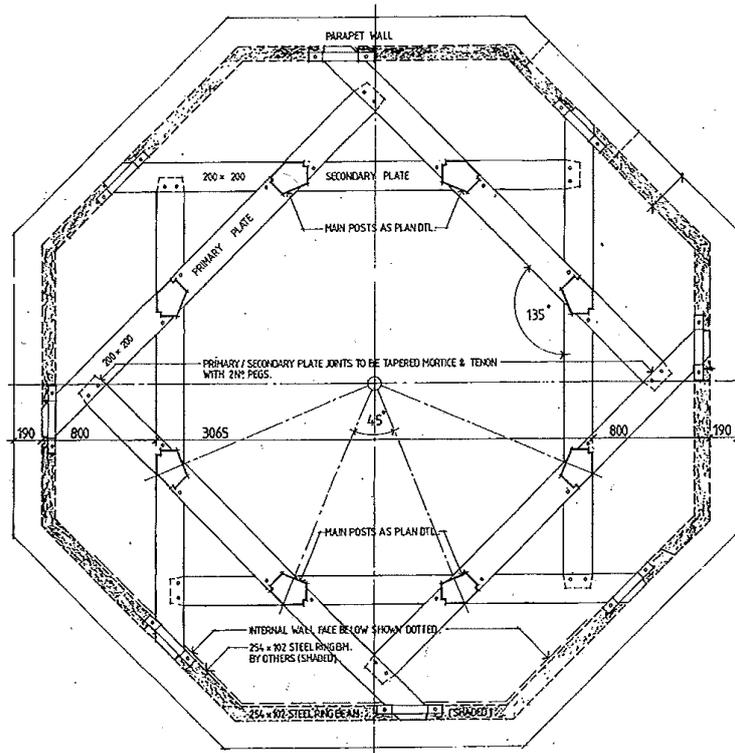


The  
Green  
Oak

CARPENTRY CO. LTD.



Conservation Carpenters  
Timber Frame Designers & Fabricators



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www.greenoakcarpentry.co.uk enquiries@greenoakcarpentry.co.uk

## **The Green Oak Carpentry Company Ltd.**

### **General Notes.**

These notes are intended to guide the client or architect through the various ways in which we might assist in the design and construction of a barn house, or other structure, and to enable effective participation in the design process. We also give guide costs and basic design information for a conservatory, 3 bay garden store and garage, affordable 3 bay 2/3 bedroom house and two different styles of 4 bedroom houses. All of which is intended to show an informed and versatile approach to design, and to offer a useful starting point in deciding what you want.

Many schemes fail to achieve their full potential through lack of design integration between architect, client and oak frame designer. Early discussion will ensure the best use and style of roof trusses, layout of floors for galleries and walkways, ways to maximise useable floor space in circumstances with limited building height, lanterns, glazed atriums, conservatories, balconies and decorative details such as door arcades, chamfers and so forth.

### **The Process.**

#### **Stage 1.**

An initial meeting between client, architect and timber frame specialist to discuss the scheme, helps us to set things along the right path for you. No costs are incurred at this stage, and we would anticipate offering an estimate based upon a strategy to move the project forward.

#### **Stage 2.**

Once fees and budgets are agreed GOCC or another will do sketch drawings, look at previous schemes and, once a design has been agreed upon, prepare planning drawings for submission to the local authority.

#### **Stage 3.**

Once planning permission has been granted GOCC prepares detailed design drawings for the frame, which are used to obtain engineers certification. These are then incorporated into the Architects submission to the Local Authority to obtain Building Regulations Approval. Once design work is complete, a firm price may be offered for the frame. GOCC may at this stage also input into the detailing of the cladding and glazing.

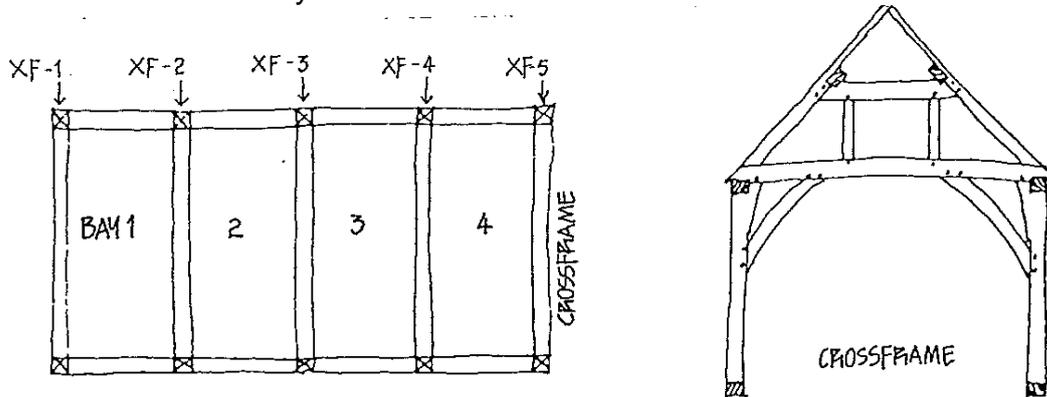
#### **Stage 4.**

A local Building Contractor is appointed and work starts on site. Generally speaking we start work on the frame at the same time as the builder as the carpentry is complex and sometimes requires a team of carpenters over a number of weeks or months.

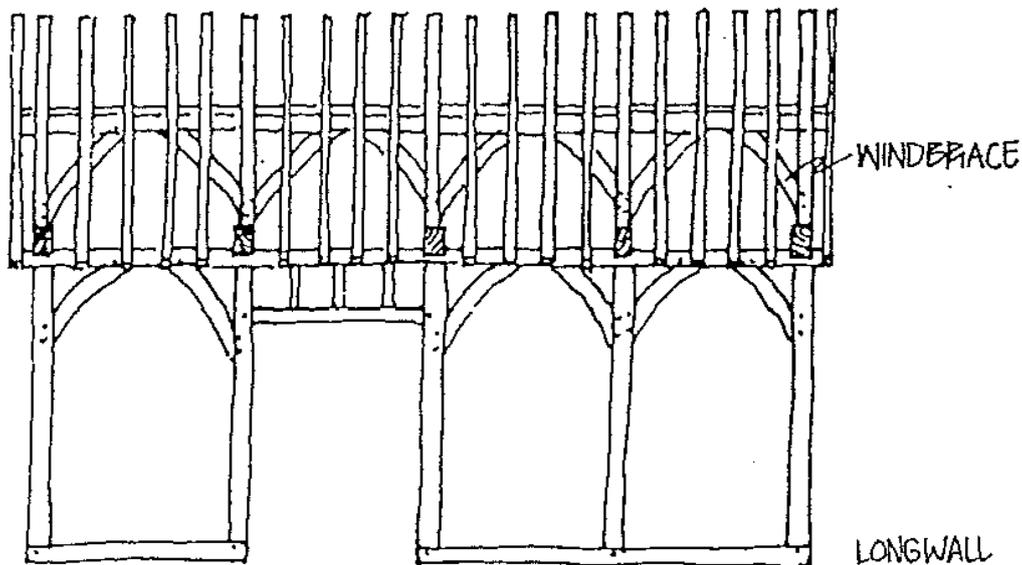
When the foundations are ready the frame is delivered and assembled using a crane, usually in a matter of days. The local Building Contractor then completes the building.

## An Introduction to Oak frame design.

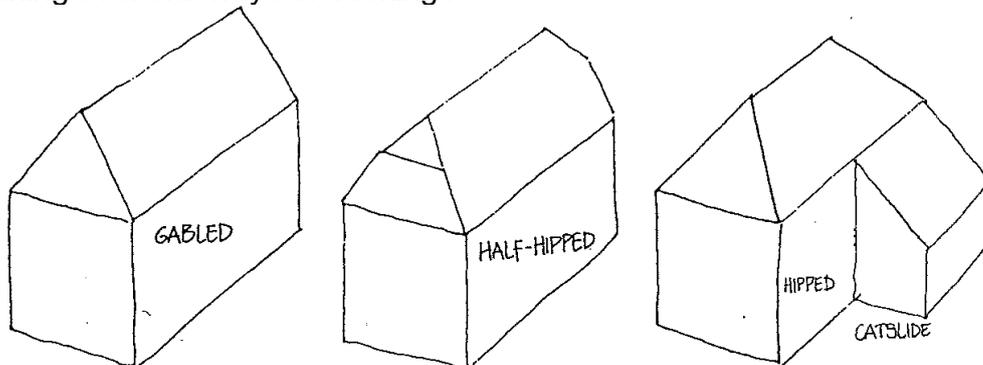
Traditional timber frames are modular and are constructed in bays. A bay may be 8'-16'/1.8-4.9m in length but more commonly would be 12'/3.6m. The small barn shown has 4 bays and hence 5 cross frames.



Cross frames form the main posts and roof trusses, and the end walls of the building. The other walls we call long wall frames which are shown here with the roof structure of the building.

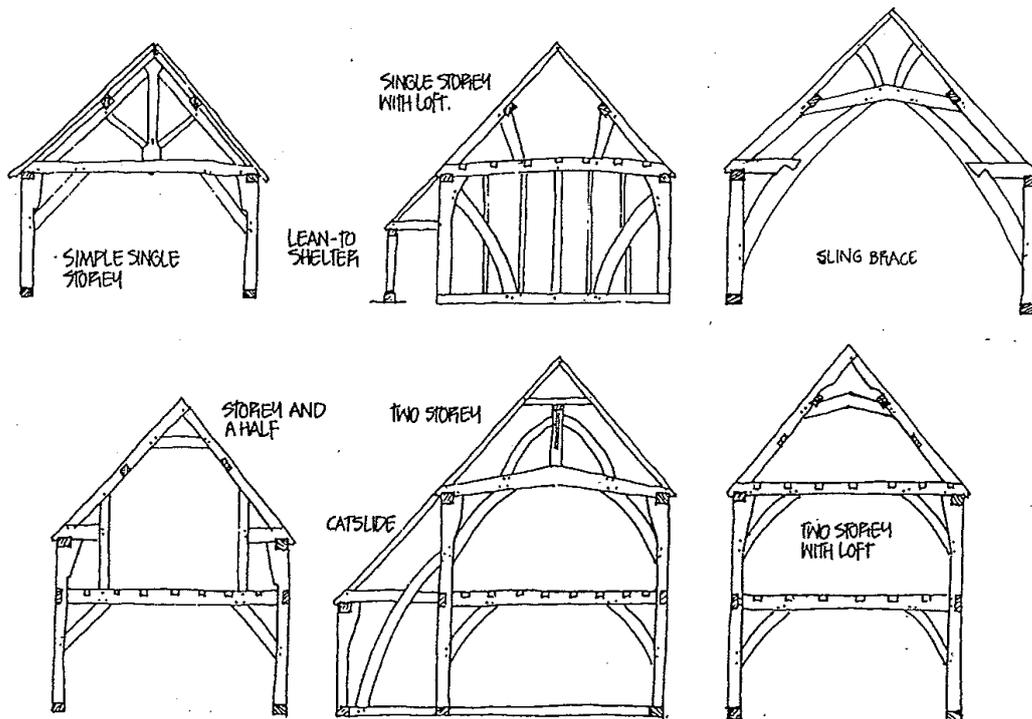


Where the roof of an oak frame is exposed to view, (which we highly recommend) the effect can be dramatic as pairs of wind braces form arcades in the bay openings of each roof plane. Wind braces are used to stop the roof leaning over sideways or 'racking'.

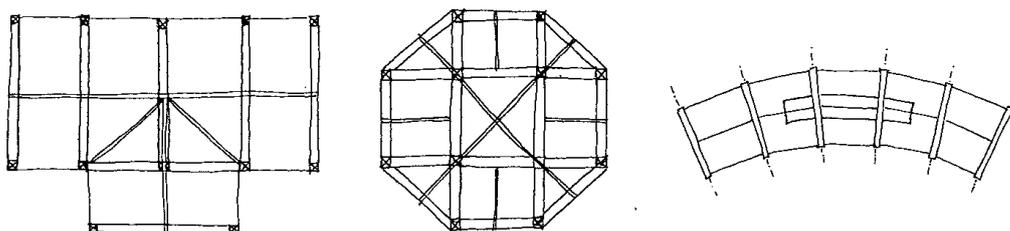


Shown above are the forms a roof can take. A catslide or lean-to is a cost effective way to increase the floor area of a building.

We show here some of the ways in which a frame may form a simple single storey building, or more complex structures with sleeping loft or studio in the roof.



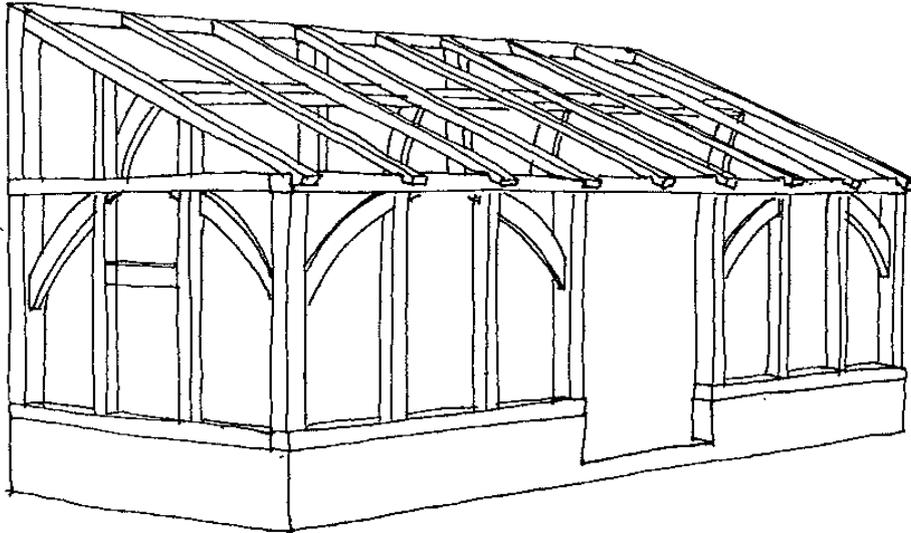
Timber frames lend themselves to integral patios or sun decks and first floor balconies, with or without a roof. A porch can be two stories and help to create a large upstairs room with glazed screens to take advantage of a view. In fact the possibilities are enormous. Frames can be any shape on plan, like the examples illustrated here.



Good design is about creating the best possible solutions to the problems or limitations presented to us by planning constraints, site limitations and so on. They offer us opportunities to find unexpected answers that may exceed our expectations.

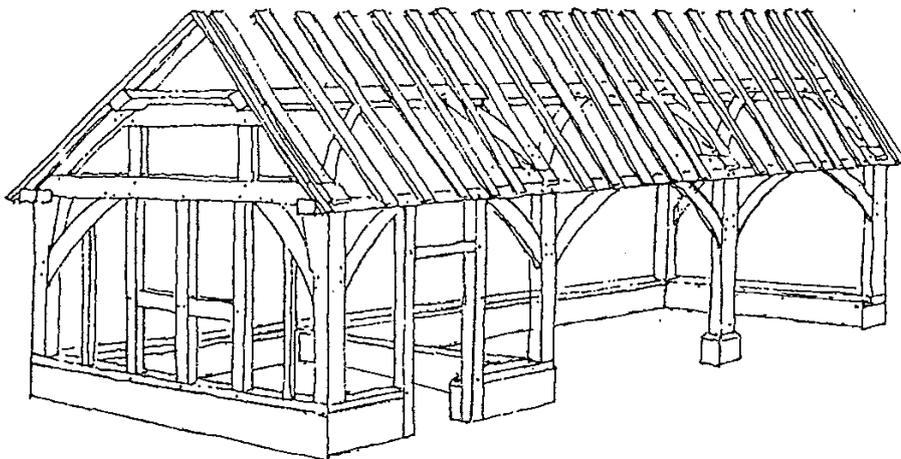
### **Lean-to Conservatory Frame.**

The frame measures 18' x 10' / 5.5m x 3m on plan. Height is dependant upon the steepness of the roof pitch, which in turn may be governed by first floor window heights. This building would be suitable as a lean to for most dwellings where a door can be knocked through to create additional space. In the region of £11,500.00 ex VAT (and not including general building works); Supply and fix of glazing, doors, ironmongery, vents and all joinery £17,000 ex VAT.



### **3 Bay Garage (or Wagon Shed) and Garden Store.**

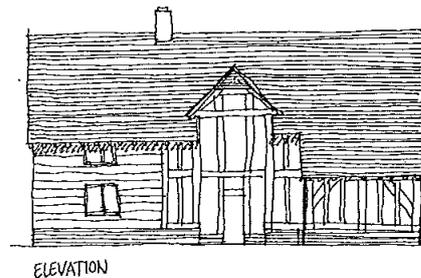
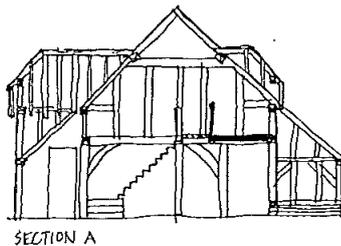
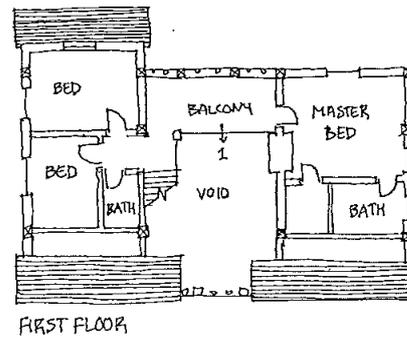
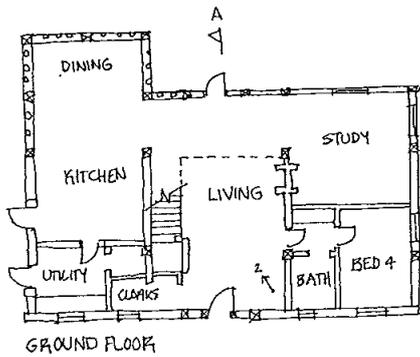
The frame measures 19'6" x 36' x 7'6" / 5.9m x 11m x 2.3m to the eaves, and is 17'5.2m high overall. The cost includes external studding, (omitted for clarity,) and a partition to bay 1 to create a lock up store. Guide price £20,800.00 ex VAT for frame; completed building approx £50,000 ex VAT.



Costs for our frames assume construction of plinth walls etc., to suit the frame dimensions.

### 'Storey and a half', 4 Bedroom House

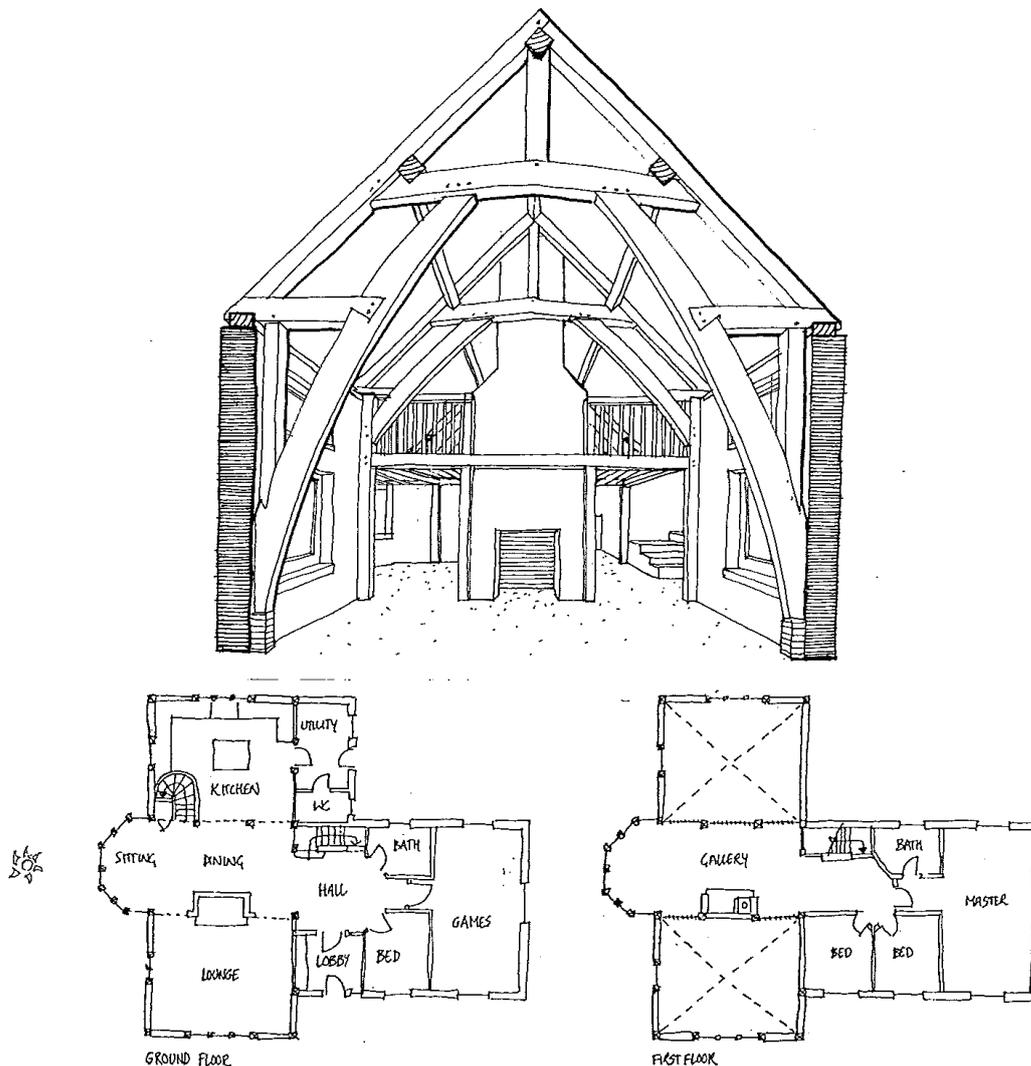
The frame is 54' long x 32'6" wide x 22'7" high, totalling c.3000sq ft / 16.5m x 9.9m x 6.9m; 280sq m). The central bay forms an open hall and living room, with staircase rising within the space to a gallery, giving access to the first floor rooms. This frame was filmed by Discovery TV, and photos can be seen in our brochure and at [www.greenoakcarpentry.co.uk](http://www.greenoakcarpentry.co.uk). Complete structural frame including all external studding and floor joints: in the region of £65,000 ex VAT.



The view on the left is from the first floor gallery looking down towards the front entrance which is direct glazed to an oak framed screen, the view on the right is from the front entrance into the living room with dining room and integral conservatory beyond.

## **Base Cruck Frame with Central Gallery and bedroom wing**

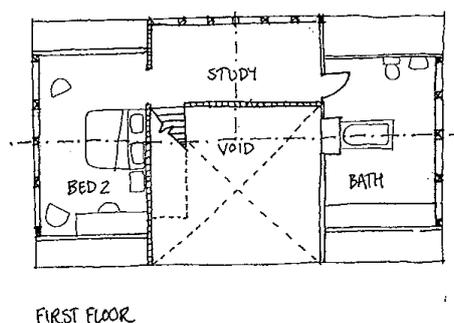
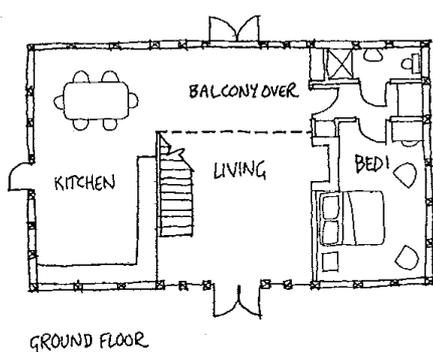
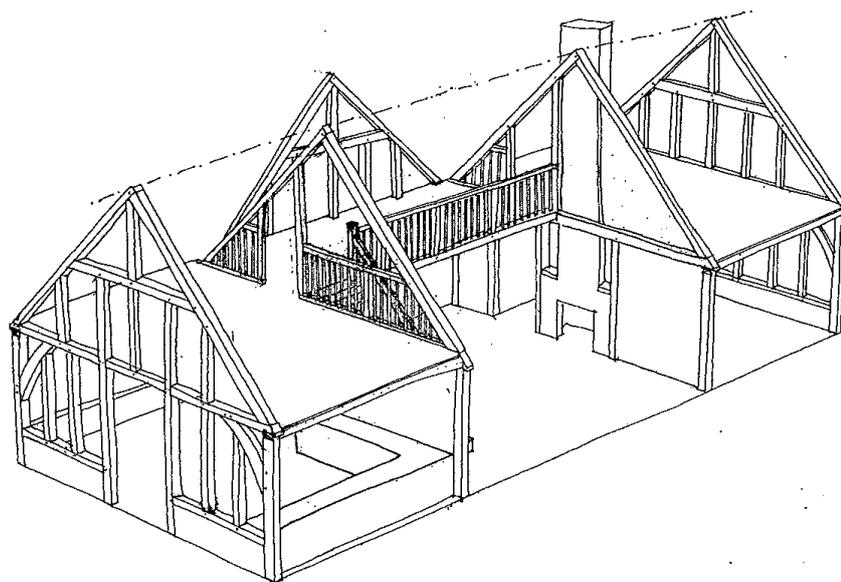
This house plan shows how to mix conventional masonry construction with an oak frame, to great effect. The base crucks create the storey-and-a-half volume giving a spacious feel to lounge and kitchen, whilst the dining area between is made more intimate by placing beneath the gallery. The spiral staircase winds up from dining room to the gallery, which overlooks both spaces, and provides views out through the dramatic bay windows to the landscape beyond. Oak frame including bay and main structural frame for both wings: in the region of £60,000 ex VAT.



Dense masonry in the walls and chimney-stacks acts as a heat store to maximise the benefits of solar gain from south facing glazed bay window. The design was one of many submitted to us by the client's own architect. The plan is approximately 57' x 49' / 17.5m x 15m, offering a total usable floor space of 3000 square feet / 278m square.

### The 3 Bay Affordable House

This plan is 43'5" x 24' / 13.3m x 7.3m, and offers 1560sq feet / 144 sq m of habitable space including lofts. This plan shows the potential for creating a beautiful space to live in with a simple budget oak frame. The two bedroom loft areas upstairs are linked by a walkway/gallery over the living room, bringing lots of high level light into the main living area of the house. Costs for the frame : in the region of £30,000 ex VAT.



Dormer windows or Roof lights can be used instead of the central gable as a more cost-effective means of bringing light into the centre of the house. The kitchen and dining area may be partitioned, or left open-plan for the maximum effect. When designing on a tight budget keep the concept simple and consider using the oak frame with softwood infill to maximise value for money. It is worth bearing in mind that kitchen cupboards and wardrobes will cover oak studs.



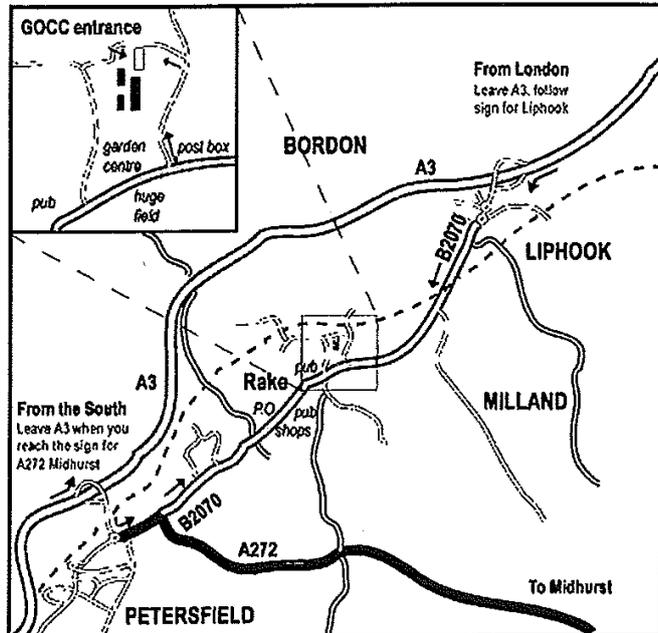
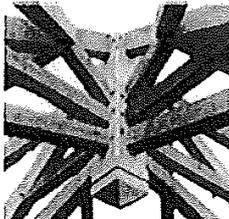
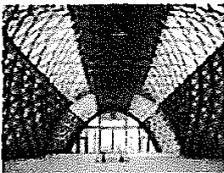
## Map and Directions



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www.greenoakcarpentry.co.uk



We are halfway down the A3 between London and Portsmouth.

### From the M25:

1. Join the A3 southbound at Junction 10 on M25
2. At Hindhead go straight over the traffic lights (only traffic lights on the A3!)
3. After 3 miles, come off at the Liphook slip road; turn left at T junction.
4. This is the B2070. In Liphook, at the first mini-roundabout: turn left
5. Second mini-roundabout: go straight on (slightly right)
6. Under railway bridge
7. Short stretch of dual carriageway
8. Look out for a 40 mph sign and red paint on the road. Slow down...
9. Turn right into an unmarked lane, with a small red post-box on the corner.
10. Take the first left turn you can on this narrow winding lane.
11. Just after the lane bends sharply left, look for a metal gateway on the left.

This is our Framing yard and Office.

### From the South:

1. Join the A3 northbound
2. Leave the A3 where it is signposted to Midhurst, A272 - north of Petersfield.
3. At the roundabout, turn left to join the B2070.
4. Continue on for 10 mins or so.
5. Go through Rake, noting Post Office, and Garden Centre on left.
6. Turn left just before the speed limit sign
7. This unmarked lane has a post box on the corner.
8. Take the first left turn you can after 1/2 mile on this narrow winding lane.
9. Just after the lane bends sharply left, look for a metal gateway on the left.

This is our Framing yard and Office.

If you run into difficulties please telephone us on 01730 892 049