

Biewer Lumber Products prides itself in producing a top quality laminated column which, when properly used, becomes an integral part of a post frame stricter. This application guide is meant to serve as added protection against product misuse or misapplication. It is the responsibility of the installer and supplier (lumber yard, builder, building contractor, licensed contractor or erection contractor) to properly receive, unload, store and handle the columns to protect life and property.

The recommendations contained within this guide are based upon the collective experience of both technical as well as practicing personnel in the post frame industry. This guide however must, due to the nature of responsibilities involved be presented as a guide for use of a qualified building designer or installer.

Some of the information contained within this guide relate to means and methods of construction which vary from builder to builder, state to state. Examples of this include, but are not limited to: temporary erection bracing, spacing of horizontal wind purlins, attachment of purlins to columns, anchorage of truss or truss carrying elements to column etc. Biewer Lumber Products expressly disclaims any responsibility for damages arising from the use, application or reliance on the recommendations and information contained herein by building designers, installers or others.

CAUTION: A Caution identifies situations where the product **MAY NOT** function as intended.

WARNING: A Warning identifies situations where the product **WILL NOT** function as intended.

A. COLUMN STORAGE:

CAUTION: Improper storage can result in columns which appear discolored or have a slight bow.

If the columns are not to be used immediately, they should be stored in a dry place where as little moisture as possible can get at them. Moisture (from rain snow, condensation, etc.) may cause damage to the untreated portion of the columns. Avoid the direct sunlight; the untreated portion will lose its natural wood color. Columns should be stored in a horizontal position. Use support boards of equal dimensions no more than 4' apart to support them and also to prevent them from sitting directly on the ground. If bunks or units of columns are stacked on top of each other, the support boards **MUST** line up vertically (i.e. no staggered placement). If outdoor storage cannot be avoided protect with a canvas or waterproof paper cover. (such as the OTP lumber wrap). Leave the bottom of covers loose to allow air movement. Do **NOT** use plastic can cause sweating or condensation.

B. COLUMN ORIENTATION:

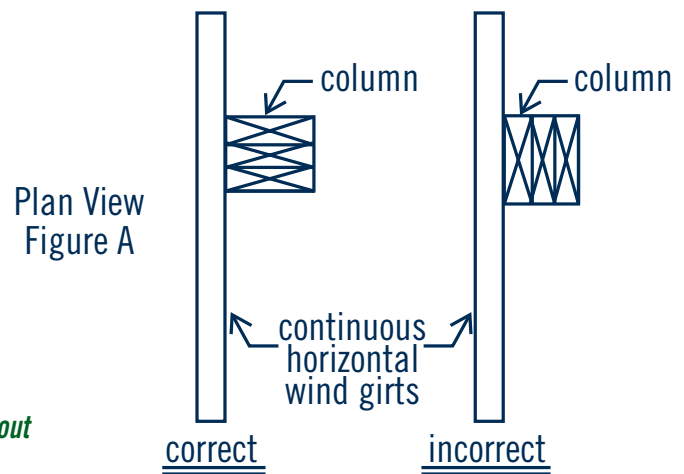
WARNING: Improper orientation will result in a column which has diminished structural capabilities.

Figure A (right) indicates how the column **MUST** be turned in order to function properly. For columns at building corners **ONLY** the installer has option of orientation provided wind girts are present in two directions.

C. WIND PURLINS:

WARNING: Continuous horizontal wind purlins (i.e. girts) must be present throughout the height of the column for the column to function properly.

A vast majority of post frame structures contain columns upon which horizontal wind girts, or purlins, are placed. Sheathing material, such as light gauge metal or wood panels, is then attached to the purlins. The Nail-Lam “ Plus” Columns manufactured by OTP **REQUIRE** the presence of these horizontal girts throughout the entire height of the column. (continued on next page)



C. WIND PURLINS(cont.):

Examples where horizontal wind girts are NOT found include interior “stand-alone” columns or columns on “open-ended” type structures. For these types of applications the column should NOT be used without modification. Typical modification may include the addition of plate (or plates) to the sides of the assemblies. Consult your building designer for a more exact determination.

Vertical spacing between the horizontal wind girts varies from builder to builder. Biewer Lumber Products suggest that spacing not exceed 36” between the purlins.

D. TRUSS ATTACHMENT:

WARNING: Truss or truss support attachment to column is critical a connection. Consult your design professional for methods available.

The top 18” to 24” of every OTP column contains no fasteners or adhesives. This provides building designers and installers with an easy way of achieving a superior connection by means of notching one or more plies. Selection of the final method of anchorage to resist either upward or downward forces remains with the building designer. Some OTP columns have, by customer direction, one of the interior plies held down some distance to permit a truss “drop-in” arrangement. Anchorage or the resulting “filler piece” to the other plies as well as truss anchorage remains with the building designer.

E. TEMPORARY BRACING:

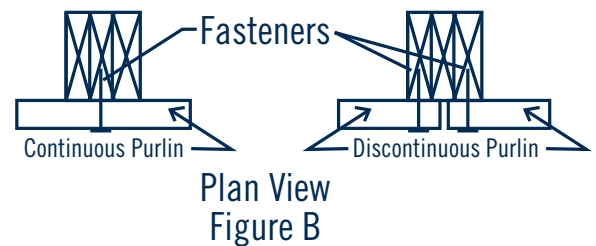
WARNING: Lack of bracing during construction can result in building becoming racked or possible collapse.

It is a generally recognized fact that a post frame structure is at its weakest point during the erection period. Lateral loads (such as from wind or seismic) can cause serious structural damage prior to the installation of sheathing material. Biewer Lumber Products recommends that temporary bracing be installed from the upper portion of the column to the ground in both directions to prevent column displacement. The contractor (or installer) is ultimately responsible for all temporary erection bracing.

F. WIND PURLIN ATTACHMENT:

CAUTION: Improper attachment of purlins to column may result in diminished holding power of the fasteners.

Figure B (right) shows the correct method of attachment for purlins which are both continuous and discontinuous at a column. Care should be exercised that fasteners are not placed BETWEEN individuals plies but rather penetrate a single ply. The size and quantity of fasteners used are to be determined by the building designer.



G. PRODUCT USE:

WARNING: Improper use can result in injury or death.

Biewer Lumber Products Nail-Lam “Plus” Columns are intended for use only in a properly designed and constructed post frame structure. In NO case is the product to be used for ANY purpose other than this. The allowable design values for the OTP Nail-Lam “Plus” column are derived from the National Design Specification for Wood design. When properly used the 3 ply 2x6 assembly will be stronger than the standard NO. 2 6x6 Southern Pine Timber values published for both materials.

H. MECHANICAL FASTENERS:

CAUTION: NAIL-Laminated Columns contain mechanical fasteners which may cause damage/ injury if struck during sawing.

Multiple members contain steel fasteners. Remove any steel fasteners present in the area a power tool (power saw , drill, etc.) is to be use. Biewer Lumber Products will not be responsible for negligence in the area of operating a power tool.