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APRIL 2022  
Vol. 34, Issue 2

## Buildings of the Year



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# It's Time To Act

Dear Readers and Advertisers,

In light of the current political events, here and abroad, I am asking for your help.

I am unwilling to see friends and family at risk and remain silent and passive. We need to do what we can to prepare and force our government to prepare for conflict.

We are potentially on the verge of war with another superpower. War would obviously be catastrophic for most of the domestic residential, commercial and agricultural construction industry.

War would obviously be catastrophic. If the conflict remains confined the uncertainty combined with increasing energy prices and general inflation creates a near-perfect storm that would be disastrous for our industry.

There are several things our government needs to do immediately. One of the foremost is to reinstate exploration and drilling

on federal land. Petroleum products are critical for a war effort and take time to process to a usable form. It would also undermine our opponents' cash flow and ability to continue its aggressions.

We also need to stop allocating funding to frivolous programs. Our spending-to-GDP ratio is comparable to that during World War II. With this level of debt, we cannot afford to fight a war. We can resume these programs after the conflict. In the concept of guns and butter, it is unfortunately time for guns.

I am not advocating war. Weakness and appeasement have never prevented violence. Consider this quote: "A man unskilled in violence can no more claim to be a pacifist than a eunuch can claim celibacy." We need to be prepared and current policy does not have that result.

During the pandemic we provided a re-

source to contact your representatives and send pre-written letters. We are in the process of relaunching a similar initiative.

Please do everything in your power to persuade the administration to take the steps necessary to prepare, including opening energy production and reallocation of unspent money from the stimulus programs to our military.

The only thing worse than war is fighting a war you are not prepared to fight.

Speaking out now is not only what is best for our industry, it is the morally right thing to do. Please contact your representatives and become active in any way you can.

Thank you for your support and may God bless those placed in harm's way.

— Gary Reichert, Publisher/CEO

Please contact your representatives by visiting <https://rollformingmagazine.com/contact-your-representative/>



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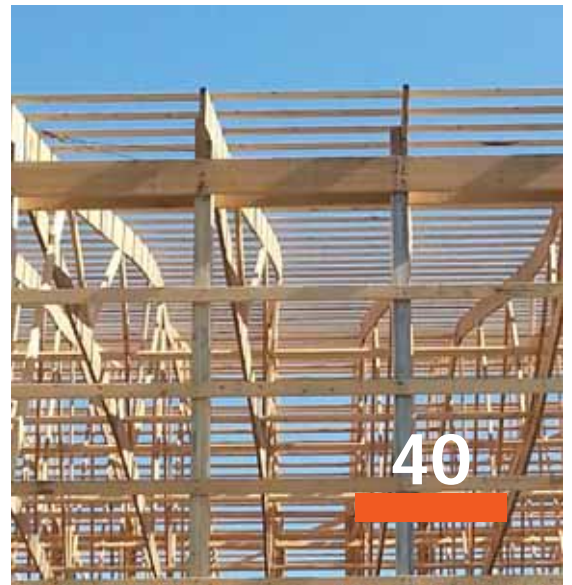
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## Industry Partners



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SEE PAGE 6



### Merger Unites Qualiform Metals, Country Metals, Hixwood brands

Three market leaders in metal fabrication and post-frame building kits — Country Metals, Hixwood and Qualiform Metals — are merging under the Hixwood name, creating a larger footprint for the combined entities and positioning the company for future growth.

With the merger, Hixwood now covers a 17-state region across the Midwest and Eastern United States.

This merger creates new efficiencies, better access to supply and improved service to customers, said Brad Crawford, president and CEO of parent company Ambassador Supply.

“Hixwood has had strong growth in the last decade. We will continue on that trajectory, and we will be making announcements soon about

new expansions in Wisconsin and Ohio,” Crawford said. “All three of these companies have a legacy of excellence, and this merger will build on that foundation.”

Hixwood was founded in 1998 in Stanley, Wisconsin, and since that time has expanded to meet customer demand, including 53 percent growth since being acquired by Ambassador in 2021. It moved more than 30,000 tons of steel last year alone.

For Hixwood [www.hixwood.com], the merger is an opportunity to keep that momentum and explore new markets.

“Hixwood is ready to expand, but we’ve lacked the capital and resources in recent years to do so as aggressively as we would like,” said Hixwood General Manager, Paul Zimmerman. “This merger allows us to move forward with confidence.”

Customers of Country Metals and

Qualiform Metals should expect the same commitment to quality services, Crawford said.

“The marketing, website and logos on the trucks have changed,” he said. “Our relationships with customers have not. If anything, this will provide more resources to ensure we meet customer needs.”

### About Hixwood

Hixwood has been supplying high-quality coil, metal panels, trims, fasteners, accessories, and prompt service since 1998. It was founded with the desire to provide a competitive line of products to wholesale dealers throughout the Midwest and beyond. Product knowledge and application have allowed them to become one of the leading suppliers in the market today.



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- Cupolas
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- Weathervanes

### Wick Buildings Announces Transition to Majority Employee Ownership

Wick Buildings, Inc. [www.wickbuildings.com], a company that designs, manufactures, and builds post-frame buildings, has announced it has become a majority employee-owned company.

Wick's ESOP (Employee Stock Ownership Plan) was established in 2013 and has purchased a majority ownership from members of the Wick family. An ESOP is an employee benefit plan, facilitated through a trust, which provides company stock to employees as part of their retirement benefits. The largest remaining family owner is John F. Wick, who founded Wick Buildings.

"This is a milestone for the Wick Buildings family and employee team that we

have been working toward for several years now," stated Allan Breidenbach, president of Wick Buildings. "The acquisition of a majority ownership guarantees Wick will continue the legacy of quality and superior service to our customers, which was established by our founder over 65 years ago."

US Department of Labor data shows that employee-owned companies outperform non-employee ownership in employee growth and stability, and provide higher returns on retirement assets than non-ESOP companies.

In continuous operations since 1954 and with more than 75,000 buildings completed, Wick Buildings provides post-frame structures for residential storage, homes, municipal, commercial, light industrial, agricultural, dairy and equine markets.

### ABC Supply Co. Inc. Acquires the Assets of Seattle Cedar Supply

Building products distributor ABC Supply Co. Inc. [www.abcsupply.com] has acquired the assets of Seattle Cedar Supply, a full-service roofing materials distributor. Founded in 2004, Seattle Cedar Supply has a single location at 8811 36th Street Southeast in Snohomish, Washington.

The acquisition will enhance ABC Supply's service in the Seattle metropolitan area while building stronger relationships with contractors and builders in northern Washington. Current Seattle Cedar Supply associates will continue to work at the location, ensuring customers receive seamless access to the products and expertise they need to run their businesses. **FBN**

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# EQUESTRIAN BARN

ALPINE CUSTOM BUILDERS

*www.alpinebuilders.com*

**BUILDERS:** Alpine Custom Builders

**BUILDING SIZE:** 38' x 88'

**ROOF PITCH:**

Gambrel 4/12 & 16/12

**DOORS:** Silvercraft Dutch doors,

Silvercraft sliding doors

**FOUNDATION:** Mono slab under timber framed part; post-framed on open areas

**INSULATION:** R-19 batt

**POSTS:** Triad Building Components, 3-ply 2x6

**ROOFING:**

Cor-Ten Corrugated Steel

**INTERIOR:** Exposed timber, 1x8 covering all interior walls & ceiling

**TRUSSES:** Quality Truss & Design; Montana Timber Tech

**WALL PANELS/SIDING:**

Rough sawn board & batten

**DORMERS AND CUPOLAS:**

Hand-framed



**T**his barn was built to be used as a wedding venue for the owner's daughter, and subsequently will be used as an equestrian barn. The enclosed part is a timber framed structure designed and cut by Montana Timber Tech. The open area with the lean-tos is a post-frame structure. The builders built a 2x6 frame around the timber frame in order to insulate the enclosed part of the building.



# SPRING



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# WORKSHOP & OFFICE SPACE

## CRITEL BUILDINGS

[www.critelbuildings.com](http://www.critelbuildings.com)

**BUILDER:** Critel Buildings

**BUILDING SIZE:** 80' x 180' x 20'  
w/ attached 12' x 24' x 10' office

**ROOF PITCH:** 3/12

**DOORS:** Clopay Garage Doors  
commercial insulated steel, 36' x  
16'; split metal sliding door, 24' x  
16'

**FOUNDATION:** Concrete frost foot-  
ings w/ Sturdi-wall Brackets

**INSULATION:** Kraft R-19 batt  
walls; R-30 blow-in ceiling

**POSTS:** Midwest Columns, LLC, 8"  
x 36", w/ Sturdi-wall Brackets

**ROOFING:** Hixwood Metals Pro Q  
Plus Panel, 29 ga.

**INTERIOR STEEL LINER:**  
Workshop section: Hixwood Metals  
Pro Q Plus Panel, 29 ga.

**TRUSSES:** Quality Trusses, 4' o/c,  
Risk II

**VENTILATION:** 12" vented boxed  
overhang, 2 sides & 2 gables

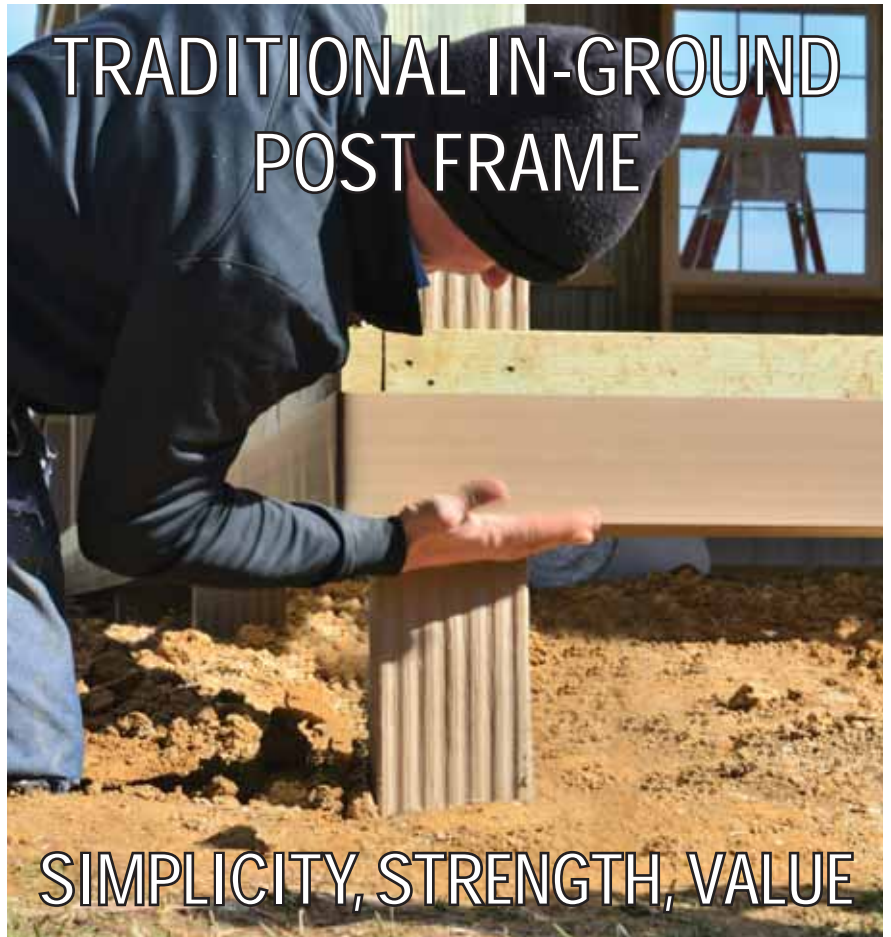
**WALL PANELS:** Hixwood Metals  
Pro Q Plus Panel, 29 ga.

**WINDOWS:** Simonton insulated,  
single-hung, 4x4, white



**T**his project was completed for a farmer in Bertrand, Nebraska. He needed additional space for his ag operation that included cold storage, a heated workshop, as well as a small office area. We designed a building to incorporate all three into one structure. The owner is able to store equipment in the cold storage section while having a climate-controlled workspace to complete any repairs and maintenance. The building includes an office area as well. It was added as a separate enclosed lean-to attached to the end of the building. A 36'-wide garage door was needed to accommodate his equipment size. An engineered I-beam was installed for structural support.





# EQUESTRIAN

BURKHOLDER CONSTRUCTION LTD

<https://burkholderconstructionllc.com>



**BUILDER:**

Burkholder Construction LTD

**BUILDING SIZE:** 60' x 92'

**ROOF PITCH:** 4/12

**POSTS:** Richland Green Posts,  
3-ply, 4-ply

**ROOFING:** Metal Exteriors Parallel  
Rib, 29 ga., Dark Green, w/DripStop

**TRUSSES:** Precision Truss

**WALL PANELS/SIDING:** Metal  
Exteriors Parallel Rib, 29 ga.,  
Rustic Red

**CUPOLA:** Metal Exteriors



**T**he owner needed to take his clients outside to access the arena, which was a nuisance, especially in cold and wet weather. He wanted a new connector building to tie into, while not structurally attaching to, three existing buildings that were not completely square with each other.

The first challenge was demolishing the existing lean-tos. Then, the rainy weather was not very accommodating. However, the unusual aspect of this project was connecting to buildings that continued to be in use.

All challenges were met and the final building features a 12' cantilever overhang with a reverse gable set to accommodate a future expansion. The interior includes new stall, tack room and lounge/viewing areas.





NO GROUND-CONTACT

NO DECAY FUNGI EXPOSURE



# REPAIR SHOP

POPPLERIVER CONSTRUCTION

[www.poppleriverconstruction.com](http://www.poppleriverconstruction.com)

**BUILDER:** Popple River Construction

**BUILDING SIZE:** 96' x 124' x 24'

**ROOF PITCH:** 3/12

**DOORS:** Plyco Corp. 92 Series entry, Wayne Dalton overhead

**FASTENERS:** ST Fastening Systems Kwikseal Woodbinder

**FOUNDATION:** Concrete stem wall

**INSULATION:** Dense-pack cellulose walls and blown-in cellulose

**POSTS:** SCI Laminated Columns

**ROOFING:** Everlast Roofing Lynx Panels, 28 ga., black

**SHOWROOM CEILING:** McElroy Metal M-Cor galvanized metal panels

**TRUSSES:** Precision Truss

**VENTILATION:** Vented soffit and ridge cap

**WALL PANELS/SIDING:** Everlast Roofing Lynx Panels, 28 ga., Crimson Red

**WINDOWS:** Alliance Window Systems Hawthorne sliders, picture windows

**ENTRANCE SIDING:** Moderra mortarless masonry siding

**ENTRY ROOFING:** Everlast Snap-lock metal



This building was constructed for Road Runner Repair, a heavy equipment repair company in Cadott, Wisconsin. It includes repair bays, office space, retail space and parts storage space. The vivid building colors were chosen to complement the business logo colors. The owner preferred wood-frame over steel-frame for the ease of insulation and interior finishing.







# EVENT VENUE

## GREINER BUILDINGS

[www.greinerbuildings.com](http://www.greinerbuildings.com)

**BUILDER:** Greiner Buildings

**BUILDING SIZE:** 54' x 120' x 18'

**DOORS:** Plyco Corp. 92 Series, commercial storefront glass

**FASTENERS:** Maze Framing Nails, Atlas Steel Screws

**FOUNDATION:** Embedded with 48" concrete frost wall

**INSULATION:** Closed cell spray foam, R-19 (walls), R-38 (roof)

**POSTS:** Glulam w/ Green Post, MCA treated, 4-ply 2' x 6'

**ROOF PANELS:** JMAC Quad Panel steel, G90 substrate, 26 ga., Trinar paint: Onyx Black roof and trims

**TRUSSES:** 2x clear-span

**WALL PANELS:** JMAC Quad Panel steel, G90 substrate, 26 ga., Trinar paint: Alpine White walls

**WINDOWS:**  
Commercial storefront glass



**T**he Hidden Acre Wedding and Event Center is located in Waverly, Iowa. This grand indoor/outdoor wedding and event center can accommodate 300 guests or more. Over 12,000 square feet of space provides a beautiful and sophisticated environment for couples to host elegant weddings, including The Main Hall, Fireside Room, Reception Room, main floor Groom's Room, second-floor mezzanine with Bridal Suite, enclosed lean-to and spacious outdoor courtyard. Enormous picture windows provide ample lighting during the day, and chandeliers light up the night. The full-service stone bar and floor-to-ceiling stone fireplace add both warmth and wonderful picture opportunities.

The owners chose post-frame construction because it delivers the modern country aesthetic and sophisticated beauty required of a rural wedding and event center, including vaulted ceilings, chandeliers and exposed truss framework. Post frame provides an energy-efficient and low-maintenance facility, important for a large, busy event center that may host five or more different functions in a weekend. The post-frame construction method also allowed the owners to meet a specific business budget.





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# MULTI-BUSINESS

MILLER'S PREMIER CONSTRUCTION

<https://millerspremier.com>

**BUILDER:**

Miller's Premier Construction

**BUILDING SIZE:**

40' x 72' w/ 16' x 8' porch

**DOORS:**

ProVia Service Doors, 24 ga.

**POSTS:**

Richland Laminated, 3-ply 2x6

**ROOFING:**

Premier Metals, Black, 29 ga.

**TRUSSES:** Hostetler Truss

**VENTILATION:** Vented eave soffit  
and ridge vent

**WALL PANELS:** Premier Metals,  
White walls, Black wainscot, 29 ga.

**INSULATION:** MWI Components  
single bubble underlayment

**WINDOWS:** Silverline 3 x 3 Sliders

The owner of this building had it constructed with the intention of operating his remodeling business out of one section, leaving the other section for his wife's beauty salon.



# COMMUNITY SPACE

LEVEL EDGE CONSTRUCTION • [www.leveledgeconstruction.com](http://www.leveledgeconstruction.com)

**BUILDER:** WJ Gross, Inc.

**BUILDING SIZE:** 50' x 100'

**ROOF PITCH:** 6/12

**FOUNDATION:** Perma-Column

**ROOFING:** AB Seam, standing seam, 24 ga.

**TRUSSES:** Scissor Trusses, 24" o/c

**WALL PANELS/SIDING:**  
ATAS International Rigid Wall II;  
Eldorado Stone Cladding

**WINDOWS:** Andersen 400 Series

**CUPOLA:** Steel Louvered, 4' x 4'



**T**his Camden County, New Jersey, building was constructed for the use of county residents. This multipurpose building will serve as an event meeting venue and a farmer's market. The building has a commercial kitchen and also features indoor and covered outdoor meeting spaces.

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# HOME/SHOP

CRITEL BUILDINGS

<https://critelbuildings.com>

**BUILDER:** Critel Buildings

**BUILDING SIZE:** shop: 50' x 80' x 16'; residence: 32' x 50' x 18'

**ROOF PITCH:** 5/12

**DOORS:** Clopay Insulated Steel: (2) 10 x 10, (1) 12 x 12 Black commercial

**FOUNDATION:** Concrete Frost Footings with Sturdi-Wall Brackets

**INSULATION:** Sol-R-Eclipse Vinyl Back Insulation: R-10 on shop. R-19 batt in house section w/ R30 blown-in in ceiling

**POSTS:** Midwest Columns, LLC, 4-ply 6x5.25 laminated columns

**ROOFING:** Hixwood Metals Pro Q Plus Panel, 29 ga.

**TRUSSES:** Quality Trusses, 4' o/c, 30# GSL

**VENTILATION:** 24" vented soffit

**WALL PANELS:** Hixwood Metals Pro Q Plus Panel, 29 ga.

**WINDOWS:** Heartland Windows, black 3x3 insulated, 3x4 insulated

**LEAN-TO:** Wrap around lean-to w/ rustic brownwood wainscot



**T**his project was completed for a customer in Phillipsburg, Kansas. He and his wife had a vision in mind to have ample living quarters and shop space all in one structure while still maintaining a residential look on the house portion. We worked alongside the customers to make their dreams a reality. The shop home features lean-tos with rustic barn wood wainscoting around the 2-story residential section, and with 4000 sq.ft. of shop space, it provides plenty of room for storage and hobbies. This building's customized design really sets it apart from your standard post-frame building.

Our crew endured some high winds and snow at times during the building process, but overall the project went very smoothly and resulted in satisfied customers who are ready to begin the finishing interior touches.





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# FARM STYLE HOME

MALLET BUILDINGS

[www.mallettbuildings.com](http://www.mallettbuildings.com)

**BUILDER:** Mallett Buildings

**BUILDING SIZE:** 34' x 56' x 20' w/  
(2) wings 23' x 82' x 14'; gable 1:  
15' x 15' x 14'; gable 2: 34' x 26'  
x 20'

**ROOF PITCH:** 6/12

**FASTENERS:** Zack Screws

**INSULATION:** Coverttech/rFOIL

**POSTS:** LA Truss LLC owned by  
Lee Mallett: (34) 4" x 4" x 12'; (34)  
6" x 6" x 20'; (29) 6" x 6" x 24'

**ROOF & WALL PANELS:** Central  
States Manufacturing, 29 ga.

**TRUSSES:** LA Truss LLC



**T**he homeowner wanted a two story farm-style home with a large entertaining area in the back (not pictured at request of homeowner).

Windows and doors purchased and installed by owner.





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BLUNIER BUILDERS INC.

<https://blunierbuilders.com>

**BUILDER:** Blunier Builders, Inc.

**BUILDING SIZE:** 48' x 48' x 16'

**ROOF PITCH:** 4/12

**DOORS:** Raynor AP138C Insulated Overhead Door, 20' x 14'; Plyco Corp. walk doors

**FOUNDATION:** Blunier Builders, 4' deep Concrete Piers w/ stainless-steel post brackets

**INSULATION:** R19 batt

**POSTS:**  
Blunier Builders, 3-ply 2x6 SYP

**ROOF & WALL PANELS:** McElroy Metal Kynar Max-Rib Ultra Steel

**TRUSSES:** Central Illinois Truss, scissor trusses

**VENTILATION:** McElroy Metal vented ridge and vented eaves

**WINDOWS:** AJ Manufacturing Harmony vinyl thermal insulated sliding windows, Low-E glass



**T**his garage/extra storage building is unique in every way. Double lean-tos on each side complete with cedar porch posts and stone wainscoting create a look that stands out. Vinyl shake siding gives this building a completely customized look that you don't see every day with post-frame builds. The window and door placements were carefully thought out to ensure they complemented the building's design and exterior aesthetic.



# RETREAT CABIN

BURKHOLDER CONSTRUCTION LTD

[www.burkholderconstructionllc.com](http://www.burkholderconstructionllc.com)

**BUILDER:** Burkholder Construction, Ltd.

**BUILDING SIZE:**  
16' x 32' w/ 9' wide porch

**ROOF PITCH:** 12/12

**POSTS:** Richland Laminated Columns 3-ply Glulam Green Posts

**ROOFING:** Townline Roofing, black textured standing seam

**BEAMS:** Antique Caboose Beams and Repurposed Barn Beam Joists

**WALL PANELS:** Metal Exterior Steel, repurposed cedar poles cut into siding

**WINDOWS:** Andersen 400 Series



**T**he beautiful setting overlooks a pond where clay was mined for a former kiln. The site had an 8' grade difference from high to low point, which had to be dealt with along with difficulties in site access and rough terrain.

Repurposed 4' x 12' yellow pine timber is repurposed from its former use as caboose running gear. Repurposed wood siding was cut from cedar telephone poles and loft joists are beams from an old timber frame barn.

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# DREAM HOME

QUALITY BUILDING SUPPLY LLC

<https://qualitybuildingsupply.us/>

**BUILDER:**

Quality Building Supply LLC

**BUILDING SIZE:** 6,000 sq. ft.

**ROOF PITCH:** 10/12

**DOORS:** Central WoodWorks  
6' x 9' mahogany doors

**FOUNDATION:** Tri-County  
Concrete/Quality Building Supply  
LLC

**INSULATION:** Spray foam

**POSTS:** Mill Creek Lumber .15  
MCA Ground Contact S4S #2 6x6

**ROOFING:** Quality Building Supply,  
standing seam, 26 ga.

**TRUSSES:** Quality Building Supply

**SIDING:** LP SmartSide

**WINDOWS:** VI-Wintech

**CUPOLA:** Quality Building Supply  
Premium 5' cupola w/ 3' copper  
weathervane



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# RESIDENTIAL GARAGE

TIMBERLINE BUILDINGS, LLC

[www.buildingsbytimberline.com](http://www.buildingsbytimberline.com)

**BUILDER:** Timberline Buildings, LLC

**BUILDING SIZE:** 28' x 40' x 10'  
w/ 16' x 36' x 14' attachment

**ROOF PITCH:** 9/12

**DOORS:** Haas 600 carriage style garage doors, 26 ga.; AJ Manufacturing 5100 Series entry door

**FASTENERS:** GRKs and nails for structural connections

**FOUNDATION:** Pre-cast "pills"; Green Post

**INSULATION:** R-21 batt walls, R-38 blow-in cellulose ceiling

**POSTS:** Green Post Glu-Lam

**ROOF PANELS:** AB Martin Panel, G-100 28 ga., Copper Penny

**VENTILATION:** Ultra Vent ridgevent and vented soffit

**WALL PANELS/SIDING:** AB Martin G-100 28 ga.; Tight Cut "Sterling" Versetta Stone

**WINDOWS:** Vinyl insulated, double hung, 38" x 48"

**CUPOLA:** 36" louvered cupola, 30" deer weathervane, supplied by AB Martin

**GUTTERS:** Raytec Leafguards



This garage was built for storage for vehicles and the homeowner's equipment in Northeast Pennsylvania. The homeowner wanted a functional yet aesthetically pleasing structure. The desired look was achieved by selecting custom features such as Versetta Tight Cut "Sterling" stone accent on the porch. A custom porch was created using authentic mortise and tenon posts and beams from Riehls Construction in New Holland, Pennsylvania. AB Martin's Copper Penny roofing, trim and brown siding provided a rustic, elegant finish. The building is designed to withstand 50-lb snow loads for Northeast Pennsylvania winters, and is completely insulated and finished.








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# RESIDENTIAL WORKSHOP

MARTIN CONSTRUCTION CO. • [www.martinconstructionco.com](http://www.martinconstructionco.com)

**BUILDER:** Martin Construction Co., Fleetwood, Pennsylvania

**BUILDING SIZE:** 20' x 30' x 10'

**ROOF PITCH:** 8/12

**DOORS:** Haas #942 overlay style 10' x 8' with Liftmaster; Plyco Series 20 Steel Entry Door

**FASTENERS:** SFS Intec wood grip siding screws

**FOUNDATION:** Partial poured concrete/Perma-Column Sturdi-Wall Plus column anchors

**POSTS:** RigidPly Rafters, Green Post, 3-ply 2x6

**ROOFING:** DaVinci composite slate shingles, 12" wide, Slate Gray

**TRUSSES:** RigidPly Rafters, 20' span, 24" oc

**VENTILATION:** Cobra under-cap ridge vent

**WALL PANELS:** Metal Sales Manufacturing Classic Rib, 29 ga., MS Colorfast 45 paint

**WINDOWS:** Simonton ProFinish, 4'w x 4'h Twin, 2'x3' single hung, vinyl

**PLYCO**  
CORPORATION

**PERMA**  
COLUMN



**T**he purpose of the new building was to replace an old post & beam building in poor repair. The customer wanted to replace the existing building with a new structure that would be aesthetically pleasing and match the surrounding buildings. Martin's Design team came through with providing the appropriate design and exterior coverings to satisfy the customer's requirements.

The project included demolition and clean-up of the old post & beam building, which had a stone foundation. (See inset photo.) Due to the slope of the site, the project required a partial-poured concrete footer/retaining wall.



# COMMUNITY CENTER

MSS ENGINEERING, LLC

[www.mssengineer.com](http://www.mssengineer.com)

**BUILDER:** Jeremy Reiff  
Construction, Inc.

**BUILDING SIZE:** 72' x 104'

**ROOF PITCH:** 4/12

**DOORS:** LT Siding, multiple

**FASTENERS:** GRK RSS Screws,  
standard nails

**FOUNDATION:** Perma-Column 8"  
Pier Footing

**INSULATION:** Ramco, Cole  
Insulation, R-Value Insulation,  
foam, Double Bubble, mineral fiber

**POSTS:** PC8300 3-ply 2x8, 4' oc

**ROOFING:** Ramco Ram Panel,  
28 ga.

**TRUSSES:** Borkholder Buildings  
and Supply

**VENTILATION:** Depew Heating and  
Plumbing

**WALL PANELS:** Ramco Ram Panel,  
28 ga.

**WINDOWS:** LT Siding, 36" x 48"

**SPECIAL FEATURE:** Track  
suspended from ceiling



**T**he building is a public space for exercise and community events. The owner was an ER nurse who was always bothered that patients often didn't have good exercise habits, healthy lifestyles, etc. They started doing a 10,000-step program and realized there wasn't a place in Albion, Indiana to exercise. They wanted a gym with an elevated track so people could do the 10,000-step program and participate in various activities at the same time. A plot was donated with 5 acres and a small barn, in addition, they built a gym for the community. They made use of all their materials and resources by establishing a learning, recreational and community center.



An unusual challenge was to ensure that the hanging running track would be properly supported. The builder worked with the truss manufacturer to ensure that was the case.



# HUNTING LODGE

BLUNIER BUILDERS INC. • [www.blunierbuilders.com](http://www.blunierbuilders.com)

**BUILDERS:** Blunier Builders Inc.

**BUILDING SIZE:** 66' x 112' x 22',  
32' x 24' x 16', 30' x 30' x 14'

**ROOF PITCH:** 6/12

**DOORS:** Raynor AP200C Overhead,  
10' x 10'; Marvin French Doors w/  
6' x 18" transom; Marvin 3/4 glass  
door w/ transom

**FOUNDATION:** Blunier Builders con-  
crete piers w/ stainless-steel post  
brackets

**INSULATION:** R38 fiberglass blown-in  
insulation in attic, R25 fiberglass batt  
insulation with poly vapor barrier

**POSTS:** Blunier Builders nail & glue  
laminated #1 SYP

**ROOFING:** McElroy Metal Kynar  
Max-Rib Ultra Steel

**TRUSSES:** Central Illinois Truss

**VENTILATION:** McElroy Metal vented  
ridge and eaves

**WALL PANELS:** McElroy Metal Kynar  
Max-Rib Ultra Steel, 4' stone wain-  
scot around entire building with  
limestone till

**WINDOWS:** Marvin Ultimate Series

**CUPOLA:** (3) 3'x3' Plyco cupola w/  
weathervanes



**S**tunning is an understatement for this building. It's the perfect place to get away and relax with family and friends. No detail was left to chance on the exterior of this build; it's complete with an outdoor fireplace, two porches and unbelievable curb appeal. The inside is nothing short of perfection, featuring a private bowling alley, golf simulator and regulation-size pickleball court.





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# Expert Tips for Residential Post-Frame Builds

■ By Linda Schmid

**T**he consensus in the last couple of years has been that the post-frame industry is going well and that it is growing and becoming more popular for many uses, such as sheds, storage, agricultural buildings and shops. Some people in the industry have seen residential post-frame inquiries soar from around 10% to 50%.

Post frame has become quite popular for shouses, which are homes with attached shop, storage, or garage. Buildings with large, unsupported interior spans such as large living rooms with cathedral ceilings and/or lofts are also moving to post frame according to Bret Buelo of Wick Buildings. For those looking to

become more involved in this expanding niche, here is some information to take into consideration.

## Building Design

Matt Greiner of Greiner Buildings sees that “the sizes of the buildings people are looking for are pretty consistent, and often Greiner finds that they are making small changes to existing designs or combining previous designs into one.”

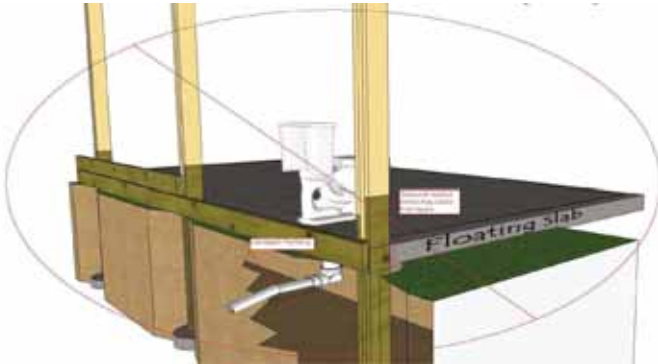
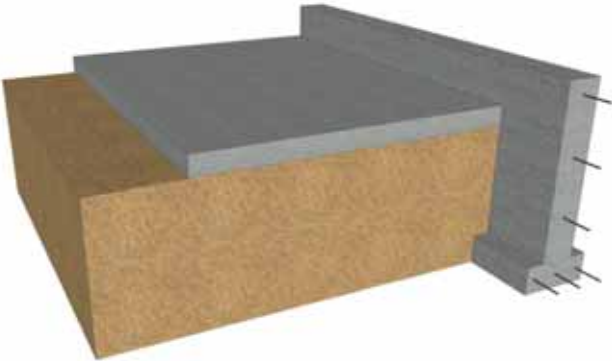
Graber Post has basic designs for residential structures where standard codes are applicable, but they are always open to creating a completely new design for a new project. Graber Post has also provided some post-frame tips.



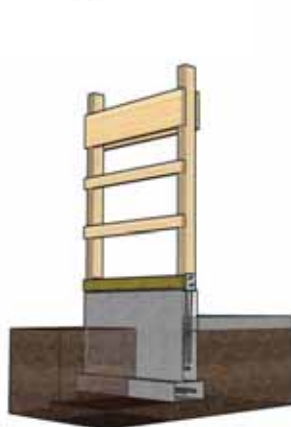
*A computer-generated design, courtesy of Wick Buildings.*

## Tips On Footings/Foundation

Most standard footings are concrete with a concrete stem wall according to Graber Post. The framing can be secured to the stem wall. Footings should descend below the frost line and it's best to supply a continuous footing. If the plumbing is installed in a floating slab, it can become damaged when the frost causes the ground to heave.



Stud Frame



Post Frame

## Tips On Framing

The type of framing used should be based on how the wall will be finished. Graber advises that if the interior will have a metal finish, the post and bracket system can be used. For finish framing, 2 x 4 spruce girts can be used with a treated 2 x 4 on the



Framing may require a variety of styles. This room features drywall and a metal ceiling

bottom row.

If drywall or OSB will be used, the stud frame is recommended. Finishing frame work can be completed with vertical studs between posts at 16" for drywall (to reduce cracking) or 24" spacings for OSB.

If the exterior of the building will have lap siding, then a solid sheathing should be used instead of the wall girts that can be used with a metal interior.

## Siding

There are many siding choices for post frame. Graber states that their G-Rib or R-Rib with wainscoting are very popular. Versetta Stone and Affinity Stone are among the most-chosen wainscoting. Rough sawn lumber is another style that has gained popularity.

As for exterior colors, "Darker exterior colors seem to be in style, for example, dark gray walls with black wainscoting, roofing, doors, and windows," according to Greiner.

Buelo says that Wick has seen "an increase in unique colors and finishes such as gray wood grain and textured matte black." Also "some very attractive buildings utilizing Copper and Black have been built over the past year." Wick has also seen a lot of post-frame building owners choose Versetta Stone wainscoting and column wraps.

In northern areas, people more often choose "cabin"-type decor for vacation homes and shouses.

## Tips On Roofing From Graber Post

Graber advises that a roof begin with a 4/12 pitch flush roof. Other pitches or overhangs are an upgrade. If gutters are desired, at least a 1' overhang should be incorporated into the design for gutter attachment.

Graber finds that G-Rib Profile 29 ga. is their most requested roof. Whether G-Rib is chosen or not, similar metal roofing provides advantages for the roofer as it saves on install time and framing procedures. *FBN*

# Fasteners for Post-Frame

Industry experts give top tips and tricks for fastener selection, installation



a building's cost. The correct length, material, quantity and fastener placement will ensure a long-lasting installation.

- Use the proper tools for installation. A screw gun with adjustable torque settings is a good choice.
- Keep the nut-setter magnet free of metal chips so as not to scratch the painted heads.
- Do not leave fasteners in plastic bags in wet environments on the jobsite while waiting to be installed.

Again, use the correct fasteners and follow the panel supplier's recommendations on their placement; many of these panel designs have been tested and have code approvals.



**BECK America**

[www.beck-america.com](http://www.beck-america.com)

Addressing fasteners used in post-frame installation, Brett McCutcheon of BECK America (a BECK member) recommends using their wood-to-wood patented diamond coated jumbo nails. (The Jumbo Nailing System consists of 4- to 6-1/8-inch pole barn nails and a jumbo nailer.) Additional fasteners recommended are metal-to-wood nails for attaching metal roofing, siding, and interior liner panels, and special pins for attaching wood to 10- to 20-gauge steel.

BECK fasteners are made of 1082 steel, F1667 compliant and code-approved ESR-1539, true hot-dipped galvanized, 304 and 316 stainless-steel as well as EG and bright.

## Before You Start

Factors to consider other than price when selecting fasteners are withdrawal, pull-

through, coating quality, coating thickness, drivability, bend yield, tool compatibility and uniformity within spec ASTM-F1667 [Standard Specification for Driven Fasteners: Nails, Spikes, and Staples].

## Tips and Tricks

- Don't forget, not all fasteners and tools used are the same.
- Do know that in post-frame construction in the past few years that looking for new, innovative ways to build can strengthen your business.
- Do recognize there has never been a better time than now to consider alternatives in the space of post-frame construction fasteners.



**Dynamic Fastener**

[www.dynamicfastener.com](http://www.dynamicfastener.com)

Dynamic Fastener supplies builders with metal-to-wood, wood-to-wood and metal-to-metal screws with a long-lasting, premium coating. (All Dynamic Fastener screws are available with Dyna-Coat®, a 1000-hour, long-life premium coating.)

## Before You Start

Questions you should ask before purchasing for a post-frame building:

- What is the material I'm fastening?
- Is the project in a highly corrosive environment where a long-life-coated screw would need to be replaced by a stainless-steel screw?

Fasteners in any metal building project is such a small percentage of the contractor's spending cost, but it's also an important element to the project. If



## Atlas Bolt & Screw

[www.atlasfasteners.com](http://www.atlasfasteners.com)

Atlas Bolt & Screw supplies metal-to-wood and metal-to-metal fasteners.

For best practices, they recommend:

- The majority of construction fasteners are made of hardened carbon steel. For industrial or coastal applications where corrosion would be a concern, the choices would include zinc-headed fasteners or stainless steel.

- Use the appropriate fastener as specified by the panel supplier or engineer. The fasteners are generally a tiny percentage of

the wrong fasteners are purchased and installed it will potentially cause problems for the installer, which ultimately could lead to costly repairs.

### Tips and Tricks

Avoid using an impact driver to install self-drilling screws. An impact driver can easily shear off the head of the screw during installation. An over-torqued screw head could create excessive stress on the screw. This stress can fatigue the fastener over time resulting in potential fastener failure.

Corded and battery-operated screw guns are available to handle just about any metal that needs to be fastened. It is critical that a torque adjustment system be used to allow you to “dial” the proper torque needed to efficiently drive fasteners without stripping or breaking the fasteners.



### Maze Nails

[www.mazenails.com](http://www.mazenails.com)

Maze Nails manufactures wood-to-wood fasteners. Regarding fastener composition, it is very important that stiff-stock and oil-quenched hardened nails comply with the ASTM Standard Specification F1667 for post-frame nails. Maze Nails meets and exceeds all these specifications. Adding a ring or spiral shank to the nail will also increase the holding power in posts, trusses and timbers.

### Quality Counts

Choose nails made consistently from high-quality steel.

### Tips and Tricks

Make sure you read the labels. All fasteners are not created equal. Double hot-dipped galvanized fasteners are not the same as electro- or mechanically galvanized nails. Specifications are key when choosing the right fastener.

Don't buy strictly on price, but you do get what you pay for. If you don't want callbacks, do the research on the front end so you can complete your project with confidence.

Other fastener information builders should know for post-frame installation:

- Know when you need a galvanized, hardened, or ring shank fastener when deciding on a nail.
- When coming in close ground contact or when a nail is exposed to the environment, you should use a hot-dipped galvanized fastener.
- When driving longer nails, it is wise to purchase hardened nails to avoid bending issues.
- Ring or spiral shanks hold well and greatly assist in preventing racking of nailed truss and post members.



### Triangle Fastener Corporation

[www.trianglefastener.com](http://www.trianglefastener.com)

Triangle Fastener supplies fasteners to attach metal-to-wood, wood-to-wood and metal-to-metal in post-frame projects. Joe Stager, vice president of Triangle Fastener Corp., shared further advice and tips:

Screws used to attach metal to wood or metal to metal are produced from low-carbon steel or stainless-steel. The carbon steel (C1018-1022) screws must be case hardened in order to be able to pierce steel panels. Screws exposed to the weather and made of carbon steel should have a thicker plating or coating to resist corrosion and should meet a minimum of 500 hours of

salt spray per ASTM B117. Carbon steel screws are also available with zinc heads or stainless-steel heads for more corrosion resistance.

These types of screws are also available in stainless-steel. They are made of either 410 grade (martensitic) that is case hardened or a 304 grade (austenitic / 18-8). The 304 stainless-steel grade provides the best corrosion resistance, especially in treated wood applications. It is recommended that screws made of stainless-steel be plated or coated to provide lubricity to the threads for better tapping.

### Before You Start

There are many factors to consider when choosing the right screw for your applications:

- Corrosion Resistance: Will the screw provide similar corrosion resistance as the panel and, will it withstand the environment?
- Strength: Will the screw meet the load requirements of connection?
- Will the screw provide the installer easy and consistent installation?

### Tips and Tricks

Do: Install screws using screw guns with a depth-sensing or torque control feature to eliminate over-driving or under-driving the screw.

Do: Install the screw perpendicular to the panel.

Do: Screws with an EPDM sealing washer should be tightened so the EPDM extrudes just beyond the metal washer or the flange head of the screw.

Do: Use the correct nut-setter or drive bits to minimize chipping of a painted screw and to improve drivability.

Don't: Over-drive or under-drive screws. This can cause the screw to back-out and roofs to leak.

Fasteners are a small percentage of the overall cost of a metal roof or wall system, but they play an important role in how the panels perform. Use screws that provide the best overall performance to help eliminate unnecessary callbacks and warranty issues. *FBN*



# Focus On The Permanent

Truss installation isn't complete until permanent bracing is applied

■ By Sean Shields,  
Structural Building Components Association

**B**ellbottoms. Mullets. Lime-green shag carpet. Some things are just meant to be discarded, either because they've served their usefulness or a better alternative has been discovered. In the case of truss bracing and lateral restraint, there is a big difference between temporary bracing, which serves a useful purpose during installation, and permanent bracing, which serves a purpose throughout the life of the building. The last article in this series looked at best practices surrounding the application and use of temporary bracing (see "Embrace Diagonal Bracing" in the January 2022 issue of *Frame Building News*), and this article will do the same for permanent bracing.

As has been stated several times in this series, metal plate-connected wood trusses are incredibly efficient at spanning long distances by distributing applied loads through compression and tension webs to wall bearing locations. This is why trusses are so often used in post-framed buildings to create large interior spaces. However, while trusses are very good at transferring loads within their vertical plane, trusses will tend to buckle out of plane if they do not have sufficient lateral support. The longer the truss span, the greater the tendency to buckle.

This series has focused heavily on how to prevent, or at least minimize, conditions that would cause a truss to buckle, from how they are stored and hoisted, to how they are stabilized during the construction



process with temporary bracing methods. It's critical to note the installer's job isn't done once the trusses are erected. In most cases, while temporary bracing is removed to affix sheathing and add other building elements, permanent bracing and lateral restraint must be installed to ensure the trusses perform as intended throughout the life of the building.

Chapter B3 of the Building Component Safety Information (BCSI-B3) includes this cautionary language in its introduction:

**WARNING:** *Disregarding Permanent Individual Truss Member Restraint and Permanent Building Stability Bracing (PBSB) recommendations is a major cause of truss field performance problems and has been known to lead to collapsed roof and/or floor systems. Failure to install the proper restraint and bracing will greatly increase the probability of truss performance problems or an accident resulting in property damage, personal injury or death.*

BCSI B-3 makes clear after this warning that not only do roof truss systems typically rely on Permanent Building Stability Bracing (PBSB) to transfer lateral loads



**Disregarding permanent building stability bracing can have serious consequences.** Photos courtesy of SBCA

from the truss system into the support structure (walls), but that certain trusses within the system may also require permanent lateral restraint and/or bracing to prevent buckling under assumed design loads.

Permanent bracing, like temporary bracing during the installation process, provides stability to the truss system by supporting the trusses at right angles to the plane of the trusses. Per BCSI B-3, permanent bracing performs several functions:

- Preventing out-of-plane buckling of certain truss members due to compression forced developed under the specified design load conditions.
- Maintaining the proper truss spacing.
- Resisting and transferring the lateral loads applied to the truss system (e.g., wind, seismic, snow, etc.)

### Permanent Bracing for Each Truss Plane

Pay particular attention to the wood or metal purlins often used as bracing for trusses spaced greater than four feet on center (o.c.). BCSI B-3 cautions the material used for these purlins must be properly sized and fastened to the top chord of the trusses in accordance with the specifications provided in the building's construction documents. It notes that purlins alone will not adequately brace or prevent buckling of the top chords, they must be



**CAUTION:** Without Diagonal Bracing in the Top Chord Plane, the Top Chords of the Trusses can buckle simultaneously in the same direction.

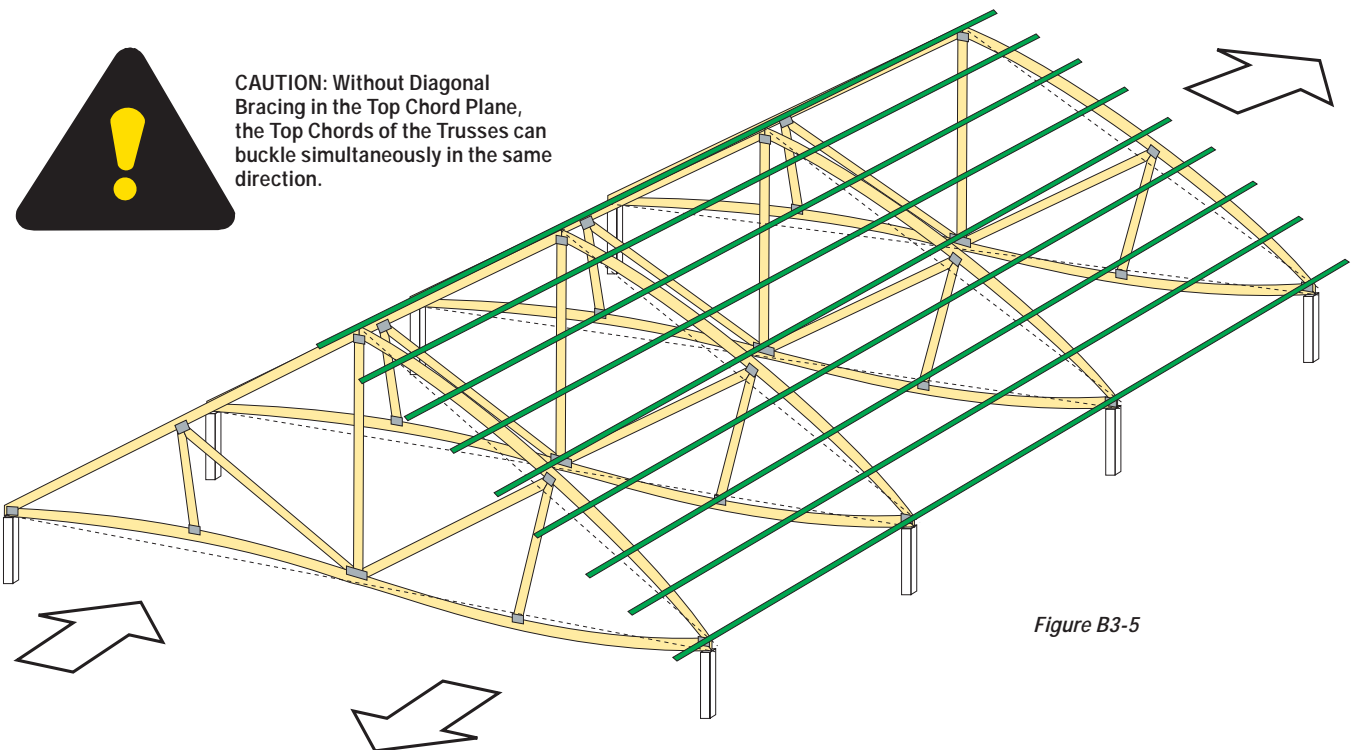


Figure B3-5

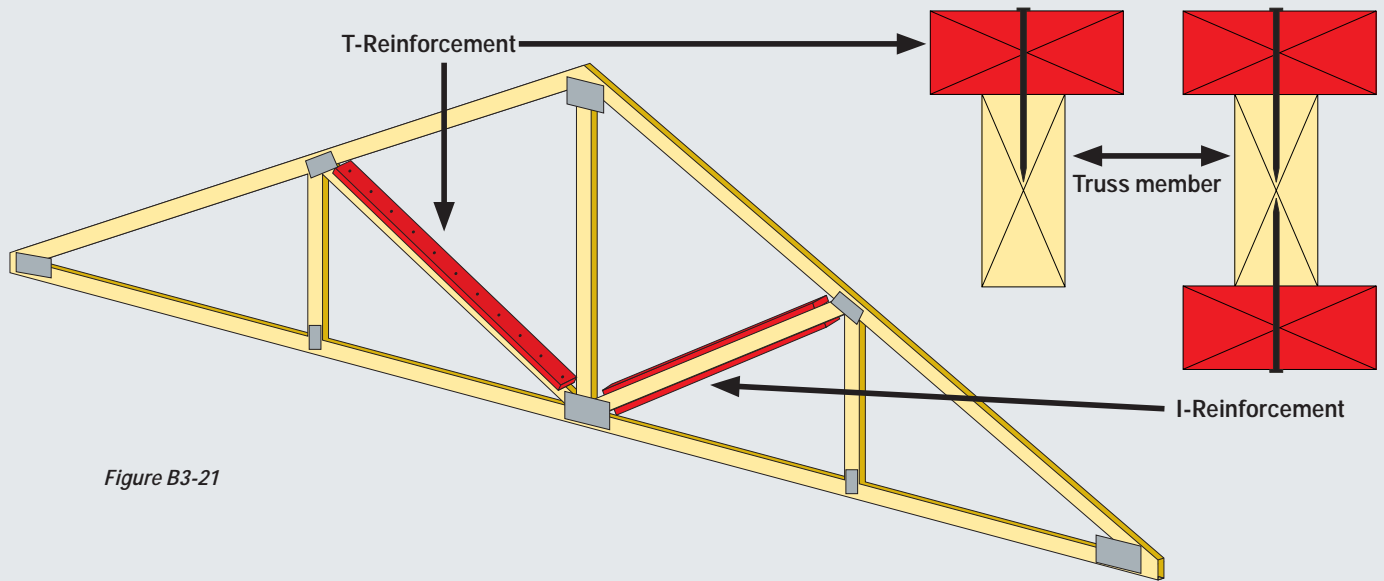



Figure B3-21



 **The purpose of permanent bracing is to avoid out-of-plane buckling over the course of the building's life.**  
PHOTOS COURTESY OF SBCA.

braced diagonally with permanent members. Without this diagonal bracing, all the purlins do is ensure the top chords of the trusses will all buckle in the same direction.

Again, per B-3, the permanent diagonal bracing can be provided multiple ways, including:

- Installing diagonal bracing to the top chord plane at each end of the building at intervals along the length of the building, as specified by the building designer,

to provide rigidity and to transfer the restraining forces from the purlins to a lateral force resisting system (e.g., braced wall panels, shear walls, braced frames, etc.)

- Attaching structural sheathing directly to the purlins.

The second bullet point is likely an installer's preferred approach, but it's critical to understand that not all sheathing products provide sufficient structural resistance. The building designer is responsible for determining if the sheathing can be used as part of the permanent bracing of the top chord plane.

Because most post-frame buildings don't typically have gypsum panels affixed to the bottom chords, permanent lateral restraint should be affixed to the bottom chords at the spacing indicated by the building designer using appropriate stress-rated lumber.

Within the web member plane, some webs require restraint and diagonal bracing to prevent out-of-plane buckling when subjected to anticipated design loads. Web member restraint is sometimes accomplished by reinforcing a member with additional material to increase its cross-section. A truss design drawing (TDD) will indicate if and where web members require this type of restraint.

T-, L-, scab, I-, or U-reinforcements are five options that involve adding lumber to

increase a web's ability to resist buckling. It is typically used as an alternative to the combination of permanent continuous lateral restraint (CLR) and diagonal bracing when they aren't possible or desirable. The size, grade, and species of web reinforcement materials, as well as the nailing schedule for attaching the reinforcement to the web, is typically specified in the TDD, but it can sometimes be specified separately in the construction documents.

### The Bottom Line

Truss installation isn't complete until permanent bracing is added to a truss system to ensure it performs as expected over the life of the building. BCSI B-3 provides excellent guidance on how to adhere to the Permanent Building Stability Bracing (PBSB) plant provided by the building designer. Failure to apply these important elements to the truss system may result in poor building performance and even failure of the truss system, leading to undesirable outcomes including callbacks and possible injuries or fatalities. *FBN*

**Sean Shields** is Director of Communications for the Structural Building Components Association (SBCA, <https://www.sbcacomponents.com>) and has authored over a hundred articles focused on structural framing and off-site construction since 2004.

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# Workforce Development

A large yellow crane is lifting a wooden truss structure into the air. The crane is mounted on a white truck. In the background, a wooden frame for a building is under construction. A green tractor and a white skid steer loader are also visible on the site. The ground is dirt, and there are stacks of lumber in the foreground. The sky is blue with some clouds.

**Post Frame Crews:**  
5 Ways to Improve  
Recruiting and  
Retention

By Matt Greiner,  
Greiner Buildings, Inc.

Photo courtesy of Matt Greiner, Greiner Buildings, Inc.

**R**ecruiting. Retention. Attracting and retaining talent. Skills. These are all words we will most likely hear over and over again for the remaining of our post frame days. You can pretty much count on it.

When it comes to assembling a skilled workforce, we all fit into one camp or another. Either we are in Camp 1, trying a million things, at times feeling like we are beating our heads against the wall to no avail, experiencing some success here and there, and looking for answers. Or we are in Camp 2, where we have given up or completely rerouted. Perhaps downsized or outsourced. Maybe we find ourselves in both.

For those still fighting the good fight or interested in getting into the battle and looking to grow or improve your crew workforce, I'm here to share insights I've gained over the years. Having hired and trained employees of all types and backgrounds in the post frame industry since my teenage years and now into my early forties, I've perhaps learned a few things that can help. Here are five ideas you can try that might give you a one-up on the competition.

**1. Treat recruiting like sales.** Put as much time, effort and investment toward recruiting as you do sales. After all, you can only sell what you can build. Calls/emails/texts to candidates should be PROMPT. Remember that your competition, both direct and indirect, is looking to hire the best recruits also. You want to beat everyone to the punch. Set up a system to evaluate recruits immediately and contact the high potential ones immediately. This means at the very least the same day but, if possible, within an hour or even minutes from the time you receive their application. You can look into online platforms that will help you with organizing, evaluating and communicating with applicants as you will need some process in place to stay robust and organized.

**2. Offer some level of training and development.** People coming into the workforce today likely have less inherent con-

struction skills than previous generations. Individuals do not want to struggle and be frustrated. They need employers to invest in them and help accelerate their skills and knowledge. You can look at general education in your geographic area or at organizations such as the NFBA, which has material you can begin using immediately. Set up a computer with headphones and show the videos that are already available; it will at least help new workers get acclimated to the position more quickly. Direct employees to YouTube where, thanks to a number of contributors, we have a plethora of fantastic content from which to learn. Look into upcoming programs the NFBA is offering, which roll out in early 2022. Or research what's available in your geographic area for teamwork, leadership or other skills training. Invest the time and money toward it and don't go cheap! Trust in the ROI!

**3. Support your crews.** Figure out what matters to today's worker and provide accommodations accordingly. Workers today generally do not tolerate the harsh treatment previous generations once did (or so the story goes). They have too many other options to put up with it. Deal with any internal barriers or conflict (if present) to make their workday more enjoyable. Have a COO or interactive project managers on staff that spend a majority of their time interacting with crews, reducing challenges, and keeping ahead of them. Let them build and do what they are good at. Try to make their lives and jobs a little bit easier. And be accommodating to family life as many employees are young parents with working spouses and tight budgets. Be as flexible as possible with schedule. Let employees off early and allow days off when it is possible and appropriate. Do not force work in harsh conditions if it can be avoided.

**4. Provide proper equipment and tools.** Again, this is another good investment. The tools offer a win-win for everyone. The company may get a write-off or at least better-equipped crews, which will do a better job and be more efficient, and the worker will be happier and safer. Consider using rewards programs that allow employees to buy their own tools such as

drills and other gadgets. Bring the proper lifts and heavy machinery on-site, whether bought or rented, in order to make the job easier and safer. Provide clean and well-organized trucks for transportation. Builders will be attracted to a company where these things are common practice.

**5. Maintain a clean and organized work environment.** Crews usually will not or cannot achieve this on their own, so someone will have to roll up their sleeves and pitch in to help. Have dedicated space in a shop that is temperature controlled for your crews to call their own. Keep trucks clean and organized. Allow time and offer rewards for this. It will make their days more enjoyable and lower stress for everyone. Crews that are surrounded by a clean, orderly, and professional environment will endure and be more efficient in the long run. Your company will also improve its reputation and benefit financially once you figure out how to get this under control.

This topic can go on forever, but these five steps will get anyone looking to spruce up their crew staffing and efficiency for 2022 pointed in the right direction. *FBN*

#### **About the author:**

**Matt Greiner** is owner of Greiner Buildings, Inc. and Greiner Technology, LLC based in Washington, Iowa. Greiner Buildings has been in operation since the mid-1980s and today has approximately 30 builder employees in two states. GB works with a variety of subcontractors in every trade, specializing primarily in post frame construction but also pre-engineered steel and some other forms of construction. Greiner Tech designs software for figuring and drawing post frame buildings and managing the operational aspects of a post frame business.

Matt and his wife, Ashley, reside in Washington, Iowa, with their two children. Matt started building post frames at a young age and ran a small contracting company while attending college at the University of Iowa as a business administration major and entrepreneurship minor. He is currently COO and owner of Greiner Buildings and leads the programming team at Greiner Tech. They have three locations in Des Moines and Washington, Iowa and Kewanee, Illinois.



PHOTOS BY SHARON THATCHER

# State of the Industry

## 2022 Lumber and Steel Mill Expansions in the Works

■ By Frame Building News Staff

Last year had plenty of challenges. Lumber prices are erratic and still higher than historical norms, manufacturers and builders have had to deal with material shortages, and everyone is dealing with longer lead times getting raw materials or supplying their customers. But there have also been opportunities. Let's look at a few of the challenges and opportunities of 2021, and what might be coming our way throughout 2022.

### Material Challenges

You'd be hard-pressed to find some sec-

tor of construction that didn't have at least some supply disruption in 2021. Since without steel and lumber there would be no post-frame building, we'll focus on those two areas.

Early in the pandemic, steel companies shut down production and inventories were depleted, creating a raw material shortage. Overseas and domestic shipping problems (and other reasons) challenged the supply and resulted in higher prices in 2021. However, demand remained strong. At the Steel Summit meeting in August 2021, hosted by Steel Market Update, industry experts predicted a strong 2022,

with some recessionary activity potentially in the second half of 2023.

Lumber mills were also shut down and builders (and do-it-yourselfers who had time on their hands) quickly cut through the lumber supply. The result was a decrease in supply, and an increase in demand. The inability of domestic mills to rapidly increase lumber production to meet the demand resulted in an unprecedented increase in lumber costs. The Random Lengths Framing Lumber Composite Price, an industry benchmark, increased about 175% between April and September. In May 2021, the FLCP topped

<sup>1</sup> Structural Building Component Manufacturers' (SBCA) Lumber Connection podcast:

<https://www.sbcacomponents.com/media/lumber-connection>. Listen in for lumber market insights and updates.



\$1,500 per thousand board feet (\$1,500/mbf). A report from the National Association of Home Builders (NAHB) said, “The production gap, and the material cost impact, can only be closed via a significant increase in domestic production, more U.S. imports of lumber, or a significant substitution to other building materials.”

To understand current lumber market activity, listen to the Structural Building Component Manufacturers’ (SBCA) bi-weekly Lumber Connection podcast, on which lumber market professionals “discuss today’s market and explore tomorrow’s trends.”<sup>1</sup> In the January 17 podcast, Ken Timmins and Justin Binning, both with American International Forest Products (AIFP, lumber.com), discussed the lumber market imbalance. During this podcast, they explain why the lumber market is under-inventoried due to transportation issues, the weather, and COVID-19. In part, the mild weather in the fall and early winter kept construction going strong. Jobbers worked through their inventory at the end of 2021 and the work kept coming in; demand continued to outpace lumber production. Plus, the late-year holidays and COVID outbreaks in sawmills caused mills to shut down for weeks at a time. Wood continues to leave plants and lumberyards, but logistical issues and COVID continue to have a serious impact on the volume entering the market.

They said there’s no quick or perfect fix for the supply chain issues, and you have to roll with the weather when it comes to getting your jobs done. They recommend keeping close touch with lumber suppliers and stay up to date on the lumber price and availability information so you can make informed decisions when it comes to running your business.

Many suppliers, not just lumber suppliers, have pointed out there’s not a single break in the supply chain; there are many. Some of which are:

- Ships loaded with filled shipping containers are awaiting off-loading off the California coast.
- Rail car and truck shortages.
- Shipping yards are full, so there’s no place to hold more containers before they



continue to their destination.

- Container shortages due to filled containers being tied up in the intermodal transport snafu.

### Expansion Plans

Several North American steel companies are in the process of adding production. While some of these projects are not directly aimed at steel for the construction market, any new capacity will help to ease overall supply constraints.

Blue Scope has new capacity expected to come on stream in Q2 at its North Star steel mill in Ohio.


Big River Steel, now part of United States Steel Corporation (US Steel) has a

major expansion underway in Arkansas, which should be finished mid-year 2022.

US Steel has also committed to a new mini-mill at a site yet to be announced, with construction to begin in the first half of 2022 and production expected to begin in 2024.


Steel Dynamics has announced plans to expand at its Terre Haute, Indiana facility as well at its Pittsburgh Techs Division. Some production at its new Stinton, Texas EAF operation went online in 2021, but weather delays has put behind the opening of the primary facility, now expected to come on stream in the second quarter of 2022.

Nucor has plans for a new steel sheet




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plant in either Ohio, Pennsylvania, or West Virginia.

Ternium and Arcelor Mittal are committed to expansions in Mexico, which feed into the U.S. market.

As for lumber production, several new mills and mill expansions are in the works in the South. Softwood lumber mill capacity in North America is approximately

74 billion board feet per year. Over the last decade or so, mills have moved from the West to the South, which is now the largest softwood lumber-producing region in North America. Last September, Forisk Consulting [<https://forisk.com/>] announced, “Based on announced sawmill builds and expansions, the U.S. South could add an additional four billion board feet of softwood sawmill capacity by 2022.” According to the announcement, the region’s plans for increased production included: “47 mill capacity increases, which includes 12 new mills and four reopenings. Of note, Roseburg Forest Products is building a 400 MMBF sawmill in Weldon, North Carolina. Recently, there have been several new announcements in Louisiana. These include the Canfor 250 MMBF greenfield sawmill in DeRidder, Interfor’s planned reopening of the former GP Dequincy 200 MMBF sawmill, and the partnership with Hunt and Tolko to build a 320 MMBF sawmill in Taylor, Louisiana.”

## Industry Voices

If the post-frame industry is anything, it’s resilient. Material costs are high and labor pools are shallow, but the outlook is still promising.

Matt Greiner, owner and COO of Greiner Buildings, said that high lumber prices and crew payroll are raising prices and putting pressure on company profits, but “Inquiries are off the charts.”

Mark Stover, president, Perma-Column LLC, said, “2021 has prepped all of us on how to manage cost/price fluctuations. I expect 2022 to stabilize a little – most of it depends on what material products you purchase: wood, steel, windows, doors etc.” He shared this valuable bit of advice: “Build to the future, manage in the present – focus on what you can control.”

With lots of jobs waiting to be done and fewer people to do them, the all-too-familiar challenge facing builders is getting the work done with fewer people. To paraphrase Greiner, “There’s plenty to do for those who are willing to grind it out.” *FBN*



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# State of the Building Industry

From a Publisher's Point of View

■ By Gary Reichert

One of the unique things about my position is I have the opportunity to regularly communicate with many people in different segments and strata in the construction industry. My conversations include marketing and advertising, but also other topics related to general and specific events effecting our world. The specifics of these conversations are always confidential, but it allows me to aggregate information relevant to our portion of the construction industry. Without violating confidences here are some takeaways based on our surveys and my conversations. Please understand that these are opinions and anecdotes. The information is possibly inaccurate and being presented for consideration only. Do not base any business decisions solely on opinions expressed in this article without verification through other sources.

In no particular order, some thoughts about this year.

Machinery and capital goods manufacturers are doing very well. Demand is up and lead times are longer than typical. For some products lead time is running a year or more. Typical leads times used to be 3-6 months. This is good for the manufacturers and a sign of general optimism. These are expensive durable goods that depreciate over a period of years. A company is not going to make a large investment in capital equipment if they believe the economy will support the investment over time. A lot of people must believe the increased demand will continue for the next 3-5 years, or longer.

The supply chain is facing challenges at multiple levels with different underlying causes. Essentially it is a mess. Everything from shipping to labor shortages is



affecting the availability of products. This creates short term uncertainty and makes it difficult to forecast and predict cash flow. In larger companies this may represent a larger challenge and cause them to be conservative in the short term. With additional levels of management, reacting to change takes more time and there is a greater aversion to risk. Indications seem to be that this will lessen after first quarter.

Generally the business climate is good and most people I speak with believe 2022 will be similar to or a up from 2021. Most of the businesses experiencing challenges seem to be suffering supply chain issues and unable to receive or ship product. Demand is high and the increased material and labor cost have not driven process up to the point it restricts demand.

Energy and fuel costs are an issue, but do not seem to be a major damper on business as they are just passed through the supply chain to the end user, and the tipping point where it affects demand does not appear to have been reached.

The labor shortage is a continuing

challenge. This may lessen, as the government is cutting back programs that subsidize workers staying home and COVID recommendations change. Interestingly, I read an article today asking, "How long can Americans afford to not work?" That topic being discussed in conventional media makes me hope that we are nearing the end of this obstacle.

Political instability, COVID policy, a looming election year, possible interest rate hikes and ongoing mergers and acquisitions introduce an aspect of uncertainty. As a rule, uncertainty limits expansion and capital investment, but our industry seems to be running counter to that trend, primarily because demand is high.

I am only in the business of making predictions about my own business. I would not recommend anyone taking my opinions too seriously. We have many reasons to be optimistic about 2022. The possibility of labor returning, shipping and supply chain issues resolving and continued high demand may make 2022 a very interesting year, in a good way. *FBN*

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# Frame Building Expo Returns

Exhibitors, Attendees Connect at the Expo

By Karen Knapstein

**T**he Frame Building Expo took place at the Gaylord Opryland Resort in Nashville, Tennessee, from January 18-20. Although before the show opened the pandemic had many questions hanging in the air, more than 120 exhibitors greeted attendees over the course of the three-day event. Exhibitors offered everything from cupolas to FootingPad foundation plates, metalworking equipment to fasteners. Whatever component or detail builders were on the hunt for, there's a good chance they found it in Nashville.

It was a pleasure seeing familiar faces of representatives from suppliers and manufacturers you've come to know and trust: DripStop, MWI Components, Plyco Corp., Direct Metals and so many more.

There were new companies, too. We met up with the founders of Wildcat, LLC, a new fastener company. Co-founder Lane Morrison said they hand-assembled 500 (really cool) sample boxes to prepare for the show. It was worth it; the new entrepreneurs came away with a lot of new business connections and a lot of ideas.

Metal Wholesale LLC is another new company that exhibited at the Expo. The company supplies lumberyards throughout the Midwest with fasteners, accessories, sealants, ridge vents, pipe flashings, trims and panels.

In speaking with exhibitors, many had the same concerns about the upcoming year in the construction industry: supply chain issues, labor shortages and rising costs — all of which push the importance of providing outstanding customer service to an even higher level.



*Having recently merged with like-minded companies, Hixwood is now supplying metal to builders and roll formers in 17 states throughout the Midwest and East. Find Hixwood at the Construction Rollforming Show in October.*

At the end of the show it was obvious exhibitors were ready to pack it in. Though exhausted, they appeared pleased and satisfied that showing up and taking the gamble paid off.

Polled after the show closed, some of the exhibitors shared their Expo experiences. Matt Greiner, owner and COO of Greiner Buildings, said, "It was an amazing experience. Nashville certainly didn't disappoint. I have not reviewed the actual stats from an NFBA perspective, but I have to believe it was a good show all around."

“For me,” he continued, “winning several awards, including the Bernon G. Perkins award, and playing live music in front of a healthy crowd of industry peers, it was certainly a magical experience.”

The H.B. Fuller booth demonstrated expanding composite urethane foam, an alternative to using concrete for setting posts. They reported: “We were very impressed with the turnout at the NFBA Expo this year. Fast 2K™ was displayed among high-quality industry vendors and attendees. There was much traffic at our demos and we look forward to exhibiting next year!”

Kimberly Blanton, director of marketing for Union Corrugating and Reed’s Metals, said, “It was a refreshing to see how the tradeshow are starting to come back to life after COVID. Both Reed’s Metals and Union Corrugating participated in the Frame Building Expo that was held in Nashville and received favorable feedback from many vendors and customers who were excited to see our products and offerings on display once again.”

Mark Stover, President, Perma-Column, was enthusiastic about the turnout and the activity: “It was great to get out of the office and be with industry friends after two years of COVID issues.

“There was a lot of excitement about 2021 growth and 2022 is trending in the same direction,” he continued. “There’s still concern with volatility with building material costs and supply, along with a tight labor market – most do not expect it to get better this year. The good news is we have experience (2021) in leading and managing through these challenges. I’m looking forward to a great 2022. I hope everyone else is, too. If we collectively grow the post frame market – we succeed together!”

The next Frame Building Expo is scheduled for February 22-24, 2023, in Louisville, Kentucky. **FBN**

**Editor’s Note:** If you’d like to share your Frame Building Expo experiences, send your comments to editor Karen Knapstein at [karen@shieldwallmedia.com](mailto:karen@shieldwallmedia.com) or to editor Anthony Brass at [Anthony@shieldwallmedia.com](mailto:Anthony@shieldwallmedia.com).



*Palram Americas is a leading manufacturer of polycarbonate and PVC sheets.*



*Rural Builder editor Linda Schmid learns about below-grade insulation from the folks at the HitzHalter booth. Find Hershey’s The Metal Meister at the Construction Rollforming Show in October.*



**Traffic was impressive at the Union Corrugating and Reed’s Metals booths. “Overall I would say this particular trade show seemed to be running at 85% capacity year over year as compared to past NFBA show,” said Kimberly Blanton, director of marketing, Reed’s Metals and Union Corrugating.** PHOTO COURTESY OF REED’S METALS



*DripStop has been tried and tested on non-insulated metal roofs in every climate condition. The membrane absorbs the water caused by condensation, which prevents dripping from the roof. Find DripStop at the Construction Rollforming Show in October.*



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*Buddy Pullen (right), vice president of Pro Sales, TUFTEX, speaks with an attendee at the Frame Building Expo 2022. Find TUFTEX at the Construction Rollforming Show in October.*



*David Quehl at Direct Metals Inc. (DMI) answers questions about their product lines. Find DMI at the Construction Rollforming Show in October.*



*Regional Sales Manager Matt Orsini mans the rFOIL booth. rFOIL is designed to reduce radiant heat gain and loss and eliminate condensation in metal buildings. Find rFOIL at the Construction Rollforming Show in October.*



*Rando Colburn (waving) and Brian Smith (blue sweatshirt) discuss the venue and keys to success with Shield Wall Media publisher Gary Reichert. Smith said owning their own trucks and the service that their sales team provides helps set Mill Creek Lumber Products apart from the competition.*



*RigidPly Rafters has improved the quality of post-frame buildings by manufacturing and distributing the original 100% glue-laminated post.*



*Richland Laminated Columns offers Glulams, Naillams, Perma-Column foundation solutions, Green Posts, FootingPad foundation pads and more.*



*Exhibiting the Ridgeline Safety System, the RFS Rapid Framing System, and The Badger Post Hole Cleaner, booth 715 was a trade show in itself.*



*Cupolas and FootingPad foundation plates were the stars of the AG-CO, LLC booth.*



*Dave Gruhlke mans the Plasti-Sleeve Post Protection booth. The company offers products that protect posts and skirt boards from decay-causing elements.*



*Representatives of Levi's Building Components were kept busy throughout the show. Find Levi's at the Construction Rollforming Show in October.*



*Tough Trade Tools offers innovative tools to make metal panel installation more efficient, safer and more accurate.*



*Perma-Column foundation products are precast concrete columns that keep wood out of the ground, ensuring your building's foundation will not rot. They are the first product to combine the economy of post-frame construction with the durability of a concrete foundation.*



# Post-Frame Residence

Cadillac, Michigan



## PROJECT DETAILS

- BUILDER:** Nick Welch, Wick Buildings
- LOCATION:** Cadillac, Michigan
- PROJECT & SIZE:** Post-frame residence, 50' x 50'
- PRIMARY SUPPLIER:** Wick Buildings
- FASTENERS:** Wick Premium Fasteners
- FOUNDATION:** Column in ground w/ 4" poured concrete
- POSTS:** Wick Columns, 3-ply 2x8 treated
- ROOF PANELS:** Wick Steel, Black, 29 ga.
- WALL PANELS:** Wick Steel, Walls & Gable: Charcoal Gray, 29 ga.; Wainscot: Beige, 29 ga.
- TRUSSES:** 30' FT RLC 1-ply truss; 2-ply 2x12 rafters
- INSULATION:** Blown fiberglass in ceiling and walls
- CONDENSATION CONTROL:** DripStop
- VENTILATION:** RV-35, 24" vented soffit
- WINDOWS:** Anderson Windows

[www.wickbuildings.com](http://www.wickbuildings.com)

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# DYNA-GUARD®



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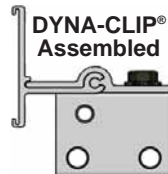
DYNA-GUARD® on duty

**S-5!** We are discontinuing the line of S-5!® snow retention products. Closeout/below cost prices on S-5!®

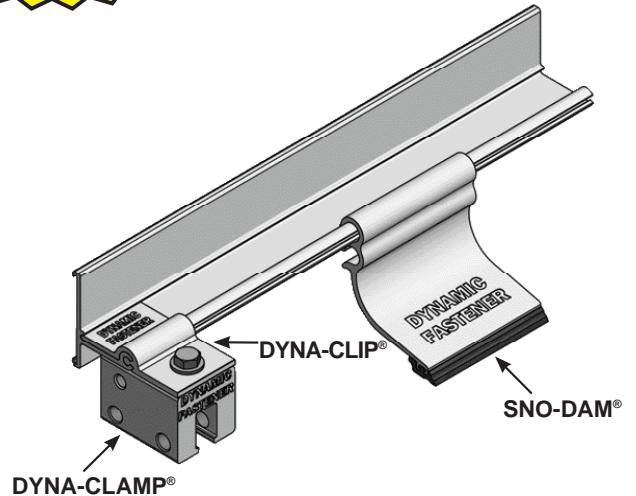
- X-Clip™ II **\$2.75**
- X-Gard™ 1.0 Bracket **\$1.85**
- X-Gard 2.0 Bracket **\$4.50**
- S5S Stainless Mini Clamp **19.50**



DYNA-CLIP®



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