Appendix Seven

South & East Lincolnshire Traditional Buildings Design Guide

South & East Lincolnshire Councils Partnership

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PROJECT
BOSTON & SOUTH HOLLAND: CONSERVATION AREA APPRAISALS, MANAGEMENT PLANS AND DESIGN GUIDE

CLIENT
BOSTON BOROUGH COUNCIL, EAST LINDSEY DISTRICT COUNCIL, SOUTH HOLLAND DISTRICT COUNCIL

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LANDSCAPE PLANNING & ASSESSMENT
LANDSCAPE MANAGEMENT
ECOLOGY
HISTORIC ENVIRONMENT
GIS & VISUALISATION

Contents

This document is separated into parts A to D, with Appendices.

How to Use this Guide

Summary tables

Parts **A** and **B** of this guide describe the general background and principles applying to all work to buildings in historic areas of Boston, East Lindsey and South Holland.

Parts **C** and **D** of this guide provide Action tables which summarise the key recommendations for each building element.

All guidance is based on the hierarchy of intervention -
Step 1- Repair: keep and repair the original or historic fabric or material whenever possible
Step 2 – Improve: make sensitive improvements without removing or compromising original or historic features
Step 3 – Replace: only replace or alter components or features when absolutely necessary

Illustrations

The document contains photos and sketches selected to illustrate specific design guidance. Elements included in photos but not specifically mentioned in the text should not be used as endorsement for their implementation.

A

What is a Design Guide

Who is it for

This guide is for anyone planning work on a traditional house, shopfront, or new building/extension in a historic area within Boston, East Lindsey and South Holland. It applies regardless of planning permission, listing status, conservation area designation, or local asset recognition. It will also serve as a guide for promoting best practices and ensure consistent decision-making.

What does the guide do

It introduces six key principles applicable to all projects, then tailors them to different building elements. The focus is on exterior features, including boundary walls and gates, but excludes interiors and landscaping.

Why is it important

- Preserving and enhancing buildings benefits both owners and the community, personally and financially.
- Well-maintained buildings improve the quality of life for current and future generations, including homeowners, neighbours, and visitors.
- Caring for local areas fosters community pride, creates economic opportunities, and supports traditional skills.
- It conserved the character of buildings and places.
- Boosts tourism and enhances community well-being for future generations.

This is particularly important for our conservation areas. The loss of historic features is eroding their character and quality, putting some at risk. Currently, 37% of all conservation areas across the three districts are listed on the Heritage at Risk Register (updated 2024).

The loss of historic features - whether intentional, due to neglect, or as a result of well-intentioned alterations and poor-quality new development - can have a real-time negative impact on the community, both socially and economically. It can undermine confidence and investment in the area, leading to a downward cycle of social and economic decline.

Many traditional buildings still retain their original features. Walking down a street, you might see 19th- and early 20th-century shopfronts set within Georgian facades, multiple phases of sash windows, timber-panelled doors with elaborate doorcases, traditional local roof coverings, and other distinctive architectural details.

Ongoing and future maintenance, repair, and thoughtful design will play a crucial role in preserving the character and condition of historic settlements. This, in turn, will significantly impact the well-being of the community, including homeowners, occupiers, neighbours, and visitors alike.

It is always good practice to speak to your local conservation officer, as they will be able to advise you on what permissions you need and what information you will need to submit and the extent of listing.

Applicants should check the most up to date conservation appraisal or management plan on their council's website or by contacting their local planning authority.

Introduction

What is permitted development

The need for planning permission varies depending on whether the building is a house, flats or apartments, or used for business.

- Owners and occupiers of apartments and places of business generally need planning permission for most works that alter the exterior appearance of the building.
- Owners and occupiers of houses generally benefit from “permitted development rights,” allowing some changes to the exterior of the house without the need for planning permission.
- However, owners and occupiers of houses in conservation areas have fewer “permitted development rights,” meaning there is greater control over even minor changes within these areas.

The Planning Portal offers interactive 3D examples of houses, flats, and shops, showing when planning permission is needed and when it isn’t for various types of changes.

What is a conservation area

For nearly 60 years, conservation areas have helped preserve the character of cities, towns, suburbs, villages, and hamlets.

Designated for their architectural or historic interest, these areas receive extra protections to prevent harmful alterations while allowing managed change. Stricter controls limit demolition and exterior modifications to safeguard distinctive features.

Councils use Conservation Area Appraisals to define key characteristics and Management Plans to address threats, ensuring long-term preservation while balancing modern needs.

What is an article 4 direction

An Article 4 Direction is a special planning control tailored to each area by the council to protect specific elements of local buildings.

Check with your local authority to see if your conservation area has additional planning controls in the form of an Article 4(2) Direction. If in place, this means certain types of work that previously did not require planning permission may now need approval.

Neighbourhood plans

Check with your local authority whether your building or site is somewhere with a neighbourhood plan. These plans may set specific design and heritage policies and provide more information about the place and its history.

What is a listed building

A listed building has special architectural or historic interest and is protected by stricter regulations than conservation areas. Any alterations which affect the building's character require Listed Building Consent.

Listing covers both the internal and external character and features of the building, including any extensions and additions unless specifically excluded form the listing. Buildings and structures on land associated with the listed building before 1948 (called curtilage) are also listed.

Consents

Planning permission depends on the type of property and proposed changes.

- Listed Building Consent is required for works affecting a listed building's character.
- Advertisement Consent may be needed for signs, even if they are being updated or included in other applications.
- Applications must include clear, scaled plans.
- All necessary consents must be obtained before work begins.

For listed buildings, unauthorised work can lead to fines or criminal prosecution.

Enforcement

Enforcement action might be taken if someone carries out building or land use changes without permission, or breaks the conditions of a planning or listed building consent.

If your building is a dwelling

Planning permission is not needed for most minor alterations. However, most forms of extension, cladding over brickwork or stonework, and satellite dishes do need planning permission. The Planning Portal offers in-depth guidance over when planning permission is needed via its **interactive houses**.

If your building is listed

Works to listed buildings will need Listed Building Consent if the appearance or character of the building changes. This is much more wide-reaching than planning permission and includes some repairs as well as alterations. Examples of external works that need listed building consent include:

- Substantial or complete replacement or repair of a roof, regardless of material
- Altering a chimney stack
- Structural repairs, including strengthening
- Changing or replacing rainwater goods
- Replacing one or more windows or doors
- Installing double glazing
- Substantial or complete repointing
- Replacing stonework or brickwork
- New signage or external lighting
- New building services (e.g., flues, air extractors, external plumbing, CCTV)
- Measures to address damp

If your building is a flat or shop

Planning permission is needed for anything that 'materially alters' the building's external appearance. This means most external alterations need planning permission, such as:

- Extensions, including dormer windows and rooflights
- Cladding, rendering or painting over external brickwork or stonework
- Changing the roof material or eaves detail
- Replacement external doors or windows that are a different design or appearance to the existing
- New shopfronts or alterations to a shopfront
- Altering the size and/or shape of an external doorway or window opening or dormer window
- Creating a new external doorway or window opening.
- Blocking an external doorway or window opening.
- Adding new external fixtures or fittings like a satellite dish or shutters or external lighting.

The Planning Portal offers in-depth guidance over when planning permission is needed via its interactive flats and shops.

Building regulations

Generally, all building works are required to conform to the current and most up to date version of the Building Regulations Approved Documents. However, these do recognise the vast and varied type of construction and materials. This is helpful when considering changes to existing and historic buildings providing some flexibility. Those parts of the building regulation most often requiring flexibility are:

Part B Fire safety

Fire safety is of paramount importance, we need to ensure the safety of building users by introducing detection and adequate fire escapes. But part B is also designed to contain the fire until the fire brigade arrives, help the fire to naturally expire through lack of ventilation and physically prevent its spread. All of which is important in helping to preserve historic fabric. It is important, however, to ensure that when introducing new features the character of the building is carefully considered and where historic fabric is considered for improvement or replacement it is done sympathetically. For all measures quality of craftmanship is key, for example a fire door is only of use if it is properly hung.

Part F Ventilation

The general principle is that the airtightness of new windows and doors in traditional buildings should be no worse than the existing condition prior to the work. Therefore, there is no need to bring the airtightness of a historic house up to the standards of a new house. Trickle vents are now used as a standard on new windows, but these are obviously modern and not appropriate for use in historic buildings. Where ventilation is required, alternatives that preserve the building's character should be used. These should avoid principal elevations where possible, and be routed preferably through the roof or an existing chimney stack. They should be designed to be as inconspicuous as possible. Generally plastic louvre are not acceptable in historic areas or on historic buildings, instead brick vents matching the host property masonry or cast iron grills should be used externally.

Part L Conservation of fuel and power

Energy efficiency measures must not compromise the long-term health of the building's fabric. The key principle is to ensure energy upgrades work with the building's greatcoat materials, not against it. Therefore insulation to the wall, floor and roof should be breathable and their impact carefully considered. Exemptions and leniency also exists where compliance would unacceptably alter the dwellings character and appearance. This can be used to support single and slimline double glazing in windows, and to carefully consider the long-term health impact of certain insulation measures on the longevity of historic building fabric.

Part K Glazing

For most new historic-sized windows or panes, glass will now need to be 8mm thick. Low-level glazing may require thicker glass, while leaded lights can typically still use 4mm thick glass. However where historic glazing exists within historic frames it is desirable to preserve and re-use them. Thinner or historic glazing can be retained and re-used. Films can also be applied to historic glazing to improve safety.

Part Q Security

Security standards must be met and upgraded when carrying out building works, but the regulations are not prescriptive. There is no single solution as long as there is a lock and fitting that meets with the relevant performance standards. Often locks can be added in addition to historic locks to improve security and many different styles are available on the market to reflect different buildings characters.

What is a traditional building

Modern and traditional buildings are often described as either ‘raincoat’ or ‘greatcoat’ buildings, depending on how they manage moisture.

Greatcoat buildings

Traditional buildings were built using natural materials: timber, stone, clay, lime (mortars, renders, plasters, washes), sand, grit and thatch. These materials behave much as they do in nature: they absorb water and allow it to evaporate. The longevity of these buildings is a testament to this natural moisture management – allowing materials to breathe and respond to their environment.

We describe traditional buildings as ‘greatcoat buildings’ because, like a woollen greatcoat, they manage moisture movement and still provide warmth and protection. A greatcoat works with the natural properties of the wool to keep the wearer comfortable in wet conditions – just as traditional buildings use breathable materials to manage moisture and maintain a stable internal environment. Although it may seem water could pass through traditional materials, in practice, it doesn’t. A well-maintained greatcoat building manages moisture at the surface level, preventing it from being drawn deeper into the structure through capillary action.

The use of traditional 'greatcoat' methods - once commonplace - has become less widespread, in part due to the loss of skills and knowledge after both World Wars. These techniques, however, remain highly effective and are supported by a growing network of skilled practitioners who are helping to make them accessible and better understood.

Raincoat buildings

Modern 'raincoat' materials and techniques became the norm during the 20th century, leading to the widespread adoption of cavity wall construction and the use of impermeable materials such as metal, plastic, and glass, often bonded together with waterproof barriers. Ordinary Portland Cement (OPC) also became the standard binder for mortars, renders, and plasters, replacing traditional lime-based alternatives.

Raincoat materials and construction techniques are designed to shed, rather than absorb, rainwater, much like a plastic raincoat. Water simply beads and runs down the faces of the impermeable surfaces. However, their weak points lie in the joints between materials, which expand and contract with temperature changes. To manage these issues, multiple layers - such as cavities, rain screens, damp-proof courses, and vapor barriers - are incorporated into modern construction.

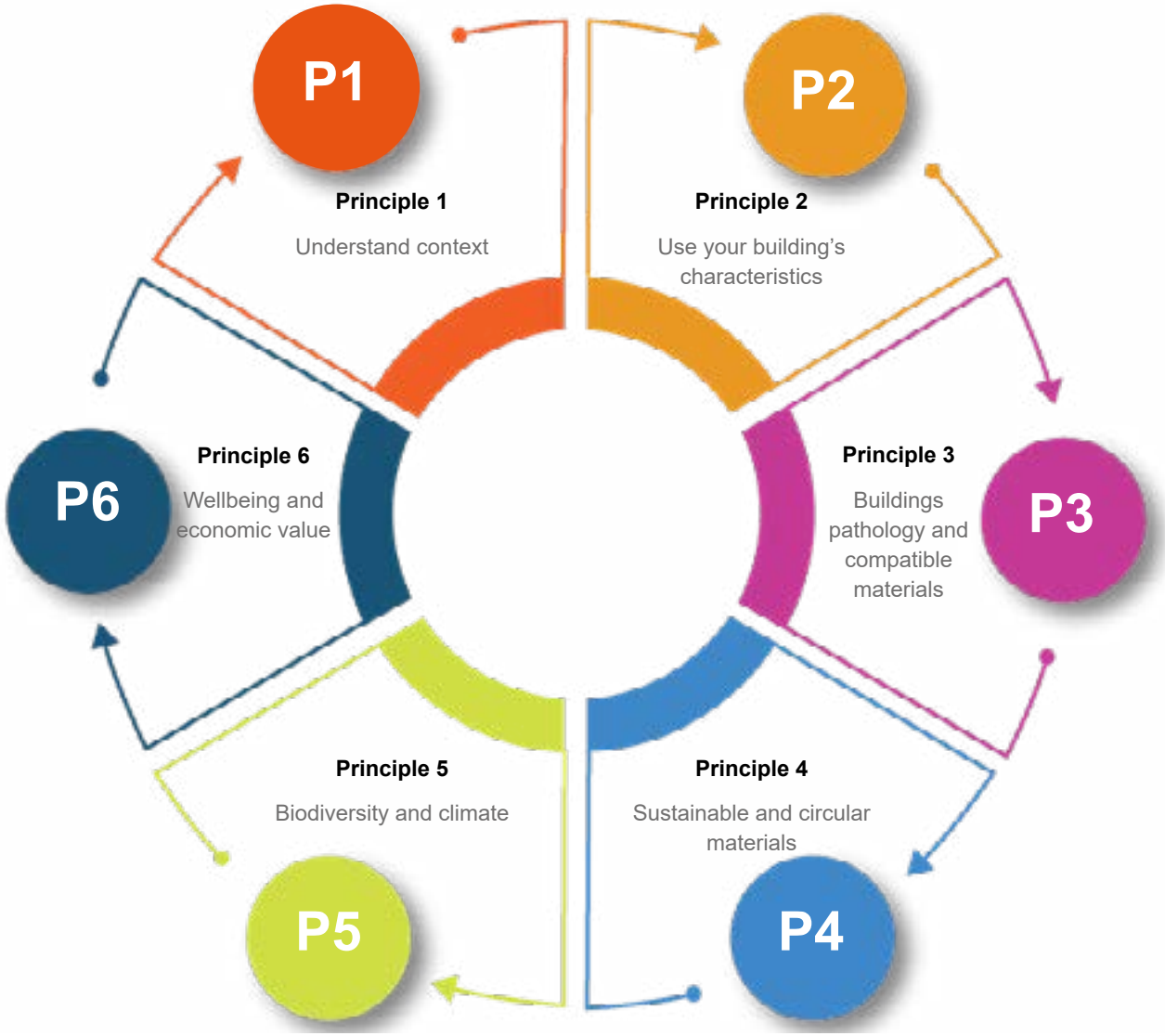
Mixing greatcoat with raincoat

Building issues arise when these two methods are combined. If modern raincoat materials (such as damp proof courses, cement, concrete, waterproof paints and renders or plastic membranes) are applied to a traditional greatcoat building, they can trap moisture inside the structure. Since the materials can’t 'breathe' in a natural way, moisture can build up in walls, floors and timbers, and cause internal damage, including mould, rot, and deterioration of the building materials.

Traditional materials and methods were designed to work together to manage moisture safely and effectively, while modern, impermeable materials disrupt this natural process. Inserting raincoat materials between, inside or in front of greatcoat materials is often the root cause of damp and decay.

B

The Principle Wheel



P1 Principle 1

Understand context

To fully understand and respond to your place, it's important to look at the building or site and its surroundings. Distinctive features such as architectural styles, massing, form, layout, and materials shape the identity of a place. These elements contribute to a sensory environment that is both distinctive and memorable.

Landscape character

What landscape character defines your area - Fen, Vale, Wolds, or Coast and Marsh? Do you live within, on the edge of, or outside the Lincolnshire Wolds?

Each landscape brings a unique character and beauty to its settlements, from the rolling hills of the Wolds to the vast open skies of the Fens and the sweeping coastlines backed by coastal marshes.

The landscape has always influenced the historic development and growth of towns, villages, and hamlets, and it will continue to do so, especially in the face of climate change. It shapes the edges of settlements and has historically guided their layout, expansion, and evolution.

Settlement type

Consider the unique spirit and identity of your settlement. Through its built form and shared collective memory, it tells the story of generations - reflecting how people have shaped, and been shaped by, the landscape over time. Each town, village, or hamlet has its own distinct character, fostering local identity and pride.

Consider the notable buildings or landmarks in your area. What is the local architectural style? What traditional building materials have been historically used? How are spaces and streets laid out?

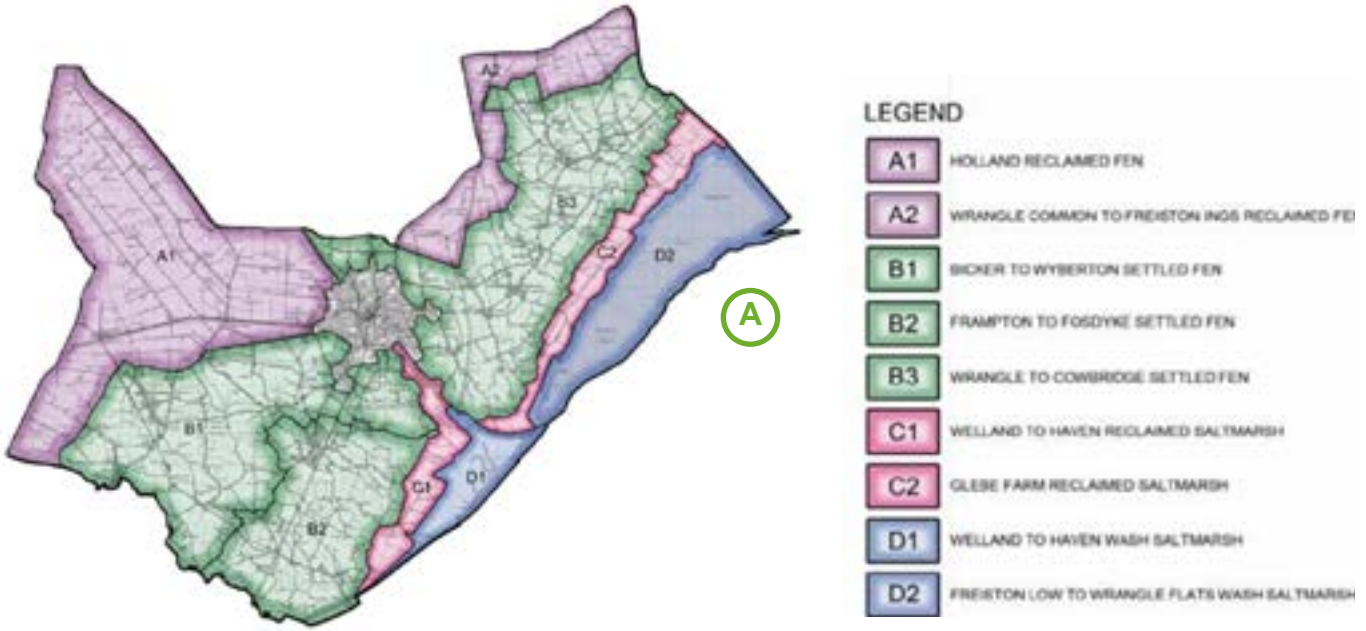
Streetscape

Your building is more than just its individual parts. Along with others, it contributes to the entirety of the streetscape, from pavement to roof. Every building plays a vital role in the street, whether through rhythm and pattern, size, design, or character. Elements like scale, style, materials, and texture all influence our perception of the space.

Building type and style

Your building was likely constructed for a specific purpose within its environment, making use of natural features and local resources. It was built in direct response to the local geology, climate, available materials, and the craftsmanship of community artisans.

Traditional buildings, structures, and monuments are valued for their craftsmanship, materials, artistry, and the sense of continuity they provide.



Ⓐ You can use Landscape Character Assessments and Extensive Urban Surveys (EUS: https://archaeologydataservice.ac.uk/archives/view/1006576/downloads.cfm) for your district or borough to learn more about your landscape and settlement.

Settlement type

Ⓐ Consider the unique spirit and identity of your settlement by looking at historic, modern and character area maps.

Streetscape

Ⓑ What is the distinct character and identity of your street(s)? What green spaces, street and pathway layouts are there? Do they make an open and formal, or tight and compact area?

P1.1 When making alterations or proposals, it's important to maintain the balance of the settlement, street and building. Visually intrusive or incongruous change - especially those using standard off-the-shelf building components in modern materials - can disrupt this harmony.

P1.2 Your proposal should be in response to the surrounding landscape, settlement type, and the established balance, pattern, and form of the streetscape and building types.

P1.3 Consider how the design of your alterations and additions will impact the beauty and character of the landscape, settlement, streetscape, and building. Decisions should protect and enhance valued views and vistas.

P2 Principle 2

Use your building's characteristics

P2.1 Assess and use the character and features of your traditional building to guide new design. Designs should be sympathetic to the building's fabric, recognising and enhancing its inherent qualities.

Balanced

Traditional buildings allow moisture to move through their semi-permeable fabric in a controlled manner, relying on natural ventilation rather than energy-dependent systems for heating and cooling. When well-maintained, this system remains balanced. Additionally, materials like stone, lime mortar, and earth have thermal benefits, absorbing and storing heat efficiently, keeping buildings cool in summer and warm in winter.

Character and significance

Your traditional building has character and significance. It has stood for many generations, and it is a valuable resource for its history and craftsmanship. Retaining historic materials and architectural elements allows us to preserve a building's inherent characteristics, retain their quality materials, foster a sense of belonging and ownership, and ensure that places and buildings age gracefully while retaining their beauty. This enhances the quality of life for their users.

Design

The construction of traditional buildings was carefully designed with a range of factors in mind. Today, architects and urban planners are increasingly looking to the past to find solutions for the present. Traditional homes have enduring appeal for their standard of internal layout, room size, adaptability, durability, floor-to-ceiling height, natural light, and ventilation.

Embodied energy

Your traditional building holds over a century of embodied energy and carbon, including its materials, processes, fixtures, and fittings. When constructed, it had a lower embodied carbon footprint than new builds today, and this remains low even with subsequent maintenance, repairs, and alterations.

Local

Your traditional building supported a thriving, circular economy through local materials, labour, and craftsmanship. It has the potential to continue doing so today and in the future.

Lifespan

The traditional construction methods and materials of your building are tried and tested. They have proven to be resilient over time and have served generations for hundreds of years.

Natural and sustainable

Natural building materials, often deep green, circular, and sustainable, have historically been used in traditional buildings. Their longevity, quality, and capacity for repair and reuse make them inherently sustainable. Your traditional building is constructed from high-quality, natural, local materials that are repairable, reusable, and recyclable. In most cases, these materials can be safely returned to the soil. Even with later advancements in transportation, materials remained predominantly local and natural.

Repairable

In the past, the handmade nature of building components made them easily repairable, reducing waste and the need for full-scale replacements of natural resources.for their standard of internal layout, room size, adaptability, durability, floor-to-ceiling height, natural light, and ventilation.

Re-usable and recyclable

Traditional buildings often incorporate materials from earlier structures, extending their use by centuries. Many traditional materials, like lime mortar, are natural and can be reconstituted for repairs, generating little to no waste. These materials have been adapted and reused over generations.

P3 Principle 3

Building pathology and compatible materials

Building pathology is the study of building problems to find their causes and determine the best solutions. It is especially important for traditional buildings, which need special care due to their greatcoat materials and construction methods. Using raincoat repairs on a greatcoat building can lead to damp walls and other issues, while lack of maintenance can cause material decay and water damage.

Although building pathologists are trained experts, the issues they identify are usually not complicated, and the solutions are often straightforward with appropriate knowledge of your greatcoat building and the material repairs it needs.

For a detailed explanation of what constitutes a traditional building, please refer to **Part A: Introduction – What is a Traditional Building**.

An annual maintenance plan which details a programme of checks to ensure your building is in good condition is recommended. Annual checks for paintwork, minor repairs is recommended. Clearing gutters, checking flashing and downpipes are important basic maintenance checks.

Like-for-like materials are certain to be compatible and work in balance with a traditional building.

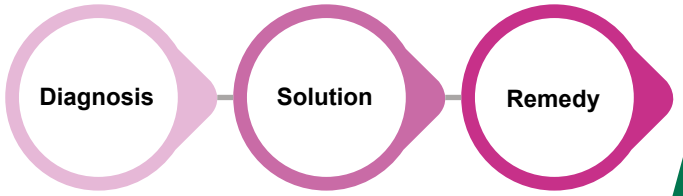
Poor quality materials will decay and weather quicker and need replacing more frequently.

Unpeeling the past

Since the mid-20th century modern, impermeable materials like cement and plastic paints have disrupted the moisture management of traditional buildings. Many problems arise from misdiagnosing moisture issues and applying raincoat materials to fix them (cement, concrete, DPCs, plastic paints), and then re-applying them. These materials trap moisture, preventing it from evaporating and making the building wetter, which leads to more damp, decay, and damage.

Greatcoat buildings need greatcoat materials and repairs. Applying raincoat materials will not turn them into raincoat buildings and will speed up the decay of materials by blocking the natural moisture management that greatcoat materials provide. A common term for permeable, porous, and capillary-open materials is ‘breathable’ (see glossary). However, be cautious, as many proprietary products use this term as a marketing tool, and they may not be suitable for traditional buildings.

Ⓐ The issues identified for buildings are usually not complicated. Lack of routine clearance and maintenance of rainwater guttering systems quickly encourages plant growth and the onset of decay.



Ⓐ Using raincoat repairs on a greatcoat building can lead to damp walls, as well as weathering and erosion of the core building material.

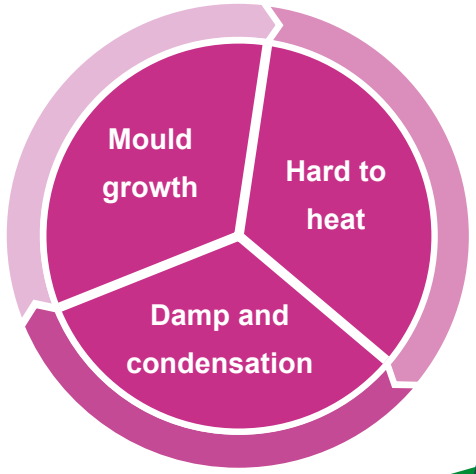
P3.2 A regular maintenance program is essential, as many of the problems identified by building pathologists stem from a lack of maintenance.

P3.3 For proper function, your building needs to be maintained, repaired, and changed with compatible materials. This involves identifying past inappropriate repairs to the traditional building and ensuring maintenance and repairs use sympathetic greatcoat materials (look for permeable, porous, and capillary-open).

P3.4 Design new additions or extensions to align with the traditional building's construction method. Before altering or extending, correctly diagnose any issues caused by past inappropriate repairs.

P3.5 Regular inspections are essential for maintaining balance. Homeowners should conduct annual surveys and routine checks to identify defects early and address repairs promptly.

Cement → Modern Concrete → Damp Proof Courses (DPCs) → Sealants → Plastic Paints



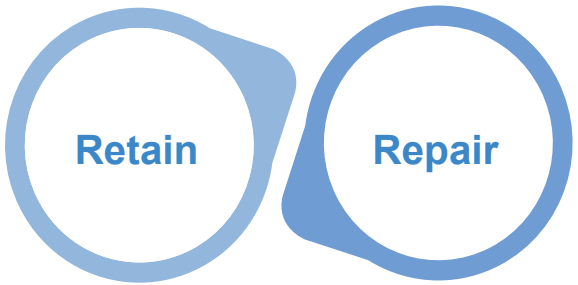
P4 Principle 4

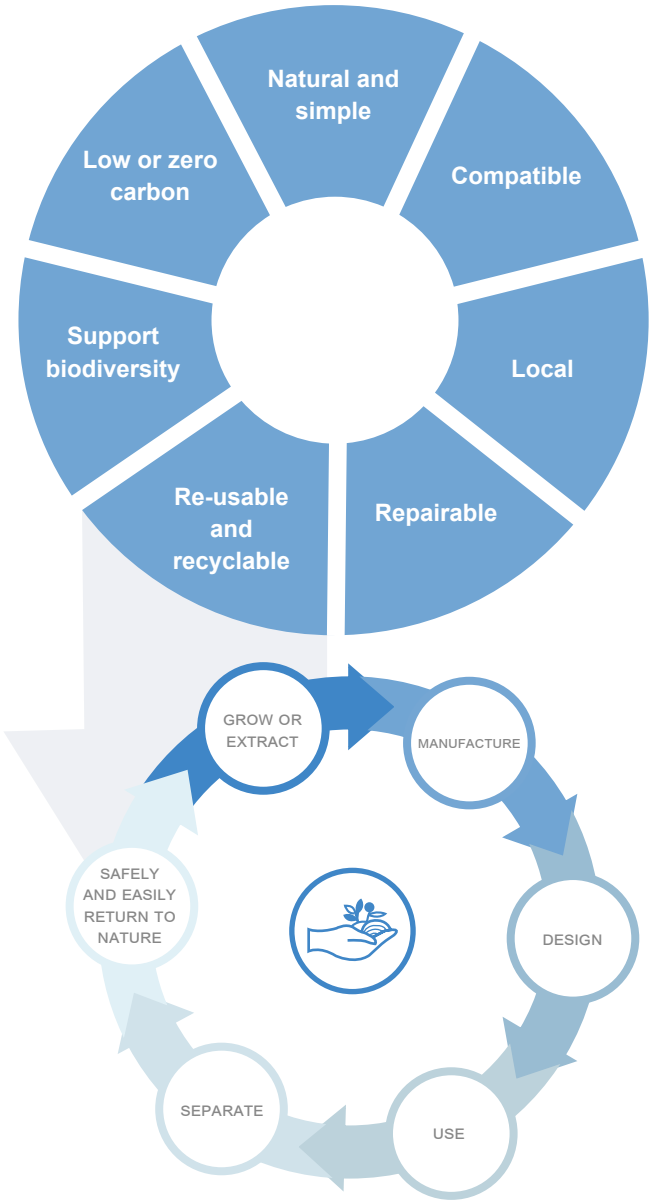
Use sustainable and circular materials

Historic buildings show that sustainable materials are the best choice: they last longer, can be repaired or recycled, use little energy to produce, and rarely create hazardous waste. This approach should be applied to new construction, rather than using short-lived, energy-intensive materials that generate waste.

Our construction and renovation industries use more and more components and materials with limited lifespans and little or no scope for re-use and recycling. In April 2021, the UK's construction, demolition, and excavation sectors were responsible for 61% of material use and waste generation. The construction industry contributes to 32% of landfill waste, with a third of the materials extracted and manufactured being wasted. If current trends continue, material extraction will triple in the next 30 years, and waste production will triple by 2100.

To address climate change, we must reduce our consumption of resources and single-use products. The production and transportation of materials have severe environmental and human rights impacts. We are just starting to understand the climate effects of our material choices, the energy used to produce them, and the challenges of recycling, which often lead to waste being sent to landfill or incineration.





Assess new materials

When choosing materials for traditional buildings or new constructions, we should consider the environmental, economic, and social consequences of our material consumption in two key ways:

- Consider the natural resources involved in your product's supply chain and how they are combined to create the final product. We should evaluate the entire life cycle of each material used, from extraction and processing to transportation.
- Consider the high energy demands required to process natural resources for modern use—including manufacturing, disassembly, and recycling. This involves assessing the energy required to extract, process, transport, and eventually break down materials for reuse.

We should also question the current understanding of 'durable', 'long-lasting', and 'maintenance-free' as these are often not sustainable.

Marketing often encourages us to purchase materials that are marketed as 'maintenance-free' or 'long-lasting'. However, these materials often function only until they fail and then become waste. We dispose of these products more frequently as they crack, degrade, and become unfit for use. In fact, such products are often discarded more quickly than natural, less 'durable' materials, which are inherently more sustainable and less harmful to the environment. These so-called 'maintenance-free' products are often advertised as recyclable but require high-energy manufacturing processes and cannot be broken down easily without significant environmental and high carbon / energy costs.

P4 Principle 4

What materials and products to choose

P4.1 Look at the cycle diagrams for sustainable materials and re-usable and recyclable materials. We should look for materials and production processes which are: **Natural and simple; Compatible; Local; Repairable; Re-usable and recyclable; Support biodiversity; and are low or zero carbon.**

P4.2 Choose cradle-to-cradle materials and products that preserve finite resources, use low energy in production, and generate minimal waste that requires low-energy disposal. Repairs and new designs should incorporate cradle-to-cradle materials wherever possible, enhancing the character and appearance of the place.

P4.3 Careful specification of materials can significantly enhance both new builds and traditional buildings by using compatible, sustainable materials for alterations and additions. New extensions and constructions should consider techniques and materials that minimize the need for near or full replacement of components. Building elements should be designed for retention and repair in the future, rather than immediate replacement.

P4.4 Consider construction techniques and materials that prioritise future retention and repair over replacement.

Prevent and reduce waste

P4.5 Consider the energy needed to break down building components and materials when they no longer serve their purpose. Find better alternatives for waste material.

P4.6 Historic fabric is a finite resource is often inherently sustainable. Once lost to landfill or waste-to-energy burn they cannot easily be replaced with as good quality materials and detailing.

P4.7 To prevent the waste of historic building materials, repair solutions should use appropriate design, materials, and construction methods that are compatible with the traditional building and its materials, while reflecting the original architectural design. Replacement should only be considered when retention is not possible and traditional fabric has been lost. Compatible repairs extend material lifespan, reducing environmental impact and whole-life carbon costs.

P4.8 Consider the energy needed to create building components and materials. Minimise consumption. When purchasing consider if recycling or reusing materials requires high energy input or processing, they may become financially unviable and end up in landfill or as waste-to-energy.

Retain and repair before replace

P4.9 Retain and repair traditional building materials, before jumping to replacement.

Prioritise repair over replacement – Traditional buildings were designed to be repairable; maintaining original materials extends their lifespan and reduces waste.

Use compatible methods – Repairs should employ appropriate design, materials, and techniques that respect the building's original character and construction.

Replace only when necessary – Replacement should only be considered when retention is not feasible and significant historic fabric has already been lost.

Protect character and integrity – Repairs should not compromise the building's overall integrity; retain as much original material as possible, ideally in situ or on-site.

Design for retention – Good design should enable the preservation of historic materials, supporting more efficient use of existing resources.

Value traditional materials – Historic materials were typically made with low embodied energy and should be retained for their durability, quality, recyclability, and embodied carbon.

P5 Principle 5

Biodiversity and climate

Globally, biodiversity is declining at an alarming rate, with much of it going unmonitored. Lincolnshire's diverse landscapes and habitats must be protected, especially around our buildings.

Buildings provide important habitats for various bird species, including Swallows, House Martins, Swifts, Sparrows, Starlings, Barn Owls, and even Peregrine Falcons. In the UK, all wild birds, their nests, and eggs are protected by law.

Bats often roost in roof spaces and cavities and use different types of roosts depending on the time of year and their needs (maternity, hibernation or transit roosts). All bat species in the UK are protected by law. Even if the bats are not visible, the roost remains legally protected. For more information, visit **the Bat Conservation Trust**.

Masonry or mortar bees burrow through soft earth mortars or enter gaps in mortar joints, often on the sun-warmed south elevation. Visit **Buglife** or the **Bumblebee Conservation Trust**.

Dark night skies are crucial for both nature conservation and human well-being. Our flora and fauna have not evolved to cope with artificial light at night, which has devastating effects on moths, bats, hedgehogs, and birds. Dark skies are also important for the rural economy, education, culture, and human health.

Biodiversity

The choices we make

Construction and refurbishment can have both direct and indirect impacts on nature, by altering micro-environments and reducing spaces for wildlife in and around buildings. Construction activity may disrupt animal behaviour or restrict access to habitats, while pollution from material production and use can harm plans and animals. By assessing how our actions affect local species, we can ensure more sustainable practices. When undertaking repairs, alterations, additions, or new builds, we must prioritize the protection and planning for plants and animals in and around our sites.

Landscapes, gardens and yards

Wildlife considerations are of particular importance when considering the future of historic traditional buildings, as they can provide habitat for protected species such as nesting birds, barn owls and bats.

The survival of all species is important in the interests of biodiversity but it is the protection of roosting bats (any of the 17 species found in the UK) and nesting birds (especially swallows, swifts and house martins) that need to be most carefully addressed in light of the protection afforded to these species under the Wildlife and Countryside Act 1981 (as amended), the Habitats Regulations (2017) and the Countryside and Rights of Way Act (2000).

Wildlife in buildings

Existing landscapes and natural features are important for nature conservation. With human encroachment into natural landscapes, and extensive deforestation, the availability of natural sites has decreased. Are trees or hedgerows present on your front or rear boundaries? Do you have natural landscaping around your building?

CLIMATE

As the UK's climate changes and the Gulf Stream shifts, we are experiencing hotter summers, wetter overcast periods, and more frequent and intense rainfall, alongside colder winters. Episodes of extreme heat are becoming more common and severe, leading to an increase in heat-related deaths. Lincolnshire, named the most vulnerable region in the UK to climate change, is facing more unpredictable weather events and rising sea levels.

There is an increasing risk of overheating in buildings during longer periods of the year, leading to potential health impacts, and a rise in building-related issues due to extreme weather events.

P5.1 Support biodiversity by evaluating both the natural environment and your home as habitats for wildlife. For example, bat friendly loft materials and integrated bat / bird boxes. Aim to create the right conditions and habitats for local species, and assess how building materials may impact wildlife by introducing hazards or reducing habitat potential.

P5.2 Plan for more variable weather events. Buildings must be in good condition and function well to ensure their materials can withstand greater physical, chemical, and biological stresses. They should provide healthy living environments in both hotter and colder weather, taking into account both heat gain and heat loss.

P6 Principle 6

Wellbeing and Economic value

WELLBEING

Where we live and how we connect with our surroundings impact our well-being and health. Well-maintained buildings and communities improve the quality of life for everyone, including homeowners, neighbours, and visitors.

Research shows that living near heritage sites boosts well-being. People in areas with cultural heritage report higher life satisfaction, with Grade II listed buildings being particularly beneficial.

“ Heritage plays a significant role in society, enhancing our wellbeing and quality of life, improving the way places are perceived, and engaging the general public

HISTORIC ENGLAND (2020) HERITAGE AND SOCIETY 2020, P2.

P6.1 Our historic places have proven wellbeing and economic benefits for individual people and our society. To protect this aspect of our historic buildings and places, new development and alterations to traditional buildings should be designed to complement or enhance the character of our local buildings and places.

“ Heritage helps to strengthen towns and cities, levelling up places across the country and fostering community cohesion

HUDDLESTONE N, MINISTER FOR SPORT, TOURISM AND HERITAGE (2020) HERITAGE, HEALTH AND WELLBEING A HERITAGE ALLIANCE REPORT

Science is increasingly aware how location, environment, memories and emotions are intertwined to shape our understanding and trigger connections and actions in a place. When people knock away or remodel their environment, they weld new memories and forget sequences of associated connections between locations and memories. Without proper care it can lead to disassociated places and spaces and fragmented communities.

A study measuring cortisol levels before and after visiting a historic site (Grossi et al, 2019) found subjective wellbeing increased 40% and stress levels decreased by 60%.

People who visit heritage were estimated to have a 0.23% lower probability of visiting psychotherapy services and a 0.7% lower probability of frequently visiting GPs each year. This can lead to cost savings for the NHS per annum.

> *“ heritage assets are important ‘pull’ factors influencing business location decisions (Graves et al, 2017)*

HERITAGE COUNTS (2023) HERITAGE AND ITS ROLE IN DEVELOPMENT AND PLACE

Economic value

The care and improvement of traditional buildings can significantly benefit the physical and mental well-being of your community as an inherited resource. On average, cultural heritage contributes £515 annually to each person’s well-being across England.

Investing in heritage not only enhances well-being but can also directly influence local economic outcomes, attracting businesses and investors and providing them with a competitive edge. By repurposing and investing in heritage, communities can create vibrant spaces where diverse businesses can thrive. Successful and sympathetic repairs and improvements also serve your own financial interests.

There is a 23% price premium for homes in conservation areas. Even when location, property features and other factors affecting house prices are adjusted for, a premium of around 9-10% was still found (Ahlfeldt et al, 2012). This advantage falls by 4% to 5% in conservation areas that are classed as being ‘at risk’.

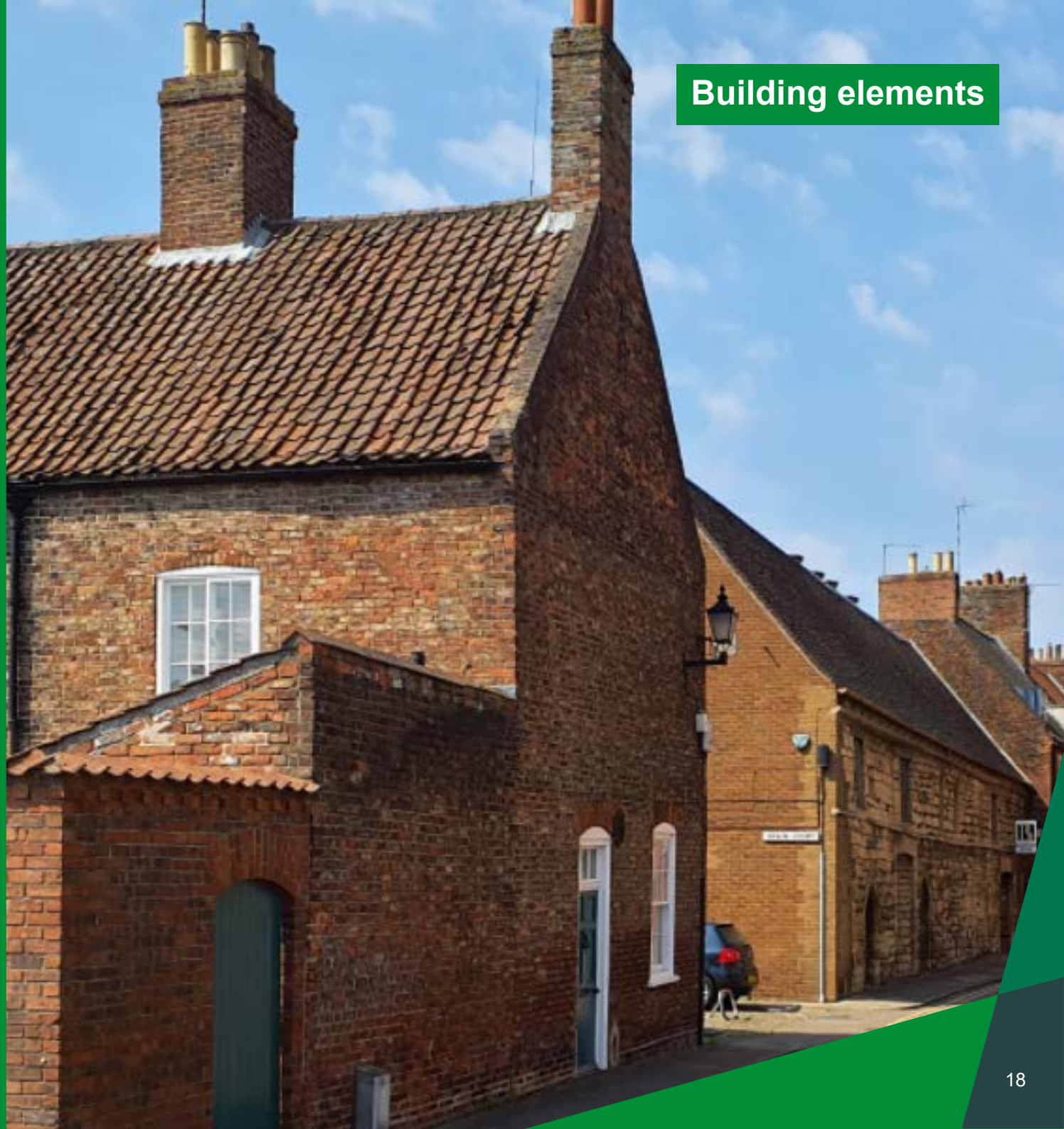
Empowered and active people

> *“ For every £1 of GVA generated by the heritage sector in England an additional £1.93 of GVA is supported in the wider economy through indirect and induced multiplier effects*

HISTORIC ENGLAND (2024) THE CONTRIBUTION OF THE HERITAGE SECTOR TO THE VISITOR ECONOMY

C

Building elements



What you should always do

Ⓐ Find a reputable and competent professional who has experience with traditional greatcoat building materials to assess repair methods and advise on alterations and additions.

Ⓑ Choose professionals (e.g. structural engineer, contractor, tradesperson, craftsperson) with experience in historic buildings - not just new builds. Where possible, review examples of recent work in person. Request photographs and client references.

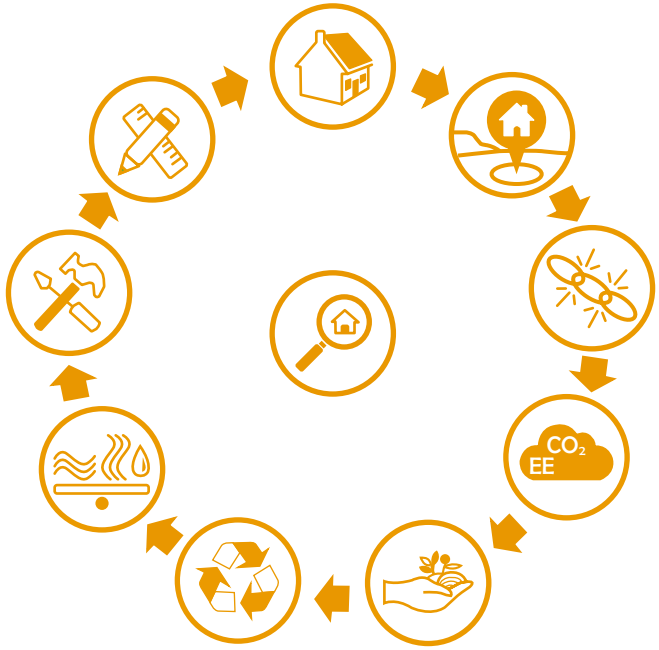
Ⓒ Undertake regular and proper inspection, maintenance and appropriate repair. Sudden bursts of harsh and severe weather events are set to become more frequent so regular checks will become even more important.

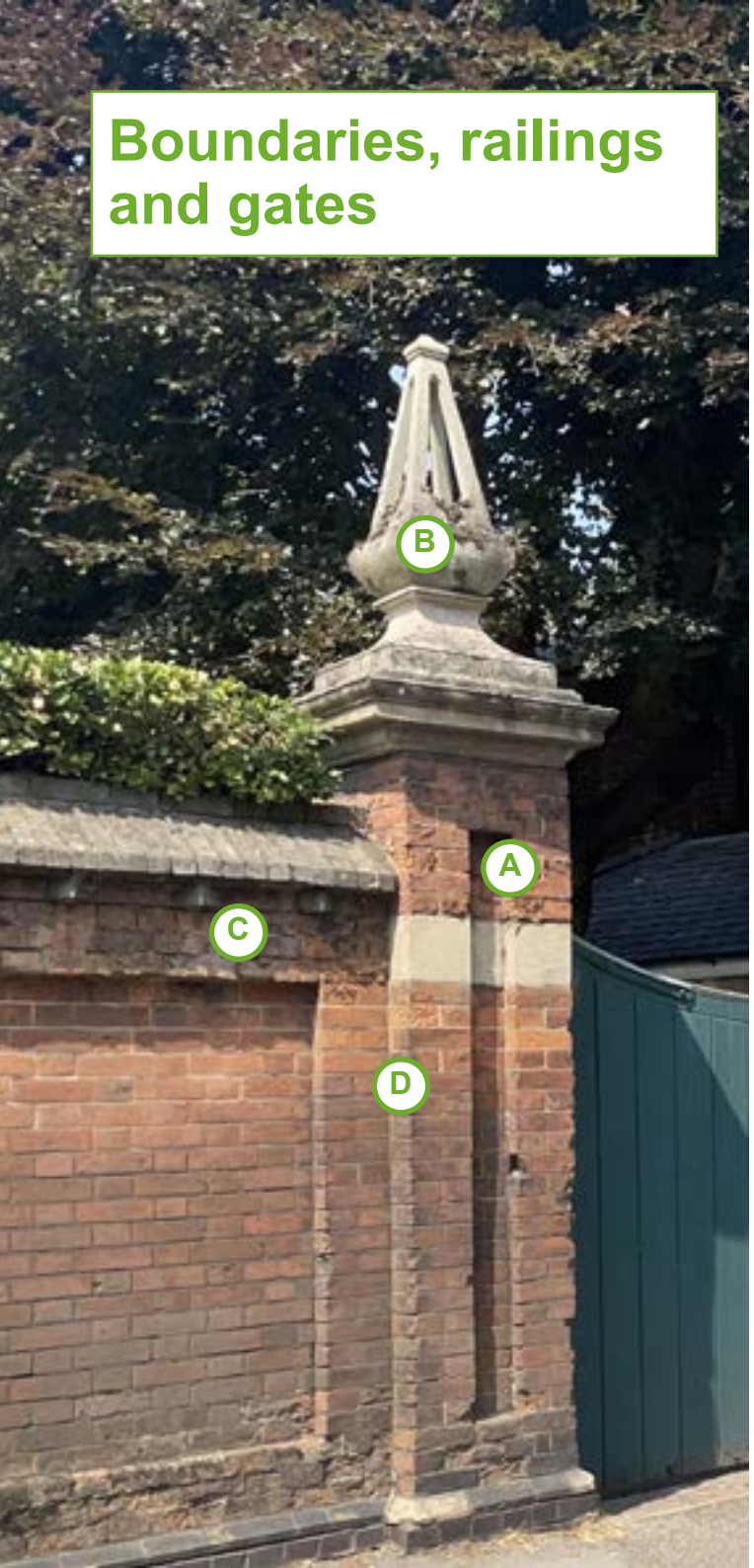
Ⓓ Retain building elements as the first step, rather than replacing them. Retention is often more cost-effective and environmentally friendly than full replacement.

Ⓔ Any maintenance, repair or new proposal should take into account construction type (greatcoat), material characteristics and design. This equally applies across all elevations, whether principal or not.

Ⓕ Use appropriate, compatible materials to preserve the durability of traditional fabric. Compatible repairs extend material lifespan, reducing environmental impact and whole-life carbon costs.

This ensures you successfully retain and use your traditional building's character and materials





Boundaries, railings and gates

What is a boundary treatment

Boundary treatments are structures—such as walls, gates, or fences—used to define the edge of an area or building. They can be decorative or functional or both. Associated features can include elements like lamp standards, letterboxes and sculptural pieces. Hedgerows or tree lines can also serve as boundary markers and contribute to the site's character and are desirable to preserve.

- **Listed boundaries** – Some structures, like the walls of a walled garden or graveyard, may be protected through listing in their own right. Others may be curtilage listed.
- **Contributory value** – Other boundary features contribute to a building, group of buildings, or the wider area.

Why your traditional boundaries, railings, gates and gardens are great

Existing boundary features not only enclose the spaces around a building but -

- **Hold historical significance** – These elements often have value in their own right due to age, craftsmanship, rarity, construction style, or association with historic use. Their qualities are determined by the designer, craftsmen or tradesmen and the historic owner.
- **Contribute to character** – They enhance the distinctive identity of a place, reinforcing its setting and sense of place.
- **Create visual connections** – Boundaries help visually link buildings, unifying them into a cohesive and harmonious group.
- **Shape spatial quality** – They define spaces that feel self-contained and, in some cases, are deliberately designed to enhance privacy and a sense of enclosure.

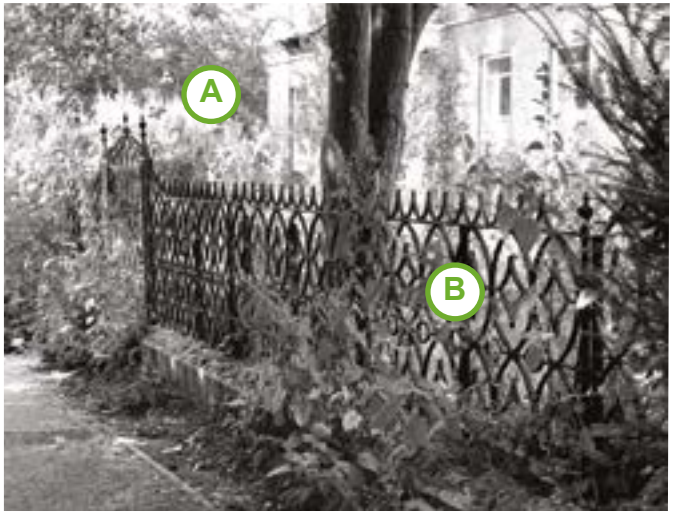
Ⓐ Walls, fences and gates are valuable in their own right as major elements to a traditional building, its setting, its broader streetscape or wider landscape.

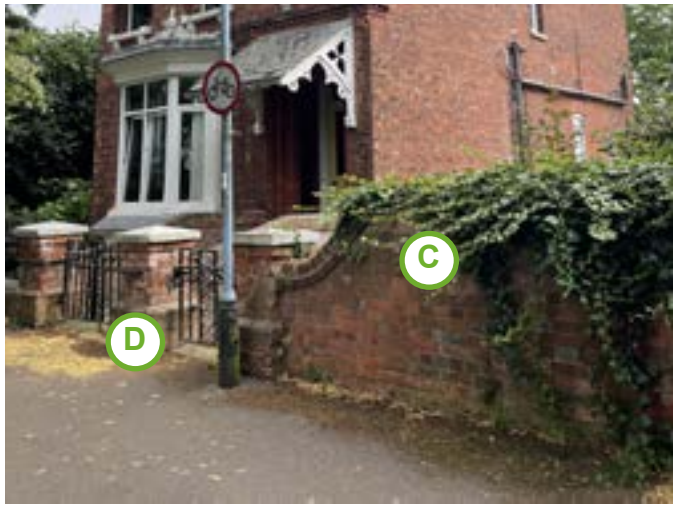
Ⓑ Height and visual permeability usually relate to function and location. High solid walls are associated with controlling access or providing shelter.

Ⓒ Different types of coping found on historic walls can demonstrate different regional characteristics and should be respected.

Ⓓ There may be stylistic similarities between the treatment of the boundary and the architectural character of the house. Boundaries were constructed to incorporate functional and decorative features, such as lighting, sculpture, signage and post boxes. They often contribute significant interest and character to the boundary and setting of the area.

Boundaries





Ⓐ Cast-iron railings define the front boundaries of many late 18th and 19th century housing areas. The iron industry produced a wide range of decorative cast and wrought iron railings and gates, varying in style from restrained to highly ornate.

Ⓑ Fences, railings, balustrades and low walls were intended to allow views through or over the boundary.

Ⓒ Brick boundary walls, or stone, of various types and dates characterise towns, villages and rural areas. Brick was frequently used for its heat retention in the construction. Composite materials, like Coade stone, may reflect local character in boundary walls.

Ⓓ Visual continuity is created by numerous boundary walls linking buildings and maintaining continuity of the building line along streets.

Ⓔ Timber was used and can still be found across the Lincolnshire area as boundaries for a range of building of different styles and dates from timber pedestrian gates to carriage gates.

Ⓕ Hedges can provide valuable habitats for birds and insects. In contrast, some fencing and some inappropriate hedge species offer no ecological benefits.

Ⓖ Cast-iron lamp standards contribute to the character of the area.

Good design versus poor design

- Standard mass-produced fences, gates or railings in front of buildings harms local character and distinctive design and materials.
- Where greater privacy is needed, consider options like planting a hedge behind existing railings or adding a fence or railing above a low brick or stone wall, rather than removing the original boundary feature entirely.
- Softwood timber, plastic, or concrete post and timber fences may look attractive when new but often deteriorate quickly and often look tired and neglected. Similarly, modern rendered walls can weather poorly.
- Boundary features should shed water effectively. Avoid flat-topped designs; brick walls should have copings or cappings that prevent frost damage and water ingress.
- Stronger storms and high winds are becoming more frequent. Lightweight fencing, which is often poorly installed, is increasingly prone to failure, leading to repairs, waste, and insurance issues.

You can find further information on brick wall bonds in **Appendix A2 Glossary**

Boundaries

Ⓐ A garden wall may be arranged to form a symmetrical compartment around a house, with a gateway aligned on the axis of the house or the entrance door.

Ⓑ Visual continuity is created by numerous boundaries linking buildings and maintaining continuity of the building line along streets.

Ⓒ Over-surfacing front gardens with hard materials disrupts historic character, increases flood risk, puts pressure on sewage systems and reduces biodiversity. Boundaries should suit the status of the building and maintain visual continuity along the street.

Ⓓ A basic boundary or no boundary feature at all looks jarring in front of a larger or higher status house or a row of terraces.

Ⓔ Over five million UK front gardens now have no plants, as hard surfacing like tarmac and paving has replaced greenery—reducing plant cover by 15% between 2005 and 2015.

Action
Retain and repair before replace - Retain original gates, gateposts, and railings in situ. Also consider traditional paving materials such as cobblestones or flagstones. Repair using like-for-like methods and materials.
Additional or new boundaries - Ensure any adaptation or new boundary treatment is sympathetic to the setting and reflects the character of the area. Respect the scale, height, and visual permeability of the historic context.
Additional or new boundaries - Choose designs and features appropriate to their setting. Avoid high, close-boarded fences in traditional contexts - these can create dead frontages and disrupt the historic streetscape.
Removing boundaries - Avoid removing boundary walls or garden/yard spaces to create hard standing or ‘grey’ paving for parking. Resurface areas using materials appropriate to the historic environment.
Material and aesthetic considerations - choose materials and finishes that age and weather well and are repairable and compatible with historic fabric for long term durability.

Windows and Doors

Why your traditional windows and doors are great

Traditional buildings feature a variety of historic timber windows, doors, surrounds, and porches that have endured for centuries. Their age, style, size, and ornamentation contribute to their distinct aesthetic character and special quality.

- They are likened to the eyes and mouth of a building.
- Changes to them can have the most significant impact on a buildings overall appearance.

Lincolnshire has many prominent historic window and door surrounds with their distinctive decoration of timber or stone surrounds, door cases, porches and fanlights.

The Issue

Windows and doors are vulnerable to replacement. In 2009, Historic England identified the removal of timber windows and doors (and doorcases) as the leading threat to conservation areas, with some areas added to the Heritage at Risk list as a result. Factors for loss include:

- lack of maintenance
- limited awareness of potential for repair
- dominance of uPVC products—marketed around energy efficiency and low upkeep—have accelerated this loss.
- alternative materials are often unable to replicate the materials and dimensions of historic windows.

The step change

With basic repairs, proper refitting, the installation of draught brushes, and the addition of secondary glazing or slimline double-glazed units, timber windows and doors can match the energy efficiency of uPVC alternatives. This is supported with the use of external or internal shutters and thermal curtains.

A 2022 CE Delft study found repairing wooden window frames has a lower lifetime carbon footprint than replacing them with new low-carbon hardwood frames.

Traditional windows, doors, frames and porches have established a greater expected lifetime of use (100 years +) compared to modern uPVC (~20 years) or aluminium windows (~40 years).

Historic timber windows, made from durable old-growth wood like Baltic or Scots pine, surpass modern equivalents in quality and longevity (centuries of use). Their quality and detailing are not easily replaced. A 1918 old-growth wood, with 20-25 tight rings per inch and higher % heartwood, offers superior stability and longevity. In contrast, 2018 fast-grown wood, with only seven rings per inch and higher % of less durable sapwood, requires more dedicated care maintenance to last.

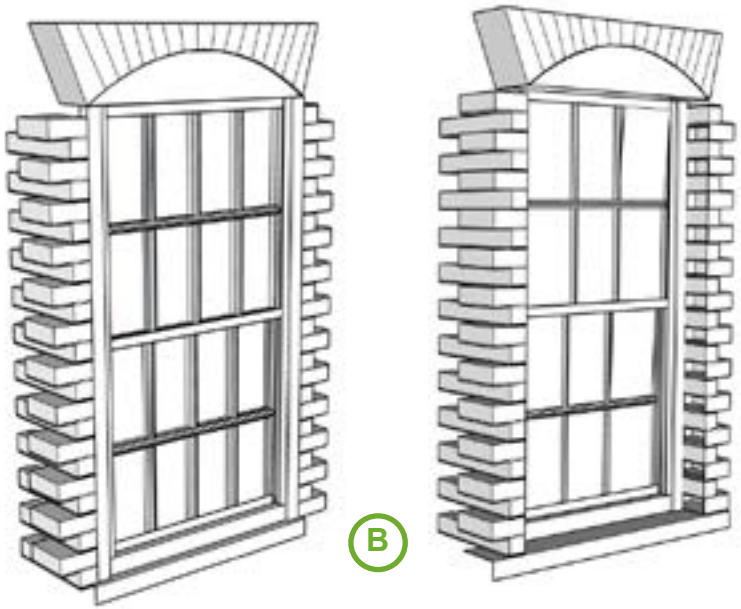
Few contemporary timber sources match their resilience, making preservation far preferable to replacement. Most modern timber windows will require higher quality and dedicated maintenance to last as long.

uPVC is increasingly guaranteed at 10 years and is generally lost to landfill or waste-to-energy burn due to exorbitant financial and energy costs at the point of potential recycling.

Economy and wellbeing

The replacement of traditional windows with uPVC alternatives often results in a loss of architectural symmetry and detail, especially when the new units differ in proportion, position, or framing. Such modern additions typically diminish the depth and articulation - or 'shadow' - of the façade. The introduction of modern-style windows and doors can erode the character and distinctiveness of traditional buildings, lowering their market value. This devaluation is pronounced when the modern replacements are themselves nearing the end of their functional lifespan.

Windows and Doors



General

Action
Research and understand more about the windows you have, then check and verify your reasons for replacing windows, doors and porches. Very often historic windows and doors are capable of repair and/or upgrading and complete replacement is unnecessary. See joinery.
Inappropriate Features - Modern features such as uPVC windows and doors (including sash or mock sash styles) are considered unacceptable due to the harm they cause to the character of the building, unless a compelling justification is provided. Traditional timber sash windows remain the most appropriate option in most cases.

Ⓐ Take a second look at your windows, carefully. In most cases the bottom sill and lower portion of the frames suffer the most and tend to decay, but this can be replaced by splicing in new wood or a similar character and quality. Wooden sashes and doors can have individual components—such as rails, panels, or parting beads—replaced or spliced in situ. In contrast, uPVC, aluminum, and sealed glazing units lack this flexibility and often require full replacement.

Ⓑ Sash windows emerged at the end of the 17th century and had small glazed panes and thick timber transoms. Double hung sashes began to dominate. From about 1710 to 1730 the segmental headed arch became popular with four and six paned sashes. As the price of glass fell the six-over-six, four-over-four window, three-over-three and then the two-over-two and one-over-one window became common. Sash horns were also introduced.

Ⓒ The flat arch was introduced around 1730 and after 1774 the windows were required to be recessed. These developments led to finer glazing bars and the Regency window with 'margin light'.

For more details on window components and design see **Appendix 2b: Building Element Glossary**

Windows and Doors

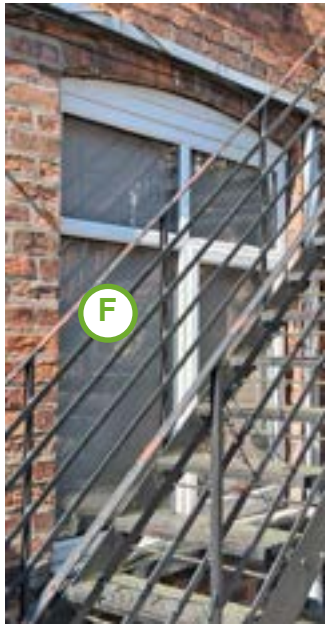
(E) Retaining original building glass is more cost-effective and environmentally sustainable than full replacement. In the UK, nearly 200,000 tonnes of glass are sent to landfill annually, with end-of-life façade glass often used as road construction aggregates. The glass industry is a major contributor to greenhouse gas emissions, air pollution, water consumption, and waste generation.

(A) Maintain regularly with annual inspections and redecoration every 3–5 years to prevent rot and prolong joinery life. Early repair can avoid full replacement.

(B) Avoid mismatched or fast-grown timber that may fail over time.

(C) Match traditional finishes such as linseed putty, burnt sand mastic, and linseed paint for durability and authenticity.

(D) Competent repairs, carried out with the right knowledge, can eliminate draughts, reduce energy bills, and significantly cut down on noise transfer. Upgrading and refurbishing historic windows and doors can greatly enhance performance, often at a lower cost than full replacement. Draughtproofing, in particular, can reduce air leakage from windows by 33% to 50%.



(F) These images show some of the issues faced across conservation areas with replacement windows.

- uPVC windows use 43% oil-based raw materials, a non-renewable resource.
- Manufacturing uPVC windows requires 8 times more energy than timber frames.
- uPVC windows generate nearly 50% more waste than timber, with 82% sent to landfill, 15% incinerated, and only 3% recycled.
- Recycling uPVC is energy-intensive and limited to a few products.
- uPVC windows are not maintenance-free.
- uPVC discolors and can rupture under extreme weather conditions.
- Service life of uPVC windows is typically 20–40 years, making them unfit for purpose much sooner than timber alternatives.
- uPVC windows are harder financially to repair and often end up in landfill.
- uPVC's broad, flat frames and mitred joints are less sustainable and have a higher environmental impact.
- uPVC has a high whole-life carbon cost, especially considering frequent replacements.

Windows and Doors

Form

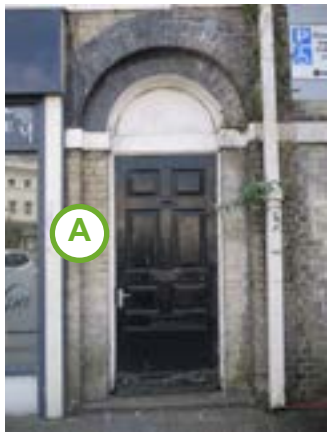
Action
Layout and Openings - Proposed changes should consider the existing pattern, spacing, symmetry, or irregularity of window/door layouts on individual or grouped buildings (e.g., terraces or semis). Reuse of existing openings is encouraged to maintain proportions and aesthetic character. To minimise the need for new openings in historic walls or roofs, small service rooms (e.g., toilets) can be provided without natural light.

Joinery

Action
Repair and upgrade historic windows, doors, and porches. Retain original joinery wherever possible, including architraves, porches, panelled doors, sash windows, shutters, and internal timber panel-ling. Repairs are often more cost-effective and environmentally friendly than full replacement.
Ensure all edges on new joinery are rounded (like a pencil lead) to allow paint to properly adhere - brushed-on paint cannot coat sharp 90-degree edge.
Where replacement is unavoidable, use high quality timber windows and doors, such as slow grown Douglas Fir or treated timber. These offer long-term value, are repairable, and preserve traditional and local craftsmanship.
Do not use plastic, acrylic, or coated finishes; avoid trickle vents or vents cut into the frame or glazing; and do not use stick-on or between-pane astragals. These diminish the traditional character of the window. Stick-on glazing bars fall off over time, while the between pane version never looks convincing

Action
New Windows and Doors in Existing Openings - Design should reflect original surviving examples. New units should: • Be bespoke and constructed from timber or metal • Utilise the original design • Match the placement within the reveal • Retain traditional proportions, size, shape, and position • Retain the original opening method (e.g., sliding sash or side-hinged)
Avoid 'look-alike' replacements such as top-hung sliding sash windows or units with wider frames and transoms, which compromise the elegance and authenticity of historic sash windows.

Windows and Doors



Glazing

Action
Install internally fitted secondary glazing. It actually provides the benefits of double glazing and improves acoustic performance. It improves heat retention in winter and is removable in summer, offering a cost-effective alternative to full replacement or slimline secondary glazing.
Replacement glazing and frames should retain key features such as dimensions, depth of reveal, glazing pattern, number of lights, glazing bar width, moulding and arrangement.
Alterations may include installing slim-line secondary glazing within existing frames if suitable. Standard or triple-glazed units should not be used. Assess on a case-by-case basis, considering weight, meeting rails, and glazing bars. This should be designed by skilled traditional building practitioners. Often, historic windows and doors can be upgraded more efficiently and cost-effectively than by replacement.

Ⓐ Lincolnshire retains a wealth of different styles of ornamented porches, door surrounds, fanlights and window styles.

Windows and Doors

Fixtures and fittings

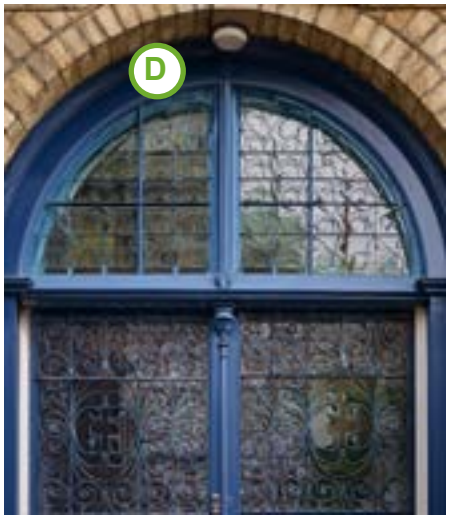
Action
Where historic glazing, ironmongery, high quality timber, internal and external shutters, window fixings survive they should be retained and repaired rather than replaced.
Modern security grilles are, however, discouraged on any elevations visible from the public realm.

Ⓐ Secondary glazing began to appear in the 19th century. Some buildings feature a second double-hung sash window or solid panels, which were fitted with counterbalanced weights.

Ⓑ As climate change leads to more intense and humid summers, historic buildings may face increased risks of overheating. Many of these buildings originally used sash windows, shutters, and awnings to regulate high summer temperatures. A suitable modern alternative is electric canvas roller awnings, which can be fixed to the top of window frames with metal brackets and arms to provide effective shading and temperature control.

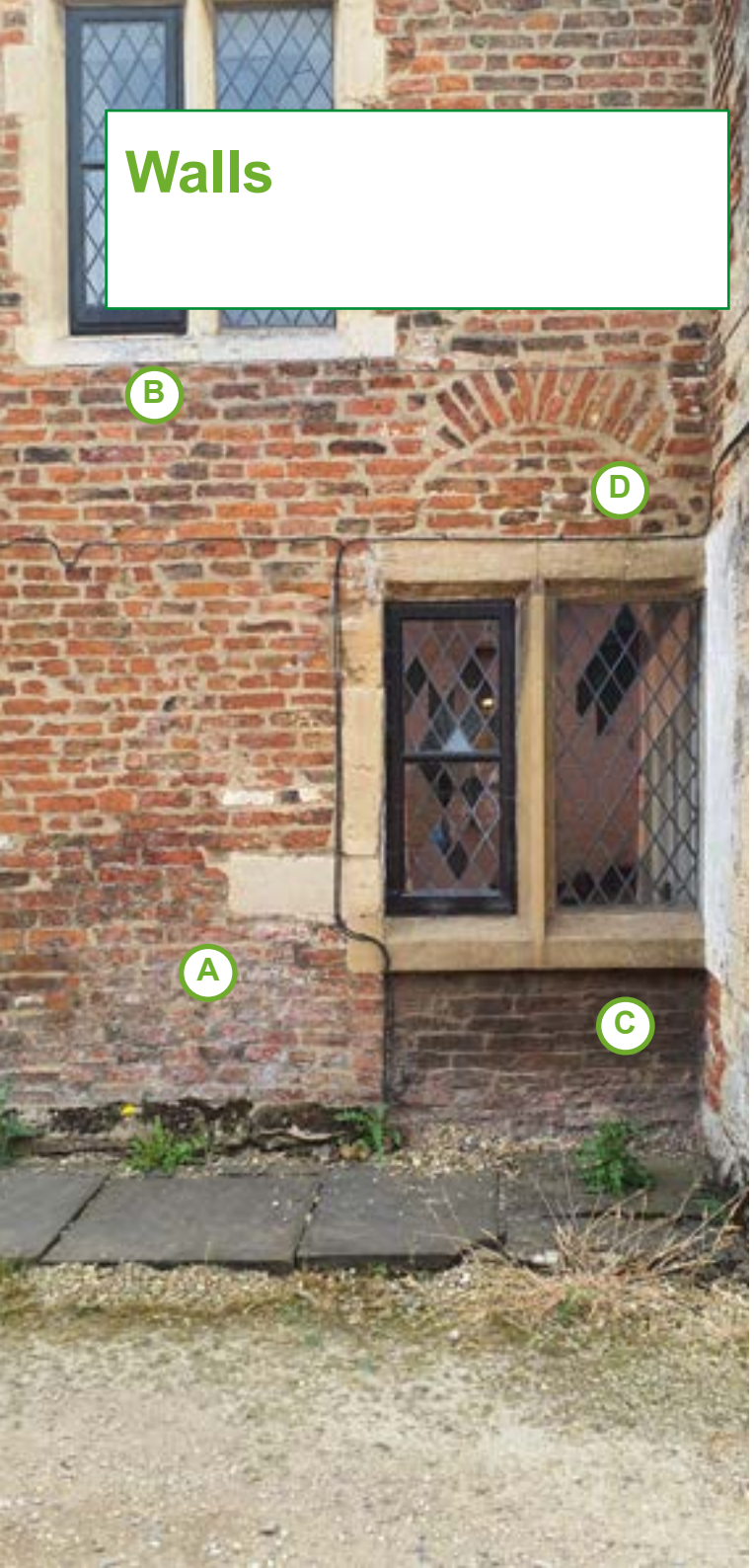
Efficiency

Action
Sash windows with sliding upper and lower frames (called double hung sashes) were designed to cool rooms on warm days. By opening the lower and upper sash at the same time, cool air can enter through the bottom of the window and warm air exit through the top of the window. Retaining this function is key to managing heat in summer.
Minor adjustments and alterations, such as draught proofing, shutters or heavy and lined curtains and draught excluding internal vestibules are encouraged. They are cost effective, efficient, and do not require planning permission.



Ⓒ The addition of shutters and awnings to southern, southwestern or southeastern elevations to address overheating issues in summer months.

Ⓓ Retain the benefits of historic ironmongery and other fixtures and fittings where they survive. Retain historic grill work in front of stained glass or fanlights, sash weights, sash lifts, sash fasteners and hooks.



Walls

Why your traditional walls are great

External walls are the most visible element of a building and form a key part of its character. Their design, materials, method of construction, colour, texture, detailing, and finish all contribute significantly to the architectural and historic significance of a structure. These walls are frequently constructed from locally sourced materials, such as earth mortars, and construction types can vary widely — including mud-and-stud, timber frame, and brick solid wall or cavity construction.

Hold historical significance – These elements often have value in their own right due to age, craftsmanship, rarity, construction style, or association with historic use. Their qualities are determined by the designer, craftsmen or tradesmen and the historic owner.

Exposed walls can reveal archaeological evidence of historic adaptation, suck as blocked openings or refronting. Different opening window sizes and floor levels can be regularised over time and phases of historic brickwork or stonework shows phases of adaptation, extensions. Photographic or measured surveys are useful if works will re-cover or cover this evidence over.

Careful observation can provide insights into:

Ⓐ Construction techniques and craftsmanship, particularly those used for structural strength and weather protection.

Ⓑ Cultural and intellectual context, reflected in the choice of local or imported materials and the quality of detailing in timberwork, brickwork, stonework, and pointing (with finer joints often indicating higher quality work).

Ⓒ The original status and cost, which is evident in the appearance and finish of materials - such as finely jointed bricks or elaborately detailed timberwork - indicating a building of greater prestige or investment.

Ⓓ Architectural style, conveyed through elements like decorative brickwork, specially shaped bricks, or combinations of contrasting materials (e.g. timber and stone, or brick and terracotta).

Natural energy conservation – Traditional materials have been selected and used in ways that promote their durability in their climate and ensure the building continued to serve its intended purpose.

- Designs were determined by local building materials, topography, climate, stylistic intent and social or economic influences.
- Their materials contribute to energy efficiency through their thermal mass, which support natural warming and cooling (rather than mechanical).
- Compatible maintenance and appropriate repair allow their continued use, reducing the need for additional materials and energy, and enabling the incorporation of circular and sustainable practices in ongoing care.

Mud-and-stud

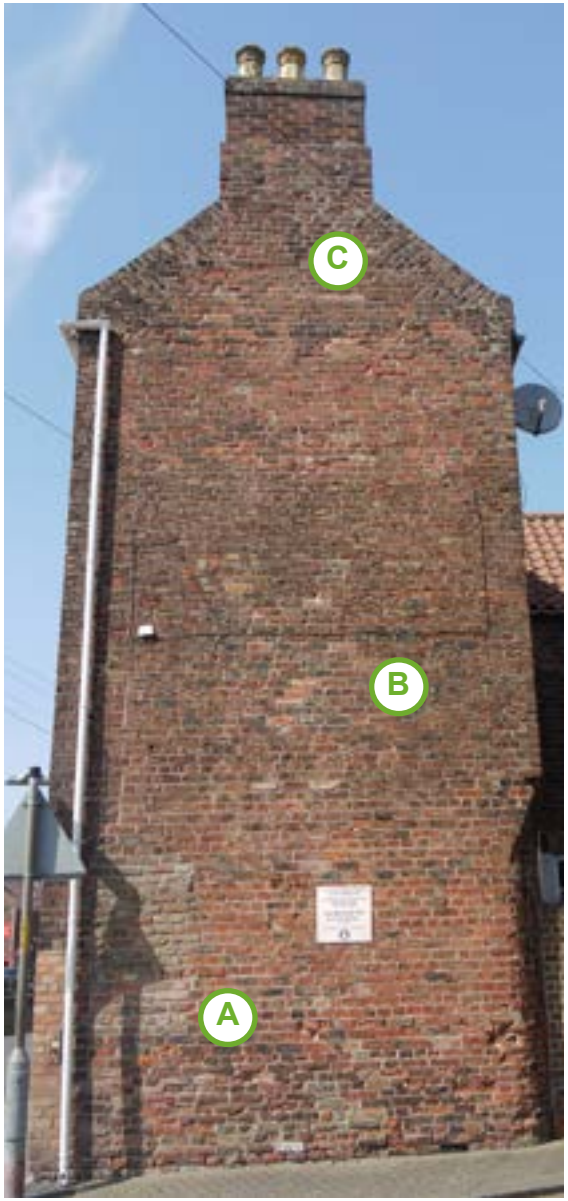
Ⓔ Mud-and-stud buildings were a common building type before the 18th century, when brick and tile became widely available. Few examples of this once common building type survive. At a higher level of society timber-framed buildings were constructed.

Walls

General

Action
Every effort should be made to maintain and repair external walls rather than structurally or materially replace them. Documentary research and fabric analysis are important for understanding design and material properties before any works. These include analysis of historic lime mortars and historic brick mixes.
Wall repairs should ideally be constructed from the same palette of materials used traditionally in the area. This means for the most part using materials present on pre-20th century buildings in the locality. Pointing to brickwork should be similar in colour to the brick and an appropriate lime mortar mix to the strength of the brick.
Inappropriate cleaning methods which would be likely to cause substantial damage would not be acceptable. Often weathering layers form natural barriers to protect the material from further erosion. Cleaning can remove the natural protective barrier, cause considerable damage and accelerate decay.

You can find further information on brick wall bonds and pointing in **Appendix A2 Glossary**



Ⓐ Brick, whether locally made or imported during the 18th or 19th centuries, are an important walling material for Lincolnshire. Most towns and villages had their own brick-pit which has given Lincolnshire a rich variety of brick colours and types.

Ⓑ Imported materials were often a statement piece in a local area. Brick bonding patterns are similarly of interest, whether Flemish or English garden wall bond. Brickwork bonds used in houses often include Flemish bond to the front elevation, with less ostentatious brickwork to the sides and rear.

Ⓒ Brick tumbling can be seen across many gable ends.

Ⓓ The palette of materials can vary in colour and texture and represent different phases of construction in an area.

Walls

Mortars

Action
Pointing to brickwork should be similar in colour to the brick and an appropriate lime mortar mix to the strength of the brick.

Brick and stone

Action
New walls should be constructed from the same palette of materials used traditionally in the area. If rebuilding the wall should re-use the bulk of dismantled original material. The innate strengths and characteristics of that building material should be used.
New walls should reflect, enhance or match the building or adjacent buildings in proportion, depth and irregularities, as well as the historic brick or stone bonding pattern.
New walls should match the historic brick or stone bond pattern.

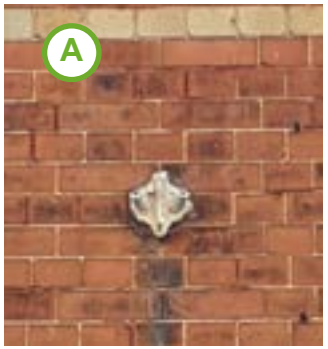
Coatings and barriers

Action
Do not cover timber, brickwork or stonework with hard cement render or other coatings or finishes that are claimed to be water resistant or waterproof. These materials will make the historic fabric underneath deteriorate much faster and could result in damp on the inside of the wall. Works will be supported where walls have been inappropriately altered in the past, with raincoat materials, and compatible greatcoat materials and features have been introduced (with research).

Action
Do not apply vapour barriers, spray foams, foils or foil faced materials, polystyrene bead insulation to your traditional building. Spray foam is impossible to remove without full or partial demolition. It affects sur-veyor's valuations for properties and mortgage lenders.

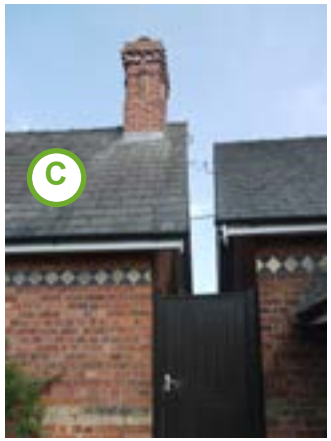
Openings

Action
Existing window and door surrounds, including lintel and cill details, should be retained. Where new lintels are needed, the external appearance should replicate exist-ing details on the building.
The formation of new openings will need to be considered in light of the composition of the overall wall and whether its consistent with the existing design. As minimal loss of fabric as possible will be favoured with a new opening.
New openings - Care should be taken to ensure the cumulative effect of new openings does not harm the building, streetscape or setting. Detailing should match, enhance or complement the existing openings.



Ⓐ Retain architectural detailing to external elevations. Ornamented wall ties, or flag pole holders reflect the distinct character of each building.

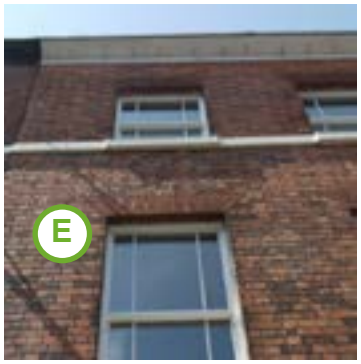
Walls



Ⓐ Decoration to buildings include Dutch gables, and "tumbling-in", which contribute to the visual character of these houses.

Ⓑ Stone was originally for high status buildings but became a more common building material in the 19th century. Limestone is quarried within Lincolnshire and around its borders and it is a versatile material with variations in size, colour and texture. Examples of sandstone and ironstone can also be found within the county.

Ⓒ In 19th century buildings brickwork is used for more complex decoration, such as polychromy or diaper work, but is still generally restrained, although occasional examples of Gothic motif can be seen.



Ⓓ This wall has not been re-built using the same palette of materials. The upper wall uses larger, regular size modern brickwork which does not reflect the variation in size, colour and texture of historic brickwork.

Ⓔ To help your building to function properly it is important to identify the mortar mix. Lime mortars, and earth mortars, allow a traditional building to function properly and different mortar mixes, and their joint and finish application, were specific to the building material.

Roofs

Why your traditional roof is great

Roofscapes and skylines form defining features of many historic towns and villages, shaping their distinctive visual identity.

- **Hold historical significance** – These elements often have value in their own right due to age, materials, functional performance, shape and pitch, profile and the craftsmanship and construction style of its supporting structure. Their qualities are determined by the designer, craftsmen or tradesmen and the historic owner.
- **Contribute to character** – They enhance the distinctive identity of a place, reinforcing its setting and sense of place.
- **Improvements in energy conservation -** they are an area where insulation and ventilation can be managed without damage to the appearance of the roof.

The issue

Roof structures and materials are vulnerable to complete replacement on the false assumption that:

- an uneven roof is a defective roof and that old timbers do not have the structural capacity to remain.
- traditional stone, slate or pantile roofs are poor quality and if there's a slate which is delaminated, or a cracked pantile, the whole roof needs replacing.
- Lime torching is not appropriate

The dominance of uPVC products - such as dry capping - which is marketed around low upkeep has accelerated this loss.

Ⓐ Roofs offer multiple planes of visual interest — some prominent and decorative, others tucked away in valleys or hidden behind parapets.openings.

Ⓑ Traditional roofs, built by local craftsmen using local materials, are integral to the historic and architectural interest of a building.

Ⓒ Historic roofs reflect regional traditions — shaped by local climate, available materials, and traditional craftsmanship. Observe what materials dominate locally and how they're laid. The materials, structure, and detailing of roofs contribute significantly to the character and authenticity of historic buildings and areas.

Ⓓ Orange/red pantiles, grey stone and blue/black slates are predominant Lincolnshire roofing materials, and should be used wherever appropriate.

Ⓔ Roof coverings gain richness over time. Their evolving colour and texture, shaped by weathering, add depth and character to historic buildings.

Roofs

Lime mortar

In Lincolnshire, a traditional method known as lime torching involves applying lime mortar between roof tiles or battens to reduce wind lift and improve insulation. Otherwise the roof tail and side joints were pointed.

Lime mortar is preferred for its flexibility, porosity, and compatibility with historic materials. It accommodates movement without cracking, offers weather protection, deters pests due to its alkalinity, and has a long lifespan—often exceeding a century. It also has minor insulative qualities and reduces draughts by filling voids beneath tiles. It is usually mixed with hair for added flexibility. Importantly, it can be easily removed and reused without damaging tiles.

Inappropriate use of cement mortars

Cement mortars are unsuitable for use with traditional roofing materials. Their rigidity and impermeability lead to moisture retention and damage surrounding softer materials like clay tiles. This damage can be costly to repair, especially if it is extensive.

Cement also has high embodied energy and is difficult to remove without harming original fabric, compromising both the sustainability and longevity of historic roofs. Moreover, whilst the initial cost of cement may be less, for the above reasons of damage to the traditional building and need for repair makes it more costly over the longer term.

General

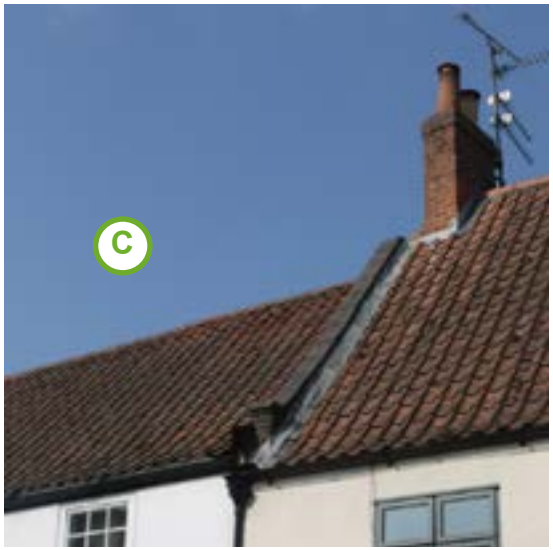
Action
Planning checks - If major work is required, consult the local planning authority to determine if planning permission or listed building consent is needed.
Prioritise retention - Original tiles or slates should be retained wherever practical to preserve character and material integrity.
Material retention during works - Use roof ladders or properly protected scaffolding to ensure safe access and no damage to in situ materials.
Retain character - Avoid complete reconstruction of roofs - their settled, slightly uneven appearance often contributes significantly to historic character.
Restore traditional finishes - Where a roof has been altered, it may be necessary to reinstate traditional materials. Reuse original materials where possible or opt for natural alternatives.
Avoid inappropriate materials - Do not use concrete tiles, interlocking imitation pantiles, artificial slates, or other modern substitutes on traditional or historic buildings.
Source materials locally - Avoid imported slate or stone (e.g. from India or China). Though cheaper, they differ in texture, colour, and weathering, and often lack environmental or ethical assurances.

Roof structure

Action
Ventilation and insulation - Pantile roofs, by nature of their construction, are more breathable than slated or modern roofs. When insulating, ensure that ventilation is maintained to prevent internal condensation.
Avoid impermeable coatings - Do not apply foam or bituminous treatments to tiles. These interfere with moisture movement, can accelerate timber decay, and prevent future tile reuse. They can also cause insurance and mortgage issues.

Ⓐ Historic roofs often contain unsawn timbers, some salvaged from earlier buildings. These materials are now rare and valuable and should be retained wherever possible for their quality and sustainability. Historic more regularly dimensioned sawn square timbers are less rare but still of a superior quality to any modern equivalent.

Ⓑ Thatched roofs are watertight and great for keeping heat in. They are made from natural, circular and sustainable materials such as straw and water reed. This means their generally shorter lifespan (between 30-70) is environmentally friendly. With regular maintenance thatched roofs can remain for a century.



Ⓒ Pantiles are usually ‘S’ shaped in section, but some have a tighter roll and a flat section or double roll. They are made of red or orange clay and laid on timber battens. They are usually typically pitched at around 30 degrees and date from the 18th century onward, with a higher prevalence in the 19th century.

Covering materials

Thatch

Action
Ensure trees or large bushes are kept well back from a thatched roof to allow it to dry out. Leaves and tree shadow can over time trigger damp and foster vegetation and decomposition.
Thatch Roof Maintenance: Undertake systematic maintenance and monitor thatch roof ridging, as it often needs re-ridging every 10-15 years.
Longstraw Thatching: Longstraw can be stripped back to a sound base without needing to strip to the roof structure. The lower layers of thatch should remain in place, with re-dressing using a ‘spar coat’ preferred where more suitable.

Action
Reeded Thatch: Reeded thatch roofs must be completely stripped and replaced once they fail. When re-thatching, use the traditional ma-terial of the local area.

Ⓐ Plain tiles are made of red or orange clay and laid on timber battens.

- Early examples are known as ‘peg tiles’ because of the oak pegs used to secure them. More recent versions are nailed in. Most plain tile roofs are fairly steeply pitched between 45 and 60, often replacing thatch coverings. Traditional hand made plain tiles are slightly curved along the short and long sides.
- Machine made clay tiles are flatter, have a more uniform appearance and are a poor substitute for hand-made examples.

Pantiles and plain clay tiles

Action
Replace slipped or missing tiles promptly - Early replacement of missing slates or clay tiles prevents water ingress, protecting rafters, plaster ceilings, and internal fittings.
Match patch repairs carefully - When patching, ensure new pantiles match the originals in size, colour, and shape. Incompatible profiles won’t fit or function correctly.
Use locally compatible replacements - Where tiles must be replaced, source locally made pantiles. Inspect second-hand tiles to ensure they’re compatible in form and function.
Ensure appropriate roof pitch - Roofs should be laid at pitches suitable for the type of tile used. Pantiles typically require pitches between 30°–40° to shed rain effectively.

Ⓑ Slate is not indigenous to Lincolnshire but arrived with the turnpike and railways of the 18th and 19th centuries. Blue-black slate is now considered a typical Lincolnshire building material. Slates come in a range of traditional sizes, but their width is wider than half their length.

Ⓒ Lead, and less often copper and zinc, can be found as roof coverings. They are more often used for flashings and gutters.

Concrete or interlocking tiles

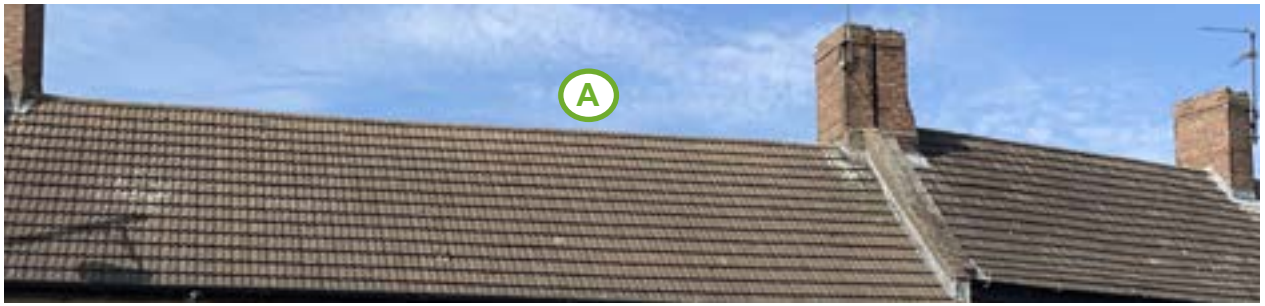
Action
Avoid concrete tiles - Do not use concrete tile replacements where pantiles were originally used. They are inappropriate for historic roofs. Concrete tiles are not compatible with clay tiles and may reduce the lifespan of surrounding traditional materials. They are often heavier and cause roofs to bow.
Avoid uniform interlocking tiles - Interlocking tiles create an overly uniform appearance that is out of character with traditional roofs and are heavier causing the roof to bow. Handmade pantiles are often a cheaper and more appropriate alternative to machine-made tiles.
Where concrete or interlocking tiles are in place and nearing the end of their lifespan, the opportunity will be taken to recommend an upgrade to a more appropriate roofing material.

Ⓐ Concrete tiles are not suitable as

- Their manufacturing is high in carbon and energy.
- They are heavier and put additional weight on the roof structure. Roof structures need to be strengthened to carry their weight.
- They decay at a quicker rate despite their thickness, as they become more porous over time.
- They have a limited life expectancy on a roof.

Eaves, verges and apex

Action
Retain traditional eaves and verge details - Features such as corbelling should be preserved and repaired. Avoid modern box eaves with deep fascia boards, flat soffits, or projecting bargeboards - these are not appropriate.
Ridges and Hips: Retain traditional clay half round ridges for pantile or clay tile roofs and upturned 'V' shaped ridge tiles for slate roofs, especially if they are decorative. Hips generally follow the same style as ridges, except for pantile roofs, which typically do not feature hips.
Avoid dentil fillers - Small clay or cement fillers between tiles at the eaves can disrupt historic rooflines and are not a preferred solution.
Do not use cloaked verge tiles or verge clips - These are not features of traditional buildings and are inappropriate in a heritage context.
Avoid visible tile ventilators - These disrupt the continuity of historic rooflines. Consider alternative ventilation solutions and consult your local planning authority.



Mortars

Action
Use appropriate lime mortars - Repoint cracked mortar at flashings, skews, and masonry using a hot-mix lime mortar. Ridges, gables, and fillets on pantile or slate roofs should be bedded in lime mortar matched to the original in-situ mix.
Research mortar composition - Always match new mortar to the original. Avoid cement mortars - they are incompatible with historic materials and can lead to condensation, tile damage, and long-term deterioration.
Avoid cement-based mortars - Cement mortar is hard, non-breathable, and difficult to remove without destroying surrounding fabric. It can damage softer, more porous materials and shortens the lifespan of traditional clay tiles. It also has a high embodied energy and should be avoided on sustainability grounds.
Consider lime torching - Historically, lime torching - a lime and hair mix - was used to bed roof tiles or back-point beneath slates, clay tiles, or stone flags. It often remains in place unless the roof has been stripped or replaced. Its reintroduction can enhance performance while retaining traditional methods.

Metals

Action
Abutments of Roofs and Valleys: These are best detailed with lead. For abutments, design should be specific to the building, for example using a flashing dressed up under a drip or into a stepped groove in the brickwork mortar.

Rooflights and dormers

Action
Original Dormers - Retain original dormers for their unique detailing, modifying them only where weatherproofing is clearly an issue.
Dormer Side Cheeks and Apex - These should be lime rendered or covered in sheet lead. Painted or stained boarding is not appropri-ate.
New Dormer Windows - New dormers should respect the proportions of the building. They should be smaller than lower-floor windows and match the building's gabled or hipped roof. Two small dormers are preferred over one large one. Care should be taken designing dormer corners (corner posts).
Use of rooflights should be limited - Rooflights are generally discouraged due to their impact on the historic roofscape. They may be acceptable if essential for a needed conversion that secures the future of the building. ■ Use on the number and size needed ■ Position them on rear slops, not principal elevations ■ Ensure they are flush fitting and use non-reflective glass. ■ Carefully consider location and alignment to maintain the integrity of the roof.

Rainwater goods, vents and flues

Why your traditional guttering and vents are great

- **Hold historical significance** – These elements often have value in their own right due to age, materials, functional performance, shape and pitch, profile and the craftsmanship and construction style of its supporting structure. Their qualities are determined by the designer, craftsmen or tradesmen.
- **Contribute to character** – They enhance the distinctive identity of a place, reinforcing its setting and sense of place.
- **Longevity -** The materials used for traditional rainwater goods have the potential to be long lasting.

Cast-iron guttering, hoppers and downpipes have been one of the most popular materials for manufacturing rainwater goods. Historically there were many manufacturers of cast iron rainwater goods. Although there are much fewer of these firms around today, they can manufacture brand new rainwater goods the same details and sizes as historically.

Ⓐ Lead, wrought iron, cast-iron, copper or wooden guttering systems are more sustainable to retain or replace with. They can be repaired with various techniques, and they are more durable and offer a better lifetime service than plastic alternatives. Aluminium, mild steel or plastic rainwater goods have shorter life spans compared to cast-iron. Plastic rainwater goods are unable to offer the advantages of cast-iron rainwater systems in longevity.

Ⓑ It is uncommon to find fitted rainwater goods as part of a completely pantiled roof.

Ⓒ Cast-iron guttering, hoppers and downpipes need to be treated with care. It is strong and hard but is brittle and can shatter if struck with a hard blow. It can only be shaped by casting. Other rainwater good materials include: stone, lead, zinc, copper, iron and timber.

Ⓓ Welding can damage the performance and appearance of traditional guttering if the wrong techniques and materials are used. Cast-iron rainwater goods should be repaired by an experienced craftsmen and off-site.

Ⓔ When re-fixing make sure downpipes are fixed away from the wall to facilitate repainting and to allow, if there are future leaks, for water to run down the back of the pipe rather than the wall.

Ⓕ Poorly functioning rainwater goods are often directly responsible for damp and serious internal and external deterioration to walls, roofs and windows and doors.

Rainwater goods, vents and flues

General

Action
Rainwater systems need regular inspection to identify any problems which may emerge. Overtime lack of maintenance causes misalignment of components which reduces their effectiveness even further.
The construction of a rainwater system was designed for its specific building. It is vital to understand the design behind its construction and use it to inform future maintenance, repairs, adaptation and if necessary, replacement.
Introduce overflow pipes above hopper heads where this can reasonably be done so. Check overflow pipes where they are present. They may be too small to cope with rainstorms as our climate changes.
Be aware that gutters that lay on top of brick corbelling were often installed before the roof was laid. In these cases, replacing the gutters is not a straightforward process and it can disturb or damage the roof covering.
When fixing replacement systems make sure downpipes are fixed away from the wall to facilitate re-painting and to allow, if there are future leaks, for water to run down the back of the pipe rather than the wall.
When considering the replacement of a full rainwater system it may be advantageous to consider increasing the diameter and width of replacement gutters and downpipes based on rainfall calculations in your area. Increased episodes of heavy rainfall mean that rainwater systems will need to manage a higher quantity of rainfall in a shorter period. Undersised replacement gutters and downpipes can lead to overflows and leaks and rainwater hoppers may need adapting to cope with increased rainfall.

Material and size

Action
Repair using similar materials and size. Dissimilar metals can create problems as they are liable to corrode at an accelerated rate. Welding can damage the performance and appearance of traditional guttering if the wrong techniques and materials are used.
If you share a gutter or downpipe with your neighbours (such as in a terrace or semi-detached pair) do not replace your own rainwater goods in a different material, size or detail. These will never form a lasting watertight bond with the existing gutters or downpipes and will result in leaks and damp.
If replacement gutters or downpipes can be justified as necessary, the replacements should be of the same materials (or an appropriate modern equivalent eg. aluminium instead of cast iron) and match or reflect in character and be painted in an appropriate colour. Remaining makers can produce a wide variety of traditional cast iron gutter profiles - such as Half Round, Victorian Ogee, and Box- using traditional sand-casting techniques. Many are available in multiple sizes and conform to BS 460. Downpipes are typically offered in round, square, and rectangular sections.

Fittings

Action
Install anti-bird installations only if they are a problem for efficient rainwater dispersal. Fit leaf guards or balloons above downpipes.

Finishes and paints

Why your traditional finishes are great

This question lies at the heart of many decisions about the treatment of historic buildings. The widespread belief that materials like brick, timber, or stone should be left bare and 'honest' is largely a Victorian legacy. In fact, earlier periods saw walls—both inside and out—commonly protected with limewash, traditional paints, or render.

These finishes weren't simply decorative: they played a vital role in managing moisture, acting as a breathable 'greatcoat' for the building fabric. The Victorian trend for stripping surfaces often removed protective and characterful layers that had helped buildings perform effectively for centuries.

When dealing with buildings pre-dating around 1850, it's important to ask: to coat or not to coat? Reinstating traditional finishes can not only enhance weather performance and breathability but also return a building closer to its original character and appearance.

Ⓐ Many existing buildings still bear traces of traditional lime renders, limewashes and distempers. Your building was most likely rendered or lime-washed. Renders could be ornamented by being lined out or left plain. Where research has shown their existence they should be reapplied.

Ⓑ Your building was most likely rendered or lime-washed. Renders could be ornamented by being lined out or left plain.

Ⓒ Timber-framing can be limewashed using authentic traditional methods. It preserved the medieval timbers as it acts as a preservative against pollutants and other destructive elements in the atmosphere and it also prevents insect infestation and damage. Timber was only painted black or stripped and exposed in the Victorian era.

- **Lime render -** is used over porous or inferior brickwork to give added protection to the wall. From the 18th century onwards, it was sometimes used for aesthetic reasons – to give a building more presence and / or a smarter appearance closer to the fashionable look of stucco. The use of render has maintenance implications.

- **Lime wash** - Limewash, distemper paints are used as a 'wash' on exposed timber frames as a preservative against pollutants and other destructive elements in the atmosphere. It also prevents bug infestations.

- **Linseed oil paint** - Linseed oil is also known as flaxseed and widely grown for its fibrous abilities in producing linen. Made from natural ingredients, linseed oil paint is non-toxic and environmentally friendly, both in production and application. It soaks into the timber, nourishing it and helping to preserve its structure. The oil paint has 'wicking' properties which does not mean its breathable but acts as a second defence against any moisture that might find its way in. It ages gradually and moves with the timber as it expands and contracts. This reduces the likelihood of cracking and flaking.

Plastic paints often contain synthetic binders, VOCs (volatile organic compounds), and petrochemicals and the paints paints form a film which tend to fail suddenly—cracking, peeling, or blistering when their film breaks down and that can trap moisture beneath the surface, leading to blistering and decay and allowing and trapping moisture beneath the paint layer. Unlike linseed oil paint plastic paints often require complete removal once they begin to fail.

Finishes and paints

General

Action
Undertake regular painting using compatible and appropriate paints, renders or washes. Without regular and appropriate maintenance all fabric and building elements deteriorate. With appropriate care however they have proven longevity and durability.
Historic finishes should be retained or reproduced where possible; these may be tiles, panelling, lime plaster, exposed brick or stone, or limewash. Lime plasters and washes also allow the walls to retain their shape and individuality as well as allowing the building to breathe.

Brick and stonework

Action
Modern paints, renders and water-proof coatings should not be applied to external walls. Where paint has been applied in the past and it is harming the performance of the wall then careful removal is recom-mended, guided by expert advice.
The removal of graffiti requires prompt action before paint or ink dries into the wall surface. Cleaning methods should be tested on small unobtrusive areas to identify the least aggressive treatment for graffiti removal.
Rendered or painted limestone appear within the vernacular palette but are only encouraged in relation to maintenance of historic materials using compatible and sacrificial lime renders and washes.
Consider whether to rusticate render, plain render or line render. Pebble dash cement render is not appropriate.

Timber

Action
No acrylic or plastic based gloss paints should be used. Match traditional finishes (use linseed putty, burnt sand mastic and traditional linseed paints) for greater longevity of the joinery.

Metal

Action
Regularly paint cast-iron rainwater goods, with care to the rear of the pipes to avoid corrosion and leaks. Corrosion and rust can occur without regular and careful painting all parts of pipes and hoppers. Fixings can break and downpipes can leak. Never paint over rust. The surface should be clean and free from corrosion. Paint selection will depend on site exposure.

Ⓐ Modern paints, renders and waterproof coatings can cause considerable damage in the long term by preventing the greatcoat materials of the building from functioning properly. The biggest issue with timber windows today is plastic-based gloss paint. It forms a hard coating but cracks quickly, trapping water and causing rot. Additionally, modern paints contain an average of 37% plastic polymers, contributing significantly to microplastic pollution—1.9 Mt/year into oceans and waterways. Linseed paints are a better alternative.

Finishes and paints

Colour choices

Action
Colour should be considered in the context of the street and overall character of the area. Brighter paint finishes using compatible lime renders or washes, or compatible paints, can be used where research has shown they are historically present.
Colour and materials should generally conform to traditional colour variations in the locality, from orange / red, cream/white and grey/black ranges. Key features can be picked out in separate colours to enhance architectural elements.

Ⓐ These colour swatches give an idea of the type of acceptable paint colours that would be considered by the Local Planning Authority when repainting the outside facade of a window.

Ⓑ Georgian and early Victorian windows were often painted in a variety of colours, including dark greens, reds, blues, and warmer, more complementary tones such as off-white, stone, or cream. These colours were typically chosen to blend harmoniously with the natural tones of brick or stonework.

Ⓒ Where repainting or reinstating historic finishes, it's important to recognise that white was not the default choices for timber joinery, nor was black the standard for ironwork. From the 1880s onwards, some Victorian windows were painted white—possibly to reduce the perceived loss of light caused by glazing bars and to reflect the influence of the popular Queen Anne revival style. However, the white paint used at the time was typically softer and less bright than modern brilliant whites, giving a more subdued and historically appropriate appearance.

Ⓓ While many commercial 'Heritage' paint ranges offer useful colour references—often organised by historical period—the paints themselves are frequently modern, plastic-based products. When using small-scale or specialist suppliers of traditional or eco-friendly finishes, you're more likely to be working with natural pigments and formulations. These not only align more closely with historic practices, but also naturally lead to more authentic, subdued, and period-appropriate colour palettes. Where possible, prioritise paints and finishes that use traditional binders and pigments, both for aesthetic accuracy and compatibility with older building fabric.

Energy renewables

Renewable energy

In all cases the addition of renewable energy, whether air source heat pumps or solar photovoltaics, will need careful considerations and expert advice from both traditional building practitioners and renewable energy specialists.

When considering adding air source heat pumps or solar photovoltaics you should be aware that for certain historic buildings or areas planning approval (in the form of planning permission, listed building consent or both) will be required by the local authority before you carry out work.

General

Action
A 'fabric first' approach is not an appropriate first step for a traditional building. Successful energy efficiency projects take a whole building approach to balance energy and carbon savings with a healthy indoor environment. Your building should always however be in its best state of repair before considering any options or improvements. If it is working in balance, with no repair or maintenance issues then you can consider energy efficiency and renewable energy methods at a similar time. Certain retrofit measures are not feasible or practicable for historic and traditional buildings.
It is suggested you seek advice from the local planning authority conservation officers where renewable energy or other energy efficiency measures are proposed in the setting or within a conservation area or for a Listed building.
Renewables should not be visible from highways or public rights of way or public open spaces.
At the earliest design stage, ensure that any renewable energy systems - such as solar panels, heat pumps, or associated infrastructure - are planned to avoid or minimise harm to the historic character and fabric of the building or site. Carefully consider the siting, scale, and visibility of equipment, along with the routing and impact of any ductwork, pipework, and cabling. Prioritise solutions that are reversible, discreet, and compatible with the building's materials and appearance.

General

Ⓐ There are sympathetic renewable options which can be considered within a historic environment context.

Ⓑ The use of these technologies requires particular care within sensitive heritage or landscape designations.

Ⓒ Early talks with the LPA are therefore recommended to try and identify whether mutually acceptable solutions exist.

Action
For designated heritage assets only those proposals that would not adversely affect the designation, or which offer environmental benefits that outweigh the harm, will gain planning permission or listed building consent.

Heat pumps

Action
Where units and cablings are attached to traditional buildings they should be reversible, sympathetic in scale, form and material, and should not harm the building's significance.
Heat pump units and cabling should be discreetly located. Choose outbuildings or sheltered locations over main buildings if they are available.: If these are not available then: ■ Units and cabling should be discreetly located. ■ If visible, mitigate impact through screening or colour merging (e.g. wraps). ■ Use only the minimum size necessary. ■ Position cables with care to reduce visual clutter.

Ⓐ In practice, choose locations where the inherently modern-looking additions would not detract from the traditional or natural scene.

Ⓑ Turbines fixed to chimneys or ridgelines can cause structural damage in certain circumstances.

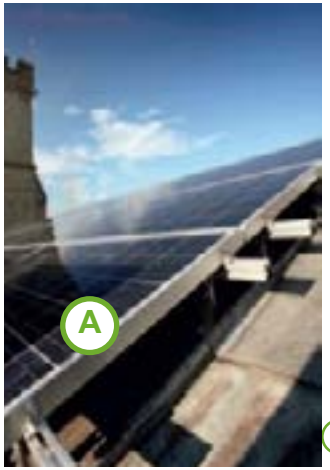
Ⓒ Solar panels tend to look out of place against the mellowed, traditional facing materials and can detract from the special character of the building.

Ⓓ Heat pumps and biomass boilers can also be incorporated into a design. The former exploit naturally occurring heat normally in the ground or from the air and efficiently convert it into a usable form for heating or cooling purposes. The latter meanwhile burn the chipped or pelletted products from forestry operations to provide both space and hot water heating.

Solar panels

Action
Panels should be installed with minimal effect on the external appearance of the building and its wider historic setting. Visual impact should be minimised through careful consideration of spacing, position, pattern and concealment behind architectural features. ■ Location and orientation. Favour less visible rear elevations, new extensions or behind parapets or within roof valleys. ■ Number and size. Panel arrangement should consider symmetry and roof pitch. Panels should not dominate an entire roof. ■ Building type. Layout should use features of the building concealment. For example behind parapets or architectural features ■ Cabling should be discreetly routed.
It is recommended solar panels are raised rather than inset in the roof (in-roof). They can cause a significant amount of fabric loss and are not a reversible solution. Inset panels are also more at risk of future leaks and need more frequent replacement than the roof.

Action
If space allows, consider installing solar panels at ground level or on outbuildings such as garages to avoid impact on the main building. Ground mounted solar panels can be installed and their location potentially screened to avoid adverse aesthetic impacts.
Design Considerations ■ Avoid installation on important or prominent elevations of the building. ■ If space allows, consider installing solar panels at ground level or on outbuildings such as garages to avoid impact on the main building.
In many cases, solar panels are considered permitted development if: ■ They do not project more than 200mm beyond the roof or wall surface. ■ They do not exceed the highest part of the roof (excluding chimneys).
When no longer needed equipment should be removed as soon as reasonably practicable.
Check whether you need planning permission and or Listed Building Consent. In conservation areas planning permission is required to install a solar panel on any part of a building that faces onto or is visible from the highway. Listed Building Consent is required for or any installation on a Listed Building.
When applying for approval should demonstrate the chosen location is the most suitable, with evidence supported by the provider and an explanation of the impact of the panels on adjacent roof slopes.
In many circumstances solar panels fixed to a wall or roof of house or block of flats are classed as 'permitted development' providing that the solar panels do not protrude by more than 200mm beyond the wall or roof, and the solar panel is no higher than the roof (excluding any chimney).



Ⓐ The visual impact of the panels will be most significant when positioned on roof slopes visible from public views. There is a careful balance between maximal efficiency, reasonable practicality and visibility.

Ⓑ Solar roof pantiles or slates are small solar panels. They perform just like normal roof tiles or slates and have less of a visual impact. However, they lack the authentic finish of traditional slate or tiles. They may therefore have the same problems as artificial slates and may not be appropriate in some instances.

Ⓒ Solar panels should be located sensitively, either ground-mounted, or with good margins of blank roof around them, be sitting low to the roof pitch, and ideally use less prominent roofs such as on a garage or extension

Biodiversity provisions

Biodiversity provisions

Why your traditional building is great for biodiversity

- **Historic and traditional buildings** often offer important habitats for species, which have adapted to the landscape, and they provide micro-habitats, shelter from predators, and access to food. Urban areas, towns, and villages can all support wildlife.
- **Modern buildings in contrast** are usually sealed, with limited access to the interior and they are devoid of ornamental details which provide crevices and ledges which certain species require.

Carrying out works

Research has shown that construction and refurbishment of buildings has numerous consequences to nature. We can examine how our actions may impact species around us to be sustainable.

Whenever we undertake repairs, alterations, additions or new builds we should protect and plan for plants and animals living in and around us.

Works can still be carried out but careful consideration and planning is required to reduce the impact on any wildlife using the building.

House as habitat

Ⓐ Map breeding and roost locations prior to works.

Ⓑ Map access points to breeding and roost locations prior to works.

Ⓒ Maintain access points where possible.

Ⓓ Create additional opportunities for wildlife

Birds

Gulls, Peregrine falcon, Kestrel, Chough, Raven, Jackdaw, Woodpigeon, Stock Dove, Song Thrush, Mistle Thrush, Blackbird, Wren, Robin, Spottet Flycatcher, Barn Swallow, House Martin, Sand Martin, Swift, Pied Wagtail, Grey Wagtail, Starling, Blue Tit, Great Tit, House Sparrow and Tree Sparrow have all been recorded nesting in buildings. Many of these species are site faithful year after year, and/or use these sites year round.

- Swifts - nest in small crevices and the eaves of houses.
- Barn Owl - often nest in chimneys or roof spaces.
- House martins - build mud-nests in the apex of the roof.
- Starling - breed in holes or crevices in buildings (under roof-tiles and fascia boards)
- Spotted flycatcher - uses small holes, gaps or crevies in courtyards and can use small crevices, gaps, and ledges on the side of buildings or courtyards.
- Jackdaw - nests in cavity walls and built stick-nests in chimneys and other cavities.
- Peregrine falcons - use large building, churches and high-rise buildings in towns.
- Herring gulls nest on flat roof tops or even on large chimneys.

Bats

Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared Bat, Lesser Horseshoe Bat, Daubenton’s Bat, Nathusius’ Pipistrelle, Leisler’s Bat, Natterer’s Bat, Brandt's Bat, and Whiskered Bat have all been found in buildings.

Most bats choose buildings for their warm locations, and relative quiet and constant temperatures during hibernation periods.

- Pipistrelles and Brown Long-eared Bats frequently roost in attic spaces

Biodiversity provisions

Action
Ecological survey - Establish whether protected species (e.g., bat roosts, birds' nests) are present. Arrange an ecological survey by a qualified consultant at the appropriate time. An applicant is responsible for arranging these surveys. For consultant recommendations, refer to CIEEM.
Protection during works - Avoid works that could cause disturbance during sensitive seasons. There should be no disturbance to protected species during nesting, breeding, or in some cases over-wintering periods. Ensure no disturbance to protected species during nesting, breeding, or over-wintering periods.
Repairs and raking - Carry out raking out and repointing of walls in late summer or autumn to avoid disrupting wildlife. Use gentle techniques, such as blocking some openings to encourage species to relocate elsewhere safely.
Material considerations - Ensure building materials do not harm or damage habitats within the building.
Preserve and enhance habitats - Retain breeding and roosting areas where possible. Create additional wildlife opportunities, such as crevices, entrances, nests, or bird or bat boxes.
Design for biodiversity - New development should enhance the natural environment. Protect and support vital habitats wherever possible.
Building materials - Choose materials and construction methods that minimise harm to the surrounding ecosystem.
Yards and gardens - Avoid converting gardens and front yards to car parking. These green spaces are vital for supporting biodiversity in urban areas, offering food, shelter, and nesting areas for wildlife. They also contribute to the overall health and connectivity of the wider green environment.

Ⓐ Masonry or mortar bees burrow into soft, often earth based mortars, or exploit gaps in mortar joints, especially on warm, south-facing elevations. Females create for brood chambers within the mortar, with young bees emerging in summer but potentially overwintering in the wall. Over time they begin to form new tunnels and the colony expands within the wall.

Ⓑ Bats and nesting birds: Many bat species roost or hibernate in cracks in mortar, under tiles, shingles or weatherboarding, or use these gaps for access. Swifts and swallows, whose populations have declined significantly, rely on high wall cavities and roof spaces in traditional buildings for nesting. Modern buildings lack suitable nesting spaces. Over the past 20 years in the UK swift populations have decreased by two-thirds.

Ⓒ It is the applicant's responsibility to address potential impacts on protected species before any work. Disturbing roosts or nests - even unintentionally - is a criminal offence under wild-life protection legislation. Disturbance is no less a criminal act as is killing, injuring or capturing a bat or bird, taking a nest or egg, or interfering with a nest or roost or obstructing a flight path.

Ⓓ Construction and environmental Impact: Consider the wider ecological impact of building works on the building, the site and its surrounding habitat. For example, avoid using insulating polystyrene beads where there's a risk of release during installation, building failure or future demolition, as they pollute the environment once lost.

External lighting and equipment

Why your traditional building and historic area is great for night skies

Dark night skies are crucial for both nature conservation and human well-being. Our historic villages and towns historically emitted little light pollution, and their layout and materials made use of natural light form the sun and moon.

- Buildings were lime rendered, which enhanced natural overall illumination
- Buildings had high windows to allow natural light.

Our flora and fauna have not evolved to cope with artificial light at night, which has devastating effects on moths, bats, hedgehogs, and birds. Light pollution can also have a negative impact on local amenity. Dark skies are also important for the rural economy, education, culture, and human health.

The issue

External lighting

Modern external lighting systems often over-light and throw light where it isn't needed. Their brightness and harshness can be a nuisance for adjacent neighbours and a potential source of conflict where lights shine into neighbouring windows or over long distances, or where they are continually switched on.

Historic lighting systems are often better for night skies but they are they also vulnerable to being lost through the introduction of harsher modern lighting schemes.

Other building equipment

Modern services can create a number of visual and conservation issues when added insensitively to historic buildings, especially in conservation areas where the preservation of character is key. Equipment includes satellite dishes, meter boxes, alarms and cameras.

These are:

- Often mounted on prominent elevations or chimney stacks. Which visually disrupt architectural symmetry, rooflines and historic detailing.
- grouped together in cluttered or irregular arrangements and obscure architectural features.
- Often oversized and poorly sited on front elevations or traditional roofs and disrupt historic appearance.
- Often brightly coloured and prominently located.

> *“ The right light, in the right place and for it to be used at the right time*

MINISTRY OF HOUSING, COMMUNITIES AND LOCAL GOVERNMENT (2019) LIGHT POLLUTION GUIDANCE

Ⓐ Retain historic lighting where possible. Traditional fittings typically prioritise ambiance over brightness, using warmer, softer light and more discreet fixtures that help preserve the character of villages and reduce light pollution. In contrast, modern lighting—particularly poorly designed or overly bright LED systems—can contribute to skyglow, disrupt wildlife, and sever our connection to the natural rhythms of the night.

External lighting and equipment

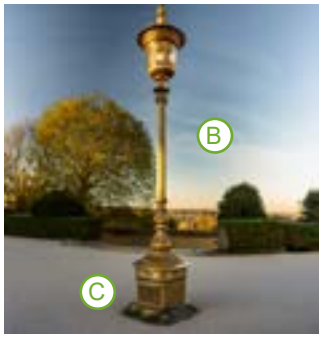
Dark skies

Action
Dark night skies are a valued feature and should be protected. Use lighting that balances safety and security needs while minimising light pollution.
Lighting fixtures should be appropriate to their context in material, scale, design, colour and illumination.
Care should be taken in rural settings where over illumination can generate a more urban feel.
If you do need external lighting, you should use lamps of 500 lumens and less, avoid bright white and cooler temperature LEDs, angle light downwards, install them at the lowest possible height and direct them only where needed.
Where required lighting fixtures should be discreet *e.g. LED lights that tuck under a doorhead or ledge) rather than cluttering doorways or elevations.

External equipment

Action
Satellite dishes should not, unless given permission, be placed on any part of a building that faces onto or is visible from the highway.
New pipes, flues, vents, service ducts, and other domestic fixtures should be discreetly positioned, ideally on secondary elevations, to minimise visual impact.

Action
Alarm boxes, security cameras and air conditioning units should be sensitively positioned upon the building and their colours carefully chosen (e.g. bright yellow alarm boxes and brilliant white CCTV and cables are not sensitive additions). Cables should be discreetly run to avoid cluttering the elevation or drilling should be through mortar joints and not through brick or masonry.



(A) Modern street lighting should provide enough illumination for residential houses.

(B) The three main types of light pollution are sky glow, glare and light intrusion.

(C) Off-the-peg ‘period’ lanterns are not universally appropriate. Designs reflecting established local styles or motifs, or simple modern designs, may be preferable. The head and column of traditional styles of lighting should be in proportion. Unbalanced designs can appear awkward and top heavy

(D) If you do need lights direct compact LED lights downward and correctly angle lights so light spills downwards. Switch off external lights when not needed.

(E) Satellite / TV antenna are visually intrusive and create a cluttered appearance within a streetscape.

Additions and extensions

Why your traditional building is great

Most historic buildings can be extended sensitively. Check with your planning authority whether you need to submit planning permission. Listed Building Consent is required for works affecting the character of a listed building and planning permission may be required in a conservation area.

Most traditional historic buildings have changed over time and reflect their evolving history of use and ownership. These layered alterations often contribute to the building's special interest.

Most traditional buildings can accommodate a degree of sensitive alteration or extension to support on-going and future use. Some are more adaptable than others and may offer opportunities for creative, high-quality design interventions. Others are more sensitive, particularly where they survive as little-altered examples of their type and may require a more cautious approach.

Traditional buildings can inspire the design of high-quality new additions, whether these are large or small, discreet or prominent.

The issue

The quality of additions and extensions within conservation areas can be variable and sometimes detract from the appearance and character of the existing historic settlement. Historic buildings and places can often be seen as a restriction on contemporary approaches or mean more expensive materials must be used.

Good new design is highly dependent on the character and significance of the existing building and its context. There is therefore no 'one size fits all' solution that will work everywhere.

Building regulations

An addition or extension can provide the opportunity to meet modern requirements and provide -

- Accessibility to existing traditional floor levels. For example, using lifts and ramps.
- Access to services which may not be suitable for installation in the existing traditional building.
- Greater provision of rainwater collection and disposal for energy and water efficiency.
- Independent foundations from the existing building.

A Design and Access Statement (DAS) can outline how a historic building is capable of alteration, and how extensions or additions can support the continued conservation and use of the building. A Statement of Significance (SoS) or conservation plan can reference the specific guidelines for the building.

Ⓐ Well-designed extensions can assert their own architectural quality while standing as equal partners to the historic building. When both are executed to a high standard, the new and the old can enhance one another—achieving a greater and more lasting quality together than either might alone.

Additions and extensions

Setting and context

Action
The design of additions and extensions should consider the wider impact on the historic village or town, including archaeology, the historic features of towns and the impact on setting. The aim should be harmony rather than discord.
Proposals should protect and enhance key views, vistas, and visual connections within the historic environment.
New work should be based on a thorough understanding of the area's historic significance and architectural character. This should be outlined and the impact assessed in a design and access statement. This is useful for both homeowners and local authorities when assessing proposals for change.
Design outcomes will depend on the specific site context – this includes the landscape setting, and the scale and form of both the existing traditional building and the proposed addition or extension.

Condition

Action
Before altering or extending, correctly diagnose any issues caused by past inappropriate repairs and alterations and consider how these could be addressed in the new work.
A record of a traditional and historic structure should take place where proposed additions or extensions are planned to a listed building, and there is loss of fabric or changes to a building's character.

Scale

Action
Small-scale new buildings may be considered in relation to traditional buildings; however, their acceptability will depend on the quality of their design, their siting, and their relationship to the character of the existing site.
Extensions and additions should ■ avoid dominating the original building in terms of scale, materials, or location. It should not obscure or overlay principal elevations. ■ Be lower in height or set back from the principal elevation, and carefully sited and scaled to respect the form and character of the original building. Ensure that any external fire escape routes are designed to be as reversible and inconspicuous as possible and are not placed on principal elevations.

This modern extensions is lower than the eaves of the original house and is on an inconspicuous elevation facing a rear garden.

Additions and extensions

Design

Action
New work should acknowledge the old in every case. Work can restore, replicate, complement, defer or assert a contrasting quality design.
Layout and Openings: Proposed changes should consider the existing pattern, spacing, symmetry, or irregularity of window/door layouts on individual or grouped buildings (e.g., terraces or semis).

Materials

Action
Choose materials and products that preserve finite resources, use low energy in production, and generate minimal waste that requires low energy disposal.
Carefully specify materials. This can significantly enhance both new builds and traditional buildings by using compatible, sustainable materials for alterations and additions. New extensions and constructions should consider techniques and materials that minimise the need for near or full replacement of components. Building elements should be designed for retention and repair in the future, rather than immediate replacement.

New build

Why your traditional building is a source of inspiration

Although we conserve historic places, they will always continue to evolve and change. How we live now and what we need from our buildings is vastly different than 100 years ago and even more so the 200 years ago. In this context, new buildings and structures in historic places are expected. The context and surroundings that traditional buildings and places provide can be an inspiration to the forms, massings, scales, materials and appearance of new buildings.

This section of the guide concerns the design of new buildings in historic places. While the reuse and adaptation of existing buildings and structures is supported from both a heritage and a carbon footprint perspective, there may be sites and locations where new buildings would not be in conflict with these aims, and may indeed support the more efficient use of land or higher densities in the most accessible locations. It is these circumstances where this guidance applies.

New build

Setting and context

Action
Consider important gaps identified in the Local Plan or CAA i.e. land at the edge of the village, marking transition to countryside or important views between buildings.
Identity: what are the components that contribute to the overall identity of the area? Is it the landscape, the architectural vernacular of buildings, or a combination of both?
Consider the history of the plot or site, especially historic maps. For example, narrow but deep building plots in towns and villages often had buildings in the backs of plots; villas often had stables, coach houses and garden buildings in certain locations in the plot; farmsteads are often an accumulation of different buildings and additions.
Consider the spaces round the plot: how enclosed is the street by buildings or boundary walls? Are vehicle entrances and gateways discreet or grand? What types of boundary features were traditionally used? How important are trees and hedges to the street scene? How is parking accommodated?

Form

Action
When designing new buildings there is often a tendency to design from the ‘inside out’ to achieve a standard or expected layout. In historic places the starting point is usually the context: how should the building appear in the townscape and landscape? This may well govern the footprint, orientation, height and shape of the new building.

Action
Building plots, streets and settlements can have an obvious or subtle hierarchy of more important or higher status buildings, spaces, elevations and streets and the same of lower importance or status. This is communicated in the location, orientation, scale, functions and materials of buildings and spaces. It is worth taking a careful look at the plot and its surroundings now and on historic maps to gain an understanding of this. The more clearly a new building respects and responds to this hierarchy, the more likely it is to harmonise with its surroundings.
The decision of whether the new building should be assertive or discrete in its design should be made early in the process. An assertive design might have a bold built form, or silhouette, occupy a prominent location or impact the skyline. A discreet design aims to be subtle and subservient by being compact in its height, massing and form, perhaps using flat roofs or the heights of existing buildings and walls to influence its height and form. Historic settings should not be considered to act as a design orthodoxy. The basic principle should be that new build design achieves harmony with their surroundings. This can be achieved via modern of traditional design, provided the design is high quality.
If the site is in or in the setting of a conservation area, the conservation area appraisal can offer insights into what is special about the area and is important to its character.
Consider the context and use of the building. For example, if it is a garage or workshop in a historic or rural context, a timber building can look less formal, permanent and suburban than the same building built of masonry.

Openings and solid to void ratio

Action
The historic buildings in the vicinity of the site should be used as a guide for: ■ Do the buildings have a ‘solid’ appearance by having large areas of wall with small or no openings, or do the openings (the ‘voids’) dominate the elevations and give the buildings their character? The balance of wall to openings is called the ‘solid to void’ ratio. The design of new buildings should pay attention to this. ■ The number and layout of openings on elevations. Are openings frequent and regularly spaced across the elevation, or are they irregular in their spacing across elevations? ■ The proportions and hierarchy of openings should be respected. For example, are openings generally taller than they are wide? Do they vary much in height and width? Do openings get shorter higher up the walls? ■ Does the number, size and layout of openings vary on different sides of the building or according to the original or historic use(s) of the buildings? Should this characteristic be replicated in new design?
Are traditional windows and doors set well behind the face of the wall (making the walls look thicker and more solid) or are windows and doors nearly flush with the wall surface (making the elevation look flat)? Should the new building respond to this?

Material

Action
The materials used in new development should respect the historic material palette. Applicants should strive to utilise sustainable materials in the delivery of new development.
Traditional material can be used, and are desirable for environmental reasons, and can be detailed in such a way as to enable new buildings to fit unobtrusively into a historic setting provided, they are in the hands of people with adequate local skill and experience. Standard solutions are not always the answer.
Local building materials: How do traditional building materials of the area dominate the visual appearance? Is there a mix in the local area or street? Is there one dominant building material in the local area? Use part 3 for some ideas on what to do using site visits, context studies, materials palettes, historical analysis.
As with traditional buildings, it is important that new buildings ‘grow old gracefully’ so the choice of materials and details is very important. Consider: ■ details like eaves and overhangs on copings so elevations aren’t stained or marked by water or algae over time ■ the level and ease of maintenance of elevations, rainwater goods and the roof, including access ■ how often materials or components would need replacing. Frequent replacement due to the failure of building components and materials means the building will never grow old gracefully.

New build

Action
Repairability - It is crucial to plan for long term sustainability from the outset. When designing new extensions or builds, consider construction techniques and materials that prioritise future retention and repair over replacement. Consider the energy needed to break down build-ing components and materials when they no longer serve their purpose. If recycling or reusing materials requires high energy input or processing, they may become financially unviable and end up in landfill or as waste-to-energy.
Texture and colour are subtle but important: ■ a smooth, straight-edged, evenly coloured brick is very different to a handmade brick with variations in colour and tone. ■ a smooth brilliant white render is very different to a roughcast render with a natural or cream-coloured finish ■ Pointing has a huge influence on the appearance of a wall depending on its colour, its level of contrast to the masonry, and texture. ■ White window and door frames stand out far more than other colours.

These two buildings have very different solid to void ratios due to the number, sizes and spaces of openings. The building on the upper right also has a grid-like layout of openings, while that on the lower right is less regular.

Shopfronts

Shopfronts

Why your traditional shopfronts are great

- **Hold historical significance** – Shopfronts often have value in their own right due to their style, age, materials, on-street visibility, diversity in shape and profile and the craftsmanship and construction style of its supporting structure. Their qualities are determined by the designer, craftsmen or tradesmen who designed them to invite and appeal to shoppers.
- **Contribute to character** – They enhance the distinctive identity of a place, adding charm and vitality to streets and boosting local businesses and tourism.
- **Craftsmanship** - They often reflect a high quality of craftsmanship through the intentional use of attractive architectural detailing, decorative elements and materials to entice customers.
- **Longevity -** The materials used for traditional greatcoat building materials has the potential to be long lasting.

The issue

Historic shopfronts are lost from a range of factors, some of which include -

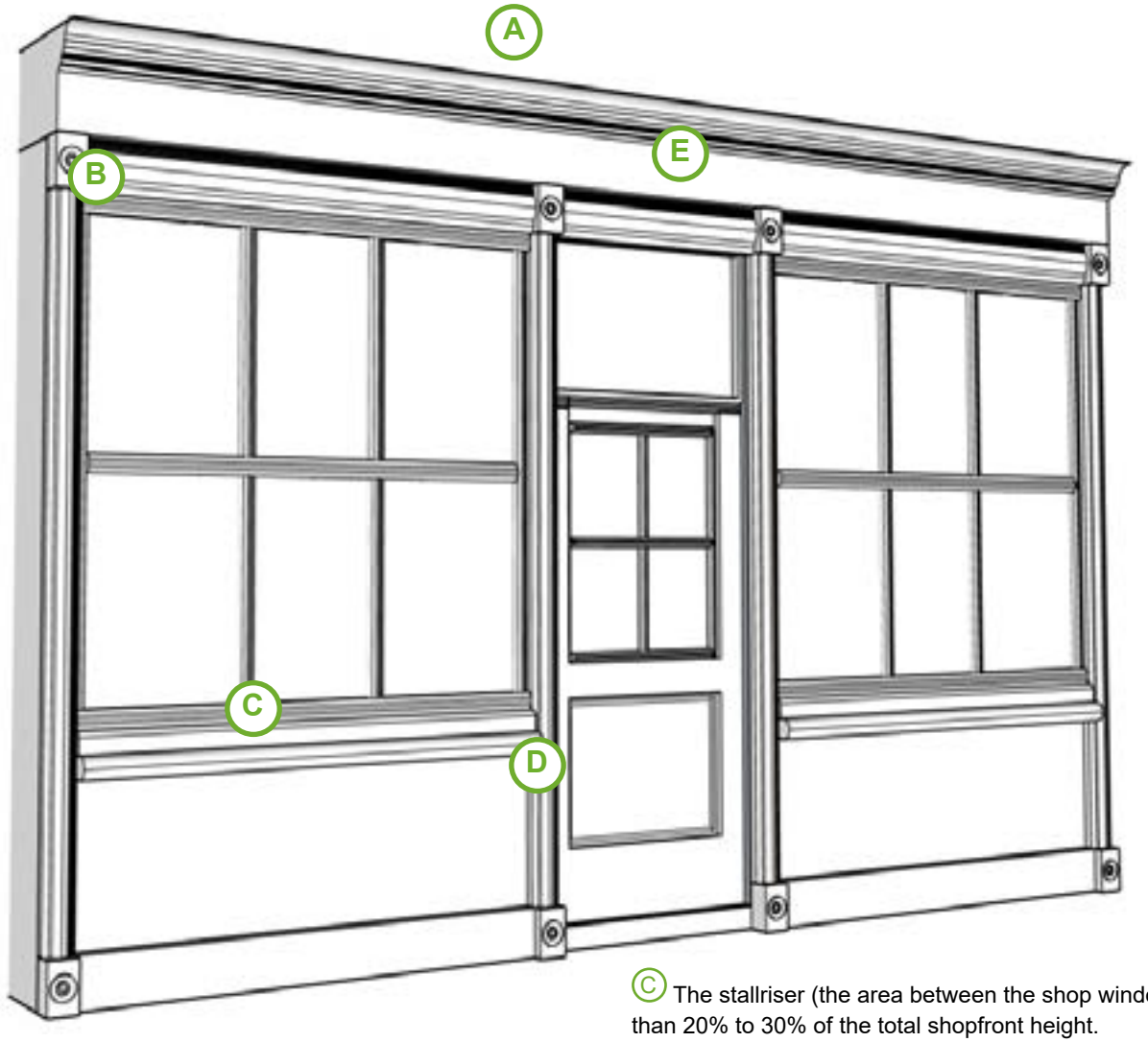
- The use of low-cost and mass-produced materials and components to produce standardised shopfronts are quick and cheap to install but have a set lifespan and are difficult to maintain. .
- The maximisation of signage and adverts, at the expense of a traditional building's architectural quality or appearance
- Accessibility and/or security being considered in isolation from the historic or architectural value of the shopfront.
- Early consultation with your local authority is recommended, especially for substantial changes. Many works may require planning permission, advertisement consent, or Listed Building Consent. Your local authority can advise on the necessary consents and whether proposals are likely to be acceptable.
- Engage a specialist, such as an architect or heritage consultant with experience in traditional buildings, to design or specify the shopfront.
- Any proposals should demonstrate how various options have been considered and assess their practicality and viability.

Actions

Good Design Principles

Action
Consider the architectural or historic value of the existing shopfront and whether it can be retained and adapted rather than replaced. This might be much of the shopfront or surviving details like a surviving timber cornice or pilasters faced with a high-quality material.
Investigate the existing shopfront: it may be that later additions such as signs, roller shutters or suspended ceilings conceal important features or details or open up new options for the new work like restoring the previous height and proportion of the shop windows.
Upper facades - When planning maintenance, repairs, or replacements for a shopfront, consider the appearance of the overall facade. The shopfront is a key part of the overall design or appearance of the elevation.

Good Design Principles



Ⓐ Lincolnshire has many examples of multi-paned shop windows that occupy around 60% of the principal shopfront height. In contrast, later Victorian and Edwardian shopfronts often feature larger single-glazed panes - both flat and curved- that can take up to 80% of the shopfront's height.

Ⓑ Traditional shopfronts across Lincolnshire are often distinguished by their decorative detailing, including mouldings such as square stops, consoles, and ornamental brackets.

Ⓒ The stallriser (the area between the shop windowsill and pavement) should be no more than 20% to 30% of the total shopfront height.

Ⓓ Traditional shopfronts often feature a step up into the premises (see the **Shopfront Glossary** for different shopfront type). Where this presents an access issue, small bridging ramps can be used to address the level change. Alternatively, recessed doorways in new designs may help accommodate the difference in height between the pavement and the shop floor.

Ⓔ The area above the shop window frame which includes the fascia sign should be no more than 20% of the total height of the shopfront.

Actions

Signage

Action
Signage and branding - While corporate branding helps identify a business, it should align with the character of the building or area. Some corporate colours, styles, and logos may appear obtrusive in conservation areas or on listed buildings.
Lettering style – Lettering should be minimal and not dominate the shopfront. It should coordinate with the design of the shopfront, especially the fascia sign.
Extensive use of vinyl is discouraged, though vinyl lettering on glass at an appropriate size and scale can be a positive addition. Consider how posters, banners, and vinyl signs impact the overall appearance of the shopfront.
Signs should be positioned carefully to avoid obscuring architectural features. They should complement the overall façade.
Projecting box signs are unsightly and inappropriate in conservation areas or on listed buildings.
A Boards - Signs on pavements, such as A boards, are not permitted as they obstruct the highway and present a hazard to people with disabilities or impairments.

Ⓐ Hanging signs are a good way of advertising on narrows streets and help give character to a street. Where streets are narrows the clever overhanging of hanging signs can provide an attractive sightline.

Ⓑ Minimise signage clutter - One or two well-designed signs are preferable to multiple signs that clutter and obscure the shopfront. Typically, a fascia sign and a hanging sign are sufficient.

Ⓒ Traditional handwritten sign writing is encouraged as it preserves local craftsmanship and trade skills. Upper floor lettering - For buildings with an upper floor, apply lettering to the inside of upper floor windows.

Materials

Action
Altered or deteriorated shopfronts should be repaired or replaced using traditional materials and techniques. The opportunity should be taken to replace inappropriate materials with more suitable, historically appropriate alternatives.
Use good quality materials for maintaining, repairing, or replacing a shopfront to ensure high standards of work. Consider the overall building condition to maintain the façade's integrity of repair and condition. Avoid lower-grade timber such as plywood, chipboard, MDF, or other timber composites, as they weather poorly, age badly, and are prone to delamination.
Consider the existing shopfront and its surroundings. Painted timber is the most common shopfront material, but in some locations, especially town centres, there is a rich variety of shopfront materials. For example, different types of stone, brickwork, metal framing, terracotta, render work and tilework might be found. In these locations consideration should be given to the design of the overall building and the character of the street to determine if these other materials could be used.

Vinyl signage

Lincolnshire' historic town centres are valued for their attractive, traditional shopfronts and open, welcoming feel. Large stickers or window coverings alter the appearance of traditional shopfront and the streetscape. They:

- introduce large areas of bold colour which appear our of keeping with the character and appearance of the shopfront and streetscape.
- block views and reduce visual depth of shop windows and features.
- remove the sense of openness and transparency characteristic of shopfronts by creating a 'blanked out' effect.
- The 'blanked out' effect breaks the connection or link between shops and businesses within the street and in the public realm. It reduces vibrancy and activity in our town centres.

Large vinyl or direct application stickers on shopfront windows (external or internal) are not appropriate within Lincolnshire's conservation areas. They can harm the special character and appearance of our historic town centres.

The installation of vinyl stickers to windows – even temporarily - can require consent from the Local Planning Authority. Contact the Planning Department for help with queries regarding when and which consents may be required.

Action
Check whether your proposals needs consent. In many cases, vinyl stickers count as advertisements and may need consent. Circumstances where consent may be required include, but are not limited to stickers which: ■ exceed 1.55m² and are within 1m of a door, window, or opening visible from outside. ■ are placed more than 4.6m above ground level or above the bottom cill of any first-floor window (whichever is lower). ■ are independently illuminated. ■ are applied to a Listed Building, where Listed Building Consent may also be required.
Large vinyl window stickers are to be avoided. Where branding or privacy is needed, consider more sensitive options such as modest window signage, hanging signs, or traditional painted fascia boards.
In some cases carefully designed vinyl stickers may be acceptable if they are short-term in use (for a marketing campaign or project) or part of a temporary shop-refit or commercial change. They should be carefully designed small-scale decorative details which complement, rather than dominate, the shopfront.

Security and lighting

Action
External Roller Shutters - While security is important, solid external roller shutters detract from the streetscape and can appear unwelcoming due to the ‘dead’ frontage they create when closed. They will not be permitted on listed buildings or in conservation areas.
Internal shutters or lattices behind glazing are favoured and generally do not need planning permission. Shutters or lattices that provide visibility through them are recommended, so that any intruders in the shop can be seen from outside.
Recessed doorways can be protected with decorative metal gates, while external removable grilles are also an alternative.
Toughened laminated glass, when used with internal shutters or lattices, can meet building insurance requirements without compromising the appearance of the shopfront.
Where curved or historic shopfront glass remains, retain them and seek alternative security measures to preserve the architectural integrity of the building.
The lighting of shopfronts or window displays can help to make streets fell more vibrant and safer at night as well as advertising the shop.
Lighting and CCTV installations should be integrated in a manner that is functional and unobtrusive, avoiding visual clutter on the shopfront.
Discreet, modern LED fittings—such as linear strips concealed beneath cornices, door surrounds, or window frames—are strongly preferred over decorative or prominent fixtures (e.g. swan-neck lamps). Feature lighting should generally be avoided, particularly where it contributes to visual clutter or is likely to fall into disrepair through lack of maintenance.

- Neon brightly coloured and large signs are distracting on a street scene and are not permitted in conservation areas.
- External lighting can be effectively achieved using concealed lights built into cornices or trough lights that match the colour of the shop fascia. Small, individual shoplight units, positioned discreetly and concealed as much as possible, are preferred over spotlights or swan-neck lights.
- Accessible Entrances - Recessed doorways can help accommodate level access by allowing space for a gently sloped, non-slip ramped surface instead of a step, supporting wheelchair users and improving accessibility.

Access

The Equalities Act requires businesses to make ‘reasonable adjustments’ to serve their customers equally. This should not be translated as meaning everywhere must be level or permanently ramped. Instead each business must consider how its day-to-day operation, including how it provides goods and services and trains its staff, will within reason accommodate the needs of people with disabilities and impairments positively and with dignity.

Action
The context of the street and overall character of the area should be considered when selecting paint, blind, or signage colours. Avoid bold or garish tones, especially within or near conservation areas. Brighter paint finishes using compatible lime renders or washes, or compatible paints, can be used where research has shown they are historically present.
Colours and materials should generally conform to traditional colour variations in the locality and should match or complement the fascia, these include Orange / red, cream/ white , grey/black ranges Rich and darker shades of blue and green. Often, the simplest colours work best.
Consider using a second colour on the shopfront to highlight features or add interest. In a similar way consider the colours of windows and features of the upper storeys of the building. A coordinated or complementary colour scheme across the whole building can look far more striking than treating the shopfront in isolation.

Blinds and canopies

Action
Retain and, where possible, repair original canopies, blind boxes, and traditional blinds. Up to the 1950s most shops in towns and villages had sun blinds to prevent products fading or becoming spoilt.
The awning or canopy should be designed into the shopfront rather than added as an afterthought, as this can undermine the design. Ideally the awning should sit at or just below the cornice at the top of the shopfront, or between the window and fascia sign.
New Canopies and blinds should be retractable and extend the full width of the fascia. Must be at least 2.43m above ground level and 1m back from the road kerb to meet health and safety requirements.
Many blind and awning manufacturers make traditional timber and canvas awnings and can often incorporate the colour scheme and logo of the shop. Powder coated aluminium or uPVC awnings always appear jarring and temporary on commercial buildings because they are designed for suburban houses. External shutters make streets look lifeless when shops are closed. Security blind boxes are bulky, project into the street, and often attract graffiti.

Ⓐ Use colour to unify the building and shopfront – A consistent colour scheme can help visually tie the shopfront to the wider building. It can highlight architectural features such as windowsills, voussoirs, or other detailing, creating a cohesive appearance. Where appropriate, separate shopfronts on individual buildings can be visually linked using a shared colour palette and consistent signage design.

Actions

Instead, make use of

- fascia boards or hanging signs for branding.
- your internal shop layout to reduce the need to use vinyl signage as a screen.
- temporary internal display boards - which are easier to remove and retain some visibility through windows.

If still considering vinyl signage

If designs are small-scale, decorative and in harmony with the shopfront consider

- Size - keep them modest in size (not covering whole windows).
- Colour and font - make sure they suit the character of the street and building.
- Quality - make sure they are good-quality graphics, without bold blocks of neon colour or using full photograph images.

D

Submitting an application

Having read the previous sections in the design guide you should now have a good idea of the different types of development and how different elements should be approached if you are considering making any changes to your property.

Next you need to consider if you are required to submit an application before carrying out works, and which type of application you need. A useful tool which covers both planning and building regulations is available on the Planning Portal's **INTERACTIVE HOUSE**. The portal allows you to explore how different types of development impact different types of properties and advise you of your next steps. However, this tool does not identify local restrictions such as conservation areas, restrictive conditions or Article 4 Directions so it is aways advised that you contact your Local Planning Authority.

Images of the Planning Portal's **INTERACTIVE HOUSE** are included on the next page.

Contact Boston Borough's Planning Team:

Call: 01205 314305

Email: planning@boston.gov.uk

Address: Planning, Boston Borough Council, Municipal Buildings, West Street, Boston, PE21 8QR

Contact East Lindsey's Planning Team:

Call: 01507 613175

Email: Development.Control@e-lindsey.gov.uk

Address: Planning, The Hub, Mareham Road, Horncastle, Lincs, LN9 6PH.

Contact South Holland's Planning Team:

Call: 01775 764725

Email: planningadvice@SHoland.gov.uk

Address: Planning, South Holland District Council Offices Priory Road Spalding PE11 2XE

Pre-application advice

All of our Local Planning Authorities offer Pre-Application advice. This is where you receive advice on your proposal in writing prior to submitting a full detailed application.

The pre-application process can include a site visit with a planning officer and will usually conclude with letter describing whether or not a detailed application of the same nature is likely to be supported. They will also give you advice on what you can do to make your application better. This process is particularly helpful if the application you wish to submit has multiple constraints (ecology, listed buildings, flood risk etc) or if it is likely to be contentious and enables you to discuss your proposal in advance of spending time and money on detailed plans and supporting documents.

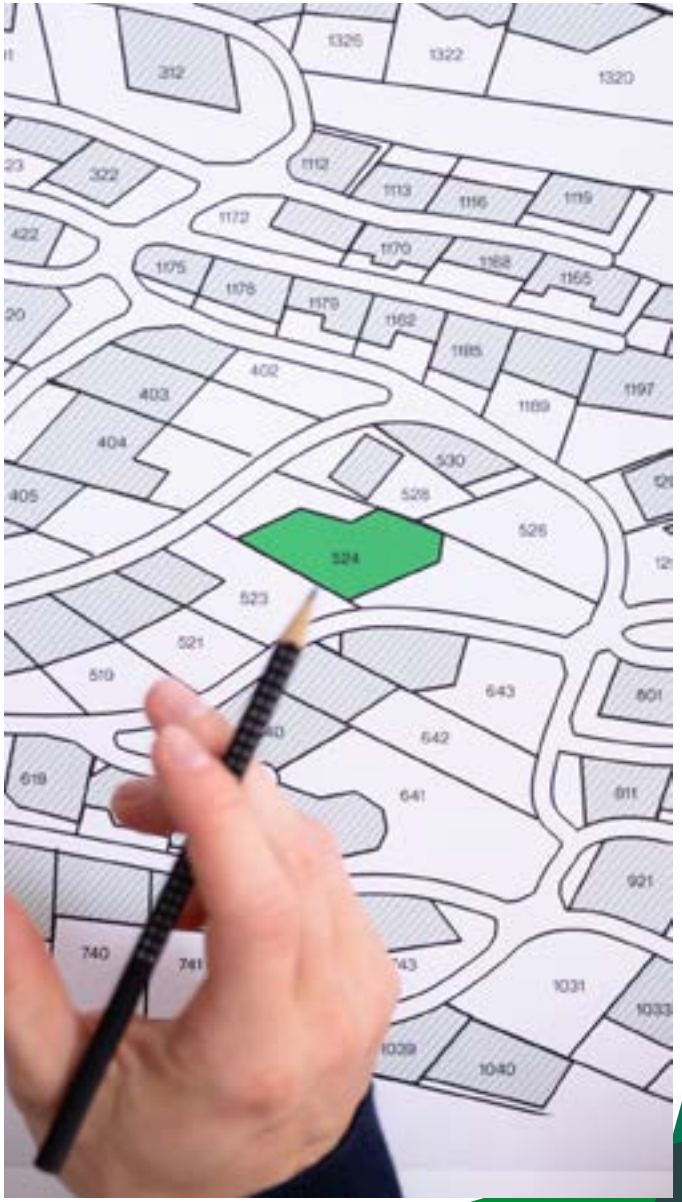
You can apply for Pre-Application advice by contacting your Local Planning Authority on the contact details provided on page **70**.

Types of application

There are a number of different types of Application, each type attracting a different fee. Planning fees are set nationally and subject to change.

The plans and documents you are required to submit alongside an application varies depending on what you are applying for. The information must be enough to understand what it is that you are apply for, and where. Some applications require you to provide written documents justifying your proposal and acknowledging constraints such as heritage assets, flood risk, ecology, contamination etc.

Different types of application also have different time periods for decisions. The first 21days of any application is the initial consultation period where neighbours and local parish councils, are notified of your proposal. For some applications this consultation period includes public site notices and press notices.



Submitting an application

The most common type of application and the ones most likely to benefit from this Design Guide are:

- **Householder (minimum 8 weeks)** - Householder planning applications provide a simplified process for proposals to alter or enlarge a single house (not a flat), including works within the boundary/garden. This is commonly used if you are a homeowner wishing to complete work on your home.

- **Full Planning Permission (minimum 8 – 13 weeks)** - A full planning application is required when making detailed proposals for developments which are not covered by a householder application. This is commonly the case for; new buildings of any kind and any 'commercial' project, structural alterations or additions to buildings including; any works relating to a flat, applications to change the number of dwellings (e.g. flat conversions or building a separate house in the garden), changes of use of part or all the property to non-residential uses, demolition of buildings, including other work normally undertaken by a builder and proposed change of use of buildings or other land.

- **Prior Approval (minimum 28days - 8 weeks)** – In some cases where planning permission would usually be required development is given prior approval. If your proposal falls into this category you must still apply but the process is streamlined and the fee reduced. You can only apply for prior approval before works commence. If you have already made a start, you will need full planning permission.

- **Listed Building Consent (minimum 8 weeks)** - Listed Building Consent is only required for works to a listed building or a building considered to be fixture or curtilage to a listed building. Is required for all works of alteration, extension or demolition of a listed building which affects the character of the building. Carrying out or instructing works of alteration, extension or demolition of a listed building without first gaining consent is a criminal offence liable to a fine and imprisonment. Please note that unauthorised works can be enforced against subsequent owners and there is no time limit on enforcement action. For external works you will need to check if you also require planning permission. If you need both listed building consent and planning permission, you can used a combined form.

- **Advertisement Consent –** an advertisement covers a wide range of signs and adverts including shop facia, advert boards, poles, canopy signs, estate agent boards, flags, traffic signs and town/village name signs. The majority of these require consent, especially if illuminated or over 4.6m or above the sill of a first-floor window or on a gable. Particular care must be taken when displaying signs in conservation areas or on or near listed buildings so that they do not detract from the character and appearance of the building.

- **Discharge / Removal / Variation of Condition –** Planning permissions and Listed Building consents are often granted with conditions. These limit and control the way in which the planning permission must be implemented. Applications for removal or variation of a condition may also be referred to as a section 73 application. You must comply with the terms of the condition for the development to be lawful.

- **Works to trees –** Protected trees include those covered by a Tree Preservation Order (TPO) or those which grow in a conservation area. You will need to contact the Council if you wish to prune branches overhanging from a neighbour's protected tree. Consent is not required when a tree is dangerous or dead, however, you should be prepared to prove that the works fall within an exemption. If you wish to carry out works to a tree(s) protected by a TPO you must apply and include all relevant information as this will be the basis for a decision to be made on. You must give six weeks' notice before carrying out work to trees in a conservation area that are not protected by a TPO. This is achieved through a Section 211 notice.

Your council resources

Boston Borough, South Holland & East Lindsey Planning Departments

Each council offers supplementary planning guidance, conservation area appraisals, and advice on listed buildings:

- Explore **Boston Borough Council – Heritage and Conservation**
- Explore **South Holland District Council – Historic Environment**
- Explore **East Lindsey District Council – Heritage**

East Lindsey District Council

- East Lindsey District Council: **https://www.e-lindsey.gov.uk/**
- Heritage, Archaeology and Conservation: **https://www.e-lindsey.gov.uk/article/5115/Heritage-Archaeology-and-Conservation**
- Building Control: **Building Control - East Lindsey District Council**
- Development Management/Planning Applications: **https://www.e-lindsey.gov.uk/article/5112/Development-Management-Planning-Applications**
- Trees and Hedges: **https://www.e-lindsey.gov.uk/treesandhedges**
- Licensing: **https://www.e-lindsey.gov.uk/licensing**

https://www.e-lindsey.gov.uk/article/6989/Houses-in-Multiple-Occupation-HMOs-and-Licensing

Boston Borough Council

- Boston Borough Council: **https://www.boston.gov.uk/**
- Heritage, Archaeology and Conservation: **https://www.boston.gov.uk/article/21240/Heritage-Archaeology-and-Conservation**
- Building Control: **https://www.boston.gov.uk/buildingcontrol**
- Development Management/Planning Applications: **https://www.boston.gov.uk/planning**
- Trees: **https://www.boston.gov.uk/article/21838/Tree-and-Hedge-Protection**
- Licensing: **https://www.boston.gov.uk/licensing?p=1**

https://www.boston.gov.uk/hmo

South Holland District Council

- South Holland District Council: **https://www.sholland.gov.uk/**
- Heritage, Archaeology and Conservation: **https://www.sholland.gov.uk/article/5306/Conservation-and-Heritage**
- Building Control: **https://www.sholland.gov.uk/article/5304/Building-Control**
- Development Management/Planning Applications: **https://www.sholland.gov.uk/article/5305/Planning**
- Trees: **https://www.sholland.gov.uk/article/11323/Protected-trees**
- Licensing: **https://www.sholland.gov.uk/Licensing**

https://www.sholland.gov.uk/article/7485/Houses-in-Multiple-Occupation-HMO-in-South-Holland-District

Basic checklist - supporting documents for an application

The following documents are likely to be required, but you should always consult your local planning authority before submitting, as requirements can vary.

Type	Description
Completed Form	Once you know the type of application needed you can apply online via the Planning Portal by registering here **Login - Planning Portal** or directly to the Local Planning Authority by post or via email. You can download the forms needed from: **Find your local planning authority - Find your local planning authority - Planning Portal** and use the contact details on page 70 to submit these. The forms also come with helpful guidance notes to help you complete them.
Correct Fee	Fees are set by the government and are subject to change but the latest schedule can be found here: **A Guide to the Fees for Planning Applications in England**
Site Location Plan (Red Line)	A plan which identifies the land to which the application relates. Based on an up-to-date map, drawn to an identified scale typically 1:1250 or 1:2500, but wherever possible the plan should be scaled to fit onto A4 or A3 size paper and, must show the direction of North, with a red line around the application site.
Block Plan/Roof Plan	This plan is the same as the site location plan but often zoomed in more such as a scale of 1:500 and can be annotated to show features relevant to the application such as boundaries, trees, outbuildings and hardstanding. Directional arrows might be used to indicate the elevation affected by the development.
Floor Plan(s)	Floor plans are required when considering a change of use or for internal works to a listed building.
Elevation(s)	Scaled, two-dimensional representations of each external face of a proposal for an existing building. These are typically referred to as front, rear, and side elevations.
Sections	Vertical cut-through representations (typically 1:50, 1:20, 1:10) of a building or site that reveal the internal structure, spatial arrangement, and relationship between different elements.

Type	Description
Design & Access Statement	A written document used to explain how a proposal has been designed to suit the specific site and setting. It must explain the design principles and concepts that have been applied to the development and how the proposed development's context has influenced the design. The Statement must explain the applicant's approach to access and how relevant Local Plan policies have been taken into account, any consultation undertaken in relation to access issues, and how the outcome of this consultation has informed the proposed development. Applicants must also explain how any specific issues which might affect access to the proposed development have been addressed.
Heritage Statements	Part 1 - Assessment of Significance ■ Understanding the significance of your historic asset – Evidential value: how a building reveals evidence about past human activity – Historical value: stories that buildings tell - connecting people and their lives, past, present and future – Aesthetic value: sensory and intellectual stimulation that a building can evoke – Communal value: all that a building means to those for whom it features strongly in experience and memory ■ Can include detailed historical research, recording or archaeological investigation ■ Surveys on condition, structural and environmental performance and ecology ■ Should contain images, maps, plans, photographs and links to help explain the text. Part 2 - Impact Assessment ■ Explaining your objective and why changes are desirable or necessary ■ Identifying your proposed changes, where applicable discussing alternative options considered ■ Assess the impact of your proposal(s) and any public benefit ■ Set out the reasoning/justification behind your preferred option, include design principles used in light of all of the above.
Combined Design, Access and Heritage Statement	For very small/simple applications it may be appropriate to combine a Design & Access Statement and Heritage Statement into a single document. ■ Identify the site and its context ■ Assess its significance ■ Discuss the proposal (Design & Access) including methods and materials ■ Include any justification or public benefit ■ Assess the impact of the proposal on the significance identified.

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Appendix 1: Useful resources

Free Lincolnshire resources

Lincolnshire County Council

For guidance on Lincolnshire's historic buildings, a key resource is the **Lincolnshire Historic Environment Record (HER).** This digital database contains information on known archaeological sites, listed buildings, and other historic places.

Lincolnshire Historic Environment Record (HER)

The **Lincolnshire Heritage Explorer** is a digital, map-based database that gives access to many of the records contained in the Lincolnshire HER, allowing everyone to discover the amazing wealth of evidence of Lincolnshire's past.

Heritage Lincolnshire

Heritage Lincolnshire offers additional resources and guidance, including a general introduction to historic buildings.

Free National resources

Heritage Gateway

Heritage Gateway is a website that brings together records related to the historic environment from across England. You can search for local and national records including:

- Local authority records from England’s Historic Environment Records
- National records for listed buildings and scheduled monuments
- National Trust Historic Buildings, Sites and Monuments records
- Photographs of listed buildings, and historic images of England
- NMR Excavation Index
- Records for historic parks, gardens and landscapes
- Designation decision records

National library of Scotland - Maps

The National Library of Scotland map collection is a fantastic resource. They hold around 2 million maps (and related items) in their collection, over 200,000 of which have been digitised.

Free Expert Advice resources

Historic England

The **Historic England Publications Library** offers a huge collection of free, expert resources to support your work with a traditional building and the historic environment. All are available to browse, download and use today.

- Planning and policy guidance
- Technical building advice
- Archaeology and landscape reports
- Research and case studies

Historic Environment Scotland

The **Historic Environment Scotland** offers a rich online archive of publications covering:

- Traditional building repair
- Conservation guidance
- Research and technical papers
- Archaeology and planning

Perfect for heritage professionals, planners, and curious minds alike.

Appendix 1: Useful resources

The Institute of Historic Building Conservation (IHBC) Toolkits and Guidance

The Institute of Historic Building Conservation (IHBC) Toolkits and Guidance is geared toward practitioners in built heritage conservation, planning and design. The Institute of Historic Building Conservation (IHBC) is a professional body and charity, representing the interests of conservation specialists in the built and historic environment, promoting built and historic environment understanding, enjoyment and access, supporting conservation for its delivery of public benefit, and enabling IHBC members to deliver conservation.

Society for the Protection of Ancient Buildings (SPAB)

SPAB offers highly practical advice on maintenance, repair philosophy, energy efficiency and materials.

The Engine Shed

The Engine Shed by Historic Environment Scotland is your go-to hub for expert advice on maintaining, repairing, and improving traditional buildings. Its comprehensive Building Advice section offers clear, practical, and conservation-led guidance across a wide range of topics – by building component, building materials, common problems and energy efficiency. Use the Resources section to find further useful advice, publications and other resources.

The extensive digital archive brings together decades of guidance, research reports, policy documents, and technical papers - freely accessible and meticulously curated. Whether you're seeking conservation principles, case studies, archaeological reports, or practical advice for traditional buildings, the collection is an invaluable and trusted resource for professionals and the public alike.

The Sustainable Traditional Buildings Alliance (STBA)

The Sustainable Traditional Buildings Alliance (STBA) is a collaboration of organisations that acts as a forum for sustaining and improving traditional buildings. STBA developed the Responsible Retrofit Knowledge Centre.

The Georgian Society

The Georgian Group is an charity created to campaign for the preservation of historic buildings and planned landscapes of the 18th and early 19th centuries.

The Victorian Society

The Victorian Society is the charity championing Victorian and Edwardian buildings, providing advice on about adapting Victorian and Edwardian buildings to the way we live now, while keeping what is special about them, and seeking to engage the public in campaigns to help increase the likelihood of conserving buildings.

TrustMark Tradespeople Directory (with PAS 2035 retrofit compliance)

Useful for identifying contractors experienced in traditional building retrofit, and with IHBC accreditation.

Twentieth Century Society

The Twentieth Century Society is a membership organisation which campaigns to safeguard the heritage of architecture and design in Britain from 1914 onwards.

Period Property

The Period Property website was established to facilitate an active community of interest for the benefit of people who share a passion for living in, and caring for, buildings that constitute part of our British heritage.

Maintain our Heritage

Maintain our Heritage is a group of building conservation campaigners, academics and others who realised how building conservation had become focussed on rescuing historic buildings in advance states of decay, rather than preventing them from decay through appropriate and timely maintenance.

The Building Conservation Directory

An in print and **online directory** of products and services for the conservation of historic buildings.

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General glossary

Appendix 2a: Glossary

Alteration

A change made to an existing building or structure which modifies its form, fabric, or appearance. It includes removal or insertion of walls or openings, changes to finishes or replacement of original features. They need careful assessment to ensure they respect the character and significance of the building.

Addition

A new element or extension to an existing building. Additions are usually sympathetic to the original structure in terms of scale, materials and design, particularly where the existing building is of architectural or historic significance.

Archaeological investigation

Carrying out an expert investigation into the evidence a heritage asset may hold of past human activity.

Archaeological interest

As defined in the Glossary to the National Planning Policy Framework, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them. These heritage assets are part of a record of the past that begins with traces of early humans and continues to be created and destroyed.

Architectural and artistic interest

These are elements in the design and construction aesthetic value of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skills like sculpture.

Article 4 direction

A direction made under Article 4 of the Town and Country Planning (General Permitted Development) (England) Order 2015 which withdraws permitted development rights granted by that Order.

Bay

The elevation of a building is divided into bays. Each bay is a unit or segment of the elevation of similar width that usually contains a window or doorway and the stretches of wall to either side. A bay can also be a section of blank wall (a ‘blind bay’) that is similar in width to the bays that contain windows and doorways.

Character

Character includes all of the elements that go to make a place, how it looks and feels, its geography and landscape, its noises and smells, activity, people and businesses. Character can be understood at three levels; the area type in which the site sits, its surroundings and the features of the site.

Conservation

The process of maintaining and managing change to a heritage asset in a way that sustains and where appropriate enhances its significance.

Context

The context includes the immediate surroundings of the site, the neighbourhood in which it sits and the wider setting. The context may include the physical surroundings of topography, movement patterns and infrastructure, built

General glossary

form and uses. It is an understanding of the context, history and character of an area.

Depth

The spatial layering and variation in the thickness or projection of building elements. Depth enhances visual interest and contributes to a building's function by creating contrast, shadow, and rhythm across elevations. It often works in tandem with proportion and shadow to define architectural character.

Design guide

A document providing guidance on how development can be carried out on traditional buildings in accordance with good design practice, often produced by a local authority.

Designated heritage asset

A building, place, landscape, etc identified through legislation such as, A world heritage site, scheduled sonument, listed building, protected wreck Site, registered park and garden, registered battlefield or conservation Aaea designated as such.

Façade

A word used to reference the exterior face or front elevation of a building. It is usually a very striking and prominent part of a building that plays a vital role in defining its character and style.

Height

The vertical dimension of a building or element, measured from a specific reference point, typically ground level. It can be used to describe the overall height of a building, the height of a specific feature like a wall or roof, or the height relative to other buildings or landmarks.

HER

Historic environment records are information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use. Typically, they comprise databases linked to a geographic information system (GIS), and associated reference material, together with a dedicated staffing resource.

Heritage or historic asset

A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and non-designated heritage assets identified by the local planning authority (including local listing).

Historic environment

All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora. Those elements of the historic environment that hold significance are called heritage assets.

Historic interest

An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history, but can also provide an emotional meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.

Like-for-like

To swap an existing material or element with a new one that is functionally identical, maintaining the original's dimensions, appearance, and performance. 'Like-for-like' means matching and not 'look-alikes'.

Appendix 2a: Glossary

Local List (of Heritage Assets)

A Local List (of Heritage Assets) is a non-statutory register created by local authorities to identify buildings, structures, parks, or landscapes with special local architectural or historic interest. It recognises assets, including monuments, or landmarks, that are valuable to the community's character but do not meet national listing criteria.

Non-Designated Heritage Assets

Non-designated heritage assets are buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of heritage significance meriting consideration in planning decisions but which do not meet the criteria for designated heritage assets.

Ornamentation

Decorative detailing applied to a building's exterior, interior, or individual elements to enhance visual interest. This may include techniques such as reeding, fluting, dentillation, or incised patterns to building elements.

Pattern

The recurring arrangement and spatial organisation of elements often seen in façades, such as a specific construction feature or type seen in walls, roofs, windows, doors and chimneys. It can also be the spatial building pattern seen in height relative to other buildings or landmarks.

Permeability

The visual interest created by the flow of movement, light or air through a building, urban scape or landscape.

General glossary

Permitted Development Rights

Permitted Development Rights (PDRs) are national grants of planning permission, primarily established under the Town and Country Planning (General Permitted Development) (England) Order 2015, allowing specific building works or changes of use without a full planning application.

Position

The spatial placement of a building or element within a larger context

Proportion

The relationship between the sizes of different parts of a building, influencing its overall scale, dimensions and aesthetic.

Repair

Repair refers to the preservation, stabilisation, and reinforcement of the original or existing building fabric. It involves targeted interventions to address decay, damage, or failure, while retaining as much of the historic material as possible.

Key characteristics:

- Minimal intervention: Only deteriorated or defective parts are treated.
- Retention of historic fabric: Original materials are preserved and consolidated.
- Matching techniques and materials: Using compatible materials and methods (e.g., lime mortar for repointing historic masonry).
- Reversible where possible: Repairs should not permanently alter the building, allowing for future changes or reversals.

Replacement

Replacement involves the removal of existing material and the installation of new material. It is typically used where:

- The original fabric is beyond repair or structurally unsound.
- Retention of the original material is no longer feasible due to extensive decay.
- There is a functional or safety need for new components.

Rhythm

In a street typical urban patterns and characteristics are evident in a street scene. This may include the massing and proportion of buildings and building elements, the quality and type of street frontages, and the quality and types of public spaces.

Scale

Scale is the height, width and length of a building in relation to its surroundings. This relates both to the overall size and massing of individual buildings and spaces in relation to their surroundings, and to the scale of their parts. It affects how a space can be used and how it is experienced. The relationships between the different dimensions of a building or component are known as its proportions.

Setting

The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

Shadow

An elevation can look very bland if all the features (such as windows and doors) are all flush with each other, giving the entire elevation a flat face. By recessing doors and windows and bringing windowsills, and other building elements slightly forward, a simple elevation design will instantly look more interesting and attractive.

Appendix 2a: Glossary

Significance

The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic.

Streetscape

Streetscape is a term used to describe the natural and built fabric of the street, and defined as the design quality of the street and its visual effect, particularly how the area is laid out and treated. It includes buildings, the street surface, and also the fixtures and fittings that facilitate its use – from lamposts and signage to planting schemes.

Symmetry

Symmetry refers to a balanced arrangement of elements on either side of a central axis, creating a mirror-like effect. This principle of design is used to achieve a sense of order, harmony, and visual balance in buildings and structures.

uPVC

A synthetic plastic polymer used for making pipes and profile applications such as doors and windows.

Vista

A distant view through or along an avenue or opening.

Vernacular

A term given to buildings constructed using local materials and techniques, to local detail.

Wall bonds and pointing

Ⓐ **Bond**

The orientation and pattern in which bricks or stones are laid in horizontal layers (courses) to create a stable and durable wall. Different types of bond provide varying structural and visual effects and are often named accordingly.

Ⓑ **Brick**

Traditional bricks vary in size, proportion, and appearance, particularly in vernacular buildings. Early handmade bricks were irregular, even after standardising length and breadth. Brick height often changed during the Brick Tax periods and varied across regions.

Ⓒ **Course**

A continuous horizontal layer of brick or stone of uniform height.

Ⓓ **English bond**

Consists of alternating courses of headers and stretchers - one full course of headers followed by a course of stretchers. Common in English brickwork from the 17th to the 19th century.

Ⓔ **English garden wall bond**

A variant of English bond with one course of headers to every three (or sometimes five) courses of stretchers. Typically used in garden and boundary walls.

Ⓕ **Flemish bond**

Each course alternates headers and stretchers. Every header is centred above a stretcher in the course below, forming a distinctive checkerboard pattern. Common in Georgian brickwork.

Ⓖ **Flemish Garden Wall Bond**

A variation of Flemish bond where each course features a repeating pattern of three (or five) stretchers between each header.

Ⓗ **Header**

A brick laid with its short end (head) facing outwards, showing the shortest face on the wall surface.

Ⓘ **Header bond**

All bricks are laid as headers, with each row offset by half a brick. This bond creates a strong, compact appearance and is often used in curved or thick walls.

Ⓙ **Joint**

The gap between individual bricks or stones, filled with mortar. The width and finish of joints vary with the regularity of the masonry: coarser materials require wider joints.

Ⓚ **Lime mortar / render / plaster / shelter coat**

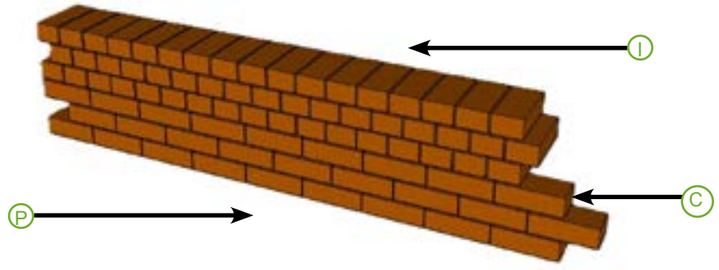
A mixture of lime and an aggregate, such as sand, mixed with water. It is a soft, porous material that works particularly well with building materials such as historic brickwork, terracotta or natural stone. It can be used as a mortar between bricks, as a render or plaster covering over timber, wattle and daub, brick, stone or rubble on the outside face of a wall, a plaster over brick, stone or timber laths on the inside face of a wall. Whether it is inside or outside, lime plaster or render is usually in three coats: a shelter coat, a scratch coat and a finish coat. A ‘shelter coat’ can also mean a fine protective lime and aggregate covering to match or protect historic stonework.

Ⓛ **Moulded or gauged bricks**

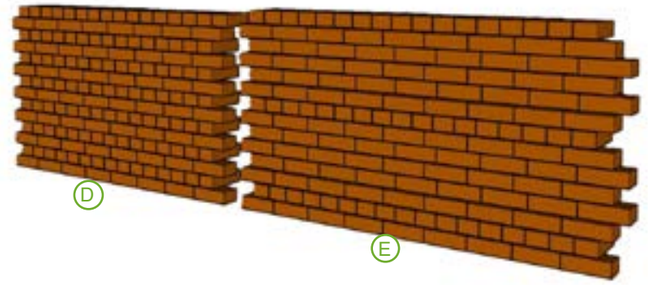
Bricks moulded to a form. Moulded Bricks are shaped into decorative or classical profiles before firing. The most common kinds of moulded bricks are those with softer edges between the stretcher face and header face. Bullnose bricks have a gently rounded edge between header and stretcher, while chamfer bricks have a corner between header and stretcher that looks as though it has been sliced off. These types of moulded bricks are often used for decoration or for boundary wall tops.

Appendix 2b: Building Element Glossary

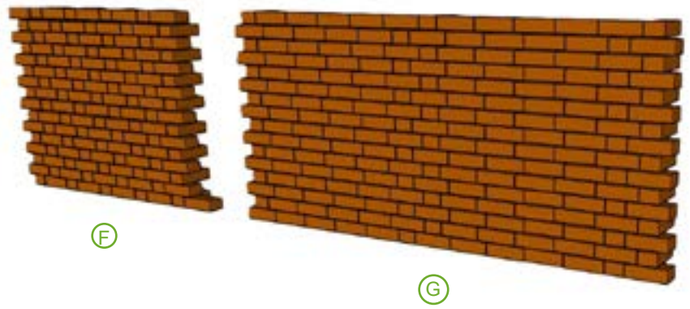
Ⓐ Header bond and stretcher bond

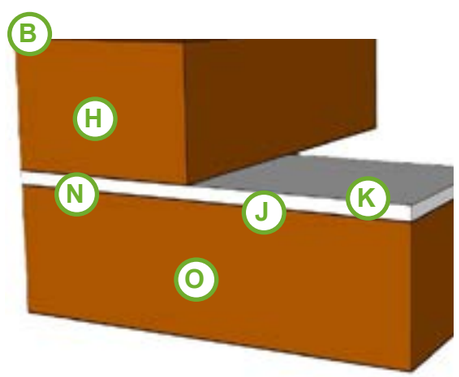


Ⓐ English bond and English garden bond



Ⓐ Flemish bond and Flemish garden bond





Wall bonds and pointing

Gauged Work are made with soft, fine bricks that are rubbed or cut to precise shapes for tight joints and refined finish, often used in arches or detailed features.

Ⓜ **Pattern**

Visual decoration achieved through colour or texture differences in bricks, created by variations in materials and firing methods. Examples include chequerboard, diaper, or lettered patterns, often using vitrified (metallic purple) headers for contrast.

Ⓝ **Pointing**

The external finish of mortar joints between bricks or stones that make up a wall or structure. Pointing contributes to weather resistance and greatly affects the visual character of a wall. In general mortar pointing should cover the arris of the brick or stonework to prevent water pooling in joints. 'Arris' refers to the sharp edge or corner formed where two surfaces meet, such as the edge of a brick or stone.

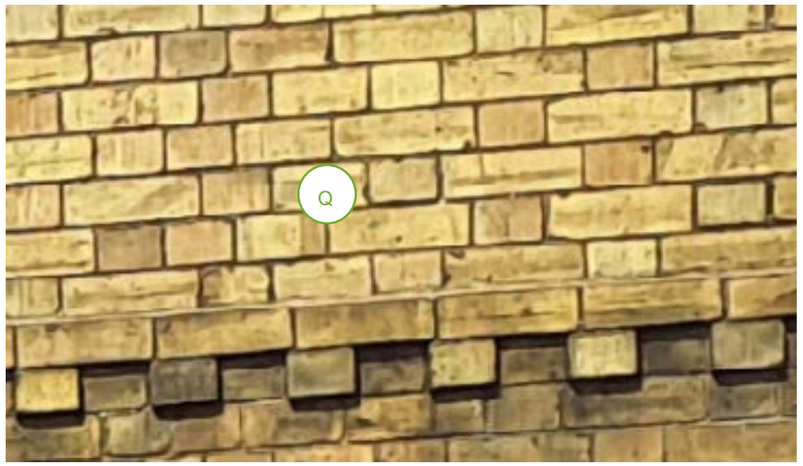
Ⓞ **Stretcher**

A brick laid with its long side (stretch) facing outward, showing the longest face on the wall surface.

Ⓟ **Stretcher bond (running bond)**

A bond where all bricks are laid as stretchers, with each course offset by half a brick. Commonly used in cavity wall construction from the 20th century onwards.

Ⓠ **String course** - A decorative horizontal band of brick or stone, often projecting slightly, used to visually divide a façade and to help shed rainwater.



Doors

Appendix 2: Building Element Glossary

A **Architrave**

A moulded frame around a door or window.

B **Bracket**

A small piece of stone or other material projecting and supporting a weight (lintel or eaves). This is usually a console or scrole bracket.

C **Bottom rail and Weather Bar**

The horizontal piece of wood that forms the base of the lower sash. It's the lowest part of the framed section that holds the glass and provides a surface for the window to rest on when closed.

A weather bar is a protective, typically angled strip made of metal, wood, or plastic installed at the bottom of an external door. Its primary purpose is to seal the gap between the door and the threshold, deflecting rainwater away from the door and preventing draughts.

D **Cill or Sill (also Threshold)**

The horizontal element at the base of a window or door opening, designed to project outward and slope away from the wall to direct rainwater runoff and protect the building's façade.

E **Console or corbel**

A shaped, often scrolled, bracket supporting a cornice or fascia, commonly found on either side of a doorway. May also support sills or parapets. Sometimes referred to interchangeably with corbel. Corbels usually support a parapet or sill.

F **Cross or frieze rail**

A cross rail, also known as a frieze rail, is a horizontal framing member located between the top and bottom rails, often at or near eye level. It is not present on all doors and is sometimes used interchangeably with the term "cross rail".

G **Entablature**

In classical architecture, the horizontal structure supported by columns or pilasters, composed of three parts: architrave (base), frieze (middle), and cornice (top).

H **Fanlight (or transom light)**

A glazed opening above a door, often semi-circular or rectangular, intended to admit natural light into the hallway.

I **Hanging stile**

The vertical edge of a door where the hinges are attached. It's the side of the door that pivots on the frame.

J **Jamb**

The vertical side of a door or window frame. The external visible part is known as the reveal.

K **Mullion or muntin**

A mullion or muntin is a vertical structural member that divides door panels.

L **Panel - fielded and raised**

A fielded panel commonly found in doors, cabinetry, and wainscoting features a flat, raised, or recessed center section surrounded by sloped, beveled edges, known as the "field".

A raised panel is a door panel with sloped, beveled edges that elevate it to be higher than the surrounding frame, often featuring a distinct shoulder.

M **Pediment**

A triangular or segmental gable feature above a door or window. A broken pediment has an interrupted base or apex.

N **Pilaster**

A shallow, rectangular projection from a wall, mimicking a classical column. Often used decoratively on façades.

O **Reveal**

The side plane of a door or window opening, between the external wall surface and the frame. Visible where the frame is recessed.

P **Segmental arch**

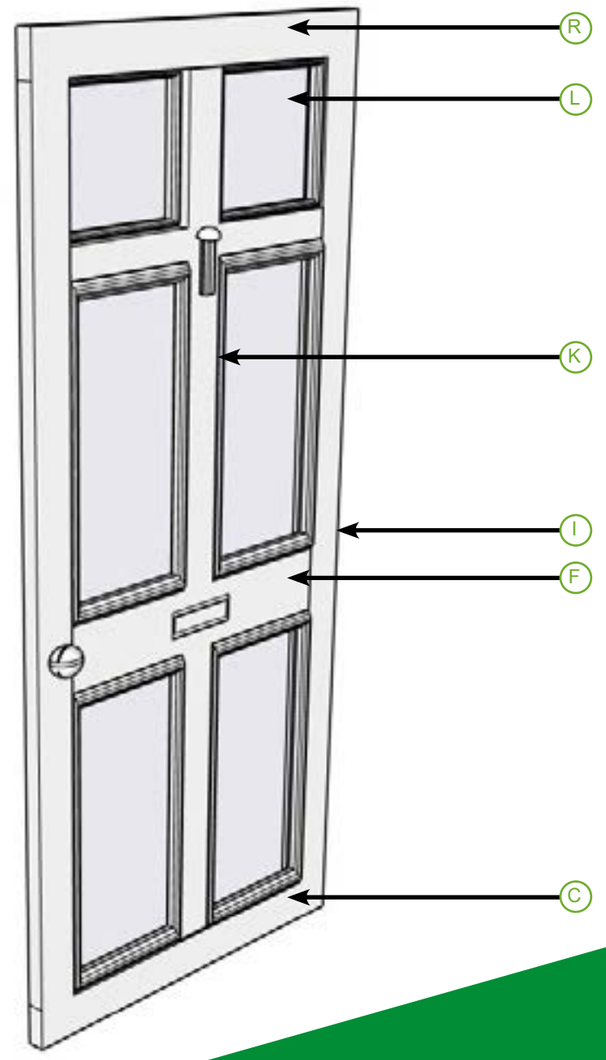
An arch whose curve is less than a semicircle. Common in vernacular or Georgian door heads.

Q **Soffit**

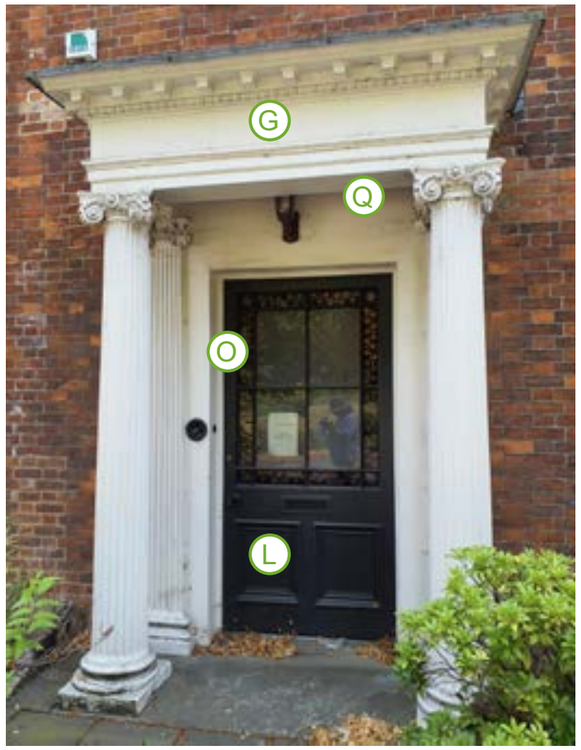
The underside of the lintel or frame above the door opening.

R **Top rail**

The horizontal piece of wood that forms the uppermost part of the door frame.



Doors



Windows

Appendix 2: Building Element Glossary

A Architrave

A moulded frame around a door or window.

B Astragal

A specific type of glazing bar, typically moulded or decorative, and often refers to the raised or shaped profile that sits over the joint between panes of glass.

C Bay window

A window that projects outward from the main wall of a building, creating a recess or window bay on the interior. Bay windows can have curved, square, or canted (angled) sides; a canted bay typically features a flat front with angled sides.

D Bracket (or console or corbel)

A projecting element from a wall, typically made of stone, wood, or metal, used to support a weight such as a lintel, balcony, or eaves. Brackets may be plain or decorative, such as scroll brackets or consoles, which feature a curved or scroll-like form.

E Cill or Sill (also Threshold)

The horizontal element at the base of a window or door opening, designed to project outward and slope away from the wall to direct rainwater runoff and protect the building's façade.

F Double glazed (slimline)

A type of window unit that incorporates two panes of glass separated by a narrow cavity, typically filled with gas or air, to improve thermal and acoustic performance. Slimline units are designed to closely match the appearance of traditional single glazing.

G Double hung sash

Usually a sash, with one horizontal and two vertical astragals dividing each sash.

H Glazing bar

A timber glazing bar separates individual panes of glass and can form a distinctive pattern or layout of panes of glass. Glazing bars are often themselves decorative with moulded profiles such as ovolo and lamb's tongue commonly used.

I Horns

Small projecting spurs of timber on a sash window (usually hanging down from the top sash) introduced from the mid-19th century to strengthen the joints.

J Jambs

The vertical sides of a window, doorway, or other opening. In window construction, jambs form part of the frame and may support hinges or sashes. The outer visible portion of the jamb, especially in masonry construction, is referred to as the reveal.

K Keystone

The central wedge-shaped stone at the apex of an arch, locking the other stones in place. Often larger or decorative.

L Light

The areas of glass between the mullions of windows. Margin lights are those found along the perimeter of some windows.

M Lintel

Horizontal beam of timber, stone, etc. bridging an opening across the top of a door or window.

N Margin

The collective name for the cill, jambs and lintel forming an opening.

O Meeting rail

The horizontal bar where the two sashes (upper and lower) of a double-hung window meet when closed.

P Moulding

Shaped strips of wood used for decorative and functional purposes.

Q Mullion

Vertical post or upright between a window sill and a window lintel. Usually of stone or pre-cast reinforced concrete.

R Reveal

The inward plane or side of a window or doorway opening, extending from the outer face of the wall to the frame. Reveals are typically visible where the wall thickness is greater than the depth of the window or door frame, and may be internal or external.

S Secondary glazing

An independent interior window pane to improve energy efficiency and sound insulation while preserving the original window's appearance. Non-invasive, reversible, and maintains the original window's external aesthetics.

T Segmental arch

An arch which is not a complete semi-circle.

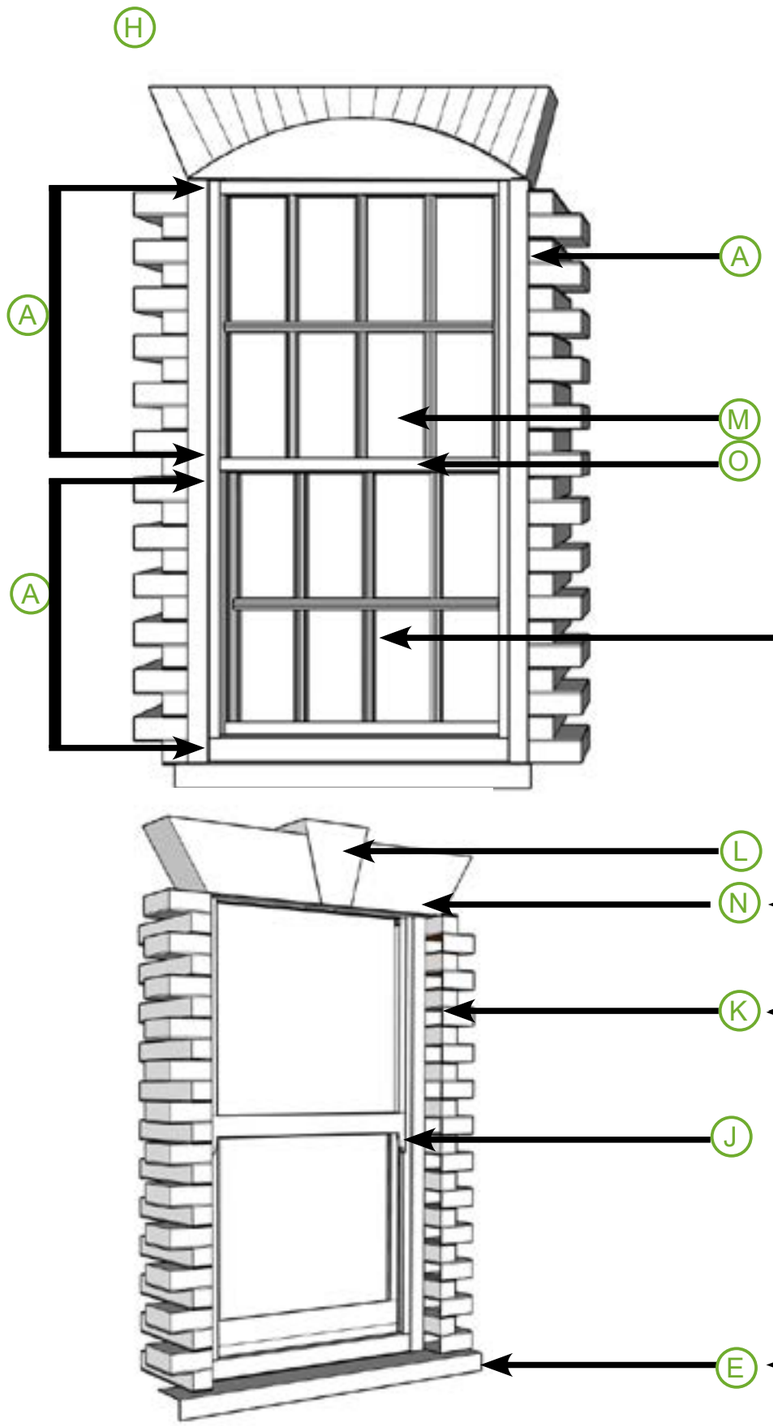
U Soffit

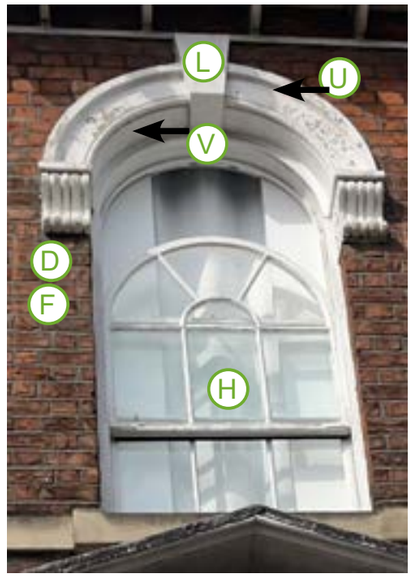
The underside of the lintel or frame above the window opening.

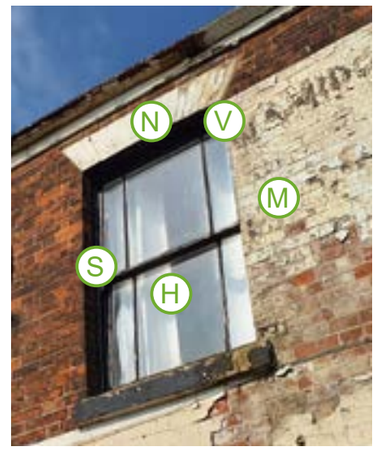
V Trickle Vent

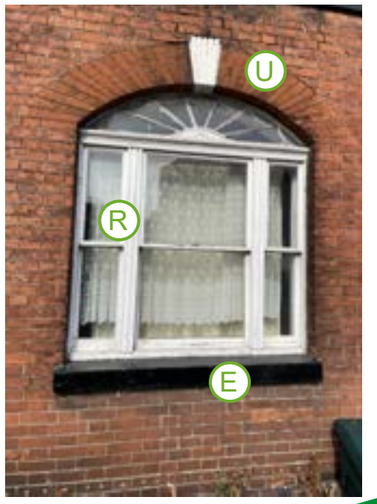
Trickle ventilation is provided in modern designs to make sure there is adequate background ventilation to prevent problems like condensation. A trickle vent is a small slot in a window that regulates air flow into the room. They should be discretely incorporated into the design of historic style windows.

Windows









Appendix 2: Building Element Glossary

Shopfronts

Appendix 2: Building Element Glossary

Ⓐ **Architrave**

A shallow moulding below the fascia that helps frame the signage and define the fascia's lower edge.

Ⓑ **Bracket (or console or corbel)**

A projecting element from a wall, typically made of stone, wood, or metal, used to support a weight such as a lintel, balcony, or eaves. Brackets may be plain or decorative, such as scroll brackets or consoles, which feature a curved or scroll-like form.

Ⓒ **Cornice**

The topmost, projecting part of a shopfront, often moulded. It provides weather protection and frames the fascia below. The architrave is usually simpler and less prominent than the cornice above

Ⓓ **Depth and shadow**

The visual interest created by varying the projection of different shopfront elements, such as recessing doors and windows and slightly projecting pilasters, windowsills, and cornices. This approach avoids a flat appearance, enhances aesthetic appeal, and provides practical benefits such as protecting doors and windows from damage and sheltering signage and lighting from the rain.

Ⓔ **Doorway**

The main entrance , typically positioned centrally or to one side of the shopfront. In historic shopfronts entrances are set directly onto the street or recessed. Recessed entrances allow for steps or ramps and can add depth and visual interest. Doors are usually part-glazed to match the proportions and character of the shop windows, maintaining transparency and visual cohesion, and complement the style, materials, and detailing of the overall shopfront and building.

Ⓕ **Fascia**

The wide broad, horizontal board over the shopfront which carries the business name. It can be ornamental.

Ⓖ **Pilasters**

Vertical elements that frame the edges of the shopfront or windows. Often divided into base, shaft, and capital, they provide structure and visual framing between shopfronts. Pilasters that are along the left and right hand edges of the shopfront should either extend the full height of the shopfront or should appear to support the fascia or cornice, if one is present. Pilasters are often decorated with fluted or reeded ornamentation.

Ⓗ **Stallriser**

The solid, vertical section beneath a shop window that provides a base for the glazing and protection at street level. They are typically constructed from materials like stone, tile, or timber, stallrisers contribute to the shopfront's proportions and durability. They generally do not exceed 20% of the overall shopfront height, unless justified by a higher internal floor level.

Ⓘ **Transom**

On taller shopfronts - typically from the late 18th century onwards, when advances in glass production allowed for larger panes - a horizontal division was often introduced in the form of a transom. This consists of a row of smaller panes positioned just below the fascia, above the main display window or shop door. Transoms help to reduce the visual scale of large glazing areas and may provide ventilation. They are characteristic of traditional and period shopfront designs.

Ⓙ **Display or Shop Window**

The Display or Shop Window are the dominant feature of the shop front. They account for most of its height and in most cases the majority of its width. The design of these windows, including the type of glass, glazing bars, and overall arrangement, contributes significantly to the character of a historic shopfront. Early lincolnshire shopfronts often feature a framework of glazing bars, creating a grid-like pattern. Later shopfronts used larger panes of glass. The largest panes of glass have a vertical emphasis by being noticeably taller than they are wide and mullions divide up the glass and achieve vertical proportions. The window frames and mullions are slender and discrete as possible to maximise views of window displays and the inside of the shop.