



NFBA Technical and Research Committee

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Technical and Research Committee Chair:

Tim Royer, PE
Timber Tech
Engineering Inc.
Denver, PA

Post Frame Construction and Best Practices

Important Changes to the International Building Code for Post Frame Construction

INTRODUCTION

As the use of Post Frame Construction grows in the United States, more post Frame buildings are built outside of the agricultural community and are subject to the requirements defined in the International Building Code (IBC) or the International Residential Code (IRC). Post Frame Construction is recognized in these codes and the building official should be able to use the information and requirements within the code in addition to the plans and structural calculations, to provide a construction permit for a post frame project.

DISCUSSION

One of the key areas specifically important to Post Frame Construction is the design of post foundations. These, typically independent pier foundations, are designed by a registered design professional using the long accepted ASABE Engineering Practice (EP) 486.3 "Shallow Post and Pier Foundation Design".

While EP 486.3 has long been recognized as a standard for design and construction of wood elements in structures using allowable stress design in IBC Section 2306.1, there has been no direct link between EP 486.3 and the requirements of IBC Chapter 18 Soils and Foundations.

At the request of building officials and designers, the National Frame Building Association proposed a change in the code that would specifically recognize EP 486.3 in this chapter referencing foundation design.

During the code development hearings for the International Building Code that took place in April 2022, NFBA submitted proposal S158-22 adding ASABE EP 486.3 to the allowable design criteria already in the code to allow this more specific design reference to be recognized.

With assistance from the American Wood Council and several other organizations, this proposal was approved. While the process is far more complex than a single presentation and vote, this proposal was successful through all phases of the code development process and was included in the accepted changes to the International Building Code for the 2024 edition.



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Summary

While ASABE EP 486.3 is not something new in the International Building Code, the recent changes that will go into effect in the 2024 edition accomplish two very important goals. The first is to more widely recognize the use of pier foundations as an acceptable design process and, as important, EP 486.3 is specifically recognized in the appropriate area of the code that deals with foundation design. With this reference, the building officials will not need to be educated on an indirect reference to allowable foundation design that has been in the code for many years. They now have a direct reference that further recognizes proven industry standards that support the use of post frame construction.

Founded in 1969, the National Frame Building Association brings together builders, suppliers, designers, and engineers for the purpose of expanding the use of post-frame construction in all types of applications. NFBA promotes the benefits of post-frame construction through:

- Technical guidance
- Educational and awareness programs
- Advocating for the interests of our industry
- Recognition of industry-achievement awards
- Monitoring of industry issues, such as codes and standards
- Research to develop improved post-frame construction products and practices
- Promotional and marketing support for the post-frame construction industry
- Publications to promote use of post-frame construction

For more information, please visit the NFBA Web site at www.nfba.org

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National Frame Building Association 7250 Poe Ave. Suite 410 Dayton, OH 45414 800-557-6957 www.nfba.org