

## **TECHNICAL NOTE No. 6**

(Formerly note 2)

Updated January 2006

# **Thatch**

**Environment and Heritage Service is currently conducting a detailed investigation of thatched buildings in Northern Ireland. It is anticipated that this advice note will be revised following analysis of this information**

### ***Historical Note:-***

A hundred years ago, most people in Northern Ireland lived under a thatched roof. Today very few indeed of those roofs remain. As the numbers become less and less so the remaining few become more special both historically and socially. Several thatching techniques have been used over the years and a wide variety of materials employed. Broadly speaking two owner classes have used thatch; the first and by far the largest was composed of those people who used thatch of necessity as being the only practical and locally available roofing material; the second group were landlords who used the thatch for effect. These buildings were designed to be picturesque and rustically romantic.

### ***Styles:-***

The owner who thatched of necessity, generally used simple undecorated styles. The landlord, on the other hand, often ornamented his thatched roofs with raised, block cut, decorative ridges and intricate patterned scallop work. When considering thatching work to a listed building, it is important to recognise at the outset into which style the building in question belongs. Regional styles also exist and should be followed in most cases of repair. Listed building consent is required for any alteration from the original detail when the building was listed. In most cases for example, it will be unacceptable to change to a 'block cut' ridge which is a detail rarely found in this area.

### ***Materials, types:-***

Historically the material used was the one most readily available. In marshy areas reeds, sedges and beet were common, whereas near arable land, rye and barley straw were most often used. Oat straw was sometimes found but was generally inferior while wheat straw was the most favoured but because of the short growing season in the North much of this material would have to be bought in. Flax was used in areas where it was also grown for linen manufacture.

Today few owners can obtain thatching materials from their own resources and so have to buy them in. A considerable amount now comes from abroad. Only in a few cases will the material used be considered critical to the historic character of a listed building provided it is one of those that have been used traditionally in the area. If a change is proposed however you should consult with the Environment and Heritage Service.

It is important however that new materials should not require the complete stripping of the historic layers of thatch because of a different application technique. English Water Reed for example is tied directly to roof timbers in the English practice. This would

result in much more destruction of thatch than a new coat applied to sound under-thatch or scraws. Such an approach is unlikely to be acceptable to PHB.

#### ***Material, quality:-***

Poor quality material will lead to a shortened life for the roof overall. Take a bundle and see what falls out of it, is it bruised with broken stems, has it been poorly thrashed? The chemical content is also critical to its life. Where straw is from a crop grown for grain rather than specifically for thatch or where reed has come from water that has run off from heavily fertilised fields, then the material is likely to contain high concentrations of damaging nitrates and other chemicals that will lead to premature decay. Some thatchers will give you a guarantee otherwise, when in doubt, have a sample analysed and tested. It is possible to have tests conducted locally. We can advise.

#### ***Vermin:-***

Bluestone (copper sulphate) is a traditional treatment. It kills insects and other small creatures that birds and some animals feed on. Another precaution is to net or wire the roof. This can make future maintenance difficult and so it may be best to limit it to the vulnerable eaves and ridges.

#### ***Fire:-***

The general perception of thatch, is that it is a fire risk although PHB records, kept now for thirty years, do not substantiate this perception. If nothing else, your insurance premium may benefit from some basic precautions. Thatch materials can be treated with fire retardants but this is only effective on a new roof where the entire depth of thatch is protected. Chimneys should be fitted with spark arresters and the flues kept clean. An internal fire proof barrier below the roof will prevent a fire in the thatch becoming a total building write off. It is also important to consider how a fire might be fought. The most effective action is to drag the burning material off the roof and to extinguish it on the ground but this requires a cleared space around the building. This should be a major consideration when planning extensions to a thatched house. An easily accessible and plentiful supply of water will also be helpful.

#### ***Roof Construction:-***

PHB advises that repairs to traditional roofs should be as conservative as possible. The construction of a roof is an important part of the historic value to be derived from thatched buildings, which often contain some of our oldest joinery. There are many examples of traditional roof structures repaired or supplemented by extra supports. This was a traditional practice because it was much cheaper and convenient than complete replacement. Modern techniques extend the possibilities of repair.

In the rare circumstances that a roof has to be replaced in its entirety a number of choices will be available that are not traditional. In the case of a listed building the form of the roof construction may be an important factor in the decision to list the building. In these cases, the new roof must be framed in the same way as the roof that it replaces. A considerable number of the original roof members may be reusable if only after some minor repair. If in doubt about the structural form of the roof contact PHB.

#### ***Regular maintenance:-***

Practically all of Northern Ireland's thatched roofs are held together by spars pinned down by scallops. The thatcher works up the roof covering each successive spar with the next bundle of thatch. As the roof ages the thatch wears back. When the spars begin to show it is time to organise a repair. Ridges, gables and around chimneys are the most vulnerable areas and these will decay faster than the rest of the roof. Regular local repairs will extend the life of the whole roof. If for some reason, the upper parts of roof are left to decay, water will get into the body of the thatch and run down inside the

roof covering. The symptom is brown tar-like stains near the head of the wall, outside and sometimes inside. When this happens the roof structure is in danger because the rafter feet will be standing in a pool of water at the head of the wall. Urgent attention is required to prevent the necessity for a complete new roof including the structure.

***Final note:-***

This paper is only an introduction to looking after a thatched roof. Regular maintenance using quality materials will mean your roof will give you the longest possible trouble free life which can be as much as a complete generation. There are other factors which can affect the life of the roof for example, the proximity of trees, the pitch of the roof, local weather conditions and where your television aerial is fitted. It is advisable that only a roof thatcher climbs on to the roof. Fix aerials and cabling internally or on gables or adjacent buildings that are not thatched.

If you follow this basic advice we hope you will get the best out of your thatch.

**Further Reading**

Oram Richard, Mourne Homesteads Scheme ,Skills Programme 2003/2004, Thatch Notes, Mourne Heritage Trust 2004

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Letts John, Historic Thatch Ireland Study Interim Report ,EHS, Belfast , 1997.

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