### **Chapter 1: Introduction**

Due to client and builder input, this latest Hansen Pole Buildings' Construction Manual edition covers features common to most installations first, followed by chapters individually addressing popular options.

There are two keys to successful post frame building installation.

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

Second key is quality workmanship - an installation 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 post frame building installation. Whatever your situation, this Construction Manual will help you follow all necessary steps involved in outstanding post frame building installation. This manual also will help master skills and techniques required for each step. With products such as pre-manufactured metal plate connected wood trusses, even a beginner can successfully construct their own building. A building should be considered as many, small, easily accomplished steps.

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

Techniques and helpful hints in this manual are based on over four decades' actual field experience. These instructions come from builders and individuals who have collectively successfully constructed over 100,000 post frame 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 post frame (pole) building installation. Local building departments may have prescriptive structural requirements for "non-engineered" pole buildings. These prescriptive requirements are non-applicable to an engineered building except for loading and climatic conditions (snow, wind, soil and seismic), those you verified prior to placing your order.

Best way to use this construction manual will be as an addition to your own experience. If you are an old pro at post frame building installations, skim table of contents and inside pages looking for tips and techniques you can add to your current skill sets.

Chances are this post frame building will be different from any prior post frame building you have installed. Avoid making assumptions. Review this manual to be familiar with differences.

If new to post frame building installations, read book from cover to cover. You will quickly understand what has to be done, and in what order, to complete a successful post frame building installation.

## If hiring a contractor to construct your new building, even one who has built Hansen Pole Buildings before, provide to them this Construction Manual, building plans and all material takeoff lists, as well as your client portal login information.

Failure to provide these resources to builder will exponentially decrease chances things will be done correctly and will increase probability of disappointment with outcome. We frequently update this Construction Manual, as new products are introduced and Building Code changes are made, so we would encourage builders to read thoroughly, even if they have read a prior version. Also, **in your best interest**, is to read this manual, as even a most experienced builder will miss an important aspect from time to time. Only direct personal involvement will guarantee a satisfactory installation.

Construction manual creation custom tailored to any specific building is neither economically practical nor feasible. While one or more of these sections may be non-applicable to your building, it could prove helpful to read through them anyway. They may occasionally contain vital information proving helpful in other project areas.

# MINDORTANT INFORMATION

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

Hansen Pole Buildings, LLC cannot be responsible for building performance, or portion thereof, if installed other than in accordance with suggested instructions referenced in this manual and according to building plans and erection drawings. **If a conflict exists between this manual and actual erection drawings, erection drawings take precedence.** 

#### CAUTION

In event any difference exists between plans, material takeoffs, this manual, or any other furnished documents, contact Hansen Pole Buildings immediately for clarification or resolution prior to moving forward. Hansen Pole Buildings, LLC reserves right to modify, without notice, any details, recommendations, or suggestions.

#### SOME WORDS ABOUT SAFETY: STUDY APPLICABLE OSHA AND OTHER SAFETY RE-QUIREMENTS BEFORE FOLLOWING THESE INSTRUCTIONS.

During construction 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 causing unsafe conditions to exist. Building erector is responsible for reading these instructions and determining safest way to install materials.

#### CAUTION

Actual photos in this manual have been provided by clients and/or their builders. They are for illustrative purposes only, and may portray unsafe construction practices.

These instructions are provided as a guide to show correct parts placement, one to another. **IF** following any installation steps would endanger a worker or bystander, building erector must 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.

- Too heavy or awkward an object? Get assistance in moving; bend from knees when picking up large or heavy items.
- Wear safety helmets 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.
- Avoid working under or near overhead power lines.
- Provide required safety railing, netting, or safety lines for persons working on roof.
- Avoid using roof panels or sheathing as a walking platform. They won't withstand a person's weight standing at a panel or sheet edge.
- Sufficiently attach any construction materials placed on a sloped surface, prior to walking on them.
- Avoid working on damp or frosty steel surfaces, or with inadequate lighting.
- Use proper protection, take precautions and plan ahead. Never bypass safety to save money or rush a project.
- For detailed specifics on construction job site safety contact:

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