

IMPORTANT CHANGES TO: Chapter 489.113(9), FS

Chapter 2007-227, Laws of Florida ~ What Does It Mean?

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[THIS ARTICLE APPEARS IN THE April 2008 EDITION OF THE Building Officials of Florida Newsletter, viewable directly at:]

<http://www.boaf.net/pdf/BOAF%20Newsletter%20April%202008.pdf>

About the author: Joe Belcher has more than 30 years in all aspects of code enforcement and code development. After ten years service in the public sector, Belcher left his position as Building Official for the City of Gainesville, Fl. and moved to the private sector. Belcher established and managed a codes and standards program for a statewide trade association for almost eight years before starting his own code consulting company in 1993. Belcher has operated JDB Code Services, Inc. since 1993. Belcher has been intimately involved in the development of the Florida Building Codes since its inception. Belcher has been a member of BOAF since 1980.

BACKGROUND

Some have wondered why the legislature was approached regarding engineering issues. The storms of 2004 resulted in the failure of many aluminum structures. The article is intended to explain the legislation that was passed in response to certain actions and reactions to these failures. This article is not intended to explain or defend the failures.

After the storms, the Florida Board of Professional Engineers (FBPE) responding to some questionable information, initiated rule-making to enact a rule addressing the design of aluminum structures. The rule proposed essentially required site specific engineering for all aluminum structures built in Florida. The level of detail in the proposed rule required for the design of aluminum structures was greater than what the current engineering rules specify for most other structures, including high rise buildings. There were many reasons for the aluminum and other industries to oppose the rule, not the least of which was the fact that the failed structures were purportedly from engineered designs. In addition, the “examples” of failures reported to the FBPE in a slide presentation were clearly labeled as being built without permits and inspections. Further, the affiliated industries had no faith that the rule would result in improved designs or design methods.

The Aluminum Association of Florida (AAF), other organizations and individuals proposed changes to the rule. The AAF believed the rule would not result in better designs and would be ruinous to the industry. This is not to say the industry was not concerned about the failures. Before the FBPE began rule development the AAF contacted all known engineers designing aluminum structures. The engineers were invited to attend a workshop to discuss design philosophy and the application of code requirements. The initial workshop ultimately resulted in a series of workshops with the engineers sponsored by AAF. The workshops revealed the engineering community did not fully understand or, in some cases, misunderstood how the loads should be applied to aluminum structures. The workshops provided an opportunity for this specialized niche within the design community to reach consensus on numerous issues.

In the end, the FBPE turned a deaf ear on all requests to change the rule. In response the AAF working with others affected organizations decided to approach the legislature for assistance and hired a lobbyist. The result was a number of legislative changes to Chapter 489.113(9), which, among other

provisions, prohibited blanket requirements for site specific engineering under certain conditions. While other issues were included in the law, the focus of this article is the changes addressing the design of one- and two- family dwellings, swimming pools, screen enclosures, and other structures not exceeding one story or 1,200 square feet in area. (SB 404, Ch. 2007-227 LOF)

Since the passage of the law, questions have arisen in the enforcement and design communities as to the intent and the proper application of the law. This article, presented in a Question and Answer format, is an effort to answer the questions and dispel a number of misunderstandings.

Q. Why did AAF believe there was a need to approach the legislature?

A. Increasingly jurisdictions were relying on the submission of sealed plans in lieu of reviewing plans and specifications. Even for structures exempted from design professional services by Florida Statute. One thought is that the presence of a seal on a set of plans relieves the jurisdiction of any liability. This is not intended to be a treatise on liability or intended to be considered or construed to be legal advice, but no seal or any other convention relieves a jurisdiction from the ethical and professional obligation of safeguarding its citizens in the built environment. The law was intended to provide formal recognition of a system for designing aluminum structures that has been in use for at least 30 years and to provide greater accountability for those using the system. This, of course, refers to master plans and specifications and master design manuals.

In addition to the local issues, the Board of Professional Engineers completed adoption of their rule addressing aluminum structures. The rule placed more stringent design requirements in the engineering rules for screened enclosures than for most other structures, including high rise buildings. Without the legislature's action the rule would be in effect today.

Q. What do the modifications to chapter 489 mean?

A. There are a number of points involved in answering this question.

1. The law clarifies that plans and specifications and master design manuals, as opposed to site specific engineering, are acceptable for use in issuing building permits.
2. The law states such documents are prepared pursuant to a contract between the licensed designer and the licensed contractor. In other words, a contractor cannot use a master design manual unless he or she does so under contract with the designer of the manual.
3. The law clearly states there is nothing in law requiring site specific drawings, specifications, or plans for the design and construction of certain structures.
4. The law prohibits the adoption of ordinances, rules, or policies requiring site specific engineering for the named structures. This item devolves from the fact that the law says it is not required in statute or "... Any other provision of law. ..." In other words, the statute cannot be countermanded at the local level.
5. The law requires local jurisdictions to accept certain drawings, specifications, or plans when submitted by a licensed contractor.
6. The law requires jurisdictions to accept documents prepared by licensed designers for use by any licensed contractor when submitted by such licensed contractors.
7. The law provides local jurisdictions the authority to accept or reject plans for good cause shown.

8. The law formally recognizes master design manuals and requires such manuals to be developed by a licensed architect or engineer.
9. The law specifies the engineer or architect is to detail the limits of the use of the manual.
10. The law requires the manual to detail required training for contractors, architects or engineers to use the manual.
11. The law requires design manuals to be peer reviewed by an independent licensed architect or engineer with no financial interest in the development or use of the manual.
12. The law requires the manual to identify the architect or engineer conducting the peer review.
13. The law specifically states design services by an architect or engineer are not required for designs based on prescriptive documents adopted by the code.

Q. What types of structures are impacted by the law?

A. As stated above, the law addresses one- and two- family dwellings, swimming pools, screened enclosures, or any other structure not exceeding 1,200 square feet or one story.

Q. A jurisdiction where I applied for a permit denied the application stating I had to have site specific engineering because the screened enclosure exceeded 1,200 square feet. Does the law require site specific engineering for screened enclosures greater than 1,200 square feet?

A. The answer is no, in fact this is the exact act the law was intended to prohibit. This is one of the most frequently encountered misunderstandings of the law. The 1,200 square feet and one story limitation addresses structures other than single and two family dwellings, swimming pools, and screened enclosures. The intent was to address small structures like carports or sheds.

Q. I am a licensed contractor. Do I have to have site specific engineering to get a permit to build a screened enclosure?

A. No. A primary intent of the law is to prohibit blanket requirements for site specific engineering. Designs may be developed under a contract between an architect or engineer and a licensed contractor. The design may be plans and specifications for master plans for a repetitively built structure or a master design manual used to design and construct structures addressed in the law. Designs so developed are acceptable for permitting.

Q. Can a jurisdiction pass an ordinance requiring site specific engineering for one- and two- family dwellings, swimming pools, or screen enclosures?

A. No. The law clearly states there is nothing in Chapters 471, 481, 489, or any **other provision of law, requiring** a licensed engineer or architect, when preparing drawings, specifications, plans, or master design manuals for use by any licensed contractor, **to prepare site-specific drawings, specifications, or plans** for the design and construction of single-family and two-family dwellings;

swimming pools, spas, or screened enclosures; or any other structure not exceeding 1,200 square feet or one story in height.

Q. Are plans and specifications submitted for permit required to be sealed by the designer?

A. There is nothing in this law addressing or seals by design professionals. Architects and engineers would be required to comply with their respective laws related to sealed documents. Florida law exempts Single-family and two-family residence buildings, townhouses, and domestic outbuildings appurtenant to any one-family or two-family dwelling are exempt from architectural design. (Ch. 481.229, FS) With the exception of townhouses, these are the very structures addressed in the revisions to Chapter 489.113(9), FS. In my opinion, the designer may be required to seal the original documents provided to the contractor. However, the plans submitted pursuant to master design manuals or to a contract between a designer and contractor for repetitively built structures with no modification would not have to be site specific.

Q. Isn't the law limited to structures 1,200 square feet or less?

A. No, it is only limited to 1,200 square feet for structures other than those specifically listed.

Q. Does the law stipulate what training is required for users of a master design manual?

A. No. The law leaves the determination of the training requirements up to the developer of the master design manual.

Q. Can a local jurisdiction request proof of completion of the required training from a contractor applying for a permit using a design based on a master design manual?

A. While not specifically addressed in the law, this would be a reasonable request.

Q. How can a jurisdiction determine whether or not a contractor is authorized to use a master design manual?

A. The law does not address this issue. In the past, it has been normal and customary for building departments to be the "gate keepers" of users of a master design manual, to the extent that they would own a list, provided by the master design manual producer (engineer or architect). It is normal and customary for the plans examiner to check this list to make sure that the contractor submitting the plan set is authorized, i.e. has paid money to the producer/engineer. This method has been criticized and seen as a building department protecting the revenue stream of the producer. The building department would be well within its purview to demand some sort of proof that the permit applicant is an authorized user of the master design manual. One suggestion is for the owner of the design manual to provide "authorized" users with dated cards or letters stating they are authorized to use the master design manual.

Q. How are the current provisions related to master design manuals an improvement over the master design manual process of the past?

A. In the past the development and use of master design manuals was unregulated. Many of the features of the existing system are incorporated into the law. Additionally, there is now a clear requirement for training and peer review. Admittedly, the training element of the law is not as developed as it should be. On the other hand, designers that treat the training and peer review issues lightly are risking their licenses and livelihood.

Q. Is an architect or engineer required for designs utilizing prescriptive documents adopted by the Florida Building Code?

A. First, I must repeat Florida Law exempts the structures under consideration from design by architects. The purpose of the prescriptive documents adopted by the code is to allow the limited design and construction of structures without requiring the services of licensed design personnel. For example, a contractor could build a building in accordance with the IBHS Guideline for Hurricane Resistant Residential Construction without the services of an architect or engineer. Any deviation from the prescriptive guideline would require review and verification by a licensed designer. The same holds true of the AAF Guide to Aluminum Construction in High Wind Areas.

Q. Will the AAF provide building departments with a letter stating who is authorized to use the AAF Guide to Aluminum Construction in High Wind Areas?

A. No. The AAF Guide is adopted within the code as a prescriptive document. No authorization to use it is required or desired.