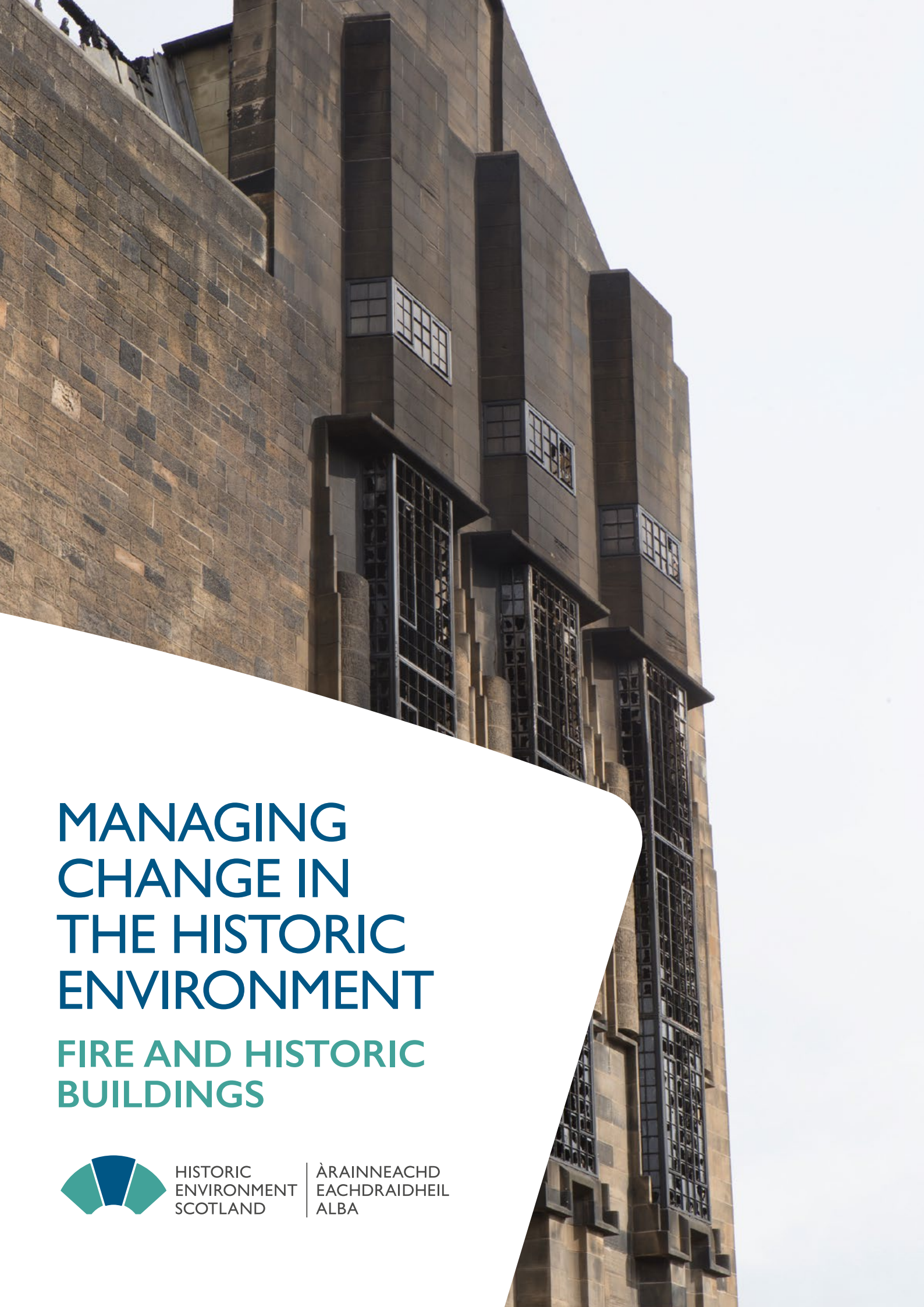
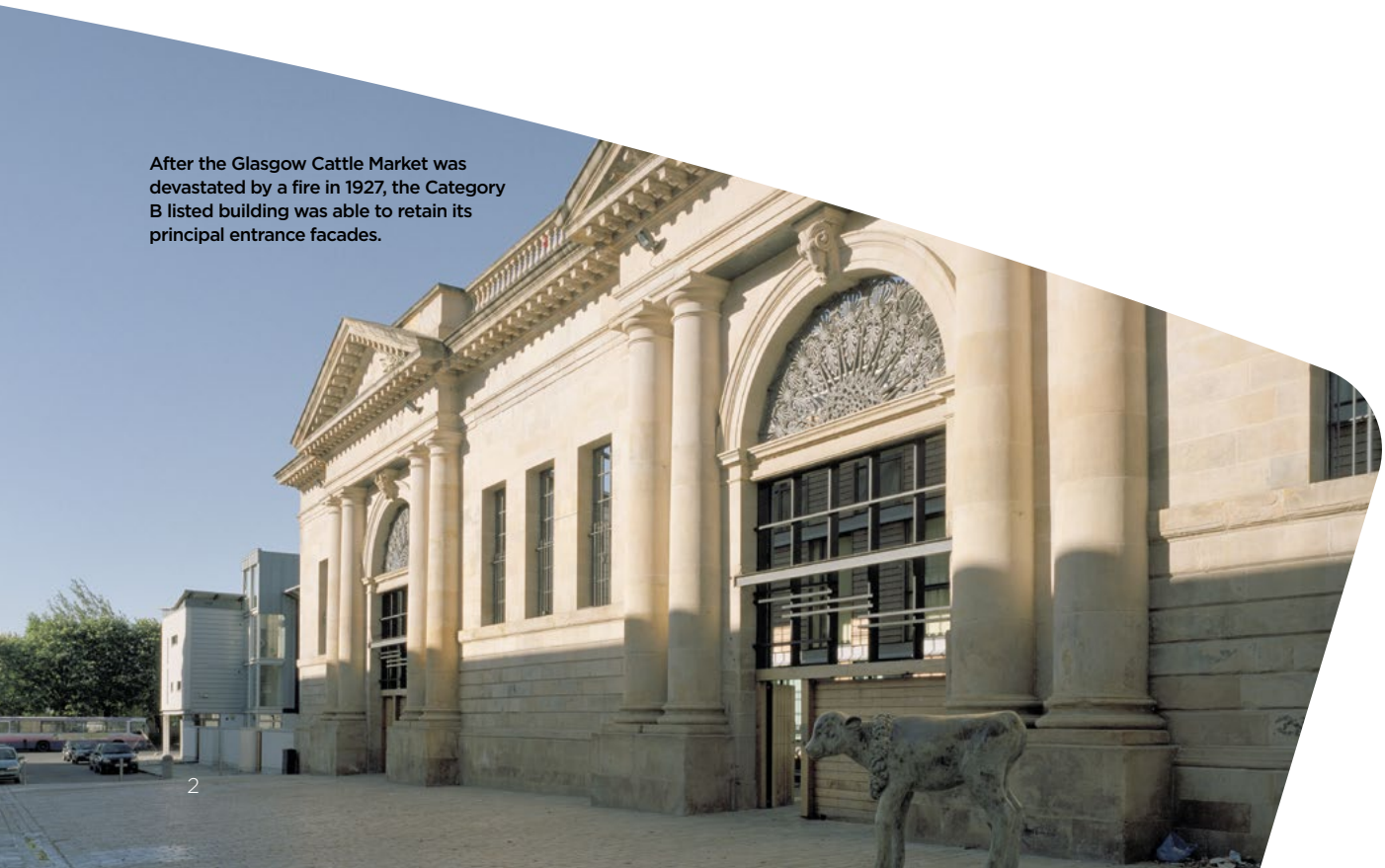


MANAGING CHANGE IN THE HISTORIC ENVIRONMENT

FIRE AND HISTORIC BUILDINGS

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

CONTENTS



After the Glasgow Cattle Market was devastated by a fire in 1927, the Category B listed building was able to retain its principal entrance facades.

PART 1: GETTING STARTED

This section covers the background, status and context of this guidance. It includes:

- Key messages
- Relevant policies
- Understanding your building
- Cultural significance
- Historic buildings and fire risk
- Permission and consents

INTRODUCTION

This guidance is about fire safety and fire damage in historic buildings. It covers fire risks, fire safety and potential responses when a building has been damaged by fire. It identifies key considerations for decision-making and can help you to understand the impacts of potential changes.

Hover over any word **underlined in green** to read a full definition.

The main aim of fire safety is the protection of life. In the case of historic buildings, fire safety should also consider the **cultural significance** of the building. This is in addition to the normal considerations of fire safety. Cultural significance can be relevant to decisions on measures for prevention of, protection from and suppression of fire.

When a historic building has been damaged by fire, cultural significance is a primary concern. The response to the situation will depend on the level of damage and the building itself.

Retaining our historic structures protects the significant amount of carbon we have invested in building them, maintaining them and adapting them. This will be relevant to management decisions that affect their long-term use.

This guidance sets out the specific issues relevant to fire and historic buildings. It looks at:

- **understanding your building**
- **identifying risks**
- **permissions and consents**
- **fire safety measures**
- responses to **fire damage**

Some changes need specific permissions but it is important to remember that works can have impacts on cultural significance even if they don't need permission. For designated sites and places, you can need additional specific consents. You can find out if a building is designated through the **Historic Environment Scotland Portal**.

FURTHER INFORMATION –

HISTORIC BUILDINGS

This guidance refers to 'historic buildings' throughout. Historic buildings can be important for their architectural or historic interest, or for their cultural significance more widely. Buildings built more than a hundred years ago can be more vulnerable to certain fire risks.

However, the principles in this guidance apply to any building of any period that has cultural significance.

This Category A listed building is an example of a late modernist studio, High Sunderland, designed by architect Peter Womersley in 1972. This guidance applies to any building that has cultural significance not just traditional historic buildings.

CONSENTS AND PERMISSIONS

You should always check with your **local authority** if you are in any doubt about whether you need listed building consent or planning permission for works. You may need to seek specialist advice to support applications for consent.

Normally, works to the interior of a building don't need planning permission, but they may need a building warrant. If a building is listed, works to the interior will need **listed building consent** if they affect the building's character as a building of special architectural or historic interest.

You can read more about this in the **Permissions and consents** section on page 12.

Tollcross Fire Station is a unique example of post-modernism architecture in Edinburgh with effective fire safety measures.

KEY MESSAGES

1. Protecting human life is the primary aim of fire safety measures.

2. Fire safety measures support the long-term survival of historic buildings.

3. Cultural significance is an important consideration when implementing changes for fire safety in a historic building. Adverse impacts on cultural significance should be avoided or minimised as much as possible.

4. Decisions on implementing fire safety measures should balance any adverse impacts against the benefits of the **long-term protection of the building** and its cultural significance.

5. Historic buildings can have additional fire risks – sometimes they are vulnerable to fire in ways that modern buildings are not, because of the ways they were built or have been changed over time.

6. Cultural significance is a key consideration when considering responses when a building has been damaged by fire.

7. Changes to historic buildings should be carefully considered, and there may be specific permissions needed.

8. Historic buildings can be complex, and specialist technical advice is often necessary.

9. Reducing fire risk and restoring damaged buildings keeps historic buildings in use as part of our circular economy. This protects their contribution to our places, communities and identities and supports a just transition to net zero.

STATUS

This guidance note is relevant to decisions on development proposals and changes to individual historic assets, such as listed buildings. It forms part of **national guidance on managing change in the historic environment**. Policy 7 of **National Planning Framework 4 (NPF4)** expects proposals to be informed by this guidance.

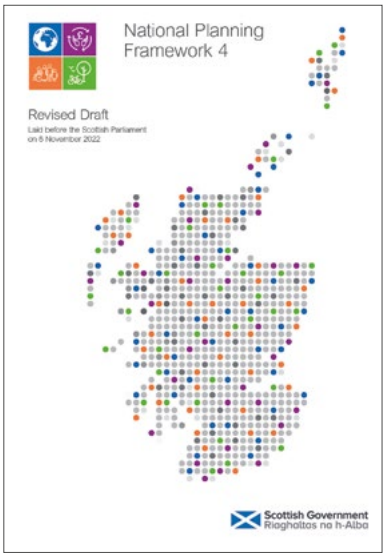
This guidance is a material consideration for relevant decisions in the Scottish planning system, including listed building consent, planning permission, or conservation area consent. This means that decision-makers should take it into account when coming to a decision.

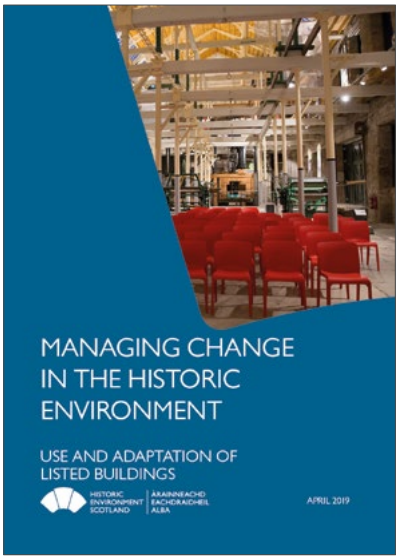
This guidance will also help anyone interested in a decision on this topic to understand the decision-making process. It can also give useful context if you are looking at the details of a decision or advice from a public body, including us at Historic Environment Scotland.

The guidance is a first reference point. It explains the key considerations and how to approach this topic. You can find more specific examples of how to follow this approach in our **case studies**. If your focus is on responses to buildings damaged by fire, you may find the advice in our **Managing Change guidance on the Use and Adaptation of Listed Buildings** helpful.

This is not technical guidance about fire safety management. It identifies the relevant issues when managing change and provides links to expert sources of information on this. You can find additional guidance on this topic in our **Inform Guide on Fire Safety in the Home** and **Guide for Practitioners on Fire Safety Management in Traditional Buildings**.

Click on each of the documents below to view





FURTHER INFORMATION –

NPF4 KEY POLICIES

National Planning Framework 4 (NPF4) is the national spatial strategy for Scotland. It sets out principles, regional priorities, national developments and national planning policy. The suite of policies in NPF4 should be read as a whole.

Some of the **policy considerations** particularly relevant when protecting buildings from fire, or responding to fire damaged buildings include:

Policy 7a expects proposals to be informed by national policy and guidance on managing change in the historic environment, and information held within **Historic Environment Records**.

Policy 7c and **Policy 7d** state that development proposals for listed buildings and conservation areas should preserve the character, special architectural or historic interest and setting of the listed building, or character and appearance of the conservation area and its setting.

Policy 7b and **Policy 7f** presume against demolition of listed buildings or buildings that contribute to character of a conservation area unless specific circumstances have been demonstrated. This can include the production of a detailed structural condition survey report in the case of listed buildings.

Policy 7m supports development which brings buildings identified as being at risk back into use.

Policy 7o states that non-designated historic environment assets, places and their setting should be protected and preserved in situ wherever feasible.

Policy 9d supports reuse of existing buildings with demolition regarded as the least preferred option.

Policy 12b states that development proposals should minimise demolition and salvage materials for reuse.

HEPS KEY POLICIES

The **Historic Environment Policy for Scotland** (HEPS) should be taken into account whenever a decision will affect the historic environment.

The key relevant policy references from HEPS are:

HEP 1
Decisions affecting any part of the historic environment should be informed by an inclusive understanding of its breadth and cultural significance.

HEP 2
Decisions affecting the historic environment should ensure that its understanding and enjoyment as well as its benefits are secured for present and future generations.

HEP 4
Changes to specific assets and their context should be managed in a way that protects the historic environment. Opportunities for enhancement should be identified where appropriate.

If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place.

UNDERSTANDING YOUR BUILDING

To make the best decisions for the long-term protection of any historic building, you should start by understanding what makes it important and the values that people put on it. In national policy terms, we refer to this as its cultural significance.

Historic Environment Records, normally held by the local Council, are often a good place to start when you want to learn more about a building. You can also search the **Canmore** website for national records. Historic Environment Scotland also has **guidance on Researching Historic Buildings**.

If the building is listed, it will have a listed building record, which you can find on the **Historic Environment Scotland Portal**.

For a historic building, cultural significance can be made up of lots of different factors. It can include the building design and layout, its use and past uses, the materials it's made of, and the associations and emotional responses people have to it.

When you're planning for the long-term future of a historic building, a conservation plan or statement is helpful. This can set out what is significant about the building, and then go on to look at how to keep or enhance that significance when change happens. Conservation plans will look at the future of the building in the long term – they are useful for buildings with complex needs or where there will be a range of different works.

If you are dealing with a complex and important building, you will need specialist advice on fire safety. This may include a specialist to undertake a Fire Risk Assessment (FRA), or a Fire Engineer.

Thinking about significance

Key things to think about are:

- how the building is constructed and what materials it is made from
- how it was originally intended to be used
- which features make the biggest contribution to its cultural significance

In most cases, both the interior and exterior of a building will contribute to its cultural significance. Its surroundings, or **setting**, can also contribute. As well as having cultural significance themselves, some buildings will contribute to the significance of other buildings, or a landscape or townscape. This may be relevant to some decisions about change.

It's important to recognise that not all parts of a building will make an equal contribution to cultural significance. The relative importance of different factors will inform decisions about what to prioritise. This can inform fire risk assessments and plans, as well as safety measures.

Some of the other guidance in the **Managing Change series** focuses on specific factors that can contribute to cultural significance. You can find **references and links** to these at the end of this guidance.

Prioritising significance

It is important to think about cultural significance both in fire safety and in responding after a fire has happened.

Fire safety

Aside from protecting human life, fire safety measures can help to protect cultural significance in the long term by helping to ensure the survival of a building and keep it in use.

Many aspects of fire safety will not affect cultural significance – such as changes to human behaviour. Some will have very limited impacts, and these can often be avoided or reduced through careful design. This is true of most modern fire detection systems.

Adverse impacts on cultural significance that cannot be avoided should be minimised as much as possible. If it is not possible to reduce adverse impacts, any decision will have to balance these against the long-term benefits of protection of a building and its cultural significance from damage or destruction through fire.

After a fire

When a building has been damaged by fire, the response will depend on individual circumstances. The importance of the building, and the values people place on it, will be part of the decision-making process.

FURTHER INFORMATION –

CULTURAL SIGNIFICANCE

In the **Historic Environment Policy for Scotland**, we use the meaning of 'cultural significance' set out in the **Burra Charter**:

"Cultural significance means aesthetic, historic, scientific or social value for past, present or future generations. Cultural significance can be embodied in a place itself, its fabric, setting, use, associations, meanings, records, related places and related objects." (Australia ICOMOS Burra Charter 2013)

Our 'Talking about heritage' guides have advice on **understanding significance**. They also have more detailed advice on **writing about significance**. Our **Designation Policy and Selection Guidance** explains how we consider cultural significance when we designate listed buildings and other historic sites and places.

OTHER VALUES OF HISTORIC BUILDINGS

This guidance is primarily about understanding impacts on the cultural significance of historic buildings. The cultural significance of a listed building will include its character as a building of special architectural or historic interest. Applications for listed building consent should consider impacts on this character. Historic Environment Scotland's **Designation Policy and Selection Guidance** explains how we consider cultural significance and architectural and historic interest when we list individual buildings.

All existing buildings also have value as part of our circular economy. It is crucial that we maximise the value of our existing buildings and infrastructure in our journey to zero waste. The **National Planning Framework 4** (NPF4) recognises this in policies **7b**, **7f** and **9d**, which identify demolition as a last resort and to be minimised where it is necessary.

APPLYING FOR PERMISSIONS

If you are applying for listed building consent, planning permission, or any other consent, for works that could impact on cultural significance, you will need to give supporting information.

The more important the place or building is, the more information is likely to be needed. Works that will have a significant impact on cultural significance are normally harder to justify. The level of detail and supporting information needed will reflect this. You may need to set out any alternative options you explored, and how you have minimised adverse impacts. It helps to get pre-application advice on this from the local authority.

The **National Planning Framework 4** (NPF4), **Policy 7a** states: Development proposals with a potentially significant impact on historic assets or places will be accompanied by an assessment which is based on an understanding of the cultural significance of the historic asset and/or place.

HISTORIC BUILDINGS AND FIRE RISK

The first step towards protecting a building from fire is to understand the specific risks. You should think about both the building, and its use. Historic buildings can have specific risks from fire because of how they are designed, built or used. The approach to assessing and managing risk relating to fire may also be affected by the nature of the building and its importance.

Types of risk

Specific fire risks to historic buildings can come from:

- the nature of the building itself
- the risk of it being empty with no current use
- risks associated with works and renovation

The building

Older buildings in Scotland, and particularly homes built before 1914, can be quite different from modern buildings. One of the reasons for this is the huge societal change that happened in the early 20th century. House building was a high priority, and homes started to be built in different ways. Different building materials and design approaches can lead to different levels of fire risk.

Buildings dating to the 19th and early 20th centuries were sometimes built with innovative construction methods. This is especially true of large commercial or public buildings. They can be affected by fire in different ways from modern buildings. For example, cast-iron columns can withstand high temperatures but may crack if cooled suddenly by fire-fighting water.

Older buildings were often built with fewer fire protection measures than we expect today, or using measures that we now know are not as effective as modern approaches. Some of them are more vulnerable to fire damage because of built-in combustible construction materials such as timbers built into walls. They may also have internal linings, hidden voids, or large open spaces that aren't divided into rooms.

Historic buildings also often have a history of alterations as we have adapted them through time. This means they can be very individual, and less predictable in layout and use of materials and space.

It is important to understand the layout and construction materials of a building because they should inform risk assessments, and any measures to prevent and protect from fire.

Empty buildings

When a business, group or organisation moves out of a historic building, the building will often stand empty for a period of time. This is more likely to be the case in situations such as a school relocating, where the building may need a new use. In some circumstances this can happen to private homes, as well.

The best way to protect a building is always to keep it in use. The Managing Change series includes a guidance note on the **Use and Adaptation of Listed Buildings** which deals with this topic in detail.

One of the many risks to a building that is empty is fire – including intentional fire-setting. If a fire starts in an unused building it is also more likely to be devastating as discovery of fire may be delayed and an alarm may not be raised as quickly.

Works and renovation

For a building to stay in use over the long term, change will be necessary. This reflects changes over time in how we use our buildings and what we expect of them.

Buildings that are being repaired or refurbished can be at greater risk from fire. Fires can be ignited by sources of heat associated with works. They can also be fed by an increased presence of combustible and hazardous materials that might be on site during renovation. In buildings with temporary openings, they can spread more easily through open doorways, removed walls or ceiling openings.

Guidance on this topic by the Health and Safety Executive on Fire Safety in Construction is the main point of reference for all measures to reduce risk.

To minimise the risk, works must be properly assessed, and changes made if necessary. This might include additional protection measures, especially for parts of the building or features that make an important contribution to cultural significance. Phasing of works can help to avoid opening multiple spaces at once. If hot works cannot be avoided on site, they should be carefully controlled.

Everyone working on the building and anyone staying in it must fully understand the risk. They should also be informed about any measures that are in place specifically to protect important parts of the building and why this is important.

The risk will change over the course of the work. This means assessment will have to be updated regularly. Often the period of highest risk is towards the end of the project, so this will need special attention.

Fire Risk Assessments

A **Fire Risk Assessment** (FRA) is **required by law** for all non-domestic properties, care homes and houses in multiple occupancy (HMOs). Private owners should also consider risk assessments as an important way to identify risks and minimise them.

The risk assessment will cover risks of fire starting and spreading, including risk of harm to people. Assessments then evaluate and aim to eliminate or reduce risks to an acceptable level. They will recommend changes to fire safety and management procedures as needed. The assessment should also identify where and how often inspections on all aspects of fire safety – prevention, detection and mitigation – will be needed. They should be reviewed periodically.

The Scottish Government website gives **example forms and guidance** on the process. For a complex historic building it is likely that you will need to employ a fire safety specialist. It helps to have an assessor who has knowledge and experience of the specific issues that affect historic buildings. The Scottish Fire and Rescue Service has specific **guidance on choosing a competent Fire Risk Assessor**.

Fire risk assessments must consider human safety by law. They can also go beyond this, and consider risks to the building itself, or its contents. It can be useful to identify the important or sensitive parts of a building in this process. This can inform the response if a fire starts and help to protect the things that matter most to people.

Leslie House is a Category A Listed Building in Fife that was severely damaged by a fire during restoration works in 2009.

Scottish building standards set out the technical requirements for building work. The Scottish Government technical guidance on this includes advice on fire. One of the key aims of this is sustainability which includes maintaining the built environment.

Insurance

Building owners need to decide what insurance is appropriate to cover the possible risks and to protect the value of their property. An up-to-date building valuation will help insurers to assess the risk. As risk will change during works or if a building is empty, these factors may also be relevant.

PERMISSIONS AND CONSENTS

For listed buildings, listed building consent is needed for any works that may affect its character as a building of special interest.

Works to any building may need planning permission and a building warrant. If your building is in a conservation area, some works may require planning permission even if it would not normally be needed. Demolition in a conservation area requires conservation area consent and a building warrant to demolish the building (or part of it).

Building warrants, listed building consent, planning permission, and conservation area consent are all managed by local authorities. You should always check with your local authority to confirm if you are in any doubt about the consents or permissions you need.

If you are planning works of any kind to a scheduled monument, you will need to speak to us at Historic Environment Scotland. It is very likely that you will need **scheduled monument consent** (SMC) for even minor works. SMC is normally only granted for works that are the minimum level of intervention that is consistent with conserving what is culturally significant in a monument. You can read our **Scheduled Monument Consents Policy** on our website for more information.

If you are not sure whether your building is listed, scheduled, or in a conservation area, you can search on the **Historic Environment Scotland Portal** or the **Pastmap website**.

PART 2:
FIRE SAFETY

This section covers key fire safety topics for historic buildings. It includes:

- Prevention
- Protection
- Suppression

It provides detail on methods of protection including evacuation and compartmentation. It also gives some detailed information on supression systems, including sprinklers.

FIRE SAFETY

The topic of fire safety covers three main topics:
- **Prevention** – reducing the risk of fires starting
- **Protection** – reducing the risk of harm or damage if a fire does start
- **Suppression** – protection measures specifically to extinguish or control fires

This topic also covers **compartmentation**, a common fire protection measure. This means splitting up buildings or spaces into smaller, fire-tight areas – or compartments. It can help to stop fire spreading.

Protecting buildings from fire often involves a combination of different factors. This can include changes to how the building is used, installation and maintenance of detection and protection systems, and changes to the building itself.

Fire safety measures must reflect the law, and the level and type of fire risks. The law on fire safety allows for some flexibility in achieving an adequate standard of fire safety. This means the mixture of measures for each building can be different.

Taking a flexible approach can help to reduce impacts on important parts of historic buildings, by increasing fire safety without physical interventions, or by making changes in less sensitive areas. Any changes should be sensitive to the building and its cultural significance. They should aim to minimise any adverse impacts, and changes should be reversible where possible.

PREVENTION

Prevention measures aim to reduce the risk of a fire starting. Fires need oxygen, fuel and heat to start or continue. These three elements are known as the fire triangle. Fire prevention aims to stop them coming together.

Most fire prevention measures are about how we use and interact with buildings. Prevention measures do not normally affect the structure or fabric of the building itself. It is therefore unlikely that preventative measures would affect cultural significance.

Some types of prevention include:
- controlling high risk activities like hot works, open fires, smoking or food preparation
- managing use of space to keep flammable material away from heat sources
- having inspection and servicing schedules for electrical systems and appliances

FURTHER INFORMATION –

POLICY REFERENCES

Changes to protect a building from fire help to ensure its long-term survival by reducing the risk of damage, and by helping to keep it in active use. They therefore reflect the policy principle of **HEP 2** in the **Historic Environment Policy for Scotland**.

Changes intended to protect a building should avoid adverse impacts on the building's cultural significance. This can involve avoiding impacts on important or sensitive parts of the building. In the minority of cases where this isn't possible, those impacts should be minimised, in line with **HEP 4**.

FIRE ENGINEERING

With older, more complex buildings, fire engineering offers an alternative approach. Fire engineers are accredited professionals who can undertake a full assessment of the building and develop a holistic, integrated approach to safety.

One of the advantages of this approach is that it can identify ways to reduce impacts on important or sensitive parts of the building. In some cases, installing enhanced detection and suppression systems will reduce the level of physical interventions that would be needed for compartmentation.

PROTECTION

Protection measures come into effect when a fire starts. They protect people and property by limiting the spread of the fire and helping people to escape. Some protection measures will require works to the building. The level of intervention will depend on the circumstance – many types of protection are unlikely to have adverse impacts on cultural significance.

The first element of fire protection is an emergency plan. Protection also includes:

- **detection**
- **evacuation measures**
- **compartmentation**

Emergency plan

For buildings where people work, **the law** says that there must be an emergency fire action plan. It should set out what people should do if a fire starts. The plan should be the basis of training for all staff. Training should include practice drills.

For historic buildings it can be helpful for a plan to include information about particularly sensitive or important parts of the building. This can inform emergency response and help to identify priorities for firefighting.

It's also important for every home to have an escape plan so that everyone knows what to do if there's a fire. This can save lives. You can read more about **escape plans** and **emergency fire action plans** on Scottish Fire and Rescue Service's website.

It's important to think about everyone who lives, works in, or visits the building, and what their needs might be. Meeting specific access requirements might need physical works or other changes. Increased accessibility can be helpful to everyone who uses a building, and not just in an emergency. The most sustainable changes will benefit the building and protect its cultural significance in the long term by helping to make sure it is accessible to people who want or need to use it.

Detection

Detection is an important consideration in protecting people and property from a fire.

Detection options are available which have little impact on the fabric or appearance of a building. They are therefore unlikely to have adverse impacts on cultural significance and have an important role in protecting it in the long term.

Where detectors may have an adverse impact, this can often be avoided or reduced by finding the right type of detector. For example, wireless technology can avoid hard wiring. To cover large open areas, optical beam smoke detectors can be an efficient option. There is more detailed advice on types of detector and how they can work in historic buildings in our **Guide for Practitioners on Fire Safety Management in Traditional Buildings**.

An aspirating smoke-detection system was installed in the Laich Hall at Edinburgh Castle during restoration work. These systems draw air through small pipes to detect smoke. You can see the small white pipe here before it has been cut back to lie flush with the ceiling, forming a near invisible detection system.

Alarm systems
A fire alarm system is made up of a number of devices working together to detect and warn people of fire. These alarms may be activated automatically from detectors or by individuals triggering manual call points.

Automatic systems are important at times and in places where people are not normally active, such as at night, or in empty or rarely used buildings or spaces. In empty buildings, they can help to reduce any delay between detection and action. Systems can be configured to alert the fire service via an alarm receiving centre. Responsible persons must try to reduce the occurrence of false alarms.

Evacuation

Evacuation is the process of people leaving a building or space in the event of a fire. It is important to remember that in some circumstances, normal routes will not be available. This is likely to include elevators.

Some people will need a Personal Emergency Evacuation Plan (PEEP). A PEEP can provide people who would have difficulty self-evacuating a building in the event of a fire with a tailored evacuation plan.

You can find specialist advice on this in Scottish Government guidance on **Evacuating Disabled People from Buildings**.

Escape routes
Escape routes are defined agreed ways of leaving a building during a fire. Lots of things can influence them. You will need to think about how the building is used and how many people are in it – and whether any of those people have specific needs.

The layout of the building and levels of risk are also important factors. For a historic building it can also be helpful to think about any parts of the building that are particularly important or sensitive. It can be difficult to develop new escape routes in existing buildings – particularly if the building is complex or unusual.

Escape routes should be protected from fire and smoke to help to keep them safe. You may need to install or upgrade detection or smoke extraction systems and add extra fire protection through changes to materials and surfaces. This can have less impact and be more practical than creating new corridors or stairways.

Sometimes the best option is to create a new exit or escape stair. In a historic building this kind of change can affect cultural significance, so options might be more limited. Avoiding the most important and sensitive areas of the building will help to minimise impacts. This might mean installing or converting openings or structures on a side of the building that is not designed to be seen from public areas. For example, it will normally help to avoid making changes to the front of a building.

FURTHER INFORMATION –

AVOIDING FALSE ALARMS

If you are using an automatic fire alarm system, it is important to reduce the risk of false alarms. Options include appropriate technology, modern intelligent systems, appropriate maintenance and management systems for checking buildings if the alarm activates during normal hours of operation and out-of-hours. The Scottish Fire and Rescue Service website has more **advice on unwanted fire alarm signals**.

These smoke vents from Riddles Court are a discreet solution to protect escape routes and common areas. The mechanism above the window is triggered by the smoke alarms, opening the window to allow fresh air in. This pushes the smoke up towards the vents.

Emergency escape lighting and signage
It is very important that emergency routes are clearly marked and well lit. There are lots of options available, and a good solution will be possible through good design and positioning.

The right approach will depend on the building and the room. It can help to refurbish old light fittings or integrate emergency lighting into normal lighting. You can sometimes avoid attaching signs to walls by suspending them from chains. If a building is not always open to the public, you might not need to make changes. For example, you could have freestanding exit signs and temporary lighting.

Compartmentation

Compartmentation is the most effective way to stop fire and smoke spreading. It involves creating physical barriers. This may include protected zones and corridors, fire doors, lobbies, and using walls and floors for separation. You can read in detail about compartmentation in the Scottish Government **Building standards technical handbook**.

Works of this type may involve changes to parts of a building that contribute to its cultural significance. This might include features like historic doors or ceilings, or alterations to the original layout and rooms or corridors. You can reduce the impact by using existing walls, ceilings and doors but upgrading their fire resistance. How you do this will depend on their original form and structure.

In less important or sensitive parts of a building you may be able to make bigger changes without having an impact on cultural significance. This can be part of an overall fire engineering solution.

A **passive fire protection** survey can identify areas where compartmentation can be improved or has been breached. This should inform your Fire Risk Assessment and any action plan for improving compartmentation. Any survey must be done by a qualified expert. It helps to have an assessor who has knowledge and experience of the specific issues that affect historic buildings.

FURTHER INFORMATION –

DOORS

Upgrading or making changes to doors is often a good way to increase compartmentation. When historic doors contribute to the cultural significance of the building they should be protected as far as possible. Sometimes they can be upgraded with specialist paint or varnish – although these may only reduce the spread of flame. In some cases, adding a non-combustible 'sandwich' panel is effective.

The right approach will depend on the situation, the type of door, its location and what you need to achieve in terms of fire resistance. A qualified fire engineer with experience of dealing with historic buildings may be able to predict the performance of historic doors in a real fire situation, considering how room geometry, fire load and ventilation will affect fire growth. There is more detailed advice on upgrading doors in in our **Guide for Practitioners on Fire Safety Management in Traditional Buildings**.

SUPPRESSION

Fire suppression systems aim to control fires and stop them from spreading. They can be manual or automatic.

Manual equipment
Manual equipment includes extinguishers and blankets. It can be used to fight a fire if it is caught early enough. This can stop fire spreading or escalating.

It is important to think about the best locations for firefighting equipment. You will need to think about areas that have a higher risk of fire starting, as well as areas that might be particularly important or sensitive to fire damage.

It is very important that people know where firefighting equipment is when needed. If equipment is out of sight, you will need signs to make sure people know where it is. Staff should have regular training on where the equipment is and how to use it.

Automatic systems
The most well-known automatic suppression system is sprinklers. Systems can use a variety of agents including water, mist, foam and gas. In some cases, they can put fires out. If this isn't possible, they can reduce the amount it spreads and may confine it to a small area.

Automatic suppression systems have to be installed into the fabric of a building. This means that they will always have some degree of physical and visual impact. The level of impact will depend on the type of system, and where and how it is installed. If installation is likely to have significant adverse impacts, it is helpful to explore other fire safety measures before choosing this approach.

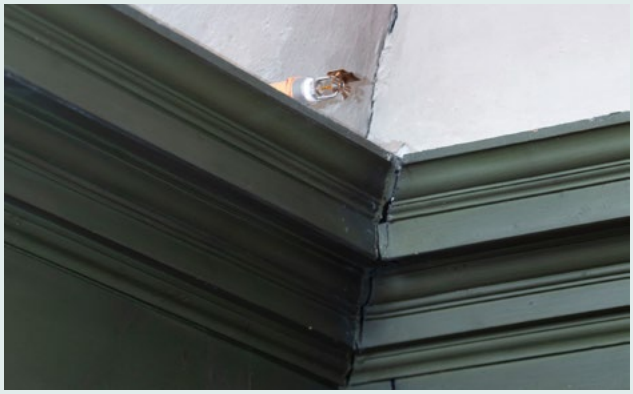
There are ways that you can reduce impacts from fire suppression systems through careful design. This will involve understanding the building and the parts of it that contribute to its cultural significance. In interiors that make an important contribution to cultural significance, some adverse impacts can be reduced by making sure systems aren't very visually obvious or intrusive.

It is often possible to conceal some elements of systems under floors or in ceilings. Elements that can't be hidden or tucked away can sometimes be painted or coloured to match their surroundings. You should also think about how the fabric of walls, ceilings or floors are affected when systems are being installed.

FURTHER INFORMATION –

SPRINKLER SYSTEMS

People often think that sprinkler systems can easily be set off by accident, causing damage to buildings and their contents. This is very unusual, and any risk can be further reduced by using a gas-based system. Scottish Fire and Rescue Service's website has useful **information about suppression systems** and the misconceptions about them.



Automatic suppression systems will always have some degree of physical and visual impact, but this can often be minimised. Sprinklers were installed in the category A listed Newhailes House during a refurbishment in 2018, including in important rooms, such as the alcove bedroom. Part of the sprinkler is concealed by the wooden fixtures on the wall. You can see a close-up image of the sprinkler on page 18.

PART 3:
FIRE DAMAGE

This section covers the key considerations when a historic building has been damaged by fire. It includes:

- Making the building safe
- Restoration
- Demolition
- Survey and recording

FIRE DAMAGE

When a building has been damaged by fire the priority is to make it safe. What happens next will depend on the level of damage and associated risk. It is important to remember that a fire damaged building can also pose a risk to neighbouring buildings.

In the case of a historic building, the response may depend on how significant the building is and how much that cultural significance has been impacted. It will also depend on whether works can help to reduce the impacts.

Making the building safe

If fire damage affects the structure of a building it can be dangerous to the public. The priority will be to stop any part of the building collapsing. Uncontrolled collapse is very dangerous and causes further damage. To avoid uncontrolled collapse, emergency down-taking or demolition work may be needed.

There is more information and advice on this in our Managing Change guidance note on **Demolition of Listed Buildings**. A lot of this advice applies to any historic building. We also have a number of **case studies on interim repairs** on our website.

Emergency works

Emergency works should be the minimum necessary to remove public danger or to ensure preservation of the building. If you are considering emergency works, you should contact your local authority as soon as possible.

We encourage planning departments to contact us at Historic Environment Scotland to discuss and agree the approach. In some cases, the local authority's Building Standards service may carry out emergency works themselves. If the affected building is listed, **scheduled** or in a conservation area they should consult us at Historic Environment Scotland before doing so.

Building notices

Local authorities can issue **dangerous building notices** or **defective building notices**. A dangerous building notice will set a deadline for works to be carried out. When a building is listed, scheduled or in a conservation area, local authorities should consult Historic Environment Scotland before they issue these notices if it is reasonably practical to do so.

The intention of this is to allow works to go ahead without consultation where immediate intervention is needed to reduce or remove danger. Any works done without consultation should be the minimum necessary to protect the public. Where this happens, the local authority should notify Historic Environment Scotland of the works as soon as possible.

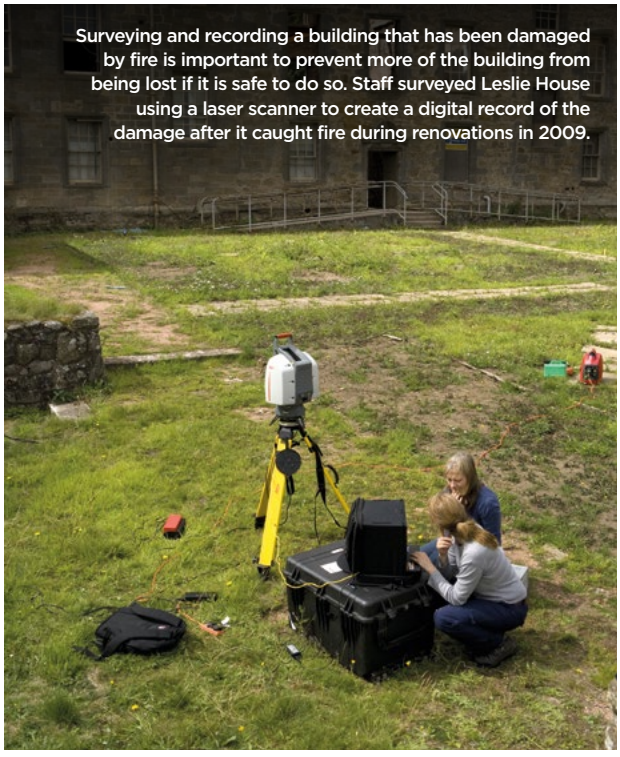
Fires can quickly spread and damage adjacent buildings, making the situation even more dangerous. In 2018, a fire started in the roof of a building on Sauchiehall street that quickly spread, causing significant damage to the surrounding buildings and retailers.

Listed building consent
You will need **listed building consent** for down-taking or demolition work on a listed building. This is the case even when the local authority has issued a dangerous building notice or is carrying out the work themselves. You should contact your local authority if you are in any doubt about whether consent is needed, or if you think demolition is required before you can apply for listed building consent.

Emergency building recording
If possible, it is good to survey and record the building before any down-taking. This creates a record of the building before any more of it is lost. It also gives decision-makers more information to inform next steps and to justify decisions about any interventions that have taken place.

In some emergency situations, Historic Environment Scotland will undertake recording through our **Emergency Building Recording Service**. We encourage local authorities to engage with us about this at an early stage, and they can email us at **tbs@hes.scot**.

You can read more about our role in this process and the specific legal requirements in our **Regulatory Framework**.



Surveying and recording a building that has been damaged by fire is important to prevent more of the building from being lost if it is safe to do so. Staff surveyed Leslie House using a laser scanner to create a digital record of the damage after it caught fire during renovations in 2009.

Restoration

Fire damage can adversely impact cultural significance and the extent of this impact will depend on the extent of the damage and the parts of the building affected. Most fires do not destroy the building they affect. It is more common for them to damage or destroy a discrete or distinct part of a building. Sometimes a fire won't damage more than the features in a single room.

If it is only parts of a building's interior that have been damaged, it is likely that they can be repaired, replaced or recreated. In most cases you will need to discuss the approach to reinstatement with the local authority. They can give you advice on whether you need consent. This is especially likely if the damaged parts contribute to an overall style or decorative scheme that contribute to the building's cultural significance.

For more extensive damage, particularly if extensive reconstruction is needed, this will normally be discussed and agreed between the local authority and the owner of the building. If the building has a high level of cultural significance, this will be an important factor in the decision-making process.

There are many factors which may be relevant to the ultimate decision about restoration of a building that has been extensively damaged. Historic buildings can have cultural significance in their own right, and they can also contribute to their surroundings more widely.

For example, a building that forms part of a terrace, or group of associated buildings, can contribute to the cultural significance of other buildings. They can also contribute to the significance of the wider townscape or landscape. Some important buildings also have high levels of social value – and communities locally and more widely may care deeply about them.

The owner and the local authority may decide not to reinstate the building, or to reinstate part or all of it.

Demolition

Our historic buildings are part of our environment, and they reflect a wide range of our history and culture. They celebrate the diversity of our communities, showing national, regional and local distinctiveness. They contribute to our wellbeing culturally, socially and economically.

This means that the demolition of any historic building is a significant loss which should be very carefully considered. On top of this, every building in our country represents an investment of energy and materials. **The National Planning Framework 4** (NPF4) recognises that in the face of climate and nature crises we must not be wasteful of our existing buildings and infrastructure. NPF4 policies (**7b**, **7f**, **9d** and **12b**) reflect this and identify demolition as the least preferred option.

Sometimes a building is so badly damaged by fire that there is no option but to demolish it. When that happens, we should still do what we can to minimise the adverse effects of demolition.

One way to do this is to keep any surviving elements that contributed to its cultural significance. It might be possible to salvage and reuse these. For buildings where the decoration or fixtures and fittings are particularly important to its cultural significance, it can be helpful to draw up a list of items that are a priority for salvage during or after a fire and a methodology for dealing with this in the event of a fire.

Reusing surviving elements of buildings helps to preserve their cultural significance. It also means that the materials used can be used again, contributing to our circular economy. Any steps that can reduce the environmental impact of demolition are positive and help to reduce waste.

There is more information and advice on this in our Managing Change guidance note on **Demolition of Listed Buildings**.

FURTHER INFORMATION –

OPPORTUNITIES DURING RESTORATION

Any restoration or works to a historic building will be an opportunity to make it perform better for the people who use it, now and in the future. This will include improving fire safety standards and physical accessibility where possible and relevant. If this is not planned into works then fire safety can be unintentionally reduced.

Any changes or additions to a building can also support reducing emissions and adaptation to climate change. NPF4 **Policy 2c** specifically supports this. HEPS policy HEP 2 states that decisions on the historic environment should secure its understanding and enjoyment for present and future generations.

SURVEY AND RECORDING

Historic Environment Scotland can also keep a record of a building, which can help to record its cultural significance and the values that contributed to it. We survey and record a range of historic sites and places. It is a legal requirement to tell us about proposals to demolish listed buildings and unlisted buildings in conservation areas. This gives us the chance to record that site and add the information to the national record on the **Canmore website**. Some planning departments do this themselves and some require owners and agents to do so.

You can read more about our role in this process and the specific legal requirements in our **Regulatory Framework**.

PARTIAL DEMOLITION

Often fires affect a specific part of a building, so in some circumstances, one option may be to only demolish part of it. This is normally called partial or selective demolition. This can be a very effective way to retain some of the cultural significance of a building, and therefore reduce adverse impacts. You can read more about selective demolition in our Managing Change guidance note on the **Use and Adaptation of Listed Buildings**.

One example of where keeping part of a building can have a positive impact on cultural significance is where it contributes to the wider landscape or townscape. If a building is part of a row or terrace, it may help to keep even just its front façade where it faces onto the street. Any decision on this will depend on individual circumstances.

REFERENCES

National policy and strategy

Historic Environment Policy for Scotland
National Planning Framework 4
Scheduled Monument Consents Policy
Designation Policy and Selection Guidance
Our Past, Our Future: The Strategy for Scotland's Historic Environment

Laws and regulations

Ancient Monuments and Archaeological Areas Act 1979
Building (Scotland) Act 2003
Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997
Fire (Scotland) Act 2005
The Fire Safety (Scotland) Regulations 2006
The Housing (Scotland) Act 1987 (Tolerable Standard) (Extension of Criteria) Order 2019

Other

Scottish Fire and Rescue Service
Historic Environment Scotland Portal
Pastmap
Canmore: National Record of the Historic Environment

Scottish Government policy and guidance

Evacuating Disabled People from Buildings
Non-domestic fire safety
Building standards

Managing change guidance

Managing Change series
Managing Change: Demolition
Managing Change: Use and adaption
Managing Change: Setting
Managing Change: Interiors

Historic Environment Scotland other publications

Our Regulatory Framework
Planning service standard
Inform Guide on Fire Safety in the Home
Guide for Practitioners on Fire Safety Management in Traditional Buildings

St Benedict's Chapel is an abandoned Category B Listed Building in Dumfries. It was significantly damaged by an overnight fire in 2022.

Historic Environment Scotland is the lead public body established to investigate, care for and promote Scotland's historic environment.

We are committed to ensuring this publication is accessible to everyone. If you need it supplied in a different format or language including Gaelic, please get in touch.

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

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Cover image: Fires can cause significant damage to our buildings, including the Glasgow School of Art's Mackintosh building. This Category A listed building has suffered from two fires. The last one severely damaged the building in 2018.