

Witchert Wall Grant Policy
Resolved by the Council on 5th November 2018
Due for review November 2021

Witchert walls are a natural blend of decayed limestone and clay which is mixed with straw over a stone base to make walls and buildings, then thatched or topped with red clay tiles. This method of earth wall construction was used extensively prior to the 20th century in Haddenham and some surrounding areas.

Managing and repairing witchert walls requires specialist knowledge and expertise. Many witchert walls are listed and/or in the Conservation Area. Damage occurs because of neglect, inappropriate repair, and the use of modern materials, particularly cement. Traditional skills are in short supply. In order to protect this heritage and to encourage good maintenance practice, Haddenham Parish Council has established an annually reviewable heritage fund to provide grant assistance for the repair and maintenance of witchert walls.

Aims

- To provide financial assistance for the proper maintenance and repair of witchert walls
- To protect this unique characteristic of Haddenham's heritage
- To promote traditional best practice for repairs and maintenance

Conditions

1. The witchert wall must be located within the civic parish of Haddenham.
2. Grants will be made only for boundary witchert walls facing a public area (eg greens, footpaths and roads). Grants will not be paid for walls forming an integral part of a building, or which are entirely enclosed within a private garden or courtyard.
3. Grants will be made for repairs and maintenance only, and not for extensions or other alterations.
4. The Council will consider walls in their original location but now containing a mixture of traditional and more recent materials.
5. Grants will be made on the basis that costs are shared between the owner and the Parish Council. The Parish Council will normally contribute 25% of the total works cost but will treat each application on its merits and may at its discretion agree an enhance contribution.
6. All requests for a witchert wall grant must be submitted in writing to the Clerk with a details of the required repairs, contractor's quotation, confirmation of contractor's public liability insurance, any prior consents (see 7 below), and an appropriate method statement which must adhere to Aylesbury Vale District Council's Advice Guide appended to this Policy and available on AVDC's web-site.
7. The applicant shall be solely responsible for: organising the repairs; obtaining any prior consents including listed building consent, party wall agreement etc; instructing and paying

contractor(s); managing any problems or disputes arising; and for ongoing future maintenance of the wall concerned.

8. The Council recognises that there are a limited number of skilled contractors able to undertake this work and that it may be difficult to obtain competitive quotes. The Council can provide details of contractors stating they have relevant expertise, but cannot recommend particular contractors or individuals.
9. Grant payment will normally be made once the project has been completed and inspected as satisfactory. In exceptional circumstances, the Council may at its discretion consider part payment prior to completion.
10. Each application will be considered on its own merit on a case by case basis, and in accordance with its annual budget. The decision of the Parish Council on all matters is final.

AYLESBURY VALE DISTRICT COUNCIL - ADVICE GUIDE

How to look after your witchert building

2.3



'All an earth wall needs are good boots and a good hat to keep it dry'

What is witchert?

Witchert or wychett, meaning white earth, is the name given to the local earth building material, known as cob in other parts of the country. It is found in a belt from the Oxfordshire border north-east through Long Crendon, Haddenham, Chearsley, Cuddington, Dinton, Stone to Aylesbury and beyond to Bierton. It also extends northwards to Ludgershall and in pockets up to Grendon Underwood and Twyford. The subsoil in these areas mainly consists of decayed Portland limestone and clay. When thoroughly mixed with water and chopped straw, it produces a walling material of high quality. Most were built in the 17th & 18th centuries, some as recently as 1920.



An early 19th century witchert house in Grendon Underwood, recently lime-rendered and lime washed after its pebble-dash had been removed.

The walls are constructed as follows. A plinth of rubble stones, known locally as 'grumplings' or 'grumblings', is constructed. This is essential to prevent rising damp and to allow penetrating rain to soak away freely. The taller the grumplings the better the protection from splash-back and surface water.

The well-prepared witchert is put onto the stone foundation in layers, known as berries, of about 0.45 m (18") or more along its length and left to dry before the next berry is added. The sides are trimmed with a sharp spade. The walls may then be rendered for decorative purposes, but garden walls are usually left without a coating and do very well.



Witchert wall showing three berries above the grumplings. The coping is formed from plain and half round tiles.

Traditionally most house and boundary walls had thatched roofs, which ensured good protection against the weather. In most instances thatch has been replaced with clay tiles (plain and pantiles), called coping. Along the narrow lanes of Haddenham the witchert walls with their red tile copings are an attractive feature.

Some problems encountered with the care of witchert walls

'All an earth wall needs are good boots and a good hat to keep it dry' is a saying often quoted in literature on the subject of earth buildings. Unfortunately this simple rule worked well only until cement, modern plasters, renders and paints came on the market in the second half of the 20th century.



Small thatched witchert stable, the walls are pockmarked by masonry bees, but remain sound and dry under the overhanging thatch and above the unaltered stone plinth

THE CAUSES AND EFFECTS OF DAMPNESS IN EARTH WALLS

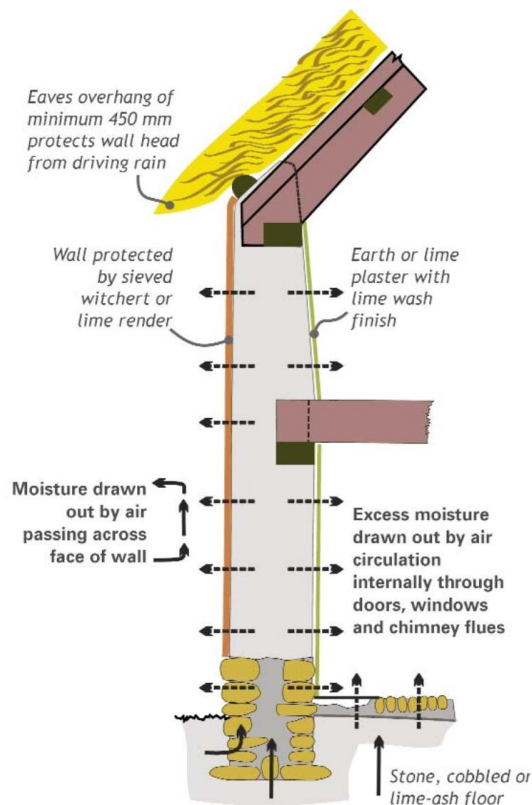


Figure 1A Wall of unaltered earth building showing how a state of moisture equilibrium is achieved

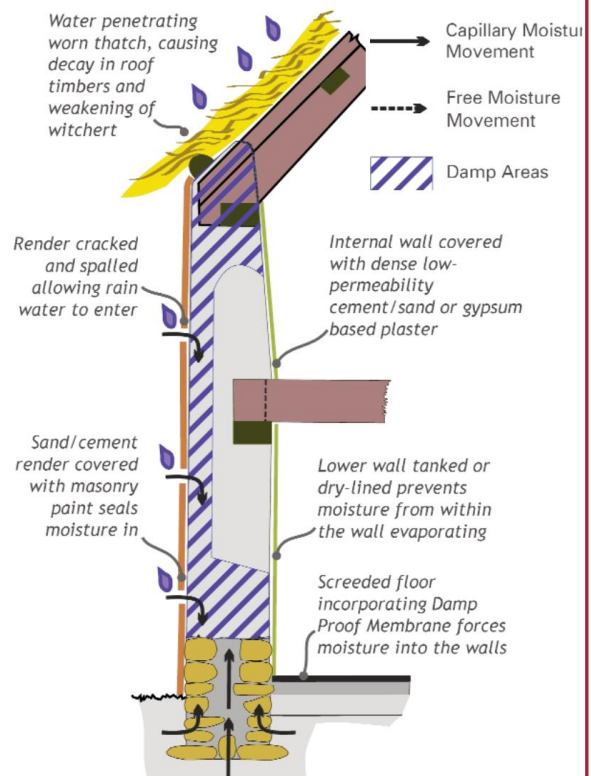


Figure 1B Neglect combined with inappropriate repair/maintenance can upset the balance by retaining moisture within the walls and lead to rapid deterioration

REMEDIAL WORKS & REPAIRS WHICH HELP TO KEEP WITCHERT WALLS IN GOOD HEALTH

<ul style="list-style-type: none"> Repairs to roofs, gutters, down pipes & drains Prevent earth from building up over the grumplings Prevent creeper growth from covering the walls 	Essential maintenance
<ul style="list-style-type: none"> Replacing cement pointing with lime mortar in the grumplings If render extends to the ground, cut out carefully at the top of the grumplings, remove and repoint as above Removal of concrete paths under thatch eaves, but never allow excavations below the level of the shallow grumplings 	Very beneficial for the health of the building. Work to the grumplings should be done in short sections only. Great care is required not to damage the stones when removing cement mortar
<ul style="list-style-type: none"> Removal of cement render, modern plaster and paints Removal of high and dense ground surfaces inside and outside, without however going below the often shallow wall foundation 	Work needs to be carried out with greatest care by specialists after consultation with the Council's Historic Buildings Officer

Cement-rich renders and dense plasters, coated in impervious paints, create strait-jackets, which stop buildings from breathing, trap moisture and prevent early detection of trouble caused by decay of the binding material. A prolonged, high moisture content can create conditions which will wash out the fines and may rot the straw. Moisture allows the build up of soluble salts, which in turn breaks down the materials, transforming the non-shrinkable clays into fine shrinkable clay. This

loose material in turn is washed down the narrow channels created within the wall by water. The results are pockets or layers, usually near the bottom of the wall, of friable witchert that has lost its strength and even drying out may not cure.

The sudden failure or removal of this strait-jacket can lead to collapse of an entire wall, the lower sections of which may have been substantially weakened over a long period.

Appropriate types of render

Traditionally boundary walls and those of farm buildings were rarely rendered. House walls are rendered externally and plastered internally for aesthetic reasons.

Roughcast: This is applied to exterior surfaces as a wet dash with a dashing trowel. An appropriate mix for this would be 1 part lime putty, 2 parts sharp sand, 1 part gravel (both river washed).

Smooth Render and Plaster: The simplest and most appropriate render mix consists of sieved witchert. A lime render consisting of 1 part lime putty to 3 parts well graded sharp, river washed sand and $\frac{1}{2}$ of hair will also be acceptable.

The use of earth (i.e. witchert) and lime based renders gives greater porosity and flexibility. If re-rendering, fixing of chicken wire or metal laths over the entire elevation should be avoided. This is a short-term solution creating long-term problems.

Finishes: Traditionally these were either a fine earth/clay slurry or a lime wash. They can be applied directly to the witchert or to a rough-cast surface but are usually put on for decorative purposes after the wall has been rendered or plastered. Only breathable paints should be used internally as well as externally on witchert buildings.

Damp in walls

Damp is the main reason why a witchert wall may become unstable. The reasons for damp becoming trapped inside a wall are:

- Defective gutters, down pipes and drains;
- Splash-back, especially from hard surfaces below dripping thatch eaves or caused by traffic on nearby road;
- Ground levels have been allowed to be built up above the grumplings;
- High internal floors. Top of grumplings should be exposed;
- Grumplings having been pointed with cement-based mortar. This prevents the plinth from doing its job, traps moisture and forces it into the witchert;
- Cement render has been extended down to the ground over the grumplings;
- Modern wallpaper and paints, which prevent walls from breathing and which can trap moisture (N.B. Even condensation generated by householders can have a detrimental effect on walls which are unable to breathe);

- Concrete floor which forces moisture up into the walls;
- Cracked cement renders. Even hair-line cracks attract and trap moisture through capillary action;
- Failed roof coverings, which expose the top of the walls;
- Failed flashings around chimneys.

The greatest danger to a building can occur when dense render or plaster is removed from large areas that have suffered from trapped moisture for a long time. Structural failure of

walls can be the consequence. Never undertake such works on a DIY basis or allow an inexperienced builder to do so. Experienced professionals must always undertake removal of wall covering in small sections. Moisture content must be monitored during this process and the wall be allowed to dry out gradually. Repairs must be carried out to decayed areas as they are revealed working from the bottom upwards.

Repairs to witchert walls need to be carried out using earth materials. Sound witchert can be reconstituted or freshly dug from the ground and applied in berries when wet. Alternatively the material can be shaped into blocks, allowed to dry and used like bricks with a witchert slurry as mortar.

Because the use of dried witchert blocks avoids the problem of shrinkage this is one of the most straightforward repair methods. Small areas of hollows and depressions can be dubbed out with earth or lime mortar, having been cut back to sound material first. The new material must be allowed to set before a plaster or render is applied.



Cement mortar pointed grumplings and cement render. Cracks in both are drawing in water through capillary action. The moisture is unable to escape through dense render and cement mortar.



Newly rebuilt witchert wall over stream before trimming.