

# Minimum Energy Efficiency Standards (MEES)

Guidance for landlords with historic buildings



An historic building is generally considered to be one built before 1919 of traditional construction, but this guide also covers those of special architectural and cultural interest. This includes listed buildings as included on the National Heritage List (https:// historicengland.org.uk/listing/the-list/). For the purposes of this document, it also includes those in Conservation Areas or SSSIs and protected habitats.

As the owner of an historic building, it is important that you carefully consider the legal requirements for your property in relation to the Minimum Energy Efficiency Standards or MEES for short.

# **Historic Buildings Exemption**

There is **no** blanket exemption for Historic Buildings in relation to MEES and an exemption will only occur in limited circumstances where it is not possible to improve the property without altering its special character or appearance. This would only happen where all the relevant energy efficiency improvements listed on the EPC or other energy efficiency report would be unacceptable. It is likely that some low impact improvements may be possible without altering special character or appearance.

The onus is on the owner to understand which works may, or may not, be permitted at their property and when relying on a full exemption an owner will need to evidence that all recommended improvements would unacceptably alter the character or appearance of the building.

Owners of historic buildings should seek advice from the Planning Department to investigate the likelihood of obtaining planning permission and/or listed building consent for any recommended improvements. This service can be accessed through the Council's website **Minimum Energy Efficiency Standards** (MEES) Requests for Exemptions -Cornwall Council

Only if all of the recommended improvements would be unacceptable can the owner be satisfied that their historic building would be exempt, and no further action is required.

If the advice given by the Planning Department informs that some of the recommended measures would be acceptable you will need to look to completing these improvements and seek the relevant approvals.

Further exemptions may apply for other limited circumstances and guidance and information can be found at **Domestic private rented property:** minimum energy efficiency standard - landlord guidance - GOV.UK (www. gov.uk)

# What actions do I need to take to ensure compliance?

- 1. Check the EPC rating of your rented domestic historic building at - Find an energy certificate - GOV.UK (communities.gov.uk) If below minimum standard (F or G) you need to take action. If you don't have an EPC and your property has been marketed for sale, rent or modified in the last 10 years you will need to commission a certificate as soon as possible.
- 2. Determine if the property is let on a relevant tenancy (see the general MEES guidance booklet)
- 3. Take action to understand if any improvements from the EPC are possible which will not alter the building's character or appearance. Use the Planning Service for this: **Minimum Energy Efficiency Standards (MEES) Requests for Exemptions - Cornwall Council** to do this and seek the relevant permissions where necessary.
- 4. Complete any improvement works which are permitted up to a maximum of £3,500 inc VAT (cost cap)
- 5. Register or model a new EPC. If the property still doesn't reach an E rating, register an exemption (All relevant Improvements) on the national exemptions register at PRSregister.beis.gov.uk.

### What work can I do?

"Old buildings are sustainable, their very existence demonstrates this, but they can still frequently benefit from sensitive, well-informed energy efficiency measures" (Douglas Kent, Society for the Protection of Ancient **Buildings**)

Many owners of historic buildings believe there is little they can do to improve energy performance that would not contravene conservation laws or damage the historic fabric of the building.

Below are examples of the type of work that can be carried out on historic buildings and those in conservation areas that can be done in a sensitive way. You should always check before commencing work as it is an offence to carry out works that require Listed Building Consent or Planning Permission without such consent or permission being obtained. The offence is committed by the person who carried out the works (possibly a builder) and by anvone who caused them to be carried out (someone instructing a builder)

Not all works require listed building consent, only demolition or works of alteration or extension that affect the character of the building as a building of special architectural or historic interest.

When undertaking improvement works you should also consider using accredited companies who provide guaranteed work.

### **Reduce heat loss**

The first place to start, before looking at ways to improve heating or power generation, is to look at reducing what is being used and where heat is leaking from a building.

Simple exercises such as blocking unused fireplaces, and draught-proofing round doors, windows, loft hatches and around letterboxes can really improve thermal comfort. For example, chimney balloons can block heat loss from a chimney whilst still allowing some ventilation to prevent damp forming.

There are also sheep's wool alternatives that are breathable.



Example of a chimney balloons (Top) - and a sheep's wool alternative (below)

Heating controls are important too. Being able to accurately control a heating system saves wastage. Thermostats on water cylinders and central heating controls are important and inexpensive. Improving water cylinder insulation is another way to reduce heat loss and improve EPC scores. Making sure that heating systems are regularly serviced is an important factor in keeping them working efficiently.

Most of these interventions can be done without any harm to historic fabric.

# **Building fabric**

#### Walls

Recent research has shown that historic solid walls perform much better in terms of energy saving than previously imagined – up to 77% better. For example, a 500mm thick cob wall can have a similar u-value\* as a modern filled cavity wall.

Old solid-walled houses – most of those pre-dating 1919 – usually need to 'breathe' unlike their modern counterparts, this means allowing air and moisture to move through the fabric. Natural materials (such as wool, cork, wood and lime) allow these walls to breathe as opposed to sealing them with modern impermeable materials. You are advised to get expert advice when insulating such walls.

#### Internal versus external insulation

It is much more likely to get approval for internal wall insulation (IWI) than external, especially in a Conservation Area, however one disadvantage is the loss of internal space when fitting IWI. It is also quite disruptive as sockets and other fittings may need to be moved.

External wall insulation (EWI) where appropriate can act as a shield from the worst effects of the weather and stop heat escaping from the property.

It is advisable to look at more affordable options first, before considering solid wall insulation.

<sup>\*</sup> u-value measures the rate at which heat is lost through a fabric, the lower the u-value the better the energy efficiency of the material.



Example of natural insulating board (photo courtesy Cornish Lime Company)

#### Windows and external doors

Windows are an important part of a building's history and changing them can completely alter the overall characteristic of a building and so need to be dealt with sensitively.

Draught-proofing can be an inexpensive way to cut down heat loss through windows and can usually be done without any planning permissions. Repairing windows is also a less expensive option. Professional repairs using good quality scarfing wood and possibly resin, would be a cheaper alternative to replacing them. Long life paints will provide better protection and reduce maintenance periods. Water based paints are a sustainable option.

New heritage double glazing with thin glass can sometimes be used within the same parameters of the original

window. Slim double-glazed units are now available with units 10-12mm thick. These units have inert gas sandwiched between the two panes of glass which provides thermal benefits. Slim profile double glazing is often not suitable for listed buildings as the glazing rebates are too small to accommodate the thicker units, and surviving historic glass is lost. This harms the special character and historic interest of the listed building. They can be more suitable for use with heavier Victorian and Edwardian profiles in some buildings.

Often secondary glazing can be a cheaper alternative and achieve similar levels of energy efficiency. It is also good for noise reduction. It is possible to get secondary glazing on magnetic strips making them easier to remove and clean, and easier to operate enabling ventilation which is



Heritage double glazed window



Secondary glazing

also important. Secondary glazing avoids having to remove the window's original glass. Listed Building consent is likely to be required, although this will generally be acceptable, subject to detailed design. New secondary glazing is far less clumsy to operate than earlier secondary glazing. It can open the same way as vertical sliding sash windows making it easier to control condensation.

In earlier times, when these buildings were constructed, heavy curtains and shutters were used on windows, secondary glazing can have the same effect. Studies by Historic England have shown that heavy curtains plus secondary glazing can be just as good at reducing energy loss as modern double glazing. Shutters can also prevent overheating in the summer months. Thermal blinds are another heat saving option.

#### **Doors**

Often old doors can be ill-fitting and let in draughts and replacing them with a new high-performance door is sometimes included as a recommendation on an EPC. However, these would need to be chosen carefully and in consultation with the local conservation officer if the building is located in a Conservation Area. Replacing a door in a listed building is likely to require listed building consent.

There are companies that can produce highly efficient wooden doors that would be acceptable in listed buildings. If a door cannot be replaced, then draught-proofing is a good idea and also fitting brushes or flaps to letterboxes.

Draught excluders at floor level also provide benefits. Some properties may have lobbies with internal doors which provide additional reduction in heat losses.



High efficiency wooden door (photo courtesy of timberwindows.com)



Insulated suspended timber floor (photo coutesty of ecological building systems)

#### **Floors**

Floor insulation can be very effective at reducing heat loss, although if the floors are solid this can be an expensive and disruptive exercise. If the house has suspended timber flooring, this is much easier to lift and install insulation underneath. Listed building consent may be required depending on the existing floor. Care needs to be taken when lifting boards to minimise damage. Avoid blocking airbricks when draught-proofing or when insulating and take care to maintain crossventilation beneath suspended timber floors to avoid rotting floor timbers. Insulating intermediate floors is a good option if possible.

More information on ways to insulate floors can be found here:

www.ecologicalbuildingsystems. com/post/best-practice-approachinsulating-suspended-timber-floors

#### Lofts

Loft spaces are easy to insulate without the need for any planning permissions and should also be within listed building consent parameters as long it doesn't alter external appearance of roof or involve modification of the roof structure or internal finishes. Natural insulation materials such as wool are particularly beneficial as these allow a building to breathe, reducing the possibility of moisture and damp problems.

Laying loft insulation can be a DIY job, or relatively inexpensive if using a contractor. It is also an intervention that can be grant funded if the occupants meet certain criteria. Advice can be given on this through CEP (0800 954 1956 or advice@cep.org.uk)

# **Heating systems**

Reducing the running costs of heating is not just beneficial to your tenants but also to your property. If a tenant is able to afford to use the system, they are more likely to keep it running and help keep away any unwanted damp and mould problems that can have a detrimental effect on your property. In choosing an appropriate heating system you may or may not have an EPC to help guide you on the cost of the existing or proposed systems. Our advice would be to speak to your Domestic Energy Assessor and the Cornwall Responsible **Landlord Scheme - Cornwall Council** to ensure any intended changes will be compliant with MEES and the Council's Rental Standard

Gas central heating is currently the cheapest and most effective way to heat buildings. However, many historic properties are located outside of the mains gas network.

Electricity in the form of storage heaters or panel heaters can provide alternative heating. New versions of storage heaters called High Heat Retention Storage Heaters are more efficient, having electronic thermostats and being fully programmable over 7 days. These tend not to need planning permission for installation particularly if replacing older versions already installed. More information can be found here:

### www.simpleenergyadvice.org. uk/measures/meta\_high\_heat\_ retention\_storage\_heaters

If installing for the first time it is important to ensure an Economy 7 meter is installed at the property to take advantage of cheaper night rate electricity.

LPG or oil can provide the fuel for central heating with tanks located externally. It is worth considering how old the boiler is and upgrading to a modern condensing boiler where possible to improve efficiency. Replacing bottled LPG with a tank will help also help to improve the EPC score.

Don't forget! Always check with a Domestic Energy Assessor how different forms of fuel will impact an EPC before installing them, check that the system is compliant with the Council's Rental Standard and also what permissions are required through Planning. The table at the back of this booklet gives an overview in relation to Planning requirements for different types of buildings but you must always check before proceeding.

### Renewable Energy

If a landlord wishes to go down a low carbon route then renewable energy systems could be an option, and many have been approved for installation in historic (including listed) buildings.

### **Heat pumps**

These take warmth from the air or ground and convert it into usable heat in a building. Pipes will need to run between the heat source and the heat pump and a route through or around the external wall will be needed that does not cause damage to historic fabric. Generally in ground source systems the pipework will enter the building below the ground level.

An air-to-air source heat pump costs not much more than a high heat retention storage heater and is a renewable option. With an air-source heat pump the pipework will normally be above the ground. Where possible, existing holes through the external wall should be used.



Above and top right: Images of external unit and internal air to air heat pump
Below: Air Source Heat Pump unit
Pictures from Historic England



If the property is listed, Listed Building Consent will be required. The visual impact of the heat pump will need to be considered, and whether it could be removed without damaging the building. It may be approved if positioned in a visually discreet location on the rear elevation and without extensive invasive works to the fabric of the listed building.



### **Solar thermal**

Solar hot water is another renewable energy system that has been given permission for use on historic buildings in the past. It often depends on whether visible from a public highway and does not damage historic roof fabric.

Top: Solar Thermal panel Middle and right: Solar PV panel installed on church in conservation area - The panel is not visible from the ground below Bottom: Ground mounted solar panels



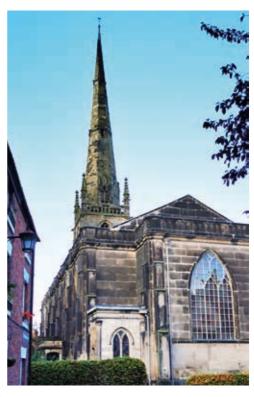




### **Solar PV**

Solar PV (photovoltaic) panels generate electricity, and again as long as not visible from public highways, planning permission may not be required. If the property is a listed building it may be approved if it is in a discreet location, not visible from surrounding properties, does not compromise the roof structure and does not adversely affect the special character or interest of the listed building. Make sure the roof is strong enough to support panels, that they face south, are not overshaded and can be regularly cleaned.

If installing panels on a roof is not an option, they can often be ground mounted.





Top: Biomass boiler @iStock

Inset: The biomass boiler on the Trelowarren Estate is situated in an outhouse (pictured left). The heating is provided from wood chip from trees grown on the estate. (Photo: Tim Entwistle) Right: Pellet stove @iStock

### **Biomass boilers**

Biomass boilers are powered by burning organic material usually logs, chips or pellets and can be situated in outbuildings with pipes running into a house providing heat and hot water. It is important to consider the location and height of the flue.

## Log stoves

Another form of biomass heating are stoves with back boilers that can run central heating systems. It is essential to have a good dry log storage area and reliable supply.



Pellet stoves can also be installed in living areas and have a live flame. They are fed from the top with pellets. Again these can have back boilers to run central heating, or used just as a stand-alone heater.

# **Planning**

### **Permitted Development**

If the property is not listed it is possible to make certain types of minor changes to your house without applying for Planning Permission. This is called "permitted development". The Planning Portal has an interactive guide: www.interactive.planningportal.co.uk. In some cases, permitted development rights may have been removed by way of a condition on a planning application or the issuing of an Article 4 direction.

An Article 4 direction is a special planning regulation that gives extra planning control in a chosen area. Your permitted development rights may have been removed by the issuing of an 'Article 4' direction. You can check to see if your property is covered by an Article 4 direction on the Council's website using the following link and searching under environment and planning:

### www.cornwall.gov.uk/mapping

You may wish to use Cornwall Council's "Do I need planning consent or building regulations?" service. With this service the Planning Department will check whether you need Planning Permission, Listed Building Consent, and/or Building Regulations. Further information can be found using the following link: **Do I need planning permission or building control? - Cornwall Council** 

# **Listed Buildings**

Listed Building Consent is needed for the alteration or extension of a listed building, which would affect its character in any way. Listing status covers the whole building or structure, interior and exterior, boundary and garden walls, railings and buildings and other structures within the curtilage of the listed building. Carrying out unauthorised works on a listed building is a criminal offence. If the works require listed building consent, you can find out more information on how to submit an application using the following link: www.cornwall.gov.uk/planning-and-

www.cornwall.gov.uk/planning-andbuilding-control/conservation-andplanning/listed-buildings/

You can check to see if your property is a Listed Building, or within a conservation area on the Cornwall Council website by using the following link: **Cornwall Council Interactive Map** 

# **Grant funding**

There is often funding available for landlords when improving the energy efficiency of a property. This is usually based on the tenant's income. In 2022 new grants were introduced to specifically target those properties off the gas grid, including those with solid walls. There is also a new upfront grant aimed at renewable energy systems.

For advice on funding options
Community Energy Plus will be able to
help, call freephone: **0800 954 1956** or
email **advice@cep.org.uk**For specific enquiries with regards
rental properties email **nicole@cep. org.uk** who is the dedicated Landlord
and Tenant Advisor.

### **Further information** and trade bodies

A very detailed guide on improving energy efficiency of historic buildings in Cornwall produced by Cornwall Council and funding via Townscapes Heritage funded Initiative can be found here: Improving Energy Efficiency in Historic Cornish Buildings (cornwall. gov.uk)

Cornwall Council Historic Environment Advice

t: 0300 1234 151

**Building Control** t: 0300 1234 151

e: buildingcontrol@cornwall.gov.uk

**Planning Advice** 

t: 0300 1234 151

e: planning@cornwall.gov.uk

### Conservation advice

The Heritage Help website includes advice on protection and planning, caring and conserving and other heritage organisations:

www.heritagehelp.org.uk

Historic England website:

www.historicengland.org.uk/ advice/technical-advice/energyefficiency-and-historic-buildings/

Society for the Protection of Ancient **Buildings** 

www.spab.org.uk

#### Windows

Buildingconservation.com - Secondary Glazing

Historic England - Secondary glazing for windows

Historic England - Draught proofing windows and doors

**FFNSA** 

www.fensa.org.uk

The Glass and Glazing Federation:

www.myglazing.com

### **Natural insulation**

Sustainable Traditional Buildings Alliance

stbauk.org/

#### Renewable energy

Microgeneration Certification Scheme mcscertified.com

Renewable Energy Association www.r-e-a.net

Measure	Unlisted no conservation area	Unlisted within a conservation area
Loft insulation	Planning permission not required	Planning permission not required
Floor insulation	Planning permission not required	Planning permission not required
Internal wall insulation	Planning permission not required	Planning permission not required
External wall insulation	Planning permission is not normally required (where there is no material change in external appearance. Advisable to check with local authority	Planning permission likely to be required
Draught proofing	Planning permission not required	Planning permission not required
Secondary glazing	Planning permission not required	Planning permission not required
Double glazing	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/design	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/design
Heating	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/design	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/design
Ground source heat pumps	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/design	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/design
Air Source heat pumps	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/design	usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/ design
Solar Panels	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/ design	Usually considered to be permitted development, not needing an application for planning permission but may be subject to conditions/ design

The above table is for dwelling houses. Flats do not have the same permitted development rights as dwellings and therefore you would need to check whether planning permission is required. Contact your Local Authority if you are unsure in relation to flats or dwelling houses.

Measure	Listed building	
Loft insulation	Consent not normally required as long as it doesn't alter external appearance of roof or involve modification of roof structure or internal finishes.	
Floor insulation	May require listed building consent depending on existing floor (ground and intermediate floors)	
Internal wall insulation	Would require listed building consent, may be granted in limited circumstances.	
External wall insulation	Listed Building consent will be required, and this will generally not be considered acceptable.	
Draught proofing	Unlikely to need listed building consent.	
Secondary glazing	Listed Building consent will be required, although this will generally be acceptable, subject to detailed design	
Double glazing	Listed Building consent will be required, and this will generally not be considered acceptable	
Heating	Listed building consent would be required for the flue and for any internal alterations. If there is an existing lawful flue and the new one is the same dimensions/design it probably won't require planning permission to replace. Advisable to check with Local Authority	
Ground source heat pumps	Listed building consent would be required.	
Air Source heat pumps	Listed building consent would be required. The external unit should be positioned in a visually discreet location on the rear elevation	
Solar Panels	Listed building consent will be required and may be acceptable in a discreet location, where not visible from surrounding properties	

It will also be necessary to check that permitted development rights have not been removed by condition or Article 4 Direction Order.

This leaflet should be read in conjunction with the Council's general MEES leaflet.

# **Contact us**

If you have any comments or queries please email:

PSH@cornwall.gov.uk

Or call us on:

01209 615629

If you would like this information in another format or language please contact:

Cornwall Council, County Hall, Treyew Road, Truro, TR1 3AY

e: customerservices@cornwall.gov.uk

t: 0300 1234 100

