



We spoke with Thermohaus, a unique and innovative provider of contemporary and energy efficient timber frame kit homes, to find out a bit more about their company and the products they provide.

See what they had to say below.

Please tell us a bit more about your organisation and the industry it operates in.

Thermohaus is a unique modular design concept for contemporary, value engineered and highly energy efficient timber frame kit homes, designed specifically for the self-builder.

Thermohaus was conceived by chartered surveyor and building consultant Peter Body. Peter has over 50 years' experience in the housing sector, initially as a quantity surveyor in private practice, then a house designer / developer and more recently a timber frame kit designer / manufacturer.

In 1984 Peter founded Norscot Joinery, now a leading timber frame kit manufacturer in Scotland, which he managed until he retired in 2018. Peter deals with all Thermohaus kit enquires personally, to ensure clients set off on the right footing.

Jonathan Miller, an architectural designer with 20 years' experience in the industry, then prepares the necessary drawings, specification, certification, etc. and guides clients through the statutory planning and building regulation process.

Finally, Norscot Joinery will manufacture your Thermohaus kit and deliver it to site. Norscot have been designing, manufacturing and supplying bespoke timber frame house kits to the self-builder market for over 30 years. Their customers are spread throughout the UK and as far afield as France and Spain. Being based in the Highlands our focus is on self-build projects in Scotland.

How can your organisation help self builders and what makes your products unique to similar services offered in the self build/construction market?

Thermohaus is founded on the principal of 'Keep It Simple, Make It Better' and we adopt a 'Fabric First' approach. As a consequence, there are no built-in redundancies or legacy defects and owners enjoy very low maintenance and energy running costs.

All our home designs are customer driven and we actively encourage clients to design their own home. Of course, we will be on hand to advise and guide you through the process. But, designing your Thermohaus home could not be simpler.

Thermohaus is a modular design concept based on just 5 primary building blocks. Blocks can be arranged in a multitude of forms to provide maximum design flexibility. The accommodation blocks do not require internal load-bearing walls meaning the internal layout can be whatever suits you best. We recommend separate blocks for living and sleeping but you can have whatever you want.

Unlike some suppliers we don't offer multiple kit packages with differing specifications. This is simply too confusing. We offer just one package which is the best we can, for a price which, whilst not necessarily the cheapest, we believe offers best value for money.

The Thermohaus design concept and enhanced specification mean our kit homes, in standard form, are superior to anything our UK rivals offer. And, compared to Continental European and North American imports, offer significantly better value for money.

What advice or recommendations would you give to self-builders?

All our home designs are customer driven and we actively encourage clients to design their own home. Of course, we will be on hand to advise and guide you through the process. Designing your Thermohaus® home could not be simpler, but to set you off in the right direction we offer our top 10 tips:

1. Before attempting to design your new home, you must have a site. It is extremely unlikely that the house design you come up with can simply be plonked on the site when you get it. Probably, it will just end up being a bad design, based on unnecessary compromises.
2. Before buying your site undertake a full site assessment to establish it is suitable for your requirements and determine the ideal position and form of your new home. Avoid steep sloping sites which give rise to increased foundation costs, may have a negative impact on the appearance of your home and will make the whole build more challenging. Also, consult the local development plan and speak to the planners to make sure they are happy with what you are proposing.
3. It is important to bear in mind the available budget when designing your new home. Just remember the greater the floor area, the greater the cost. And, when deciding on external finishes, minimise maintenance liabilities. This will ensure your home remains good to look at and reduce lifecycle costs.

4. 'Keep It Simple' - complex layouts, curves, angles and unconventional roof configurations all add to the build cost. And, avoid small projections such as porches, bay windows and dormer windows. They may add aesthetic appeal but are disproportionately expensive for the practical benefits derived.
5. Avoid wasting space. How many bedrooms and bathrooms do you need? Do you really need to accommodate family and friends who only stay a few days, a couple of times of year? Putting them up in a local hotel will be much cheaper. And, that's rooms you won't need to heat, clean or pay Council tax on! Also, do you really need big bedrooms and bathrooms - what are you going to be doing in them? A poor layout may create long corridors. Have you minimised circulation space? The current trend towards open plan living works well in this regard.
6. Try to keep the plumbing in one area. If this is not possible keep the number of areas to a minimum. Keeping kitchens, utility rooms, bathrooms and en-suites close together, both horizontally and vertically, will reduce internal pipework and external drainage, further reducing cost.
7. Ideally your new home will maximise the benefits of natural light and solar gain. It is important to remember the sun rises in the east, passes through south and sets in the west. All dayrooms (kitchen, dining, sitting) should face south / west. The only exception might be where there is a particular view you wish to capture, in which case rooms should be double or triple aspect so as to get at least one window facing south. If you want early morning sunshine to enter bedrooms they need to face east. Utility rooms, bathrooms, en-suites and stores, which do not need much natural light can face north.
8. Consider windows and doors very carefully. A lot of money can be wasted here. Even the best windows on the market are poor insulators in relationship to the wall in which they're located. Keep window numbers and sizes to the minimum necessary, to conserve energy. Any large areas of glazing should ideally face between south east and south west, to maximise solar gain. In our view triple glazing rarely offers significant benefits / value for money.
9. Adopt a 'Fabric First' approach. The more you invest in insulating and making the structure of your home airtight the better. It will save you money for the lifetime of your home.
10. If working to a tight budget don't spend money on expensive sanitaryware, kitchen units / equipment and internal doors. It is relatively straightforward to upgrade these items, when funds permit.

Please provide some more information on a typical product(s) and/or service

Thermohaus is a modular design concept based on just 5 primary building blocks. A full height (2.4m) accommodation block, a two-third height 'room in roof' (1.6m) accommodation block, a mono-pitch roof block, a duo-pitched roof block with either flat or vaulted ceiling and a full height storey link or porch block. For a very contemporary look, there is also a simple flat roof option.

Accommodation blocks have nominal internal dimensions of 4.8m in width and 10.2m in length, providing a gross internal floor area of approximately 49m².

Link/porch blocks have nominal internal dimensions of 2.1m in width and 4.8m in length adding a further 10m² of gross internal floor area. Whereas link blocks will always have a flat roof, porch blocks may have either a flat or mono-pitch, lean-to roof of variable pitch to suit the house design.

Similarly, if joining accommodation blocks without a link, we will provide a valley infill so that the roof runs through from one block to the other.

Mono-pitch roof blocks have a pitch of 15 degrees and the duo-pitch roof blocks have a pitch of 45 degrees.

Features and benefits include:

- Compact designs which aim to minimise circulation space in favour of good sized rooms, putting the space where you actually need it.
- Higher levels of insulation in floors, walls and roofs creating a very energy efficient building envelope, minimising heating costs and improving occupier comfort.
- Integrated mechanical ventilation and heat recovery system design ensuring maximum efficiency combined with minimum outlay and ease of installation, reducing overall build costs.
- Single skin wall construction, greatly reducing foundation costs. Although conventional cavity wall construction can be employed, if preferred.
- Open metal web floor joists providing clear spans (for open plan living) and easy installation and routing of wires, pipes and ducts - no drilling through joists required and no risk of weakening the structure as a consequence.
- Totally flexible internal layout of accommodation modules means you can have what you want, where you want it.
- For two storey modules, an easy going (14 rise) dog-leg staircase, with no tapered steps, makes moving from one floor to another as safe as possible. And, makes moving furniture and installing a chair lift (if required) much simpler.
- Oak doors throughout, adding style and appeal to the interior environment.

- Dual finish (inside and out), low maintenance and recyclable energy efficient uPVC windows and doors, with a wide choice of colours, adding further style and appeal. All openable windows provide an emergency escape route and are cleanable from the inside to provide greater safety. Timber and aluminium clad timber windows and doors available.
- Composite, high security, front entrance door with decorative glass and matching sidelights for added appeal and a stylish welcome for visitors. Wide choice of door styles and glass patterns available to add to the uniqueness of your home.

