

Self-Certification Program 2018 Fire Code

Greg Preston– Fire Prevention Specialist II



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Fire Code Self-Certification Guide

Construction Documents

- **Scope of Work/ Project Narrative**
- **Building Information/data (Occupancy classification, building area, type of construction, occupant load, etc.) Provide code summary chart / project data**
- **Applicable codes and standards (2018 Fire Code)**
 - **PFC Chapter 9 in lieu of IBC Chapter 9**
- **Automatic sprinkler system (NFPA 13,13R, ESFR)**
- **List of deferred submittals (Life safety permits)**
- **Hazardous Material Inventory Statement (HMIS)**
- **Fire Department Appeals or Building CMODs**

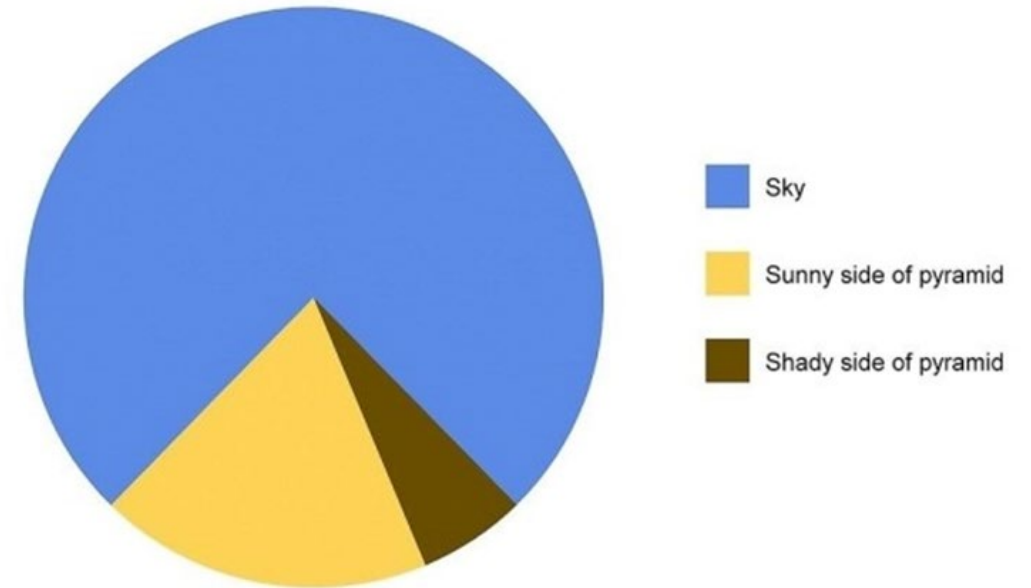


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PFC 903: Automatic Sprinkler System

NFPA 13 system is required:

- **Building area increase**
- **Reduction in fire resistance rating**
- **Travel distance increase**
- **Reduction in fire partitions rating**
- **Reduction in required fire flow**



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Access to Building Opening and Roof

- **Stairway access to roof is required four or more stories above grade plane. Exception, 33.3 % slope.**
- **Stairway access to the roof is to comply with Phoenix Fire Code 504.3. Stairway is to be in accordance with 1011.12. Please show and note on the construction documents which stairways are to be provided to conform. Please provide stair a detail.**



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Emergency Responder Radio Coverage

- **Four stories or greater**
- **Total building area greater than 50,000 square feet**
- **Any building with a basement or underground level(s)**
- **Where required by the fire code official**
- **PFC Section 1103- Emergency responder radio coverage in existing buildings**



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905: Class I standpipe systems shall be installed throughout buildings 30 feet above/below the fire department vehicle access.

Non-sprinklered Group A buildings having an *occupant load* exceeding 1,000 persons.

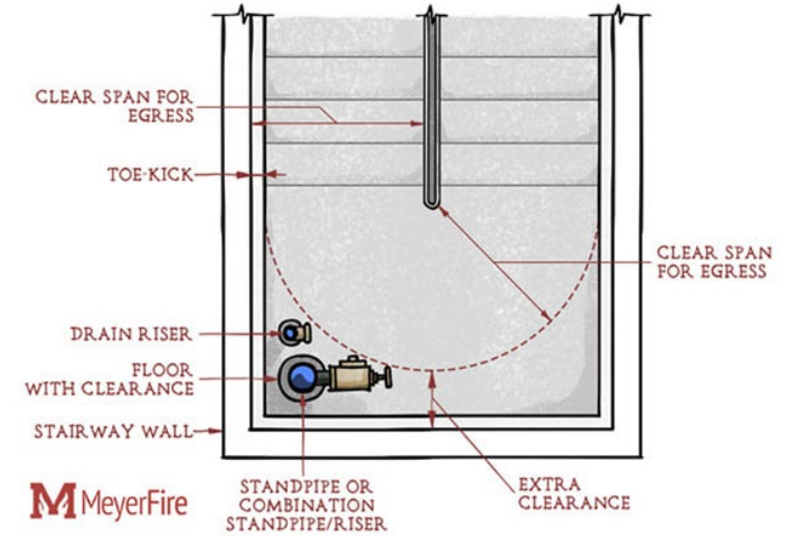
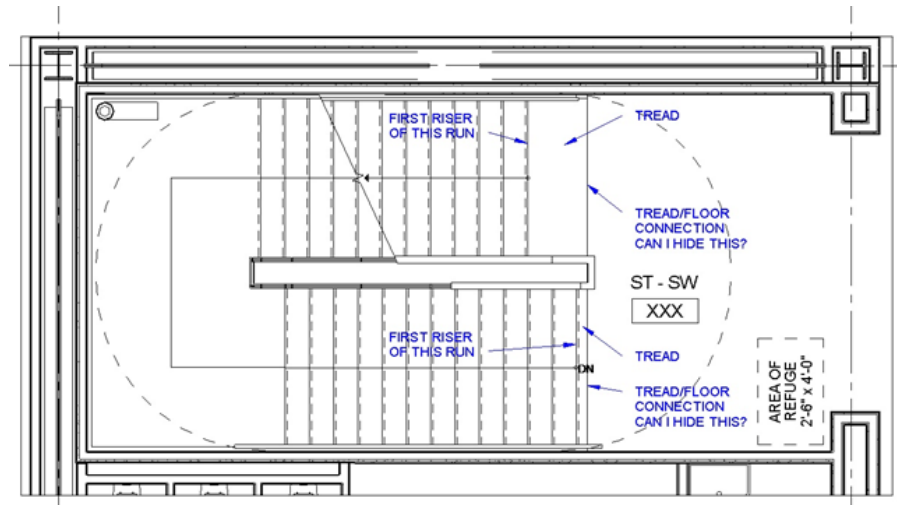
- **Covered and open mall buildings**
- **Stages greater than 1,000 square feet**
- **Underground buildings**
- **Helistops and heliports**
- **Marinas and boatyards**
- **Rooftop gardens and landscaped roofs**



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905: Standpipe Systems

- Show proposed location on drawings
- Main Floor landing



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High-piled Storage

•PFC 910: Smoke and Heat Removal

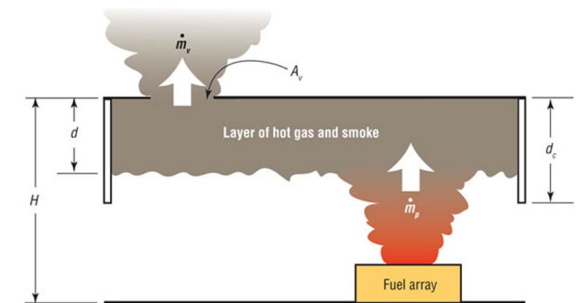
- Group F-1 or S-1 more than 50,000 square feet (4645 m²) of undivided area
- PFC 3206.4.1.3- Speculative warehouses
- Table 3206.2- Smoke and heat removal required at 2,501 for High-pile storage

•If ESMR exception is to be utilized, show on drawings in code analysis, listed in deferred submittal, etc.

- Evaluate the need for Fire Pump
 - 1 hour Fire Separation

•A separate FPPD submittal is required to PDD for High-Pile Storage – F102 (Construction Permit)

•A separate FPPR submittal is required to the Fire Department for High-Pile Storage – F303 (Operational Permit)



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PFC 32: High-Piled Combustible Storage

- **3206 Number of doors required.**
 - Fire department access doors shall be distributed a lineal distance to not exceed 125 feet (center to center)
 - **PBC 1017.2.2 Groups F-1 and S-1 amendment has 4 conditions which must be met to increase travel distance to 400 feet. Condition #4 defers to PFC 3206.6**
 - **Applicable to shell buildings**
 - Speculative Warehouses PFC 3206.4.1.3.
- **3206.8 Smoke and heat removal.**



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PFC 913: Fire Pumps

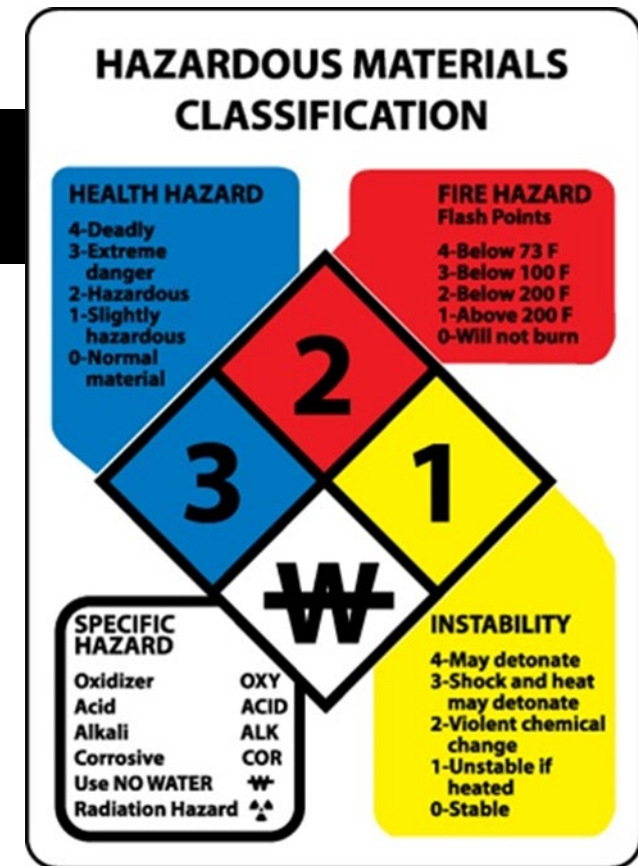
- **Indicate type of pump (Electric vs Diesel)**
 - Diesel, evaluate MAQ, show fuel tank capacity calculations on construction documents NFPA 20 (11.4.1.2)
 - Electric: Generator fuel capacity (if applicable) NFPA 20 (9.6.2.3)
- **Protection of fire pump rooms. Fire pumps shall be located in rooms that are separated from all other areas of the building by 2-hour *fire barriers* (1-hour fire barrier in other than high-rise building with automatic sprinkler system).**



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PFC 50: Hazardous Materials

- **Hazardous Materials Inventory Statement (HMIS).** Where required by the *fire code official*, an application for a permit shall include an HMIS or a Globally Harmonized System (GHS).
- **To be coordinated with Phoenix Fire Department Special Hazards Unit (SHU)**
 - <https://www.phoenix.gov/fire/prevention/specialhazards>



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PFC 50: Hazardous Materials Inventory Statement

- Indoor/ Outdoor
- Chemical Trade name
- Concentration
- CAS number
- Hazard Classification
- Physical State (Solid, Liquid, Gas)
- Total Amount (Pounds, Cubic Feet, Gallons)
- NFPA 704 Rating
- Number of Tanks Above Ground



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Fire Life Safety Reports (FLSRs) Requirements PFC Section 105

Applicable TRT documents:

- ✓ **Document Number 00836 (FLSR Policy)**
- ✓ **Document Number 00837 (FLSR Report Checklist)**

- **High-Rise Buildings**
- **Covered Mall Buildings**
- **Buildings containing atriums**
- **Hospitals**
- **Building storage height over 40 feet**
- **Group F and S occupancies over 500,000 square feet**
- **Any structure determined by the Fire or Building Code Official**



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Common Audit Comments

- **Hose Valve Connection Locations(stairs/horizontal exits, etc.)**
- **Fire Alarm System Requirements**
- **Automatic Sprinkler System Requirements (NFPA 13/NFPA 13R)**
- **Fire Department Access Doors in High-Piled Combustible Storage**
- **Hazardous Materials Requirements**
- **Atrium or Smoke Control System modifications**
- **Extraction Rooms and Facilities**
- **Battery Storage Rooms/ Facilities**
- **Hazardous Occupancies/
*Processes***



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Not Eligible for Self-Certification

- **Paint Booth**
- **Energy Storage System/ PV Solar System**
- **Dust Collector**
- **Paint Dipping Operation**
- **Grow Facility WITH Carbon Dioxide**
- **Plant Extraction**
- **Industrial Oven (400,000 Btu)**
- **Processes with descriptions which include the terms “combustible, flammable, hazardous and/or hazardous material”**
- **General: If an item has its own Chapter in the Fire Code**
 - **Sections 1205 & 1206 and Chapters 20, 22, 24, 25, 26, 27, 28, 29, 30, 32, 34, 38, 50 & 56**



Questions?

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