

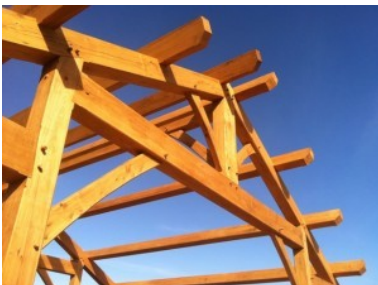
-Tips and Tricks of 2012-

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We have created these articles and compiled them in this report for information purposes to help convey ideas to you. As always, you should tweak, apply or disregard the information in them accordingly as applicable to your project and situation.

The Six Steps in Getting a Timber Frame Kit

Getting a timber frame is not very difficult and folks enjoy the process. Below I have outlined six steps that each timber frame project goes through help you to understand how to get a timber frame kit yourself. I am sure your path you take may deviate a



little but I think you'll find this a good guideline to helping you get a timber frame home.

Inspiration

It's my guess that if you're reading this you've already been inspired to get a timber frame but let's look at some of the common reasons why people love to have timbers in their homes. Not only are timber frame strong and durable but they bring an incredible feeling into any structure, this sets the stage for anyone who enters the home. It is also a way to personalize your house to your needs and style.

Timber Frame Design

The first stage is to develop the timber frame design. It is highly encouraged that you reach out and find a timber frame designer or timber frame company who does in-house design early on in your project. This will save you time and money in the future by integrating the team early on. Even if you

are working with an existing architect it is good to bring on a designer early to minimize conflicts between the architectural and timber frame design.

Finding a TF Company

There are several good ways to find a timber frame company a couple suggestions would be to look at the timber frame directory and the timber frame business Council together they have a large pool of quality people to pick from.

A timber frame is a very personal thing and choosing a timber frame company is to. In working with clients over the years I've seen the passion and curiosity that each client brings to their timber frame project the matter what the size or scope.

Choosing a timber frame company should be based on how they make you feel and their professionalism in talking with you and any correspondence.

Engineering

Soon after the design begins an engineer will be brought on board to check the timber sizes and the structure to make sure everything is structurally sound. They generally work on the foundation, timber frame, walls, roof, and floor system basically the structural elements of the home.

Your timber frame designer or timber frame company can easily help you find an engineer that meets your projects needs and location. While sometimes engineers make things a little tricky they serve an important and integral part in getting a high quality home.

Cutting the Joinery

The next stage is for the timber frame to be cut. The timber frame company has ordered the timber to the specifications that your designer and engineer have provided them and will start laying out and cutting the timbers.

They use a variety of tools starting with a pencil and a tape measure laying out the timbers. They then rough out the timber frame joinery with specialty power tools such is a chain mortise or and beam saws. After that every joint is lovely cleaned up with chisels and hand planes to achieve a high level of craftsmanship.

The last stage the timber frame company goes through is assembly. Any timber frame sections that can be put together in the shop are assembled to make sure that everything goes smoothly on raising day.

Raising

This is it. The big day.. raising day it's incredible day that should be celebrated and be made into a party. The timber frame company comes out and reassembles the timber frame on your subfloor or slab. The crane then comes in and they start raising the timber frame in bent or wall sections. You will be surprised how fast a timber frame can go up.

Site Work

After the raising the work is generally not complete on your timber frame. You still need to put tongue and groove boards on the ceiling and get the sips installed. You can get your timber frame company to install both the tongue and groove ceiling and the sips however not all companies provide the service. Often your contractor will want to perform this work themselves.

I hope that laying out the process in six easy steps helps you overcome a hurdle in getting your timber frame project underway.

A Down and Dirty Timber Frame Tutorial



When builders and architects say “timber frame” what they mean is that the structure of an entire building or maybe just a portion of it is supported primarily by large wooden timbers that are joined with pegs or by other types of decorative joinery. Almost always, the walls of the structure are on the outside of the timber frame leaving the timbers exposed for visual effect.

Timber frames are often confused with, but are quite different from log-homes. Timber Framing is an age-old building process, and the basics have not changed much over the centuries. However, technology has made the process easier, ensuring the builder more sound structures that have increased levels of efficiency and comfort. Hybrid buildings can now include both conventional and timber frame elements, which may be beneficial in some instances.

What are the Benefits?

Beyond the aesthetics of exposed timber and open floor plans, timber frame structures enjoy a durability unmatched

by conventionally-built homes. They also provide more structural integrity in the unfortunate event of fire damage, as the large timber supports are more resistant to burning completely through than the thinner cuts of wood that make up conventional building structures. Finally, a timber frame home affords the owner opportunities to use bold design statements, as timbers come in an untold number of sizes, shapes and colors.

Timber Frame Lingo

Like most specialized art forms, timber framing has a language all its own, with terms for the various tools, processes and codes. Below is a brief list of commonly-used timber frame terms to help you better understand the process..

Timbers – the wooden beams that comprise the home's structural frame



Kit – timber frame kits or post and beam kits are pre-fabricated home plans and materials that come together quickly and easily. However, they can limit your options greatly and typically do not provide the same level of quality as custom timber frame buildings.

SIPs – structurally insulated panels, these building pieces sheath the structure. Made of two layers of durable flat wood and filled with a highly dense insulating foam in between, SIPs have more or less revolutionized the timber frame building process.

Hybrid – this type of building combines the methods of timber framing and conventional stud frame building. Depending on your home's location, climate and budget, a hybrid building may or may not provide the homeowner benefits.



Posts – the main upright timbers that comprise the frame.

Braces – an element of a joint that fortifies the frame by resisting movement in a certain direction. Knee braces are a popular type of brace, as they incorporate very natural-looking ‘knee’ timber piece.

Crossbeams – these connect the post beams, providing stability

Joints – where two timbers or frame pieces come together. Joints can range from simple to highly decorative and include lap joints, mortise-and-tenon joints, dovetailed and pegged joints, among many others. Your designer can show you samples of each type of joint.

Truss – a rigid triangle of timbers, trusses provide column-free floor space, are typically incorporated on the top floor.

Timber Frame House Plans with Kids in Mind

Incorporating a timber frame into your house will bring many compliments from your adult visitors, but it also has the potential to bring squeals of delight from the younger age crowd. By including several key elements into your timber frame construction details, you can achieve timber frame house plans that is sure to please everyone.

As a parent to two young children, and the current owner of a timber frame home, I have several suggestions if you are looking to incorporate “kid friendly”, fun, and useful timber frame kit aspects into your home.

First, the pegs that are used to lock the joinery together are great to hang things on. We currently have our stockings hanging from our pegs. Some people choose to cut their pegs flush with the posts, whereas we chose to leave about 1-2” on either side. These are also great to hang hats, or even heavier objects that would traditionally need a nail due to weight. Knee braces also make great hanging tools, such as baby mobiles or other hanging arts and crafts.



Other really eye catching pieces to add into your timber frame construction details include organic pieces. These are pieces that follow the natural shape of the branch or log. We have an especially curvy and unique piece of sassafras that is used as a knee brace. Since it is located above our couch, the kids use it as a place to climb up and sit like a sloth. When they are older, I can foresee them sitting there with their backs on the timber and reading a book. Adults think it is one of the

nearest timbers in the house. Even though it was not needed for support, we added it in for the character. If you are in the design process, ask friends if they have especially interesting pieces on their property that you might incorporate into your home.

Last, we use the vertical and horizontal timbers that are not against the wall or ceiling as places to run Christmas lights. We don’t decorate much outside since we live in the woods and no one would see it except for the bears and us, so we decorate more on the inside. We also have one of the most popular toys in the community-a wooden ladder/swing from Ikea. This simple toy has kept children from age 2-17 entertained for quite a while.

If you are planning a timber frame house with kids that will live there permanently, or grandkids that will visit periodically, doing some simple prior planning will lead to not only an aesthetically pleasing timber frame, but also an indoor kid friendly playhouse.

5 Benefits of Making a Construction Schedule

Building a timber frame home can be an intimidating and stressful venture. A construction schedule helps keep the project on track. Here are five reasons why a construction schedule is an important resource in the home-building process:



1. Open Communication With Your Contractor

Laying out a schedule before you build your home puts you and the contractor on the same page. He can let you know what expectations are reasonable, and you will be able to see if the project is falling behind schedule. It also offers you some recourse if the contractor is not meeting deadlines for reasons that are well within their control.

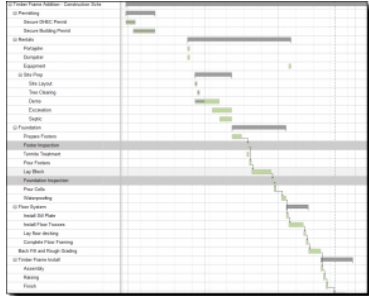
2. Keeping Track of Your Budget

Seeing when certain aspects of the project will be completed gives you a better idea of when each payment will come due, either for supplies or for subcontractors. Paying for each phase

in a timely manner will help the next stage of the project move forward on schedule.

3. Knowing When to Book Subcontractors

If you are hiring subcontractors, a construction schedule allows you to book them well in advance before they commit to other projects. If you intend to do some of the work yourself, like painting, you will know when to schedule vacation time, rent equipment or start



purchasing supplies for the project.

4. Applying for Permits and Scheduling Inspections

There are municipal requirements to be met when building a home. Having a [timeline](#) of when each project will start allows time to apply for appropriate permits. Knowing when a task, such as electrical installation, will be complete makes it possible to schedule inspections so that the next phase can begin quickly.

5. Planning the Rest of Your Life

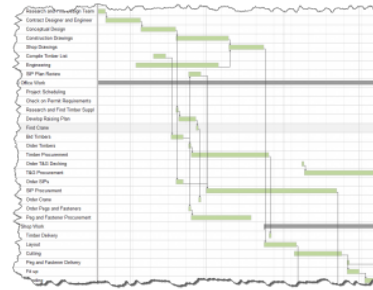
Life goes on even when a big project like home construction threatens to bring it to a standstill. Having an idea when your home-building project will be finished lets you plan other aspects of your life for fewer inconveniences. If you are renting a home, staying with relatives or trying to sell your current home, a construction schedule helps you make suitable arrangements. Knowing when the home will be move-in ready is especially helpful if you are expecting a new baby or building in a different community than your current home.

Construction schedules should be flexible and expect some delays, especially those related to weather or unforeseen emergencies. However, a construction schedule will aid you in maintaining control and cost on your timber frame home-building project.

How to Create a Construction Schedule

Making a construction schedule for your timber frame construction project takes time. However, I think you'll find that you will reap the rewards in both time and money in the long run by taking some time and making an accurate schedule. We talked in a previous article on the site about the benefits of making a schedule. While it's easy to talk about the benefits of a construction schedule, it's not as easy to create

one. So, I thought I would devote a little time both writing and making a video



showing you how I make a schedule step by step. Let's get to it...

Step one – Gathering information and getting the right tools

- Make a list of all the subcontractors. Contact them to get both a) how much time it will take to procure the materials they need; and, b) the amount of time that they expect your project will take once the materials are on site. For example, it may take upwards of 6 to 8 weeks to get windows and doors delivered to your site. After they are ordered, add to that selecting and working through the various options of the windows and it may take you an additional 2 to 3 weeks. This lets you know that you have an effective time of about eight to eleven weeks to get the windows on site.
- Contact your local code office and find out the different requirements and inspections for your area. Remember timber frame construction is a bit different and I would recommend you go and check out my previous article about working with your local code office before you contact them.
- Sit down and talk through your project with your bank and figure out when they will release their draws. Cash is king when it comes to keeping your project rolling and every bank is a little different when it comes to when they will disburse money. Sit down with them both before and after you make the schedule. This will give you and the bank the big picture about when you will need money.
- Select the best template for your project from the options below or create one from scratch to meet your project parameters.
- There are several online tools as well as off line tools that you can run on your computer to make the schedules. I use and recommend [Smart Sheet](#) because it's easy to use and you can share it online with everyone in your team and it has a free 30 trial. You can also get a free trial of Microsoft Project, or even use an Excel sheet if you are familiar with the Gantt chart formulas as an option.
- Select the best template below for your project from the options below or create one from scratch to meet your project parameters.

Step Two – Get rolling – Watch the Video

- Create a free Smart Sheet account.
- Download one of the above templates.
- Import the template into Smart Sheet
- That's it! You are ready to get started, but, remember... Step Three

Step three – Be realistic

- Rain/snow and bad weather days add up. In our area if we can have a five day work week I am happy; but, I have to realize that later down the road we may only be able to get a three day work week because of the weather. It's that cushion that will make your schedule a little more accurate. You can easily check this [chart of the rain days in your area](#) and then sort out how much time you need to factor into your schedule by multiplying the number of days of rain on the chart by 60% (due to weekends not being counted) then take that number and divide by 52 (weeks). That will give you a average days per week for your area.
- Remember the holiday seasons and other holidays throughout the year. They will impact your schedule.
There may be other factors out there like hunting seasons and harvesting that you may want to consider.
- While I like to trust that the estimates that a subcontractor or supplier gives me are dead on, I generally add 25% to 30% to their time just to be safe.
Remember the goal is to be reasonable in determining the deadlines, as Eric Morley just mentioned in Timber Frame Talk Radio Episode 4 – the average individual underestimates the time it takes to complete a task by 30%. Be cautious and realistic, it will pay off in the long run.
- While everyone certainly strives to pass a code inspection on the first go-round, it is often like going to the DMV and many times takes two times to get everything squared away and get rolling again. Make sure you take this into account and give yourself a couple days of cushion on either side of the inspections as these tend to be big hinge points in a project.



It is easy to make the schedule what you want instead of what it is. If you need to be in before Christmas and you start shuffling things around unrealistically, stop and

really think... is that possible? I remember looking at my wife in tears and telling her that I was not able to follow through on the schedule that I committed to. That experience hurt, and I learned a valuable lesson that I have applied to all my schedules since then. Remember to be real and honest with yourself and your clients. Let's start having some fun!

Step Four – Start Your Schedule

- Start with setting the start date for the various tasks and adjust the schedule end date by adjusting the gantt bar. Insert your specific project tasks that are not in the templates and deadlines from the information you gathered from step one.
- Add procurement, delivery, and other lead times that you have gathered from other sources. Knowing when to order something is just as important as knowing when it needs to be installed.
- Add building inspections and cushion their timeframe a little.
- Insert the bank draws and link them with the different tasks necessary to get the different draws from the bank.
For example, in a timber frame home, it is generally necessary to give the timber frame company a deposit to get them to order the timber and start cutting. This need is actually a little unusual in the construction loans arena, so making sure the bank knows what is coming by sharing the schedule with them will help you in keeping your project rolling.
- Link those tasks that are dependent upon each other.
This will both show you how things are tied together; and, if you have to adjust the schedule in the future, things will move together and you will not have to change each individual task.
- Assign tasks to people and color code different tasks.
This will make it easier to see what you are doing and what other folks are doing. If this is integrated with SmartSheet, then it will send a reminder email to your team automatically about their upcoming tasks.

Step 5 – Adjust, adjust and adjust it again



- Check and update the schedule often throughout the project. It is a living document that will change constantly. Remembering that the construction schedule will change depending on onsite and offsite

scenarios will be paramount to your success in managing the schedule.

- While I look at my schedules often, I generally only update them twice a month. In the beginning I updated them daily; but, I found that it was not a valuable use of my time and don't recommend it. Now I try to sit back and look at the big picture for a week or so.

While I know (from experience) that making a complete and detailed construction schedule takes some time, I can assure you that both the time you put into it, and the money that you will save by making one, will be clear at the end of the project. It will simply keep your project rolling instead of having unnecessary delays. It will not be perfect. There are just too many factors involved for it to be 100% correct, but being able to see the big picture and what is coming helps you to be prepared and be able to tackle it before it hits you.

How Much Does A Timber Frame Cost?

When people build houses, they take a lot of things into consideration. After all, building a house is a big step – one that usually signals a new beginning in the lives of couples and families. Construction companies know this, which is why the construction business doesn't operate in a one-size-fits-all kind of policy. The homeowners have ideas as to how they want the design and structure to look like, and the construction company will make sure that the homeowner's vision is delivered. Of all the many factors that should be considered, one factor stands out from the rest. That factor is cost. No matter how grand a homeowner's vision for his house is, this vision will have to be checked against the



homeowner's budget. At the end of the day, the cost is what usually dictates how the final output will look like. In building timber frame houses therefore, the most important consideration is timber frame cost.

The first thing homeowners should know about timber frame cost is that estimating it is largely dependent on the specifications of the house and the timber frame construction details. However, compared to houses made of the more traditional materials, construction companies can estimate timber frame cost a lot more accurately. This is a big advantage for homeowners who are making the decision, because an accurate estimate will allow them to adjust their budgets or adjust the design if necessary.

Secondly, homeowners should note that there are two components that need to be considered in computing for total timber frame cost. The first component is the actual cost of the

timber frames used to build the house. In most (but not all) cases, they are slightly more expensive than the usual bricks and cement. However, this is not the only cost component homeowners should look at. While the materials used in timber framing are slightly more expensive, other factors will even out the equation and in the end, timber framing will cost roughly as much as regular construction materials. These factors pertain to the process of building the house, which entails a lot of overhead expenses and labor cost. Construction using timber frames is a lot quicker, which saves homeowners on a lot of additional overhead. Understanding these two cost components is important for homeowners to make a wise decision.

Another aspect that will affect timber frame cost is the size of the house. This may be surprising, but bigger homes (big vs. small floor area, 2-storey vs. 1-story) are actually more efficient to build, so they will tend to cost less on a per-square-foot basis. The design is another factor that affects timber frame cost and construction details, because the more complicated the homeowner wants the house to look, the more difficult it will be to make. Simpler and more straightforward designs will make more efficient use of the raw materials, and generally take a shorter time to build. Additionally, the interiors will also affect the price, especially if some owners have special requests.

With all the factors that need to be considered in timber frame cost, it is best if the homeowners really explore all their options way ahead of time. This will ensure that they get the best possible house at the least cost.

Show Me the Money! The Appraisal Process for Your New Timber Frame Home

Unless you are sitting on a sum of disposable cash (and most of us unfortunately are not), getting a bank loan will be one of the starting points to getting your timber frame house kit. Banks rely on the appraisals of licensed appraisers to determine whether the amount of money you are asking for is commensurate with what the house will end up being worth. With the mortgage crisis nationwide, banks are now especially careful before lending out money.

Your first step will be to have your timber frame house plans, along with a detailed estimate of funds needed to provide to the bank. After that, the appraiser will come out to your site with your plans and take some pictures of your land. They then have to scour the tax records to find "comps", or comparison sales, of houses in your area that fit the general size and workmanship of your proposed house. Here is the difficult part: there are not that many timber frame homes and they are not sold very often as the owners tend to stay in them for a long time. This leaves the appraiser with not very many comps that are "true" comparisons. As a result, many appraisers will have to look at regular "stick frame" homes that may or may not have all of the craftsmanship that goes into a timber frame home. Be ready for the appraisal process to take a little longer than it might with conventional homes in suburban areas.

Also, many people who are of the mindset to want a timber frame in their home are also in the mindset to want energy saving building techniques, such as tankless hot water heaters, SIPs (structural insulated panels), solar panels, etc... Even though these “extras” will help lessen the utility bills for the homeowner in the future (thus increasing the value of the home), they are not found in many homes, thus again making the process of getting true comps more difficult. If you are interested in utilizing more progressive, energy saving appliances or building techniques, be prepared to possibly spend cash on some of those if the bank is not able to get an appraisal high enough for your needs.

After the appraiser has found his comps, he/she has to submit the report to a board to make sure that it is accurate. This extra step is also due to the mortgage crisis. What this means for you as a new homeowner is that the appraisal process may very well take several weeks. My recommendation is to try to be patient and think about how impressive that timber frame is going to look in your new house.

Preliminary Timber Frame House Budget Worksheet

Getting to the end of the design process for your home and realizing that your timber frame house plan is one that you cannot afford is unfortunately very common and can be devastating for you. To avoid this, we have devised a [Preliminary Budget Worksheet](#) to help you estimate the cost of your project as you go through the design process. It will start saving you money right off the bat by showing you that you need to cut square footage or revise some of the

Your Project's Name				
Preliminary Budget Worksheet				
Price per SQFT		115.00	138.00	
Area	% Rate	Square Feet	Cost Per SqFt Range	Total Budget Range*
1st Floor Interior Heated Space	100%	1000	\$110.00 - \$130.00	\$110,000.00 - \$130,000.00
2nd Floor Interior Heated Space	80%	750	\$80.75 - \$110.00	\$60,562.50 - \$82,500.00
3rd Floor Interior Heated Space	80%	750	\$80.75 - \$110.00	\$60,562.50 - \$82,500.00
Unheated Covered Decks/Porches	50%	344	\$27.75 - \$65.00	\$9,532.50 - \$22,350.00
Unheated Decks	25%	318	\$28.75 - \$30.00	\$9,131.25 - \$9,525.00
Timber Frame	15%	1375	\$17.25 - \$19.00	\$23,718.75 - \$26,137.50
Total		4353		\$414,462.75 - \$480,930.00

*This is a very crude estimate to provide you with a budget based on the square footages and price per square foot.

finishes to meet your desired budget.

Bookmark this page so as you revise your floor plans, come back and re enter your square footage amounts to keep yourself up-to-date of what the costs will be so you can see the real picture. Remember, for this tool to really work, you must be honest about the numbers you enter into the calculator. It is all too easy to make the numbers match what you need them to be and not what they are.

1. First, talk to your local builders and contractors and find out the average price per square foot for a custom home in your area. They will want to ask you a few questions to gauge your tastes and location. I have seen the same house built for \$155/sq. ft and for \$335/sq. ft, and it all depended on the finishes. It will be hard for the timber frame company to give you a good price at the beginning of a project because they don't have all the information

they need. Tell them you are working with this calculator and ask for a rough estimate so you have a working number that can be revised over time.

2. Second, enter the square footage amounts from your plans and adjust the percentage rate according to the information from your builder. As an example, the basement line has a rate of 50% and assumes a finished basement space in that rate. If you plan to have an unfinished basement that rate would decrease to say 25-30%. You can see that getting good information from your team at the beginning of your project will help you have the best picture of the cost of your project throughout the design process.
3. Next, hold your breath and get the estimate. Remember that this is just a starting point for you to start to figure out the cost of your home and does not represent the final working number. After you have completed the design process your contractor and timber frame team can give you an accurate number that you can take to the bank.

Selecting A General Contractor

Your general contractor is responsible for constructing your timber frame home. From the excavation of the foundation to the final walk-through, they are in charge of all aspects of the building process. Before signing your name on the dotted line, make sure of what the company is providing. The services a contractor provides can vary, and each company has different views on the extent of their services. Most contractors coordinate the labor and see to assembling all the required materials in a timely fashion. Their job is completing your home within the set budget and on time.



The contractor manages the job site and supervises the work and the workers. This includes the plumbers, electricians and roofers, as well as carpenters and general labor workers. Workers may be in the employ of the contracting company or they may be sub-contractors.

A general contractor that is experienced with timber frame construction is a great asset. They maintain records, coordinate payments, develop and maintain a construction schedule and monitor the work to ensure everything is completed properly and in a timely fashion. In addition, their familiarity with timber frame construction methods can be of significant value in the design phase of your home. Although timber frame construction experience is definitely helpful, it

is not unconditionally necessary. The most important thing is that the architect, timber framing company and the contractor are able to communicate well with the general contractor and that he understands the unique facets of this building project.

If your timber frame company does not have a list of contractors in your area, you can consult your local builders [associations](#) for references or our [directory](#). When



interviewing potential contractors you should find out how long they have been in business and if they have experience with timber framing. If so, for which companies have they worked. Make sure they are willing to work with the architect or designer in the design stage. Ask questions such as how they handle change orders.

Using a Request for Proposal (RFP) is the best way to get apples to apples pricing. This is a package that includes construction drawings and specifications pertinent to the various details required to complete the construction of your home. These packets are sent to prospective builders and tradesmen asking them for proposals. This fair and competitive bidding process allows you to gather and assemble bid information accurately, so you can select the best team for your construction project.

Getting Apples to Apples Bids for Your Timber Frame Construction Project

A Request For Proposal is an invitation for [timber frame companies and contractors](#) to provide bids on work to be done in constructing your home. This competitive bidding process allows you to compare a number of different companies before making a decision and gives to the best chance to get apples to apples pricing.



Some of the aspects to consider include pricing, the company location relative to your building site, the timber framers ability to deliver the products or services, the prior performance of the company and the timeliness in which they are able to complete their jobs and deliver their products.

Research And Define The Scope Of The Project

A good understanding of your project makes it easier for you to answer questions. Defining exactly what you want in your home and what you expect gives potential team information to write proposals that address all your needs and concerns. If the contractor or timber frame company understands the project, they can tailor their proposals to your specifications.

You will be asked questions and asked for clarifications after you submit the RFP make sure you share that with everyone in the process. Time spent researching and defining your RFP will reduce the time you need to spend answering these questions. This speeds up the bidding process, helps to keep the [timeline](#) on track and saves everyone a bunch of time.

By providing your potential companies with properly prepared, adequate information, you increase your potential for competitive bids with a minimum of questions and aggravation.

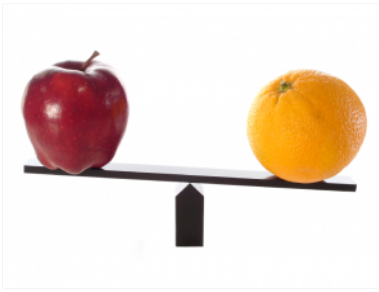
Create A Reasonable Timeline

Once you've committed to this great adventure, time is money. Preparing a timeline and sticking to it is the only way to get this job done in an expedient manner and within the budget. Your RFP should include the following timeline:

- Distribution of RFP
- Deadline for submission of written questions and notice of intent
- Written answers to questions provided to all applicants
- Deadline for proposal submissions
- Notification of finalists
- Interviews of finalists
- Vendors selected
- Contracts signed

Identify The Information Required From Applicants And Specify The Proposal Format

Your package will include construction drawings and any specifications that are pertinent to the completion of your home or timber frame kit. Some packages for specialized work or materials like a timber frame will need to contain additional information related to that trade make sure to include this in your proposal.



If you don't ask for specific information, you may wind up with a jumble of information that may, or may not be useful in your decision-making process. On the other hand, you may receive a boilerplate proposal that doesn't address the specific needs and requirements of your timber frame home. By providing complete design documents and other specifications you will insure that you don't end up with an apples to oranges proposals.

- The proposal should address the specific requirements of your project. Timber frame construction is a specialized building method and candidates should be aware and familiar with this method of building.
- The company should specify their payment requirements, schedules and costs in full.
- The firm should provide a timeline for the completion of their segment of the project.
- Ask for a brief history and profile of the company that includes its experience with their construction methods.
- The company should include examples of their completed projects. It should also include a brief profile of the project team members.



Establish Your Evaluation Criteria

Once you've received all your RFP packets from the applicants, how will you determine which companies to select?

Of course, the cost is very important. Your budget plan is a big factor in the successful completion of your project. However, what happens if the bids are all similar. You need other criteria to evaluate the suitability of your candidates. Some points to analyze and compare are included below. You may have other areas of concern that you should incorporate in your analysis.

- Does the company have good communication skills, and are they able to transmit and absorb information effectively
- Are the company representatives available for both phone and personal meetings
- Are the examples they provided in keeping with the basic tenets of your project and principles
- Is their timeline reasonable
- Is the company representative forthcoming and open. Did they present a convincing package, explain how they will complete the job and describe the materials they will use.
- Has the proposal openly addressed their costs and payment schedule
- Is the contract reasonable

An RFP is a very useful tool that you should take time to compile. Don't just jot notes down on a cocktail napkin, but devote time to formulate and develop a Request for Proposal that succinctly and clearly states the information you wish to impart and expect to receive in return.

5 Advantages to Building a Small Timber Frame Home

Since 1970, the average size of a new home has nearly doubled, from an average of 1,400 square feet to 2,700 square feet, as the number of people in a household continues to drop. While many people may think that "bigger is better," building a small timber frame home has definite advantages:



1. Lower Utility Bills

Although newer homes are energy-efficient, the cost to heat and cool today's large homes can take a huge bite out of your budget. Aside from financial considerations, large houses are also using up more than their fair share of natural resources.

2. Fewer Repair and Maintenance Costs

A small timber frame home has fewer items to replace, and what does need replacing, such as a roof, flooring, furnaces and air-conditioners, costs less to replace in a small home. Additionally, the amenities that sometimes come with larger

homes, like whirlpool baths, will require extra maintenance and repair.

3. Less Clutter

People have a tendency to keep accumulating things until they fill up the space they have, no matter how large. A well-planned smaller home will have practical, multi-purpose spaces and will discourage large rooms devoted to one activity. Such rooms are an invitation to collect random paraphernalia. A smaller home forces you to buy more prudently, which also saves money.

4. No More Downsizing

Many people discover that they can finally afford a larger home just as their children are leaving the nest. Later, they must downsize when they can no longer care for the property or it becomes dangerous for them to get around. A small home built with handicap facilities or an easily convertible floor plan will allow you to stay in your home longer,



delaying the need for assisted living or a nursing home. Even younger families can benefit from this strategy.

5. Overall Financial Security

If you have a fabulous house, but have nothing left after paying the mortgage and property taxes to enjoy life or afford groceries, your quality of life is not what it appears. Even if you can afford a large home, paying extra on a smaller loan will get you to home ownership that much faster, freeing up money so you can enjoy life in later years.

The benefits of building a smaller timber frame home make it an appealing choice for homebuyers, and one that more folks should consider.

7 Tips in Designing a Small Home

Although the size of the average home has nearly doubled in the last half-century, timber frame construction techniques offer abundant design options when building a small home.



1. Use Open Concept Design

Contemporary construction practices and materials make it possible to design small houses without the walls that often divided older homes into small, boxy rooms. With kitchens, dining areas and living rooms opening into one another, rooms appear larger, and entertaining is more enjoyable.

2. Eliminate Single-Purpose Rooms

A formal dining room used only a few times a year is wasted space in a small home, as is a home office used only for paying bills. Open kitchens accommodate tables of varying sizes for special occasions. A small built-in desk in the kitchen or family room provides sufficient workspace for increasingly compact computers.

3. Incorporate Ample Storage

Clutter makes small houses seem even smaller. Closets should be integrated into the timber frame floor plan without adding unnecessary walls. Easily accessible crawl spaces and attics offer even more storage options.

4. Consider Room Usage

Large bathrooms and bedrooms are unnecessary for families who plan to spend the majority of their time socializing in the kitchen or living room. However, a bedroom intended for multiple occupants should comfortably accommodate a bunk bed



Photo Courtesy of Moresun Woodworking, Inc without interfering with closets, windows or light fixtures.

5. Make the Kitchen the Heart of the Home

Kitchens are the hardest working room in any home. They should be easily accessible from other parts of the house and key points outside of the home. Adjoining garages, decks and patios expand the function of the kitchen by offering additional storage and entertaining spaces.

6. Find Lost Space

A laundry closet, as opposed to a full-size laundry room, frees up valuable square footage. An extra row of kitchen cabinets can occupy the space usually devoted to an unnecessary soffit. Eliminating hallways and large foyers, building half-closets over stairwells and adding dormer windows to attics utilizes space that would otherwise go to waste.

7. Select Suitable Windows and Doors

Large windows increase desirable light and air in small spaces. However, windows and doors can interfere with furniture placement in a small home. Consider a room's purpose when selecting the dimensions and height of windows. Doors should not open into furniture or traffic patterns. Pocket doors and bi-folds are excellent options for cramped quarters.

Thoughtful design creates small timber frame homes that fit perfectly into modern lifestyles. We hope that you will find these seven tip helpful in designing your small home.

Can I Be an Owner/Builder for my Timber Frame House?

Owner builders are people that enjoy a challenge and want to build their own timber frame house, either by contracting out the work or doing it all themselves. Most are also looking to save some money on contractor fees and gain control of the building process.

Most owner builders act as their own contractor. Some code offices require a licensed contractor be on the permit. If you are not a contractor and this is the case, you may need to make friends with a contractor that is willing to put their name on your permit.



Licensed contractors play several roles in the construction of the house. First, they hire subcontractors and act as the “go-between” between the subs and the owner, and between the subs themselves. They make sure that there is a logical scheduling of the various subcontractors. Contractors also have their own framing and general carpentry crews that they are used to dealing with. By acting as the contractor, you will need to find your own crews and orchestrate the scheduling of everyone. You will also need to make sure that all the supplies needed are on site for the workers to help prevent costly delays.

That brings me to another responsibility of the contractor.

Hired contractors also do all, or most, of the purchasing of supplies and materials. Because of the sales volume that they provide to various stores, contractors can usually get reduced prices or special payment plans. This is definitely a factor to consider if saving money is your primary goal. While you will generally pay a contractor 10-15% of the cost of the total job, you may not be able to achieve savings on materials like they can. Some stores will give owner builders the contractor rate so it is always worth asking for.

Last, another major responsibility of the contractor is to deal with the local code office and the varying permits and requirements that are needed to stay in compliance. As the owner builder, you are responsible for arranging all of the permitting for well, septic, etc... and for making sure the plans and actual construction are in compliance with building

regulations. If you are not familiar with the code requirements to begin with, this task alone can be very daunting and time consuming.

So...can *you* be an owner/builder of your timber frame house kit? Only you and your family can answer that question. It is a time consuming and mentally demanding project; but, chances are, if you decide to tackle building your own house, you will have a sense of ownership and pride at the end that you would not have otherwise. In the end, you must decide whether the control and potential savings are worth the large amount of time involved.

Wood Procurement - Timber Frame DIY

Once you’ve decided on building a timber frame structure yourself, it’s never too early to begin considering of your wood procurement. Your builder can help you develop plan and an accurate materials list. Finding and transporting large timbers



can provide some challenging moments but it can be as easy as making a few calls to friends with heavy-duty trailers or meeting with the local sawyer.

There are several options for procuring wood:

Buying from a Wood Broker or Mill

A wood broker deals with mills and salvage dealers of all sizes. They are most likely to secure rare woods and different grades with relative ease. Brokers are good at what they do, and they are experts at shipping and delivery. When a broker secures your timbers, you can bet that they will arrive planed, dry and ready to use. These advantages do involve extra costs.

Buying from a local sawmill or sawyer

No matter where you’re structure will be located, you may be surprised at the number of mills in your area. Native species will obviously be less expensive and readily available. Sourcing your



wood in this way may qualify your home for LEED certification, since you will not be spending much money on fossil fuels for long-distance delivery. You’ll also be supporting another local business person in your area. Depending on the sawyer, you may be responsible for hauling the timbers to your

site. Clearly communicate with your sawyer, as large timbers are not typically their specialty, however most do a great job in this extended capacity.

Milling Your Owner Timbers

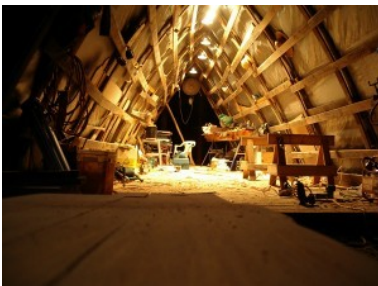
If you're looking for the ultimate self-sufficient method of building your timber frame home, you can borrow or rent the equipment to cut timbers from the standing trees on your home site.



Portable band saws or mills range in size and complexity—the bigger they are generally, the easier they are to use. The cost of owning one of these machines may be a bit high for the average home builder. It takes hard work and skill to master this process, but it can be done. There will be plenty of opportunities to roll up your sleeves and work hard during the building process, so I recommend hiring someone to do your on-site milling. An experienced sawyer can maximize the usable wood taken from each log, cutting down on waste and time spent milling on-site. They can also cut custom pieces, for example timbers with natural curves. Lastly, on-site milling means you are responsible for clearing all the waste, by either burning it or having it hauled off.

Material Handling and Workspace Design for Your Timber Frame Construction Project

The term material handling is used for the process of moving timbers in and out of the shop and around the yard. A lot of time and muscle can be spent on material handling. A timber framer can never just touch a piece of wood once and



consider it done until raising. Timbers will have to be moved around and it is important to organize a plan so as to reduce the amount of material handling to a minimum. There are several devices which will greatly assist you (and your muscles will thank you for them too.)

If you plan on cutting the frame yourself, I would strongly suggest investing in a new or used machine with hydraulics to save your back and muscles. We were able to find a used backhoe which helped significantly in the clearing and foundation stages, and also moving timbers around too (though it was a bit cumbersome due to size). If you do not need anything for clearing, then a skid steer with forklifts may be more useful (and a little easier to maneuver).

For moving wood small distances, a timber cart is well worth the investment. It is a 2 wheeled cart with a rest for the timber in the middle that is very nimble and easy to use. I would also suggest making multiple sets of saw horses. These will give you ample working space and make it easier to move timbers around, especially if you are working on several at a time.

Workspace

Assuming you don't have a workshop, tents work well for the actual cutting of the frame. We invested in (2) 10'x20' and one 12'x36' tents to cut the frame. The first 2 were purchased from Sams Club and the larger one was a handmade A frame with a large tarp as the roof. All were inexpensive, fast, and dry working spaces. If you have access to some old wood, making an inexpensive platform floor makes it even easier to move around. Otherwise, I would suggest putting down mulch to lessen the mud impact from heavy rains.

As far as inside the workspace, I would strongly suggest a bit of organization and good tools. We made piece drawings for every single timber so that the measurements were checked ahead of time and only needed to be cut once. We also allotted a bit of time each afternoon to cleaning up the workspace and readying it for the next day. Last, we bought good quality chisels and kept them sharp. Being able to start each new day with good drawings, a clean workspace, and sharp tools made our time cutting the frame that much more productive.

4 Tips on Working With Your Local Building Code Office With Your DIY Timber Frame Construction Project

One of the responsibilities on being the owner builder of a new timber frame home is to insure that the house complies with local codes, DHEC (environmental control), zoning, etc...



This typically takes longer than one usually allots and there is a specific order for getting your permits. Start early in learning the process of acquiring your permits for your well, septic, power, etc. and you will rest easier at night and know

your timber frame construction project will run smoother, thus saving you money. Many think of the building code offices around the country in a negative light but they do serve a good purpose and exist for a reason. They are there to make sure that your house is built properly to minimum standards and is safe not only for you, but any future owners. They have a defined book of standards that they operate from and while not as confusing as tax code; the building codes can be intimidating so make sure you find out which rules they follow, your local office will be more than happy to help you find the information you need. However, here are a few pointers to help you with the code office:

- Tell them about building a timber frame and whether you are using SIPS or not. The TF building process can change their standard inspection schedule and if they know ahead of time what you are working with, they can be more accommodating to what makes sense for your timber frame construction project.
- Be ready to have your [timber frame plans](#) and foundation plans engineered. In the [primary code book used, the IRC](#), due to the fact that timber frames are considered unconventional buildings they require engineering by most local offices and will require an engineer to sign off on your drawings. While this is an extra step the long term value you will get by having an engineer reviewing your plans is incredible.
- Be honest about your plans and try to be flexible and have patience. By showing them



early on that you intend to do good work (and not just throw something together), they will be more helpful in the long run. I hate to say it but prior planning does prevent poor performance (the 5 P's) when dealing with the building department.

- Please realize, they usually work with professional contractors who know the process so by doing your homework ahead of time, you will save time and frustration for all. Many departments have an online resource that you can tap into to find out the right information before you apply for your permit. I usually search for the county and "building codes" in Google when I am looking for the various code offices. This usually gives me the links to the information I need fast.

I hope this eases your mind a little in dealing with your local building code office. My goal was to give you some tips to ease your pain and to make you realize that they are a part of your construction team, so make sure you take advantage of this resource.

Purchasing Your Materials for Your Timber Frame House - Timber Frame DIY

If you choose to be an owner/builder for your timber frame house, you will likely get to know your local hardware stores well. You may even get on a first name basis with the employees of the big box stores. It can be both fun and terrifying at the same time figuring out not only what products to get, but where to get them from.

What to Get

We were interested in using some newer technologies in building materials that were not available in the Home Depot or Lowes stores. Therefore, we spent a decent amount of time on the internet researching products and



evaluating the pros/cons, and then finding out where to buy them. If that sounds like what you would be interested in, start researching and asking questions now. Pay attention to other people's houses and new houses under construction to see what they are using. The deciding phase can be very time consuming and mentally taxing as there are so many choices out there on a variety of products. Don't forget that there is frequently more than one good option and that there are some things that it is not worth having sleepless nights trying to decide what brand to get.

Where to Get the Stuff

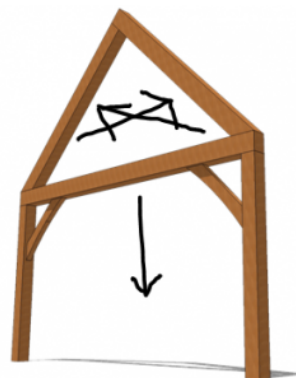
Many new owner/builders assume that Lowes or Home Depot (the big box stores) will always have the least expensive price on materials. While it is frequently true, it is certainly not always true and there are other factors to consider when deciding where to buy building materials.

You can often buy directly from the producer, thus skipping the middle man, and save a fair bit of money. For example, we bought our cedar shingle siding directly from a family owned mill in Maine and had it shipped to our house site. Not only did we get to deal with really nice people who were familiar with our order, we got a superior product for less money.

Small, locally owned hardware stores are also a great option. One local family owned store delivered any purchase over \$50 for free. Since we live 45min from the supply stores, this option saved us a lot of time, effort, and gas. They also often will give discounts to owners who are building their own timber frame homes, remember it never hurts to ask.

Single supply houses (electrical, plumbing, etc...) are also another good option. These are especially helpful if you have questions as they will usually lend a great deal of support. They will also frequently extend the contractor rate to owner/builders make sure you are friendly and respect that they normally deal with pros and you will get a better price.

No matter where you decide to purchase your building supplies, planning ahead can save you a lot of time. Having a general idea of all the plumbing supplies you need for a particular project before you're in the aisle will make the process easier. Last, don't forget to save your receipts, not only to keep track of your budget, but also to return any extra pieces that you didn't need.



lighting pattern creates a glow that creates an incredible ambiance to the space below. Since many light fixtures are not able to be used in a timber frame researching the various light fixtures out there this is a vital step beforehand.

How to Light a Timber Frame House - 5 Steps to Illuminate Your Home



Watch our companion video above

Lighting a timber frame house can certainly be a challenging aspect to the design of your home however as we look at these five proven steps you will not only be able to highlight your timber frame but make sure you don't blow the budget doing so.

Many folks including the electrician may look at this task as a daunting project that we can easily ease your mind and that of your electrician in the next couple of minutes. So the first step is...

Step 1 – Planning

This is the pivotal stage in planning how to light your home.

Working with your architect and designer to develop a thorough lighting plan is imperative. While I'm experienced in lighting design I always recommend that you visit a couple of electrical show rooms and talk with a professional lighting designer before finalizing your design. There are too many options out there for just one person to know them all.

Step 2 – Design

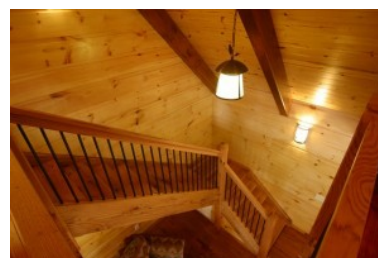
As a basic concept for lighting a timber frame great room or open area. The goal is to cross light the timber frame ceiling, so that the lights on the right point to the left of the center point of the ceiling and vice versa. This type of

Step 3 – Picking out the Light Fixtures

If you've decided to talk to a professional lighting designer then he or she has worked with you to choose the lighting fixtures for your timber frame home. However, if you're like me I ended up with a stack of catalogs and thumbed through them until I found styles that I liked. I then got online and researched pricing and about two thirds of the time the lighting supply store is cheaper and the other third the internet was cheaper. I would recommend sticking with the slightly higher cost and have the support and warranty that you will receive from going with the local lighting supply house, as long as they have experience with other timber frame structures.

Step 4 – Collaborating with the Timber Frame Company and Electrician

After you have developed both the timber frame plan and the lighting plan it is important to talk everything through with your timber frame company and your electrician, remember it is a team game building your house. They will all need to coordinate any chases and wiring considerations into their plans before they cut the timber frame and frame up the house. Talking



through this with the electricians before they get on site will both save you time, money and headaches in the long run.

Step 5 – Execution

While thorough planning is vital to a well executed lighting plan for a timber frame home. Nothing trumps the actual execution of the plan. This is when all the hard work during

the planning stage pays off. As long as everyone knows what is needed to hide the wires beforehand you can put light fixtures and switch boxes in the middle of timbers if need be.

Remember this is your project if you don't feel like something is going right make sure you speak up and voice your opinion so that everyone on your team knows your concerns so they can address them appropriately.

Those are the five steps in making sure you create a lighting plan for your timber frame that will not only illuminate your life but your timber frame home as well.

5 Exterior Lighting Tips For Your Timber Frame Home

When you're planning the electrical schematic for your new timber frame home, don't forget about your home's exterior and property. It's important to consider where you need power and lighting, both now and in the future. It's a lot easier to pre-plan for future electrical needs before your home is completed, rather than redoing and expanding your electrical system later.

When you're planning your electrical needs, you'll be considering the types and locations of your exterior lighting. Obviously, you'll illuminate your driveway, front walkway and porch. You'll also have a lighting design for your back porch and patio or deck. However, if you've been developing landscaping plans, you should consider the electrical needs for other areas of your property as well. Perhaps you envision a charming gazebo in a secluded section of the yard. You may have your eye on an outbuilding plan that would make a perfect storage area, workroom or studio. Your toddlers will soon be clamoring for a playhouse and your immature softscape may develop into attractive focal points that would be enhanced by subtle illumination.

You've spent so much time and effort designing your timber frame home. Planning attractive lighting to accent and enhance your unique home is a finishing touch you shouldn't neglect.

Plan Your Lighting

When you're considering how to set up your exterior lighting, take a couple of tours around your property. Take one tour during the daytime, and then plan another to see your yard at night. Your evening stroll will give you an opportunity to look for potentially hazardous areas like curbs and steps. You can also look for dark corners and areas that should have lighting for safety and security.



Observing the effects created by the moon and sun will help you determine what areas you want to illuminate.

Prepare a rough sketch of your house's footprint and your yard. Include the landscaping and walkways, porches and outdoor living spaces such as decks and patios. Lay out the locations of light fixtures and lighting patterns. This will probably change and grow as you consider all the potential lighting solutions that are available.

Use A Combination Of Lighting Styles For Total Illumination

Just as you use a variety of lights for different areas of your timber frame home, you should combine lighting techniques for your yard. This adds interest to your property and adds curb appeal for all who pass by.

For example, up light a specimen tree, cluster, or bushes while bordering a walkway with subtle down light path lighting. You may use spotlights to highlight architectural features of your home. This is a great idea for timber frame homeowners, as your house is a distinctive style that isn't seen often.



You can also create high contrast by placing spotlights to accentuate a specific zone with a dark area around it. There's so many ways to add interest to your property with lighting. You can use a minimalist approach or a symmetrical plan. Whatever style you choose, use a variety of lights to add interest to your home and property.

Ease Of Access And Use

When you're designing your outdoor lighting system, consider the most convenient locations for installing the switches. Indoor controls make it simple to manage all your exterior lighting day or night, and you won't be running outdoors in rain, sleet or snow to flip a switch. You can also have three way switches installed, so you have the convenience of both indoor and outdoor switches.

There are also special photocells you can attach to your lighting system that will automatically turn the lights on and off. There are also programmable control systems that give you continual automation based on your needs for different times of the day and days of the week.

Think Green When Planning Your Exterior Lighting

As a timber frame homeowner, there's a good chance you're part of the green movement. Using energy efficient lighting

and fixtures is just one more way you can contribute to lessening your carbon footprint.

Since lighting is the fifth largest culprit of electrical use in



your home, using energy efficient outdoor lighting such as LED and fluorescent fixtures can make a significant impact on your electric bill. You don't need to skimp on lighting the exterior of your home. You just need to think in terms of using the most efficient type of illumination to give you the style and security that's right for you and your family.

Using exterior lighting is like the frosting on a delicious cake. It certainly isn't necessary, but it adds a top note that accentuates and highlights a well-made product. Add a little frosting to your timber frame house to bring out its beauty and style.

How to Transform a Space into a Guest Suite in a Timber Frame House Plan

Adding a well-designed guest suite to your timber frame house plans ensures that your guests will find the room restful and welcoming. One of the joys of timber frame homes is the opportunity to share its beauty and warmth with friends and family. The planning stage is the best time to include such timber frame construction details as room size, window style and placement, how much storage and display space to include, and the ideal number of electrical outlets and cable or phone jacks.

Take Their Breath Away



While the master bedroom and the main living room should command excellent views, the view from the guest room is an essential part of the overall welcome. When making your timber frame house plans, consider all available views. While it may mean sacrificing a symmetrical home design, you and your guests will ultimately be happier with the change.

Include a private bathroom in your timber frame construction details. Even long-time friends will feel more at home when they do not have to share a bathroom with the rest of the household. Window options for the guest bathroom include round or Gothic-style arched windows with opaque or stained glass.

Because the timber frame provides all the support instead of the walls, you are free to create entire walls of windows in the bedroom itself. Bring the sunshine inside and offer the perfect frame for a patio view — complete with chimney, fireplace and a cozy arrangement of comfortable patio chairs, or an equally appealing view of a burbling brook edged with river rock. Such a view strikes a relaxing note that invites guests to enjoy the outdoor amenities of your home.

Room for One More

Adult guests sleep in greater comfort when you offer a queen or king-size bed. Tables on each side of the bed provide room for a reading lamp and clock. The tables need at least one drawer for small items, and a shelf for books and magazines. Include space for a desk, complete with phone, high-speed internet and digital cable jacks so that your guests have a place to write or work.

Include enough floor space for a wardrobe and a mirrored vanity in your timber frame house plans, so that guests have room for their clothes and a place to get dressed for dinner. A minimum two-foot clearance around all furniture means making your room dimensions at least 9 feet by 12 to 15 feet, especially if friends or family use wheelchairs or other mobility aids.

Benefits of a Walkout Basement in Your Timber Frame House

When evaluating the design of a timber frame house, an often overlooked area is the basement. Basements are typically used as a utility space and for heating and cooling units. A walkout basement is an excellent way to add value and living space to a timber



frame house. Walkout basements, sometimes called daylight basements, are in timber frame houses that are on a slope. This design has part of the basement above ground and that is where the entry door is located. The section of the floor covered by the ground is why it is called a basement. You can exit and enter a walkout basement without using stairs, you “walkout” right onto the ground from the door, hence the name.

Walkout basements are an excellent design in timber frame homes built on a slope. When a walkout basement is included in timber frame house plans, full-size windows can be

incorporated. This is why walkout basements are also called daylight basements. The advantages of a walkout basement with full-sized windows in a timber frame house are numerous because now, what was formerly a utility basement area, transforms into a living area with a myriad of possibilities.

With a walkout basement, with full-sized windows, many towns and cities will allow bedrooms in the basement because of the various means of escape. With a walkout basement, added bedrooms are available without added expense. It can also be used as a living room or a playroom, just about any living space would be well-suited in a walkout basement. No worries about dampness because the ventilation is taken care of by the full-sized windows and the fact that the living space part of the basement is not underground.

Walkout basements can also be used as a garage. Since a part of the basement is fully above ground, an entry garage door can be designed in the timber frame house plans. The part of the walkout that is underground can still be used as a utility space.

Walkout basements add value to a timber frame house since they add more flexible and livable space to a home. Since this is a multi-level design, costs are saved on roofs and foundations. A walkout basement adds value to any home.

Log vs Timber Frame Homes: What is the Difference?

Log homes and timber frame homes are structures that are built to last. These buildings can potentially last for centuries and are beautiful and dramatic showcases for builders and homeowners alike.

In lieu of dimensional lumber, both methods use solid timber construction materials. These buildings, with their massive timbers and self-supporting frames, do not require structural interior walls for support. A homeowner looking for the utmost in sustainability and long-term durability should consider these types of construction when shopping for a new home.

- Log Building is created from large logs that may be in their natural, round shape or machined into a rectangular form. These members are stacked to create walls, and the timbers interlock at intersections to form strong corners.
- Post and Beam Building uses upright posts to support horizontal beams. This type of construction uses metal fasteners and brackets.
- Timber Frame Building incorporates the beauty of furniture construction techniques with the engineering principles of post and beam construction to produce an attractive and strong method of building construction that is generally not covered by drywall, plaster or siding.



Log Homes

Log homes can be constructed with a number of methods to create the exterior walls. Although the final appearance of the structures is similar, the methods used are diverse.

The logs may be fully scribed and require no chinking. These logs are meticulously fitted individually as the structure is built.

Logs may be hewn into rectangular shapes and fitted with commercial chinking that is recessed between the logs as each timber is fitted into place. These timbers are processed and ready for assembly.

Rustic construction will have the chinking applied after the logs have all been fitted in place. A well-constructed log home is energy efficient if all doors, windows and flooring are properly installed and insulated.

Exterior and interior wood finishes can include oil, stains and polyurethane finishes. Chinking that is exposed may need periodic reapplication or sealants to protect the material.

Timber Frame Homes

The craftsman uses mortise and tenon joining methods, along with wooden pegs, to produce building frames that are meant to remain exposed. This wood, in its massive and intricate framework, adds to the beauty and grandeur of the home.



Structural insulated panels are generally used to create the fill between the timber framework. The use of SIP building material minimizes leaks, which helps to control energy loss. These panels have a high R-value and are extremely energy efficient.

Timber framing incorporates an artisan's approach to construction, and there are many dramatic and intricate framework designs that enhance the beauty of the home. The wood can be finished in a number of methods including hand-hewn, rough sawn, sandblasted, hand planed or planed and oiled.

A log or timber frame house is a style that a potential homeowner will either love or hate. This type of home is not for everyone, but regardless of your personal preference, these structures are certainly impressive. The care and workmanship used in constructing this style of building is exacting and the versatility and durability is undeniable.

What's a SIP?



Structural Insulated Panels, known as SIPs, is not a new idea. The whole concept actually began in 1937 when the United State Forestry Service began a quest to conserve our forests. The building industry started looking at foam core paneling in the 1970s with renewed interest, and it has since developed into an energy and cost efficient method that becomes a more mainstream option with each passing year.

- What Are Structural Insulated Panels?

SIPs building systems are used for light commercial and residential building construction. The panels are assembled with an insulating foam core surrounded by structural boards. The foam core can be rigid polyurethane foam, expanded or extruded polystyrene. The facings can be oriented strand board, aluminum, steel, cement board, plywood or pressure treated plywood.

The various types of materials used in the production of these panels are inherent



in the final application of the system. For example, pressure treated plywood is used for below ground foundations. Metal SIPs are commonly used for cold storage or environmentally controlled storage buildings.

The manufacturers of these products can produce custom fabrications for any building specification including timber frame homes. This flexibility allows for efficient construction with minimal labor costs and maximum energy efficiency.

This extends from the material production to the completed building.

- Building Green with SIPs

With proper construction, a structure built with SIPs is extremely well insulated and airtight. Airtight buildings use less energy for climate control, so a SIP building is a cost effective method to reduce the ecological footprint.

Environmentally responsible builders use SIPs panel construction as a means to reduce not only the energy costs to maintain the building, but to reduce the infiltration of contaminants and toxins as well. Pollutants like molds, pollen and radon can be minimized by airtight construction and proper ventilation systems. The indoor environment for healthcare facilities, schools and homes is an important issue that is effectively addressed with SIP construction techniques.

- Structural Insulated Panel Energy Performance



SIPs buildings can help reduce annual climate control costs significantly. In general, SIPs have a much greater whole-wall R-value than comparable stud walls.

However, this does require that the construction follow industry standards. Any voids must be filled to ensure proper insulation. The correct adhesives and sealants must be applied to prevent air and moisture intrusion into the building.

- Building Costs and Structural Insulated Panels

When all the factors are taken into account, building costs for wood frame construction and construction using SIPs are very similar.

Since SIP construction takes less on-site construction time, there is a savings in labor costs. With properly sized members ready and waiting to be fitted into place, the job is done in specific stages. There is little waste of either time or materials since the panels are constructed specifically for each building. On-site modifications to the individual panels is minimal.

Extended savings are accomplished with smaller heating and cooling systems because of the improved insulation and airtight nature of the SIPs building.

Structural Insulated Panel technology has developed to make it an economically sound alternative for the average construction company and homeowner. SIPs building systems are important as we look for ways to control ever-growing energy costs and attempt to become more ecologically responsible.

How Do I Incorporate Passive Solar Into My Timber Frame House

Timber frame homes have a long history that can be seen in medieval and Tudor buildings throughout Europe. Timber framing eliminates the need for the typical studs in house framing and allows builders to fill in the gaps with a variety of materials. Today this same timeless design can be as energy efficient as it is beautiful and it lends itself to passive solar building techniques.



A good timber frame house design is capable of lowering a household's carbon footprint and with a few energy producing additions and it can be moved off the power grid all-together.

Passive solar does not mean that you have to install solar panels and produce electricity. Passive solar homes use interior and exterior design to maximize winter heating, summer cooling and daily light. A well designed home can save more money by increasing heating and lighting efficiency than by using solar panels, although solar panels can further decrease a homeowner's the reliance on the local energy grid.

The wide spaces between the beams of a timber frame home can fit a wide variety of insulating materials. Straw bale and found materials are fun and easy to find possibilities, but more fuel efficient insulations are possible such as SIP's. The beam spacing also allows builders to design in the all important south facing windows which form the aperture to let in sunlight during the cold part of the year. Basic timber frame home design already uses an open floor plan, which allows heat and light to reach every part of the house.

In a passive solar timber frame home, the flooring material helps absorb and radiate or conduct heat energy gathered by the aperture window. The top layer, near the aperture, should be dark in color to absorb as much heat as possible. Below the top layer of flooring is the thermal mass. This flooring layer can be stone, concrete or another material that will conduct the absorbed heat.

Timber frame homes are gaining popularity in the US. They are easy to design and build and even easier to include design features to fit modern, energy efficient demands. These features do not add very much to the cost because they take the place of other materials. Simple attention to the orientation of the house and choice of window placement makes an enormous difference. Floor plan and materials that allow absorption and heat exchange in a completely passive way reduce the home's carbon footprint.

Timber Frames and Green Building



When you build a timber frame, chances are you'll be building a green home without even knowing it. However, if sustainability is a priority for your building project, then you'll be glad you chose a timber frame home. Beyond incorporating green measures like high-efficiency appliances and regulated lighting systems, timber frame buildings, by its nature, is considered green in the following ways:

Local Sourcing of Materials

In most instances, timbers and other materials can be sourced locally. In some cases, you can even select certain standing trees from your building site to use in the construction of your home. In the region where Timber Frame HQ operates, there are still several local sawmills, so you can be sure you're supporting your local economy if you choose to have your beams hewn onsite.

Recycling of Materials

Some homeowners choose to recycle existing timbers. This can prove beneficial for your structure, since salvaged timbers have gone through a curing process and they maintain their shape for the life of the structure. Also, you're recycling! Doing so can earn you credits toward LEED certification, if that's something your interested in. Your project manager should worth with you to ensure that your salvaged timbers are structurally sound. He may also be able to help you locally source your recycled timbers.

Maximizing the Site's Natural Features

When you build a custom home, you can use the natural features of the land to contribute to the efficiency of your house. An example of this can include incorporating south-facing windows all the way to constructing a rammed-earth home built into a hillside.

Sustainable Structures

Lastly, timber frame structures simply last longer than conventionally-built homes. Some of the country's oldest structures have timber frame foundations. In most instances, timber frames maintain their structural integrity through fire and other disasters. Their legendary durability means you'll only have to build one, and it will last a lifetime, maybe more.

Eight Energy Saving Ideas for Your Timber Frame House

Did you know that taking small steps to save our environment and reduce our dependence on foreign oil but it can also help you save money? If you follow one or all of the tips below, you can actually see real savings on your energy bill. You don't need to do everything but you can do something.

First, you will need to make sure that your architect, designer and contractor have followed the best practices when creating the timber frame house plans. By using passive solar theory, using the best timber frame construction techniques and focusing in on the timber frame construction details the contractor can save you a bunch of money over the long run.

In a typical U.S. home, appliances and electronics make up about 20% of energy use. The first step is to look for Energy Star labels when buying appliances and products. Energy Star labels are strict guidelines created by the U.S. Department of Energy and Environmental Protection Agency for



energy efficiency. Follow some of these tips to help make the environment better for our future generations and save money at the same time.

Light bulbs: Use energy saving CFLs (Compact Fluorescent Light bulbs) instead of the conventional incandescent light bulbs. Although CFLs cost 3-5 times as much as the incandescent light bulb, CFLs only use one-quarter of the electricity and lasts years longer. Each CFL bulb contains 5mg of mercury so you will have an extra item to sort in the recycling bin.

Dishes: Never load your dishes in a dishwasher unless they are a full load. Air-dry dishes instead of using a dryer.

Laundry: Wash clothes with warm or cold water instead of hot water when you can. Instead of using a dryer, air-dry or hang your clothes on a clothes line. Don't use the dryer unless it houses a full load.

Refrigerators: Think of what you want to take out before you open the refrigerator. Leaving the door open will waste extra energy.

Take Showers, less Baths: Taking showers instead of baths will reduce water usage and also lower your heating bill.

Turn Off all Appliances Not in Use: Turn off all lights, computers, and electronics when they are not in use. Plug all your electronics such as computers, TVs, and DVDs into power strips. Using a power strip can reduce electricity used to power

home appliances. Even when your appliances are turned off, energy is still being consumed from the outlet. To avoid extra energy costs, unplug the appliance or use a power strip. The power strip has an off button to cut all the power from the appliance.

Weather-Strip Windows and Doors: Check windows and doors for air leaks. Air leaks can be sealed by caulking or weather-stripping. By securing the leaks in your home, hot and cool air will be kept in your home longer. Less heating and cooling will help you save on energy costs.

We hope this gives you at least one idea to take and use inside your timber frame house.

What Makes a Timber Frame Home a Cottage?

The fairy tale image of a timber frame cottage evokes thoughts of a cozy, charming retreat. Cottages offer a restful alternative to elaborate formal decor or austere contemporary design. While cottages exist with a variety of unique features drawing from centuries of architectural and cultural influence, they hold a timeless appeal.



Rendering by Steve Arthur, copyright 2012

Cottages are typically smaller than the average modern home, containing two or three small bedrooms and a small bath. Kitchen and living spaces are also compact and may be combined into one space. Two-story cottages often consist of dormer windows tucked into an attic area to create a bedroom or sleeping loft, while the bedrooms of one-story cottages open directly into common areas with no adjoining hallways. The use of natural, rustic elements is common in cottage plans. Exposed rafters, plank floors and other bare-wood features contribute a great deal to the ambience of the cottage home. Alternatively, painted wood surfaces such as white paneled walls, railings and cabinets maintain the rural, comfortable atmosphere of the dwelling. Stone is a popular choice for floors and kitchen and bathroom surfaces. Ample windows allow natural light to enhance these features.

Architectural components of cottages include clean, straight lines or gentle, understated curves. Inspiration for cottage style draws from a variety of sources, from European chalets to the cabins of the Arts and Crafts movement. Wood, stone, brick and stucco are all used for siding in striking combinations. Bold paint colors from rich, earthy hues to light, airy pastels increase the visual impact of the smaller home without overwhelming the senses. Occasionally, stone, wood shakes and even pseudo-thatch replace modern shingles as roofing materials.

Airy porches often extend living spaces to the outdoors. Informal, organic landscaping using natural stone, meandering paths and traditional plants enhance the charm of the cottage home. Arbors, trellises and fences consisting of bare and painted woods or wrought iron are welcoming additions.



The carefree atmosphere of a cottage lends itself to colorful, whimsical decor. Neutral walls and floors provide the ideal setting for bright, boldly patterned fabrics. Petite furniture pieces stand out in vivid colors. Inviting overstuffed sofas and cushions paired with simple rag rugs provide a pleasing respite. Rustic vintage tables and chairs encourage cheerful family gatherings.

Cottages are ideal as vacation homes situated by a picturesque lake or deep in a secluded forest. They are also attractive additions to small town neighborhoods. Cottage plans incorporate classic, informal design elements into inviting, diminutive spaces.

5 Reasons to Build a Screened Porch

A timber frame screened porch is a welcoming feature that adds character and charm to a home. Here are five reasons why homeowners should consider building a screened porch:



1. Stop Pesky Insect Intruders

The most obvious purpose for a screened porch is to thwart invading flies, mosquitoes and other unwelcome creeping guests from ruining your enjoyment of the great outdoors. Avoid harmful insecticides and annoying bug zappers without missing another sunset and the pleasant sights and sounds of twilight. Enjoy a catnap free from the persistent buzz of a winged invader humming in your ear. A screened porch also creates an extra barrier between the interior of your home and the bugs outside.

2. Expand Your Living Space

A screened porch provides a quiet reading nook, a well-ventilated crafting area or an intimate space for casual entertaining. Children play contentedly and safely without scattering their toys throughout the family room. There is no need to set up a tent or other gear for an impromptu campout, and lunch becomes a picnic with no extra effort on your part. A screened porch adds valuable square footage to your home.

3. Enhance Curb Appeal

Porches add charm to any home, a welcoming entry that extends beyond the front door. A screened porch is a striking feature that will make your home a notable presence in the neighborhood. Visitors are enveloped by hospitality between the front path and the front door. A porch also works as a drop zone for muddy shoes or wet umbrellas after it has sheltered your guests from inclement weather.

4. Enjoy the Rain as Well as the Sunshine

A sudden summer shower can be an exhilarating display of natural beauty rather than an occasion to run frantically into the house. The midday sun is subdued by the cool shade of your screened porch. Weather extremes are kept in check, increasing the time you can spend outdoors and making the turn of seasons that



much more enjoyable. Windows under the protection of the porch roof are better protected from cold winds and full sun, making an impact on your utility bills.

5. Experience Nature in Relative Privacy

Casually drinking a cup of coffee in your pajamas, practicing yoga and even sneaking a midnight snack are more pleasant in the tranquil peace of nature. A screened porch provides some seclusion while allowing you to connect with the environment. Relaxing pursuits are uninterrupted by the prying eyes of neighbors.

A Look at the 2012 Western Timber Framers' Guilds Conference

I am sitting here in the San Francisco Airport looking back and reflecting on the past few days. You see, I just attended the [Timber Framers' Guild](#) Western Conference just outside Monterey Bay at the Asilomar Conference Center.



It always amazes me just how much I enjoy hanging out and talking with a group of like minded folks who are all passionate about the craft of timber framing. It was the first conference that I have attended in the past several years and I am certainly planning to make a more regular appearance after the great conversations and speakers that they brought in.

It is also the first Western Conference that I have attended and it was good to meet and introduce myself to everyone on the west coast. As well as a great place to visit, Asilomar is located right on Monterey Bay. During the breaks it was nice to be able to go for a walk along the boardwalk and see some of the local deer that are located on the peninsula.

The conference started on Friday with a quick meeting to hear news from the Board of Directors of the Guild and then the start of the various presentations. I won't go through them all, but the presentations ranged from hard skills like design and timber drying, to marketing and the history of timber framing in California. After the [TFBC Trade Show](#), which displayed the latest tools and innovation that the specialty suppliers provide to us all, after dinner we all sat down for the slide show where everyone can share their work with the group. It is always good to see what other folks are designing and building. I have always been able to take away some incredible details that I can incorporate into my designs.

Saturday morning, we all gathered for the Feature Presentation by [Dr. John Francis](#) on Redefining the Environment. It was an amazing story of one man's journey after deciding not to speak, or travel in a motorized vehicle, for 17 year after a devastating oil spill in the San Francisco Bay in the early 70s. He followed with how he was able to help change the way folks look at helping the environment. I have added his book to my must read and I recommend that you read it too. It is titled [The Planet Walker](#).



After his passionate talk, it was off to more presentations covering topics from working with an engineer, design flaws, and air infiltration. During the middle of the day, the finals of the Axe Throwing Competition took place and Gabel Holder from the Holder Bros. TF won the day. The day was wrapped up with the Benefits Auction which is always a great way to hang out with everyone and support the guild.

During the entire conference the team from [Fire Tower Engineered Timber](#) was holding the Joint Testing Sessions. Basically anyone could submit an entry to the



contest and they were put through the test. It was certainly a highlight of the show for everyone, and I was disappointed that I was not able to have an entry. After I looked into the shipping of the timbers through UPS, I decided I better hold off until the Eastern Conference this fall in Leesburg, VA. After the results are officially published, I will include a link so you can see the results.

On the final day, I attended the Veterans Voice presentation with John Miller of Cascade Joinery. With his motivational talk, I was able to walk away with things to think about and put to use in my life and businesses. Last, a presentation on timber frames and seismic events along with a one on one session with an architect.

Sunday is left as a half day to help folks get back to home so they can start assimilating all the information that they consumed during the 3 day event, and start putting it to good use. I know my mind is racing with new directions and topics I want to learn more about.

I would recommend to everyone that has an interest in the craft of timber framing, whether you are a person just curious about the craft and want to learn more, or a seasoned joiner in the shop, to attend just one of these events. It will not be a waste of time. I would like to also like to thank Joel McCarty and the Board of Directors of the Guild



for the hard work that they put into the organization of the event. I can only imagine the amount of work that it takes to pull one of these events off. Another thanks goes out to the other sponsors that made the event possible. I will be working in the next couple of weeks to get their names so I can post them here.

Until the Fall Conference....

Highlights - 2012 Eastern Timber Framers' Guild Conference

Whew! What a whirl wind of activities and emotions over the past few days. Once again, I am sitting in the airport reflecting on the past 3 days of the Eastern Timber Framers Guild Conference just outside Washington, DC in Leesburg, VA. Meeting new and old friends and colleagues who all share a passion for the craft of timber framing always leave me feeling good about the path that I am on.

The main speaker was Tedd Benson of Benson Homes. He is one of the folks that revived this craft from the ashes in the US in the 1970s. The first time I heard him speak was at my first conference over 10 years ago. He motivated me then and continued to do that this time as well. In his presentation, "The Heart of a Timber Framer", he spoke about finding timber framing, the path he took to getting to



where he is today and the state of this noble craft. One thing that I never knew is that he started off as a conventional framer in Colorado Springs, and continued developing his skills finally finding timber framing. From there, he became the icon in the industry. Here are a few things I took away from it:

- We own the problems that we see.
- Homes are the center of lives and families.
- Quality of life begins at home.
- How you are working is more important that what you are doing.

I look forward to the next time I hear him speak...For me it was one of the highlights of the conference.



That was just the beginning of the fun and motivation that I got during the weekend. Another great presentation was hearing

Jack Sobon talking about using hand tools exclusively and the economics of it. He has been keeping track of his time and had some data that made his point that sometimes it is just quicker to use hand tools over grabbing a power saw or drill. It is certainly something that I will continue to employ in my projects.

Once again the teams from FraserWood and Firetower Engineering put on the Joint Busting



Contest. You can see some of the highlights in this video. They have been testing and breaking mortise and tenon joints for the past few conferences and next year will change up and start busting a new type of joinery. I look forward to reviewing the results and the next round of timber frame joints they plan to bust.

The slide show was great success and great fun. It is always good to see what other are doing from around the country. I always take away something that I can put to use in my designs.

In the evenings we retired to the bar for some great bluegrass music played by a group of the attendees and great conversations. This time around I threw my iphone of the floor and recorded a song that they played you can listen to it by clicking here. It was a good time had by all.

I would recommend to everyone that has an interest in the craft of timber framing, whether you are a person just curious about the craft and want to learn more, or a seasoned joiner in the shop, to attend just one of these events. It will not be a waste of time. I would like to also like to thank Joel McCarty and the Board of Directors of the Guild for the hard work that they put into organizing this event.

It always amazes me just how much I enjoy hanging out and talking with a group of like minded folks who are all passionate about the craft of timber framing. I hope to see you at the next one.