



Example of longstraw

Historic buildings Thatch and thatching

This leaflet describes the character of thatch and thatching methods, identifies the distribution of materials and methods in the area, and aims to help owners of thatched buildings and their agents understand what work will require consent and how the application will be assessed.

There is a list of references and useful contacts on the last page.



Introduction

The word 'thatch' is Anglo-Saxon in origin and simply meant roof covering. In time the word came to mean a vegetable covering. It is one of the oldest construction techniques known to man, but in Britain there is little agreement on its development, and there has been little professional study of its origins..



Estate cottage, Breamore

History

Historically, there was a variety of materials used on roofs in different parts of the country, including straw, heather, gorse, bulrush, sedge and sods of grass, but this usually depended upon the location.

In England there survive several hundred buildings where the underside of the thatch is from the mediaeval period. The coating of soot that built up when the buildings had open fires rather than chimneys shows this. Of the examples that can be studied, albeit particularly in Devon, straw was the material most commonly used. Devon has the majority of smoke-blackened thatch as it is in this county that the over-coating of thatch has continued least disrupted through the centuries.

From the late 18th Century to the present day straw thatch is known to have continued to be the norm. The modern distinction between combed wheat reed and long straw (explained overleaf) is reflected in thatching practice from the beginning of the period and related to the availability of the material;

combed wheat reed being used in the west where the climate resulted in shortage and the need to use the material sparingly, whilst elsewhere where straw was abundant it could be processed and used in a different way, known today as long straw. Water reed thatch was confined to coastal areas and the Norfolk Broads.

From the start of the 19th Century there was a steep decline in the number of thatched buildings. In 1800 there were approximately 950,000 thatched buildings in England, but by 1960 this number had dropped to 35,000.

Since the Second World War, there has been an official interest in sustaining thatch and this has led to a wider spread of combed wheat reed thatching from the west and a wider use of water reed, frequently drawing on foreign supplies.

Currently there are about 24,000 listed thatched buildings in England. Of the 1600 listed buildings in New Forest area, approximately 20% of these are thatched.



◀ Long straw thatched with flush wrapover ridge

Example of combed wheat reed with block ridge ▶



Description

Thatch is usually laid at a steep angle so that water can run off it as quickly as possible. This avoids excessive soaking of much of the material, and it reduces the speed with which moss accumulates. The three thatch types found commonly today are long straw, combed wheat reed and water reed.

Long Straw

Long straw thatch was at one time the most common form of thatching in England. The basic material for long straw is a cereal straw, usually wheat but sometimes rye.

The straw is placed in layers on the ground, with no regard to the alignment of the stems. It is wetted carefully to make it more flexible, and then gathered together in bundles called 'yealms', and the longstemmed straws selected. The length of the straw is important to the overall effectiveness of the roof and should not generally fall below about 80cms.

On the roof the straw is laid in place, rather than dressed, over the existing underlayers. The eaves are cut to shape and the verges cut or rolled. The thickness of the roof covering means that details such as dormers can be swept over. Ridges were historically flush but since World War II there has been a move to block cut ridges that stand out from the main roof. Distinctive surface rods are used to secure eaves and sometimes verges. Long straw has a tendency to swell somewhat over the fixings. The end result is a rounded and 'poured on' appearance.

Combed Wheat Reed

As with long straw, this type of thatch is based on cereal straw, usually wheat. It is known as reed because of its similarity to water reed in appearance and in the way it is laid on the roof. It is closely packed and 'quill-like.'

At the time of harvesting, the material is the same as long straw. However, in the process of collecting and binding, combed wheat reed is passed through a reed comb, which removes the grain without crushing the stems. The straw is then bound in bundles with the stems all pointing in the same direction.

When the roof is prepared, as with long straw, usually only the decayed top layer of the existing thatch is removed. The butts of the new thatch straw are laid pointing downwards and dressed into place. The bottom edge of the straw at the eaves is cut to shape. Again ridges were historically flush but sometimes today are block cut.

The consequent accumulation of layers of thatch over the years creates a softer, more rounded appearance to the finished roof than water reed.



◀ Re-thatching in water reed



Water reed stacked ready for new thatching ▶

Water Reed

Water reed is a wetland plant, which was historically maintained to provide for thatching purposes. Originally, most of the Norfolk reed beds, which provided the majority of the English grown reed, were man-made. There were other areas of undrained wetland which led to small pockets of water reed along for example the South coast. Nowadays, up to three quarters of the reed required for thatching in England is grown abroad.

The material grows to about 2.5m and is cut very low on the stem. It is relatively stiff, so when laid on the roof it requires an even base. This generally means that the previous covering is wholly removed. Bunches are applied to the roof in horizontal courses and the reed pushed up into position. The eaves shows no visible fixings. Ridges are made from a different material, such as sedge or straw.

The overall appearance is extremely uniform. On close inspection the tips of the reed ends are visible over the entire roof, excluding the ridge. As water reed thatch is usually not as deep as straw thatch, it follows the lines of the roof structure more closely, emphasising with angularity features such as dormer windows.



Detail of long straw



Detail of reed thatch

Thatch in the New Forest

Thatching materials

Thatching materials and the methods by which they are applied reflect the broad geographic and economic character of their areas over time.

The New Forest area can be divided geographically into three zones with regard to the type of thatch used both historically and today.

The first zone is essentially the coastal zone from the southern reaches of the Avon through the south of the area to the edge of Southampton Water and the River Test, including the areas bounding the Lymington and Beaulieu Rivers. Here the presence of marsh and more specifically managed reed beds led to the use of water reed. Suitable thatching reed is no longer obtained locally. However, there is still an obvious water reed presence although there is also a significant quantity of combed wheat reed thatch.



Longstraw thatch, Breamore

The second zone is the north western part of the area comprising the Avon Valley to the south of Salisbury, the villages to the west and the forest villages above the eastern slopes of the Avon valley. In this zone the historic thatching tradition would have been one of long straw. Today, with the exception of 'estate villages' like Breamore and other pockets, the predominant thatch material is still straw but in its combed wheat form. There remains a strong long straw tradition in this zone.



Traditional detailing around windows using liggers



Flush ridge

Traditional flush ridge and eaves restrained with liggers



Thatching in progress



Detail of flush ridge thatched cottage, Ogdens

The third zone is the remainder of the area, comprising much of the forest and the agricultural areas to the north east. This zone would have traditionally been an area of long straw thatch. Today much of the thatch is combed wheat reed with the occasional incidence of water reed.

Ridges

In those areas where the historic thatching tradition is one of long straw it is likely that ridges would have been simple, of the flush wrap-over type rather than the ornate block-cut patterned ridges. Today, there is a mix of plain flush ridges and block cut patterned ridges on properties in the area.



Decorative block cut ridge



Flush ridge



Decorative ridge



Modern block-cut ridge



Cottage and outbuilding with simple block cut ridge



◀ Patch repairs to a combed wheat reed roof



▶ Moss build up on a deteriorating thatched roof

Longevity and maintenance of thatched roofs

The issue of longevity in thatch is much disputed. In the past figures have been quoted for the longevity of the three different types of thatch described in this leaflet, water reed having been considered to last longest. Examples of roofs over fifty years old are however known from the three types of thatch.

There are many issues which must be taken into account. In the past failures of combed wheat reed have been suspected to be due to the enhanced use of fertilizers in the growing of straw for thatching, which today is controlled. The quality of the crop will be an influencing factor, as will the climate and levels of rainfall, the situation of the building, the pitch of the roof and the skill of the thatcher.

Evaluating the remaining life of thatch is not always easy. A roof will not necessarily weather evenly. It is important therefore to look out for depressions, vertical lines or slippage of thatch.

Water reed roofs are not often repaired before rethatching (other than re-ridging). This is not normally the case with straw thatch where localised repair by patching frequently takes place to effectively extend the life of the top coat. In all thatches the ridge will require replacement before the main coat.

In thatches where netting is used, moss build up may occur. This can be carefully removed. However there is no agreement whether the moss causes damage to the roof or offers additional protection.

If an owner receives advice on changing to a different type of thatch, then it is important to remember that this may require consent from the local authority. The need for consent is considered in more detail later in this leaflet.



Thatch in poor condition



Thatch around the chimney is badly eroded



Layers of thatch - new thatch on existing



Re-thatching in progress

Archaeology

A thatched roof may be of particular interest because the layers of thatch may have remained undisturbed for many centuries due to it never having been completely stripped back to the timber work. As mentioned earlier this is sometimes evident in smoke blackening dating from a time prior to the insertion of chimneys. It is an aim of conservation policy to protect this historic or archaeological material.



Layers of thatch

Listed buildings

The Planning (Listed Buildings and Conservation Areas) Act 1990 provides control over alterations to listed buildings. Planning Policy Statement (PPS) Note 5 (Planning for the Historic Environment) provides advice to planning authorities in the interpretation of the Act.

Listed building consent is required for any alteration which would affect the character of a listed building as a building of special architectural or historic interest.

Listed building consent is therefore required for:

- the removal of material which is of archaeological or historic importance.
- a change of material between straw and water reed, or any other botanically different species (this includes the covering of one material by another).
- a change of material between long straw and combed wheat reed, which may be botanically identical but have been differently prepared.
- a change of thatching method between the main types previously described.
- a change of external appearance or surface configuration, such as the formation of a different ridge.

Re-thatching by stripping the upper layer and replacing it in the same material and to the same method

as existed is a repair and will not normally require consent.

In considering an application for listed building consent for alteration, there is a presumption in favour of the preservation of a listed building. PPG 5 advises in Planning Practice Guide that 'Original materials normally only need to be replaced when they have failed in their structural purpose. Repairing by re-using materials to match the original in substance, texture, quality and colour helps maintain authenticity and ensure repair is technically and visually comparable.'

In making an application for listed building consent, it is up to the applicant to justify the proposals. The sort of information which the local authority may need includes:

- evidence of the nature and provenance of materials;
- historical report on the thatch of the building;
- specification / method statement for the preparation of materials and thatching work;
- scale drawings to show the final effect or photographs of comparable work;
- an explanation of how any reduction of the archaeological interest of the roof could be minimised.



The roof contributes significantly to the historic character of this cottage.



Fire officer dealing with the aftermath of thatch fire.

Conservation areas

Planning permission is required for any alteration to a roof in a conservation area. There will be a presumption in favour of retaining thatched roofs and their detailed characteristics in order to preserve the character of the area.

The character of listed buildings and buildings in conservation areas

Listed buildings and buildings in conservation areas have roofs which contribute to their historic character through the particular type of thatching material and method employed and their detailed characteristics.

This character is regional and it is important that it is retained through the preservation of these buildings and areas.

Fire in thatch buildings

Tackling fire hazards in listed buildings has been an on-going concern for many years.

Specific guidance notes have been prepared on this. Refer to the websites for New Forest District Council www.nfdc.gov.uk or New Forest National Park Authority www.newforestnpa.gov.uk and look for notes on 'Fires in thatch buildings'

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Further information

Click on the website
address for link



References

A Practical Guide to Thatch and Thatching in the Twenty-First Century

National Society of Master
Thatchers Ltd 2008

Thatch and Thatching: a guidance note.

English Heritage 2000

Thatch in Hampshire

Hampshire County Council

The Care and Repair of Thatched Roofs

by **Brockett, P and Wright, A**
SPAB 1986

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www.hants.gov.uk/landscape-and-heritage/historic-environment/
historic-buildings-register.htm



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