Fire Suppression Introduction

Contact Information

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Goal of This Seminar:

- Hierarchy of Codes
- List reference codes involved in fire suppression
- Codes in Action: establishing jurisdiction
- Codes In Action: one code leads to another
- Codes in Action: modifications trump raw code
- Rule of Thumb
- Questions
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Hierarchy of Codes in Georgia

Official Code of Georgia (O.C.G.A.) – Title 25

- Establishes the State Fire Marshals Office
- Grants the Commissioner of Insurance authority to administer regulations as they pertain to the various categories of fire protection
- Establishes Jurisdiction (State/Local)
- Facility type
- County or city population
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Hierarchy of Codes in Georgia

Chapter 120-3-19 – The Georgia Fire Sprinkler Act

- Establishes who can work on sprinkler systems
- Qualifications for individuals who:
  - Design
  - Install
  - Inspect
  - Licensure requirements for these individuals
Hierarchy of Codes in Georgia

Chapter 120-3-23

- Establishes who can work on portable fire extinguishers, pre-engineered kitchen suppression systems, or pre-engineered industrial suppression systems
- Qualifications for individuals who design, install, inspect and service
- Licensure requirements for these individuals
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Hierarchy of Codes in Georgia

Chapter 120-3-3 – The State Minimum Fire Safety Standards

- Identifies which national and/or international codes are adopted in this state as they pertain to:
  - Fire and life safety
  - Fire suppression systems
  - What edition of each code is adopted
  - Lists any modifications to those adopted codes
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Required References – Water Based

- NFPA 14 (2013 Edition) - Installation of Standpipes
- NFPA 22 (2013 Edition) - Water Tanks for Private Fire Protection
- NFPA 24 (2013 Edition) - Private Fire Service Mains
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Required References – Other Types

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Required References – Other Types

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Codes in Action
Jurisdiction State/Local
Example: Hospital

- O.C.G.A. Title 25 establishes state jurisdiction, Regardless of Location
- Hospitals
- Nursing Homes
- Ambulatory Surgical Centers
- State Owned or Occupied Buildings
- Jails
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Codes in Action
Jurisdiction State/Local
Example: Restaurant in Atlanta

- O.C.G.A. Title 25 establishes state jurisdiction,
- Municipalities over 45,000 in population
- Unincorporated areas of Counties over 100,000 in population
- A Municipality or County not meeting either population requirement above has adopted a resolution with the State assuming local jurisdiction
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Codes in Action
Sprinkler Requirements
Example: Restaurant

  12.3.5.2 Any building containing one or more assembly occupancies where the aggregate occupant load of the assembly occupancies exceeds 300 shall be protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7 ….

NFPA 13 (2013 Edition)
Codes in Action

Sprinkler System Type
Example: New 3-Story Apartment Building


30.3.5.1 All buildings shall be protected throughout by an approved, supervised automatic sprinkler system installed in accordance with 30.3.5.2.

(Cont.)
30.3.5.2 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be installed in accordance with Section 9.7, as modified by 30.3.5.3 and 30.3.5.4. In buildings four or fewer stories above grade plane, systems in accordance with NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*, shall be permitted.
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Codes in Action
Example: Standpipe Requirement

  905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

NFPA 14 (2013 Edition) - Installation of Standpipes
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Codes in Action
Example: Post Indicator Valve Requirement

  8.16.1.1.1.1 Each sprinkler system shall be provided with a listed indicating valve in an accessible location, so located as to control all automatic sources of water supply.

NFPA 24 (2013 Edition) - Private Fire Service Mains
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Codes in Action

Example: System Riser Components Requirement


13: 3.5.12 System Riser: The aboveground horizontal or vertical pipe between the water supply and the mains (cross or feed) that contains a control valve (either directly or within its supply pipe), pressure gauge, drain, and a water flow alarm device.
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Codes in Action
Example: Design Dictates Fire Pump

- Sprinkler system was required
- Not enough available water pressure to supply

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Codes in Action
Example: Design Dictates Tank & Fire Pump

- Sprinkler system was required
- Not enough available water pressure to supply
- Not enough available water supply


NFPA 22 (2013 Edition) - Water Tanks for Private Fire Protection
**120-3-3 modification of International Fire Code, 2012 Edition, 507.5.1** Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 500 feet (152 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrant mains shall be provided where (Cont.)
required by the local Fire Chief and/or Fire Code Official of the responding fire department or agency. 

Exceptions: 1. For group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).

2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

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Codes in Action
Rules of Thumb

- For Jurisdiction, go from the top down
  - O.C.G.A Title 25

- For code application go from the bottom up
  - Raw Code (NFPA or IFC)
  - State Modifications (Chapter 120-3-3)

- Works for all types of code applications
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Questions?

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