The POST-FRAME ADVANTAGE

POST FRAME

An Engineered Wood Building System.

Versatile. Cost Effective. Durable. Sustainable.

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The ADVANTAGES

Post-frame buildings are all around us, in urban and suburban settings.

# of POST FRAME

Because of its durability, flexibility, cost-effectiveness, and sustainability, post frame is now the construction method of choice for an increasing number of commercial and residential applications. Post-frame buildings are all around us, in urban and suburban settings. Designers and owners of strip malls, convenience stores, restaurants, multi-family housing, garages, office complexes, schools, churches, banks, fire stations, airplane hangars, and warehouses are increasingly turning to post frame to meet their low-rise building needs.

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Versatile. Cost Effective. Durable. Sustainable.

Post-frame construction is an engineered wood-frame building system that features large, solid-sawn posts or laminated columns instead of wood studs, steel framing, or concrete masonry. In post-frame construction, wood posts function as support columns for strategically integrated wood framing components. Wood columns are typically implanted in the ground or surface-mounted to a concrete pier or masonry foundation, and then trusses and secondary framing components such as wall girts and roof purlins are attached.

Read more about the advantages of this very modern, engineered wood building system on the following pages. Learn about how post frame is shaping today's building landscape, delivering unmatched value for your building dollar.


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Electrical

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VERSATILE

Almost any kind of roofing, exterior siding, and interior wall can be used in post-frame building.

Post-frame buildings support a wide choice of interior and exterior finishes, roofing products, and architectural details. Almost any kind of interior wall finish can be used in a post-frame building. Vinyl, steel, and wood siding; stone, brick, and stucco; architectural foam, fiber cement, and backerboard are all viable options for exterior façades. Any roof pitch can be chosen and covered with metal or asphalt, wood, tile, or slate shingles. It is typically more cost-effective to add overhangs, gables, dormers and other visual interest to post-frame than to steel-frame buildings. Other architectural features such as porticos, canopies, guttering, window and door trim, and wainscoting are also commonly added to post-frame buildings.

Post-frame construction accommodates high, open spaces and wide, clear spans. For religious facilities and commercial, institutional, and industrial buildings, clear-spans in excess of 100 feet and large uninterrupted spaces allow for open, flexible floor plans uninterrupted by load-bearing walls or columns.

Financial institutions with limestone entryways, traditional concrete-block schools, brick-and-mortar office complexes, strip malls and other retail establishments, warehouses, and other industrial facilities can all be quickly and economically erected as post-frame buildings.

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COST EFFECTIVE

Post-frame construction is a cost-effective option because it requires fewer materials, less-expensive components, and less construction time than comparable methods.

The cost of post-frame construction is generally lower because it requires limited wall- and roof-framing materials and minimal footing and foundation materials. In many instances preservative-treated posts or isolated concrete piers embedded directly in the ground serve as the foundation for the post-frame system, eliminating the expense and time of pouring a continuous foundation. Large glued- or nail-laminated wood columns are widely spaced, so fewer wood materials are needed than for traditionally framed buildings.

From site preparation to project completion, construction times are very short for post frame building, which reduces labor costs. Post-frame column spacing is very wide, typically between 8 and 12 feet, and the crew spends less time installing fewer structural members. An experienced crew can erect post foundations, side and endwall wood posts, wall girts, roof trusses, and roof purlins in 2–3 days. Many light-commercial buildings are completed in 90–120 days.

Although almost any type of exterior finish can be used, 26- to 29-gauge ribbed steel panels are used for siding and roofing on many post-frame buildings. They can be quickly and easily installed and provide decades of low-maintenance service.

Many light-commercial buildings are completed in 90–120 days.

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DURABLE

Post-frame buildings consistently outperform many other structures, particularly in the area of durability. When compared to other wood-framed construction, post-frame systems provide greater structural stability and also the capacity to build a much higher sidewall with fewer materials. The posts in most post-frame buildings are either embedded directly into the ground or are attached directly to the top of cast-in-place or precast embedded concrete piers. Posts may also be attached to continuous concrete or masonry foundation walls or to thickened edges of concrete floor slabs above grade. Portions of posts embedded directly in the ground must be properly pressure preservative treated.


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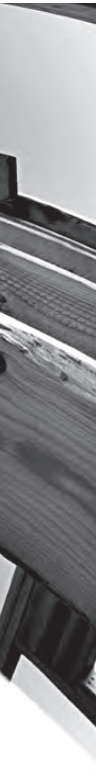

Post-frame buildings are relatively lightweight and perform exceptionally well under adverse conditions.

Any of these post-foundation options transfer lateral loads efficiently and directly to the ground and add to a building's stability and wind resistance.

Post-frame buildings are relatively light-weight and perform exceptionally well under adverse conditions. The diaphragm design procedures used in post-frame building account for how all of the building components work together to transfer lateral loads to the foundation. This makes these structures highly resilient under the pressure of external stresses such as design wind, snow, and seismic loads.

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SUSTAINABLE

Wood is a renewable resource that is widely available and sustainably harvested throughout North America.

Post frame is an energy-efficient building method and its primary material, wood, is a renewable resource that is widely available and sustainably harvested throughout North America. Wood is strong, and innovations in engineered wood products allow it to be used for longer spans and taller structures than ever before.

The widely spaced, relatively thick wood side and endwall posts minimize the number of thermal breaks and the thermal bridging effect in post-frame buildings. Wood is a good insulator, thereby reducing heat transfer at the widely spaced thermal breaks in post-frame systems. Condensation accumulation on the inside wall surfaces at thermal breaks is practically eliminated.

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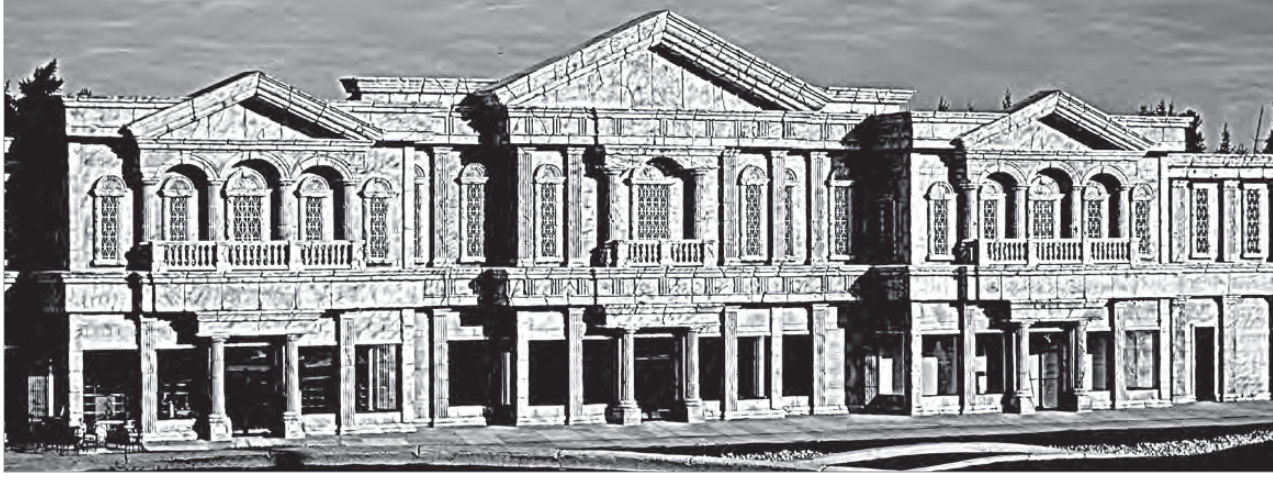
Where newer energy codes require higher levels of insulation, post frame is a particularly good option because its walls and roofs are relatively easy to insulate. Wide column spacing allows for continuous insulation between structural elements, fewer interruptions in insulation material, and less chance of thermal leakage.

Where the insulation is interrupted, wooden structural members have natural insulating properties and conduct less heat than most structural steel or masonry components. Post-frame buildings feature an exceptionally large built-in wall cavity for ample insulation, thereby lowering heating and cooling costs throughout the year.

Visit

WWW.POSTFRAME

to discover the strength and durability, design versatility, energy



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and cost efficiency, and sustainability of post-frame construction.

PHOTO GALLERY

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Craftsman Construction
Hafer Associates
Kistler Buildings, Inc.
Lester Buildings, LLC
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Midwest Manufacturing
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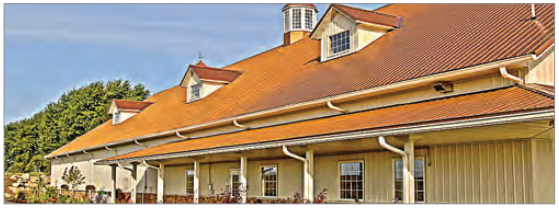
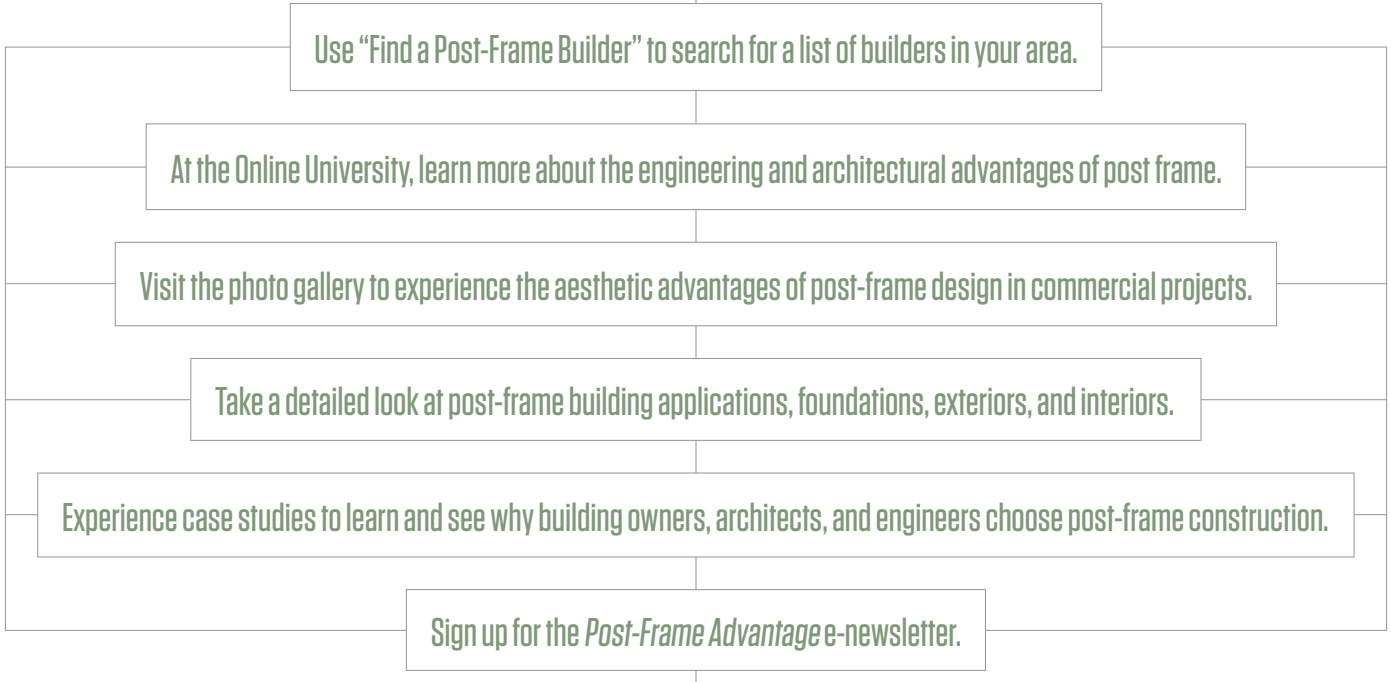



For your next low-rise building project, turn to www.postframeadvantage.com for the most up-to-date resources and information.



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1 tennis court

62,634 L of water
179 days of water consumption

949 kg of waste
19 waste containers

2,466 kg CO_2
16,496 km driven

28 GJ
128,947 60W light bulbs for one hour

7 kg NOx
128,947 60W light bulbs for one hour

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