



Timber frame

By Ken Hume

IMAGE COURTESY OF PHOTONICA



Barking up the right tree

When it comes to wood, big is beautiful. Ken Hume urges architects and planners to engage with the unique qualities of timber in order to help small builders' dreams come true.

Recent television programmes such as *Grand Designs* have fuelled a renewed interest and awareness among the public regarding the possibility of both designing in and using wood as a major building material. Wood is a sustainable and renewable resource, aesthetically pleasing, nice aroma, irresistible to touch, strong and yet flexible, durable, comes in many different colours and textures and what's more it is currently very affordable.

Where can a member of the public go to buy a large timber post or beam? These do not seem to be currently available from the large do-it-yourself stores or even from most builders merchants so that must mean that there is no demand for it - right - wrong?

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What can be done to stop the feeding of our new found building heritage to the pulp digester?



Far right: Lydia Musco with a large Eastern White Pine at her home in Royalston, Mass., USA.
Right: Totem pole incorporated as a main house decorative structural member, VT, USA.



We have come to believe that timber is available only in small sizes e.g. the common 2" x 4" stud used in modern timber frame construction. We may have lost sight of the fact that a forest-grown tree is typically 75 - 100 feet high when felled and may be 4 feet around at the base. This could yield at least a couple of good beams of 8" x 8" section and 20 feet long together with some large planks from the outside of the butt log and studs from further up the tree where its girth starts to wane.

We drive past trees like this every day but don't generally take the time to see them as a potential component for our new homes. This was not always the case and as with many things of past times we are now beginning to see a resurgence of interest in using big

timbers in home and garden construction.

Consider the photographs taken (above right) of Lydia Musco in her second generation New England woodland which is located directly behind their house in Royalston, Massachusetts. Note the big Eastern White Pine tree encircled with a pink tape. Now switch to the picture of the new timber framed and log home (above left) and see if you can find the tree in its new life form?

Scotland is host to millions and maybe even billions of such trees and yet what is the most interesting thing that we currently chose to do we do with them? Well the answer currently lies in your hands.

Being a professional engineer and timber frame designer I confess at struggling to reach the new unsatisfied clientele that programmes like *Grand Designs* has created, in order to ply my trade.

I know that there are probably not even a handful of engineers in the UK today who can seriously design, analyse and supervise the construction of traditional timber frame buildings in big timber. There are prob-

ably even less architects with this experience but then they would never admit to that. I do however readily confess that the best timber framer and carpenter whom I know is a qualified architect.

So what can be done to resolve the dilemma of feeding our new found building heritage to the pulp digester? The answer may lie in fostering and encouraging small groups to experiment and practice the craft of building in wood under the watchful eye and guidance of an experienced veteran. In the old days we called this an apprenticeship but spending five long years to achieve something which now needs to be achieved in a week is maybe no longer appropriate. We need to recognise that we are now in the new era and what was once a craft practised to the village boundary can now, via the miracle of information technology, be practised world wide. Most of the design commissions that I currently receive today come from North America but I am now looking more confidently to Scotland to provide some new grist to the mill.

Our planning system is archaic. When a young couple dare to dream of building their home and life together they can quickly find their dreams dashed by 'the suits' at city hall.

Might it be better to establish new guide lines as to what can be built under permitted development rights within a given area and then let the people decide

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what and how they want to build. After all, it is their dream. A bad dream will result in a poor resale price but this will in itself provide an opportunity for a newer and better dream. Planners may need to adopt a new role and become educators and foster the skills of patience and encouragement. It is probably quite important to have a planning policy and approach which differentiates between the individual small builder and big business. Right now the odds are stacked unfairly against the small builder so all we get is masses of houses that are the same or similar and which provide little satisfaction to the occupants.

No one taught Lydia how to make a structural totem pole but then again no one told her she couldn't make a totem pole without obtaining permission. Instead, she was inspired, had the tree cut down and then got to carving and shaping it the way she thought best. The results speak for themselves.

I get the feeling that design and architecture is something that is generally believed to be the preserve of a highly educated élite and that its message or interpretation is beyond the comprehension of the ordinary people. Nothing could be further from the truth. In my world of timber framing the progress made over the centuries was gradual and it resulted in the evolution of building patterns which could be followed by the artisan to achieve a very creditable result. Many of these building patterns still exist today and can still be safely copied by the average person to produce good results at affordable prices.



I am deeply disturbed by the clear felling of trees which we see practised in Scotland today.

Clockwise from far left: classic 'tying joint' type carpentry. A modern American lap joinery timber frame being raised by hand using pike poles. Small reproduction house frame.

I confess to being woodland owner who does not find it easy to cut down his trees even when destined for timber frames. Every so often, whether I like it or not, nature takes a hand and blows down or snaps off a tree or two. I then find myself in a race with nature to hew and shape the remains into a beam or a brace, hopefully to become a part of a new building. The space created by a fallen forest giant can also provide an opportunity to plant and protect new trees thereby performing a penance for harvesting this woodland bounty. It seems that some others are not so respectful of nature and I am deeply disturbed by the clear felling of trees which we see practised in Scotland today.

Sustainability is a numbers game. Glib talk of planting two or three trees for every one tree felled is not enough; if given a chance nature will provide thousands of progeny to ensure that eventually at least one

will survive to become a forest giant. The same is true with builders. It is important to foster a large number of small builders in order that outstanding results will eventually be achieved.

Timber frame is an appropriate and sustainable method for the small builder to adopt and I hope that it is one that the planning authorities, building inspectors, woodland owners, architects, engineers, designers and carpenters will actively support and encourage.

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