



Preserving Historic Stonework

STORY: Sue Rawle

The past is what makes us who we are today and so it is with older buildings; they are documents of history, and if we are to preserve them for future generations to enjoy, then we need to understand the different periods in our culture. Older properties have so much to offer and so many stories to tell about the period of time in which they were built. How sad then that they often suffer from neglect and worse still, inappropriate work which, instead of enhancing the natural beauty of the property, not only detracts from it, but can give rise to serious deterioration in the fabric of the building.

Whilst many older properties were made of cob and rendered with lime mortar, stone and brickwork were also an important part of the fabric of a building. Together they make ideal companions, with stone being used as a plinth for cob walls as well as in its own right as a strong building material. The type of stone used in early construction was dependent on whereabouts you live in the country. Here in North Devon the native stone to be found in the area is sandstone, instantly recognisable with its warm, muted colours of browns and golds, whereas in South Devon, the sandstone is a soft red. Travel down to Cornwall and blue-grey granite is an inherent part of the landscape.

We are fortunate that in our area we have some excellent quarries stocking high quality stone that can be hand picked if necessary to meet the requirements of the client. It's then down to the craftsmanship of the stonemason to ensure that the finished appearance is both pleasing to the eye and sympathetic to the building as a whole.

To this day, there are many fine examples of wonderful stone buildings to be found, ranging from a small workman's cottage to a palatial manor. If you are thinking of purchasing a house built of stone, then inspect both the facing of the stone and the mortar between it carefully. Never be afraid to call in a specialist for an opinion on how best to restore



LEFT: Restoring a stone plinth foundation to a cob wall.

ABOVE LEFT: Example of strap pointing- already damage to the stone is evident.

ABOVE CENTER: Cement render before being repointed with lime mortar- notice the cracks that have appeared.

ABOVE RIGHT: Cement Strapping replaced by lime mortar.

BELOW: Stone wall and building before restoration.



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decayed stonework. Like everything, it's a matter of horses for courses, and whereby a builder who only uses cement and sand would probably advocate the use of modern materials, a traditional builder understands the necessity of restoring like for like. We can't stress enough that any repair work needs to be done using the correct, traditional materials so that it not only preserves the building, but enhances its appearance.

A classic example of how not to restore stonework can often be seen when viewing stones that have been 'strap' pointed using cement render, which can lead to serious damp issues on the adjoining internal wall. Strap pointing usually stands away from the face of the stones and should be avoided at all costs. Not only do the wide joints dominate the appearance of the wall, but they can also harm the fabric of the building. In this instance, the pointing between the stonework should be dug out and replaced with lime mortar which ideally should match the colour of any existing mortar.

To understand why the use of lime mortar between stonework is so imperative, we need to appreciate its properties, compared to those of cement render. Lime



ABOVE: Early stages of restoring decayed stonework.

BELOW: Walls have been rebuilt and together with the stack are in the process of being repointed with lime mortar.



mortar allows a certain amount of movement within the structure, and so is less likely to crack. It has a greater porosity than its modern counterpart, and so moisture within the stones can escape through the

joints. By comparison, cement pointing will prevent this process, instead forcing the moisture out through the stone facing. Over a period of time, this widens the joints and erodes the face of the stone, leading to



ABOVE: Stone wall and building after restoration.

spalling (flakes of stone that break off from the larger body of stone) and loss of fabric.

Occasionally, spalling leads to serious erosion of the stone facing, and the actual stone needs to be dug out and replaced. This type of conservation work is highly specialised and not a job for the faint hearted, as not only will the new stone need to match the existing stonework, both in colour and character, it will also have to be carefully shaped to fit in to the gap where the damaged stone was removed. If the building is listed then work should only be carried out after consultation and agreement from the Heritage and Environment section of your local authority.

It's perhaps worth mentioning the most common causes of decay in older stonework stems from poor maintenance, damp, and inappropriate pointing and repairs. Blocked drains, gutters and downpipes will cause stonework to be continuously damp, this, coupled with the action of frost, will initiate significant damage. Make sure that soak-aways are provided against the building to allow any water to drain away or lessen rain splash. Once the cause is remedied and the stonework then well maintained with traditional pointing, it should not require surface coatings such as water proofing. The age old adage,

'a stitch in time saves nine', is so true when it comes to looking after older buildings and regular maintenance, with repairs carried out promptly, will save time and money for the owner in the longer term.

A point worth remembering that if you are considering replacing defective stonework on a property that is listed, then such work should only be carried out once you have spoken to the Council's Conservation Officer in your area. Although Listed Building Consent is not normally required for repairs of a listed building, providing they do not affect or alter the character in anyway, as the owner or occupier, it's your responsibility to check first. In some instances, you may be able to obtain a small heritage grant for the sensitive repair of historic buildings and also the restoration of important historic features.

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