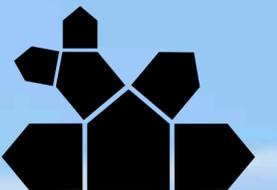
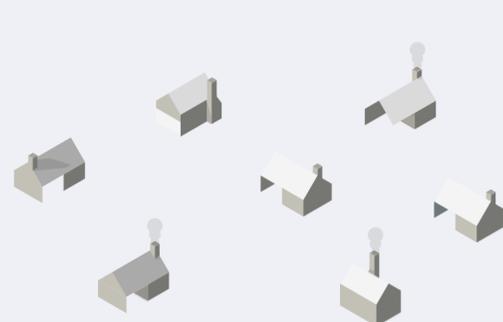


Using WikiHouse

A introductory guide for
your project

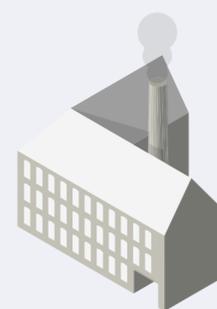


The future of construction



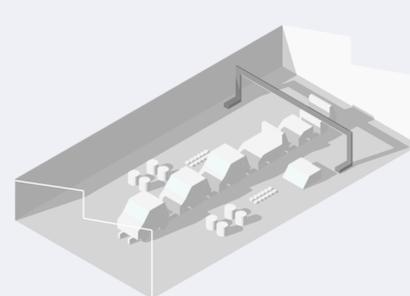
Pre

Vernacular design
Manual fabrication
Distributed supply chain
Circular materials



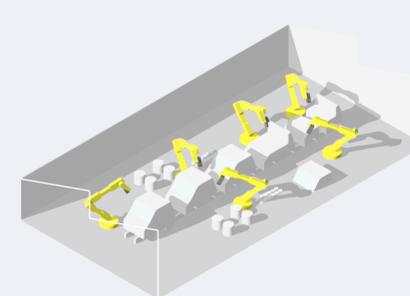
1st

Paper design
Powered fabrication
Centralised supply chain
Linear materials



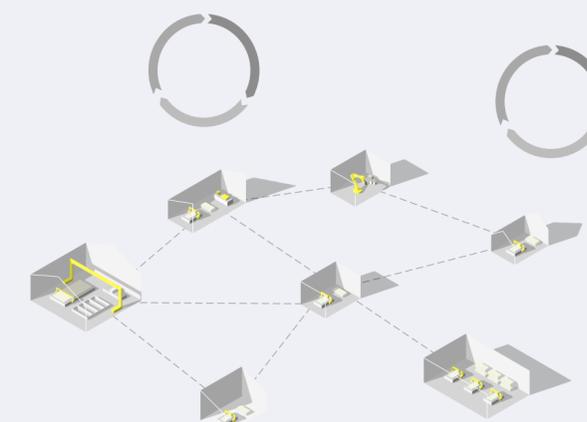
2nd

Paper design
Mechanised fabrication
Centralised supply chain
Linear materials



3rd

CAD design
Digital fabrication
Centralised supply chain
Linear materials



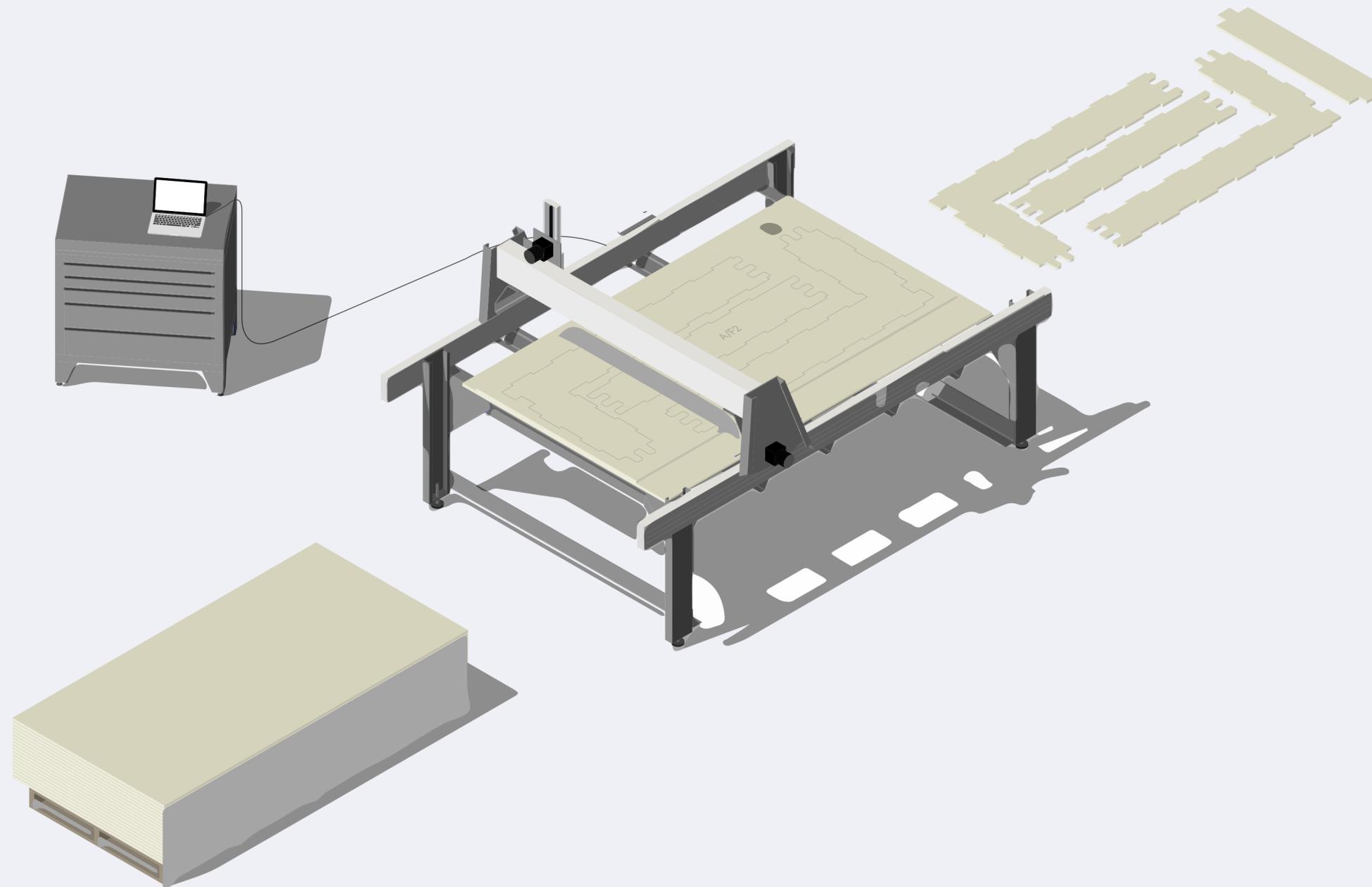
4th

Automated design
Digital fabrication
Distributed supply chain
Circular materials

Digital design

WikiHouse can be thought of as a kind of digital 'lego'. Parametric scripts 'code' the building, generating detailed 3D models and cutting files. Designs can also be modelled directly using software such as SketchUp or Rhino.





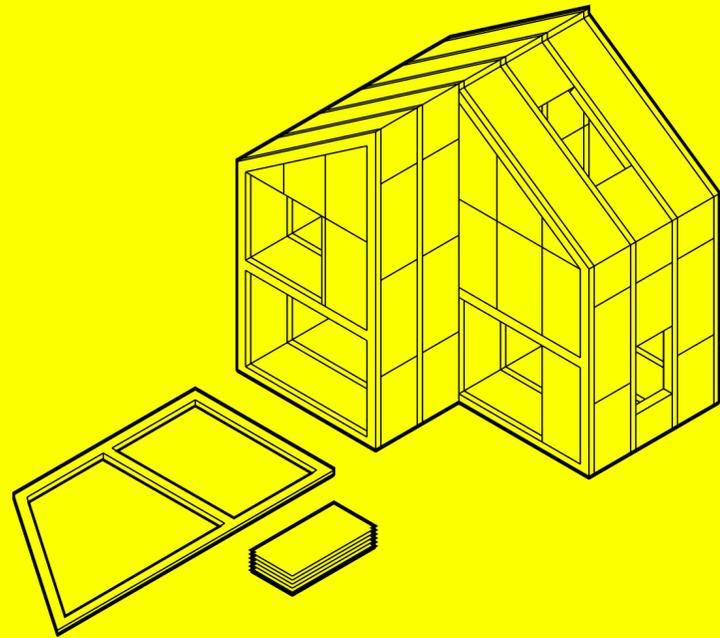
Local fabrication

The files can then be sent instantly for local digital CNC fabrication. A micro-factory capable of fabricating WikiHouse components can be set up by anyone for a fraction of the cost of a traditional prefabrication facility, ready to manufacture precision, high-performance homes. Hundreds already exist.

Simple assembly

The components can then be rapidly assembled like a large flat-pack, to millimetre precision. They can be assembled by any able-bodied person, even if they do not have traditional construction skills. This makes it ideal for self-builders or local SMEs.



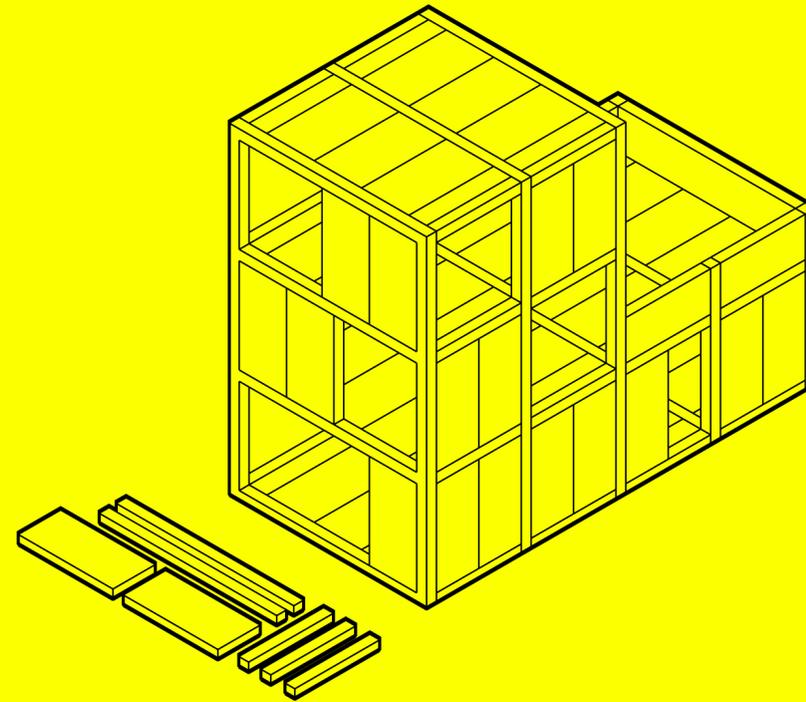


Wren

Portal frame assembly chassis system

Dev stage	beta (25+ completed)
Typical cost*	£325/m2 floor area
Max span	3.6m
Max height	2 storeys

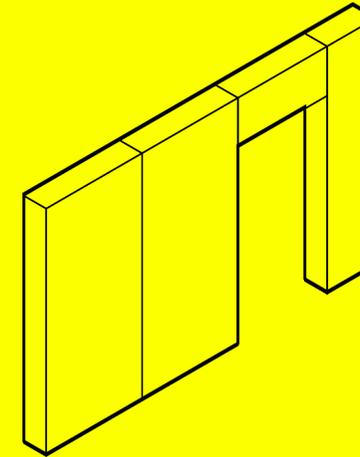
[Get files](#)



Blackbird

Post + beam assembly chassis system

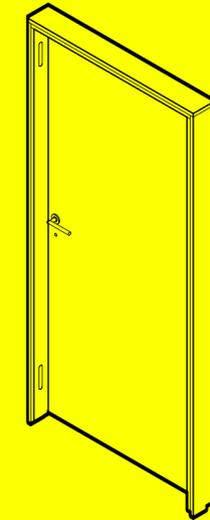
Dev stage	alpha (seeking first pilots)
Typical cost*	£250/m2 floor area
Max span	4.5m
Max height	3 storeys



Weaver

Internal wall kits

Dev stage	beta
Typical cost*	£60/m2
Max height	4.8m



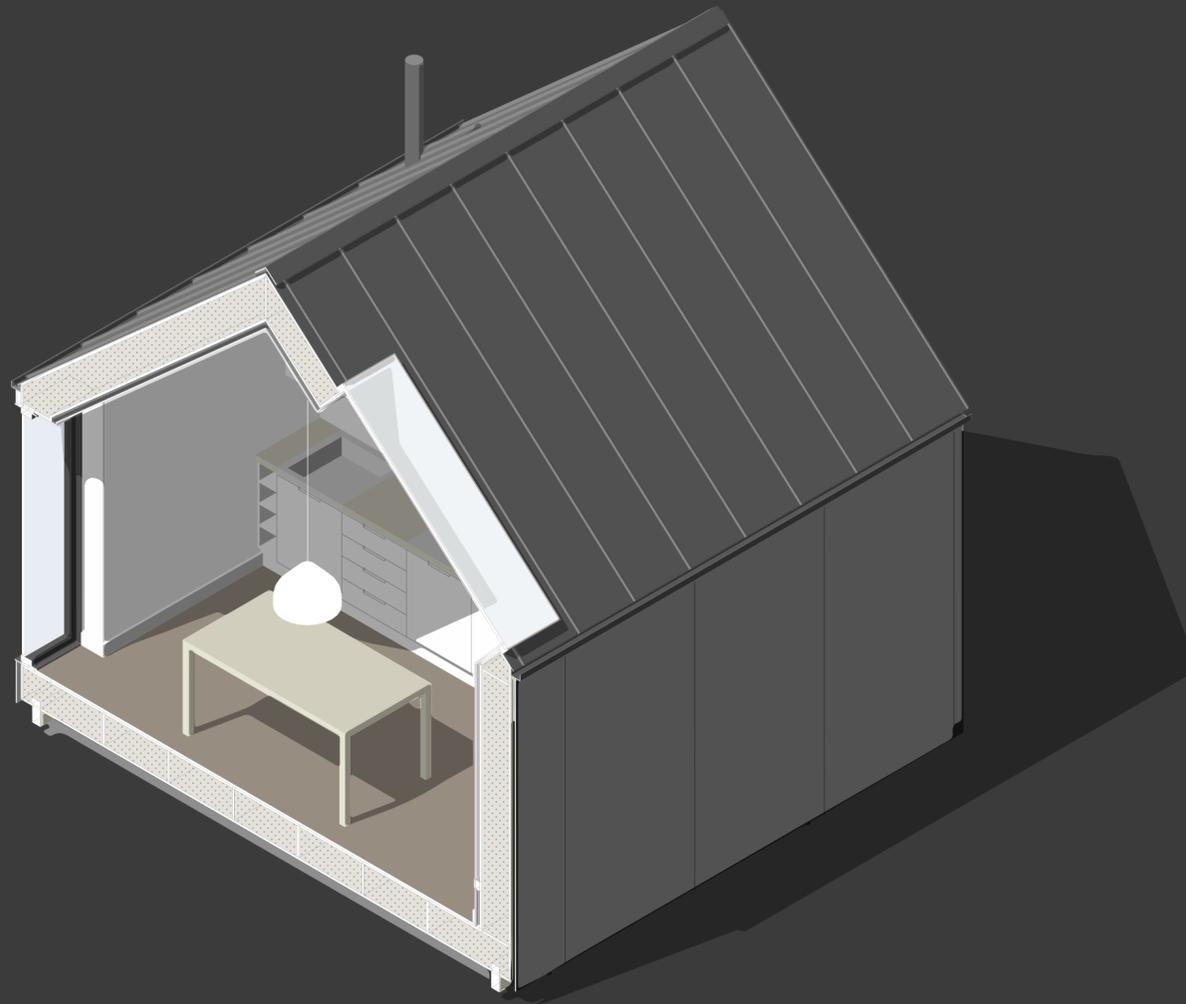
Owl

Internal door kits

Dev stage	alpha
Typical cost	£250 ea
Max width	1m
Max height	2.1m

[Get files](#)

* Chassis cost. Includes materials and manufacturing, does not include assembly



1 Low energy bills

Typical fabric U value is 0.14 W/m²K. Airtightness is typically 1-1.5 ACH@50Pa

2 Flexible layout

Internal walls and services can be changed during the building's lifetime.

3 Dry assembly

Dry processes improve quality and speed on site, and makes maintenance / upgrade easier.

4 Modular

Interoperable with almost any other components eg Windows.

5 Cost control

Total build costs depends on design, spec and procurement route, but are typically £800-1200m²

6 Precision made

A precision of +/- 1mm/m is standard, allowing easy installation of other components.

7 Fully customisable appearance

Structure is wrapped and can be clad in any rainscreen cladding material

8 Any foundations

Foundation rails and service connections must be pre-installed to +/- 10mm.



Wood is good

WikiHouse technologies use FSC certified structural timber panels such as [WISA Spruce Plywood](#) and screw fixings. It's strong, lightweight, durable and renewable. It also allows for disassembly and re-use of metal components in future.

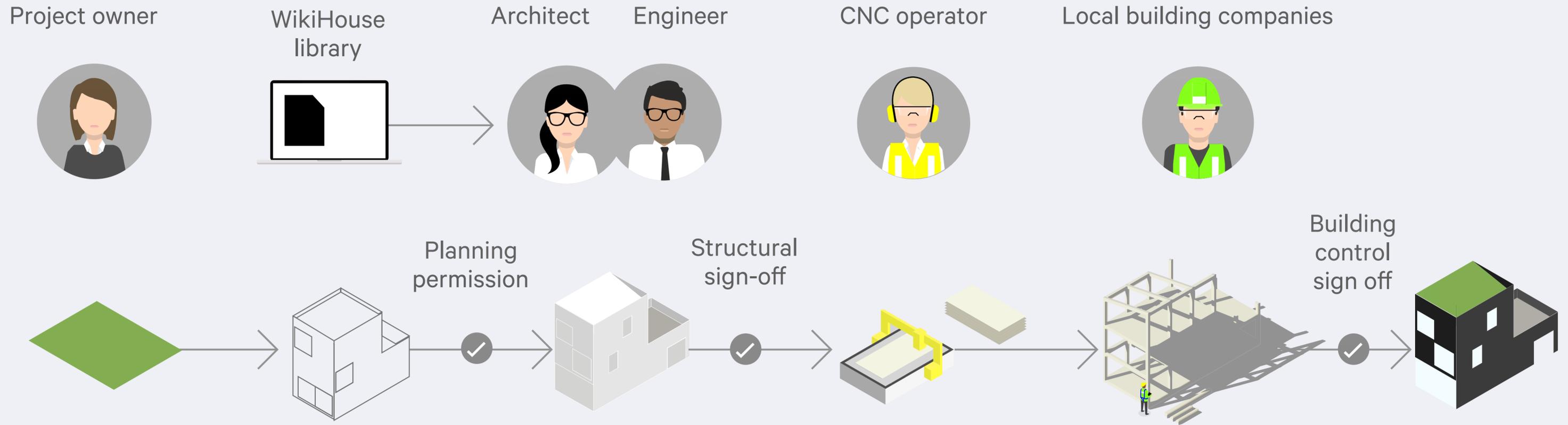


CNC fabrication

As a rule of thumb, each sheet typically costs around £25 to buy and takes 15-30 minutes to manufacture using a CNC. For small projects, it usually makes sense to find a local manufacturer. Larger projects may consider setting up their own microfactory to significantly reduce cost.



The delivery chain



1. Acquire site

Find and buy a plot of land suitable for development

2. Outline design

Sketch design, within the rules of the system

3 Detail design

Prepare full model, spec / bill of materials, cutting files and assembly manual

3. CNC manufacture

Find a local microfactory.

4. Assembly

Choose procurement method, find local companies and plan site sequencing

5. Occupancy

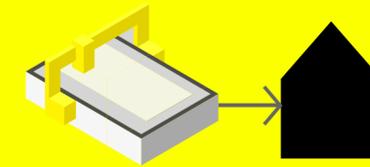
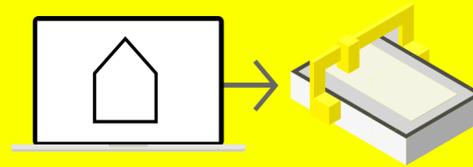
Move in. Optional feedback and performance monitoring.

Need help?

All WikiHouse technologies are open source. This means you can use them for free without paying a licence fee.

However at the moment the documentation and design process is still quite complicated, and digital construction is still something most people are unfamiliar with. To help with this, we provide a range of consultancy services.





1 Strategy & R&D

2 Outline design

3 Production information

4 Delivery

Scoping meeting

An introduction meeting / video call to discuss and guide your project.

Strategic consultancy

Advice & collaboration on shaping your project (eg procurement) Especially for innovative pilots

Communications

Help communicating your project internally or externally

Find a team

We will try to connect you with architects, engineers or fabricators who know the WikiHouse technologies. (We can usually do this for free)

Design support

Design workshops to help you or your team to develop a design that works with rules and limits of the technology.

Design support

Workshops with your team to develop detailed spec or custom components.

Detailed 3D chassis model

Building a detailed 3D model of your WikiHouse components.

Production info

Producing manufacturing files and/or assembly manuals

Quality control

Manufacturing and site supervision / support

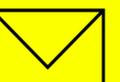
Warranty applications

Help applying for a warranty if required.

Documentation

Assembling a toolkit / repo to make your project replicable

[Contact us to request a quote.](#)



Scotland, UK

A-Barn

A garage and writing studio built on the West coast of Scotland in 2014 for a private client. The structure was assembled in one week by the owner, a group of volunteers working with a local builder.





Warwickshire, UK

14

Farmhouse

A 110m², 3-bedroom home which was designed by Architecture 00, and almost entirely self-built by the owners. Clad in natural Oak, with the internal layout designed to meet the requirements of a contemporary farmhouse. The result is a beautiful, high-performance home, which cost less than £110,000

Austria

Alpine Studio

Initially built as a prototype demonstrator by a group of architects and designers developing WikiHouse in Austria, the structure was disassembled and rebuilt as a permanent mountain escape.





London, UK

HereEast Studios

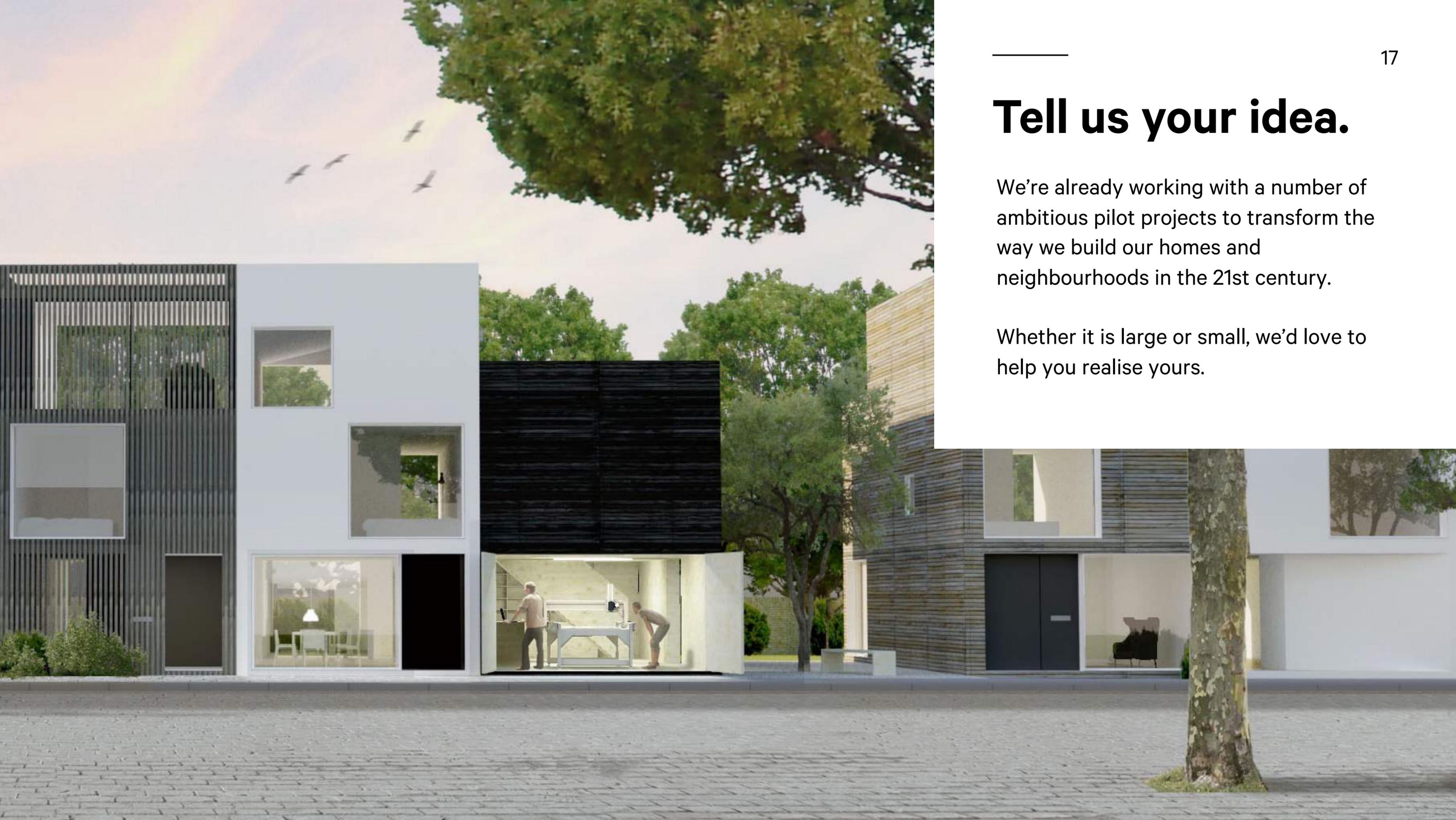
Formerly part of the broadcasting centre for the London 2012 Olympics, the architects Hawkins Brown designed 23 studios for artists and creatives on an elevated gantry. The structures had to be lightweight, capable of rapid production-line-like assembly. The studios vary in their form, layout and appearance.



Tell us your idea.

We're already working with a number of ambitious pilot projects to transform the way we build our homes and neighbourhoods in the 21st century.

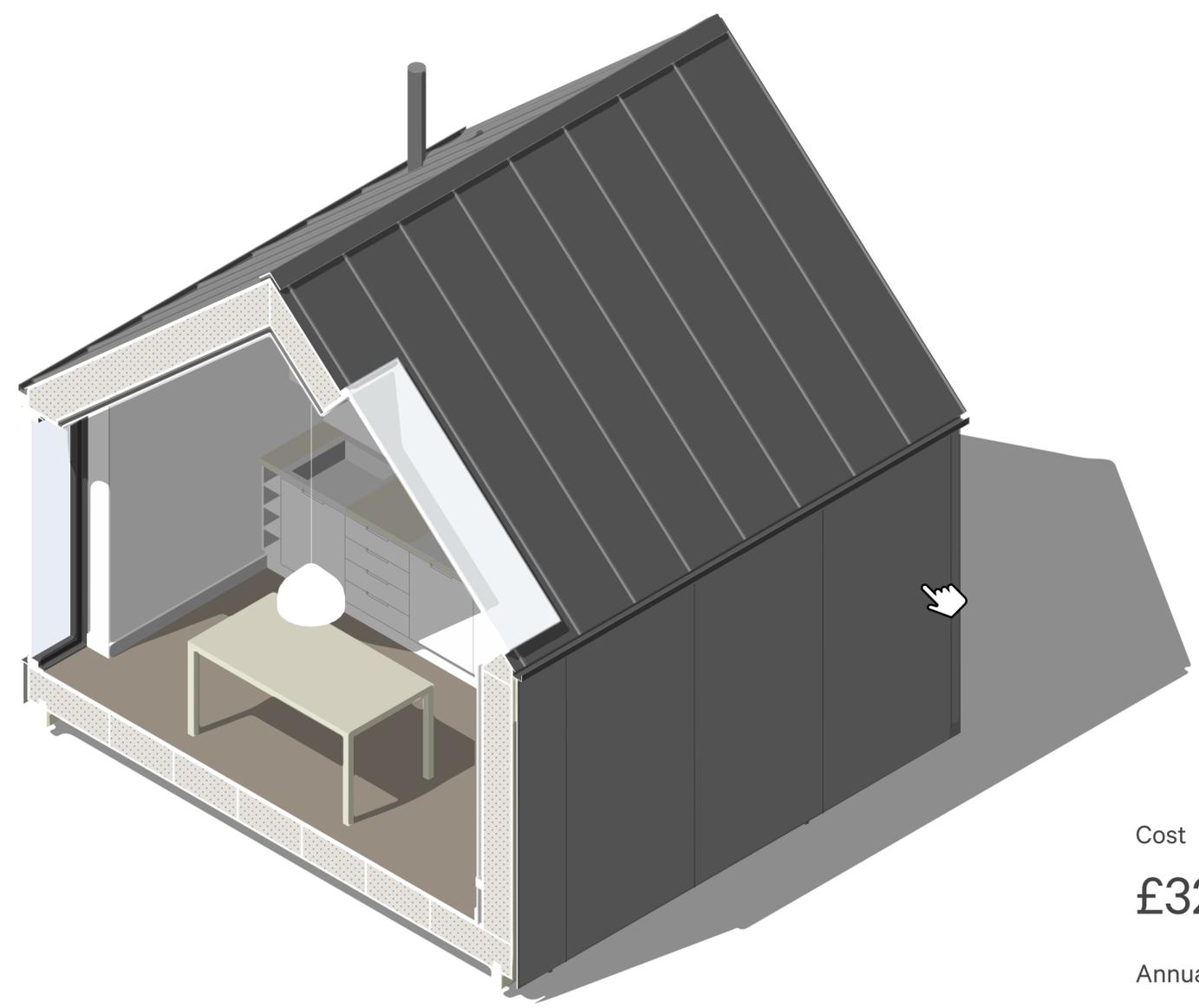
Whether it is large or small, we'd love to help you realise yours.



Orange house



Nina Casto



Cost
£32,000
Annual energy cost
£115

What's next?

We're working on a smart building platform that will use automation and data to transform the way we design, build and use homes, and to make WikiHouse and other manufactured building systems incredibly easy to use.

Watch this space.

FAQs

How long does a WikiHouse last?

The standard design life of all new homes is 60 years, but if properly protected and maintained, there is no reason why a WikiHouse structure should not last much longer than this.

Can I get a mortgage for my project?

Yes. For this you'll probably need a building warranty (or 'defects insurance'). This can be purchased from an insurer such as BLP, on a project-by-project basis, at a small additional cost.

Is WikiHouse compliant with building regulations?

Yes. Building control officers treat it like any other timber structure, however you will need a structural engineer to sign-off your design.

Is WikiHouse cheaper than other methods?

The cost always depends on your design, specification and how much work you do for yourself. We believe in making costs transparent so you can make informed decisions. Generally overall cost will be lower or similar to other methods, but much higher performance.

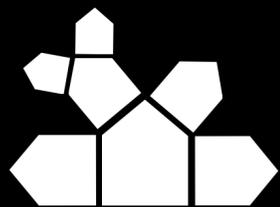
Can I build it myself?

Yes, but it's important you do so in a safe way, and comply with all the usual planning and health and safety regulations.

If I download files, do they come with any guarantees?

No. WikiHouse files are shared without any kind of guarantee. You are responsible for checking your project, and hiring the professionals you need, but we can help with this.

[Read our full terms of use here.](#)



WikiHouse Foundation

UK non-profit 9152368
www.wikihouse.cc

Get in touch with us

