

Mid-Atlantic
TIMBERFRAMES



TIMBER TALK



Autumn 2021

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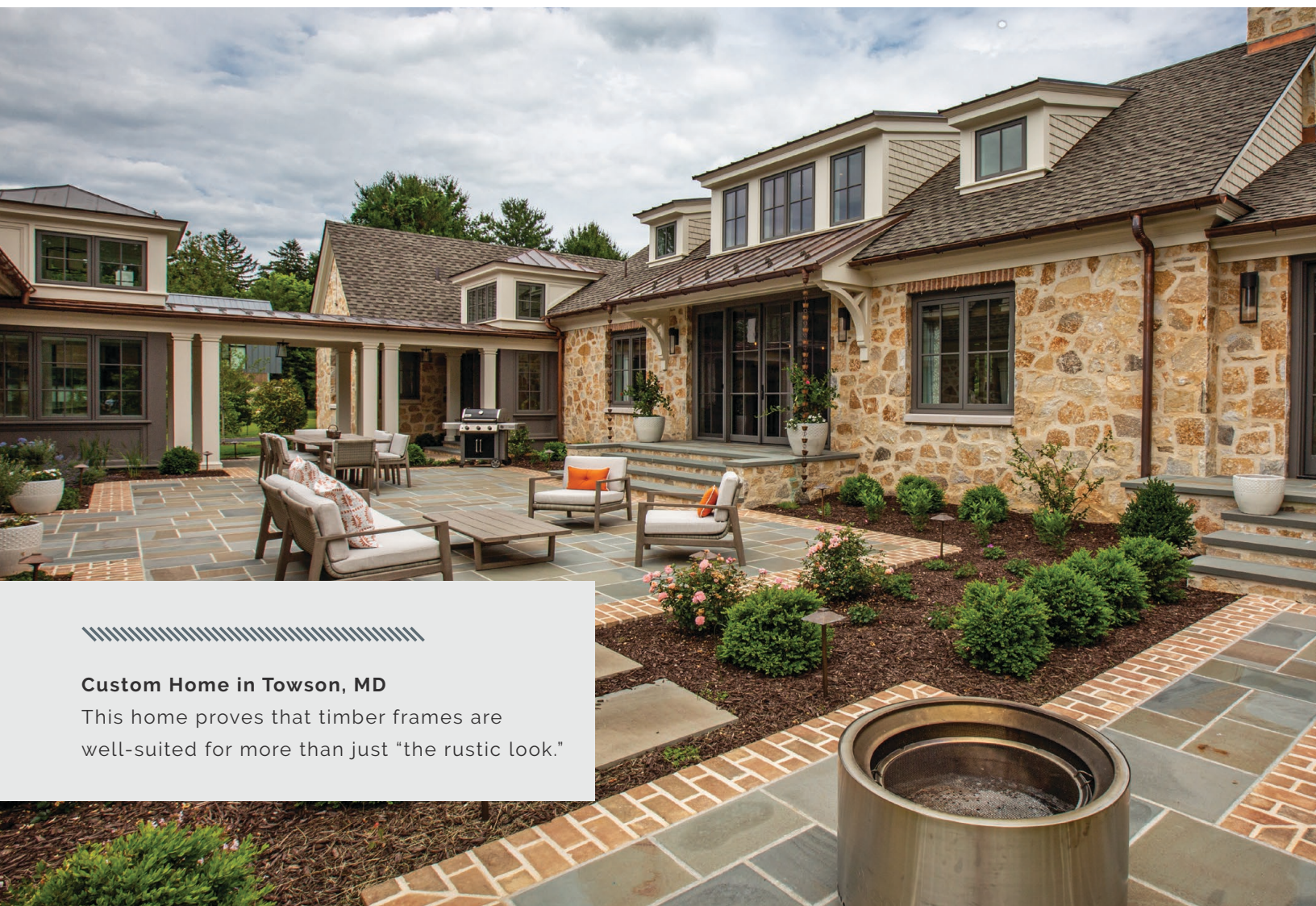
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ASK AN EXPERT

What is the process of building a timber frame?



Custom Home in Towson, MD

This home proves that timber frames are well-suited for more than just "the rustic look."

INDUSTRY NEWS



Lumber, Timber Prices Remain Mixed

It's no secret lumber prices hit record highs in late 2020. Time spent at home during the pandemic led to a surge in remodeling and building, driving demand for finished lumber. However, that same time spent at home meant timber harvesting, processing, and transport ground to a halt, limiting the supply of finished lumber.

Supply and demand dictated that lumber prices soared, but the price of timber itself remained fairly steady. The inventory of standing timber (in particular, Douglas fir, one of the most popular species for timber frame structures) has remained high in recent years.

With the workforce slowly returning, this timber inventory being turned into finished lumber has helped meet demand, and lumber prices have dropped considerably. But, we've been seeing higher prices than usual in 2021 for some other timber species and specialty materials such as tongue and groove. Ongoing economic uncertainty could mean further price fluctuations, so staying flexible with materials and budgets will be key moving forward.



Mitigating Acoustical Challenges in Timber Buildings

Mass and heavy timber are versatile, beautiful building materials, but sound transmission can be an issue. Following IBC codes for acoustics helps, but consider the following to take sound mitigation to the next level:

- Use an acoustical mat between CLT floor panels and the underlayment to dampen impact sounds like footfalls.
- Install natural insulation (e.g., mineral wool and gypsum board) on either side of the walls to muffle airborne sounds like music and talking.
- Employ hybrid building methods, such as combining concrete with mass timber, to reduce sound transmission in general.

PROJECT SPOTLIGHT

Custom Home



Architect	Melville Thomas Architects, Inc.
Builder	Johnson Residential LLC
Location	Towson, MD
Points of Interest	<ul style="list-style-type: none">• Great room• Bedroom

Though timber frames are often used to create a rustic look, this project proves they're equally at home in a more modern setting. We used heavy timber trusses in the foyer and vestibule of this custom home, as well as unique laminated curved barrel trusses throughout the project. The painted white timbers in the kitchen and living room provide a bright, airy space perfect for entertaining.





There's a perception that timber frames make a home feel "dark." These painted white timbers do anything but!

ARCHITECT HIGHLIGHT



John Wolstenholme | Wolstenholme Associates

What inspired you to become an architect?

I've been a licensed architect for 18 years but have more than 27 years' experience in the architecture/design industry.

From a young age, I was obsessed with building models and Legos. In high school, I worked for my brothers, installing custom kitchens, working in a machine shop, and installing car audio systems. These experiences strengthened my appreciation of the possibilities of wood and metal and the importance of acoustics.

Before my first job in architecture, I worked for a model maker, reinforcing my desire to become a licensed architect. I became a designer at an architecture firm, then earned the appropriate degree from Drexel University.

Which project are you most proud of?

The adaptive reuse of the Nathan James Building, built in 1888 in Doylestown, PA. Designed by Milton Bean, the building had fallen into disrepair. We designed a major basement renovation (which became our main office), high-end offices for tenants on the first and second floors, and an eclectic apartment on the third.

I'm proud of this project because it was possible only through the support of my family, employees, friends, and builders we collaborate with often. I spent many evenings and weekends working on the building with the help of my family members.

For our efforts, we won the inaugural Mayor's Stewardship Award from the borough of Doylestown, as well as an AIA Bucks County award specifically for the basement renovation,

a very special achievement since it is home to Wolstenholme Associates' office.

Where do you find inspiration?

When designing an addition or a renovation, I draw a lot of inspiration from the existing structure itself. Paying attention to the historical trends and architectural details of the past is integral to developing design ideas. I also follow high design through magazines, social media, and the product of quality firms.

What are your thoughts on designing with timber?

Designing with timber makes sense on many levels. Adaptive reuse is a wonderful way to preserve historic barn frames. They are easily adapted for open living, and their reuse exemplifies the terms "sustainable" and "renewable," all popular with our customers. Because of the range of unique qualities that timber offers, we've successfully created design aesthetics from very rustic, to modern rustic, to very modern. Also, using structurally insulated panels with a timber frame creates a very efficient enclosure and greater flexibility for door and window placement.

Which structure in the world do you find most interesting?

Many structures may be more of an engineering marvel, but the Reichstag in Berlin, designed by Norman Foster, is one of the most interesting because of the story it tells about shedding light on democracy in postwar Germany. It's an amazing modern renovation of a historic structure, which significantly increased its energy efficiency.

Photo by AG Photography



Want to be our next Architect Highlight? Email Sam Ebersol | samuel.ebersol@midatlantictimberframes.com



"Adaptive reuse is a wonderful way to preserve historic barn frames."

– John Wolstenholme

Photo by Vidal Photography

ASK AN EXPERT



What is the process of building a timber frame?

At Mid-Atlantic Timberframes, we work with architects, engineers, and contractors throughout the life of a project to harness all of the efficiencies and possibilities of building with wood. But as our name suggests, we specialize in the core ingredient of a timber structure — the timber frame itself.

To start, sustainably sourced and harvested timber arrives to us from the Pacific Northwest as rough-sawn beams. We first plane the beams (with our 1920s planer!) to make sure each side is straight, level, and free of splinters.

Then, we use our CNC machine to make precision cuts for the timber dimensions, post lengths, and truss configurations specified in a project's design. We do some work by hand, too, such as making intricate cuts on valley rafters or chiseling corners on housings.

Next, we finish the beams with an orbital sander or a rougher head finishing process, then test every joint in each beam to ensure it's a tight fit. When the beams meet our high standards, we deliver them to the building site and erect the timber frame ourselves.



Sam Ebersol | General Manager

Sam has 25 years' experience in the timber frame industry. He got his start erecting timber frames, then graduated to layout and cutting, and eventually learned the design and estimating side of the business. As the general manager of Mid-Atlantic Timberframes, he oversees all of the company's departments, as well as its sales, estimating, design, fabrication, and erection of timber frames.

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Mid-Atlantic TIMBERFRAMES

Advancing the Art of Timber Construction

Mid-Atlantic Timberframes builds custom legacy homes and academic, agricultural, and one-of-a-kind commercial structures. Timber frame construction provides versatility that traditional construction methods can't match, for limitless building possibilities. We employ innovative computer-aided design and computer numerical control (CNC) machining technology, bringing our craft to a higher level of precision and resulting in exceptional structures that deliver lasting durability and peace of mind.

For more information about Mid-Atlantic Timberframes, visit [**midatlantictimberframes.com**](http://midatlantictimberframes.com).