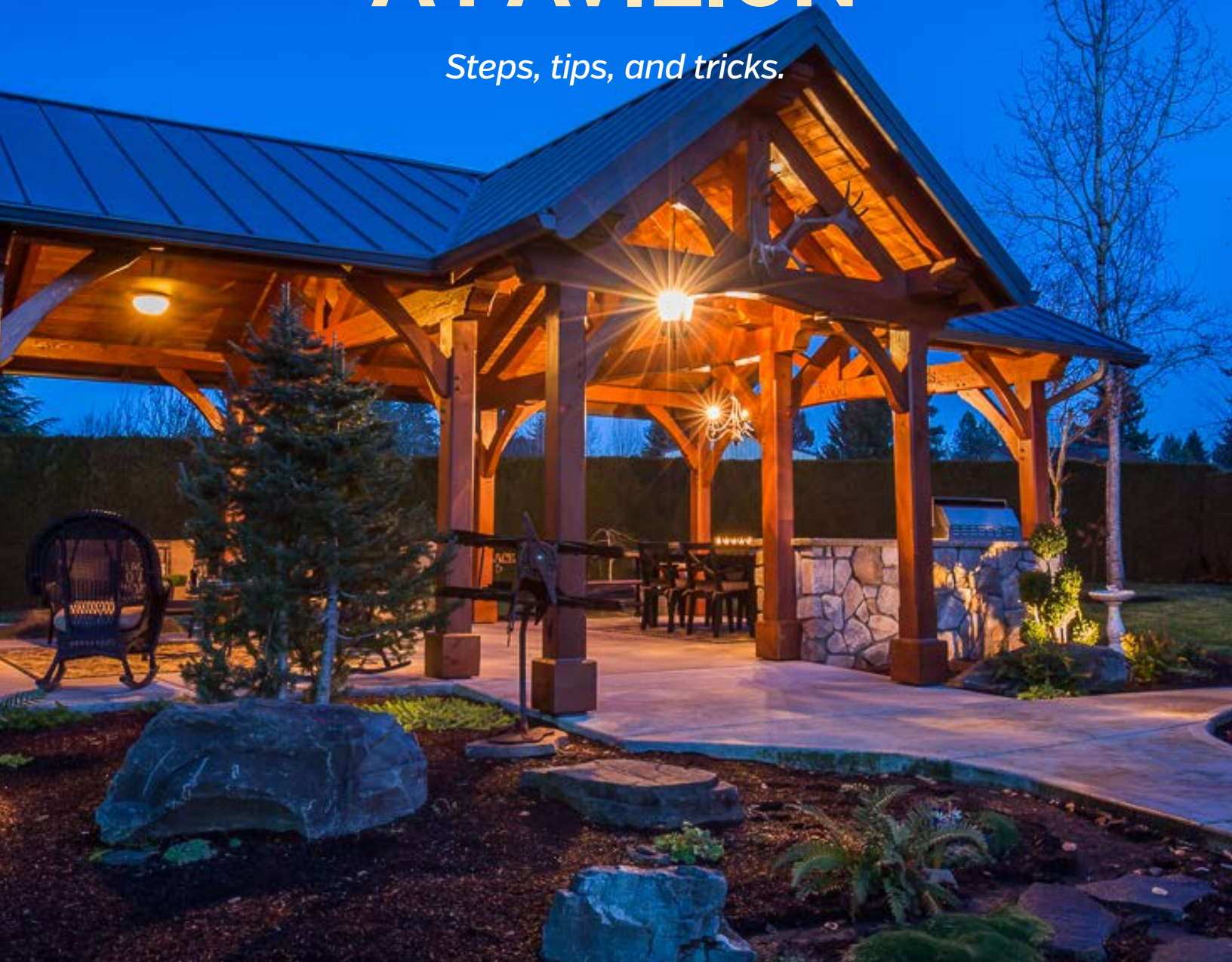


THE DIY GUIDE TO BUYING (AND BUILDING) A PAVILION

Steps, tips, and tricks.





Transform your backyard into a sanctuary—a resort-like place to retreat from the world—with a do-it-yourself Framework Plus pavilion kit. All you need is a sunny afternoon, a few tools, and some friends to help you set timbers.

It's easy, too. Just ask any of Framework Plus' clientele. The Oregon-based company ships their kits via truck. All kits contain expertly designed structures that are handcrafted with mortise and tenon joinery, fully engineered construction drawings, handmade oak fasteners, Douglas fir tongue-in-groove roof decking, and assembly guides.

"We just shipped a frame to a retired dentist in Pennsylvania," says John Pederson, owner and CEO of Frameworks Plus. "He sent us photos of him and his friends, wearing overalls, erecting his pavilion. He said they had a lot of fun doing it."

Follow these six DIY steps to make your dream pavilion a reality, too.



Laura B. Kozlowski photo

TIMBER FRAME 101

Without question, building a true timber frame is more fun when you can speak in the same vernacular as the Roman and Anglo Saxon craftsmen who first originated these designs. Here's a cheat sheet.

Post:

The legs of every timber frame and the principal weight-bearing frame members. Anything vertical in a frame is a post. Their names include principal posts (used at the corners) or king, queen and crown posts—to name just a few. Each has a specific role to support other beams or trusses. For example, a samson post supports the intersection of four horizontal upper story beams. A jowled post (also called a gunstock post) is fashioned from a whole tree turned upside down to utilize the natural flare of the trunk.

Horizontal Timbers:

Specialized beams have their own nomenclature. These include timber sills (the perimeter of floor sections upon which posts stand), girts (which span between posts also where the term “girder” comes from), joists (used to support floors), purlins (used between exterior posts or tie roof sections together), and ridgepole (the horizontal apex of the roof system). A summer beam is a main structural member used to carry the weight of floor joists or to tie girts together.

Truss:

A truss is the name given to a collection of beams that have been connected together to form a frame for the roof. A triangle is the simplest form of truss and is most often used in small buildings. Adding a king post in the center of this triangle allows for a wider span. Queen post trusses, in contrast, look like a rectangle within the triangle. The hammerbeam is the most dramatic in appearance, used to span large interior spaces like those found in cathedrals and courthouses.

Bents:

When trusses are combined with the vertical posts and horizontal beams they are called bents, which form the basic cross-section of a timber frame. Bents give the frame the strength it needs to carry the structural weight of your new pavilion.

1 DETERMINE YOUR BUDGET

Framework Plus' most modest 10'x10' timber frame pavilion starts at \$12,000. Depending on the client's budget, homeowners will add custom amenities, such as kitchens, bars, fireplaces, lighting, TVs, sound systems, hot tubs, and spas. The higher the finishes, the higher the final tab.

2 DECIDE ON A DESIGN AND ORDER

Visit frameworkplusinc.com, review our design options, and pick your favorite. If one of the kits is perfect for your applications as is then you can order it on the spot. We can also modify existing designs, or make a completely custom order, if you have a special request. If local codes require engineering approval that will be supplied.

3 EARN BUILDING CODE & HOA APPROVAL

Double check whether you need to pull a building permit. Building permits are written authorizations from a city or county allowing for construction. While it varies by location, you will likely need to:

- Complete permit application
- Prepare site plan
- Obtain plan approval
- Schedule inspections
- Obtain final certification when construction is finished

If your neighborhood is governed by a homeowner's association, you will have to earn the approval of the HOA as well. Discover how much time will be required for this review and approval.

THE FRAMEWORK PLUS Q+A

Q: How to get started?

A: Fill out the get a quote form on frameworkplusinc.com.

Q: How long does it take?

A: Design, fabrication, and the delivery of your timber frame to your home can take two to three months.

Q: How do local sales reps help?

A: Regional project managers from Woodhouse–The Timber Frame Company in Mansfield, PA help homeowners around the country order and build their own pavilions.



Three Tips to Success

1. Rent a lull with a telescoping forklift to be on hand on delivery day.
2. Rent a material lift to erect the frame and some of the higher timbers. It's a necessity for some of the larger frames.
3. Secure two to four helpers to help you move timbers around.

4 DISCOVER FOUNDATION REQUIREMENTS

Most homeowners choose to mount their timber frames on poured concrete pads, stamped concrete, or pavers.

5 TAKE DELIVERY & BUILDING THE FRAME

A trucking company will deliver your timber frame pavilion to your home at a predetermined time. Have your staging area prepared to receive the timbers and be ready with three to five friends to help unload all the material when the truck arrives.

6 DIY

Erect the frame, install landscaping or roof shingles, keep the job site clean, and take responsibility for any number of other smaller tasks to help save money. Don't forget to apply a clear maintenance coat six to 12 months after construction and then as needed, to protect the wood from Mother Nature.

➔page 7



Timber Frame vs. Post & Beam Structures

Some companies offer lower cost construction using “post and beam” structures. These companies supply square-cut dimensional lumber or engineered lumber, such as laminated beams, with metal fasteners that include metal plates, screws, and bolts. Timber frame structures on the other hand use high grade solid timbers with traditional peg, mortise, and tenon joinery, which creates an authentic artisan aesthetic.

Four Awe-Inspiring Projects

1 SUMMER OUTDOOR LIVING PAVILION

in Damascus, Oregon

This king post truss style pavilion is an attached outdoor living area in Damascus, Oregon. The customized Timberline pavilion kit features skylights, stone fireplace, and a bespoke timber mantel. This 18' x 20' pavilion with tongue and groove wood ceiling makes outdoor living stylish and comfortable.



Four Awe-Inspiring Projects, Cont.

2 BEAVER LAKE OUTDOOR LIVING

Nestled next to beautiful Beaver Lake in Oregon City, Oregon is the perfect setting for this amazing 18' x 30' Timberline style timber frame pavilion. Peace and tranquility are abundant as you settle in with a good book or just relax and listen to the birds around you. A natural rock fireplace complements the surrounding landscape while the Douglas fir timbers look at home next to the natural trees surrounding this gorgeous setting.



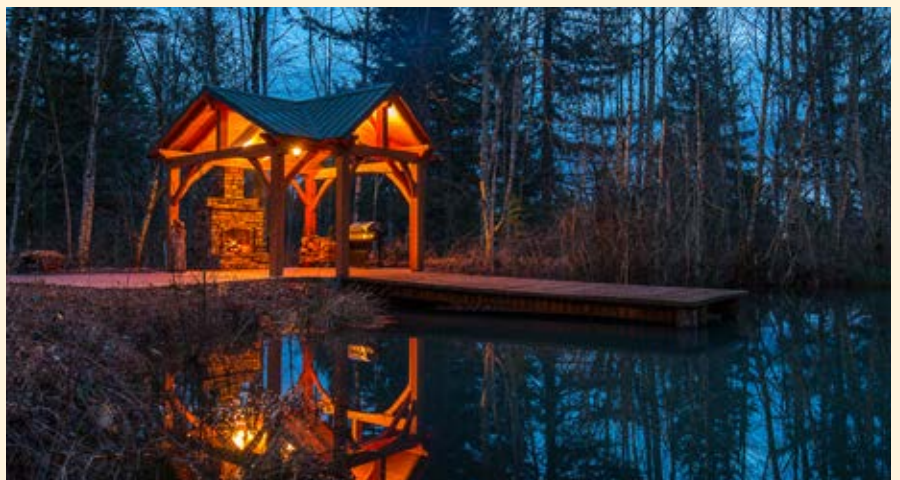
3 TIMBER FRAME HYBRID HOME in Brush Prairie, Washington

This custom, hunting lodge-style home in Brush Prairie, Washington features 34' hammer beam trusses with 6" x 6" purlin rafters. Hybrid homes use structural timber frame trusses for a portion of the building, with conventional stick framing in other areas, allowing homeowners to create dramatic open spaces without breaking the bank.



4 TIMBER FRAME POND PAVILION in Brush Prairie, Washington

Paired with this custom timber frame hybrid home in Brush Prairie, Washington, this 14' x 14' Timberline pavilion kit with a minimalist king post truss is set in a scenic lakeside location. With tongue and groove ceiling, rustic outdoor lighting, and a stone fireplace, this cozy pavilion is an affordable approach to comfortable outdoor living. The roofing material was selected to match the existing hybrid home on the property.





Building your own timber frame outdoor living structure is an exciting and fun process: not only does it bring family and friends together for the exciting “barn raising” process of erecting the structure, but it will continue to unify your community throughout its life-cycle by providing an ideal space for hosting events and enjoying the outdoors!

Fill out our Contact Us page, or reach out to your local project manager any time if you have more questions, or when you are ready to get started on the process of building your dream outdoor structure:

Jamie Thompson
Midwestern Regional Project Manager
 Office: 517-740-9717
jthompson@timberframe1.com

Don Downs
Southeastern Regional Project Manager
 Office: 336-528-3202
ddowns@timberframe1.com

Jay Hodgson
Northeast Regional Project Manager
 Office: 607-391-5221
jhodgson@timberframe1.com

Jon Shockley
Mid-Atlantic Regional Project Manager
 Office: 302-470-2237
jshockley@timberframe1.com

Ben King
Western Regional Project Manager
 Office: 303-495-0812
bkking@timberframe1.com



Pre-cut, Systems Built, and Delivered to your Door

Timber frame structures usually are custom designed and constructed, and generally cost more to build than conventional construction. This is because of the availability of both heavy timbers and the builders experienced in crafting them. Fabricating a complex framework of massive timbers on-site would be a daunting task for most contractors. This is why the vast number of timber frames are crafted in indoor facilities that are equipped to handle large timbers with ease, and staffed by artisan woodworkers with decades of experience.

Defining Timber Framing

This centuries-old classic form of construction uses heavy timbers that are connected using mortise and tenon joinery. The result rivals fine furniture construction. All parts of the structural frame, including the roof trusses, posts and beams, interlock together with no nails, screws or metal brackets. The wooden pegs or tenons also used to be called trunnels, an ancient contraction of the words tree and nail. The bents and various joints are assembled flat on the shop floor and the sections are dismantled and each timber is “branded” with a chalk mark or incised symbol that corresponds to its place in the building schedule.

What Kind of Stain is Used?

Framework Plus uses Timber Pro Coatings, <https://timberprocoatingsusa.com>, to stain its timber frames. The company pioneered one of the first environmentally friendly wood finish technology, starting in 1996. With facilities in Portland, Oregon and Richmond, BC, Canada, the company created a natural plant-based stain that does not rely on petroleum oil or its derivatives. This eco-friendly formula has proven to be exceptionally durable.