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DEPARTMENT OF INSPECTIONS & PERMITS

## REGISTERED DESIGN PROFESSIONALS IN THE BUILDING CODE

**2016 CSBC 107.1** "The construction documents shall be prepared by a registered design professional where required by the statutes..." The exception states the building official can waive this "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".

So we must require construction documents to be prepared by a registered design professional whenever the state statutes for regulation of architects, engineers, or interior designers require it. The only times we can waive this requirement is if we do not need drawings, specifications or other documentation in order to determine that the proposed work will be code compliant. That applies more usually to trade permits and very minor alterations.

## When is an architect required?

Connecticut General Statutes Chapter 390 is where we find the requirements for the practice of architecture. Section 20-298 lists activities that are *exempt* from requiring an architect. So we can use that to list the activities where an architect *is required*, as follows:

- 1 & 2-family dwellings or townhouses when over 24,000 square feet.
- 3-families or more, residential construction or alteration when building is over 5,000 sq. ft.
- Buildings 5,000 SF or more (Measured to the *outside* of exterior walls, total of all occupiable floors or levels), construction, addition or *alteration* all use groups *except* one & two family, residential private garage or accessory building, or any farm building or structure for agricultural use.
- Regardless of size when the occupancy is assembly, educational, institutional, high hazard, or transient residential (hotels, motels, rooming or boarding houses, dormitories and similar buildings).

Notice that the size limitation in the statutes is to outside walls, whereas, the building code defines building area as being inside face of perimeter walls and roof projections. So it is possible to have a set of plans submitted for a building permit where we will determine that the building is less than 5,000 SF for code compliance purposes but it still needs an architect because it is over 5,000 SF when you include the thickness of the exterior walls or an occupiable basement or mezzanines. This requires that we pay a little more attention to marginal projects.

What is often misunderstood is what an *alteration* is. A common dictionary definition is "a change, modification or adjustment." The IBC definition is "Any construction or renovation to an existing structure other than repair or addition." This is very broad and would encompass virtually any kind of construction project. Upon consulting with Robert Kuzmich, staff person for the Connecticut DCP

Architectural Licensing Board, alteration also includes changes to building roofs such as re-roofing or roof replacements.

The definition of the practice of architecture under **Section 20-288** is quite broad and includes "consultation, investigation, evaluations, preliminary studies, plans, specifications and coordination or structural factors concerning the aesthetic or structural design and contract administration of building construction or any other service in connection with the designing or contract administration of building construction."

- Can an architect prepare and seal the structural design for a building? YES
- Can an architect prepare and seal mechanical and electrical design for a building? YES
- Can an architect prepare and seal site plans? **YES**

The limitation is whether the particular architect is working within his/her realm of expertise and competence, which will not usually be for the building official to determine unless it is obvious the architect does not know what he/she is doing.

## When is an engineer required?

CGS Chapter 391 contains the requirements for the practice of engineering. There is no minimum building size or use groups mentioned. The definition of engineering in Section 20-299 is also very broad and includes "any professional service such as consultation, investigation, evaluation, planning, design or responsible supervision of construction, in connection with any public or privately-owned structures, buildings, machines, equipment, processes, works or projects in which the public welfare or the safeguarding or life, public health or property is concerned or involved" and needs their knowledge or mathematics, the physical sciences and the principles of engineering.

Does this mean an engineer can prepare, sign and seal drawings for an entire building for a building permit? For instance, say a set of drawings and specs came in for a retail building with only a P.E.'s seal and signature. Is that acceptable? **NO**.

On August 2, 1991 the State Attorney General issued a formal opinion regarding limitations on the practice of engineers. Part of his letter states:

"While we recognize the overlap in the practice of architecture and engineering, we also recognize the limitations on engineers set forth in the architect's chapter. Conn. Gen. Stat. § 20-298 of the architectural chapter exempts "the practice of engineering by a professional engineer licensed under the provisions of chapter 391, and the performance by such professional engineer of architectural work for which he is qualified by education and experience and which is incidental to his engineering work." (Emphasis added). This exemption section specifically limits such cross practice to situations where the practice of architecture is "incidental" to work being performed by the engineer. Therefore, for example, to be permitted to perform architectural design, an engineer must first be working on an engineering project. See Conn. Op. Atty. Gen. 382 (1987) (Letter to Anthony Masciarelli), dated October 20, 1987.

Ultimately, it is the local building official who is empowered to "accept or approve" only those plans or specifications that are sealed by a licensed architect <u>or</u> a licensed professional engineer. Conn. Gen. Stat. § 20-293. Under Section 110.1 of the Connecticut State Building Code, it is the responsibility of the building official to "pass upon any question relative to the mode, manner of

construction or materials to be used in" building construction. Reg. Conn.. Agencies, Public Safety, § 29-252-1a(110.1). Applying these statutory and regulatory guidelines, the building official may determine, for example, that the engineer lacks the education <u>and</u> experience to perform that architecture or that the architectural design work is not "incidental" to engineering work being performed by the engineer.

In conclusion, a professional engineer's authority to design buildings may be limited by: 1) his lack of education or experience in that particular phase of engineering; 2) the fact that the design work being performed is not incidental to engineering work; or 3) the determination of a local building official that an architect's seal is required on the plans."

So it is a longstanding matter in Connecticut that an engineer cannot play "architect", that is, be the sole design professional for an entire building unless the building itself is incidental to a larger engineering project. For instance, an engineer may be designing a power plant or waste water treatment facility and some of the structures or buildings are really incidental to the larger engineering project.

On the other hand, an architect can essentially play "engineer" and seal structural, mechanical, and electrical or site plans for a project for which they are the overall designer. However, we would not accept structural, mechanical or electrical drawings sealed only by an architect for just those disciplines on their own. In that case a P.E. would be required.

So an engineer is required for design work beyond the scope of the architect of the project and can also be required by the building official when special project circumstances dictate that a building element(s) should be engineered. This is in keeping with 2012 IBC Section 107.1

## What can an interior designer do?

**CGS** Chapter 396a regulates the title and practice of interior designers. They receive a certificate of registration from DCP. Their work includes "services relative to interior spaces…non-load-bearing interior construction, materials, finishes, space planning, reflected ceiling plans, furnishings, fixtures and equipment relative to the design of interior spaces."

So an interior designer is considered a "registered design professional" only for permits involving interior non-structural work. They don't have a seal so they can only provide their signature and their registration number on the drawings. Most commonly we would see their construction documents for tenant fit up work in office buildings or retail spaces. Wherever State regulations or codes require specifically an architect or engineer then an interior designer cannot be a substitute.

It is very important for us to require Registered Design Professionals when State regulations dictate because **CGS Section 20-293** is very clear when it states "no official of this state or of any city, town or borough therein, charged with the enforcement of laws, ordinances or regulations relating to the construction or alteration of buildings or structures, shall accept or approve any plans or specifications that are not stamped with the seal of a licensed architect or a licensed professional engineer."

If there is any question on whether a particular permit requires a registered design professional and what kind, the matter should be referred to the town building official for a determination. In most cases,

however, the information herein should be sufficient for inspection staff to understand when to expect an architect, engineer or interior designer to have prepared the construction documents for a permit.

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