Barn Home Design & Build Process

At Heritage Timbercraft we specialise in designing beautiful timber frame homes or homes that incorporate Timber Frame elements. Whether you are looking for a beautiful home, a wedding venue, commercial building, or an agricultural barn our team has you covered.

We have a simple Step by Step process to guide you through your Barn Home design and install including the costs involved along the way.

Design Process

Step 1: Connecting on Your Project

Tell us about your hopes and dreams!

To ensure we really understand what you would like and what spaces and functions you need in your barn home, please provide a brief, along with any images, mood boards, and floor plans. Please also include images and aspects of things you 'don't' like. This will help us match your vision with one of our modular post and beam frames or one of our Modular Home Designs. Please note that keeping to our standard modules will save on design and engineering costs.

We will also need information on the location of your building platform so that we can site your home in a way that optimizes the site and location. For this, we will need your Lot #, legal description and if on sloped land then we'll also need a topo survey plan provided by a cadastral surveyor. Information on prevailing winds, views you want to optimize as well as position of potential outdoor spaces, parking and driveway access are all important in developing the site plan. Photos and any videos of the site would also be useful. If needed, we are happy to do a site visit at additional cost.

It is also important for us to understand any parameters that we need to work within specific to your site, e.g., cladding types, overall height, recession planes, etc. For this, we will ask you to supply an idea of what overall exterior look you are after. While we are not planners, our design team will review the local District Plan and identify any potential planning issues like setback requirements and height restrictions. We'll also require a current CoT (certificate of title) and any underlying consent notices (don't worry, we can obtain these on your behalf). Please note that any breach of planning rules may result in the need to apply for a Resource Consent.

Size and complexity drive the final build price of your home, so it is also important for us to understand your budget so that we can steer you with both size and design choices to meet your budget. There is no point designing a beautiful home that you cannot afford. We would also recommend that you connect with one of our local builder partners early on so that they can help provide feedback on expected build costs through the design process.

Step 2: Selecting the Right Frame

Based on our discussions, we will work with you to come up with a suggested floor plan and an appropriate barn to meet your brief. We provide this stage in rough sketch form at no cost. At this point, we would suggest that you lay out the barn footprint on your site to see how it looks.

Step 3: Barn Frame Drawings and Pricing

Once you are settled on the barn size, we are ready to design and price the timber frame. If there is no change to our standard design, then no fee applies. If we are going to be customizing your timber frame, then a fee of $250 + GST will apply, as it will involve re-drawing the barn frame, pre-engineering timber sizing, and customizing connection details.

Step 4: Concept Design

The next step is to develop your concept so that you can visualize the final product and make sure all the spaces work for you. Either you can use your own architect or you can use our in-house team. Our team typically takes 4 to 6 weeks to complete a concept and involves 2 or 3 iterations. The cost depends on the size of your project and is charged on a sq.m floor area basis. For the main home, the price (including upstairs areas) is $25 + GST/sq.m and $5 + GST/sq.m for covered outdoor areas. Please note that for our Modular Home designs Heritage Timbercraft retains the right to the designs which allows us to offer home concepts to clients like yourself at no costs to help their design process.

For our Standard Service, you will receive a basic site plan, detailed floor plans, realistic elevations culminating in a rendered life-like 3D exterior image, an interior image and 2 cross sections of your new home.

For our Premier Design Service, we include one of our leading barn Home Architects in the Design Process to bring their additional experience to the project. This is an additional cost of $25/ sq. m. We can also include a walk-through tour with life-like 360-degree images in each area of your home. These cost an additional $1500 + GST.

Our team can also help with aspects such as kitchen design, bathroom design, detailed material choice, lighting plans, electrical plans, landscape design, and feature design such as fire pit / exterior seating areas. The cost for this work is at an hourly rate of $85/hr + GST.

Step 5: Build Costs

Once the concept design is completed, you can work with a quantity survey (QS) or one of our build partners or a local builder of your choice to estimate your home build cost. These local experts will be able to help guide you to more specific decisions and the cost implications to your build. Some examples include foundation type, cladding and floor choices, kitchen, and bathroom budget. Once you know the price to build your home, you are then ready to proceed to get your Timber Frame Contract in place and proceed to the Building Consent Documentation Stage.

Step 6: Timber Frame Contract

Heritage Timbercraft will supply a set of timber frame drawings which includes timber sizes and connection details showing the barn frame for your home. This is based on our experience but still subject to final engineering. We will also include the following in the contract:

- Price and payment schedule (Typically 40% deposit to secure timber; 25% once joinery commences; 25% Once joinery is complete and 10% on delivery)
- Timber Species
- Timber texture and edge finish
- Engineering of the frame, bracing and foundation engineering responsibilities
- Delivery address
- Additional services such as:
    - Oiling or staining the frame
    - Raising the frame

- Our 10 year structural guarantee
- Agreement to photograph the raising and the finished home for promotional purposes.

Note that Heritage Timbercraft retains the IP of the post and beam frame.

Step 7: PIM – Project Information Memorandum

Prior to commencing with the Building Consent Documentation, we always recommend applying for a PIM with the council. Incorporating a PIM into your project planning is not merely about compliance; it's a deliberate move towards an informed, efficient, and successful building process, reflecting our commitment to excellence and your satisfaction. A PIM can identify early adherence to the RMA and Building Act and encapsulating all legal and regulatory standards vital to your project. The PIM also provides comprehensive insights into your land and site characteristics, including potential hazards, drainage, zoning, and other factors that may influence the design and build.

Step 8: Building Consent Documentation Phase

The next step is to prepare your barn home working drawings and documentation for the provisions of obtaining a building consent. Again you can use your own architect or our in-house team. We will provide a fee proposal for your project but a rough guide is $100 / sq.m + GST up to 150m2 and then for additional size $50 + GST/sq.m up to 250 + GST/sq.m and $25+GST/sq.m up to 450 sq.m . Note this does not include council fees, specialist contractors, or surveying costs. At this stage, we will also require you to obtain and provide a Geotechnical report (We can assist with liaising with geotechnical engineers). We can provide a quote for our service and or a bundled package depending on other services you may decide to select. If you would like to go ahead, we will supply you with our Design Agreement for approval.

Part of this process includes preparing the site plan, which includes working with you and other contractors on both stormwater and septic system design, drainage, retaining walls (if any), power, and water supply. There are many decisions to make from internal and external linings, flooring, windows, heating, ventilation, as well as bathroom and kitchen planning. Our design team will help talk you through each of these stages. Providing we have all the necessary information upfront, then this stage typically takes 12 to 16 weeks to complete.

Additional Site information and specialist consultants may be needed to prepare your building consent documentation. The following may be required but would be arranged by your design team and typically billed separately.

LEGAL
Copy of LIM, certificate of title and/or deposited plan of property.

SOIL TEST/ GEOTECHNICAL SURVEY
It is becoming mandatory for soil tests (geotechnical) to determine soil type and bearing capacity.

Slope stability and/or geotechnical analysis may need to be undertaken for sloped/hill properties to help determine suitable locations for building and assess earthworks, potential for rock fall or other hazards that may require mitigating before construction can commence.

SITE SURVEY
A full site survey is required from a registered cadastral surveyor prior to commencing detailed design work. The plan should indicate legal boundaries, easements & rights of way, contours at 1.0m intervals minimum for sloping sites or spot levels on flat sites, location of existing services, site features, vegetation etc.

OTHER SPECIALIST CONSULTANTS
As the design work progresses, there may be input required from other separate consultants. This may include a landscape architect for site planning and landscaping, interior designer for colours, fabrics & furnishings etc. Specialist input may also be required for aspects such as home automation & home theatre systems, swimming pool and/or spa specialists, central heating & ventilation and/or acoustic requirements.

Step 9: Structural Engineering

Once your design has progressed to the stage where you have confirmed your floor plan layout, window and door openings, internal linings, and external claddings, we are ready to complete the SED (specific engineering design) and bracing calculations for your home. Our engineering team completes this as well as completing the structural engineering on the frame and foundation. All engineering costs for this stage are included in your barn frame contract. This normally takes 4 to 6 weeks and will overlap with the BC Documentation Phase. Our timber frames are designed for most situations but timber sizing and connection details can be impacted by site specific conditions such as wind, snow load or earthquake load. This is assessed during the engineering phase. If the costs for the changes is < $1000 we will absorb the costs but if it is more we will provide a quote to adjust the frame to meet the specific engineering requirements and will incorporate these into the building consent documentation

Step 10: Application for Building Consent

Once our engineer has completed the structural design, our design team is able to complete the building consent drawings. If any changes are needed due to site-specific issues, we will advise you of any changes or implications. Once you are happy with the plans and specifications, your Building Consent is ready to be lodged. Our design team will prepare, lodge, and administer the entire BC application on your behalf 'as your agent'. Part of this process is to work closely with the council and address their RFI's (requests for information), which is all part of the standard processing. Overall, the consenting process generally takes 20 to 30 working days to complete by the council but can take between 30 working days and 120 working days depending on specific requests or information required by the council.

Step 11: Building Consent Issued

Congratulations! You are now ready to install your services, lay your foundation, and start your build.

Step 12: Cutting & Test Fitting Your Post & Beam Barn Frame

We usually start cutting the barn frame before building consent is issued so that we are ready when you are. We often mill our own timber on site and handcraft your frame at our base at Mohaka River Farm in Hawkes Bay. You are welcome to visit us and see the timber frame being cut. This typically takes 4 to 12 weeks depending on your frame size. Once they are complete, we are ready to transport the frame to site.

Step 13: Raising Your Timber Frame

As soon as the foundation has cured, we will send your timber-frame. Either we can send a foreman to help support your builder with the raising or our experienced team can come and raise your frame. Raising typically takes 2 – 5 days. With the structure in place, a full weatherproof shell can be achieved quickly.

Step 14: Completing Your Home

You will need a licensed building practitioner and a team of carpenters to complete your building, or you can choose to complete it yourself as an owner-builder using contractors as required. We have a number of building

partners around the country that are specializing in barn home construction and always looking to expand our network.

Having building materials booked ahead of time and planning your project well ahead makes a significant difference in completing your project on time. In conclusion, building a barn home is an exciting and rewarding experience. Our step-by-step process ensures that your barn home is tailored to your specific needs and preferences, while our additional services and cost estimates make the process as seamless as possible. With our assistance, you can have a barn home that is a perfect fit for you. We look forward to the opportunity to collaborate with you to become a proud owner of a Heritage Timbercraft Barn Home.