

Thinking of a Barn Conversion? Where is the Light going to come from?

an article by Peter King of The Rooflight Company

The trouble with barns is that they are difficult to light - and also to make cosy. The two issues go hand-in-hand, because if you intend to capitalise on those great big spaces that present themselves you will import light if you use them to the full, but at the same time you will present yourself with a big challenge when it comes to insulating them successfully.

The other problem is that the doors are often too large and the windows too small. While the conservation officer may well allow you to glaze the space previously occupied by the large doors, he is unlikely to permit you to create new openings - or at least many of them - unless the barn is unlisted.

Nevertheless it is easy to see why barn conversions are in such demand as houses. All too often they have an irresistible appeal of age; they have time-worn old surfaces just gasping to be incorporated in an internal wall in a sitting room, kitchen or bedroom, and if they have a huge old oak frame a sensitive conversion can produce a family home with a real 'wow' factor.

Perhaps, and above all, there is the ambience green oak framing induces - relaxed living in a rural, or semi-rural situation.

It is easy to understand why planners are duly and correctly cautious. In the 'early days' of barn conversions many historic barns were changed - internally at least - beyond recognition by developers who seemed to want to make them look like modern houses. Many therefore ended up with hard gypsum wall finishes concealing wonderful old wall surfaces that, with minimal effort, could be used as eye-catching features in the finished conversion. Further, many of them ended up with stained wooden window surrounds and entirely inappropriate hard cement external pointing.



Today, when people who know the subject state that converting historic barns, particularly stone ones, can be a nightmare, they are usually correct. This is because planners today are duly and correctly cautious.

Barns are buildings with what architects and planners call a "strong form" - a simple, clearly identifiable shape - and for this reason they are buildings that all too often give character to the countryside that surrounds them. This can present all kinds of pitfalls for people wishing to make houses from them when they confront the planners.

The conservation officer, in particular, will have a keen and direct interest in the conversion scheme you propose. The issue of rooflights pinpoints the problem very neatly. With the kind of new 'barn-style' home so popular nowadays the roof structure and rooflights are usually designed integrally to achieve the best possible internal lighting effects. With a barn conversion you are faced with the challenge of lighting an existing historic structure that is probably quite dark, and you will have to fight like mad for every square centimetre or rooflighting because of the strict guidelines to which most local authorities adhere.

Apart from being very strict on new openings in historic stone walls these usually restrict new openings in the roof to an absolute minimum.

In addition you will find that all over the country local authorities dislike dormer windows in barn conversions. The reason for this is simple - and understandable. While some farm buildings - perhaps stables with lofts above - might have been built with dormer windows, barns, by virtue of their functions, do not. Therefore it is considered inappropriate to insert dormers into them.

The answer usually lies in rooflights. The type of conservation-style rooflight that lies flat on the roof rather than being raised in profile imitates the cast iron originals found in roofs from the Victorian period onwards, and avoids inserting new windows in the walls of barns. In addition it encourages top-lighting - more of that later.

However it is not as simple as that. If you have a barn conversion in mind and think that you will be able to insert rooflights wherever you like, think again. Local planners do not like to see conspicuous "bright spots" in the roofs of traditional farm buildings in rural settings at night when they have traditionally remained dark. The reasoning behind this is that when barns are converted they should not lose their character, and should therefore continue to make the same contribution to the landscape that they did when used for agricultural purposes.

Problems usually arise because people wish to adapt the building to their lifestyle rather than adapt themselves to the





building. It has, after all, been around longer than they have. A classic example of this is the way they regard the light in their building. In my view people living in converted barns should accept that they have to live with more variations in light than people living in conventional houses.

In other words, rather than flooding the building with light from windows in the walls that are far too big, they should accept that subtle use has to be made of the light entering through the small openings generally found in the walls of stone barns ("wind eyes"). I call this "painting with light". The wind eyes and rooflights are some of the 'colours' used to make the light travel round the building.

I believe people converting barns into homes should also accept that the light levels will be greater in some rooms than in others, where more artificial light will probably have to be used. They should also never forget that internally rounded corners and subtle earth-flavoured colours - stone and sand-coloured finishes - will greatly help with the transmission of light.

The most common 'telltale' sight in a large converted barn is the use of the big 'haywain' entrance to import light. The technique often used nowadays is to hold the floors back from this entrance so it can be used as a horizontal lightwell.

This can be very effective but it will not overcome the problem of importing light into the extremities of the building. This is where rooflights come in. I believe it is impossible to get sufficient light into a traditional barn with a huge roof without using rooflights. Many conservationists dislike them, and in refurbished historic buildings they take an architecturally subservient role to other elements, but most will accept that discreetly positioned they

provide the answer - or much of the answer - to the problem of importing natural light.

If you opt for the black conservation-style rooflights that lie flat on the roof and avoid the large single sheets of undivided glass that give the game away when used on historic buildings then you might be allowed to have some rooflights at the rear of the building. Your local planners are likely to regard the exterior appearance of the rooflights on the roof as critical, and may insist on an arrangement using several different sizes to avoid the rooflights looking too regular and therefore drawing attention to themselves. In some instances lengthy negotiation may produce permission for only one or two conservation rooflights to be inserted. Again the principal is that the main form of the barn should remain unaltered.

It stands to sense that if the number and size of rooflights you can use is strictly limited they will have to be used very discreetly and they will need to import the maximum possible amount of light.

One big advantage of rooflights is that size-for-size they admit 20 per cent more light into the building than vertical windows. Another advantage is that they introduce a different form of lighting - top-lighting. As anyone who has visited a top-lit art gallery will know, natural top-lighting, when separated from side-lighting generates in the UK (with its almost permanent cloud 'filter') an ethereal, almost luminous effect. It is an excellent means of introducing a variety of different moods into different rooms.

Top-lighting is very effective when it is allowed to penetrate from the roof right through the building. In practice in a barn conversion this means travelling directly from the roof light down to the ground floor. There are various ways of achieving this. One is to have galleries. I have done this in an extension to my own house - which is not a barn conversion but a stone-built cottage with a long front elevation to which the extension has been added and set back a little. The overall effect would not benefit from having too many windows in the front wall of the extension.

The other is to have some form of atrium - an open, top-lit space that travels from roof to ground floor. By using this technique, particularly if it is walled with glass to form a light well on the first floor, you can also introduce an interesting design feature into your new house that should form quite a talking point.

In general you will only be allowed to have this form of window if your barn is oak-framed and weatherboarded and the windows will not interfere with the historic fabric of the frame. However, as with many stone barns, with which I have been primarily concerned in this article, there may be areas of the walls that have decayed so badly that they need to be replaced. It is in such instances, with both stone and timber-framed barns, that you have the best opportunity to persuade your local planners to make alterations to the walls that will introduce more light.

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