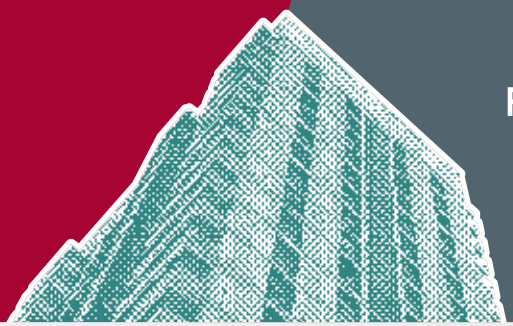
Bin chutes



Building Safety Regulator HSE

A bin chute is a vertical shaft that passes through the floor/ceiling compartment barriers to allow residents to dispose of rubbish. A chute will typically run from all residential floors down to a bin room or store on the ground or basement floors.

Bin chutes in some existing buildings might open directly onto corridors rather than being in their own compartments. If this is the case, and there is a fire in the chute or the bin store below, fire and smoke could spread into the corridor.

It will not usually be practical to relocate bin chutes, and providing compartmentation to current standards may not be reasonable (or even possible depending on the building design). The example diagram on page 2 provides a number of different options that you could consider taking to improve building safety. The options are not exhaustive – there may be other things you could do – and it may be reasonable to take more than one additional measure. What is reasonable for your building will depend on the individual circumstances.

Scenario:

The risk of spread of fire/smoke vertically via the bin chute.

Possible reason(s):

By their nature, bin chutes pass through the compartment barriers between floors. In some older buildings, the bin chute opens directly onto a corridor on each floor rather than into its own compartment.

Short-term responses:

The first thing to do is to assess the bin chute(s) and identify what control measures are in place. You should then consider whether any additional measures are reasonable. You may need help from a fire risk assessor or other competent person.

Additional responses:

You may already be doing everything that is reasonable. Make sure you record the reasons for your decision.

There are a number of additional measures you could consider. The ones listed here are only examples – there may be other things you could do and it may be reasonable to take a combination of actions.

Some measures may not be suitable in some buildings – what you do will need to be based on the individual circumstances of your building.

Remember that some control measures do not operate instantly – fusible links or sprinklers need a fire to reach a specific temperature before they operate.

Examples of measures you could take:

- You could install partitions and self-closing doors to provide compartmentation around the bin chute to prevent the spread of fire and smoke. This option may not be reasonable (or possible) in some existing buildings but should be considered
- Ensure a fire-resisting door or hatch is in place and in good condition on each floor/at each opening to the chute(s)
- Fit an automatic fire-resisting shutter at the base of the chute may help to restrict the spread of fire and smoke from a fire in the bin store. The shutter should, as a minimum, be operated on a fixed temperature fusible link
- Install a sprinkler system located over the bins. The sprinklers should be either frangible bulb or fusible link sprinkler heads, or open sprinkler heads with water discharge controlled by smoke detectors
- You could seal off bin chutes on each floor to maintain compartmentation. This option has implications for management of rubbish and increases the risk of fire hazards/blocked escape routes if residents leave bin bags in corridors. You would therefore need to consider the consequences of this action as well as any benefits
- You should also review what else is stored in the bin store that may increase the risk of fire. You should also review the security of the bin store to minimise the risk of arson.

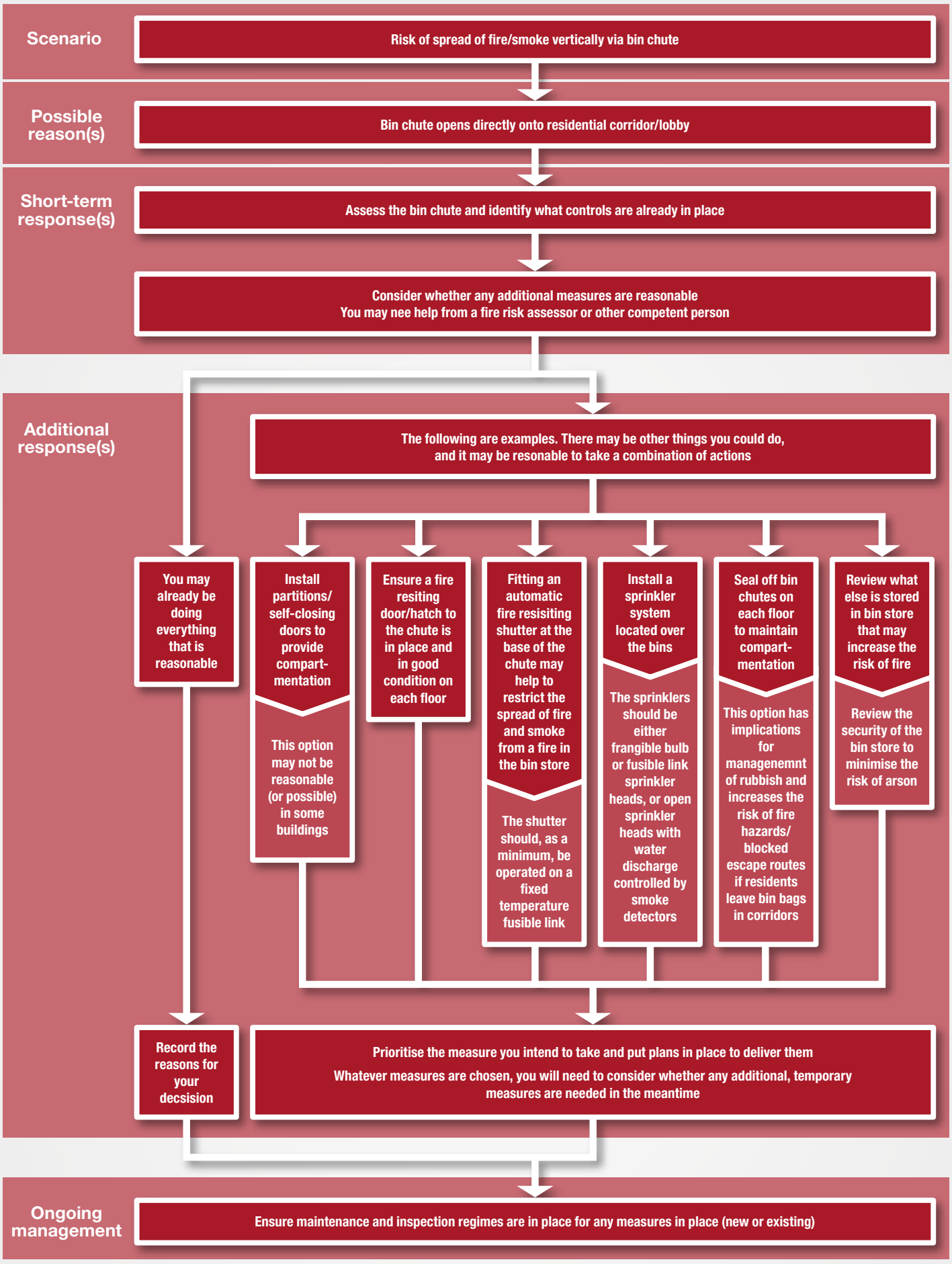
You should prioritise the measures you intend to take and put plans in place to deliver them.

Whatever measures are chosen, you will need to consider whether any additional, temporary measures are needed in the meantime.

Ongoing management:

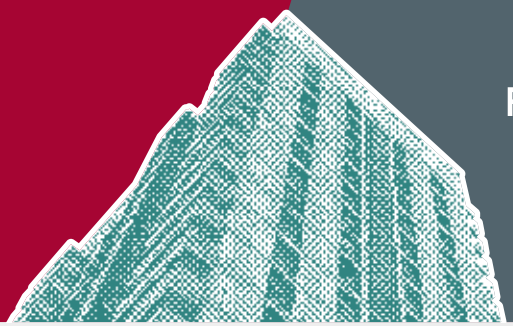
Ensure maintenance and inspection regimes are in place for any measures in place (new or existing).

Principles and Benchmarks - Bin chutes



Principles and Benchmarks

Fire doors – not closing



Building Safety Regulator HSE

Fire doors are an important safety measure in high-rise residential buildings. They can help prevent the spread of fire and smoke from the compartment where it starts and provide a barrier between people and the fire during any evacuation.

Fire doors is a shorthand for fire-resisting door sets or fire-resisting door assemblies. A door set or door assembly is made up of not only the door itself but also the frame and door furniture such as locks and handles.

Some fire doors – such as to cupboards or rarely used rooms may be kept locked when not in use. Other fire doors are usually unlocked and need help to make sure they close after use – often by using a self-closing device. If one of these types of fire doors does not close after use, and there is a fire in that compartment, there is a risk that the fire could spread.

This example relates to a self-closing fire door not closing, but there are other issues that can happen with fire doors. Similarly, the possible responses listed are not exhaustive. The key thing is to investigate any problems and fix them.

The example also assumes that the door is a fire door (of the correct type) and needs to be one based on the relevant standards and fire risk assessment.

Scenario:

A self-closing fire door does not self-close.

Background/possible reason(s):

There are several reasons why a self-closing fire door does not self-close. Examples include:

- The self-closing device may be missing, broken or need adjusting
- The door may have been deliberately propped open
- The door may be binding on its hinges
- The door or frame may be damaged, preventing it from closing
- The bottom of the door may be binding on the carpet or flooring

Short-term responses:

The first thing to do is investigate why the door is not closing. You may be able to do this yourself, but if the reason is not obvious you may need a fire door specialist to help you. Whoever does any work on your fire doors should be competent to do so.

If the problem(s) can be fixed straightaway (e.g. by adjusting the door or replacing the self-closing device) then action should be taken there and then.

If the problem(s) cannot be fixed straightaway (e.g. because a part or a new door is needed), then you should do a combination of things:

- Arrange for the necessary action to be taken as soon as possible
- Raise awareness of the need to close the door manually in the meantime. This may include telling the residents of the flat/corridor affected or considering signage or a notice. Although signs or a notice would not be acceptable as a long-term solution, they may be helpful as an interim measure
- Consider whether any other measures are needed to manage the risk until the problem has been fixed

Additional responses:

The additional measures that you should take will depend on why the fire door was not self-closing.

Measures could include:

- If the self-closing device had been removed or disabled, or if the door has been propped open, educate residents on the importance of fire doors and how they help keep people safe
- If the self-closing device had failed, investigate why and whether other similar devices may need to be replaced
- If the issue had been seen but not reported, educate residents, staff and contractors on the importance of defect reporting
- If the issue had been reported but not actioned, review the systems in place for dealing with defects that are reported
- If the problem was caused by a change to the building – e.g. new carpeting – review how change is managed

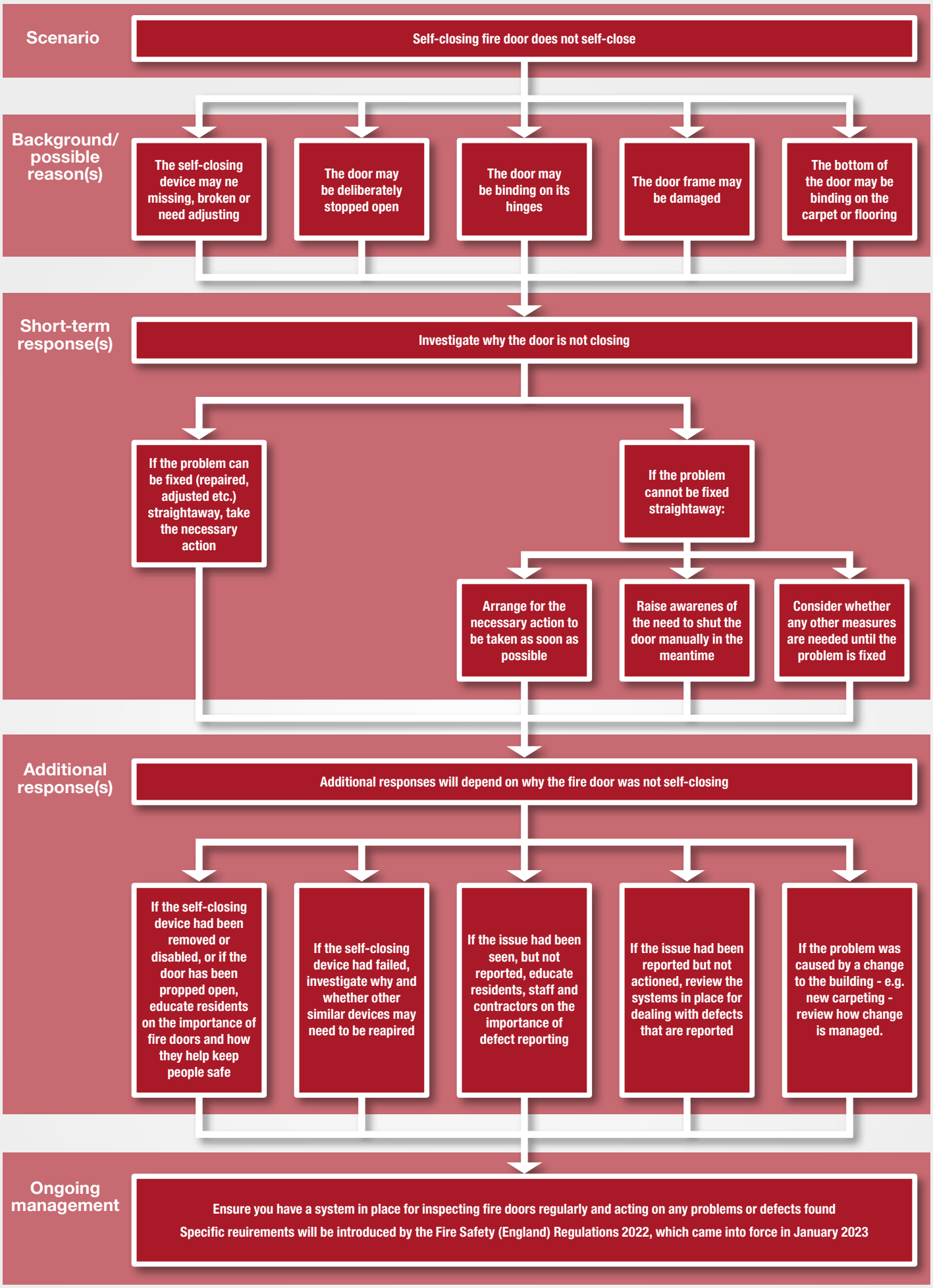
Principles and Benchmarks - Fire doors

Ongoing management:

Ensure you have a system in place for inspecting fire doors regularly and acting on any problems or defects found.

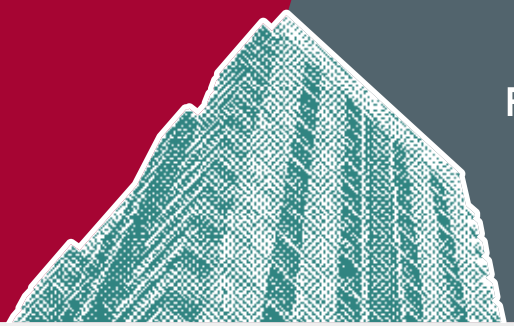
Specific requirements will be introduced by of the **Fire Safety (England) Regulations 2022,** which came into force in January 2023.

Principles and Benchmarks - Fire doors



Principles and Benchmarks

Fire doors – cannot confirm it is a fire door



Building Safety Regulator HSE

Fire doors are an important safety measure in high-rise residential buildings. They can help prevent the spread of fire (and smoke) and from the compartment where it starts and provide a barrier between people and the fire during any evacuation.

Fire doors is a shorthand for fire-resisting door sets or fire-resisting door assemblies. A door set or door assembly is made up of not only the door itself but also the frame and door furniture such as locks and handles.

Some doors look like fire doors but may not be marked or identified as such. This example assumes that you have already checked and confirmed that a fire door is needed in that location/for that purpose. You could do this be referring to the building's fire risk assessment or a competent person such as a fire risk assessor.

You could also use a similar approach if you know it is a fire door, but it has replacement fittings that you cannot confirm maintain the integrity of the fire resistance, As with other examples in this series, the possible responses listed are not exhaustive. The key thing is to investigate any problems and resolve them.

Scenario:

You may have doors which need to be fire doors but do not appear obviously marked or identified as such.

Background/possible reason(s):

There are a number of possible reasons for this:

- Fire door markings may have been missed
- It could be an old fire door that isn't marked
- It looks like or has some features of a fire door but isn't one

Short-term responses:

The first thing to do is to investigate whether it is a fire door or not.

You could do this by checking records – but bear in mind that what is actually there may differ from the records – e.g. the paperwork may refer to a previous door or a door may have been modified (with new locks for example) since it was fitted.

You might find information in the building's health and safety file if it was built recently. Alternatively, other records or the contractors who fitted the door may have information.

You can also inspect the door.

You could get a competent person to inspect the door.

You could also do some basic checks yourself. For example, you could check markings haven't been missed. Labels are often on the top edge of a door and not visible from ground level. Alternatively, plugs (circular disks) might be found on the hinge side of the doors.

You could also check basic features of the door. These won't prove conclusively that it is or isn't a fire door, but may help you work out next steps. For example, you could check the thickness of the door or the number of hinges. If it is less than 45mm thick (30 minute door required) or 54mm (60 minute door required) it is unlikely to be a fire door. If it does not have 3 hinges it may not be a fire door.

Additional responses:

There are a number of possible outcomes to your investigations.

You may be able to confirm it is a fire door. If so, make sure you record the details for future reference

You may not be able to confirm it is a modern fire door, but it meets previous standards or appears to meet some of the requirements for a fire door. If this is the case, you should assess whether the door can be considered to be a fire door. These are sometimes referred to as 'notional fire doors'.

Whoever does this will need to be competent – you may need a consultant or contractor to help you. You will find further information on notional fire doors in Fire Safety in Purpose-Built Blocks of Flats.

If you have a large number of the doors or doors with the same replacement fittings, you could consider getting one tested to see if it meets the requirements for a fire door. Whilst there will be a cost involved with this, if it passes it could be cheaper than replacing a large number of doors.

One property owner had replaced key locks with card operated locks on over 200 doors but could not evidence that the fire resistance of the door had been maintained. They had a door tested, it passed and saved them having to replace the doors. A comparatively small cost saved them a large amount of money.

If you can regard the doors as notional fire doors, or they pass a test, record the details as you would for any other fire door.

If you cannot treat it as a notional fire door, it fails a test, or it is obviously not a fire door, you will need to prioritise and schedule for replacement. Some doors will be a higher priority than others – e.g. a door to a staircase enclosure will likely be a higher priority than a cupboard door which residents don't have to pass when evacuating.

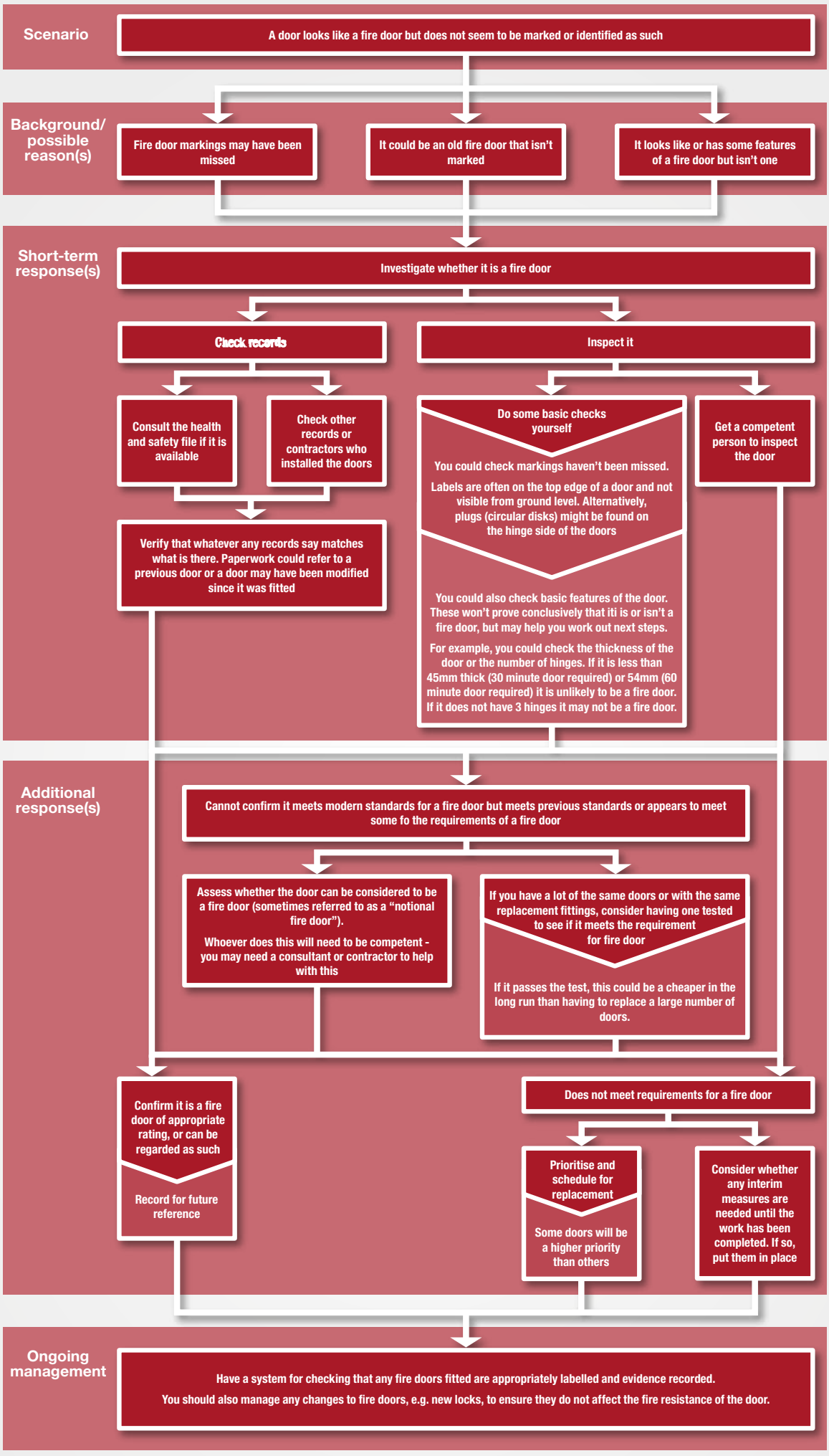
You should also consider whether any interim measures are needed until the replacement work has been completed. If so, you should put them in place.

Ongoing management:

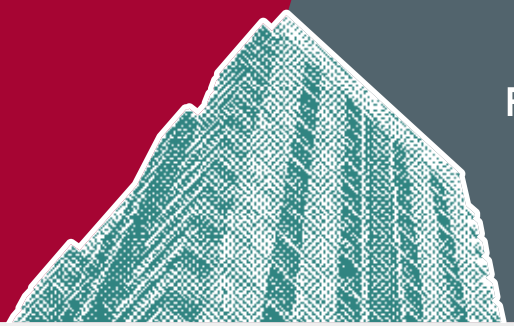
Whatever the result of your investigations, you should ensure you have a system for checking that any fire doors fitted are appropriately labelled and evidence recorded.

You should also manage any changes to fire doors, such as new locks, to ensure they do not affect the fire resistance of the door.

Principles and Benchmarks - Fire doors



Lifts



Building Safety Regulator HSE

Normal lifts should not be used in the event of a fire. Firefighting or firefighters lifts have additional measures in place to allow the fire and rescue service to use them when tackling fires. This is particularly important with taller buildings as it means firefighters do not have to climb many flights of stairs, carrying heavy equipment.

This document will use the term 'firefighting lift' to refer to these types of lift. Different standards may refer to them as that, or as 'firefighters lifts'. Older documents may refer to 'fireman's lifts'. Here we are using it as a shorthand to mean a 'lift with protection measures, controls and signals that enable it to be used under the direct control of the fire and rescue service in fighting a fire'. Further information can be found in **BS 9991** or **BS 9999**.

Older buildings may not have firefighting lifts. Since they are generally bigger than normal lifts, it may not be physically possible to replace a non-firefighting lift with a fire-fighting one. However there may be reasonable measures that can be taken to upgrade a normal lift to allow the fire and rescue service to use it.

Scenario:

Firefighters face additional challenges when dealing with a fire as they are unable to use the lift.

Background/possible reason(s):

The lift(s) in existing buildings may not be firefighting lifts because they were never designed/installed to meet those requirements.

You may not know whether the lift is a firefighting lift.

It is also possible that the lift is a firefighting lift but has not be maintained so it can still be used as one.

Short-term responses:

If you do not know whether it is a firefighting lift, the first thing to do is establish whether it is or not.

You may need the help of a lift engineer or the lift manufacturer.

Standards such as **BS 8899:2016** or **BS EN 81-72:2015** may help you.

If you find it is a firefighting lift, or if you knew it was but it had not be maintained so it can be used as one:

- You should review the lift's maintenance records and work out what needs to be done to make it usable as a firefighting lift
- Make arrangements for work to be carried out
- Tell the fire and rescue service when the lift is suitable for use as a firefighting lift

If you find it is not a firefighting lift, or if you knew it wasn't:

- Review the lift against a standard such as **BS 8899:2016**. Again you may need the help of a lift engineer or the lift manufacturer
- Decide which, if any, of the possible changes may be reasonable
- Liaise with the fire and rescue service to find out if any of the changes identified would allow them to use the lift in an incident – this is critical in deciding what action to take

Additional responses:

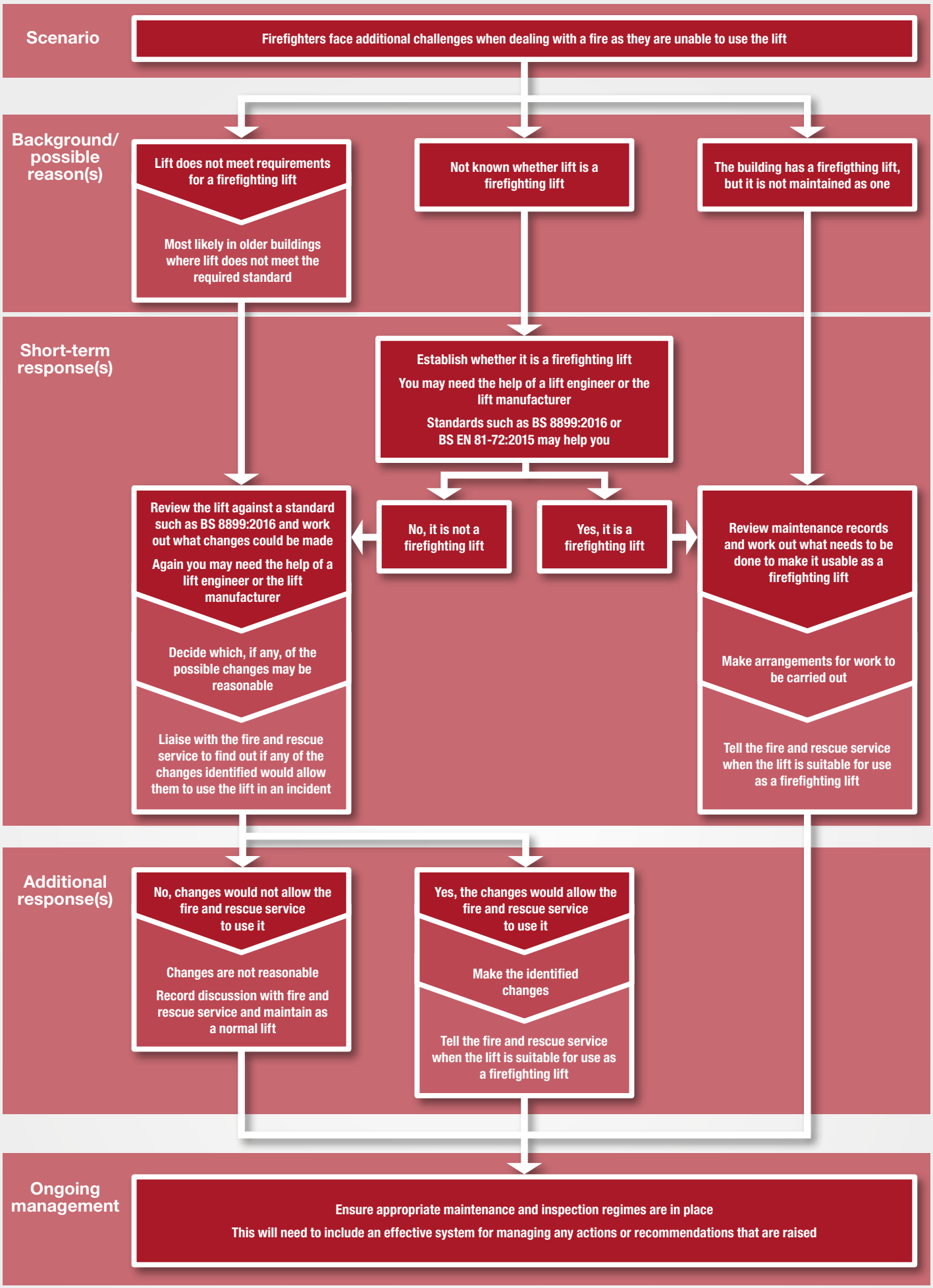
If making certain changes would allow the fire and rescue service to use the lift, and they are reasonable, then you should make them and tell the fire and rescue service when the lift is suitable for use as a firefighting lift.

If the measures identified would not allow the fire and rescue service to use the lift then those changes would not be reasonable. You should record the discussions with the fire and rescue service and maintain the lift as a normal passenger lift.

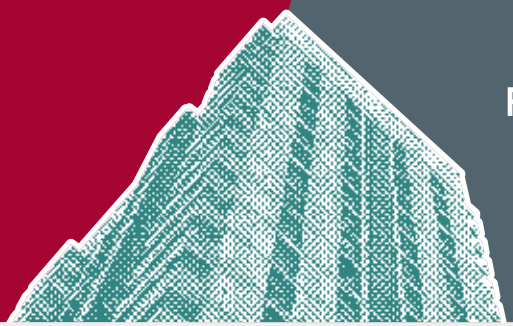
Ongoing management:

Ensure maintenance and inspection regimes are in place for the lift(s) whether they are passenger or firefighting. This will need to include an effective system for managing any action or recommendations that are raised.

Principles and Benchmarks - Lifts



Resident engagement – Multiple Languages



Building Safety Regulator HSE

Being able to communicate effectively with residents is essential for managing building safety risks.

This example relates to communicating a change in evacuation strategy, but there are many situations where you will need to engage with residents. Similarly, the possible responses listed are not exhaustive. The key thing is that communication is effective.

Scenario:

The building's fire evacuation strategy has changed from 'Stay Put' to 'Simultaneous Evacuation'.

The change needs to be communicated effectively to residents, many of whom do not speak English.

Background/possible reason(s):

500 residents live in the building, including 150 who do not speak English. 15 different languages are spoken.

Short-term responses:

Infographics do not rely on understanding a particular language.

You could display infographics of the updated fire evacuation plan throughout the building. You could also post infographics of the updated policy under the door of each flat.

You could hand-deliver a booklet of more extensive information about the updated policy to each flat:

- For flats where the main language is known, translate the information accordingly
- Where the main language is not known, provide information in English and add a QR code. Scanning the code links to translations in several alternative languages

Additional responses:

Liaise with the local fire service or community leaders as a 'trusted voice' for residents.

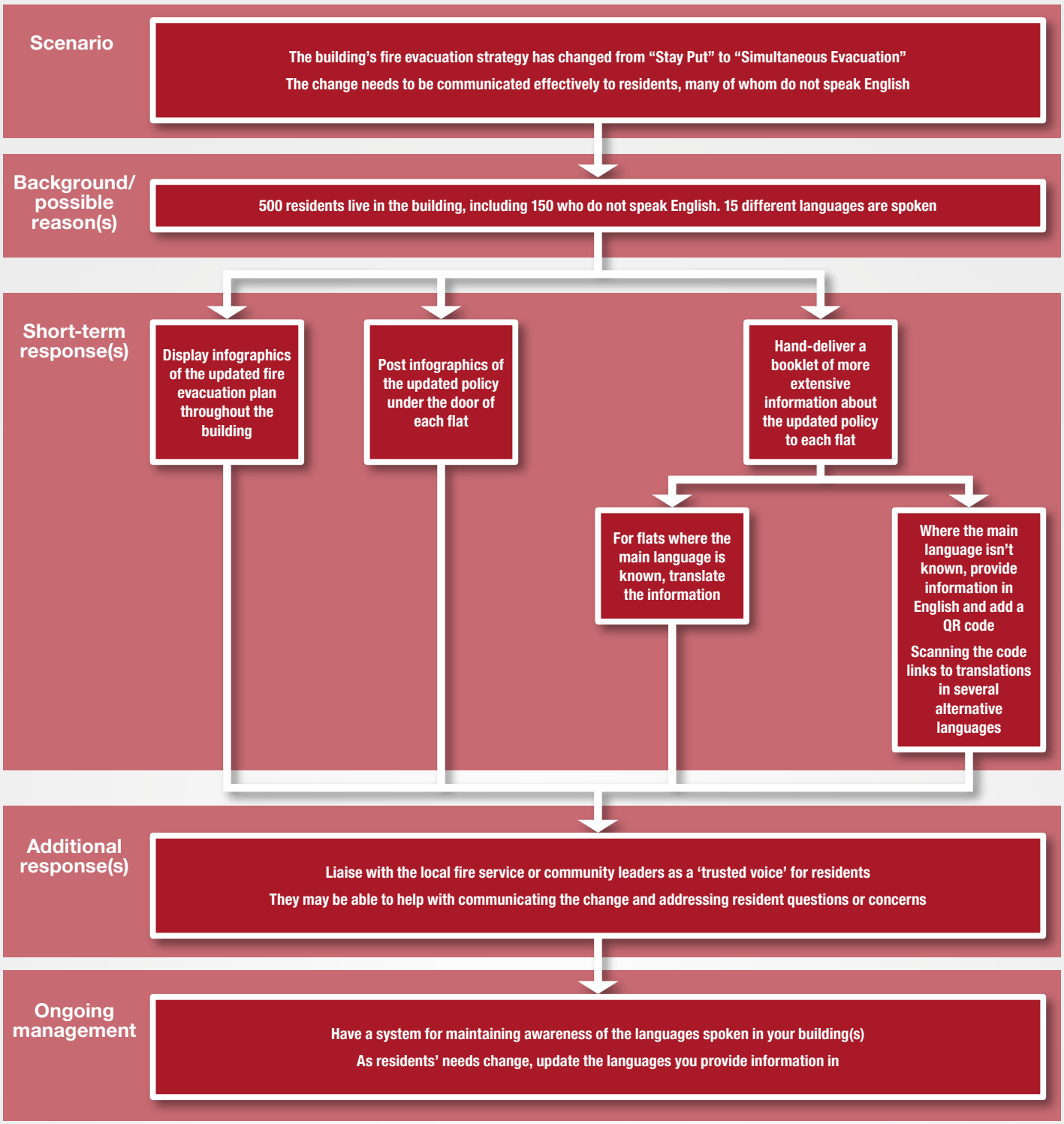
They may be able to help with communicating the change and addressing resident questions or concerns.

Ongoing management:

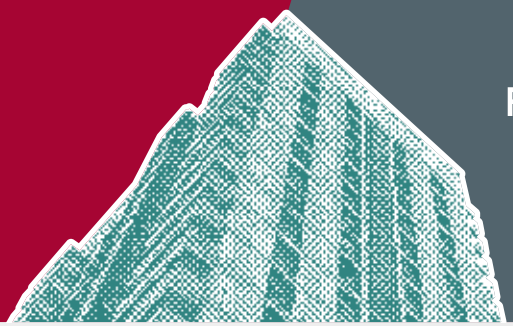
Have a system for maintaining awareness of the languages spoken in your building(s)

As residents' needs change, update the languages you provide information in

Principles and Benchmarks - Lifts



Resident engagement – Outdated information



Building Safety Regulator HSE

The Building Safety Act will require Principal Accountable Persons (PAPs) to prepare a residents' engagement strategy.

As part of this, you will need up-to-date information about who lives in the building.

This example covers a general update of out-of-date information, but you could follow a similar approach if you needed to contact residents about other aspects of building safety. The suggestions in this example are not exhaustive and other ways to get the information may be just as effective.

Scenario:

The Principal Accountable Person (PAP) for the building is preparing their residents' engagement strategy and needs up-to-date information about who lives in the block.

Background/possible reason(s):

A number of residents have sold their flats and moved, and the information held is out-of-date.

The PAP will need to provide their residents' engagement strategy to residents and owners and needs to refresh the information they hold.

Short-term responses:

You could post an information gathering survey under the door of each flat. This will ensure it is received, rather than leaving in mailboxes where it may be missed. The same information could be displayed on communal noticeboards to raise awareness.

Things you should think about include:

- Targeting the information-gathering at both new and existing residents – people's needs can change over time and information about existing residents may also be out-of-date
- Some of your residents may not speak English. You should consider this when sending out the survey. You could translate the survey and post the appropriate version under doors. You could also put a QR code on the survey which, when scanned, links to versions of the survey in other languages
- Take the opportunity to explain to residents the relevance of the survey and how it contributes to keeping them safe. This may encourage uptake

Additional responses:

You should call at each flat to offer guidance and support where required.

If residents are out, or so they can get further support if needed, you could leave call-cards detailing when help will be available, for example for the following fortnight.

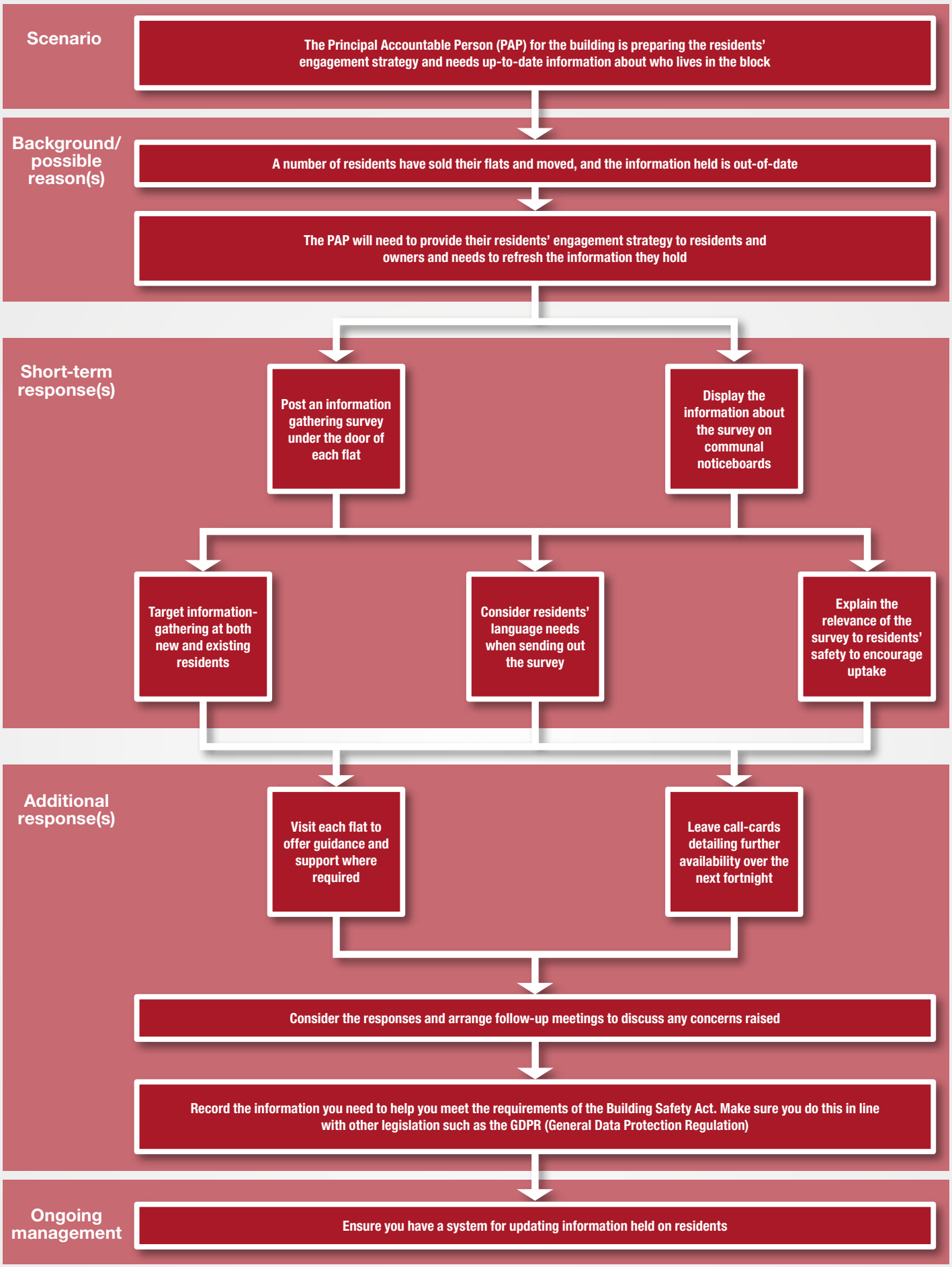
Consider the responses and arrange follow-up meetings to discuss any concerns raised

Record the information you need to help you meet the requirements of the Building Safety Act. Make sure you do this in line with other legislation, such as the GDPR (General Data Protection Regulation).

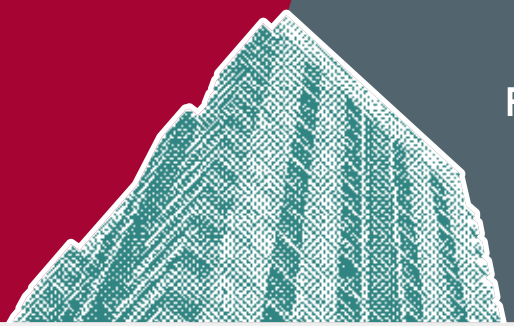
Ongoing management:

Ensure you have a system for updating information held on residents.

Principles and Benchmarks - Lifts



Structural – Balconies



Building Safety Regulator HSE

Problems reported with balconies

An issue with a balcony may not mean there is a structural problem with the building as a whole, but it may indicate a wider problem that might need further investigation.

Problems with a balcony may also be an issue for those in the flat concerned or those below / around the building. Although not necessarily covered by the Building Safety Act, such problems should be investigated and put right.

Scenario:

Problems have been identified with one or more balconies. It is likely that residents of the affected flat(s) will raise any issues. They could also be noted during inspections of the property such as part of the tenancy agreement or during checks when residents move out/new residents move in.

Background/possible reason(s):

There are a number of issues that could be raised. These include:

- Spalling of concrete. Spalling is different from cracking. Concrete spalling is when a piece of concrete breaks away from the main structure. A common cause for this is corrosion of the steel reinforcement
- Balconies seem 'bouncier' or seem to be moving. This is sometimes called deflection
- Handrails move or are corroded or gaps have developed where they join the wall

Short-term responses:

The first thing to do is investigate the issue and what has caused it as soon as possible.

It is very likely you will need to use a specialist such as a structural engineer to help you.

You may want to consider recommending residents of the affected flat(s) and the one(s) immediately below do not use their balconies until they can be assessed.

What you need to do will depend on the result of the assessment. If you haven't already done so, it might be necessary to recommend that some balconies are not used until work can be completed. You could also recommend residents remove items stored on balconies – but only if it is safe to do so.

If there is a risk that a balcony or part of one could fall from the building, you should consider blocking off the area below to protect people walking past. You may also want to contact the local council or your insurance company.

Additional responses:

You may need to inspect other balconies or other parts of the building.

The action required could include:

- You might not need to do anything else
- Monitoring or minor repairs may be needed, but balconies can continue to be used in the meantime
- Urgent or extensive work may be needed. One or more balconies may not be safe to use in the meantime

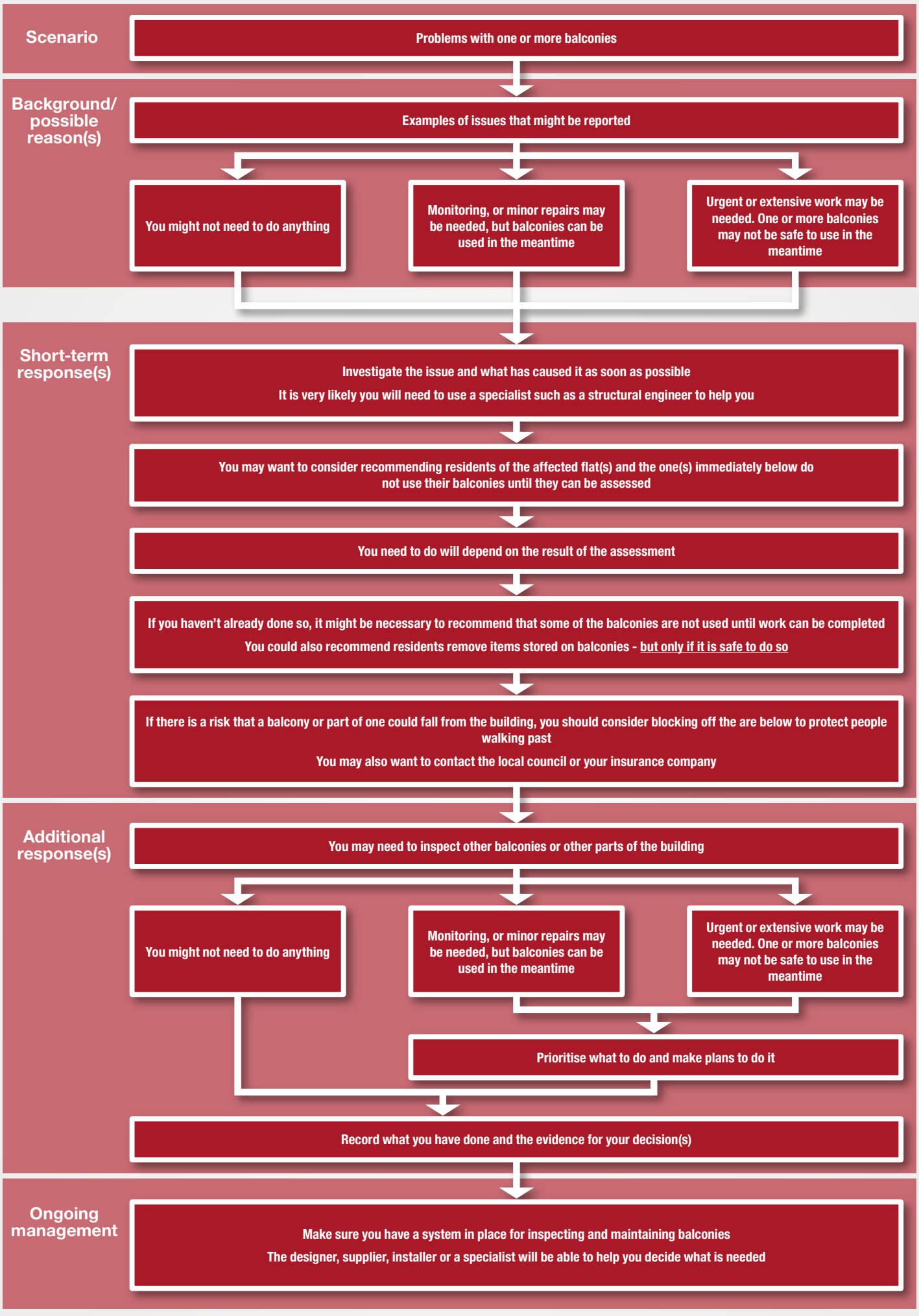
Whatever is needed, you should prioritise what to do and make plans to do it.

You should record what you have done and the evidence for your decision(s).

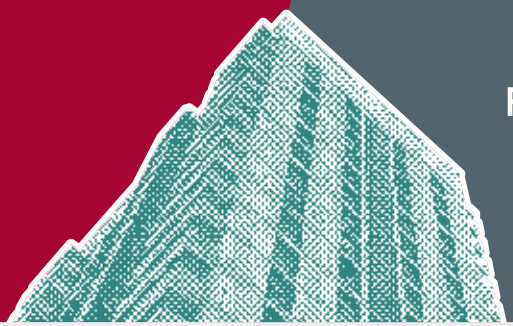
Ongoing management:

Make sure you have a system in place for inspecting and maintaining balconies. The designer, supplier, installer or a specialist will be able to help you decide what is needed.

Principles and Benchmarks - Structural



Structural – Damage to structural fire protection



Building Safety Regulator HSE

Scenario:

Damage has been noticed or reported to what could be structural fire protection.

Background/possible reason(s):

There could be a number of reasons for this::

- It may not be structural fire protection – it is not always easy to tell just by looking
- It could be damaged through normal wear and tear
- It could be because of a specific incident or deliberate damage
- It could have happened during planned or unauthorised work on the building

Short-term responses:

Firstly you need to establish whether it is structural fire protection. You may be able to do this yourself by referring to records or you may need to get a competent person to help you.

If it is not structural fire protection, consider whether it could affect the spread of fire / compartmentation:

- If not, deal with as cosmetic damage.
- If it is, assess the risk and decide what needs to be done. You will then need to take any urgent or short-term actions identified.

If it is structural fire protection, a competent person should assess the risk and decide what needs to be done. You will then need to take any urgent or short-term actions identified.

An example of short-term action might be:

- **Issue:** Damaged structural fire protection to a column in an underground car park
  - **Action**: Close off the nearby spaces to reduce the risk in case of a vehicle fire

Additional responses:

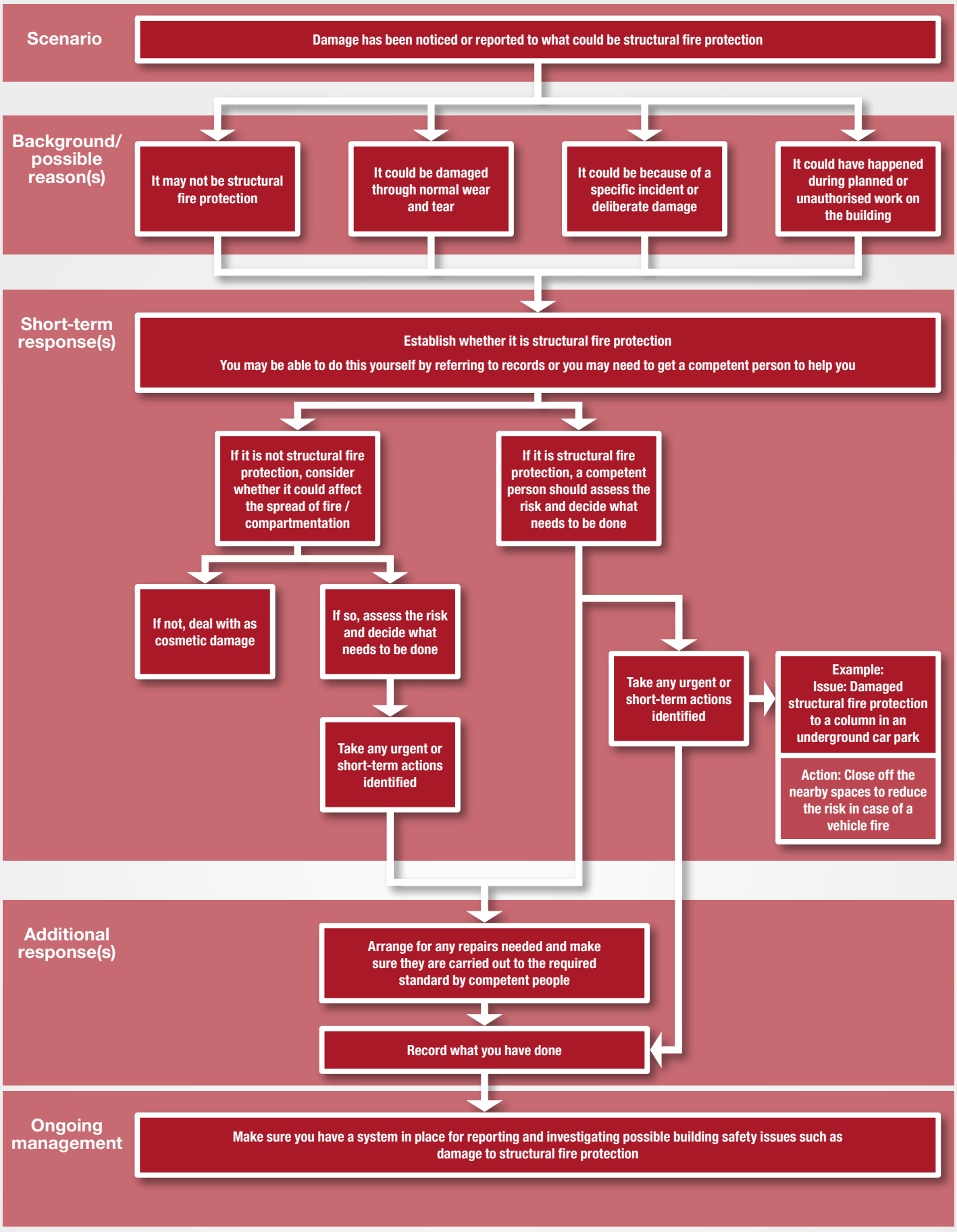
You should arrange for any repairs needed and make sure they are carried out to the required standard by competent people.

Record details of what you have done.

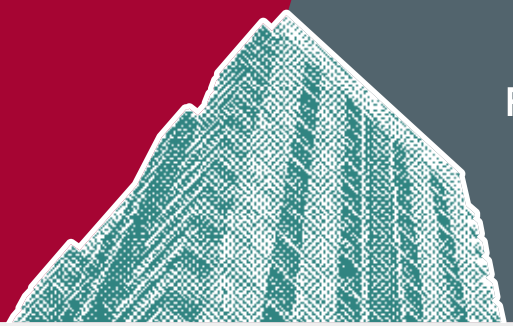
Ongoing management:

Make sure you have a system in place for reporting and investigating possible building safety issues such as damage to structural fire protection.

Principles and Benchmarks - Structural



Structural – New cracking



Building Safety Regulator HSE

New cracking has been noticed or reported

Cracks in walls or concrete are common. They do not necessarily mean that there are structural problems with the building, but new cracks should be investigated and may need to be monitored.

Scenario:

New cracking has been noticed or reported in the building. This might be as part of routine inspections of the building or it may have been reported by a resident.

Background/possible reason(s):

There are a number of possible causes for cracking. These include:

- Cracking could be cosmetic or a local, non-structural issue
- Cracking could indicate a structural problem
- Cracking could be one example of a wider problem

Short-term responses:

The first thing to do is for someone competent to make an initial assessment as soon as possible. This might be one of your staff if they have the necessary skills and experience. Width of the crack(s) will be a relevant factor

This should include looking for other cracking in the same or similar areas.

If the competent person sure that the cracking is just cosmetic, you may not need to take any further action.

If you cannot be sure the cracking is just cosmetic, you will need to do more:

- Arrange for a specialist to assess the cracking
  - Depending on the outcome of the assessment, you may need to do more – see below
- Consider whether any urgent action is needed
  - While this is unlikely if the cracking is new and limited, it should be considered

Additional responses:

There are a number of possible outcomes after the cracking has been assessed. These include:

- The specialist may recommend no further action
- They may recommend a programme of monitoring
- You may need to take action to put the problem(s) identified right. What you need to do will depend on what the problem is, what caused it and how widespread it is
- If the problem is widespread, you may need to investigate further

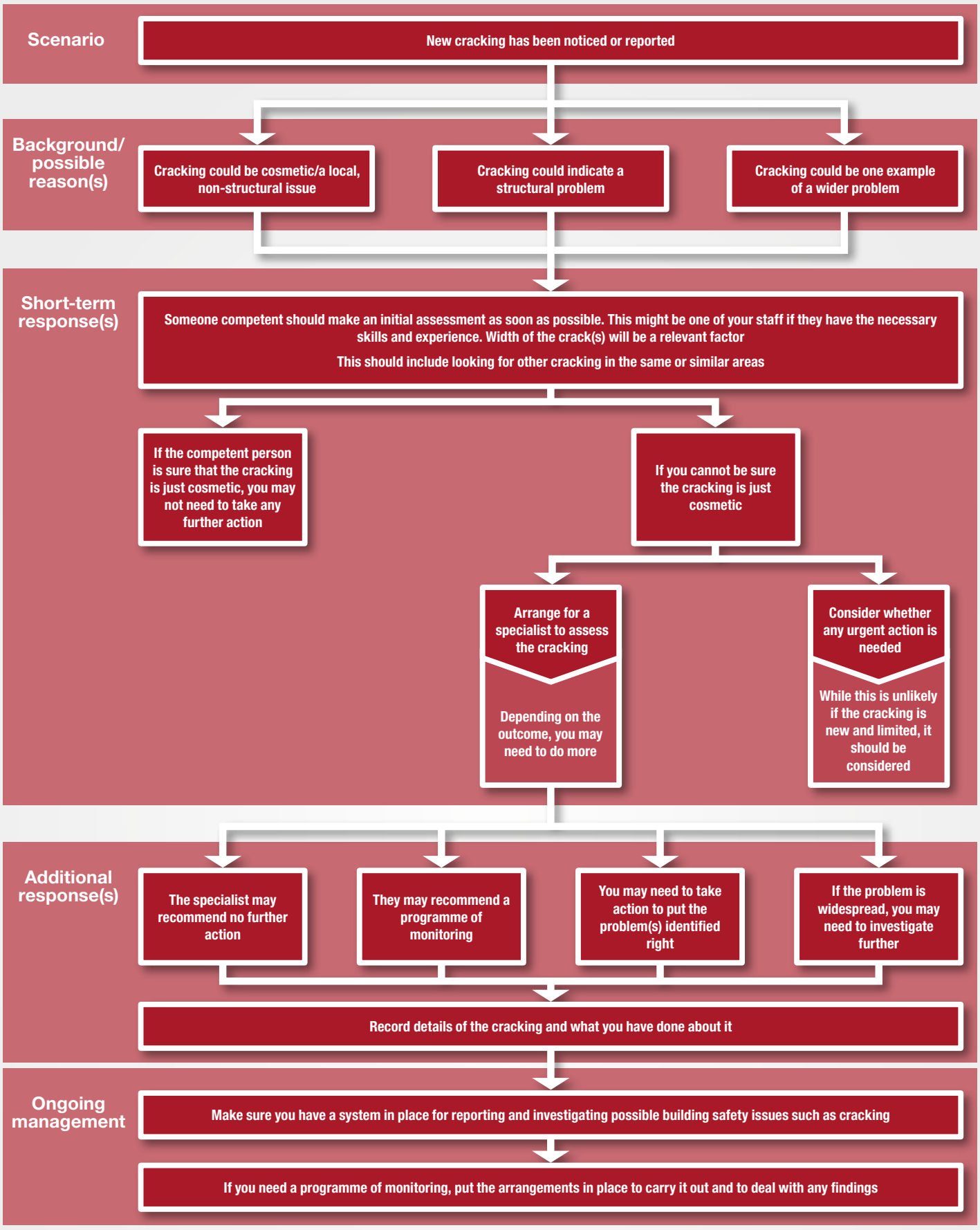
Whatever the outcome, you should record details of the cracking and what you have done about it

Ongoing management:

Make sure you have a system in place for reporting and investigating possible building safety issues such as cracking.

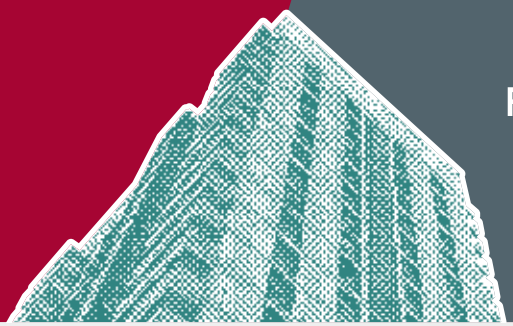
If you need a programme of monitoring, put the arrangements in place to carry it out and to deal with any findings.

Principles and Benchmarks - Structural



Principles and Benchmarks

Structural – Prolonged or uncontrolled water ingress



Building Safety Regulator HSE

Scenario:

Evidence of prolonged or uncontrolled water ingress.

Background/possible reason(s):

Evidence could include:

- Spalling of concrete. Spalling is different from cracking. Concrete spalling is when a piece of concrete breaks away from the main structure. A common cause for this is corrosion of the steel reinforcement
- Water damage, mould etc.
- Water or damage in plant rooms / other seldom visited areas

Short-term responses:

The first thing to do is inspect / investigate what has happened.

You should:

- Identify where the water is coming from / getting in. This might not be obvious if it was caused by, for example, prolonged rain or a heating system currently turned off due to warmer weather
- Identify where the water is going to. If it isn't obviously pooling, it must be going somewhere. This could cause further problems
- Assess the damage the water ingress has caused

You may be able to do this yourself, but if you suspect there may be structural damage (for example if the ingress is serious or has been going on for a long-time) you may need a structural engineer to help assess what has happened.

You should then identify and take any urgent action needed.

Additional responses:

Prioritise the measures you need to take prevent more damage occurring and to repair any damage already caused, and put plans in place to deliver this work.

Make sure any work is carried out by competent people and to any relevant standards.

Ongoing management:

Make sure you have a system of visual inspections in place to pick up any problems before they become serious. This should include rarely visited areas such as plant rooms.

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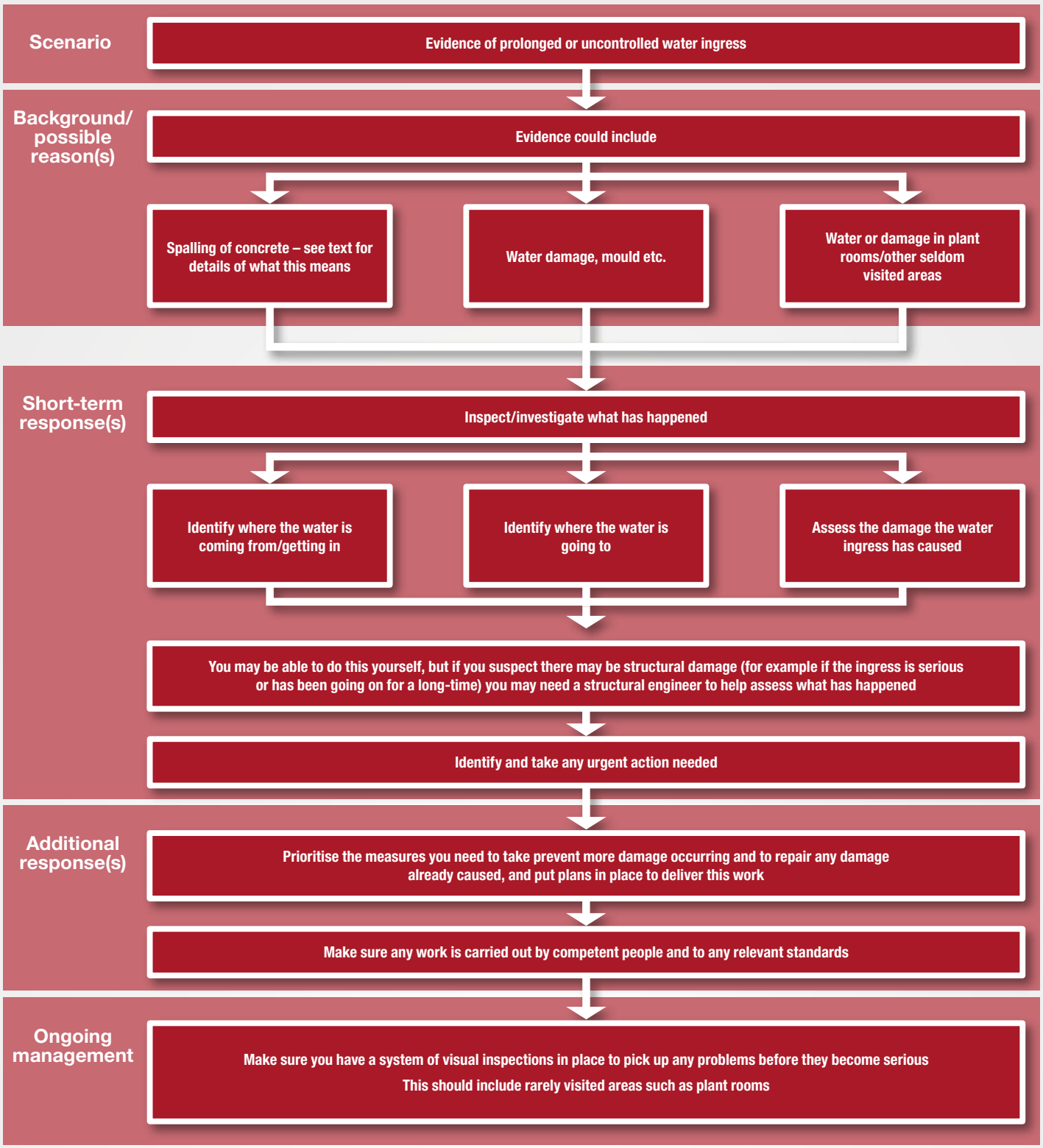
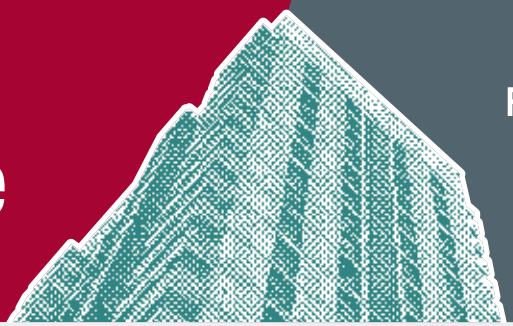
Principles and Benchmarks - Structural



Structural – Risk of vehicle damage



Building Safety Regulator HSE

Scenario:

Risk of vehicle damage to the building.

Background/possible reason(s):

This may be identified from an inspection or report. Alternatively, there may have been an incident that led to damage.

Short-term responses:

If there hasn't been an incident, you should assess the risks and identify what needs to be done. You will then need to take any short-term actions. For example, you may decide to close off parking spaces closest to the building to stop vehicles getting close, or put up signs / paint markings on the ground as a warning.

If there has been an incident, you will need to assess the damage and identify actions. Depending on how bad the damage is, you may need help from a specialist such as a structural engineer.

Only risks from the spread of fire and structural failure are covered by the Building Safety Act. However, damage caused by vehicles may also pose a risk to passers-by or residents – such as from loose bricks, blocks or cladding – and this should also be assessed.

Again you should take any short-term measures identified – for example putting barriers around the damage to prevent people getting too close. The local authority may be able to help if nearby roads or footpaths could be affected. You may also wish to contact your insurance company as they may expect you to take specific actions.

Additional responses:

If damage has been caused, you will need to arrange for repairs to be completed. You should ensure these are carried out to the required standard by competent people.

Whether or not an incident has happened, arrange for any measures needed to prevent vehicle strikes / further incidents to be put in place. Common measures include barriers or bollards.

Ongoing management:

Make sure you have a system in place for reporting, investigating and repairing damage to buildings or the protective measures designed to prevent vehicle damage.

Principles and Benchmarks - Structural