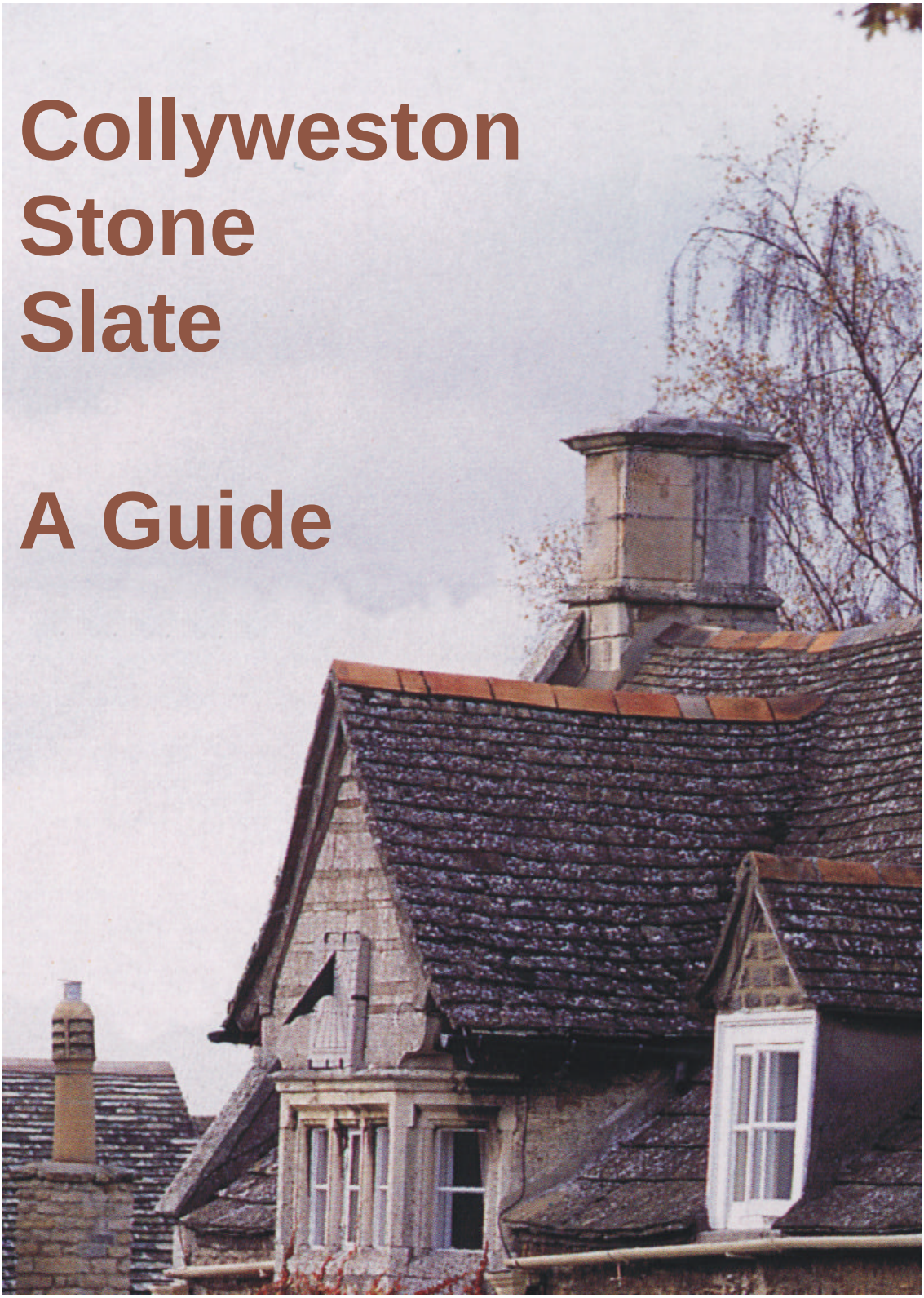
Collyweston Stone Slate

A Guide



Collyweston Stone Slate - Introduction

"Limestone can yield a roof covering of incomparable dignity and beauty. When the building is itself constructed of local limestone, a roof of stone slates adds the crowning touch of harmony, in colour and in texture, with the surrounding landscape."

Sir Alec Clifton-Taylor
The Pattern of English Building
1962

Collyweston stone slate roofs are one of the most distinctive and familiar features of the historic towns and villages around the village of Collyweston in Northamptonshire which gives its name to the stone from which they are made.

The extraordinary richness of their texture and colour, weathered with time, is a reminder of our ability to utilise local materials and by so doing create a strong sense of place and relationship between the landscape and the buildings.

Collyweston stone slate roofs make a unique contribution to the distinctive local character of both the everyday and the prestigious buildings which lie along the limestone belt which continues north from the Cotswolds. The area where they are found includes North Northamptonshire, South Lincolnshire, Rutland, and North-west Cambridgeshire.

The ready availability and price of modern mass-produced roofing materials have consistently been a threat to the long term survival of this feature of our historic buildings. The Collyweston stone slate industry has never been large but specialist Collyweston stone slaters do still maintain the traditions and the high levels of skills required to keep the existing roofs in sound repair and some new slates are being made by traditional methods to replace the stock.

The Collyweston Stone Slaters' Trust was set up in 1982 to work towards sustaining the industry. Together with local councils and conservation bodies they seek to retain this valuable asset to the visual and historic environment and to the rural economy of the area.

"I do not believe that any other roofing material can match the visual attraction of Collyweston slating, when newly dressed and fixed it has a soft variety of colour. It then matures with age. It has an interest of pattern and texture that is fascinating."

Alan Wilson FRIBA
Hon Sec CSST 1983

A Brief History of Collyweston Stone Slate

Stone from the Collyweston area was used as a roofing material by the Romans and evidence has been found at several archaeological sites where slates were found shaped roughly into diamond shapes with a single peg hole at the top point. It is thought that earlier buildings would have been too flimsy in construction to support the weight of a stone roof.

Roman slates were almost certainly made from stone which was found on the surface, known as 'gifts', as it was probably not until the 16th century when the frosting process for making slates was widely used. In 1375 and 1390 it is recorded that 14,000 slates were supplied to Rockingham Castle; so it can be inferred that in the mediaeval period there must have been an organised industry of some kind and a system of production, possibly as a by-product of quarrying activity. It is known that by 1633 there were both open pits and mines in the fields around the village of Collyweston.

For nearly 300 years the use of Collyweston slates on local roofs was commonplace and the industry was thriving. Roof structures were made of oak with square section rafters to support the heavy slates and the battens which were made of riven oak or chestnut. Slates were hung from the battens by oak pegs. The underside of the roof was covered with a soft mortar made of lime and hair called torching which helped weatherproof the roof.

The ready availability of mass-produced roofing materials and blue slate from Wales in the 19th century inevitably threatened the viability of the industry. A significant decline in the rural population, with migration to the towns and the losses from two world wars, meant that the traditional relationship between the men and the land, the seasonal jobs, and the unbroken line of traditional skills were seriously weakened. By the 1970s there was a real danger that the craft was dying out; but today conservation measures, a buoyant economy, and the continuing commitment of the firms of specialist Collyweston slaters are ensuring that the story of Collyweston stone slating continues.

"If any regard is to be had to the general beauty of the landscape, the natural material of the special countryside should be used instead of imported material."

William Morris
On the External Covering of Roofs
1890

Further Information

More information, including a list of local roofing contractors who are known to carry out Collyweston slating, is available from the Collyweston Stone Slaters' Trust website.

Your local Council's Conservation Officer may be able to provide you with names of Architects or Building Surveyors who could also give you advice about the extent of repairs required.

For any work at all, you are advised to contact your Conservation Officer to check the legal position about consent. You may also receive advice about the availability of grant aid in your particular locality.

Points of contact:

English Heritage
01604 735400 or 01223 582700
www.english-heritage.org.uk

Collyweston Stone Slaters' Trust
fax 01733 331200
www.collywestonstoneslaterstrust.org.uk

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Local Authorities who may be approached are:

Cambridgeshire County
01223 717111
www.cambridge.gov.uk

Cambridge City
01223 457000
www.cambridge.gov.uk

Huntingdonshire District
01480 388388
www.huntsdc.gov.uk

Peterborough City
01733 563141
www.peterborough.gov.uk

Leicestershire County
0116 232 3232
www.leicestershire.gov.uk

Harborough District
01858 410000
www.harborough.gov.uk

Lincolnshire County
01522 552222
www.lincolnshire.gov.uk

South Kesteven District
01476 406080
www.skdc.com

Northamptonshire County
01604 236236
www.northamptonshire.gov.uk

Corby Borough
01536 402551

East Northamptonshire District
01832 742000
www.east-northamptonshire.gov.uk

Kettering Borough
01536 410333
www.kettering.gov.uk

Rutland County
01572 722577
www.rutnet.co.uk

Planning and Historic Building Legislation

Many buildings with Collyweston roofs are 'Listed'. This means that consent may be needed from the Local Authority for any alterations which will affect the character or appearance of the building. For all but the most minor repairs, it is prudent to speak to the Local Authority to ascertain whether or not Listed Building Consent will be needed for the work.

Buildings which lie in the curtilage of a listed building are also covered by the legislation. Curtilage buildings are those which, although not fixed to a listed building, form part of the property and have done so since before 1st July 1948. For example, farm buildings surrounding a listed farmhouse are curtilage structures. It is a criminal offence to undertake or to cause unauthorised work to a listed building.

Buildings with Collyweston roofs are very frequently in parts of towns and villages which have been designated as Conservation Areas. These roofs make a positive contribution to the character of the area. They are frequently protected and owners may require permission to remove or alter them. If Listed Building Consent or Conservation Area Consent is required, at least eight weeks should be allowed for this to be obtained. Time must be programmed into the work schedule accordingly. Once authorised, permission is valid for five years.

Grants

It is always worth checking the current situation with the local Conservation Officer to see if a repair project will be eligible for grant aid. In general the provision of grant aid by Local Authorities and English Heritage is becoming increasingly rare. Where it is available it tends to be tightly focused on particular priority areas. Apart from the two sources mentioned above there are no other potential sources of funding currently known which would contribute to the costs of re-roofing a domestic dwelling. For Churches, Grade II*, and Grade I listed buildings, English Heritage should be contacted.

Facts

- Collyweston stone roofing occurs in a small area of the East Midlands around Stamford. This is one of only ten localised areas of England where local stone used as a roof covering can be seen on historic houses.

- Collyweston stone slate is not a true slate but a limestone from the Jurassic period which splits naturally along its bedding plane to form slate-like shapes ideal for roof coverings.

- There are calculated to be 1,500 buildings in north Northamptonshire alone with Collyweston stone slate. Over half of these are listed buildings.

- The pitch of a Collyweston stone slate roof is usually 47º but can be up to 65º. This means that rainwater is shed very quickly and slates are not easily lifted by even the strongest gales.

- Collyweston slates for 200 sq ft of roofing are known as a 'heap' and weigh about one ton. This consists of 840 slates plus 13 large ones.

- The largest slates, used at the eaves, can be up to 24 ins (60 cms) wide by 36 ins (90 cms) long.

- Collyweston stone slates are always laid in diminishing courses from eaves to the ridge. The width of slates is random, but every half inch increase in length gives a slate its own special name.

- Collyweston stone slates last for hundreds of years and are capable of almost continuous reuse. When the roof of an historic building in Pytchley was stripped for repair recently, it was found that more than half the slates, which were laid in the 17th century, were still sound and reusable.

- Stone slates are the least expensive roof covering, if the lifetime cost of the roof is taken into account.

- Since 1945 Collyweston stone slates have been used for prestigious new buildings including Guildhall in London; Nuffield College, Oxford; and the Masters Lodge at Trinity College, Cambridge.

The Production of Collyweston Stone Slate

The making of stone slates has always been a time-consuming, labour-intensive activity, dependent on the weather and requiring great skill, patience, experience, and knowledge. Even today nearly all the work is carried out by hand, usually by the same man who processes the log and fixes the finished slates on the roof. The 19th century method of extraction was to mine out the Collyweston slate seam. Miners used to lie on their sides, picking away at the sand under the stone slate seam, using tools known as foxing picks. Permanent columns of waste stone were built to support the ceiling, and temporary ones for the undermined seam. The miner would tap the seam above his head to check that it was safe. When the seam was about to fall, a series of clicks, known as talking, could be heard. Ideally, it would be ready to fall at the end of a day's foxing, and the miner would retreat pulling the temporary supports out as he went. The undermined part of the seam would then fall to the floor, hopefully breaking into easily managed pieces known as log. If the seam did not fall, steel wedges would be driven into it and a bar known as a lion's tail would be used to lever the seam down. The log was taken by a barrow, known as a shim, to the surface. It has always been essential that the log should remain damp so that freeze-thaw cycles of frost could initiate splitting. Present day methods have reverted to opencast quarrying, selecting log as the overlying roadstone rock is stripped out. Once above ground, the log is laid out on a bed of shale to allow freezing air underneath. It is kept wet until frost splitting occurs. Formerly, in mild winters, when the log did not split it had to be pied: that is taken back into the mine and covered with wet sand to prevent its drying out. It was brought back to the surface again for splitting the following winter. Even today slaters rely on frost to split the log. Once the log has received several frosts, the slater clives, or splits, it into its separate layers with a cliving hammer. The skill is to produce the largest possible slates from an individual log. Once split, the slates are dressed into the various sizes using a dressing hammer which produces the characteristic rough-edged appearance. A nail hole is made at the top of the slate, traditionally with a bill and elves, but now electrically drilled with a masonry bit. The dressed slates are then stacked in slater's thousands each containing 840 s`lates.

Setting Out A Collyweston Stone Slate Roof

Showing lath sizes and gauges, slate and skirt sizes