



A Guide to Barn Conversions

by David Nossiter Architects

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Useful Resources

SPAB
(Society for the Protection of Ancient Buildings)
spab.org.uk

TRADA
(Timber Research & Development Association)
trada.co.uk

Historic England
Adapting Traditional Farm Buildings
historicengland.org.uk/images-books/publications/adapting-traditional-farm-buildings/heag158-adapting-traditional-farm-buildings/

General Permitted Development Order (Part Q) Agricultural Buildings to Dwellinghouses
legislation.gov.uk/ukxi/2015/596/schedule/2/part/3/crossheading/class-q-agricultural-buildings-to-dwellinghouses/made

Do your research. What kind of barn is it? When was it built? Learn about the typology of barns.

Permitted Development (Part Q)

Since 2014, it has been possible to convert agricultural buildings into a maximum of three dwellings, subject to stipulations, together with a successful application to the local council for Prior Approval.

Listed Buildings

Many old agricultural buildings are Listed. This will restrict what you can do to the property and permission will be required for most alterations. If your building is Listed you should check the actual wording of the Listing and see if the particulars that make the structure notable are described. Listed status does not bar development. A sensible approach is required, the planners will be considering the longevity of the structure, not just your own vision for it.

Many Listed buildings have outlived their original use and require bringing back to a life in order for them to be saved. This is particularly the case if the building is unused. A lack of maintenance

may mean that building fabric starts to deteriorate.

Types of Survey

A Listed Building will require thoroughly surveying. There will be measured surveys, in order to provide a record of the property as existing and drawings to work from, condition surveys to record any defects, together with structural surveys to assess the conditions of the existing structure and whether any strengthening is required.

Almost certainly environmental surveys will also be required by the local planning authority. These will identify any invasive plant species on the site as well as protected wildlife, such as owls and bats that might be using the structure for breeding or roosting. The planners may stipulate that you time your development around breeding seasons or provide suitable alternative habitats for wildlife.

Upgrading the Building Fabric

Barn constructions fall into three main categories. Timber framed structures, sometimes, centrally aisled with infill panelled external walls, masonry structures with timber frame roofs or

metal framed structures. Most have full height central doors on each flank.

In turn they will have one or several of three wall types depending on their location and age, solid masonry, Timber frame with either cladding or wattle and daub, or more recently sheeting on a metal sub-frame.

The roof and existing structure are major elements of a barn and they will usually require a substantial cost outlay in repairs and bringing the insulation levels up to modern standards. The condition of the roof is an indicator of the likely condition of the barn structure, as water ingress destroys building fabric.

Most barns do not have concrete floor slabs to a residential standard. Floors may be paved with bricks or a thin concrete oversite slab, laid to fall, allowing the spaces to be cleaned out when they were occupied by livestock.

Take care not to damage the existing walls if breaking out an old slab. Work back from your finished floor level. Any services penetrating the floor will need to be coordinated before the slab is cast.



Incoming Services

Large roofs mean large amounts of rainwater. Where will it go? Carefully consider the locations of soakaways and other services. Barns are usually in rural locations without connections to mains utilities and drainage. You might need to install a sewage treatment plant as well as connections for electricity and water.

Insulate...

It is difficult to seal insulation around existing old timber framed structures and it can be more satisfactory to add a new insulated layer entirely as a first line of defense and then secondary breathable insulation within the walls.

...But Allow to Breathe

Avoid cement renders as they seal in condensation and moisture. Breathability and flexibility are important considerations. Use lime based renders, which are vapour permeable and accommodate an amount of building movement. Lime based materials require care during execution and are usually undertaken during the spring and summer months to avoid frost damage.

Use local materials where you are able

and re-use original materials where possible. If you introduce new materials, carefully consider what these will be and whether they are inherently agricultural in nature.

Scale

Characterised by tall spaces with ceilings stretching to the apex of the roof, Barn typologies stem from agricultural use. They are the forerunner of our industrial buildings and have a majestic scale, so avoid making them look like smaller domestic buildings.

The number of openings you can make within the building fabric might be restricted, which could impact on the available daylight. Try not to divide the interior of the building into too many spaces - work with the existing partitions, structure and openings where you can.

Keep the essential character of the spaces, but also be aware that large tall spaces can be difficult to make comfortable and might not suit domestic activities and it is sometimes better to house circulation areas within the grander spaces. Haylofts can lend

themselves to becoming mezzanines, helping to divide the spaces without destroying the nature of the original building.

Don't think rooms, think spaces - dwellings consist of varying degrees of public and private spaces. Consider how freestanding elements, such as storage can provide privacy.

Excerpts from this article originally appeared in The Sunday Times and Homebuilding & Renovating magazine.