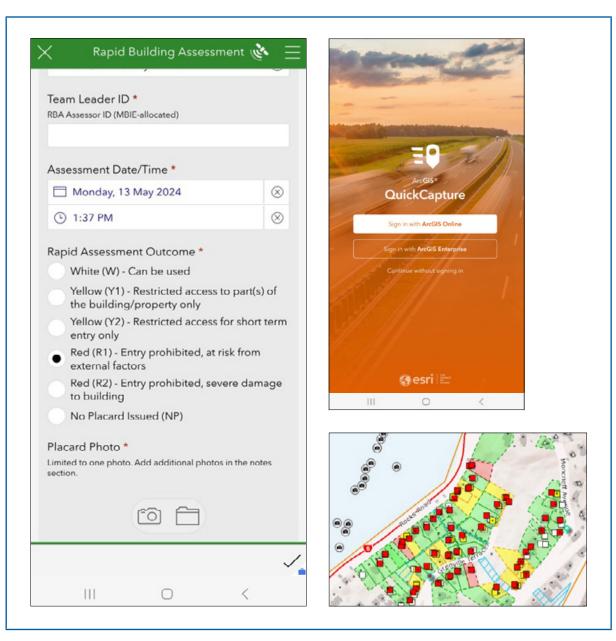


Figure 12: Example of digital assessment form

Each territorial authority should maintain sufficient supplies of the up-to-date paper version of assessment forms in case any problems arise where the digital system does not work. Hard copy versions of the assessment forms can be found here: Rapid building assessment resources | Building Performance

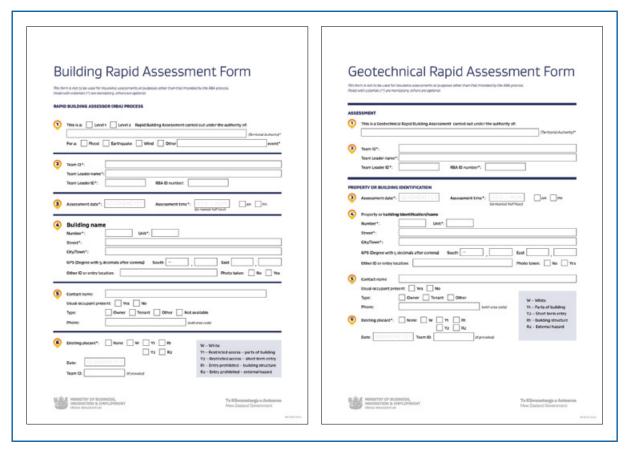


Figure 13: Examples of the MBIE-approved hard copy assessment form

Rapid building assessment placards

Ensure there are sufficient quantities of placards pre-printed. It is also a good idea to store reams of suitable coloured blank paper (eg white, red and yellow) so extra placards can be printed as required.

It is recommended that the placards be printed on waterproof paper. The placards must be affixed to the building for as long as the damage/risk to the building exists and therefore need to be durable. Permanent marker for filling in the placards and hard-wearing tape, such as masking tape or duct tape, is also recommended.



For additional printing requirements:

- the placards must be printed in A4 horizontal format, and in colour
- the colours of the placards must be set up in the following way using the CMYK coding below:

Placard	CMYK Coding
Red placard	C:0, M:95, Y:91, K:0
Yellow placard	C:0, M:0, Y:100, K:0

Placard templates can be found here: Rapid building assessment resources | Building Performance



Key point:

For rapid building assessments conducted under the Building Act, territorial authorities and RBAs must use the placards (notices) approved by the Chief Executive of MBIE as per section 133BT(3)(a) of the Building Act.

Placards under section 133BT of the Building Act must be:

- placed 'on or near' the building (133BT(1) and (2)), and
- visible to people approaching the building (133BT(3)(c)).

It is recommended that these placards and procedures are also used for assessments conducted under the CDEM Act, as this will align with MBIE-led RBA training and will provide a consistent approach to rapid building assessments.

Personal Protective Equipment (PPE)

Appendix 4 has checklists for resourcing the operations centre, equipment to supply to RBAs teams and equipment that RBAs should provide themselves.

Note: All systems, equipment and resources should be checked and/or tested every 6-12 months to ensure materials are up-to-date, functional and in sufficient quantities to support the first 48 hours of a rapid building assessment operation.



Key point:

Ensure that any maps, hazard map checklists, response plans, lists, and database information that are stored electronically can be accessed in an emergency by keeping copies on the territorial authority's computer network, and other storage media such as external storage devices or cloud storage services. It is worth ensuring that there are printed versions of contact lists and building inventory lists and maps in case there is a power outage during a response.

Pre-prepare public information where possible

Consider pre-preparing some hard copy factsheets for building owners and the public following an emergency.

- MBIE provides information on the rapid building assessment system, including placarding: Rapid building assessment resources | Building Performance
- NEMA provides nationally agreed, consistent messages for all civil defence emergency management organisations and emergency services to use: CONSISTENT MESSAGES for CDEM » National Emergency Management Agency (civildefence.govt.nz)
- NEMA also publishes *Response Management: Director's Guideline for CDEM Group and Local Controllers*, which is intended to help those responsible for developing and providing CDEM information to the general public: Response-management-DGL06-08-Oct14-Revisions.pdf (civildefence.govt.nz)
- NEMA's websites also have useful public information resources: <u>www.civildefence.govt.nz</u>, <u>www.happens.nz</u>



Consider transport and communications for assessors and staff

Determine transport needs to get people to and around operational areas. Vehicles must be able to navigate damaged roads. It is likely that many council pool vehicles will be required for other emergency response tasks, such as monitoring hazards and maintaining emergency communications. Consider how to get hold of additional 4x4 vehicles if needed. Helicopters may be required depending on access constraints and terrain.

Also make sure you have adequate means of communication, such as temporary telephones or radios.

Maintain key alliances and understand the important roles played by others

The effectiveness of the building management response will largely depend on mutual agreement and cooperation among all affected parties. Maintain good relationships with key people in all the agencies and organisations that need to work together during and after an event. This will minimise inefficiencies, especially any unnecessary duplication of technical and administrative resources.

Similarly, where possible, collect raw data that is useful to multiple agencies. This may mean organising data-sharing agreements. Engage early with the lifeline utilities providers.

Other interested stakeholders include:

- MBIE's Temporary Accommodation Service (TAS), for emergency housing
- Fire and Emergency New Zealand (FENZ), which undertakes rapid impact assessments (not rapid building assessments)
- GNS Science, NIWA and academics working in the hazard area, for assessing aftershock and tsunami risk and for collecting scientific data
- · Heritage New Zealand Pouhere Taonga, for advice on any damaged heritage buildings or sites
- infrastructure representatives such as Waka Kotahi and KiwiRail, who will be assessing infrastructure damage
- building insurers and the Natural Hazards Commission Toka Tū Ake assessors and their advisors, who will be looking at land and building damage for insurance compensation/repair.

All may play a crucial role in the recovery phase.

8. Response – managing buildings in an emergency

(i)

In an emergency event, territorial authorities can call the MBIE Duty Phone: 021 812 058 or

Email: BEM@mbie.govt.nz

This section provides guidance for territorial authorities on managing buildings in an emergency. It contains steps for managing the response including activating a building assessment plan, mobilising key people, and managing the ongoing rapid building assessment operation.

This section covers:

- determining the extent and impact of event on buildings
- setting up a rapid building assessment operation
- establishing and deployment of rapid building assessment teams
- managing the ongoing rapid building assessment operation, including monitoring, cordon management, urgent works and providing info to the public.

Helpful tools include:

- authorisation form for engaging RBAs Appendix 5
- checklist for activating a building assessment operation Appendix 6
- checklist for daily operational activities Appendix 7
- cordoning checklist and barricading guidelines Appendix 8

8.1 Roles and responsibilities during the response phase

Territorial authorities:

- putting in place measures to protect buildings or keep people at a safe distance (including stabilisation work and barricades and cordons)
- carrying out urgent works where necessary to remove or reduce risks without delay
- deciding if owners need to provide further building information
- requiring the mandatory evacuation of a building or the area around a building when necessary
- set-up and management of a building assessment operation and leading rapid building assessments
- liaising with MBIE if national support is required
- determining if an area should be designated under the Building Act for longer-term building emergency management
- ensuring the health, safety and wellbeing of all RBAs and operational staff during an assessment operation.

MBIE:

- coordinating national building management support for designated areas
- leading rapid building assessment functions in a state of national emergency
- mobilising and deploying registered RBAs to support rapid building assessment operations as requested
- providing advice and guidance to affected territorial authorities
- advising and reporting on operational building management needs and options to the Director or the National Controller
- providing building management policy advice to the Government as requested
- facilitating consultation with required parties regarding a request for the removal of a heritage building.



The diagram below outlines the key decision and action points when mobilising for a response:

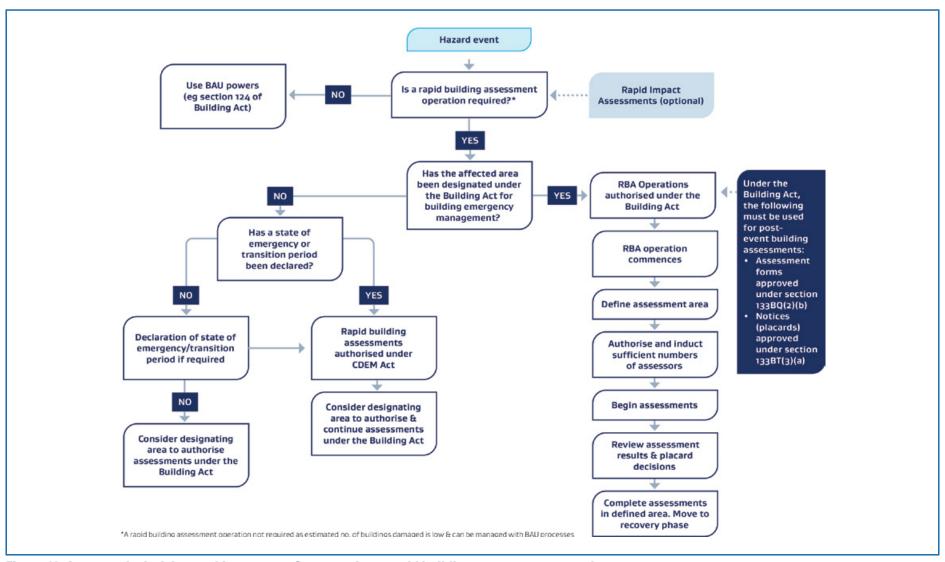


Figure 14: An example decision-making process for mounting a rapid building assessment operation

8.2 Determining the extent and impact of an emergency event on buildings

The Building Response Manager for the affected territorial authority should liaise with others as quickly as possible to get a preliminary picture of building damage in the district – its geographic extent, the type of buildings affected, and likely effects on public safety. In developing this preliminary picture, the Building Response Manager should get input as quickly as possible from first responders, other building officials and experienced local structural and geotechnical engineers, who should be pre-briefed to function as a specialist operational panel.

Rapid Impact Assessments

Rapid impact assessment (RIA) refers to assessments undertaken within the first eight to 48 hours of an emergency, usually by emergency services and/or CDEM Group staff. Their purpose is to obtain a rapid and broad picture of the extent of the damage suffered to:

- determine initial response activities
- direct the initial distribution of resources
- ascertain where and when more detailed forms of assessment may be needed, such as rapid building assessments, or detailed welfare or recovery needs assessments.

The authority to conduct RIAs normally falls to a CDEM Group or local Controller.

There are two types of rapid impact assessment:

- initial situation overview, which involves a rapid survey of the impacted area (either from the ground, air or a combination of these) – typically carried out within first eight hours.
- initial damage assessment, which involves a more detailed street-by-street assessment. General information is gathered about the initial impact of the emergency event, which is used to identify areas where more detailed assessments may be needed – typically carried out within first 48 hours.

Rapid impact assessments build situational awareness to support establishing priority needs in the response. They are a key source of information when making decisions about whether a state of emergency should be declared or transition period notified, and if so, whether a rapid building assessment operation is needed and where.



(i) For more information on rapid impact assessments, see: Rapid-impact-assessment.pdf (civildefence.govt.nz)

8.3 Set up a rapid building assessment operation if required

Using the information gathered from rapid impact assessments, the responsible person needs to decide if a rapid building assessment operation is needed to manage the immediate risks to people and property. If a rapid building assessment operation is required, the Building Response Manager will also need to determine the area the operation should cover, taking into account any cordon placement and the location of key public access routes.

The responsible person should consider the questions in **Table 10** when considering if a rapid building assessment operation is needed.

Table 10: Considerations for activating rapid building assessments

Issue	Questions	
Response considerations	 Is a state of emergency declared or transition period notified, or has an area been designated for building emergency management? Is resource coordination required because of limited local resources and/or a need for significant outside resources? 	
People affected	Are a significant number of people at risk from building damage or land instability?	
Building damage	Are building assessments required because of a large or widespread event and damage to buildings?	
Hazard events(s)	Are conditions uncertain? Could the event escalate? Is the extent of damage unknown?	



Key point:

In any emergency the priority is public safety. If necessary, emergency services personnel will establish search and rescue functions. If people require rescue, Urban Search and Rescue (USAR) taskforces may be deployed. Rapid building assessments may be delayed until search and rescue operations are complete.

Consider designating the affected area to conduct rapid building assessment operations

While rapid building assessments can begin during a state of emergency (under the CDEM Act), if a rapid building assessment operation is required, consider designating the area to allow for longer term building management. Remember, the requirements specified in 133BD of the Building Act need to be met to designate an area.

Request to designate area form

See Appendix 2 for more on the designation process.



Activate the rapid building assessment operational plan

If a rapid building assessment operation is required, the Building Response Manager should activate the rapid building assessment operational plan developed during the Readiness phase (see: Readiness section 7.5).

The Building Response Manager should determine the operational base and mobilise key people and set up an operations log for recording all key decisions and briefing/debriefing times.

All emergencies are different and will require differing skills. The nature of activities will change with time as issues arise, so the operating structure should be flexible.

For an initial activation checklist, see Appendix 6

Define initial rapid building assessment area and ensure sufficient resources are available

Initial reconnaissance should provide a preliminary rapid building assessment area(s) and an approximate number of buildings needing assessment. Use this number to estimate how many RBAs and support personnel may be needed. While this will inevitably change as better information comes through, it is a good starting point for mobilising the necessary resources.



(i) If you need to recruit specialist help and additional resource, liaise with MBIE who can assist. Engineering New Zealand (ENZ) and the Building Officials Institute of New Zealand (BOINZ) can also be good sources of additional resource.

Liaise with stakeholders

There will be a need for significant liaison with other people, organisations and teams outside the rapid building assessment operational team. This includes liaison regarding:

- cordons and barricades coordinating with the Operations Manager for the response on the location of any cordons and provision of barricades to protect the public in fall zones
- urgent works such as stabilisation or demolition.

It also includes liaison with:

- commercial building owners
- the professional engineering community seeking advice on technical issues and providing direction on priorities and timeframes. In significant events, the technical societies will set up clearing houses to provide the latest information to all engineers involved in assessing buildings and land
- Heritage New Zealand Pouhere Taonga.

Decide rapid building assessment operational priorities

Planning a rapid building assessment operation will depend on the nature of the emergency, its impact on the community, buildings and land and the extent of the affected area.

The Building Response Manager will need to decide on the overall priorities, with guidance from the Controller and community leaders. This should be informed by the pre-prepared list of prioritised buildings completed as part of the rapid building assessment plan (and rapid impact assessment and other reconnaisance information).

If there has been an earthquake and large aftershocks are expected, it is also useful to identify a range of indicator buildings to help monitor the rapid assessment operation.

Separate operations may be required to concentrate on:

- buildings within the central business district
- critical buildings needing to be stabilised
- community facilities: eg schools, medical facilities, shops
- land instability: eg slips, rockfall
- residential suburbs.

See Readiness section 7.5 for more detail.

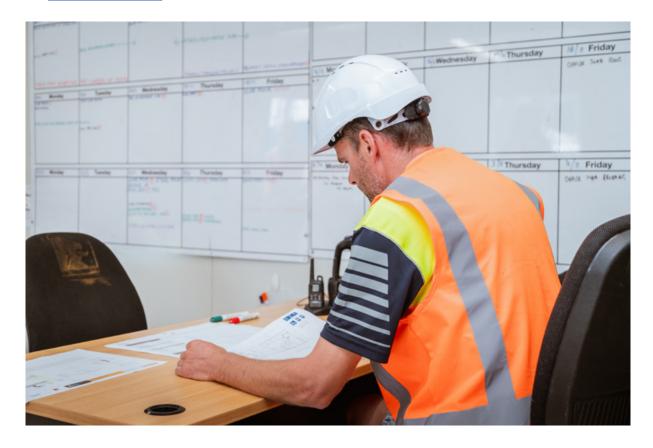


Table 11 provides some criteria for prioritising buildings for assessment. These priorities may need adjusting once an operation is underway.

Table 11: Building assessment priorities

Prioritise the rapid building assessment of commercial and industrial buildings using criteria such as: • how close buildings are to arterial routes • how many pedestrians pass the buildings • whether hazardous substances are present and the potential for explosion, conflagration, contamination leak, or spill (eg chemicals, fuel) • whether the building has a specific role in the emergency or recovery phase as identified by the Controller's incident management team • how important the business operation or service is to the response or the community (eg building supplies, pharmacy)	Commercial and industrial areas	Residential areas
 whether essential supplies are stored or produced in the building (eg food, fuel) how many people live or work in or near the building whether the building contains key infrastructure (eg transformers, cell phone towers) construction type (eg unreinforced masonry). 	Prioritise the rapid building assessment of commercial and industrial buildings using criteria such as: • how close buildings are to arterial routes • how many pedestrians pass the buildings • whether hazardous substances are present and the potential for explosion, conflagration, contamination leak, or spill (eg chemicals, fuel) • whether the building has a specific role in the emergency or recovery phase as identified by the Controller's incident management team • how important the business operation or service is to the response or the community (eg building supplies, pharmacy) • whether essential supplies are stored or produced in the building (eg food, fuel) • how many people live or work in or near the building • whether the building contains key infrastructure (eg transformers, cell phone towers)	Prioritise rapid building assessments in community and residential areas using criteria such as: • buildings housing vulnerable, or less mobile, residents (eg rest homes) • essential services (eg supermarkets) • buildings that serve large numbers of people (eg schools and apartment blocks)

Seek advice on geotechnical risks if needed

The Building Response Manager will need to seek advice on the likely ongoing nature of hazards and risks. This may include an understanding of any elevated risk of aftershocks following an earthquake, or the weather forecast for flooding events. GNS Science and NIWA can provide advice. MBIE may also be able to assist.

An area or areas affected by significant geotechnical risk may require a location or sector-based approach. This will depend on the:

- geographic extent of the event and its impacts
- geotechnical assessor resource available and their skillsets and experience
- number and complexity of the geotechnical issues (for example, landslide, mass movement, landslide dam, cliff collapse, boulder roll).

In cases of major land damage, the situation is often highly dynamic. Ensuing aftershocks or storm events may require ongoing monitoring and further assessments. The extent of the area and risk from land instability will influence the response. For example, if there is an actual or potential threat to life from land instability, USAR will be directly involved in rescue operations.

If an area-wide or hazard-specific response is required, a specialist geotechnical group with a designated leader should be established.



(i) For more detailed information on geotechnical processes for Rapid Building Assessors, see: Field Guide for Geotechnical Rapid Building Assessments



8.4 Establish and deploy Rapid Building Assessor teams

By the start of this phase, the following should be located at the designated Command Point/operational centre:

- all key staff who are part of the rapid building assessment operating structure (see Readiness section 7.1)
- enough equipment for the operational centre and each assessor team to fulfil their role, including maps, placards and other field resources (see Readiness Section 7.6).



Key point:

MBIE can help to identify appropriate Tier 2 RBAs or provide additional resources if there are not enough assessors available to support the operation. If a state of national emergency has been declared, MBIE will support the operations without request, using Tier 1 personnel.

8.4.1 Health and safety requirements for operational staff

Before deploying RBAs, it is important that all relevant health and safety processes have been considered and incorporated into the operational plan and are implemented before deployment of operational staff begins.

- It is recommended that only assessors who have completed the MBIE training programme and are on the MBIE register of RBAs are deployed.
- Assessors should be physically capable of working long hours in an emergency event environment.
- RBAs should be provided with sufficient and appropriate personal protective equipment (PPE) and equipment based on field conditions and event type. See Appendix 5 for a checklist of assessor resources and equipment.
- There should be a process for RBAs to log in and out each day and record the area to which they have been assigned. This will enable oversight of assessors for their own safety and make sure all are accounted for. There must also be a way to contact assessors in the field.
- Assess and confirm how RBAs can safely get to and from the damaged areas and provide suitable transport if required.



Key point:

RBAs are not first responders, and sufficient operational precautions need to have been undertaken by the leadership of a rapid building assessment operation before deployment into the field.

Managing mental health

Everyone who goes to work should go home safe and healthy, both physically and mentally. Rapid building assessment operations are often intense experiences that can include long hours and challenges unlikely to be encountered in daily life. The Building Response Manager must constantly monitor working conditions that could affect people's ability to function. Things to consider:

- stress and fatigue can affect anyone involved in a rapid building assessment operation. This will need constant monitoring and attention. A rotating roster for RBAs will ensure that assessors don't burn out and are taking breaks when needed
- recognise that rapid building assessment operations can be a hard and tiring undertaking that can have both immediate and delayed impacts on the mental wellbeing of personnel
- encourage and support each other for instance, develop a buddy system for colleagues
- try to recognise when colleagues (especially in your direct team) have reached their limits
- watch out for signs of fatigue such as headaches, loss of concentration and focus, increased irritability, and similar symptoms of stress
- · ensure all personnel take opportunities to eat proper meals, and take regular breaks
- make good use of standdown periods after several consecutive days of operation and/or particularly intense experiences to avoid burnout. Operational command should also ensure standdown periods are delivered for all personnel where possible
- seek extra support from colleagues if things become overwhelming. This can help provide perspective and relief from stressful thoughts arising from experiences during a rapid building assessment operation
- ensure that all staff are aware of and have access to help that is either be available through the workplace Employee Assistance Programme (EAP) or other agencies (eg Red Cross, Salvation Army, or Ministry of Social Development).

RBA team composition

As per MBIE's RBA training, the minimum size for an RBA team should be at least two assessors for safety. Where possible, best practice is for a team that includes:

- a Tier 2 Team Leader
- an assessor to conduct the visual assessments
- an assessor/team member to record assessment details
- an assessor/team member to speak with building occupant and log any welfare issues.

Teams should include a qualified engineer where possible (eg CPEng registered). Teams should be expanded to include geotechnical expertise if there are geotechnical hazards threatening buildings and/or life safety. For assessing large commercial buildings, a CPEng registered engineer must be a member of the assessment team.



Field risks and hazards

Table 12 highlights some basic elements of safe fieldwork.

Table 12: Health and safety requirements for deployed Rapid Building Assessors (field work)

Issue	Action	
Teamwork	 ensure RBAs understand they must look after other team members ensure operational leadership has adequate knowledge of assessor location at any time through a log-in/log-out system when in the field 	
Personal responsibility	 every RBA should ensure they are using issued personal protective equipment (PPE), and identification at all times. Facemasks should be worn if there are asbestos risks ensure RBAs maintain personal hygiene, including treating cuts and grazes ensure RBAs know that they need to alert their Team Leader is they are too stressed or fatigued to continue field work 	
Hazard awareness	ensure RBAs know how to identify potential hazards. This includes the following actions: • a preliminary hazard assessment including checking that the immediate site is stable and that adjacent buildings/structures are not a risk • check a building from the outside for risks, including risks from above • if entering a building, stay in pairs and have at least one team member outside to watch for new risks and signal evacuation if needed • check there are no other obvious risks that would prevent approaching the building (eg chemical or contaminant risk, downed power lines) • always assume that debris and flood water (and therefore silt) is contaminated with run-off, chemicals, or sewage • document and report all hazards as they are discovered	
Welfare and support	 recognise that the role of an RBA is a hard and tiring undertaking that can have both immediate and delayed impacts on mental wellbeing watch out for signs of fatigue such headaches, loss of concentration and other signs of stress. ensure operational leadership provides stand down periods after several consecutive days in the field. utilise extra support when needed. 	

For more detailed information on field safety and hazard assessment processes for Rapid Building Assessors, see: Rapid Building Assessment Field Guide

8.4.2 Authorise and induct Rapid Building Assessors and assign areas

Every RBA needs to be authorised by the responsible person before they can begin assessments. A sample authorisation form can be found in Appendix 5.

Once staffed and fully equipped, each RBA team should be provided with details of the location(s) that they are to head to and inspect, along with any relevant information on hazards that they may encounter enroute or on-site.

During the induction, check and ensure all assessors have suitable identification before going in the field. MBIE trained RBAs should already have MBIE-issued identity cards.

Immediately before commencing field operations, a deployment briefing should also be held. In the deployment briefing, assessment teams should be provided with map(s) clearly defining their assigned areas. Ideally, RBA teams should be allocated buildings on a block-by-block basis as this lets them see each building from multiple sides. As assessments are completed, RBAs should mark off those areas on the map and transfer the information to master maps maintained by the building assessment coordination centre. This mapping information will help to identify areas that have suffered significant property damage and prioritise further assessments or cordoning.

If possible, provide each RBA team with city block maps so they can indicate the extent of cordoning they believe may be required.

Deployment briefings of assessors should cover the territorial authority's referral system or resources for building occupants who are under stress or need more information.



Key point:

Before deploying assessors, the Building Response Manager should have determined:

- what information is required from the field operation
- what actions need to be taken (eg isolating severely damaged properties)
- how RBAs should report issues (eq life safety hazards, the need for cordons, barricades, shoring, or demolition).

Organise ongoing daily briefings and debriefings

Once RBAs have been inducted, briefed and deployed, ensure there are ongoing daily briefings and debriefings. Daily (morning) briefings are important to provide ongoing direction to assessors, including known risks and hazards and daily objectives.

Debriefs should also take place daily. They should include, where possible, a review and moderation of placard decisions, and a discussion of risks and issues encountered in the field. Debriefs also help the management team make any changes to future plans. A debrief is also a good time to report any health, safety and welfare concerns.

When determining the content of these briefings, take into account that conditions can change rapidly during an emergency. **Table 13** outlines key topics to cover at the daily briefings/debriefings.

Table 13: Daily briefing topics for Rapid Building Assessors

Issue	Action	
Health and safety	 brief RBAs on known safety risks and identified hazards in the field encourage RBAs to look after their own wellbeing and know what support is available to them provide safety equipment needed to carry out assessments 	
Information collection	 make sure RBAs know they need to accurately and clearly identify each building and fill out assessment forms correctly brief RBAs on local resources (maps, photographs, and building numbering systems) ensure there is a process for the daily collection of all completed assessment forms (digital and paper) 	
Public safety and building usability	 instruct RBAs to recommend further actions following an assessment if appropriate and show them how to record this on the forms instruct RBAs to place barrier tape around unsafe areas (note: a red placard effectively prevents access to a building, so does not require barrier tape) remind RBAs that they may need to place barrier tape around an external fall zone, or prevent access within part of a yellow-placarded building 	
Assessment review/quality assurance (debriefings)	 discuss placarding decisions taken by assessment teams during that day and guiding principles/business rules adjusted as required to ensure placarding decisions are consistent and are appropriate report and discuss risks and hazards identified in the field and go through the objectives of the next day's operations handover organised for next batch of staff (rotating roster) 	
Communication	 ensure RBAs have information sheets describing the rapid building assessment operation and the placard system to give to building owners. This could be prepared in advance. reiterate key messages and protocols, especially if the response period is extended. 	

8.4.3 Start assessments, record and collate results

Once RBAs have been authorised, inducted and briefed, direct teams into the field to undertake Level 1 assessments and Level 2 assessments where appropriate.



(i) The field guides for rapid building assessments describe the process assessors should follow and recommended observations: Rapid Building Assessment Field Guide

To manage the assessment results, allocate specific people for data collation and manual database entry where necessary, and set up systems to enable this. Checking the quality of this data before uploading is important to verify that a consistent approach to rapid building assessments has been taken across the teams. This would normally be done by the Building Response Manager or a delegated technical person.

Placarding principles

In addition to the more general principles that would have been taught in training, the Building Response Manager or leader of the assessment operation should provide RBAs with some guidelines to follow regarding the decision-making process for placarding to ensure that placarding decisions are consistent and are appropriate. This will depend on the type of hazard event, the scale of the event and the risk of future events.



Key point:

The principles outlined in section 133BN of the Building Act are relevant during a rapid building assessment operation and must be considered:

- the paramount consideration in the exercise of any power is the protection of human life and safety.
- actions taken should be proportionate to the risks being managed.
- actions should result in minimal restriction of the ability of an owner or occupier to continue to use and occupy the property, and any restriction should be for no longer than is reasonably necessary.
- decisions should be based on:
 - up-to-date information, including information about the possible occurrence of further emergencies or other relevant events and other changes in the type and severity of risks arising from an emergency.
 - information about possible future events.

For example, the Building Response Manager could provide the following placarding guidance for assessors following a flood event. Note, the example process outlined below would be subject to other considerations (eg if any danger is posed by nearby buildings despite the building being assessed not being at risk based on the assessment process described).

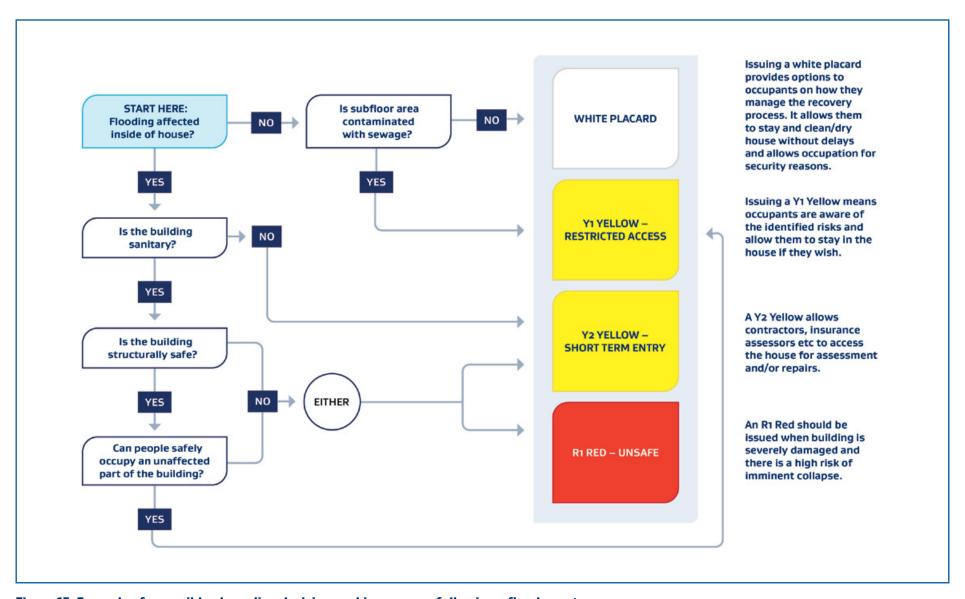


Figure 15: Example of a possible placarding decision-making process following a flood event.

Other possible examples where a general approach to placarding could be provided to assessors include:

- quidelines for assessing the hazard posed by fallen roof tiles after severe wind (eq tornado event)
- guidelines for assessing water levels in relation to height of electrical sockets and exposure times
- guidelines around water and wastewater systems.

Unnecessarily conservative placard decisions may mean that building occupants will have to seek shelter elsewhere. On the other hand, people should not be exposed to unnecessary risk. Remember the principles for the exercise of powers outlined in section 133BN of the Building Act mean there needs to be an appropriate balance between paramount consideration of protecting life and safety, and that actions are proportionate to the risk and result in minimum restriction to the homeowner/occupier. Daily debriefs should revisit placarding decisions taken by assessment teams during that day and guiding principles/business rules adjusted as required.

Communicating with building owners, occupants and the public

The RBA role is mainly to inspect and assess a building's usability. However, assessors may be the first 'official' contact for building owners and occupants following an emergency. They may need to deal with people under stress. They may also need to give information and referral to support services.

- The Building Response Manager should connect with the Welfare Manager, who will have connection/
 oversight of the psychosocial support sub-function (focused on the psychological and social interventions
 that will support community recovery for people affected by an emergency). It may be that the support
 agencies of the psychosocial support sub-function can deploy trained people with RBAs to provide
 welfare support for affected people.
- Pre-deployment briefings of assessors should cover the territorial authority's referral system or
 resources for building occupants who are under stress or need more information. Provide public information
 such as assessment fact sheets and other resources to RBAs. Also cover topics such as food and water
 supply, social and medical services, sanitary facilities and requirements, and contact details for a call
 centre to answer other queries.

Directing media enquiries

RBAs should not give any information to the media. If approached, they should refer them to the Public Information Manager in the Emergency Operations Centre, or where appropriate (in larger scale responses) the relevant CDEM Group Emergency Coordination Centre (EOC). It is recommended that the relevant information is provided at briefing so the RBAs can direct people to the right contact.



8.5 Managing the ongoing rapid building assessment operation

Ongoing activities include:

- · continuing daily briefings and debriefs
- managing cordons and barricades for public safety
- continuing rapid building assessments
- reviewing placard decisions (including changing or removing these placards as necessary)
- identifying and using indicator buildings if further damage is likely (eg from aftershocks)
- monitoring the assessment operation and, where necessary, seeking more detailed building evaluations
- considering whether any severely damaged buildings require urgent works such as stabilisation or demolition.

The Building Response Manager also needs to manage the safety of people in and near buildings during the emergency response, regardless of whether a rapid building assessment operation is carried out. This involves managing safety issues inside and outside any operational area.

8.5.1 Cordon management

Part of a rapid building assessment operation is the application of appropriate measure such as cordons, barricades, hoardings or fences where required to protect buildings or keep people at a safe distance.

Cordons block off an entire area, whereas barricades block off a building or part of a building. They can range from simple barriers, such as hazard tape, through to complex barriers, such as a wall of shipping containers. Their purpose is to prevent people from going into areas, buildings or parts of a building that are not safe because of land instability or building damage.

Note the corresponding powers in the Building and CDEM Acts on the application of measures to keep people safe:

Building Act:

Section 133BS: Measures to keep people at safe distance and protect building

CDEM Act:

- Section 88: Closing roads and public places
- Section 94H: General transition period powers

Table 14: Cordons, barricades and barrier tape

	Cordoning	Barricading	Barrier Tape
Definition	Ordinarily a large area where access is prohibited whether for short/fixed period or on a more permanent basis	A 'fence-like' structure to protect people from collapse of a building or structure	Temporary warning for lower risk (eg chimney or flooded room)
Decision-maker	Responsible person (designated area), Controller (state of emergency) or Recovery Manager (transition period) or other person authorised to exercise this power by the decision-maker		
Role of RBA (Tier 2 Team Leader)	May be involved in making recommendations to the BRM that supports the cordoning decisions of the Controller	Makes recommendations about where barricades should be set	May set out tape or instruct where barrier tape should be set out by others



What the law says:

Section 133BS of the Building Act – Measures to keep people at safe distance and protect building specifies that:

- 1 A responsible person may put in place measures that the person considers reasonably necessary—
 - (a) to keep people at a safe distance from a building in a designated area; or
 - (b) to protect a building in the designated area from being damaged.
- 2 Measures may include—
 - (a) the installation of a hoarding or fence to prevent people from approaching the building; and
 - (b) measures that prevent or limit public access, with or without vehicles, to any road or other public place near the building; and
 - (c) measures intended to prevent the building or debris from the building harming people (for example, by the collapse of a roof or wall); and
 - (d) measures that allow limited access for a purpose that the responsible person considers appropriate.
- If measures have been in place for more than 3 months,—
 - (a) the owner of the building is liable for the costs of continuing to take the measures after that period; and
 - (b) the responsible person may recover those costs from the owner; and
 - (c) the amount recoverable becomes a charge on the land on which the building is situated.

Cordons and barricades may be put up shortly after the emergency and will need to be managed as building assessments continue. The Building Response Manager should support the Controller during the response period by providing advice and information collected from building assessments. Collapsed buildings will require a cordon without the need for information from rapid building assessments.

In a designated area, the principles outlined in <u>section 133BN of the Building Act</u> apply – particularly relevant in relation to restricting access are the principles that actions should result in minimal restriction of the ability of an owner or occupier to continue to use and occupy property and any restriction of that ability should be for no longer than is reasonably necessary.

Neither resource consent nor a building consent is required for measures such as hoardings or fences put in place to protect buildings or keep people at a safe distance. In addition, where measures are in place for more than three months within an area designated for building emergency management, the building owner is liable for ongoing costs. The Building Response Manager may recover those costs from the owner, with the amount becoming a charge on the land on which the building is situated.

Collapsed buildings or buildings that USAR teams are searching through should **NOT** be assessed or placarded until emergency services or MBIE have completed their work.

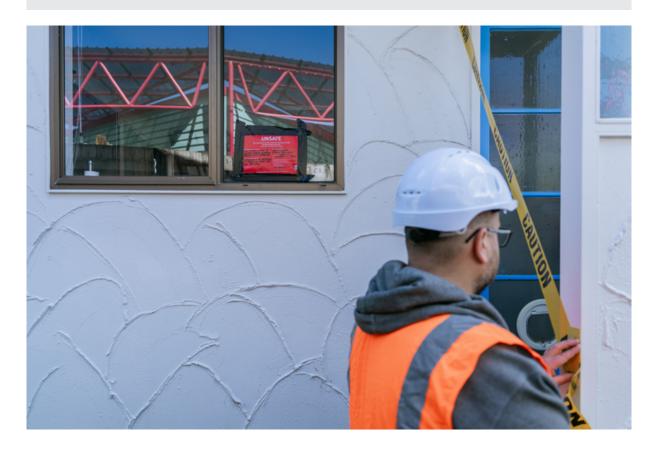
For buildings and structures that pose an immediate life safety risk, the responsible person may also take responsibility for directing propping, bracing or demolition ('making safe') in part or full. The Police and the Defence Force may also have a role in managing building security and access.



Key point:

Before reducing cordons for public access, the Controller may authorise a 'street sweep' by the Sector Coordinator, the lead assessing engineers and emergency services. This street sweep will confirm that all hazards have been addressed and all agency requirements have been met before full access to the street is granted. Barricading may still be required in some isolated sites to mitigate the risk of building failure.

- (i) For more information, please refer to:
 - Appendix 8 for a cordoning activity checklist and barricading guidelines
 - Emergency Movement Control Director's Guideline (DGL 18/15): www.civildefence.govt.nz
 - FEMA Recommendations for Cordoning Earthquake-Damaged Buildings (FEMA P-2055-2/ September 2023 (Chapter 4): Recommendations for Cordoning Earthquake Damaged Buildings (fema.gov)



8.5.2 Monitor and review the assessment operation

Ongoing evaluation and revision of the rapid building assessment operation is recommended. This is important as new information will come to hand from both assessment teams and from other emergency management personnel and agencies that can impact the scope and focus of the operation.

If there has been an earthquake and you expect large, repeated aftershocks, using a set of indicator buildings to monitor and reassess the rapid assessment operation can be extremely useful (see <u>Readiness section</u>).

The extent of new damage noted on indicator buildings can provide a basis for deciding whether or not to continue with the planned building assessment.

The Building Response Manager should use evidence from indicator buildings, completed rapid building assessments and other information such as changes in the environment (eg receding flood waters), and damage encountered by assessors to determine priorities and review the approach outlined in the operational plan.

Ensure that public information is regularly updated where required, so affected communities can find the information they need.

For an example of a daily operations checklist, see Appendix 7

Reviewing, changing or removing a placard

Placard decisions should be discussed and reviewed at daily debriefing sessions, and sometimes a placard may need to be changed. Examples where a placard may need changing include:

- to correct an oversight, mistake in judgment, after a second opinion
- after a review of placard decisions
- after a Level 2 assessment
- after an engineering assessment
- after a geotechnical assessment.

The table below outlines some scenarios where a placard may need to be changed to a more restrictive placard (ie from yellow to red) or to a less restrictive placard:

Table 15: Changing placard examples

Changing to a more restrictive placard	Changing to a less restrictive placard	
Previously unobserved damage has been found, or the responsible person believes that an engineering report or second opinion is warranted.	An engineer may re-evaluate a building after temporary repair or securing work and recommend a change in placard status in writing to the responsible person (usually the territorial authority).	
 Additional events have increased the risk. For example: aftershocks have significantly worsened the condition of the building further degradations of ground stability have been observed. 	A hazard or risk initially identified during assessment has now lessened or no longer exists (eg water levels have receded or electrical/gas issues rectified), so a placard may be changed by an assessor to reflect the remaining hazard/risk. This scenario would likely require a reassessment.	
As part of ongoing quality assurance reviews of placarding decisions, the Building Response Manager may recommend changing some placards where there was an inconsistency in decisions, or the original risk/hazard is worse than initially thought.	As part of ongoing quality assurance reviews of placarding decisions, the Building Response Manager may recommend changing some placards where there was an inconsistency in decisions, or the original risk/hazard has lessened.	



To ensure consistency, carry out random checks of placarding decisions and the associated geotechnical assessments where relevant. One way to do this is by using a different team to make a Level 2 assessment of a building following another team's Level 1 assessment. Alternatively, use Tier 1 RBA expertise to review and discuss results.

RBAs that have been assigned a building to assess and find that it already has a placard, or have been assigned to reassess a placarded building, should be instructed to do the following:

- read the placard what was the original hazard(s) identified, and are those hazards still present?
- if the circumstances remain unchanged, assign a new placard of the same colour, with new assessment date and details
- if the circumstances have changed (eg risk has now reduced), assign a different placard with new date and details, and remove the original placard.

Note: the rapid building assessment form has a field to record existing placard details.

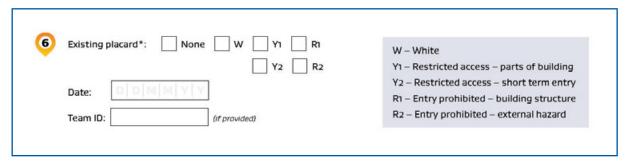


Figure 16: Section 6 of rapid building assessment form – recording details of existing placard

Placard after a geotechnical assessment

There may be cases where both a rapid building assessment and a geotechnical assessment are completed on the same property. The rule of thumb is that the last placard to be assigned is the one that remains. This placard could identify a higher or a lower risk than the previous placard.

For example, a rapid building assessment can be completed on a building and a white placard initially issued, as no significant structural hazards were observed. Two days later, a geotechnical assessment is carried out on the land surrounding the property. The geotechnical engineer assessed that part of the building was at risk of a landslip to the rear of the property and allocated a yellow 'RESTRICTED ACCESS' placard as a result. This yellow placard takes precedence, and the initial white placard would be removed and recorded in the 'existing placard' field of the geotechnical assessment form.

Only an authorised person can change a placard either under a state of emergency/transition period (eg under the CDEM Act) or while the area is designated under the Building Act.

It is important to consider reviewing red and yellow placards, where practicable, during the response phase, especially for those issued as a result of geotechnical hazards. Make sure you have enough staff and specialist resource to peer review red and yellow placard decisions. Consider developing a checklist for placard reviews that follows the criteria outlined in the RBA Field Guides.





Key point:

Reviewing a placard decision is about whether the identified risks on the original placard decision have been appropriately mitigated (or not). It is not about whether the building complies with the Building Code.

Removing placards

A placard cannot be removed once issued. It can only be changed to a different colour as described in the above section by an authorised RBA or removed once a reassessment has been conducted following repair or remediation work. Some territorial authorities may choose to specify an expiry date for the white placards they issue, which means they can be removed by the building owner after they expire. If this is decided by the Building Response Manager, they will need to ensure this is communicated clearly to building owners and occupants.

For reassessment of placards following repair or remediation, see the <u>Recovery section</u>

8.5.3 Urgent works

If buildings have been severely damaged in the emergency, it may be necessary to establish a separate critical building team of highly skilled experts to advise the responsible person if these buildings need urgent stabilising or demolition.

Urgent works to remove or reduce risks (non-heritage buildings)

Where a severely damaged building is within a designated area, the territorial authority (as the responsible person) has the power to carry out urgent works if:

- the building presents a risk of injury or death, or
- a risk to critical infrastructure, and it is necessary to carry out these works without delay to remove or reduce these risks.

This might apply, for example, if a building is in danger of collapsing in a location that would cause death or injury or could block access to a critical facility such as a hospital. Another example may be a non-heritage building that has been damaged by an earthquake. The responsible person believes that, if works to prop and brace the walls of the building are not carried out without delay, the building might collapse and, because of the building's location, cause death or injury.

Urgent works can include demolishing all or part of a building if it cannot be stabilised; is an immediate risk to life safety, or cannot be adequately barricaded without preventing access to a critical route or significantly disrupting homes and businesses.

Note also corresponding powers in the Building Act and CDEM Act:

Building Act:

Section 133BV: Urgent works to remove or reduce risks

CDEM Act:

- Section 85: Emergency powers of CDEM Groups
- Section 94H General transition period powers

What the law says:

Section 133BV of the Building Act specifies that for urgent works to remove or reduce risks:

- (1) This section applies if a responsible person believes that works in relation to a building in a designated area—
 - (a) are reasonably necessary to remove or reduce risks posed by the building; and
 - must be carried out without delay in order to remove or reduce those risks.
- (2) The responsible person may carry out those works.
- (10) In this section, risk means a risk to—
 - (a) persons, of injury or death; or
 - (b) critical infrastructure, of damage or disruption to its operation or use.

The decision to carry out urgent works is considered to be a warrant under the Building Act. On completion of the works, the Building Response Manager must apply to the District Court to confirm the warrant unless the building owner:

- confirms to the Building Response Manager they do not dispute entry to their land to carry out the works
- agrees District Court confirmation of the warrant is not required, and
- pays for the cost of the urgent works.

If there is a state of emergency or transition period but there is no designation in effect, the Building Response Manager can direct urgent stabilisation or demolition work under the authority of the Controller/Recovery Manager. Typically, this involves liaising with affected building owners who then carry out this work. In some cases, the territorial authority may need to commission the stabilisation or demolition works. This will depend on a combination of factors including its urgency and whether the building owners are unable to do this.

A severely damaged building may need to be stabilised before any decision can be made about its demolition or repair.

Urgent demolition of part or all of a severely damaged building may be necessary if it is an immediate risk to life safety. Buildings that cannot be adequately barricaded without cordoning off the street may need to be demolished urgently (eg if cordoning would prevent access to the only route to a hospital). Barricading or cordoning may also significantly disrupt neighbouring homes and businesses and could unreasonably impede the recovery activity.

The territorial authority may recover the cost of any urgent works from the building owner, with this becoming a charge on the land on which the building is situated.

Neither resource consent nor a building consent is required for urgent works.



: Key point:

Demolition is a last resort. Wherever practical, this decision should be held over until the building owner can be involved. It is important to consider all the external factors before a decision is made to demolish, and the reasons for making this decision must be documented.

Note that any stabilisation or demolition work will be done on behalf of, and will be paid for by, the building owner.

Urgent works to heritage buildings

As part of Readiness work, each territorial authority should have a list of heritage buildings in their area. Where possible, heritage specialists should be given the opportunity to act as technical advisors for the rapid building assessment operation, as early identification of affected heritage structures could allow such specialists to consider options for effective interventions to preserve public life safety while additionally seeking to preserve/recover heritage structures.

There are special conditions for urgent works relating to heritage buildings in the Building Act, to ensure respect is given to the national significance of these buildings. The Heritage New Zealand Pouhere Taonga Act 2014 prohibits the modification or destruction of a protected site unless authority is obtained from Heritage New Zealand Pouhere Taonga. A number of requirements must be met before works can be carried out to any heritage buildings within a designated area. The responsible person must obtain the approval of the Minister for Building and Construction before carrying out works that involve the demolition of the whole or a part of a heritage building of the following types:

- any building listed as Category 1 (places of special or outstanding historical or cultural heritage significance or value) or wāhi tūpuna (ancestral place) on the New Zealand Heritage List/Rārangi Kōrero
- any building that is included on the National Historic Landmarks/Ngā Manawhenua o Aotearoa me ōna Kōrero Tūturu list.

The Minister for Building and Construction must then consult with the Minister responsible for the administration of the Heritage New Zealand Pouhere Taonga Act 2014 at least 24 hours before approval can be given to carry out urgent works on heritage buildings.

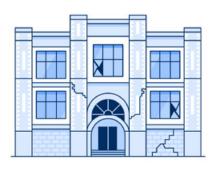


Key point:

MBIE will facilitate this process on behalf of the responsible person where required. To seek the Minister's approval to carry out works involving partial or whole demolition of a heritage building, the responsible person (e.g. territorial authority) should complete this form: Demolition of heritage-building-form and email it to: BEM@mbie.govt.nz

For other works related to heritage buildings, including demolition of heritage buildings that do not fit within the categories listed above, the responsible person must consult Heritage New Zealand Pouhere Taonga at least 24 hours before carrying out those works. These requirements apply to:

- all buildings on the New Zealand Heritage List/Rārangi Kōrero except those listed above
- buildings that are subject to a registered heritage covenant (under the Heritage New Zealand Pouhere Taonga Act 2014)
- buildings that are subject to a heritage order
- buildings that are included in a schedule of a district plan because of their heritage value.



What the law says:

Section 133BV of the Building Act specifies that:

- (3) The responsible person (if not the Minister) must obtain the approval of the Minister before carrying out works that involve the demolition of the whole or a part of a heritage building that is—
 - (a) identified as Category 1 or wāhi tūpuna in the list referred to in paragraph (a)(i) of the definition of heritage building in section 7; or
 - (b) referred to in paragraph (a)(ii) of that definition.
- (4) A responsible person who requests the approval of the Minister under subsection (3) must at the same time notify Heritage New Zealand Pouhere Taonga of the request.
- (5) The Minister must consult the Minister responsible for the administration of the Heritage New Zealand Pouhere Taonga Act 2014 at least 24 hours before
 - giving an approval under subsection (3); or
 - carrying out the works under subsection (1) (if the Minister is the responsible person).
- (6) The responsible person (if not the Minister) must consult Heritage New Zealand Pouhere Taonga at least 24 hours before carrying out any other works in relation to a heritage building.



(i) For more information, see:

Demolition of heritage building fact sheet Definition of 'heritage building' in section 7 of Building Act

8.5.4 Maintain communications and reporting

The Building Response Manager will need to communicate progress throughout the operation. A crucial aspect of this is providing status reports to the Controller and other relevant parties such as MBIE on placard data and the progress of the rapid building assessment operation.

The Building Response Manager will also need to:

- help communications/public information management (PIM) teams with key messages for media and the public, drawing on any pre-prepared material such as factsheets, and providing any event-specific details required
- be ready to address periodic clearing house meetings by the relevant technical societies to understand particular issues and help provide greater understanding of the impact on buildings.



Key point:

Good communication between all affected parties is vital to the success of building assessment during an emergency.

9. Recovery and risk reduction

This section is for territorial authorities to help manage buildings during the recovery phase. Recovery should begin as soon as practicable after an emergency, often alongside the response activities. It may include further building checks, managing ongoing hazards, and approving urgent repairs.

This section also provides guidance on how to further reduce risk after an event. This involves learning from the event, improving building performance systems, and making any changes needed to improve planning, training and resourcing of building assessment processes.

Under the National CDEM Plan (sections 79 and 80) each territorial authority is to:

- · develop and maintain arrangements, in accordance with national guidelines and procedures, for assessments, evaluations, and steps to be undertaken for managing risks to and uncertainties as to the safety of buildings in response to and recovery from an emergency
- as necessary, take steps to manage people's safety in and near a building including cordoning, barricading, stabilisation work, demolition and/or building evacuations.



- Key point:

Recovery activities may start when a state of emergency is still in force. If an area has been designated for building emergency management, the Building Act sets out the procedures that must be followed when requesting detailed assessments or other information. If there is no designation but a state of emergency or transition period is in place, the CDEM Act sets out the procedures that must be followed.

9.1 Roles and responsibilities during the recovery and risk reduction phases

Territorial authorities:

- manage affected buildings and placards
- ask owners for more information, including detailed assessments where necessary
- monitor ongoing hazards
- consider whether other works (including demolition) are required to remove or reduce risks posed by any buildings
- consider whether works are required for the longterm use or occupation of any buildings
- manage transition back to business as usual (BAU) for response staff
- when the rapid building assessment operation is complete, should carry out a formal review and share any lessons learnt.

Building owners:

- commission detailed structural/geotechnical evaluations as required
- carry out necessary repairs
- request placard reassessment once repairs or remediation has been completed.

MBIE:

- considers the impact and operational aspects of an event and any changes needed to legislation, guidance, planning or training
- advises the Government on any requirements for facilitating efficient and effective recovery of building stock and functions
- conducts review
 (debrief, lessons learned)
 regarding response
 efforts where applicable.

9.2 Transition to recovery

Once the rapid building assessment operation is complete, the territorial authority will need to demobilise the response operation. Some key tasks when demobilising a rapid building assessment operation are listed below:

Table 16: Demobilisation tasks

✓	Tasks
	confirm rapid building assessment operation is complete (eg identified areas/buildings have been assessed)
	stand down all response staff and provide welfare support where needed
	manage stand-down periods for response staff and plan a transition to business-as-usual (eg building control personnel)
	manage placards in the designated area (prioritise red and yellow placards)
	conduct debriefs with all operational staff
	identify and circulate lessons learned
	provide input for any transition planning and recovery strategies
	ensure all collected assessment data and logs from operational staff and assessors have been collected and stored securely for review
	generate a final report or review of response operation and provide this to interested parties (eg MBIE, other response agencies).

9.3 Enabling the recovery

'Recovery' is defined in the CDEM Act as the coordinated efforts and processes to bring about the immediate, medium and long-term holistic regeneration and enhancement of a community following an emergency. Recovery should:

- support cultural and physical well-being of individuals and communities
- minimise the escalation of the consequences of the disaster
- reduce future exposure to hazards and their associate risks (ie build resilience)
- take opportunities to regenerate and enhance communities in ways that will meet future needs (across the social, economic, natural and built environments).

Helping affected communities recover from an emergency and return to business as usual requires oversight and coordination of various follow-up activities, including:

- requesting, receiving and reviewing further building evaluations
- removal of placards following reassessments
- managing hazards and other works
- review and reduction of cordons and barricades
- preparing public information
- monitoring urgent repair work and issuing certificates of acceptance.



9.3.1 Actively manage affected buildings and placards

During the recovery phase, territorial authorities will need to manage damaged buildings. This could involve asking owners for detailed assessments of any building damage and reassessing placards after remediation and repair work.

Reviewing placard decisions – managing red and yellow placards

It is important to actively manage placards in your designated area, with a priority focus on red and yellow placards. Make sure you have enough staff and specialist resource to peer review placard decisions. Consider developing a checklist for placard reviews that follows the criteria outlined in the RBA Field Guides.

Reviewing a placard decision is about whether the identified risks on the original placard decision have been appropriately mitigated (or not). It is not about whether the building complies with the Building Code.

Make sure you have enough staff and specialist resource to revisit red and yellow placards, particularly for placards issued as a result of a geotechnical assessment/hazard.



- Key point:

When reviewing placards, remember to consider, to the extent practicable, the principles outlined in section 133BN of the Building Act:

- the paramount consideration in the exercise of any power is the protection of human life and safety
- actions taken should be proportionate to the risks being managed
- actions should result in minimal restriction of the ability of an owner or occupier to continue to use and occupy the property, and any restriction should be for no longer than is reasonably necessary
- decisions should be based on:
 - up-to-date information, including information about the possible occurrence of further emergencies or other relevant events and other changes in the type and severity of risks arising from an emergency
 - information about possible future events.

Reassessing placards after repair or remediation

To get a placard changed or removed, building owners must provide evidence to the territorial authority about the structural status of their building.

If a designation under the Building Act is in place, the responsible person has the power to proactively direct a building owner to provide this evidence if needed to determine the risks posed by the building or whether to exercise any further building emergency management powers, including what works, if any, are needed to remove or reduce the risks.



Key point:

It is important to follow up and confirm all placards issued, even when a building is deemed useable and is not subject to access restrictions.

Following an emergency, building owners should commission any detailed evaluations required to identify remediation and repair options (ie by a structural or geotechnical engineer). For residential buildings, evaluations and repairs will usually be organised through the owner's insurance.

A reassessment of a residential property subject to a placard will examine the building post-repair against the risks noted in the original placard decision and other relevant information. Reassessments must be organised through the relevant territorial authority, who will require evidence that the identified repair works have been completed on the building. The territorial authority will review the evidence and decide if the placard should either be downgraded or removed entirely.

Placarded **non-residential buildings** will require more detailed evaluations and input before a reassessment can be done. **Figure 17** outlines the basic process for managing buildings once rapid building assessments are complete:

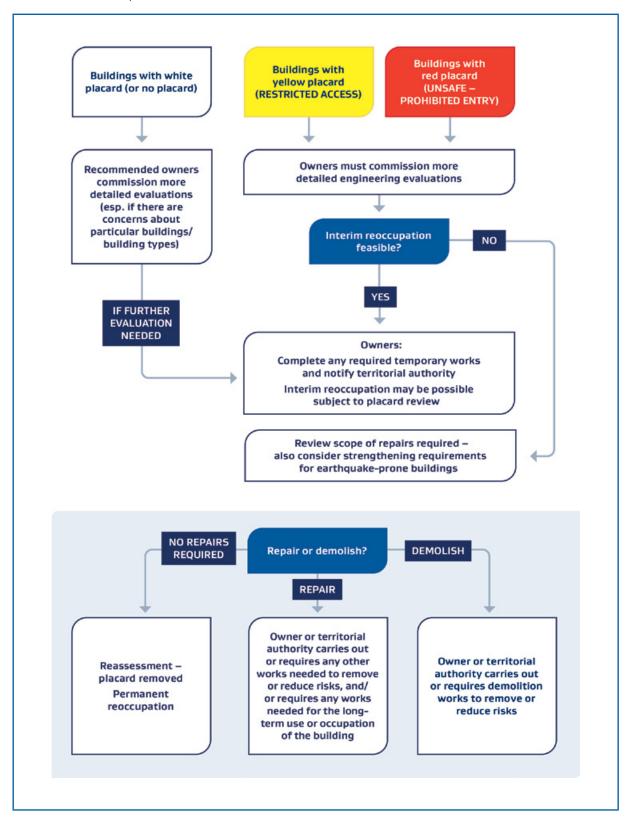


Figure 17: Building evaluation and placard reassessment in a designated area for non-residential buildings

Detailed assessments and evaluations

Building owners can commission detailed structural and geotechnical evaluations.

Interim Use Evaluations (IUEs) provide assessments of the ongoing usability of a building until a more detailed evaluation can be completed.

Detailed Damage Evaluations (DDEs) are in-depth engineering assessments focussed on determining the extent and nature of structural damage suffered by a building. This type of assessment is usually performed by engineers contracted by the building owner and aim to provide advice on building usability and options to address any damage.



Targeted Damage Evaluations (TDEs) focus on certain building types and building elements. They recognise that some buildings or building elements may be affected more than others by earthquake shaking at a certain location. That is because the nature of the shaking depends on the magnitude, directivity and distance from the earthquake's source.



Key point:

A Targeted Damage Evaluation process was developed by the engineering societies for Wellington City following the November 2016 Hurunui/Kaikōura earthquake when directing certain building owners to provide further information. In this event, medium rise Wellington buildings (5 to 15 storeys) were more severely tested than shorter, stiffer buildings.



(i) Further information on different types of detailed assessments can be found here:

- Interim Use Evaluation (IUE) guidance (Canterbury Royal Commission website)
- Detailed Damaged Evaluation (DDE) guidance (Structural Engineering Society website)
- Targeted Damage Evaluation (TDE) guidance (Structural Engineering Society website)
- The Civil Defence website also has further information about requiring a structural assessment

Managing access to placarded buildings

Buildings with yellow or red placards will have restricted or prohibited entry. However territorial authorities should have a plan in place to manage access to these buildings so more detailed assessments can take place (eg by engineers or insurance assessors). Consider developing a red placard managed access process to authorise staff and/or contractors to access placarded buildings with restricted/prohibited entry.

You may want to consider the following when developing a managed access process:

- assigning a case manager for each red placarded building who can be the point of contact between the territorial authority and the building owner. The case manager can schedule access for engineers/contractors/insurance assessors upon request (eg by 'booking' a time slot with the case manager for access to the building).
- before access can be granted, make sure essential information is recorded including:
 - the names of all contractors/people requiring access including proposed day/time
 - ensure the contractor/assessor has a suitable hazard management and health and safety plan for the work to be undertaken.
 - ensure that all relevant hazard and risk information been shared between the PCBUs.
- before access is granted, ensure contractors/assessors have first undergone a full health and safety briefing to cover access requirements (eg identified hazards, entering the property in pairs and having a spotter outside).

For contractors who want to demolish or repair the building, more detailed risk mitigation plans will be required beforehand due to the longer timeframe they would be on-site.

For areas with many red placarded buildings (including cordoned off areas), consider organising a temporary managed re-entry process for building owners to retrieve personal effects. Organising a managed access for an area will need an engineer to first to assess the surrounding ground risks and/or buildings along with RBA support.

Also consider sharing information about red placarded and cordoned areas with local police in case of looting.

Placards and Land Information Memoranda (LIM)

The Building Act does not require a territorial authority to generally include information about a placard in a property file. Section 133BX(7)(b) – works for long-term use or occupation of building does specify that the territorial authority that is responsible for the land on which the building is situated must include in a land information memorandum (LIM) issued under section 44A of the Local Government Official Information and Meetings Act 1987 information concerning the direction and the failure to carry out the directed works.

However, depending on the circumstances, a territorial authority may choose to disclose information about a placard. This might include putting information about the placard on a LIM for the property or providing information in response to a request under the *Local Government Official Information and Meetings Act 1987*. Territorial authorities should seek independent legal advice on what approach they should take.

9.3.2 Building consent exemptions

Schedule 1 of the Building Act provides a list of building work for which a building consent is not required, and there are exemptions that may apply to remediating damage. You can find more detail here: <u>Building consent</u> exemptions for damaged buildings – quick quide

A discretionary exemption allows proposed building work to be carried out without obtaining a building consent. Building consent authorities and territorial authorities can grant discretionary exemptions provided that:

- the work is likely to comply with the Building Code, or
- if the completed building does not comply, it is unlikely to endanger people or any building, whether on the same land or on other property.

If building consent authorities/territorial authorities grant discretionary exemptions, they should consider developing a clear policy and procedure for accepting, assessing, and granting discretionary exemptions under Schedule 1(2) of the Building Act. For more detail on applying discretionary exemptions following an event, see: Discretionary exemptions for flood damaged building – quick guide

What the law says:

Section 41 of the Building Act specifies that a building consent is not required in certain cases:

- (1) (c) any building work in respect of which a building consent cannot practicably be obtained in advance because the building work has to be carried out urgently—
 - (i) for the purpose of saving or protecting life or health or preventing serious damage to property
 - (ca) any building work that is carried out under section 133BS (which relates to buildings located in areas designated under subpart 6B); or
 - (cb) any building work that is carried out under section 133BV or 133BW (which relate to buildings located in areas designated under subpart 6B); or
 - (e) any building work that a territorial authority is authorised to carry out under this Act.

Certificates of acceptance for emergency repairs.

Building owners may need to carry out urgent repairs during an emergency period when it is not possible to process building consent applications. Such repairs often involve building work that in normal times would require a building consent.

It is a sensible idea to adopt a pragmatic approach to this. Talk to building owners early on and provide certificates of acceptance (under section 42 of the Building Act) is where appropriate. Providing key messages to owners to make sure they document these repairs adequately and photograph the progress of urgent work is also a good idea. This will make it easier to establish on reasonable grounds that the building work complies with the relevant requirements of the Building Code.

Any works for the long-term use or occupation of a building should be carried out using the normal building control processes (ie by issuing a building consent for the building work and a code compliance certificate as final sign-off).



Figure 18: Certificate of Acceptance Form

(i) For more information on processing certificates of acceptance, see here: <u>Issuing certificates of</u> <u>acceptance</u> | Building Performance

9.3.3 Managing ongoing hazards

Actions that can be taken to manage ongoing hazards when a designation is still in place include:

- directing owners to provide information about the risks posed by a building, which may include detailed engineering assessments
- carrying out or directing works to remove or reduce 'other' (ie, non-urgent) risks where measures put in place to keep people safe or protect buildings are causing ongoing disruption to a public thoroughfare, the use of another building or critical infrastructure
- directing building owners to carry out works for the long-term use or occupation of a building.



Key point:

The powers in subpart 6B of Part 2 of the Building Act to manage ongoing hazards only apply when an area is/remains designated.

The ability to manage ongoing hazards can be limited if the area isn't designated due to the limited period an area can be in a state of emergency or transition period.

Direct building owner to provide information

Section 133BU of the Building Act specifies that a responsible person can direct an owner to provide information about their building or land if the responsible person believes that the further information is reasonably necessary to determine—

- the risks posed by the building and whether to exercise further powers under subpart 6B of the Building Act in relation to the building; or
- what works, if any, are needed to remove or reduce the risks.

An owner of a building or land who is given a direction under this section must comply with the direction at that owner's expense. The owner can appeal within ten days on the grounds the direction is unreasonable, but otherwise they must comply with the direction. It is an offence to not comply with a direction under this section.

If the responsible person directs the owner to provide information, the direction must be in writing, in the form (see below) approved by the Chief Executive of MBIE. This form must describe the information required, which may include a full structural assessment, a detailed engineering assessment of observed damage, or another type of technical assessment, and it must specify the time and date by which the information must be given by the building owner, and who it must be given to: Form for directing an owner to give information

Also note corresponding powers in the CDEM Act:

Building Act:

Section 133BU: Direct building owner to give information (see below)

CDEM Act:

- Sections 76: Power to require information
- Section 94I: Power to require information (Transition period)

What the law says:

Section 133BU of the Building Act specifies that:

- (1) A responsible person may direct the owner of a building or of any land in a designated area to give the responsible person information about the building or land if the responsible person believes that the further information is reasonably necessary to enable the responsible person to determine—
 - (a) the risks posed by the building and whether to exercise further powers under this subpart in relation to the building; or
 - (b) what works, if any, are needed to remove or reduce the risks.
- (2) The direction must—
 - (a) be in writing, in the form (if any) approved by the Chief Executive of MBIE; and
 - (b) describe the information required, which may include a full structural assessment, a detailed engineering assessment of observed damage, or other technical assessment; and
 - (c) specify the time and date by which the information must be given (allowing a reasonable time for the conduct of any assessment required); and
 - (d) specify to whom the information must be given.
- (3) An owner of a building or land who is given a direction under this section must comply with the direction at that owner's expense.
- (4) On receiving information under this section, the responsible person may, in accordance with subsection (2), direct the owner of the building or land to give further information that the responsible person believes is reasonably necessary to comply with the first direction.
- (5) The owner of a building or land who is given a direction under this section may appeal to the District Court on the grounds that the direction is unreasonable.
- (6) The provisions of sections 209 to 211 apply to an appeal under subsection (5)—
 - (a) subject to this section; and
 - (b) as if, in those provisions,—
 - (i) a reference to a determination were a reference to a direction under this section; and
 - (ii) a reference to the chief executive were a reference to the responsible person who gave the direction; and
 - (c) with any other necessary modifications.
- (7) An appeal under subsection (5)—
 - (a) must be commenced within 10 working days after the appellant receives notice of the direction; and
 - (b) is limited, in the relief that may be granted, to the reasonable costs of complying with the direction.
- (8) A person who intentionally fails to comply with a direction under this section—
 - (a) commits an offence; and
 - (b) is liable on conviction,—
 - (i) in the case of an individual, to a fine not exceeding \$5,000:
 - (ii) in the case of a body corporate, to a fine not exceeding \$50,000.

Carrying out works to remove or reduce other risks in a designated area

Section 133BW of the Building Act specifies that a responsible person can carry out works in relation to a building in a designated area or direct the owner of the building to do so if they believe the works are:

- reasonably necessary to remove or reduce risks posed by the building; and
- section 133BV(1)(b) of the Act does not apply (ie the works aren't urgent); and
- there will be ongoing disruption of a public thoroughfare or of the use of another building or of critical infrastructure because the responsible person has put in place measures such as barricades or fences (section 133BS) or signs or placards (section 133BT) on the building, which must remain in place until the works are carried out.

For example, a non-heritage building has been damaged by an earthquake. The responsible person believes that works to prop and brace the walls of the building are necessary to remove or reduce the risk of the building collapsing but need not be carried out immediately. In the meantime, the responsible person prohibits entry to the building and also an adjacent building by issuing yellow placards to the buildings that will need to remain in place until the walls can be braced. Until the works are completed, use of the two buildings will be disrupted. In this case, section 133BW applies, and the responsible person may carry out the works or direct the building owner to do so. If the responsible person carries out the works, the owner of the building is liable for the costs of the works, and the responsible person may seek to recover those costs.

Before carrying out works: At least 10 days before deciding to carry out works, the responsible person must seek and consider the views of the stakeholders specified in section 133BW(3):

- building owner
- building occupier(s)
- owners and occupiers of other buildings and operators of critical infrastructure whose use is disrupted by the measures put in place under section 133BS or by the signs or notices placed under section 133BT
- people who have an interest in the land on which the building is situated under a mortgage or other encumbrance registered under the <u>Land Transfer Act 2017</u>
- people who have an interest in that land that is protected by a caveat lodged and in force under section 138 of the Land Transfer Act 2017
- Heritage New Zealand Pouhere Taonga, if the building is a heritage building
- a statutory authority, if the building is classified or registered by that authority.

The responsible person must also, if it is reasonably practicable to do so, consider alternate approaches to demolishing the building (if that is the work to be carried out) and without limiting section 133BN, take into account the difference between the cost of carrying out the works and the likely impact, on neighbouring homes and businesses, of not carrying out the works.

Directing an owner to carry out works: If the responsible person directs the owner to carry out works, the direction must be in writing, in the form (below) approved by the Chief Executive of MBIE: Form directing owner to carry out works to remove or reduce risks

Note: A responsible person must not carry out works under this section after the day that is six months after the date on which the designation for the designated area comes into force unless this restriction is extended (by up to three months).

What the law says:

Section 133BW of the Building Act specifies that this section applies if—

- (a) a responsible person believes that works in relation to a building in a designated area are reasonably necessary to remove or reduce risks posed by the building; and
- (b) section 133BV(1)(b) does not apply; and
- (c) there will be ongoing disruption of a public thoroughfare or of the use of another building or of critical infrastructure because the responsible person has—
 - put in place measures under <u>section 133BS</u> or placed 1 or more signs or notices under <u>section 133BT</u>; and
 - (ii) decided that those measures, signs, or notices must remain in place until the works referred to in paragraph (a) are carried out.
- (2) The responsible person may—
 - (a) carry out those works; or
 - (b) direct the owner of the building to do so.
- (4) A direction under subsection (2)(b) must—
 - (a) be in writing, in the form (if any) approved by the Chief Executive of MBIE; and
 - (b) be given to the owner of the building, if practicable; and
 - (c) describe the intended outcome of the directed works; and
 - (d) state why the works are required; and
 - (e) specify when the works must be completed; and
 - (f) state that, if the works are carried out without a building consent, in reliance on section 41(1)(cb), the owner must apply for a certificate of acceptance after completing the works, in accordance with section 42; and
 - (g) state that resource consent under the <u>Resource Management Act 1991</u> is not required for the works (see <u>section 133BY</u>).
- (5) The owner of a building must carry out works that are directed under subsection (2)(b) at the owner's expense.
- (6) If the owner does not carry out the works in accordance with the direction, the responsible person may do so.
- (7) If a responsible person carries out the works,—
 - (a) the owner of the building is liable for the costs of the works; and
 - (b) the responsible person may recover those costs from the owner; and
 - (c) the amount recoverable becomes a charge on the land on which the building is situated.
- (8) A responsible person must not carry out works under this section after the day that is 6 months after the date on which the designation for the designated area comes into force.
- (9) The period under subsection (8) may be extended—
 - (a) by—
 - (i) the person who designated the area; or
 - (ii) another person (if any) who can extend the designation of the area under section 133BH:
 - (b) by up to 3 months:
 - (c) once only.
- (10) A person who intentionally fails to comply with a direction under subsection (2)(b)—
 - (a) commits an offence; and
 - (b) is liable on conviction to a fine not exceeding \$200,000.

Directing an owner to carry out works for long-term use of occupation of a building

A responsible person may direct the owner of a building to carry our works if they believe that the works:

- are reasonably necessary to remove or reduce risks posed by the building; and
- sections 133BV(1)(b) and 133BW(1)(c) of the Building Act do not apply (ie they are not urgent works or works to remove or reduce other risks); and
- the responsible person believes that the works are reasonably necessary to make the building safe, sanitary, and otherwise suitable to be used or occupied by people on a long-term basis.

This power can be used for a non-heritage building. For example, a building has been damaged by an earthquake. Urgent works are not required and re-entry to the building need not be prohibited. However, the responsible person believes that works on a damaged wall are necessary to make the building safe, sanitary, and otherwise suitable for long-term use or occupation. In this case, section 133BX applies, and the responsible person may direct the building owner to carry out the works.

Any works directed to be undertaken for the long-term use or occupation of a building should be carried out using the normal building control processes, ie by issuing a building consent for the building work and a code compliance certificate as final sign-off.

A direction to carry out works must be in writing, in the form (below) approved by the Chief Executive of MBIE: Form for directing owner to carry out works for long-term use of occupation of a building

As soon as practicable after completion of the building work the building owner will need to apply for a certificate of acceptance under section 96 of the Building Act.

Note: If works directed in relation to a commercial building or a multi-unit residential building are not carried out, the responsible person may continue to exercise powers under section 133BS (barricades, fences etc) or 133BT of the Building Act (notices, signs, placards) in relation to the building.

What the law says:

Section 133BX of the Building Act specifies that this section applies if—

- (a) a responsible person believes that works in relation to a building are reasonably necessary to remove or reduce risks posed by the building; and
- (b) $\frac{133BV(1)(b)}{and}$ and $\frac{133BW(1)(c)}{and}$ do not apply; and
- (c) the responsible person believes that the works are reasonably necessary to make the building safe, sanitary, and otherwise suitable to be used or occupied by people on a long-term basis.
- (2) The responsible person may direct the owner of the building to carry out those works.
- (3) A direction to carry out works must—
 - (a) be in writing, in the form (if any) approved by the Chief Executive of MBIE; and
 - (b) be given to the owner of the building, if practicable; and
 - (c) describe the intended outcome of the directed works; and
 - (d) state why the works are required; and
 - (e) specify when the works must be completed; and
 - (f) state whether a building consent is required for the works.
- (4) An owner of a building must carry out works directed under this section at the owner's expense.
- (5) If the owner does not carry out the works in accordance with the direction, the responsible person may do so.
- (6) If a responsible person carries out the works,—
 - (a) the owner of the building is liable for the costs of the works; and
 - (b) the responsible person may recover those costs from the owner; and
 - (c) the amount recoverable becomes a charge on the land on which the building is situated.
- (7) If works directed for a simple-unit residential building are not carried out,—
 - (a) the building may be used or occupied or continue to be used or occupied; but
 - (b) the territorial authority that is responsible for the land on which the building is situated must include in a land information memorandum issued under <u>section 44A</u> of the Local Government Official Information and Meetings Act 1987 information concerning the direction and the failure to carry out the directed works.
- (8) If the responsible person is not the territorial authority referred to in subsection (7)(b), the person must notify that authority of the direction and the owner's failure to carry out the directed works.
- (9) If works directed in relation to a commercial building or a multi-unit residential building are not carried out, the responsible person may continue to exercise powers under <u>section 133BS</u> or <u>133BT</u> in relation to the building.
- (10) A person who intentionally fails to comply with a direction under this section—
 - (a) commits an offence; and
 - (b) is liable on conviction to a fine not exceeding \$200,000.
- (i) For more information on the responsible person for each power and situation in the Building Act, see Appendix1

9.3.4 Actively manage barricades and cordons

Ongoing movement control (eg through cordons) can either assist or impede recovery following an emergency. It is therefore essential during the transition from response to recovery to allow for a review of all cordons and barriers.

Where cordons are in place, a cordon office should put set up and rules should be put in place to control:

- access (specify restrictions, ID systems, and access procedures)
- vehicle use (including speed limits and car parking)
- health and safety (including emergency procedures).

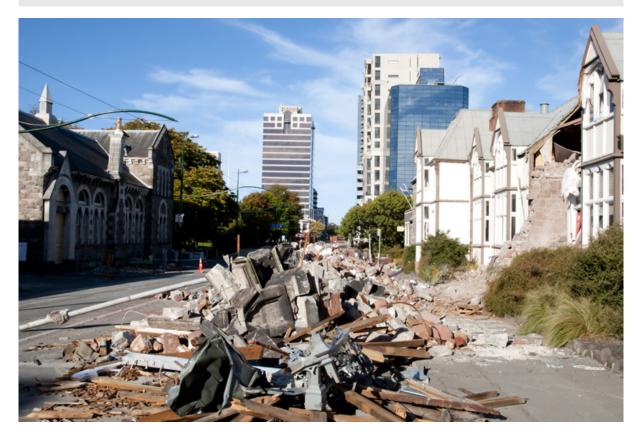
The cordon office should review fences/hoardings/barricades regularly by vehicle and/or on foot. The principles specified in section 133BN of the Building Act apply here – there should be an active programme to review, reduce, and remove when information on the hazard changes. Do not depend on the existence of a placard to confirm that a barricade should be there.

Large cordons will likely require a staged approach to removal. Ongoing hazard assessments and mitigation works should be carried out based on prioritisation to assess cordon reduction.

Allow stakeholders opportunities to consult on cordon reduction timeframes and rules as they are developed. It is a good idea to work with the public information management (PIM) team to inform stakeholders of the timeframes, and rules for access and activity, once they have been decided and approved.

(i) For more information on cordon management during recovery, including checklists, see:

- Appendix 8: Cordoning Guidelines
- Emergency Movement Control Director's Guideline (DGL 18/15): <u>www.civildefence.govt.nz</u>
- FEMA Recommendations for Cordoning Earthquake-Damaged Buildings (FEMA P-2055-2/Sept. 2023): Recommendations for Cordoning Earthquake Damaged Buildings (fema.gov)



9.3.5 Reviewing, extending or terminating a designation

90-day review of designated area

Any designation of an area for building emergency management must be reviewed at least every 90-days by the responsible person (usually the relevant territorial authority). The 90-day review of designation form outlines the matters that must be considered including whether:

- the designation is still in the public interest and necessary or desirable to protect people, and minimise damage and disruption to buildings, public thoroughfares and critical infrastructure, or protect persons or buildings from the effects of the insanitary condition of a building in the area. (**Note**: critical infrastructure means a priority building or a building or other infrastructure operated or used by a lifeline utility)
- the scale and degree of the impact of the emergency and of its effects on buildings in the relevant area
- the likelihood of a further emergency or any other relevant event occurring that could cause buildings in the relevant area to pose increased or additional risks; or land in the relevant area to pose a risk to a building
- the risks can be managed without the use of the powers provided by a designation
- the entire area under designation needs to remain or if the designation for some of the area can be terminated.

See: Form for 90-day review of designation

The review outcome must specify whether the designation will continue without alteration, if part or all the designation should be terminated, or if the designation needs to be extended. The completed 90-day review form, with supporting documentation should be emailed to: BEM@mbie.govt.nz

If as an outcome of the review, a decision to terminate part or all of a designated area has been made, a termination of designation form must also be completed (see below section). The outcome of each 90-day review must be, as soon as practicable, publicly notified by publishing the information on a publicly accessible and free-to-access website or, if this is not possible, through other appropriate means. The notice must include details of the designated area, the emergency, the date/time of the outcome of the review and details of any exercise of a power under the CDEM Act in accordance with section 133BL(2).

Part or full termination of a designation

A designation of an area should remain in place until the designation is no longer in the public interest. If, after reviewing the designation of an area, it is decided that the designation is no longer required for all or part of the area under designation, it can be terminated.

When a designation covers a large area/number of buildings, it is recommended that a territorial authority considers whether the entire area under designation needs to remain or, if the designation for some of the area can be terminated, and any remaining risks can be managed without the use or continued use of the powers provided by a designation. For instance, when an area (including suburbs and/or specific addresses) no longer has placarded properties, or those remaining can be managed using the usual provisions of the Building Act, it may be the designation can be terminated for that area.

It is recommended that a designation remains in place in areas where red or yellow placarded buildings remain. This is because the responsible person needs sufficient information to determine that the initial reason for prohibiting or restricting use of the building no longer exists (ie the danger identified had been mitigated, or it was determined the dangers could be dealt with using the council's ordinary powers under the Building Act, such as a section 124 notice).

As each situation can be different, territorial authorities should seek independent legal advice on whether a designation should be terminated, and how or when placards should be reassessed or removed following a termination of a designated area.



Key point:

Section 133BH(1) identifies who can make the termination or extension decision. The responsible person must not terminate a designation unless the person is satisfied that the designation is no longer in the public interest. Note that a designation will automatically terminate after three years, unless extended.

When a decision has been made to terminate part or all of an area, the following form should be completed and sent to MBIE: Form to request termination of designation

Important information should be detailed on the form, for example: why the designation in the specified area(s) is no longer in the public interest. A clearly marked-up map showing the area(s) to be terminated should also be attached to the form. The completed termination of designation form, with supporting documentation should be emailed to: BEM@mbie.govt.nz

When the termination form is received, MBIE will review the request and either notify or facilitate the approval of the Minister for Building and Construction where it is required.



(i) For more information on terminating a designation, see Appendix 2

Extending a designation

A designation will terminate automatically after three years unless it is extended or has been terminated earlier. An extension may relate to all or part of the designated area but must be for no more than three years and can be made only once. When a decision has been made to extend part or all of the designated area, the following form should be completed and sent to MBIE: Form to request extension designation

Important information must be detailed on the form (eq why the designation is still in the public interest). The completed extension of designation form, with supporting documentation must be emailed to: BEM@mbie.govt.nz

When the extension request form is received, MBIE will review the request and either notify or facilitate the approval of the Minister for Building and Construction where it is required. If the designation is extended, this must be publicly notified. The notice must include details of the designated area, the emergency and the date/ time the designation was extended.



(i) For more information on extending a designation, see Appendix 2



9.4 Risk Reduction

Risk reduction is about taking preventive steps to avoid or mitigate further and future adverse consequences. It involves identifying and analysing risks to life and property from hazards, taking steps to eliminate those risks if practicable and, if not, reducing the magnitude of their impact and the likelihood of their occurrence to an acceptable level.

A territorial authority should carry out a formal review of its entire building assessment operation. MBIE may be involved with this depending on the size and scale of the event.

Debriefs

Debriefs are an important step, as they can be used by operational staff to identify lessons from their experience and to ensure such lessons can be embedded within planning arrangements in anticipation of future emergencies.

The table below describes different debriefing types:

Table 17: Four debriefing types

Туре	Description
Hot debriefing	A debriefing can help emergency personnel cope with an incident. It is commonly held at the end of a shift to review operational procedures and identify immediate areas requiring attention or changes.
Defusing	A defusing is a much shorter, less formal, and less structured version of a critical incident stress debriefing (described below). A defusing is held within a day or two of the event, and usually lasts about 30 to 45 minutes. The defusing only involves the most seriously affected members who experienced the emotional event. Its purpose is to allow the affected personnel to express their feelings and to prepare them to go back to work. A defusing is a short-term fix for an immediate reaction to a troubling event.
Critical incident stress debriefing (CISD)	A CISD is a group meeting conducted in a confidential environment that provides a forum for individuals to vent their emotions and express their reactions to the event. Two major goals of a CISD are to reduce the impact of a critical event and to accelerate the recovery of people who have experienced a traumatic event.
Cold debriefing	Soon after the end of a response operation, agencies involved should be invited to attend a formal debriefing with a view to improving response capabilities and to capture key learnings. To facilitate that meeting, it is important to make sure that significant operational information has been evaluated by those actively involved, and that an accurate written record of the operation has been kept.



(i) For more information on debriefing processes, see Organisational Debriefing – Information for the CDEM Sector, available at: www.civildefence.govt.nz

Lessons learned

Lessons learned from the response and recovery operations should be used to improve future management of buildings in emergencies. These lessons could include a better understanding of the local hazards, the building stock, and the performance of different building systems and types in different events and ground conditions.

Actions the territorial authority could take to share what has been learned and reduce risk in future events include:

- highlighting any gaps that became apparent during/after the emergency or areas where things could have been done better, documenting any revised processes that were developed, and updating the building management plan
- making any improvements needed (eg to training, planning and resources)
- sharing key findings with other interested parties
- identifying any new research needs
- recommending and implementing steps to reduce risk from buildings where appropriate.

MBIE may also consider if any changes are needed – for example, to improve the building management emergency response or because issues have been identified with particular building types. This could include further refinement to guidance, training or resources, or recommendations for legislative amendments.



PART C: Appendices – Resources for managing buildings in an emergency



Appendix 1: Building emergency management powers in the Building Act

Section	Provisions
41	Building consent is not required for measures to keep people at a safe distance and protect buildings, urgent works to remove or reduce risks, or works to remove or reduce other risks
123B	Actions taken in relation to dangerous or insanitary buildings prior to a designation continue to apply
133BC	Sets out when the decision-maker on a designation is the CDEM decision-maker, a territorial authority, or the Minister for Building and Construction, respectively
133BD	Requirements and considerations for making decisions on a designation
133BE	Public notice requirements for designations
133BF	Sets out that a designation expires after 3 years unless extended or terminated sooner
133BG	Sets out that a designation must be reviewed at least once every 90 days, and identifies roles and responsibilities
133BH	Sets out that a designation can be extended only once, for no more than 3 years, and identifies roles and responsibilities
133BI	Circumstances for terminating a designation, and identifies roles and responsibilities
133BJ	Sets out who may exercise building emergency management powers as the 'responsible person'
133BK	Sets out who may exercise specific building emergency management powers as the 'responsible person' when a state of emergency or transition period is in force
133BL	Sets out that Building Act powers take precedence over CDEM Act powers
133BM	Allows a responsible person' to determine that previously issued CDEM Act notices continue in force during a designation
133BN	Principles for exercise of powers by responsible persons
133BO	Requirements for exercising power to enter building or land
133BP	Exercise of powers within secured buildings must be in accordance with instructions by the officer in charge of the building
133BQ	Powers and requirements in relation to post-event / rapid building assessments
133BR	Powers and requirements in relation to evacuating buildings
133BS	Powers and requirements in relation to measures to keep people at a safe distance and protect buildings
133BT	Powers and requirements in relation to notices and signs on buildings
133BU	Powers and requirements in relation to directing building owners to give information
133BV	Powers and requirements in relation to urgent works to remove or reduce risks, including requirement to consult Heritage New Zealand
133BW	Powers and requirements in relation to works to remove or reduce other risks, including requirement to consult Heritage New Zealand
133BX	Powers and requirements in relation to works for long-term use or occupation of building

Section	Provisions
133BY	Resource consent is not required for measures to keep people at a safe distance and protect buildings, urgent works to remove or reduce risks, or works to remove or reduce other risks
133BZ	Powers and requirements in relation to sharing of information with Civil Defence officials
133BZA	Application of building emergency management powers to dangerous, affected, insanitary and earthquake-prone buildings or dangerous dams
153AA	Application of building emergency management powers to dangerous of dangerous dams during a designation
177	Application for a 'determination' on the exercise of building emergency management powers by a responsible person
183	Circumstance under which an application for a determination suspends the exercise of building emergency management powers
Schedule 1	Building work for which building consent not required

The responsible person for each power listed in subpart 6B of the Building Act

The Building Act specifies that responsible persons may exercise powers under subpart 6B of the Building Act. (ie in a designated area). Once an area has been designated, who the responsible person is may depend on how and who put the designation in place.

The responsible person for each power and situation is set out in the tables below.

Conduct post-event assessments (section 133BQ)

Responsible person	Powers
 State of emergency: a Controller (or a person acting under that person's authority) Transition period: a Recovery Manager (or a person acting under that person's authority) 	RBAs acting under the authority of the responsible person may inspect the exterior and interior of a building or land in a designated area and prepare a post-event assessment of any risks posed by or to the building.
No state of emergency or transition period: territorial authority or, in certain circumstances, the Minister for Building and Construction	A trained RBA (Tier 1 or Tier 2) should lead each assessment team. The post-event assessment must be prepared— (a) in accordance with the methodology (if any) approved by the Chief Executive of MBIE, and (b) in writing and in the form (if any) approved by the Chief Executive. Current forms and field guides

Note: Where a warrant is required to carry out a rapid building assessment, the responsible person must apply to the District Court following the process set out in the Search and Surveillance Act 2012.

Power to evacuate buildings (section 133BR)

Responsible person	Powers
 State of emergency: a Controller or constable (or a person acting under their authority) Transition period: a Recovery Manager or constable (or a person acting under 	A responsible person or a Police constable may direct the evacuation of a building in a designated area if satisfied that evacuation is necessary to prevent death or injury of any person.
 No state of emergency or transition period: territorial authority or under certain circumstances, the Minister for Building and Construction 	A responsible person or a Police constable may enter a building or land for this purpose. To do so, they must carry proof of identity and if requested, produce that proof of identity or give a general explanation of the authority under which the person is acting and the power that the person is exercising.

Example explanation of authority: "I am authorised under [section 133B0] the Building Act 2004 to enter this [building/land] for the purpose of exercising the power of evacuation under [section 133BR] of that Act."

Measures to keep people at a safe distance away and protect buildings (section 133BS)

Responsible person	Powers
 State of emergency: a Controller (or a person acting under the Controller's authority) 	A responsible person may put in place measures that the person considers reasonably necessary to keep people
 Transition period: A Recovery Manager (or a person acting under the Controller's authority) 	at a safe distance from a building or to protect a building in a designated area from being damaged (eg a hoarding,
No state of emergency or transition period: territorial authority or under certain circumstances the Minister for Building and Construction	barricade or fence). If measures have been in place for more than 3 months, the owner of the building is liable for the costs of continuing to take the measures after that period. The responsible person may then recover those costs from the owner.

Place notices and signs (placards) on buildings (section 133BT)

Responsible person	Powers
 State of emergency: a Controller (or a person acting under their authority) Transition period: a Recovery Manager (or a person acting under their authority) No state of emergency or transition period: territorial authority or under certain circumstances the Minister for Building and Construction 	A responsible person may place one or more signs or notices on or near a building in a designated area prohibiting or restricting the use of the building if they believe that it is reasonably necessary to remove or reduce risks of injury or death; or an evacuation of the building has been directed under section 133BR. A responsible person may place signs or notices on or near a building informing the public of the risks posed by the building. A sign or notice under this section must: • be in writing and in the form (if any) approved by the Chief Executive of MBIE. • detail the nature and extent of any damage to the building; and • whether, how, and to what extent the building can safely be used; and • be visible to people approaching the building. Current rapid building assessment placards

To direct an owner to give information (section 133BU)

Responsible person **Powers** • State of emergency: the Director or A responsible person may direct the owner to provide CDEM Group (or a person acting under information about their building or land if the responsible their authority) person believes that the further information is reasonably necessary to enable the responsible person to determine— • Transition period: the Director or CDEM Group • the risks posed by the building and whether to exercise (or a person acting under their authority) further powers under subpart 6B in relation to the • No state of emergency transition period: building; or territorial authority or under certain • what works, if any, are needed to remove or reduce the risks. circumstances the Minister for Building and Construction If the responsible person directs the owner to provide information, the direction must be in writing, in the form (if any) approved by the Chief Executive of MBIE. Form for directing an owner to give information

Urgent works to remove or reduce risks (section 133BV) - including heritage buildings

 State of emergency: the CDEM Group (or authority) Transition period: a Recovery Manager (or a person acting under their authority) No state of emergency or transition period: territorial authority or under certain circumstances the Minister for Building and Construction For example, a building that is not a heritage building has been damaged by an earthquake. The responsible person believes that, if works to prop and brace the walls of the building are not carried out without delay, the building might collapse and, because of the buildings's location, cause death or injury. This section applies and the responsible person may carry out the works. For heritage buildings: There are special conditions for urgent works relating to heritage building, to ensure respect is given to the national significance of these buildings. The responsible person must obtain the approval of the Minister for Building that is identified as Category 1 or wāhi tūpuna in this list. MBIE will facilitate the process to obtain approval on the responsible person sensor's behalf. For other heritage buildings, the responsible person sensor was consult Heritage New Zealand at least 24 hours before carrying out works. 	Responsible person	Powers
	 (or authority) Transition period: a Recovery Manager (or a person acting under their authority) No state of emergency or transition period: territorial authority or under certain circumstances the Minister for Building 	 building in a designated area if they believe they are— (a) reasonably necessary to remove or reduce risks posed by the building; and (b) must be carried out without delay in order to remove or reduce those risks. For example, a building that is not a heritage building has been damaged by an earthquake. The responsible person believes that, if works to prop and brace the walls of the building are not carried out without delay, the building might collapse and, because of the building's location, cause death or injury. This section applies and the responsible person may carry out the works. The owner of the building is liable for the cost of the works. For heritage buildings: There are special conditions for urgent works relating to heritage buildings, to ensure respect is given to the national significance of these buildings. The responsible person must obtain the approval of the Minister for Building and Construction before carrying out works that involve the demolition of the whole or a part of a heritage building that is identified as Category 1 or wāhi tūpuna in this list. MBIE will facilitate the process to obtain approval on the responsible person's behalf. For other heritage buildings, the responsible person must consult Heritage New Zealand at least 24 hours before carrying out works. Demolition of heritage buildings fact sheet

Note: The responsible person's decision to carry out works under this section applies as if it was a warrant issued under section 129 of the Building Act (measures to avoid immediate danger or to fix insanitary conditions), and the responsible person must apply to District Court for confirmation of warrant (see section 130 of the Act).

Works to remove or reduce other risks (section 133BW)

Responsible person Powers

- State of emergency: the CDEM Group (or authority)
- Transition period: a Recovery Manager (or a person acting under their authority)
- No state of emergency or transition period: territorial authority or under certain circumstances the Minister for Building and Construction

A responsible person can carry out works in relation to a building in a designated area or direct the owner of the building to do so if they believe the works are—

- reasonably necessary to remove or reduce risks posed by the building; and
- section 133BV(1)(b) of the Act does not apply (ie the works aren't urgent); and
- there will be ongoing disruption of a public thoroughfare or of the use of another building or of critical infrastructure because the responsible person has put in place measures such as barricades of fences (section 133BS) or signs or placards (section 133BT) on the building, which must remain in place until the works are carried out.

For example, a non-heritage building has been damaged by an earthquake. The responsible person believes that works to prop and brace the walls of the building are necessary to remove or reduce the risk of the building collapsing but need not be carried out immediately. In the meantime, the responsible person prohibits entry to the building and also an adjacent building by issuing yellow placards to the buildings and will need to remain in place until the walls can be braced. Until the works are completed, use of the two buildings will be disrupted. So, this section applies, and the responsible person may carry out the works or direct the building owner to do so.

If the responsible person carries out the works, the owner of the building is liable for the costs of the works, and the responsible person may seek to recover those costs.

Note: if the works are carried out without a building consent, in reliance on section 41(1)(cb), the owner must apply for a certificate of acceptance after completing the works, in accordance with section 42.

Before carrying out works:

At least 10 days before deciding to carry out works, the responsible person must seek and consider the views of the stakeholders described in section 133BW(3)(a) and consider the matters in s 133BW(3)(b) and (c) of the Building Act if it is reasonably practicable to do so.

Directing an owner to carry out works:

If the responsible person directs the owner to carry out works, the direction must be in writing, in the form (if any) approved by the Chief Executive of MBIE.

Form for directing owner to carry out works to remove or reduce risks

Note: A responsible person must not carry out works under this section after the day that is six months after the date on which the designation for the designated area comes into force unless that period has been extended.

Works for long-term use or occupation (section 133BX)

Responsible person	Powers
 State of emergency: the CDEM Group (or a person acting under their authority) Transition period: a Recovery Manager (or a person acting under their authority) No state of emergency or transition period: territorial authority or under certain circumstances the Minister for Building and Construction 	 A responsible person may direct the owner of a building to carry out works if— they believe that the works are reasonably necessary to remove or reduce risks posed by the building; and sections 133BV(1)(b) and 133BW(1)(c) of the Act do not apply (ie they are not urgent works or works to remove or reduce other risks); and the responsible person believes that the works are reasonably necessary to make the building safe, sanitary, and otherwise suitable to be used or occupied by people on a long-term basis. An owner of a building must carry out works directed under this section at the owner's expense. If the owner doesn't do the works, the responsible person can carry out the works and recover the costs from the owner. Any works directed to be undertaken for the long-term use or occupation of a building should be carried out using the normal building control processes, ie by issuing a building consent for the building work and a code compliance certificate as final sign-off.

Directing an owner to carry out works:

The responsible person may direct the owner of the building to carry out those works. A direction to carry out works must be in writing, in the form (if any) approved by the Chief Executive of MBIE:

Form for directing owner to carry out works for long-term use of occupation of a building

Note: If works directed in relation to a commercial building or a multi-unit residential building are not carried out, the responsible person may continue to exercise powers under section 133BS (barricades, fences etc) or 133BT (notices, signs, placards) in relation to the building.

If works directed for a simple-unit residential building are not carried out, the building may be used or occupied or continue to be used or occupied; but the territorial authority that is responsible for the land on which the building is situated must include in a land inform on memorandum (LIM) issued under section 44A of the Local Government Official Information and Meetings Act 1987 information concerning the direction and the failure to carry out the directed works.

Exercise of powers in secured buildings (section 133BP)

Responsible person	Powers
The responsible person will depend on the power that needs to be exercised. Consult the relevant tables in this section to determine the responsible person for the power that needs to be exercised.	Secured buildings include buildings (or parts of buildings) that are or that are in defence areas and buildings (or parts of buildings) used by the New Zealand Defence Force, intelligence and security agencies, and the Ministry of Foreign Affairs and Trade.
• For example, if a post-event assessment needs to be done, the responsible person will be as per section 133BQ in Table 1 above.	A responsible person exercising a power under any of sections 133BQ to 133BX and 133BZA in relation to a secured building must exercise that power in accordance with any instructions given by the officer in charge of the building. See section 133BB of the Act for the definition of 'officer in charge'. For example, the officer in charge may choose to supervise a rapid building assessment or the completion of urgent works, to ensure the security of sensitive information.

Power to enter building or land (section 133B0)

Powers

A responsible person may enter a building or land for the purpose of exercising a power under—

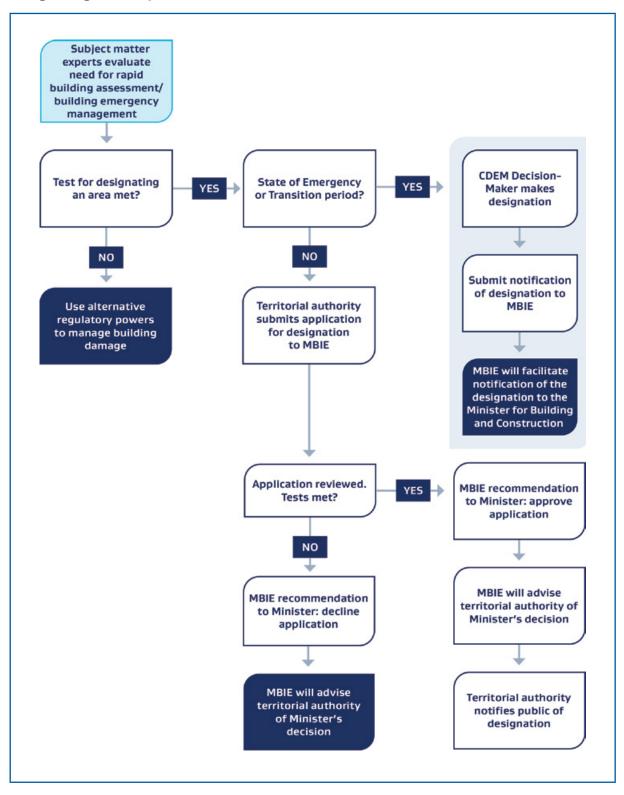
- Section 133BR (evacuation) a constable may also enter a building or land for this purpose
- section 133BS (measures to keep people at safe distance and protect building); or
- section 133BT (notices and signs on buildings); or
- section 133BV (urgent works to remove or reduce risks); or
- section 133BW (works to remove or reduce other risks); or
- section 133BX (works for long-term use or occupation of building).

See the above guidance boxes for the responsible person for each power listed.

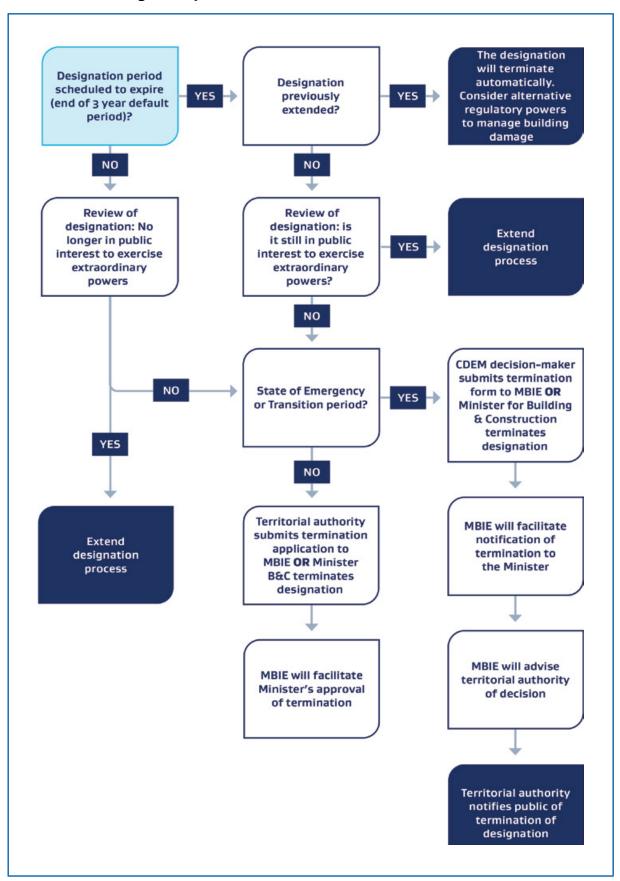
A person who is exercising a power of entry under this section must carry proof of identity and produce that proof of identity on request by the owner or occupier or produce evidence or give a general explanation of the authority under which the person is acting and the power that the person is exercising.

Appendix 2: Designation processes

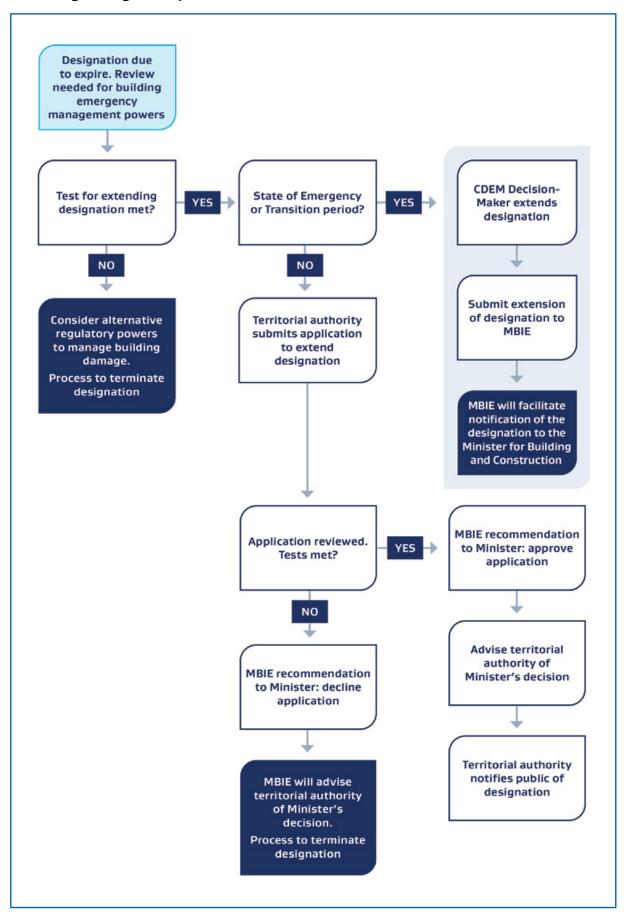
Designating an area process:



Termination of designation process:



Extending a designation process:



Appendix 3: Readiness Checklist

✓	Readiness Step 1: develop an operating structure
	Establish and record legal basis for the proposed response activities
	Develop policy statements for the likely scenarios, for example heritage building demolition
	Ensure delegations framework makes it clear who is authorised to request a designation and ensure the Building Response Manager and other relevant officials are authorised to exercise building emergency management powers (including rapid building assessments) during a designation.
	Prepare the operating structure and how teams will report
	Identify key roles
	Define specific roles and responsibilities
	Identify people for key roles
	Specify the composition of teams
	Identify support staff
	Decide how to contact key people in an emergency
	Identify and train local building control staff (Tier 2 and Tier 3 RBAs) to match local requirements
	Identify specialist building knowledge requirements
	Identify any gaps in available local knowledge and maintain a contact list of external specialists including engineer contractors
	Identify local facilities that could be used to accommodate people from outside the district
	Identify emergency response service providers
	Consider supporting functions including procurement, legal, financial and communications; arrange for external assistance as required
	Plan for and trial likely scenarios
	Develop a health and safety plan
☑	Readiness Step 2: identify an operational base and other facilities
	Identify and arrange for a building to serve as the assessment coordination centre
	Arrange for office equipment
	Identify a second building as an alternative coordination centre
	Establish a responder assembly point
	Identify the public contact centre(s)

✓	Readiness Step 3: gather information about buildings, critical infrastructure and the environment
	Identify and locate all key facilities, and premises storing or using hazardous substances
	Ensure earthquake-prone buildings, listed heritage buildings and critical structural weakness building records and files are up to date
	Prepare a default priority list of buildings and sites to check as part of the initial building assessment response
	Annually cross-check the priority list of buildings against a list of key facilities and infrastructure with priority response agreements in place
	Have an understanding of how the bigger building owners intend to cover their assessment needs and identify overlaps
	Establish realistic risk damage scenarios
✓	Readiness Step 4: develop a building assessment plan
	Clearly define authority and scope (for example, linkage back to the territorial authority emergency procedures)
	Develop links with other parties, such as Operation, Welfare and Logistic Managers, and other agencies such as Heritage New Zealand Pouhere Taonga
	Maintain mutual aid agreements for additional building control and other resources
	Maintain a list of locally available trained RBAs and other specialists (building control officials, structural and geotechnical engineers, heritage advisors and others)
	Maintain contracts for emergency work (shoring, demolition, hoardings, containers, cordons, secure storage, and debris dump sites)
	Arrange ongoing training for administrative staff
	Establish information management systems to capture data and provide rapid building assessment data management reports and maps for the Controller and Building Response Manager. Ideally, use business-asusual systems. Ensure the standard rapid building assessment database workbook is stored on an accessible data stick or geographically separated alternative system.
	Establish a plan for requesting and coordinating volunteer (ie deployed) RBAs, and for funding contracted services once outside the three-day volunteer period
	Establish a method for tracking RBAs, eg as a sign-in and sign-out register including assigned area of operation
	Have a plan for control at cordon access to enable assessment within cordons
	Compile critical pre-event data so that post-event data can be easily compared
	Establish who will manage and fund the collection of critical post event data such as aerial photography and LiDAR

✓	Readiness Step 5: systems, equipment and resources required for a response
	Assemble background information for inspections (maps and building-specific information)
	Prepare and stockpile assessment forms and placards
	Prepare induction packages
	Provide for resourcing all RBAs (eg personal protective equipment, assessment resources)
	Arrange adequate communications (temporary telephones, radios)
	Plan for transportation requirements
	Prepare information for building owners, occupiers and the public (coordinate with welfare services agencies)

Appendix 4: Equipment and Resource Checklist

Note: If the building assessment operation is not part of the Emergency Operations Centre, use this checklist for office requirements.

✓	
	Food
	Water
	Tables and chairs
	Communications equipment
	Whiteboards and markers
	Maps and other geospatial resources
	Office supplies
	Placards and rapid building assessment forms
	Photocopier (coloured weather-resistant paper for printing placards)
	Printers and computers (including, as appropriate, capability for assessment app download)
	Generator
	Means of amplification to brief hundreds of assessors (induction pack)
	ID card reader (and ID card printing machine, if required)
	Toilets, toilet paper, and other sanitary supplies
	Spare assessor personal protective equipment (for example, hard hats, safety footwear, high-visibility vests, torches, safety glasses, safety gloves, face masks)
	First aid kits
	Batteries

V	Resource checklist: Territorial authority to supply to each rapid building assessment team
	Vests for leadership staff
	Location of the EOC on a map and by coordinates, and details of the EOC layout
	Meeting and debrief facilities
	Induction packages for assessors
	Contact information for the known managers and a structure for the response team
	Briefing sheets with an outline of the rapid building assessment procedure, reporting requirements, contact points, communications arrangements, first aid, health and safety
	Official photo identification/authorisation (secure clip-on badges, lanyard or similar)
	Communication radios/devices
	Relevant field guide(s) for rapid building assessments
	Information about the area, including an overall map on which assessors can circle the affected area during briefings, large-scale street maps or photo maps of assigned areas, aerial photographs, hazard register, and building-specific information
	Security cordoning or barrier tape and spray paint
	Placards and means to secure (such as thumb tacks, plastic sleeves, duct tape)
	Indelible marker pens (fine: 4 black, 4 red) for marking the placards (note that ballpoint pens are not reliable in rain and fade under sunlight)
	Tablet or other electronic device (when using digital assessment forms)
	Batteries, waterproof covers etc for electronic devices
	Rapid building assessment forms (assess number of forms required for each team)
	Clip boards x2 (inside a plastic bag big enough to write inside when raining); paper pad, pencils
	Information handouts for occupants (including support agency referral information)
	A one-day ration of emergency food and water
	Food and accommodation (unless told otherwise)
✓	Personal Protective Equipment (PPE)
	High visibility vest/jacket
	Hard hat
	Protective glasses/goggles
	Other personal protective clothing such as gloves, dust masks, wet weather gear
	Torch and batteries
	First aid kit

Note: The forms, database, and area information may be provided on a digital data recording device (iPad, tablet, as available) preloaded with street maps, geotechnical hazard maps, photos, and building data. Alternatively, you can provide a USB stick with the data that can be loaded on to an assessor's laptop or tablet. It is best if the team is familiar with the device, the data, and also with the applications for recording, communication, and downloading. Hard copies of assessment forms will not be required if data entry is via a rapid building assessment app.

▽	Resources: to be provided by Rapid Building Assessors
	Proof of identity (organisational ID card or driver's licence, MBIE-issued RBA ID)
	Travel pack with sleeping bag, warm clothes, rain jacket, toothbrush and so on
	Hard hat, high-visibility vest, steel-capped boots or shoes

Appendix 5: Sample Rapid Building Assessor Authorisation Form and guidance

The purpose of this form is to record the authorisation of a Rapid Building Assessment Assessor to undertake Rapid Building Assessments in relation to an emergency under the Civil Defence Emergency Management Act 2002 and/or the Building Act 2004.

It also provides Assessors (and Authorising Persons) with key information and guidance on functions, resources, and procedures necessary for Rapid Building Assessments during a State of Emergency, Transition Period and/or a designation of an area following an emergency.

1.	Authorising Person:	Insert name of the Authorising Person and their role:	
		See page 2 for guidance on who the Authorising Person should be.	
2.	Employer:	Insert the name of the employer engaged (if applicable):	
3.	Assessor:	Insert name of person engaged (on behalf of the firm above, if applicable):	
		Assessor ID number: If currently on register of trained Rapid Building Assessors maintained by the Ministry of Business, Innovation and Employment (MBIE)	
4.	Date of authorisation:	Insert date of authorisation:	
5.	End date:	Insert the end date or set out the maximum period (e.g. maximum of 3 days):	
		unless extended or terminated sooner by the Authorising Person.	
6.	Scope and nature of services:	Rapid Building Assessments under the Civil Defence Emergency Management Act 2002 and/or the Building Act 2004 in the interests of public safety per the MBIE guidelines, including issuing placards following assessment.	
		Assessments are to be undertaken in <i>(insert area)</i> :	
		in relation to (<i>insert event/emergency being responded to</i>):	
7.	Special conditions:	Insert any special or additional conditions (e.g. The assessor will not perform geotechnical assessments):	
8.	Signatures:	Authorised person: Date:	
		Assessor (on behalf of firm noted above, if applicable): Date:	

Guidance for Assessors

Purpose of rapid building assessments

The purpose of rapid building assessments is to determine the usability of structures in the context of public safety during a State of Emergency, Transition Period and/or designation of an area following an emergency.

This guidance applies to Assessors carrying out rapid building assessments under the Civil Defence Emergency Management Act 2002 and/or the Building Act 2004 only.

Who is the Authorising Person?

The Authorising Person is named in the above form and is the person with authority to undertake rapid building assessments or to authorise others to do so. The appropriate Authorising Person will differ depending on the circumstances of the emergency.

If an area has been designated under the Building Act 2004, the Authorising Person for the purposes of this form is the "responsible person" as described in sections 133BJ and 133BK of the Building Act 2004.

	Authorising person
State of emergency at time of designation	A Controller (or a person acting under that person's authority)
Transition period at time of designation	A Recovery Manager (or a person acting under that person's authority)
No state of emergency or transition period at time of designation	The Territorial Authority or, in certain circumstances, the Minister for Building & Construction

If rapid building assessments are carried out under the Civil Defence Emergency Management Act 2002 (ie because the area has not been designated under the Building Act 2004):

	Authorising person	
State of emergency	A Controller (or a person acting under that person's authority)	
Transition period	A Recovery Manager (or a person acting under that person's authority)	

Note: if circumstances change, the Authorising Person may change, and this form may need to be updated.

Where the Authorising Person is a Territorial Authority, the person exercising powers on behalf of the Territorial Authority should hold the appropriate delegations. Delegations should be set up in advance to ensure efficiency.

Authorising Person roles and responsibilities

The Authorising Person will:

- provide the Assessor with the means of identification to authorise them to do this work or the Assessor will use the MBIE-issued identification as an authorised Rapid Building Assessor;
- 2. ensure the Assessor is provided with or has appropriate safety equipment;
- 3. ensure the Assessor undertakes a health and safety induction prior to undertaking any assessments, including a briefing on the emergency procedures in place;
- 4. ensure the Assessor will be supported by at least one other person in the field;
- 5. ensure the Assessor is provided with the standard assessment forms and placards as required.

What are the powers of the assessor?

Assessors acting under the authority of the Authorising Person may inspect the exterior and interior of a building or land in a designated area and prepare a post-event assessment of any risks posed by or to the building. They may then place a placard on the building identifying its usability and if necessary, record that access is restricted.

A trained Assessor (Tier 1 or Tier 2) should lead each assessment team. The register of trained Rapid Building Assessors maintained by MBIE records that an assessor has completed rapid building assessment training provided by MBIE and sets out the Tier the Assessor has achieved.

Assessor roles and responsibilities

The Assessor will:

- 1. follow the instructions of the Authorising Person;
- 2. not operate outside their field of expertise unless under the supervision of another suitably qualified building assessor;
- 3. take reasonable care for his or her own health and safety;
- 4. take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons:
- 5. not assume any obligation on behalf of the Authorising Person;
- 6. not release confidential information received in the execution of these duties to any other party or for any other purpose save for the rapid building assessment for this event; and
- 7. not talk to the media or make any public statement unless authorised to do so during or after the rapid building assessment.

Unless otherwise agreed, or otherwise provided in a contract for services or a contract of service, the Assessor provides the rapid building assessment services are in a voluntary capacity for the duration and under the conditions specified in the above form and there will be no remuneration for this work. Expenses incurred for travel and accommodation will be met by the territorial authority for the area the work is carried out in. In a national state of emergency these costs may be met by MBIE.

The Assessor shall perform services for assessment of the usability of structures in accordance with rapid building assessment guidelines as produced by MBIE. No other services shall be supplied without express instructions from the Authorising Person or other person with appropriate authority. In providing the services, the Assessor shall exercise skill, care, and diligence expected of a competent professional. The Assessor should advise the Authorising Person of any training or knowledge the Assessor has of building usability assessment systems.

The Assessor completing the rapid building assessment is aware of the safety issues associated with entering or approaching buildings or other structures following an emergency.

Assessor liability

When acting under the Building Act 2004, the Assessor is protected under section 390 of the Act from civil liability in respect of the Assessor's services under the Act, provided they act in good faith.

When acting under the Civil Defence Emergency Management Act 2002, the Assessor is protected under section 110 of the Act from liability for any loss or damage in respect of his or her services carried out under the direction of the Authorising Person, other than conduct that is grossly negligent or in bad faith.

General

Should work proceed beyond the duration indicated or for purposes other than emergency response, a commercial contract should be signed.

Either party may suspend all or part of the services by notice to the other party. It is understood that these services are undertaken under emergency conditions and circumstances as to the Assessor's availability, the nature of the situation, or the requirements of the Authorising Person, may change.

Appendix 6: Activating a Rapid Building Assessment Operation Checklist

✓	Response Step 1: Building Response Manager activates the rapid building assessment operational plan
	Activate the territorial authority's building assessment plan, amending it as needed to match the nature of the particular emergency and the requirements of the Controller/responsible person
	Set up an operations log for recording all key decisions and briefing/debriefing times
	Consider the nature and extent of the emergency, including key facilities affected and any geotechnical concerns
	Decide suitable operating structure and key roles (eg for recruiting and inducting RBAs; for briefing and coordinating assessment teams; data capture and IT support; wellbeing support; separate critical building team if severe damage)
	Liaise with MBIE for support as necessary (eg coordinating additional resource or advice)
✓	Response Step 2: set up a rapid building assessment operation (if required)
	Decide the approach – set overall assessment priorities with guidance from the Controller/responsible person and community leaders
	Seek advice on likely ongoing nature of hazards and geotechnical risks (eg from GNS Science, NIWA, MBIE)
	Establish specialist geotechnical group if required
	Decide which buildings to assess first (eg from list of prioritised buildings and information gathered by first responders)
	Make a preliminary estimate of the number of RBAs required – base this on the number of buildings within the initial area identified for the rapid building assessment operation
	Determine the extent of assessments likely to be required (eg Level 2 assessments for prioritised buildings, Level 1 for other buildings)
	Provide a data collection system for assessment results (liaise with the territorial authority IT Manager if system not established in advance)
	Gather material for RBAs (eg food and drink as appropriate, field guides, personal protective equipment, maps, placards etc) and establish field support
	Consider health and safety responsibilities; make sure system in place for recording who is assigned to which area and ensuring assessors log in and out each day
	Establish access to legal advice; liaise with communications staff for key messages
	Prepare for liaison with stakeholders including: the CDEM Operations Manager about cordons and barricades; those affected regarding any urgent stabilisation or demolition works; Heritage New Zealand; commercial building owners (who may commission their own engineering assessments); and the professional engineering community

☑	Response Step 3: establish and deploy RBA teams	
	Locate and engage the required number of trained RBAs (primarily from MBIE's Tier 2 list), using the assessor authorisation form in Appendix 5	
	Ask MBIE if help needed to identify more RBAs, or for more support for the management of the operation	
	Establish rapid building assessment teams (ideally three-person teams including two technical staff and led by a Tier 1/Tier 2 trained assessor); include geotechnical expertise as required	
	Check and provide suitable identification for assessors (Tier 1 and Tier 2 should already have MBIE-issued identity cards); provide them with other necessary equipment	
	Deploy rapid buildings assessment teams and mark their allocated areas on an overall map	
	Organise daily briefings and debriefings; check that assessors log in and out daily	
	Record and collate the assessment results; organise quality check before uploading data to ensure a consistent approach across assessment teams	
✓	Response Step 4: manage the ongoing rapid building assessment operation	
	Manage cordons, barricades and any other measures to protect buildings or keep people at a safe distance – the Building Response Manager should support the Controller by providing advice and information collected from assessments	
	the Building Response Manager should support the Controller by providing advice and information collected	
	the Building Response Manager should support the Controller by providing advice and information collected from assessments	
	the Building Response Manager should support the Controller by providing advice and information collected from assessments Manage building placards: change or remove these as necessary	
	the Building Response Manager should support the Controller by providing advice and information collected from assessments Manage building placards: change or remove these as necessary If further damage is likely, identify and use indicator buildings to provide systematic monitoring Monitor the assessment operation using feedback from completed assessments and any indicator buildings;	
	the Building Response Manager should support the Controller by providing advice and information collected from assessments Manage building placards: change or remove these as necessary If further damage is likely, identify and use indicator buildings to provide systematic monitoring Monitor the assessment operation using feedback from completed assessments and any indicator buildings; revise nature and scope of the operation where needed; seek more detailed building evaluations as required Consider urgent works such as stabilisation or demolition works to any severely damaged buildings on advice	
	the Building Response Manager should support the Controller by providing advice and information collected from assessments Manage building placards: change or remove these as necessary If further damage is likely, identify and use indicator buildings to provide systematic monitoring Monitor the assessment operation using feedback from completed assessments and any indicator buildings; revise nature and scope of the operation where needed; seek more detailed building evaluations as required Consider urgent works such as stabilisation or demolition works to any severely damaged buildings on advice from specialist critical building team Communicate progress throughout, including keeping the Controller updated on the status of the building	
	the Building Response Manager should support the Controller by providing advice and information collected from assessments Manage building placards: change or remove these as necessary If further damage is likely, identify and use indicator buildings to provide systematic monitoring Monitor the assessment operation using feedback from completed assessments and any indicator buildings; revise nature and scope of the operation where needed; seek more detailed building evaluations as required Consider urgent works such as stabilisation or demolition works to any severely damaged buildings on advice from specialist critical building team Communicate progress throughout, including keeping the Controller updated on the status of the building assessment operation and assessment results Connect with the Welfare Management and Public Information Management functions to enable relevant	

Appendix 7: Daily Operational Checklist

Repeat a check of this task list every 24 hours.

▽	Tasks (in approximate priority order)	Person(s) Responsible
	Check-in with CDEM Controller (during state of emergency)	Building Response Manager
	Hold a daily rapid building assessment operational command team meeting	Building Response Manager
	Check welfare status of rapid building assessment personal (food, psychological state etc)	Building Response Manager + RBA Sector Lead/Team Leaders
	Review Action Plan	RBA Operational Leads
	Check-in with MBIE	RBA Planning and Intelligence
	Review situational awareness for rapid building assessment operation	RBA Operational Leads
	Review hazards and risks identified in relation to rapid building assessment operation	RBA Command Team + Health & Safety staff
	Review resourcing requirements for rapid building assessment operation	RBA Logistics
	Review operational duration and pacing	RBA Command Team
	Review operation handover plan	Building Response Manager RBA Planning and Intelligence (where applicable)
	Ensure all new rapid building assessment personnel have been inducted and briefed prior to deployment	Building Response Manager + RBA Sector Lead/Team Leaders
	Manage rapid building assessment personnel roster and rotate personnel to ensure effective fatigue management	Building Response Manager

Appendix 8: Cordoning and Barricading Guidelines

✓	Cordoning – Example checklist
	In conjunction with emergency services, recommend to the Local Controller to establish any cordon(s), detailing cordon plan and boundaries
	Establish a cordon office, defining cordon management responsibility and access rules (eg cordon office, cordon access pass process)
	Hold a planning session with appropriate agencies, the Building Response Manager, Operations Manager, USAR, Police, and Fire and Emergency New Zealand to determine whether occupants within the cordon need to be evacuated
	Determine with Logistics/Operations and Police how any cordons will be put into place on the ground while fencing and barrier needs are arranged
	Work with Logistics to supply and place fencing, barricades, and secure storage for valuable property, and access to appropriate storage for debris from demolition and secure storage for debris that requires forensic review
	If size and/or the number of personnel required to control the cordon exceeds operational resources, consider where to get additional cordon control staff (consider Parking Enforcement, Park Rangers, general enforcement staff, Police, and New Zealand Defence Force)
	Place fences and cordon access points

Set up barricades at an appropriate distance

Decide how far from the building to set up the fence/hoarding/barricade. The distance between the barricade and the building will depend on the type of potential failure. As a general guideline, RBA assessors will default to the following:

- If the total building may fail, base the distance on the total height of the building
- If the top storey only may fail, base the distance on the height of the top storey
- If the parapet only may fail, consider allowing a distance of two metres from the veranda fascia, or three metres from the building
- If the building is an unreinforced masonry construction, consider multiplying this distance by 1.5 (bricks tend to splay outwards upon hitting the ground).

Also consider the mass of material in any potential failures. Add the base width of the potential material pile to the distances given above. If geotechnical hazards have been identified, an impact assessment will be required that addresses the scale of the geotechnical hazards.

Set up barricades to minimise disruption

Consider how fences/hoardings/barricades will interact with traffic and pedestrians. The further the barricades are from the building, the greater the potential for conflict. The key driver is the life safety, which means barriers are often required in locations that disrupt other activities. It is important to make information about the barrier impact available to the Controller.

Factors to consider include:

- the volume of traffic and pedestrians at peak periods
- the complexity of the route that passes the building: road alignment, crossroads, traffic lights etc
- whether different levels of protection are needed for pedestrians, people with disabilities, cyclists, and motorists. For example, you may need to direct pedestrians to the other side of the road, provide more pedestrian crossing points, or have a barricade system that alerts visually impaired pedestrians.

Also consider the potential for conflict with remedial work on roads, services and buildings. Find out whether traffic management plans (TMPs) will be provided and approved for such activities. A TMP can give information that will help decide where to put the barricade, and what kind of barricade to use.

Set up barricades inside buildings where necessary

If a building has a yellow (access restricted) placard, put up fences/hoardings/barricades or hazard tape to mark off any areas that are considered unstable. When placing barricades inside buildings do not place them too close to a hazard. For example, consider that glass and brick walls can shatter in aftershocks.

Use the appropriate kind of barricade

Use the appropriate fence/hoarding/barricade for the circumstances. Options include:

- shipping containers if stacked the bottom layer(s) may need to be filled with sand/water/concrete for ballast and the containers may need to be braced together
- concrete ballast blocks
- temporary road barriers
- wire fences
- cones
- tape.

The simpler the barricades, the easier they can be moved, including by people who are not authorised to move them. Structural engineers are best placed to decide on what should be barricaded and the appropriate method.

It is suggested to be conservative in selecting and placing barriers, recognising that both the hazard and the barrier could deteriorate between inspections.

Actively manage barricades and cordons

The cordon office should review fences/hoardings/barricades daily by vehicle and several times a week on foot. There should be an active programme to review, reduce, and remove when information on the hazard changes. To do this review, check the database to see which buildings needed barricading. Do not depend on the existence of a placard to confirm that a barricade should be there. If someone unauthorised has moved the barricade, the placard may also have been removed.

The cordon office will eventually need to hand over responsibility for cordon management at the end of the operation. This should be acknowledged when setting up the cordon office.

The latest technical guidance on cordons is contained in *FEMA Recommendations for Cordoning Earthquake-Damaged Buildings* (FEMA P-2055-2/Sept. 2023): <u>Recommendations for Cordoning Earthquake Damaged Buildings</u> (fema.gov)

