

# Guidance for Historic Buildings

## Guide No. 2. Photography tips



Lisa Jayne Fisher

## Guide No. 2: Photography tips.

There are several issues to consider before embarking on a program of photographic recording of your building. Controlling the quality is imperative so the best type of camera to use would be a professional or entry level digital SLR (single-lens reflex) camera. There are plenty of courses available in basic photographic skills but there are two simple issues which can help achieve quality, as follows:

- Do you need to control the light?
- What kind of lens will you need?

### 1. Controlling your light source

If working inside, there are times when natural light will not be sufficient. It is worth investing in some simple lighting equipment to ensure you get the best detail for your photos. The two sources listed below in Figs 1-2 plus an in-built camera flash (which can be rather 'flat' and creates reflections) should be sufficient for most situations, unless working inside large buildings such as cathedrals. You will need more powerful plug-in flash lights on stands for this.



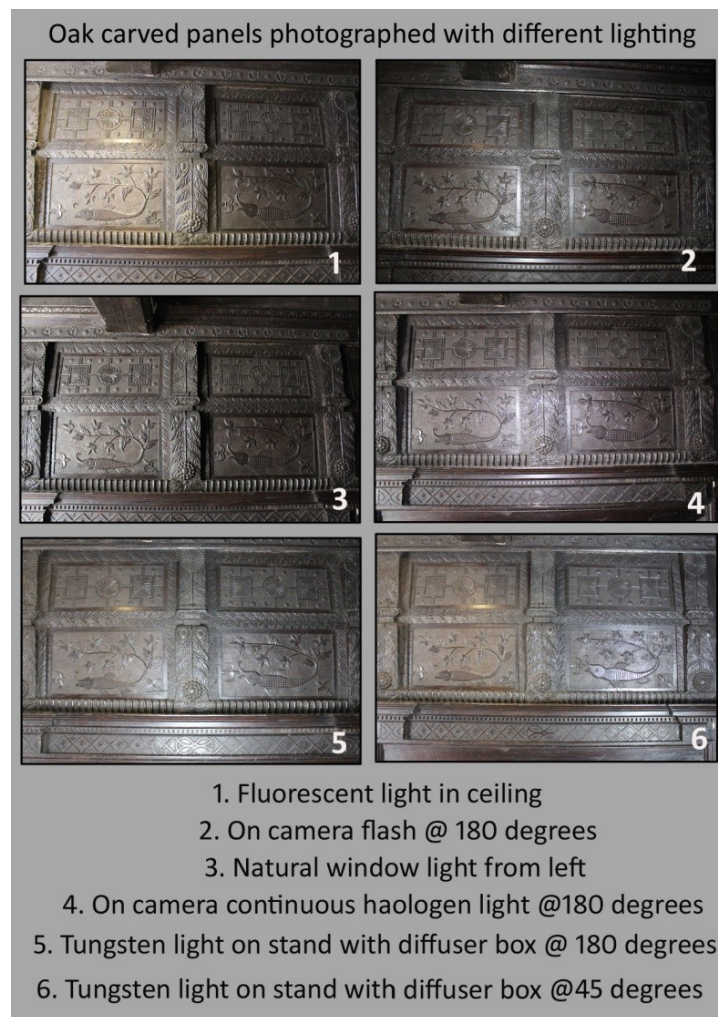
**Fig.1. On camera, continuous halogen light unit which slots into the 'hot shoe' on top of the camera.**



**Fig.2. Continuous tungsten studio lights with diffuser boxes, which need mains plugs.**

It is always worth experimenting with different sources, moving the lights at different angles and heights where possible, to obtain the best solution as no two situations are the same. It is also worth turning all artificial lights off and shooting with natural window light, as well as trying available in-house lights. Fig.3 shows different light situations for comparison and in this example it is the natural window light (No. 3) that gives better definition by creating shadow and texture. However, the right side suffers from shadow so might benefit from the use of a reflector, such as a large piece of white

card held up against the shadow side to fill in the details by bouncing the light back. When dealing with textures, a raking light to one side is usually the best solution.



**Fig.3. Lighting experiment.**

Bear in mind that the bigger the rooms, the more lights you are likely to need. There is potential in large rooms to position the camera on a tripod and with a long shutter speed, such as 10 seconds, using several bursts of light such as an off camera light or other moveable source, which can be used to light a variety of features in one room. To achieve this, the light source must never face the camera and the user must not shine the light on themselves or they will appear in the photograph. Experiments should be made with the exposure so that adjustments can be made.

## 2. What kind of lens will you need?

Most SLR cameras come with zoom lenses with a standard focal range consisting of 18-55mm. The 18mm setting gives a wide angle view, meaning you can fit more of the room in, but usually with resulting perspective distortion towards the edges of the frame.

A 55mm is a standard view, such as we might see with the naked eye. This is the best setting to use to avoid distortion. Other experiments to be practiced include placing the camera on a tripod (at the halfway height of the room) and using a linear marker such as a tape measure placed left to right on the floor, a series of photos can be taken moving the camera along the line so the pictures overlap. They should overlap by approximately 25% to avoid distortion, with the lens set at 50mm. The images can then be stitched together on image editing programs to create 'joiners' or photograms.

Longer focal length lenses such as 100mm upwards achieve a closer view, like that seen through a telescope, but are rarely used inside buildings due to space limitations.

When shooting exterior views of buildings, a distorted view is obtained when the camera effectively looks up at the walls, due to perspective distortion. This can be overcome by the use of a shift lens (Fig.4), an expensive piece of equipment, where a portion of the lens slides to correct the perspective shift so a square shot of a wall can be achieved. However, a standard lens can be acceptable if you move further away from the building and use a step ladder to increase the height of the camera, which will decrease the distortion. If a shot is taken 'squared up' to the building, placed approximately mid-point of the height of a building then perspective can be minimized. Always ensure someone assists by holding the step ladder for safety reasons; this would obviously be difficult to achieve for multi-storey buildings, unless a cherry picker is available.



**Fig.4.** Image source and more information available: <https://phillipreeve.net/blog/working-with-tilt-shift-lenses/> accessed 5/6/23.

Use of scales is another important consideration. These are used as markers so that more precise measuring can be undertaken from a photograph or they can simply be used as a visual aid for interpretation. They will need to be placed against the building (Fig.5); if placed in front or behind they will not accurately measure the building. Different sizes can be used, but a record will need to be made of what sizes were used for each shot so you can add this to any caption as necessary.



**Fig.5.** Barn recorded with 1m and 2m scales in the horizontal and vertical plane.

It is also worthwhile making records of the direction the camera faced and what you photographed as such information can easily be forgotten once back at the desk (Fig.6.).

Photographic field recording notes					
Site Name and location:		Field director:		Photographer:	
Site type:		Film type:		Sheet number:	
Date:	Frame No:	Scale size:	Context or building No:	Facing direction:	Notes:

**Fig.6.** Photographic field recording notes filled in for each shot taken.

Finally, keeping a translucent 'skylight' filter over your lens will protect it from scratches and a spare charged battery with spare memory cards in your camera bag is essential. Other useful items such as a notepad, a torch for setting up, a tripod or mono-pod and a variety of lights is also helpful.