

Hansen Buildings Construction Guide

www.HansenPoleBuildings.com



Hansen Pole Buildings, LLC
Technical Support Department
12167 Lake Road
Browns Valley, MN 56219

Important Contact Information:

▶ **If material takeoff list is NOT received in your login within one week after receiving building plans, notify your Project Coordinator** ◀

Plans/Drafting Department:

Building plans take precedence over any other information or instructions. In the event you find something you question, are unclear about, or which may be contradictory, contact the Hansen Buildings Drafting Department via login.

Technical Support:

For questions regarding proper installation or for any additional information not outlined in this guide, technical support is available for a nominal fee (may be pre-purchased via login).

Purchasers of a technical support plan will be given contact information for our Technical Support Department. In the event a technician is not available when you call, leave a detailed message. All requests are taken in order received. Answers will either be emailed back (quickest), texted to your cell phone (please leave cell phone number and name of cellular service provider), or the next available technician will return your call. Depending upon call volume, telephone calls will normally be returned the following business day.

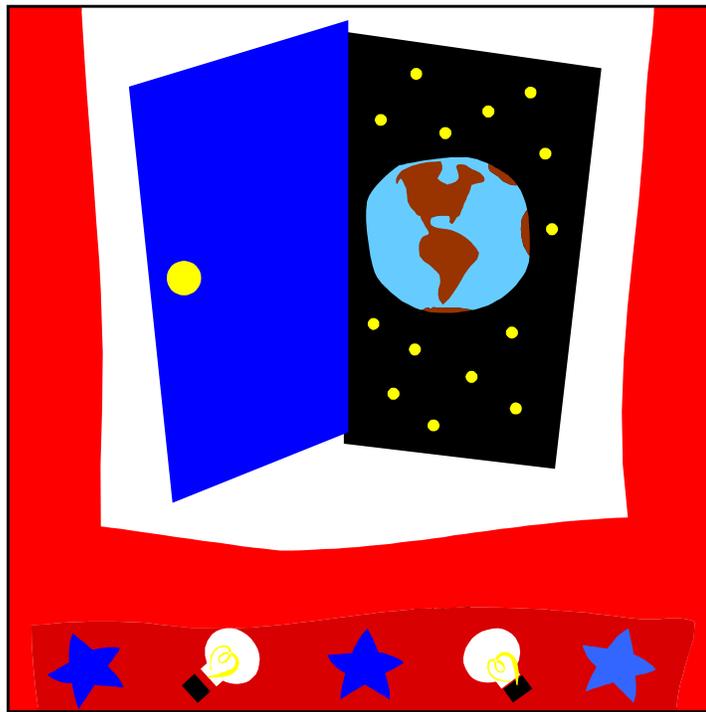
Keep in mind pole buildings are highly complex structures, involving thousands of components. Our technical support staff may not have the solution to a particular challenge immediately. However, they will research the situation and respond with answers as quickly as is reasonably possible.



Do not contact either component manufacturers or the Engineer of Record for Technical Support **as wrong information may be given**. Large charges to you may apply (calls or Emails to the engineer **WILL** result in you being charged hundreds of dollars, even if the question was not answered).

No technical support is available through our Sales or Production Departments.

You are about to enter the world of a Hansen Building . . .



. . . and you don't have to carry the weight of it alone!

We're here for you - every step of the way.

What do we ask in return?

To please read this manual.

**It is written to save
you time and costly errors.**

Quick Answers

Q: When will my building plans arrive?

A: Building plans are available by login approximately 5-7 working days after door and any stair locations are provided. Plans will be in .pdf format. Please review and approve online, so they may be sent to our engineer or blueprinter.

Q: Does everything show up at once?

A: No. Usually there will be at least three major deliveries: lumber, trusses and steel. Other deliveries may include: hardware, insulation, doors and windows, depending on the features selected.

Q: I didn't get my nails (or Ledgerloks or bolts). Where are they?

A: We only furnish nails which can not normally be driven by a nail gun. Other larger fasteners, typically used to fasten the trusses (or rafters) to the columns are sent from the Hansen Buildings office. Take everything out of ALL boxes, count and inventory. The box contents are "mixed merchandise".



Q: How is eave height measured?

A: Eave height is **always** the vertical measure from the skirt board *bottom* to the intersection of roof steel and sidewall column outside edge. See **eave height** in the glossary for an illustration. *Improper eave height measurement is the most common and most expensive construction error!* Eave height is **NOT** the measure to truss bottom chord.

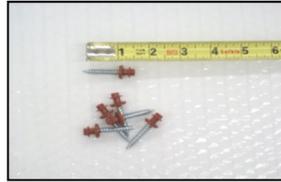
- 1.) Go to the building **eave side**, other than at a **corner**.
- 2.) Hook a tape measure to **skirt board bottom** at a post.
- 3.) Measure up the *post outside*, to the **TRUSS (or rafter) TOP**.

Q: What's the difference between "stitch" and "diaphragm" screws?

A: **Stitch screws** are 3/4" or 1-1/4" long metal-to-metal and are used to install trim to siding and roofing. They also fasten the steel sheeting onto the sliding doors. No wood is required beneath the point to fasten.



Diaphragm screws are 1-1/2" and have an outward tapered shank directly below the head. They are used to install roofing and siding with tip placed into a wood member beneath the steel sheeting.



Q: The insulation has a silver side and a white side. Which way is it placed?

A: The silver or foil side is "up" (facing the metal). White side faces down (towards inside of building).



Q: Do insulation edges overlap?

A: No! If overlapped, plan on purchasing more insulation. Our standard A1V product comes with an adhesive tab. "Butt" the insulation edges to each other, remove the pull strip and press the tabs together at the seams. This insulation is designed to give a 48" net coverage per roll. With our other reflective insulation products, the edges may "butt" together and the seams are taped.

Q: I spent \$500 buying "extra" materials for my building. When does the check come?

A: Any materials purchased, without Emailing or calling to verify what was missing or damaged or for any "extra" materials used in building the structure other than according to our building plans and the instructions contained in the **Hansen Buildings Construction Guide**, are at your expense. Only with written pre-authorization from Hansen Buildings may anyone purchase additional materials and be reimbursed.

Q: What if I run short of screws?

A: Not meaning to insult anyone...from experience, screw shortages in building construction most often happen when a "professional builder" is hired. The reality is: these are not their materials – they are YOURS. You, the homeowner have paid for them. Screws dropped on the ground are more likely to be picked up at day's end by the person who paid for them!

Washers may become separated from screws during shipment. If the choice is made to not reassemble, replacements for these discarded screws are at the customer's expense.

If you or your builder runs short 100 screws or more in any color, you will be required to pay for additional. All screws are calculated with a 5% overage added to ensure plenty to complete the building.

Q: Are the materials offloaded for me?

A: In most cases, lumber and trusses are offloaded. With larger truss spans (usually over 40' in width), lifting equipment may be required to help off load the trusses. In no case, does unloading include truss setting onto building columns, by crane or any other equipment.

Unless steel offloading is available and was purchased at building order, YOU provide equipment to unload steel roofing and siding.

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Readers - be aware the building industry is an ever-changing entity. Bring any questions arising from this guide's use immediately to any Hansen Buildings' team member's attention.

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Icons Used in This Book



The key points to basic, but “open sesame” concepts to insure getting ***your dream building!***



Red push pin to get fired up and paying **close attention** to these details.



This is like the yellow caution sign by open manhole on a street. Ignore and expect to FALL IN!



STOP! Take time to read and ***re-read*** before proceeding.



Follow the directions and the **money** stays in your pocket. If you or anyone building for you fails to follow the directions in this guide, the cost is ***yours!***



Finger with the string around is a reminder of things to help the whole building process go smoother.



Warning of possible problems if this point is not followed carefully.



DANGER! We're trying to protect you from injury, pain or monetary loss.



Noteworthy point - pay **close attention**.



A solution or fix to a common building error.



Check lumber for allowable defects and those which are acceptable.



Pay close attention!



Check this out.

Which icons should be followed? **ALL!**

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Chapter 1: Introduction



Due to customer input, this latest edition of the Hansen Buildings Construction Guide is arranged covering features common to most installations first, followed by chapters which individually address popular options.

There are two keys to successful pole building installation.

 The first is quality products – the products professional builders and contractors have come to expect from Hansen Buildings, the pioneer in easy-care, easy-to-install pole building products. If using Hansen Buildings' products for this building project, then the important first step has been taken to an outstanding installation.

 The second key is quality workmanship - an installation which is carefully planned and completed with attention to detail. This is where knowledge and know-how come into play.

Maybe you are an experienced installer, or perhaps preparing for your first pole building installation. Whatever the situation, this Hansen Buildings Construction Guide will help you follow all the necessary steps involved in outstanding pole building installation. The guide also will help master skills and techniques required for each step. With products such as pre-manufactured trusses, even a beginner can successfully construct their own building. Think of a building as many, small, easily accomplished steps.

We truly mean ***EACH*** step. This guide begins with site preparation. Then it moves to laying out a building, digging holes and setting building columns. Next is building framing. Finally there are the techniques for installing steel roofing, siding, and trims.

Techniques and helpful hints in this guide are based on over 30 years of actual field experience. The instructions come from builders and individuals who have collectively successfully constructed over 100,000 pole buildings. Be assured these are time-proven techniques. A good idea is to review local building codes to be aware of any special requirements for pole building installation. The local building department may have prescriptive structural requirements for “non-engineered” pole buildings. If this is the case, and a “non-engineered” building package was ordered, any changes made by the building department, will be at your expense. These requirements will not apply to an engineered building except for loading and climatic conditions (snow, wind, soil and seismic).

The best way to use this construction guide is as an addition to your own experience. If you are an old pro at pole building installations, skim the table of contents and the inside pages looking for tips and techniques which can be added to your current skill sets. **Chances are this pole building will be different from any prior pole building you have installed. Avoid making assumptions. Review this guide to be familiar with the differences.** If new to pole building installations, read the book from cover to cover. You will quickly understand what has to be done, and in what order, to complete a successful pole building installation.



If hiring a contractor to construct your new building, even one who has built our buildings before, provide this guide, the building plans, all material takeoff lists, and steel cutting diagrams. Failure to provide these resources to builder will exponentially decrease the chances things will be done correctly and will increase the probability of disappointment with the outcome. We frequently update our guide, as new products are introduced, so we would encourage the builder to read thoroughly, even if they have read a prior version. Also, in your best interest, is to read this guide, as even the most experienced builder will miss an important aspect from time to time. Hiring a builder, rather than doing the work personally, is all-too-often a guarantee the work will be done incorrectly. Only direct personal involvement will guarantee a satisfactory installation.

Construction guide creation custom tailored to any specific building is neither economically practical nor feasible. While one or more of these sections may not pertain to your building, it could prove helpful to read through anyway. They may occasionally contain vital information proving helpful in other project areas.

If questions or problems are not covered in this guide, whether old pro or beginner, turn to the last pages for other help sources.



IMPORTANT INFORMATION

The application and detail drawings in this guide are strictly for illustration purposes and may be non-applicable to all building designs or product installations. It is impossible for this guide, or any other resource, to cover all possible circumstances. In some cases, generally accepted construction practices and common sense may have to be used. Conform all projects to applicable building codes for their particular area.

Hansen Pole Buildings, LLC is not responsible for building performance, or portion thereof, if not installed in accordance with the suggested instructions referenced in this guide and according to the building plans and erection drawings. **If there is a conflict between this guide and the actual erection drawings, the erection drawings take precedence.**



In the event any difference exists between plans, material takeoffs, this guide, or any other furnished documents, contact Hansen Buildings immediately for clarification or resolution prior to moving forward.

Hansen Pole Buildings, LLC reserves the right to modify, without notice, any details, recommendations, or suggestions.

SOME WORDS ABOUT SAFETY: STUDY APPLICABLE OSHA AND OTHER SAFETY REQUIREMENTS BEFORE FOLLOWING THESE INSTRUCTIONS.

This is construction and many potential hazards exist. Construction is a dangerous procedure and some work portions may be advisable to have supervised or done by trained knowledgeable erectors. Hansen Pole Buildings, LLC cannot be aware of all possible job site situations which could cause an unsafe condition to exist. The building erector is responsible for reading these instructions and determining the safest way to install materials.



The actual photos in this manual have been provided by our customers. They are for illustrative purposes only, and are not intended to portray safe construction practice.

These instructions are provided as a guide to show the correct parts placement, one to another. **IF** following any installation steps would endanger a worker or bystander, it is up to the building erector to stop work and decide upon a corrective action.

As you exercise your do-it-yourself skills, develop and stick to safe work habits.

- Work patiently. If becoming confused, frustrated or hurried, chances are greater mistakes will be made or accidents will happen.
- Read and follow recommended safety procedures from tool manufacturers or products used.
- Turn off and unplug tools when changing blades or making adjustments.
- Use tools or equipment for their intended purposes; keep cutting tools sharp and all tools in good working condition.
- Adequately protect eyes and ears at all times.
- Wear appropriate protective clothing and heavy soled boots (with rubber soles when working on roof), gloves when handling lumber.
- Tie back long hair to avoid catching accidentally in power tools.
- Keep work surfaces and traffic areas free from materials, cords, tools, scraps and debris.
- If an object is too heavy or awkward, get assistance in moving; bend from knees when picking up large or heavy items.
- Hard hats are recommended when working under or around overhead construction.
- Use scaffolding when working on high places. Manipulating heavy and unwieldy trusses, rafters, beams and sheathing can cause balance loss. Be careful where stepping; move slowly and with caution. Avoid anyone standing below.
- Be extra careful working around glass – one wrong move can cause injury or replacing a costly item.
- Provide required safety railing, netting, or safety lines for persons working on roof.

- Do not use roof panels or sheathing as a walking platform. They will not withstand a person's weight standing at a panel or sheet edge.
 - Do not stand on any construction materials placed on a sloped surface, prior to sufficient attachment.
 - Avoid working on damp or frosty steel surfaces, or when lighting is inadequate.
 - Use proper protection, take precautions and plan ahead. Never bypass safety to save money or rush a project.
-
- For detailed specifics on construction jobsite safety contact:

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