Professional tools, trends, and insights for North American Construction

GOOD CONNECTIONS®

ALPINE® AN ITW COMPANY

SPRING 2026

CALENDAR OF EVENTS

2026 UPCOMING HOLIDAY OFFICE CLOSURES

U.S.

Memorial Day
Monday, May 25

Independence Day
Friday, July 3

Labor Day
Monday, September 7

CANADA

Good Friday
Friday, April 3

Victoria Day
Monday, May 18

Canada Day
Wednesday, July 1

Civic Holiday
Monday, August 3

Labour Day
Monday, September 7

2026 ALPINE® ACADEMY UPCOMING EVENTS & WEBINARS

- Floor Trusses, Bearing Types, and Settings | March 27
- Engineering Advanced Loading | May 29
- Designing a New Single Truss | June 26
- IntelliVIEW® Paperspace Tool | July 31

SIGN UP HERE

2026 REGIONAL CLASS SCHEDULE

- New Designer Training
  April 20–23—Earth City, MO June 15–18—Sacramento, CA August 24–27—Grand Prairie, TX
- Intermediate Designer Training | July 27–30—Glenview, IL
- Advanced Designer Training | May 11–14—Grand Prairie, TX

For additional information please contact **training@alpineitw.com**
Regional Class seating is limited.

Project Spotlight: Alpine TrusSteel—pg. 11

TABLE OF CONTENTS

Publishers Note:

Good Connections® is published by Alpine® for its customers, associates, builders, architects, building officials, and other professionals interested in the building components industry.

At Alpine, "Good Connections" refers to the quality products and services we offer as well as the connections we have with our customers and the components they provide to the building industry.

We appreciate story ideas, project photos, and other suggestions that you have to make this an even better publication. For more information, contact marketing@alpineitw.com.

Matt Davis
Group President

Matt Davis is the Group President of the Global Offsite Construction Platform and responsible for overseeing Alpine®, Offsite Europe, and Offsite Asia Pacific businesses. Since his tenure at ITW in 2000, Matt has held various operational and commercial roles across multiple divisions. He has previously served as the Vice President and General Manager for Commercial Construction of North America as well as ITW Medical.

As we hit the ground running in 2026, many of us find ourselves with a familiar feeling of cautious optimism. In some ways, the start of this year feels a bit like Groundhog Day—waking up to conditions that look strikingly similar to what we expected heading into 2025. Last year delivered its share of new surprises, and once again, we find ourselves asking:

Is this when the momentum finally shifts?

Will interest rates move in our favor? And will the long-anticipated lift in housing demand begin to materialize?

We have asked these same questions before. So here we are again—same outlook, same cautious hope, wondering whether this is finally the year the alarm clock stops ringing.

Even as near-term expectations have tempered, the long-term fundamentals remain undeniably strong. Housing continues to sit at the center of a resilient U.S. economy—one that, despite pressure and uncertainty, has demonstrated remarkable staying power. Cycles come and go, but this industry has proven time and again that it knows how to absorb challenges, recalibrate, and emerge with renewed energy.

Years of structural undersupply have not gone away, and that unmet demand will not simply evaporate. It quietly builds beneath the surface and will eventually break through. While progress may feel repetitive at times, the underlying forces continue to move us forward.

All of this positions us not just for recovery, but for a renewed period of growth—built on partnership, innovation, and readiness. Even if the calendar page looks familiar, the industry itself continues to evolve—and that matters.

As always, Alpine® remains committed to supporting our partners as well as the industry every step of the way. While 2026 may feel like a repeat of what we expected a year ago, I remain confident that persistence, preparation, and partnership will ultimately change the outcome.

Then again, what if there is no tomorrow? There wasn't one today.

INDUSTRY NEWS

SBCA Award | Plan Comparison Tool

Alpine® was honored to be the Structural Building Components Association (SBCA) Innovation Grant People's Choice Solution at the Building Component Manufacturers Conference (BCMC) 2025 with the Plan Comparison Tool. The tool streamlines plan review—incorporating AI for faster and more collaborative reviews. See page 24 to learn more.

January Housing Starts

In the U.S., total residential building permits through October 2025 declined by 2.9% compared to the previous year. This mixed performance depicts a cautious outlook on housing starts for the upcoming months due to affordability and financing challenges. **LEARN MORE**

Housing Predictions for 2026

Redfin expects 2026 to be a more active year for housing, with affordability gradually improving as wage growth outpaces home prices and mortgage rates ease. While home sales are projected to rise by 3%, Redfin anticipates rents will increase as apartment supply tightens and demand for rentals grows. **LEARN MORE**

NAHB IBS

NAHB International Builders' Show (IBS) was held February 17–19, in Orlando, Florida, attracting over 75,000 builders, remodelers, developers, and other home building professionals. Join us next year in Las Vegas, Nevada February 2–4, 2027.

BCMC 2026

The Building Component Manufacturers Conference (BCMC) will be held Monday, September 14, through Friday, September 18, in Columbus, Ohio. The annual show includes live machinery demonstrations, networking opportunities, peer-led educational sessions, and much more. Visit *alpineITW.com* to learn more about our latest innovations designed to help component manufacturers become more profitable and efficient.

Dick Bowman Award | Marty Hauge

Marty Hauge, Senior Alpine® Trainer, won the Dick Bowman Industry Enthusiast Award! This award honors an individual from an SBCA supplier member company that has supported BCMC and the structural building components industry with enthusiasm and integrity in an unselfish and positive manner.

Matthew Blue
Director of Strategic Marketing

Matthew Blue has joined Alpine® as the Director of Strategic Marketing. Based out of Glenview, he is a key member of the Alpine Leadership Team. He will be driving strategic growth and marketing.

Annette Peterman
Solutions Delivery Manager

Annette Peterman has transitioned to Solutions Delivery Manager. In this role, she leads the Alpine Software Consultants, Help Desk, and Training teams, focusing on delivering high-quality software implementations and support that enable our customers' growth.

Ryan Erickson
District Sales Manager

Ryan Erickson has transitioned into a District Sales Manager and will be working with CMs across North and Central Florida.

Dennis Schieffer
Director of Operations

Dennis Schieffer joined Alpine as the Director of Operations in October 2025. Based out of Litchfield, he is a key member of the Alpine Leadership Team and provides strategic direction for both the Connectors and TrusSteel operations.

Zach Sartain
Software Consultant Manager

Zach Sartain has been promoted to Software Consultant Manager, South. He will be responsible for managing customer support to maximize the value of Alpine Software.

Discover your potential with Alpine!

We're proud to promote a collaborative, inclusive, and creative work culture. Learn how you can join our team: *https://alpineitw.com/about-us/careers/*

ALPINE FIRST AWARD

We are proud to honor David Rothweiler, P.E. with the 6th annual Alpine® First Award. We truly appreciate his unwavering support and dedication while demonstrating an Alpine-first mentality by prioritizing the needs of the business over individual or functional goals.

Congratulations, David!

Partnering for a New Era.

A new cloud-based platform that simplifies workflows and enables real-time multi-disciplinary collaboration—from the field, office, or plant floor.

Experience Alpine Connect™.

IntelliSheets

Access job information to effortlessly monitor and update progress directly from the field.

Dashboards

Real-time data visualization to quickly analyze trends and make informed decisions.

Plan Comparison Tool

Easily compare floor plan revisions with an AI-powered tool to save time and improve accuracy.

Project Scheduler

Prioritize production and shipments with ease to optimize workloads and capacity.

BUILD MORE.

alpineITW.com | 800.521.9790

ALPINE® CONNECT

Find Good People & Grow Old With Them

60 ALPINE EST. 1966

Co-Founder Bill McAlpine

FIND GOOD PEOPLE & GROW OLD WITH THEM

Six decades of partnership, practical innovation, and growth: That is the legacy Alpine® celebrates as it marks its 60th anniversary. Turning the big 6-0 is something that hits some people hard, while others consider themselves lucky to reach that milestone. But a business in a competitive landscape, particularly one that started from objectively humble beginnings—marking its Diamond Anniversary?

It's worth celebrating—recognizing the people, hard work, and innovation that helped the company thrive while also looking forward. As Alpine turns 60, reflection shines a light on the history and trajectory of the organization that has helped define—and frequently redefine—the component manufacturing industry.

The legacy began in 1966 when Bill McAlpine and Charlie Harnden left Sanford Industries to form Alpine Engineered Products in Pompano Beach, Florida. Truss design was done using only "paper, pencils, and slide rules," but the duo, working from a small shop, churned out 200 truss designs for three customers that first year. In doing so, they established our hallmark: practical innovation, grounded in customer needs.

Within a year the founders had already expanded, acquiring a small nail plate manufacturer. This growth mindset set the tone—within the first decade, they acquired three more companies, expanding service capabilities and territories.

INDUSTRY-SHAPING

As the structural building components industry grew, Alpine helped shape the conversation around innovation and best practices. The company wrote the industry's first optimizing and pricing software in 1970, while also researching and developing truss assembly equipment that year. A decade later, Harnden helped co-found an industry institution: the first BCMC equipment exhibition, in Louisville, Kentucky.

Our innovations evolved in lockstep with that progress—from advances in layout software and CAD-type graphics that helped pave the way for today's design environments, to plant-level concepts that reshaped operations, automation, and optimization.

The company's growth has also reflected an important tenet of component manufacturing: one material or method doesn't fit every project. In 1995, Alpine introduced TrusSteel, expanding into cold-formed steel truss systems and serving a wider range of structural needs.

Over the decades, the company has developed a comprehensive suite of solutions, including software, engineering services, connector plates, and equipment—designed to help customers manufacture better buildings while becoming more competitive.

A defining moment in Alpine's modern story arrived in 2006, when Illinois Tool Works (ITW) acquired Alpine Engineered Products. As a division

"The focus has always been on partnering with the customers, providing solutions to their problems, and helping them grow. And by doing that, we grow."

of ITW, we continue to invest in innovation, software development, and engineering services, while remaining committed to component manufacturer needs.

Mike Johnson joined Alpine over 35 years ago and serves as the Southern Region Sales Manager. He explained that the company has always been tremendously fluid and agile in meeting customer needs. "We all try to run our departments like it's our own business—making good decisions and focusing on what truly serves our customers. That allows us to build trust and form lasting partnerships."

Alpine® founders Bill McAlpine and Charlie Harnden

THE STORY IS IN THE PEOPLE

Now with the company for over half of its existence, Engineering Manager Bill Krick, P.E., joined Alpine straight from college. Asked about the secret to its success and longevity, he replied: "It's the people, whether it's the people who stamp the plates and ship them, the sales team, the programmers, the engineers, or the administration, marketing, and HR—it's all of them."

A plaque in the Orlando office represents an idea that has become a foundational principle. "Find good people and grow old with them," is a sentiment from McAlpine that captures Alpine's belief that strong relationships, trusted partners, and committed, passionate teams are at the core of our business. The fact that so many staff members pride themselves on decades of experience here also speaks to the enduring nature of its positive culture.

Krick added that even as the company has weathered acquisitions, ownership transitions, and challenges like the 2008 economic downturn, COVID, and others, new staff members typically embrace the company culture quickly. That culture has remained steadfast as the company has continued to help component manufacturers design and make high-quality roof, floor, and wall components. In fact, the culture is also measured in outcomes: millions of homes built in North America under one name.

Alpine supports advanced sustainability throughout the industry. Component-based construction improves material efficiency and reduces jobsite waste, which are crucial benefits in today's builds. Additionally, Alpine design software enables technicians to value-engineer and optimize component designs, reducing unneeded material from the outset.

Industry buzzwords and acronyms come and go, "but at Alpine®, being a good, true partner to our customers doesn't change."

CULTIVATING TALENT

As a longtime leader in building innovation, Alpine has always understood that shaping the industry's future requires more than technical excellence and leadership: it requires cultivating diverse talent and growing from within when possible.

When Cathy Hill first joined the company nearly 30 years ago, there weren't many women in the room. Now serving as Product Owner and residential architect, she oversees the core truss design and engineering software, and she has appreciated seeing more female colleagues joining the conversation. "While it has traditionally been a male-dominated field, women are embracing construction and it's becoming increasingly balanced," she said.

Hill, a strong advocate for women in the industry, partially attributes her success to having excellent mentors throughout her career. "I've been fortunate to work with so many great mentors who've consistently encouraged me to push myself or take on new challenges, and that has helped me grow in ways I haven't yet imagined." However, she added, much of her success—and Alpine's—ties directly back to delivering value to customers. "Each day brings new challenges, a new problem to solve, and we're committed to meeting them, whether it's creating new features or resolving issues—our goal is always helping our customers succeed."

PARTNERING REMAINS PARAMOUNT

With the company for nearly four decades and having served customers from nearly every department, Marty Hauge, Senior Software Trainer, said the culture that Harnden and McAlpine established six decades ago has not only survived but flourished. "The focus has always been on partnering with the customers, providing solutions to their problems, and helping them grow. And by doing that, we grow."

Industry buzzwords and acronyms come and go, he added, "but at Alpine®, being a good, true partner to our customers doesn't change. That theme hasn't changed in the 37 years that I have been here."

From a small Pompano Beach shop designing trusses with slide rules, to a global division of ITW, Alpine's trajectory over 60 years has been remarkable. Matt Davis, Group President, noted that this anniversary "presents a perfect opportunity to take stock of where we've been, where we are, and look forward to the opportunities and a bright future."

Looking ahead, that original vision—partnering with customers to drive innovation and shared growth—will continue to guide every decision.

PROJECT
SPOTLIGHT

ALPINE® TRUSSTEEL PROJECT

Project: Lake Mead Housing
Location: Las Vegas, NV
Trusses Designed & Manufactured: Cascade Mfg Co. (Cascade, IA)

Alpine® TrusSteel Project featuring cold-formed steel trusses.

OVERVIEW

Engineered for the demands of multi-family development and designed to maximize efficiency, Alpine® TrusSteel cold-formed steel trusses, manufactured by Cascade Mfg. Co., delivered the strength, consistency, and precision needed for repeated building layouts. Lightweight, high-performance, and code compliant, these trusses were built to elevate every phase of the project.

WHERE PLANT MANAGEMENT MEETS EFFICIENCY

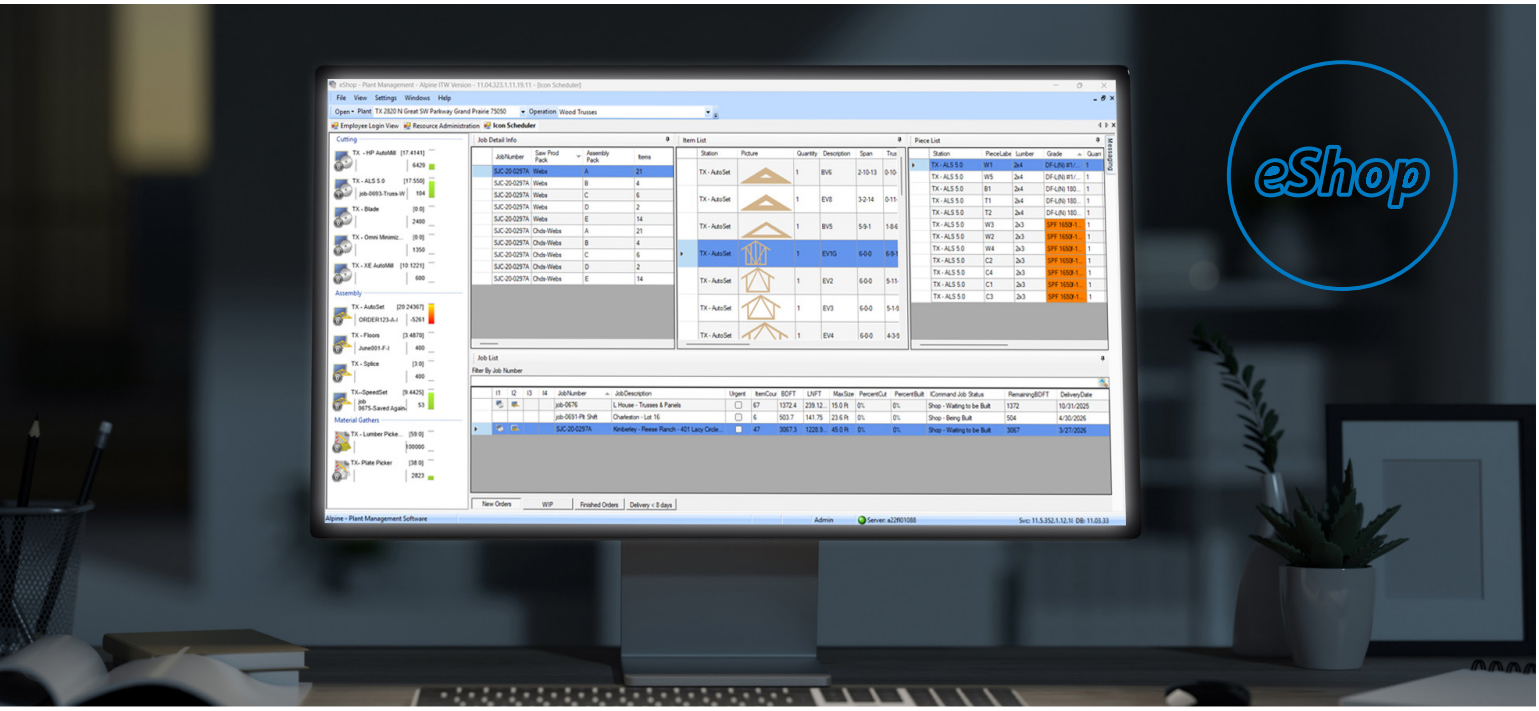
Rising material costs and a tight labor market are pushing component manufacturers (CM) to strive for leaner, faster and more precise operations. Yet many plants are hindered by disconnected systems and mixed-vendor equipment that limits visibility and slows decision-making.

On the shop floor, the consequences are familiar: recuts caused by inconsistent lumber dimensions, trusses backing up production on overloaded jigs, mid-shift schedule changes that create confusion, and critical design notes that don't always make it to production. Without real-time insight into where issues occur—or why—inefficiencies compound and true costs remain hidden.

The Alpine® eShop plant management system was built to solve these challenges. Designed for managers, eShop unifies mixed-equipment operations through an open integration architecture, delivering real-time visibility, intelligent scheduling, and actionable cost insight across the entire plant.

EASY INTEGRATION: ONE SYSTEM, ONE SOURCE OF TRUTH

eShop integrates seamlessly with all Alpine equipment and select third-party machinery, eliminating data silos and creating a unified flow of production data. This connectivity allows manufacturers to track actual labor, equipment



eShop's live, at-a-glance views provide managers with immediate insight into every station on the shop floor.

usage, and material consumption across the entire plant—without disrupting established workflows. By replacing fragmented systems with a single source of truth, CMs gain the clarity needed to identify inefficiencies, understand true costs, and make informed operational decisions.

ELIMINATE BOTTLENECKS WITH REAL-TIME VISIBILITY

eShop's live, at-a-glance views provide managers with immediate insight into every station on the shop floor, making it easier to balance workloads, reassign jobs across jigs, and adjust schedules mid-shift without losing alignment.

eShop also captures historical production data that helps teams understand how often recuts occur, where delays originate, and culprits that drive repeat inefficiencies. This visibility enables root-cause analysis and continuous improvement, turning day-to-day data into long-term operational gains.

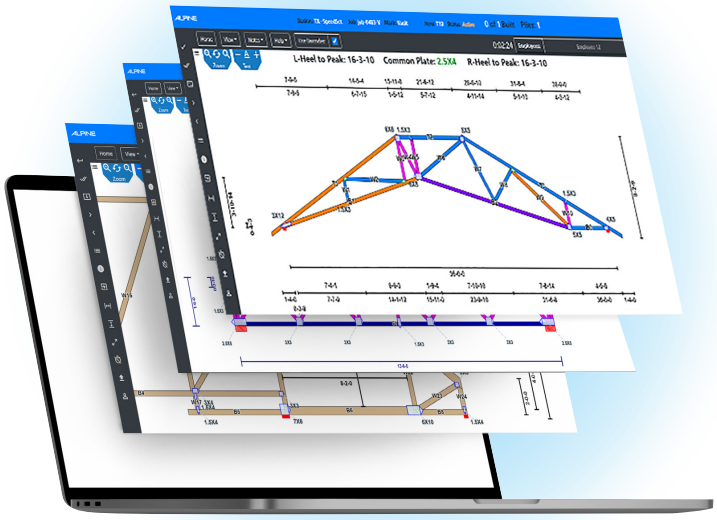
THE EASE OF A SINGLE SYSTEM

Managing roof trusses, floor trusses, and wall panels within a single platform simplifies both production and communication. With eShop, designer notes remain connected to drawings and visible to production teams, job status is clear across all stations, and operators can move between panel and truss operations without switching systems.

By consolidating plant activity into one interface, eShop reduces training time, eliminates reporting inconsistencies, and ensures that production metrics remain accurate and accessible across departments. The result is a more agile operation—one that can adapt quickly, maximize equipment utilization, and keep work flowing smoothly from design to delivery.

Contact your Alpine® Sales Representative to learn more about how eShop can simplify and improve shop management.

eSHOP | PLANT MANAGEMENT SOFTWARE MADE EASY



Manage All Production Activity with One Platform

Manage roof truss, floor truss, and wall panel production activity all on one platform.

Intuitive Web-Based Manual Shop Stations

Access from any device with a browser, without the need to install the software on each station.

Automated Equipment Integration

Supports Alpine® and select third-party equipment. Save time, increase efficiency and accuracy.

ASK
ALPINE

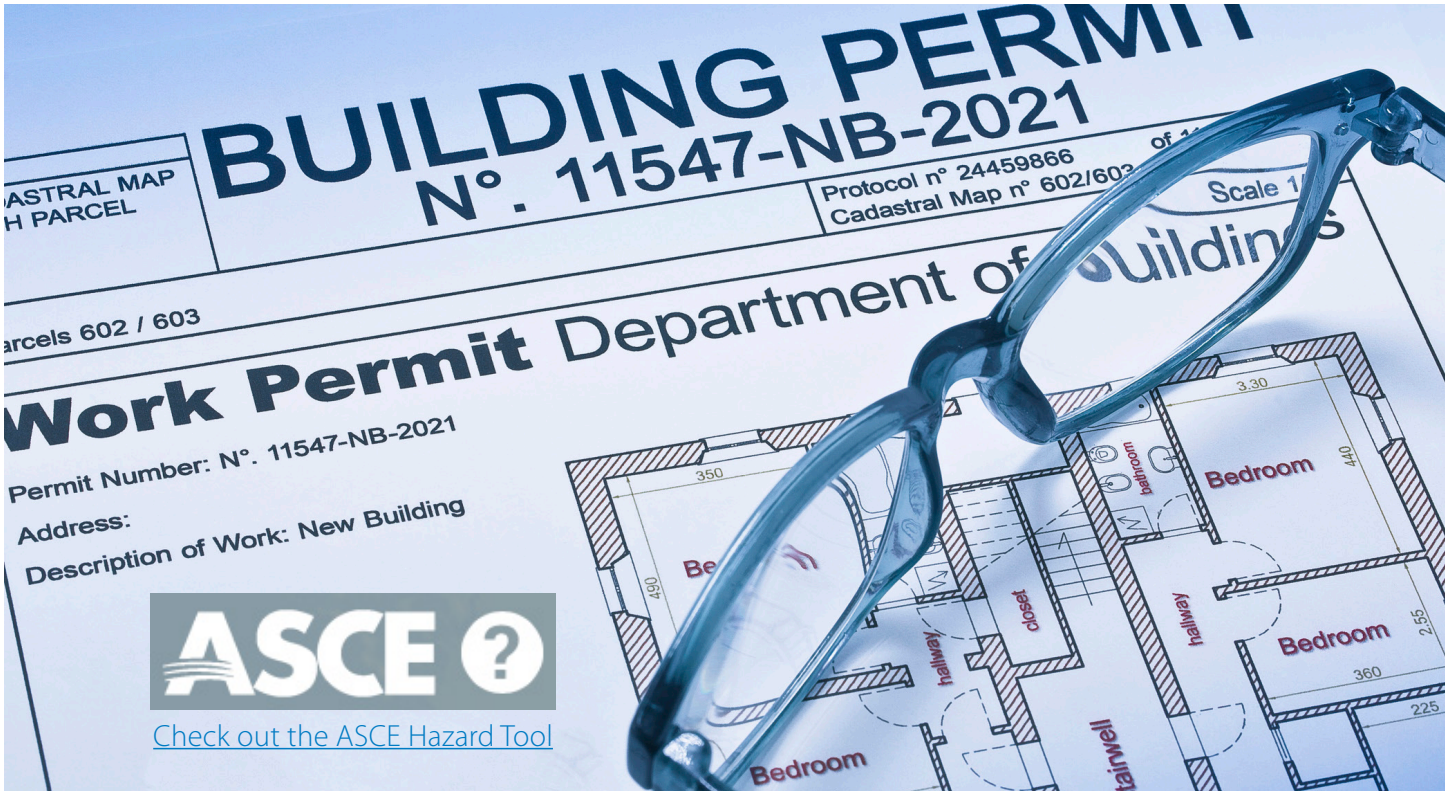
INDUSTRY FOUNDATION CLASSES

Q: WHAT IS IFC AND WHY IS IT IMPORTANT?

A: Within the IntelliVIEW® Suite, IFC (Industry Foundation Classes) capabilities help teams collaborate more effectively, catch design clashes early, and eliminate data entry errors. This ensures all stakeholders stay on the same page with consistent data from design through construction.

IFC is a standardized data format that acts as a "common language" for BIM (Building Information Modeling). It enables different building software applications to communicate with one another, allowing architects, engineers, and designers to exchange digital models seamlessly, even when they work in different tools.

INTELLIVIEW® SOFTWARE 25 SERIES | BUILDING CODE



New Building Code Highlights

Updated standards for building code compliance:

- IRC/IBC 2024
- CBC 2025
- MN IRC 2020
- TPI 1-2022 Driven Design Enhancements
  - New Web/Stud Reinforcements for Lateral and Non-Lateral truss systems
  - Deflection Enhancements
  - Plating Refinements

Need Help?

Solve a problem, read expert articles, watch online tutorials and access top-notch support when you need it. At Alpine®, we provide our customers with the ultimate support experience. Our passionate Help Desk team is ready to assist every step of the way to ensure you always get the most out of our software.

Help Documentation | Solutions Network | Alpine® Academy | Contact Support

BUILD MORE.

alpineITW.com | 800.521.9790

ALPINE®
AN ITW COMPANY

ALPINE® EXPANDS AUTOMATED MATERIAL HANDLING SOLUTIONS WITH VEKTA USA

Teaming up with Vekta USA, Alpine now offers integrated material handling equipment.

Alpine® is excited to team up with Vekta USA to deliver integrated material handling equipment to customers. Vekta USA specializes in automation for timber truss and frame manufacturing. This partnership is committed to quality and performance, helping component manufacturing plants across North America improve efficiency and safety.

"Partnering with Vekta USA will expand our material handling solutions to enhance overall operations for our customers," says Jenai Alexis, Business Unit Manager, Alpine Equipment. "The Vekta PackFeeder, Direct Delivery System, and StakPro are a solid complement to Alpine Equipment solutions."

Ed Serrano, Managing Director at Vekta USA, adds, "Vekta is excited to take this next step in partnership with Alpine, who share our customer-centric values based on trust, respect and integrity. By complementing Alpine's solutions with Vekta's latest material handling innovations, this collaboration will drive even further productivity gains for the industry into the future."

This partnership helps deliver integrated equipment solutions that drive progress while achieving operational efficiencies. It also reflects a shared commitment in the industry to enhance safety.

Jenai Alexis (left), Alpine, an ITW Company, and Ed Serrano (right), Vekta USA, celebrate the new partnership that emphasizes a commitment to improving CM efficiencies.

Together, we are shaping the future of component manufacturing through strategic collaborations that have an immediate impact—Build More.

Contact your Alpine Sales Representative to learn how the integration of Alpine® and Vekta USA technologies can optimize operational efficiency and safety.

LONG SPAN TRUSSES

AUTHOR

Bill Krick P.E. | Chief Engineer

Designing long-span trusses starts with a clear definition. Establishing what constitutes a long-span truss sets expectations early, helping to drive smarter design, manufacturing, and logistics decisions from the outset.

DEFINING LONG-SPAN TRUSSES

According to the Building Component Safety Information (BCSI), long-span trusses are defined as trusses with a clear span of 60 feet (ft) or greater. In practice, however, a good working definition is any truss that cannot be transported as a single unit. In other words, does it fit on a typical flatbed trailer? If not, it is a long-span truss.

A standard flatbed trailer is typically 8.5 ft wide and 48 to 53 ft long (see Figure 1). When trusses exceed these transport limitations, they present unique challenges for the truss manufacturer, contractor, and erection contractor (or framing contractor).

This article focuses on the challenges faced by truss manufacturers, and highlights how Alpine® Engineers help support navigating these complexities.

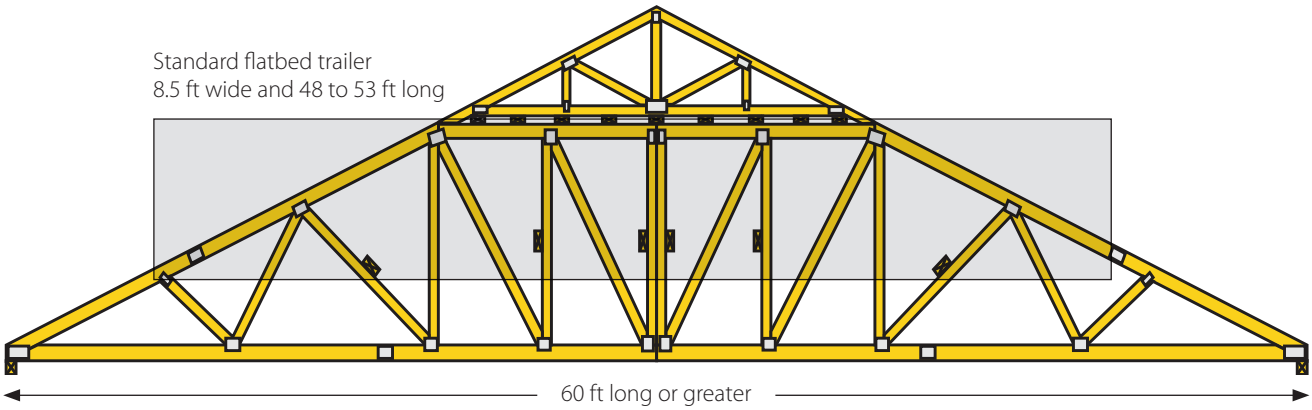


Figure 1. Dimensional limitations of a standard flatbed trailer, typically 8.5 ft wide by 48 to 53 ft long, used to determine if a truss qualifies as a long-span unit.

REVIEWING CONSTRUCTION DOCUMENTS

Before starting the design process, confirm that the following questions can be clearly answered based on the project's construction documents. If information is missing or unclear, contact the building designer to obtain the necessary details. The checklist below serves as a practical reference to support a thorough and efficient design review.

Building & Site Parameters

- ☐ **Construction Type:** Identify the primary building construction method.
- ☐ **Wall Specifications:** Confirm the type of wall construction and wall heights.
- ☐ **Occupancy & Use:** Verify the occupancy and intended use of the building.
- ☐ **Exposure:** Note the presence of open sides.

Structural & Load Requirements

- ☐ **Bearing Points:** Locate all interior bearings.
- ☐ **Mechanical & Special Loading:** Identify requirements for HVAC equipment, movable partitions, or material handling systems.
- ☐ **Drainage:** Confirm any special drainage provisions that will be required for flat or sloping-flat trusses.

Logistics & Assembly

- ☐ **Field Splices:** Determine if the framing contractor requires trusses to be field spliced.

FRAMING CONTRACTOR ASSESSMENT

The next step, and equally important, is to assess the capabilities of the team on-site. An understanding of available experience, equipment, and installation expertise helps identify potential constraints early while reducing potential installation problems. Consider the following:

- ☐ **Experience:** Is the framing contractor experienced in handling long-span trusses?
- ☐ **Equipment:** Does the framing contractor have proper lift equipment, such as an adequate crane and a spreader bar of the correct length?
- ☐ **Support:** Will the framing contractor be willing to install temporary scaffolding down the center of the building until the roof deck is secured, and all bracing is installed?
- ☐ **Knowledge:** Does the architect, engineer, and framing contractor have—and understand—BCSI truss handling and bracing requirements?
- ☐ **Supervision:** What is the contact information for the architect or engineer responsible for design and field supervision?

SPECIAL CONSIDERATIONS

To ensure structural integrity and ease of handling for long-span trusses, the following recommendations help reduce risk, enhance efficiency, and promote consistent structural performance:

- **Lumber:** Dense or MSR lumber is recommended for the top and bottom chord. For improved handling, 2x8 members are recommended for both top and bottom chord sizes.
- **Configuration:** For better handling and stability, long-span trusses should be two-ply. These may be spaced greater than 24" O.C. (on center).
- **Field Splices:** For field splices, a jack-scab is required on both faces. Please contact your Alpine Engineer for guidance.
- **Installation:** It is recommended the framing contractor review the video "Proper Erection and Bracing Procedures" and that the engineer be present at the jobsite while trusses are being installed.

DESIGN EXAMPLE WITH AN 80-FT SCISSOR TRUSS

With the above checklists addressed and a clear path forward, this section provides an example to help illustrate key design concepts in application. The following explores an 80-ft scissor truss with a 6/12 top-chord pitch and 2/12 bottom-chord pitch.

Step 1: The Baseline Design

The first step is to revisit the checklist outlined earlier to ensure all project requirements are understood. Once verified, design an 80-ft truss using all design criteria provided in the construction documents. This full-span design serves as the baseline for developing the two splice segments (see Figure 2).

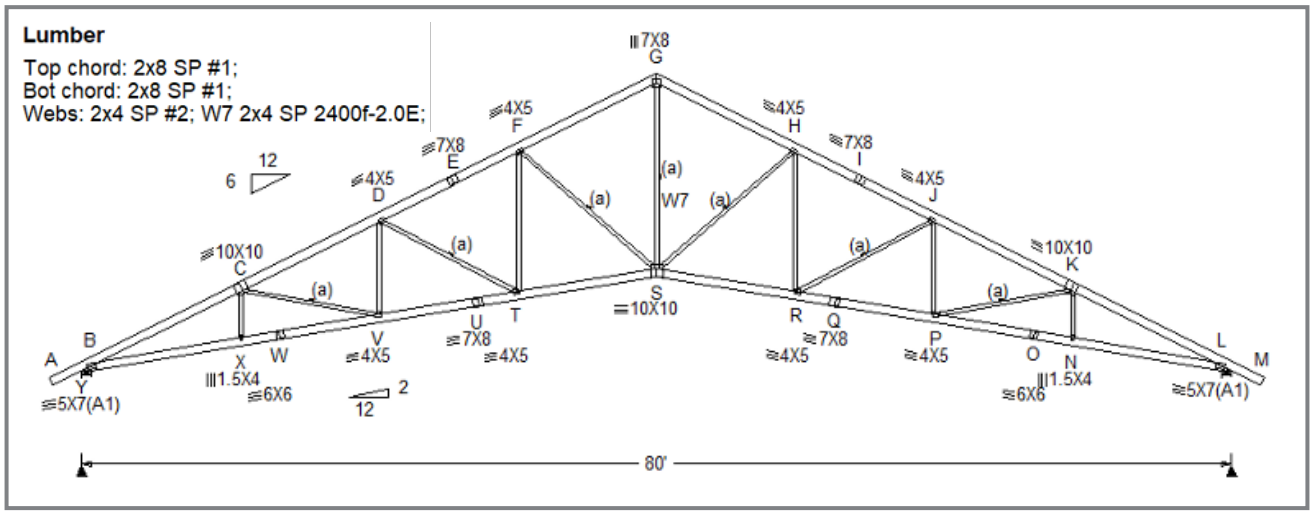


Figure 2. Full 80-ft scissor truss diagram showing the 6/12 and 2/12 pitches.

Step 2: Field Splicing and Segmentation

In this example, the project requires a field-spliced truss. The most straightforward approach is to design two 40-ft trusses that can be connected in the field. However, a critical requirement is to use the same lumber grades, plate sizes, and web-bracing requirements specified in the original 80-ft truss design. Using materials or plate sizes appropriate for a standard 40-ft truss will result in inadequate capacity. Once assembled, the system functions as an 80-ft long-span truss, not two independent 40-ft trusses.

Additionally, because the full truss will be divided into two halves, two vertical webs must be incorporated at the peak of each 40-ft truss, as illustrated below (see Figure 3).

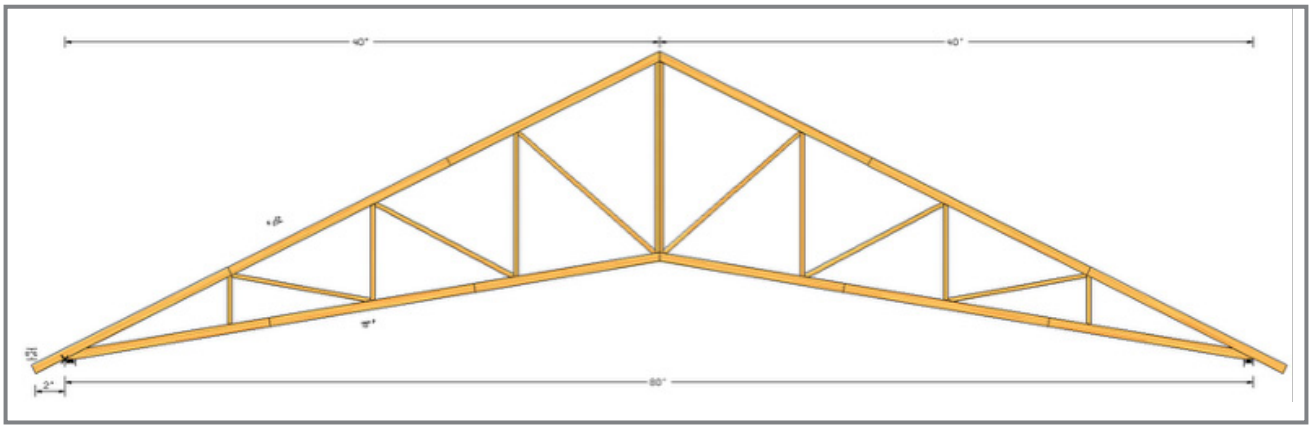


Figure 3. Close-up diagram of the truss peak with vertical webs.

Step 3: Creating the Segment Designs

The design for the left 40-ft segment of the overall 80-ft long-span truss is shown in Figure 4. The same design process is then applied to develop the corresponding 40-ft right-side of the truss, shown in Figure 5.

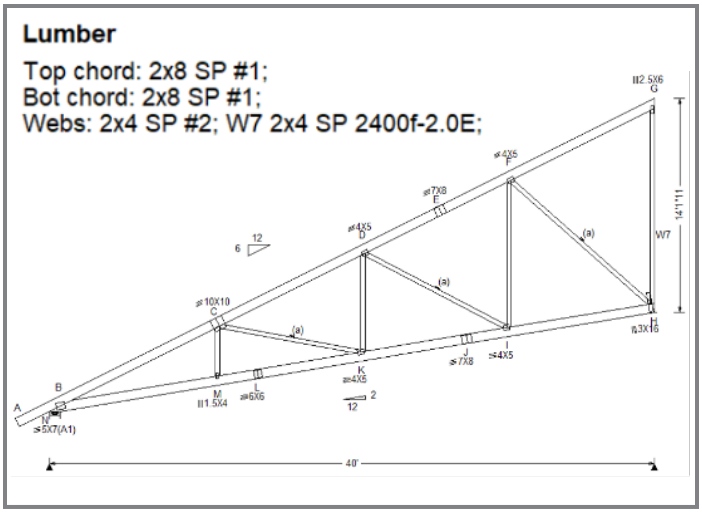


Figure 4. Design diagram for the left 40-ft segment.

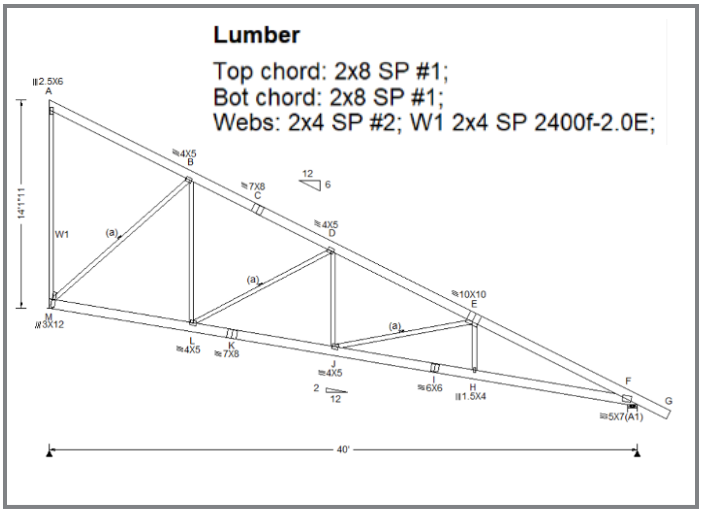


Figure 5. Design diagram for the right 40-ft segment.

Step 4: The Jack-Scab Truss

The next step is to design the two-ply jack-scab truss. This component must include the full top-chord section on both sides up to the peak, along with the full bottom-chord section. Matching webs are required to ensure proper transfer of forces through each chord and web member (Figure 6).

Note: The connection details between the jack-scab truss and two 40-ft truss halves must be provided by an Alpine Engineer or another Registered Design Professional (Figure 7).

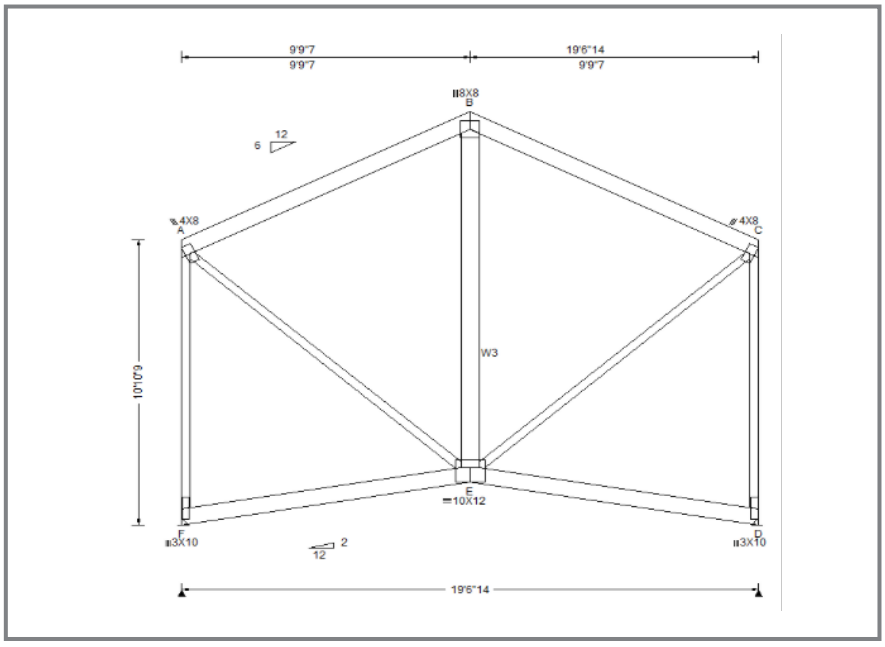


Figure 6. Two-ply jack-scab truss configuration diagram.

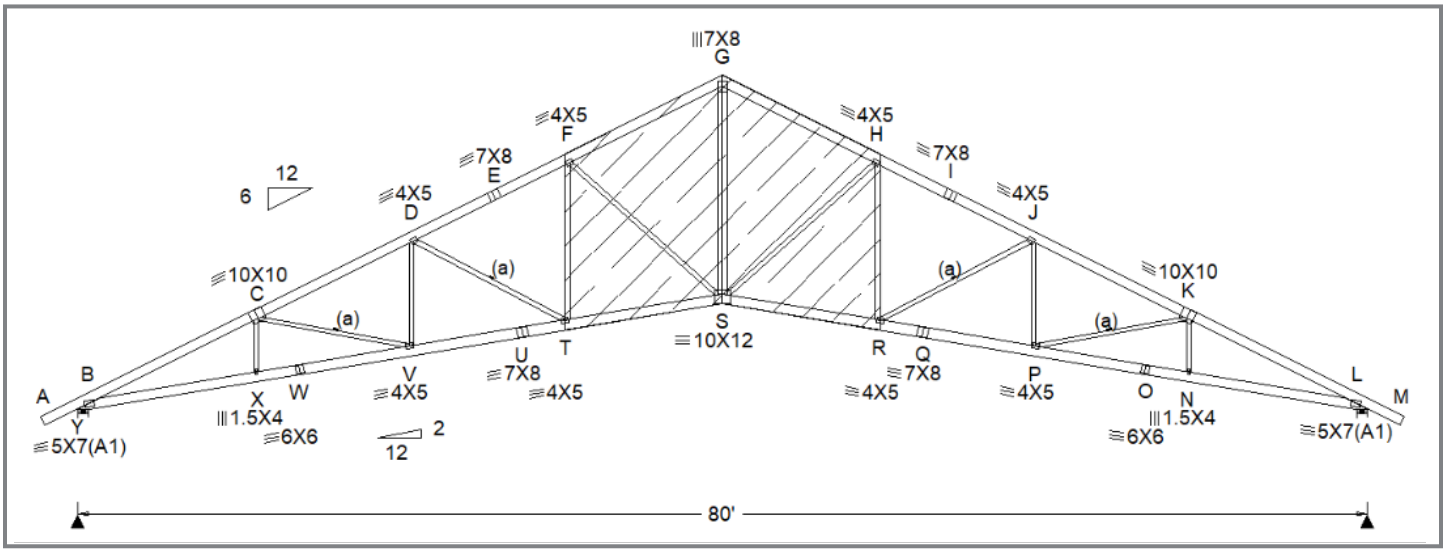


Figure 7. Two-ply jack-scab truss connected to 40-ft truss halves diagram.

JOBSITE INSTALLATION GUIDELINES

Once all truss sections have been designed, fabricated, and delivered to the jobsite, BCSI provides several key guidelines to ensure proper and safe installation:

- ☐ **Professional Oversight:** Engage a Registered Design Professional to prepare a temporary restraint and bracing plan and to oversee the process. This is required by the International Building Code.
- ☐ **BCSI Standards:** Review and understand the latest BCSI documents before installation begins.
- ☐ **Safety Planning:** Develop a safe and effective truss installation plan and ensure all crew members understand their responsibilities.
- ☐ **Experienced Personnel:** Use personnel experienced in installing long-span trusses, particularly those spanning 60 ft or more.
- ☐ **Pre-Installation Inspection:** Inspect all trusses prior to installation to verify they are in suitable condition.
- ☐ **Damage Documentation:** Document any truss damage before installation and ensure all repairs are completed in accordance with repair details prepared by the Truss Designer or a Registered Design Professional.
- ☐ **Support Stability:** Confirm that all walls and supporting structures are stable, properly restrained, and adequately braced prior to setting trusses.
- ☐ **Equipment Readiness:** Verify that all necessary lifting equipment and materials are on site and ensure the crane operator understands the unique hoisting requirements associated with long-span trusses.

REQUIREMENTS FOR SPANS EXCEEDING 80–90 FT

Long-span trusses exceeding 80 ft require additional coordination and design consideration. For projects over the 80-90 ft range, the following information and requirements should be reviewed in collaboration with an Alpine Engineer to ensure structural performance.

Checklist:

- ☐ **Contact Information:** Provide the name and phone number of the architect or engineer responsible for the design and field supervision.
- ☐ **Double Trusses:** Alpine normally requires double trusses on spans above 90 ft. These trusses may be spaced out at intervals greater than 2 ft O.C. and fastened together either at the truss plant or on the ground at the jobsite. All double trusses must be lifted as pairs. Acceptance of double trusses should be confirmed early in the design process.
- ☐ **Lumber Grade:** Truss chord members shall be MSR lumber or visual grade of Select Structural or Dense Select Structural to meet the strength and consistency requirements.

- **Analysis:** For spans greater than 90 ft, Alpine's standard analysis is required. Empirical analysis methods will not be permitted for these applications.
- **Compression Limits:** Maximum permitted axial compression force in chord members is 25,000 pounds (lbs.) per ply.
- **Materials:** Roofing and ceiling materials must be clearly identified.
- **Dead Loads:** Design dead loads must be verified to account for the weight of all specified materials, including the weight of the trusses.
- **Bracing:** All continuous lateral web bracing must be eliminated by means of increasing web grade and/or web size, or by use of Alpine Web Block, T-bracing, L-bracing, or scab reinforcement.
- **Environmental Loads:** Trusses must be designed for all code-required environmental loads, including unbalanced snow and wind loads, in accordance with the ASCE-7.
- **Piggyback Bracing:** Flat top chord of all piggybacked trusses must be laterally braced with structural sheathing decking.

Addressing these considerations early in the design process helps reduce risk and improves jobsite coordination, while supporting an overall execution of long-span trusses. For further guidance or project-specific support, contact your Alpine® Engineer.

REFERENCE(S)

1. Building Component Safety Information (BCSI)
2. International Building Code 2024 (IBC)

ALPINE® NAMED SBCA INNOVATION GRANT PEOPLE'S CHOICE INNOVATOR FOR 2025

Alpine's Plan Comparison Tool was showcased at BCMC 2025.

Diego Polanco

Alpine® has been named the People's Choice Innovator for the 2025 SBCA Innovation Grant with its Plan Comparison Tool. After being selected earlier this year as one of the 2025 SBCA Innovation Grant recipients, Alpine's tool was showcased alongside other grant recipients on the BCMC 2025 show floor in Innovation Alley. Their solution stood out to attendees at BCMC, who voted to recognize the company's work for its outstanding impact and potential to advance component manufacturing.

"This is a great recognition for Alpine as well as the dedicated team behind The Plan Comparison Tool," says Matt Davis, Group President with Alpine, an ITW Company. "We're honored to be recognized and even prouder of the team bringing this solution to life. It reinforces our commitment to providing component manufacturers with tools that maximize efficiency and productivity."

Alpine's Plan Comparison Tool is designed to boost productivity, reduce errors, and streamline workflow by providing a single source of truth for everyone involved in a project. By automatically identifying changes and differences between two documents, whether images, text, drawings, or other elements, the tool ensures that revisions are clear and nothing is overlooked. This creates a collaborative communication system where everyone—from architects and engineers to designers, builders, and component manufacturers—can contribute their input with confidence, knowing The Plan Comparison Tool will capture comments or revisions and reflect them in the final product.

For Diego Polanco, Product Owner with Alpine, an ITW Company, the recognition reflects the dedication and creativity of the team. "On behalf of the team, I am humbled to receive the People's Choice Innovator Award for the SBCA Innovation Grant," says Diego. "This win is for Alpine. Thank you to Alpine leadership for supporting me and the team of developers throughout this process. This product is helping solve pain points for our customers and the industry. Being named the People's Choice Innovator is a motivator for the team. It helps to sharpen our focus on continuing to deliver meaningful solutions that support the industry."

The SBCA Innovation Grant program is designed to encourage and showcase new ideas that improve safety, quality, efficiency, and collaboration across the structural building components industry.

For more information about the SBCA Innovation Grant program and past recipients, visit *www.sbcacomponents.com/innovation-grant*.

Learn more about Alpine's Plan Comparison Tool at:

https://alpineitw.com/simplify-floor-plan-review/

https://www.sbcacomponents.com/media/sbca-innovation-grant-spotlight-alpine

Alpine® Linear Saw 5.0

With over two decades of proven reliability, durability, and accuracy, the ALS 5.0 continues our legacy of innovation. Experience a new optimized cutting workflow, improved material handling, and preventative maintenance features that improve your productivity.

Available Today.

BUILD MORE.

alpineITW.com | 800.521.9790

ALPINE®
AN ITW COMPANY