

PART 3
Post & beam

Building with timber

Anna-Marie DeSouza explores the advantages and possibilities of building a post and beam home

Post and beam construction dates back over 4,000 years, but don't let age fool you: it's still a popular technique, flexible enough to create traditional, contemporary or fusion homes. The construction method means great looking, character-filled houses can be effortlessly designed and it's perfect if you're after some open plan space. So, how does post and beam differ from standard timber frame, and is it right for you?

How does it work?

In the most basic of terms, a post and beam home refers to anything constructed from vertical structural posts and horizontal beams. The variety of designs is vast, ranging from traditional green oak properties to ultra modern designs.

In a traditional sense vertical posts and horizontal beams are jointed together, usually pegged, to form a structural frame upon which the walls are attached. As the frame is structural, the rest of the home, including the roof, relies on it for support – so it is not essential to have a large number of interior walls, making it ideal to create open plan spaces.

Traditionally, oak was used, but contemporary structures often use engineered Glulam beams to form the skeleton. Some companies, such as Huf Haus, specialise in modular post and beam where subsections of the house are prefabricated in a factory and then hoisted and bolted in place – so instead of a house consisting of hundreds of beams, it can be made up from as little as seven or eight of these units.

Why choose post and beam

If you're after good looks and character, post and beam's unequalled aesthetic will bring tons of it to your home's interior. While beams are usually on display inside houses, it is common for them to be fully concealed on the outside by an exterior skin, which is rendered or covered with claddif, such as weatherboard. As a result, post-and-beam properties aren't always easily recognised from outside.

It's the space and dramatic interior design where this method comes into its own. For example, it allows a whole gable end to be used for a stunning double-height window, without losing any of the property's structural integrity – beams at the top of the glazing can be load bearing to support the roof. And it lends itself to late changes, so if you want to modify room boundaries or knock through two rooms to make one while you're building you can (as long as the walls aren't at all load bearing).

Design-wise, post and beam is very flexible. "Clients often start by saying that they want something traditional, but they're

Vertical posts and horizontal beams provide the basic structure and give a home bags of character



CARPENTER OAK AND WOODLAND

usually open to combining the frame with stainless steel and glass in conjunction with a post and beam frame," says Andy Parker of frame specialists Carpenter Oak.

"So, when they say 'traditional' they usually mean the use of traditional materials, quality and craftsmanship. Also, as a method of construction it is something that many architects have a particular interest in, increasingly encouraging clients to consider it for their home. If you want to find an architect that specialises in designing oak buildings with post and beam, visit the Directory of Oak Frame Architects." (www.oakframehouses.co.uk)

Costs

They say you get what you pay for with post and beam – a basic house can cost from 20-25 per cent more than a mainstream timber-frame construction. The website of post and beam specialists, Timberpeg, states that a typical home will cost between £100 and £150 per ft² depending on specification and local labour costs.

According to Parker: "The cost of a post and beam frame cannot be isolated because, once settled on as a method of

construction, it drives lots of other decisions. It's a common mistake to view a timber frame as a last-minute aesthetic add on; approached in that way it becomes a pure overhead to the build. However, if you choose a nice simple post and beam form, build up your envelope in conventional softwood and clad in timber then you will build for far less money than if you had built in many other methods. However, if you choose an arched brace truss, build up in Cotswold or Bath stone then you'll quickly be at the top end of the budget spectrum."

What are the pros?

- In comparison to other build systems, for example brick and block, the speed of erection is great – particularly when combined with a conventional panelled system for the building envelope
- The aesthetic is difficult to match. "I can't think of any other construction material that can provide structure to a building that has timber's good looks," says Andy Parker
- They are extremely marketable – estate agents love properties with exposed frames and there are lots of examples where a frame has enhanced both the sale value and the desirability of the house
- They are sustainable in terms of materials and predicted lifespan

What are the cons?

- It can be costly in comparison to other timber-framing methods
- In comparison to conventional timber-frame, post-and-beam homes will take longer to construct. Typically it takes four to five working days to build the frame of a post-and-beam house, whereas the overall frame of a panelled 'mainstream' home of comparable size, could be up within a day or two
- Shrinkage and movement can occur, but shouldn't be too problematic if the design is detailed accordingly and movement accommodated for
- In large open-plan rooms posts may get in the way – consider your room layout and furniture at the design stage

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Case study

Field Farm, Carpenter Oak and Woodland

Who The Brookes family

Where Wiltshire

What A modern home built using traditional green oak post and beam. The family runs an organic farm so wanted to use as many natural products as possible. The exterior shell is made up of Cotswold stone, timber and huge full-height windows. The build took just nine

months from start to finish and fell within their tight budget

Favourite features The Brookes chose not to sandblast the oak beams and left them in their natural state – they are a key feature of the home's interior, filling it with bags of character. Outside, the dramatic full-height windows give the house a contemporary feel

