

# To Seal or Not To Seal – Code and Law

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*Author's Note: The author is not an attorney and does not purport to offer, imply, directly or indirectly any legal advice. Competent legal advice should be sought when considering Florida Statutes and how statutes may impact you or your business.*

A great deal of misunderstanding and confusion exists regarding when the services of an architect or engineer are required in obtaining permits. Increasingly, building departments require an architect or engineer to seal all types of documents. This article will discuss the requirements in the Florida Code and in Florida Law regarding the requirements to provide sealed documents for permit application related to masonry structures.

Overall, with the exception of Dade and Broward Counties (High Velocity Hurricane Zone or HVHZ) the code defers to Florida Statutes regarding when a registered design professional is required to design a building. The International Codes serve as the foundation for the Florida Building Code. The term “registered design professional” is used in the International Codes due to the differences in terms in the myriad of state licensing laws across the country. The term as used in the Florida Building Code is synonymous with the terms architect and engineer (and, as of the June 9 Florida Building Commission meeting, interior designers). While not required by the code for the total design of a structure, the code frequently calls for the services of registered design professionals for specific functions or services.

In many cases the code states a requirement and allows an alternate designed by a registered design professional. In other cases the code may allow a contractor to certify their structure as complying with the code. For example, Division I Contractors completing specific training are permitted to certify one and two family dwellings for compliance with the code. Statute contains provisions permitting the use of design manuals developed by an architect or engineer to be used to develop plans and specifications which are not required to be sealed. [FBCB §106.3.4.3; Ch 489.115(4)(b)<sup>1</sup>, F.S.; Ch. 489.113(9)(b)2, F.S.; Ch. 489.113(9)(c), F.S.]<sup>2</sup> The code and law also permit the design of certain structures using prescriptive documents adopted by reference within the code; two of which address masonry structures<sup>3,4</sup>. The residential code specifically states an architect or engineer and sealed documents are not required for masonry structures designed using the empirical provisions of ACI 530, or the provisions of the residential code. (FBCR §606.1.1)

The general language of the code related to signing and sealing by architects and engineers was recently changed. The changes were approved by the Florida Building Commission at a Rule Adoption Hearing at Tampa on June 9, 2009. The new requirements which are scheduled to go into effect in mid- or late-August 2009 defer to statutory requirements.

**“ 106.1 Submittal documents.**

Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit.

The construction documents shall be prepared by a ~~design~~ registered design professional where required by the Chapter 471, Florida Statutes or Chapter 481, Florida Statutes. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

**Exception:** The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

~~If the design professional is an architect, or engineer legally registered under the laws of this state regulating the practice of architecture as provided for in Chapter 481, Florida Statutes, Part I, or engineering as provided for in Chapter 471, Florida Statutes, then he or she shall affix his or her official seal to said drawings, specifications and accompanying data, as required by Florida Statute. If the design professional is a landscape architect registered under the laws of this state regulating the practice of landscape architecture as provided for in Chapter 481, Florida Statutes, Part II, then he or she shall affix his or her seal to said drawings, specifications and accompanying data as defined in Section 481.303(6)(a)(b)(c)(d), FS.~~

(Note: revised as a result of the June 9, 2009 Rule hearing)<sup>5</sup> (Note: Underline indicates new text ~~strikeout~~ indicates deleted text.)

In addition to the code requirements, Florida Statutes regulate the professions of architecture, engineering, and interior design. The Florida Statute regulating the practice of architecture contains specific exemptions from the law. The statute regulating engineering is not so clear in that anyone practicing engineering is required to be registered as a professional engineer. However, the code allows buildings to be constructed using prescriptive documents adopted within the code. Use of the prescriptive documents is not considered engineering.

481.229"(1) No person shall be required to qualify as an architect in order to make plans and specifications for, or supervise the erection, enlargement, or alteration of:

(a) Any building upon any farm for the use of any farmer, regardless of the cost of the building;

(b) Any one-family or two-family residence building, townhouse, or domestic outbuilding appurtenant to any one-family or two-family residence, regardless of cost; or

(c) Any other type of building costing less than \$25,000, except a school, auditorium, or other building intended for public use, provided that the services of a registered architect shall not be required for minor school projects pursuant to s. 1013.45." (Ch. 481.229, F.S.)

So, what does all this mean to the masonry contractor?

1. For designs of one and two family dwellings and townhouses the prescriptive provisions of the Florida Building Code, Residential may be used without a registered design professional. A contractor could develop the plans and

specifications based on the prescriptive provisions in the code (subject of future articles) and a building department has no authority to demand signed and sealed plans. This applies to one and two family dwellings and townhouses three stories or less in height.

2. For simple single story structures, the FC&PA Guide to Concrete Masonry Residential Construction in High Wind Areas may be used without the services of a registered design professional.
3. For designs of one and two family dwellings, townhouses, and multi-family dwellings up to three stories in height, the prescriptive provisions of the IBHS Guidelines for Hurricane Resistant Residential Construction may be used without the services of a registered design professional.
4. A contractor could enter into an agreement with an architect or engineer to prepare master drawings, specifications, plans, or master design manuals for one story single-family and two-family dwellings for use by the licensed contractor. Designs based on such documents may be submitted for permits without the signature and seal of the registered design professional. (Note: Engineering rules would likely require the engineer to seal the original set delivered to the licensed contractor.)<sup>6</sup>

It is uncertain what economies may result, but the ability to design and build certain buildings without going through a registered design professional exists within the code and statute. In most cases the design may be somewhat more conservative than a site specific design. The very nature of prescriptive construction documents results in some more conservative assumptions. However, the prescriptive documents adopted within the code, as well as the building and residential codes, permit design of items not addressed by a registered design professional. The design of those items not specifically addressed by the document does not require the design of the entire structure. An analysis may reveal use of the available prescriptive provisions in the code or reference documents translates into savings of time and money.

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<sup>1</sup> Florida Building Code, Residential, 2007 with 2009 Supplement. "R606.1.1 Professional registration not required. When the empirical design provisions of ACI 530/ASCE 5/TMS 402 Chapter 5 or the provisions of this section are used to design masonry, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority."

Ch.489.115(4)(b) 2, F.S. "In addition, the board may approve specialized continuing education courses on compliance with the wind resistance provisions for one and two family dwellings contained in the Florida Building Code and any alternate methodologies for providing such wind resistance which have been approved for use by the Florida Building Commission. Division I certificateholders (*sic*) or registrants who demonstrate proficiency upon completion of such specialized courses may certify plans and specifications for one and two family dwellings to be in compliance with the code or alternate methodologies,

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as appropriate, except for dwellings located in floodways or coastal hazard areas as defined in ss. 60.3D and E of the National Flood Insurance Program.”

<sup>2</sup> Ch.489.113(9)(b), F.S. “This part, chapter 471, chapter 481, or any other provision of law does not:

1. Prevent any licensed engineer or architect from contracting directly with a licensed contractor for the preparation of plans, specifications, or a master design manual addressing structural designs used to make an application for building permits.
2. Require 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. For the purpose of issuing building permits, local building officials shall accept such drawings, specifications, or plans when submitted by any licensed contractor. Upon good cause shown, local government code enforcement agencies may accept or reject plans prepared by persons licensed under chapter 471, chapter 481, or this chapter.

As used in this section, the term "master design manual" means a restrictive design manual intended to be used to design, permit, and construct structures as described in this section. Any such manual must be prepared by a licensed engineer or architect and specifically detail the limits of its use, including, but not limited to, the structure type, size, materials, loading conditions, time limits, applicable codes, and associated criteria. The manual must also detail the required training for the contractor, engineer, or architect using the manual. All master design manuals must be peer reviewed by an independent licensed engineer or architect having no financial interest in the development of the manual or the construction of structures pursuant to the manual. The engineer or architect conducting the peer review must be identified in the manual.”

<sup>3</sup> Ch. 489.113(9)©, F.S. “Notwithstanding anything in this chapter or any other provision of law, a licensed engineer or architect is not required for the preparation or use of any design guide adopted by the Florida Building Commission as part of the building code pursuant to s. 553.73.”

<sup>4</sup> 1609.1.1 Determination of wind loads. Wind loads on every building or structure shall be determined in accordance with Chapter 6 of ASCE 7. The type of opening protection required, the basic wind speed and the exposure category for a site is permitted to be determined in accordance with Section 1609 or ASCE 7. Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered.

Note: Clarification to ASCE 7. Arrows shown on Figure 6 -10 of ASCE 7 indicate that the pressure coefficients apply specifically to "Direction of MWFRS being designed." This means that the longitudinal pressure coefficients are not applicable to trusses that span in the transverse direction and, therefore, uplift reactions for trusses that span in the transverse direction would be determined by the pressure coefficients associated with those shown for the transverse direction.

Exceptions:

1. Wind tunnel tests together with applicable section 6.4 of ASCE 7.
2. Subject to the limitations of Sections 1609.1.1.1, 1609.1.2, and 1609.3, the provisions of IBHS Guideline for Hurricane Resistant Residential Construction shall be permitted for applicable Group R-2 and R-3 buildings for a basic wind speed of 140 mph (63 m/s) or less in Exposure B in accordance with Figure 1609 and Section 1609.4. Provisions for design wind speeds of 140 mph (63 m/s) in the Guideline shall also be permitted for buildings for a basic wind speed of 120 mph (54 m/s) or less in Exposure C in accordance with Figure 1609 and Section 1609.4 and provisions for design wind speeds of 120 mph (54 m/s) in the Guideline shall be permitted for buildings for a basic wind speed of 100 mph (45 m/s) or less in Exposure C in accordance with Figure 1609 and Section 1609.4.
3. Subject to the limitations of Sections 1609.1.1.1, 1609.1.2, and 1609.3, provisions of ANSI/AF&PA WFCM, Wood Frame Construction Manual for One- and Two-Family Dwellings shall be permitted for applicable wood frame buildings of Group R-3 occupancy for a basic wind speed of 150 mph or less in accordance with Figure 1609 and Section 1609.4.

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4. Designs using NAAMM FP-1001 Specification for Design Loads of Metal Flagpoles.
  5. Subject to the limitations of Sections 1609.1.1.1, 1609.1.2, and 1609.3, the provisions of the FC&PA Guide to Concrete Masonry Residential Construction in High Wind Areas shall be permitted for applicable concrete masonry buildings of Group R-3 occupancy for a basic wind speed of 130 mph (58 m/s) or less in Exposure B and 110 mph (49 m/s) or less in Exposure C in accordance with Figure 1609 and Section 1609.4.
  6. ANSI/TIA/EIA 222 shall be permitted for communication tower and steel antenna support structures and shall meet the wind loads of ASCE 7 and shall be designed by a qualified engineer.
  7. Subject to the limitations of Sections 1609.1.1.1, 1609.1.2, and 1609.3, the provisions of the WPPC Guide to Wood Construction in High Wind Areas shall be permitted for applicable wood-frame buildings of Group R-3 occupancy for a basic wind speed of 130 mph (58 m/s) or less in Exposure B and 110 mph (49 m/s) or less in Exposure C in accordance with Figure 1609 and Section 1609.4.
  8. Designs using AASHTO LTS-4 Structural Specifications for Highway Signs, Luminaires, and Traffic Signals.
  9. Wind loads for screened enclosures shall be determined in accordance with Section 2002.4.

<sup>5</sup> Source: Florida Building Code Information System (BCIS) Web Site [www.floridabuilding.org](http://www.floridabuilding.org)

<sup>6</sup> Op. Cit. Endnote 2 Item 2.