Individual Solutions

quality timber structures
For over 40 years the Challow name has been synonymous with quality timber structures.

From luxury log buildings and functional, well ventilated agricultural and horticultural structures through to golf driving range facilities and our timber framed garage and loft, all providing individual and attractive solutions that are both affordable and will stand the test of time.

Within our business we live and breathe timber. It is what we know the best. And together with real expertise and experience in supplying a range of markets - private customers, public bodies and commercial organisations - you can be sure that your Challow building will be everything you expect.

We can offer a full design, manufacture and build service, structural design, fabrication and on-site construction. Benefits include reduced costs, shorter time scales and the benefit of our considerable experience. Alternatively, we can supply individual parts of this process to suit your particular requirements.

This brochure introduces our Challow products and services. But make sure you contact us...

We will have an individual solution waiting for you.

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**Why timber?**

Timber is such a plentiful and versatile construction material that allows manufacturing and construction flexibility as well as having real benefits over man-made alternatives.

Firstly, timber has a natural warmth and beauty that provides a real aesthetic advantage when compared to conventional block or brick structures. The timbers we use are from slower grown trees, producing a dense make up with excellent straight grain. Any splitting and distortion is minimised, allowing your timber buildings to keep their natural good looks for decades.

Environmentally, timber is also the best choice for us all. The great majority of Europe’s forests are now sustainably managed and growing in size, supplying high quality softwood timbers in a responsible manner.

As a building material wood has the lowest energy consumption in its production as well as the lowest carbon dioxide emission. Timber buildings act as a ‘carbon sink’, actually locking in CO2 into their structure.

Wood has a superb natural thermal efficiency which increases with the thickness of the timber, reducing the cost of heating and insulation materials in a building.

Timber is very strong. In relation to its weight, timber is stronger than any other building material, producing lighter buildings and simpler foundations.

With the development of effective preservative treatments, timber can have a greatly extended service life, even when exposed to the harshest of weather conditions.

The majority of timbers used in our Challow buildings are pressure pre-treated with the latest generation of wood preservative to give ourselves and our customers a real confidence in their long term performance. Finally, and probably most important of all, timber buildings are more cost effective to construct. Timber offers a 30% more predictable construction time than block or brick work and being relatively light in weight, provides reduced transport costs.

Timber is the natural, high performance and affordable choice for your next building.
Challow log buildings are individually designed to our clients particular requirements, creating attractive, high performance solutions for home and commercial offices, retail units, garden retreats and swimming pool covers.

Initial drawings will confirm the building design and make up to your approval.

The main structure is designed from profiled and interlocking softwood timbers, 95 or 70mm thick, that are precision lap jointed at the corners to give the appearance of a traditional log cabin.

The roof is available in a choice of materials including traditional felt or high specification slate or cedar shingles.

Double glazed and joinery finished timber doors and windows make sure each cabin design is thermally efficient yet keeps the natural beauty of wood.
Inside the log buildings can be insulated and fully lined with our TGV boarding timbers to give greater comfort and warmth.

All timbers can be preservative pressure treated, if required, or supplied untreated. If untreated, we would recommend application of a high performance decorative coating which will require regular maintenance.

Our team of experienced fitters will erect the new building to your total satisfaction.

Alternatively we can supply the plans and timbers for your own self build project.
Challow lodges come in various designs and are suitable for both private and commercial developments and for a range of uses.

Holiday lodges, hunting, shooting & fishing lodges, offices, cricket pavilions, summer houses, garages, shops, restaurants, swimming pool enclosures, private fitness centres and leisure complexes - the list is endless.
All our timber buildings can be designed to suit individual requirements using 70mm or 95mm logs, or even 125mm laminated logs. Nonetheless, the package we provide will contain similar elements and our standard specifications will include the following:

**Roof**
Plywood roof boarding with battens on rafters and beams as necessary.

**Ceilings**
Tongued and grooved boarding to sloping and flat ceilings, including Kingspan (or similar) insulation board 100mm thick.

**Exterior walls**
Ex 70mm or 95mm log pressure impregnated construction, pre-drilled to accept dowelling with studding, insulation and tongued and grooved boarding finish.

**Interior walls**
Ex 70mm or 95mm log construction, pre-drilled to accept dowelling.

**Windows**
Double glazed high performance windows with trickle vents.

**Interior doors**
Panel softwood doors supplied complete with door frames, architrave and standard door furniture.

**Exterior doors**
Part double glazed softwood doors supplied complete with door frames, architrave and standard door furniture.

**Veranda and balcony**
Open lattice design with posts and floor boarding on rafters.

**Other Components**
All fascias, soffits, eaves boards and mouldings as required.

Other items are a matter of discussion depending upon what type of planning permission has been gained and what type of construction method is required.
The Challow range of agricultural and horticultural buildings provides long lasting, cost effective and versatile solutions for both general storage and animal housing.

These timber frame structures have either a portal, monopitch or propped span frame, in a range of spans to suit particular needs, all manufactured from preservative pressure treated timber. The buildings have a variety of external cladding design options including preservative treated open boarding, closed boarding, shiplap boarding or box profile steel sheeting.

Preservative treated timber stock walling also provides a safe and natural, high performance lining for the interior of the buildings which provide light, well ventilated and healthy environments for livestock.
Central feed passages can easily be designed into the interiors for livestock management, as required.

The low pitch angle of the roof pitches keeps the ridge height on the buildings relatively low and reduces any impact of the structure on the landscape.

This aspect, together with the natural look of the buildings, allows regular approvals from planning authorities.

Challow agricultural buildings are designed to be simple to erect and extend. We offer a comprehensive design service and a full erection package is also available using our own fully trained and experienced staff.
The range of Challow golf driving range buildings can accommodate any requirement for this ever growing sport practice facility.

The buildings are generally designed as a monopitch timber framed structure, constructed from large sections of graded and pressure preservative treated timbers, with an oversail feature at the front. Dimensions and building angles can be varied to suit particular needs.

The buildings are completed externally with pressure treated horizontal shiplap boarding to a height of 1200mm with chevron boarding up to the roof. Other cladding design options are available.
Internally the width of the bays can be varied and also sectioned with double sided exterior plywood dividers. These can be to a height of 1200mm or to the full height of the building to provide separate and private tuition areas. Bench seating constructed from pressure treated timbers can also be incorporated into the design.

The roof design is a box profile ‘Plastisol’ coated steel sheeting with shadowline type bargeboards and PVC guttering and downpipe systems. Optional lean-to buildings can be incorporated into the building structure to securely house facility equipment.
A welcome addition to our range of timber buildings, this stylish timber framed garage incorporates a substantial loft facility.

The design creates four 3m ground floor bays, one with robust timber doors. The external stairway which leads to the loft can help create an ideal office area or the loft space can simply be used for storage.

All the structural and external cladding timbers are pressure preservative treated to ensure a long and low maintenance service life and the roof material is hard wearing, reconstituted slate and incorporates three skylight windows, together with all the necessary PVC guttering and downpipes.

Inside the loft there is an 18mm plywood floor and a large casement window in one gable end. The roof area and walls are insulated with 100mm thick high performance quilt material and then lined with 9mm plywood.

Within the loft there are two framed, ledged and braced doors complete with standard door furniture.

The garage has standard dimensions of 12m in length, a depth of 6m and an overall height of 5m. Alternatively other sizes and design layouts are available to suit individual requirements.

This versatile building, which blends easily into any outdoor setting, is already gaining approvals with planning authorities.
General Information

PLANNING APPROVAL
Many kinds of buildings and structures can be built without the need for planning permission. However, because the planning rules and regulations are continually reviewed, in the first instance we would strongly recommend contacting your local planning department. They will be able to advise if you are permitted to build a structure without permission or what procedures must be followed if permission is required.

MAINTENANCE AND DECORATION

Treated Timbers
The majority of external timbers used in the design of Challow buildings are preservative pressure pre-treated to ensure a long term protection against all forms of wood decay and insect attack and provide a greatly extended service life for the building.

Initially the colour of the treated timber will be a natural pale green. Upon exposure this green colour slowly weathers to a warm honey brown and in the longer term becomes a natural silver grey.

Although treated timber can be decorated if desired, it does not have to be painted or stained to maintain its preservative properties.

If treated timbers are to be painted, stained or varnished we would always recommend a high quality, high performance coating. Always consult the coating manufacturer recommendations before applying a coating product to pressure treated timber and follow the manufacturer’s instructions, taking note of the recommended maximum moisture content of the timber and subsequent maintenance cycles. Before applying a coating, the treated timber should be dried throughout the cross section.

If waterbased coatings are applied, some discolouration may occur in exceptional circumstances. If this happens, allow the coating to dry completely. Then apply an additional coat of product, preferably one with a high build, high solids content.

If any cuts or notches are made to any of the treated timbers of the buildings, the area of timber revealed must be liberally brushed with a suitable end-grain preservative, such as Ensele, to maintain the integrity of the preservative protection.

Un-treated Timbers
Some external timbers in Challow buildings are supplied untreated, for instance doors and windows and Log Cabin profiles. In these circumstances we would recommend the application of a high quality, high performance decorative coating, preferably with a high build, high solids content. Always consult the coating manufacturer recommendations on application and subsequent maintenance.

Metal Fixings and Fastenings
Because the treated timber used in Challow buildings has a long life expectancy we use metal fixings and fastenings that have a comparable length of life and will not require maintenance.

Roof Materials
Roofs should be checked on a regular basis to confirm that no movement or damage to the materials have been caused by the weather or physical damage. Any damage should be repaired as soon as possible.

Gutterings and Downpipes
The drainage systems used on Challow buildings are all PVC based. Regular checks should be made for cracks and joint breakages and repaired as soon as possible. Regular checks should also be made to ensure there are no blockages within the guttering and downpipes.
Project Gallery

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Farm office
Green oak garden room/conservatory
Home office/summer house
Gazebo/external classroom
Cart shed style garages

Livestock housing

Building site office

Log cabin garage

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