

NEW PROFESSIONAL ENGINEER LAW ALREADY IN EFFECT

After many years of discussions agreement was finally reached between the Illinois Society of Professional Engineers and the fire sprinkler industry on the issue of an engineer's seal and it was determined that a technical submission and fire protection system layout drawing should be treated as two separate items. It was decided that in order for a building permit to be issued, a design document must be submitted and sealed by a licensed design professional. A fire protection system layout document (shop drawing) would follow, which could be prepared by a PE, Architect or NICET III or IV and would not require the seal of engineer if prepared by a NICET III or IV. It is only if the fire protection system layout document materially deviates from the design document that they would both be sent back to the design professional for further review. SB 1384 was signed into law and took effect August 24th..

Below is the text from the new law.

(c) Nothing in this Act shall be construed to prevent a fire sprinkler contractor licensed under the Fire Sprinkler Contractor Licensing Act from providing fire protection system layout documents. For the purpose of this subsection (c), "fire protection system layout documents" means layout drawings, catalog information on standard products, and other construction data that provide detail on the location of risers, cross mains, branch lines, sprinklers, piping per applicable standard, and hanger locations. Fire protection system layout documents serve as a guide for fabrication and installation of a fire sprinkler system.

(d) A building permit for a building that requires a fire suppression system shall not be issued without the submission of a technical submission prepared and sealed by a licensed design professional. Fire protection system layout documents do not require an engineering seal if prepared by a technician who holds a valid NICET level 3 or 4 certification in fire protection technology, automatic sprinkler system layout. An authority having jurisdiction may not accept fire protection system layout documents in lieu of technical submissions. Fire protection system layout documents may be submitted as supporting documents to supplement technical submissions. However, in the event the fire protection system layout documents materially alter the technical submissions, the authority having jurisdiction shall return both the fire protection layout documents and technical submissions to the licensed design professional for review.

**DESIGN DOCUMENT (TECHNICAL SUBMISSIONS) vs. FIRE PROTECTION
SYSTEM LAYOUT DOCUMENTS (SHOP DRAWINGS)***

What should a design document consist of? *A design document shall be prepared and sealed by a licensed design professional and establish the objectives and design criteria of the system. A design document needs to be submitted to the AJH before a building permit is issued. **As an example,** design documents should include*

1. *The Identification of the scope of work*
2. *Identification of applicable codes and standards*
3. *Ensure conformance with applicable building codes (have construction trade offs been allowed based on the installation of a suppression system, etc.)*
4. *Identification of occupancy type and hazard classification*
5. *Water-based suppression systems: a) Selection of type of system and components b) classification of hazard and commodities to be protected; c) establishment of the density/flow and design area size; d) **determine and verify the adequacy of the proposed water supply** e) analysis to identify concerns regarding systems structural support (as appropriate) and f) analysis to identify any concerns with water quality that would affect the proposed systems (as **appropriate**)*

What should a fire protection system layout document (shop drawing) consist of?

A Fire Protection System Layout Document can be prepared by a licensed design professional, or NICET Level III or IV and does not require a seal but cannot take the place of a design document. Shop drawings shall consist of:

1. The detailed layout of risers, cross mains, branch lines, sprinklers, and hanger
2. Size of Pipe
3. Furnishing of supplemental hydraulic calculations in accordance with the Design Documents, technical data sheets and details for the specific equipment being furnished for installation.

* These definitions were based on the Society of Fire Protection Engineers, National Society of Professional Engineers and NICET White Paper on the *Engineer' and Technician's Role in the Design of Fire Suppression Systems.*