



BUCKINGHAMSHIRE ARCHAEOLOGICAL SOCIETY HISTORIC BUILDINGS GROUP

A step by step guide to recording a building

First, the essential safety bit!

- Never work alone (unless you are surveying your own house!)
- Teams of 3 or 4 are ideal; 2 to hold and read measuring tapes, 1 to write down, and 1 to gain information from the occupants of the house
- Make sure you have the owner's permission and do everything possible to avoid damaging the property
- Always work safely. Don't climb unless necessary. Use the correct equipment for the purpose. Check loft ladders are safe before using. Wear a hard hat in a loft or empty building. Never enter a building which is derelict unless you know it has a sound structure

Consider how you wish to record the building before you begin.

The ideal survey will consist of measured drawings, written description and photographs. If drawings are not possible, then consider a thorough written description with a full set of photographs.

Equipment

- Long measuring tapes. 30m is perfect
- Short hand tapes
- Folding rule (2-3m)
- A4 clipboards and plenty of paper
- Soft pencils with erasers
- Pencil sharpener
- Peg or skewer for fixing the end of the tape when measuring outside
- Chalk

Drawing the ground plan

1. Sketch the ground lay-out of the building in rough, but large and clear enough to add measurements. It should fit on one A4 page!
Include doorways, windows, fireplaces, walls, overhead beams (in broken line). A plan is normally done at waist height or thereabouts.
Begin with the ground floor and then do upstairs.
2. Now begin measuring room by room. Starting at one corner, one member holds the long tape at zero, whilst the second moves along the wall stopping at significant points to read out the measurement to the third person. Take these **running measurements** over as long a stretch as possible, i.e. until there is a turn in a wall.

Upper floors

1. It is not always necessary to measure upper floor plans because internal walls and chimneys are often directly above those on the ground floor. It may be possible therefore to add variations onto a plan drawn to ground floor measurements. In the case of a jettied building, a new plan will be required, since the upper floor will differ in size to that of the ground floor.
2. Remember to check upper outer wall thicknesses as these may vary above the level of the floor joists.

Elevations

Consider whether an elevation drawing is required; a photograph might be enough for a simple building. If doing an elevation drawing, a different team might be used, if sufficient members are available.

1. Begin as before with a sketch plan, but try to get proportions correct because vertical measuring can be tricky.
2. It is generally helpful to set up a level string line across the front of the building, from which to measure upwards and downwards.
3. The sketch plan should record door and window openings, breaks in walling, plinths, parapets.
4. It is possible to produce a sketch by counting brick courses, which will give reasonably accurate dimensions (for a brick building obviously!!)
5. To measure heights you will need to use a rod but for some tall buildings you may need to drop a tape down from an upper window and use a rod to reach up to the eaves. If you really cannot reach to measure, then make a decent estimate by, for example, counting brick courses or using the known height of features such as windows as a guide.
6. If other elevations are significant, they will need recording as well as the front.

A timber-framed building will require a lot more work! The positions of upright posts should be marked on the plan. The elevation will need to show the relationships between horizontal and vertical timbers, position and sizes of bracing timbers and positions of doors and windows.

Roofs

1. Roofs are normally drawn in cross-section. In sketching a roof section, draw a truss as seen from straight on, ignoring everything behind. Anything in front, coming towards you, should be drawn in a broken line.
2. If there is a principle truss, this is what should be sketched first.

November 2009