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ENGINEERING EXEMPTION POLICY
FOR FIRE SPRINKLER SYSTEM DESIGN
(Effective April 1, 2006)

This policy works in conjunction with the Engineering Exemption Policy for Fire Sprinkler Design Decision Trees. The Decision Trees should be referred to first to determine the parameters for use of this policy (see list at the end of this policy). Please note that the head counts in this policy are based on standard sprinkler heads and not extended coverage sprinkler heads. The installation of a sprinkler system in a non-sprinklered existing building which is required due to a change of occupancy or building renovation will automatically fail the System Capacity test.

1: NEW BUILDING CONSTRUCTION REQUIRING SPRINKLERS.
New building construction AND ADDITIONS OF 5,000 SF OR MORE will require the services of a Professional Engineer, competent in Automatic Fire Sprinkler design, for the design of the new fire sprinkler system. These services shall be provided in accordance with **T.C.A. § 62-2-102** [Practice and persons exempt from registration].

2: RENOVATION OF AN EXISTING FIRE SPRINKLER SYSTEM.
If there is no occupancy classification change and adequate capacity has been determined, a Professional Engineer, competent in Automatic Fire Sprinkler design, shall not be required unless the Automatic Fire Sprinklers to be installed or modified in the renovation exceed the following:

A. Light Hazard	225 Sprinkler Heads
B. Ordinary Hazard	225 Sprinkler Heads
C. Extra Hazard	225 Sprinkler Heads
D. High Pile Storage	400 Sprinkler Heads

3: UPGRADING AN EXISTING AUTOMATIC FIRE SPRINKLER SYSTEM.
If there is no occupancy classification change and adequate capacity has been determined, a Professional Engineer, competent in Automatic Fire Sprinkler design, shall not be required unless the Automatic Fire Sprinklers to be installed or modified in the renovation exceed the following:

A. Light Hazard	225 Sprinkler Heads
B. Ordinary Hazard	225 Sprinkler Heads
C. Extra Hazard	225 Sprinkler Heads
D. High Pile Storage	400 Sprinkler Heads

4: NON-SPRINKLERED EXISTING BUILDING.
If an owner elects to install an automatic fire sprinkler system in a non-sprinklered building, which under current code compliance analysis would not require an automatic sprinkler system, it shall not require the services of a Professional Engineer, competent in Automatic Fire Sprinkler design, unless the Automatic Fire Sprinklers to be installed in the new system exceed the following:

A. Light Hazard	225 Sprinkler Heads
B. Ordinary Hazard	225 Sprinkler Heads
C. Extra Hazard	225 Sprinkler Heads
D. High Pile	400 Sprinkler Heads

Classifications are as outlined in current NFPA13 standards.

The Owner or his agent has the option to hire the services of a Professional Engineer, competent in Automatic Fire Sprinkler design, or a Licensed Fire Sprinkler Contractor to prepare the Design Concepts in:

- RENOVATION OF AN EXISTING FIRE SPRINKLER SYSTEM,
- UPGRADING AN EXISTING AUTOMATIC FIRE SPRINKLER SYSTEM, or
- NON-SPRINKLERED EXISTING BUILDING (BY CODE NOT REQUIRING SPRINKLERS).

If the total fire sprinklers exceed the parameters of this policy, a licensed Fire Sprinkler Contractor is not authorized to prepare the Design Concept.

If an Automatic Fire Sprinkler Contractor prepares the Design Concept, the adopted Board of Architectural and Engineering Examiners Board Standard of Care should be followed in preparing the Design Concept.

Installation of Fire Sprinkler Systems in One-and-Two Family Dwellings and Manufactured Homes shall be installed in accordance with NFPA 13-D and shall not be part of this policy.

DEFINITIONS:

ADEQUATE CAPACITY. The existing public water supply or the current system configuration will serve the proposed renovations, upgrades, or additions to the structure. Adequate capacity can be calculated by an RME or PE and submitted to the AHJ for approval.

AHJ (AUTHORITY HAVING JURISDICTION). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure. The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction. Source: NFPA 1.

BUILDING. Any structure used or intended for supporting or sheltering any use or occupancy. Source: Life Safety Code (NFPA 101).

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Source: International Building Code.

COMMODITY. Combinations of products, packing material, and container upon which the commodity classification is based. Source: NFPA 13.

FIRE CODE OFFICIAL. The fire chief or other designated authority charged with the administration and enforcement of the code, or a duly authorized representative. Source: International Fire Code.

FIRE PROTECTION SPRINKLER SYSTEM CONTRACTOR. A person who contracts, offers to contract, or represents that such person is able to contract with a general contractor, subcontractor, or the general public for the undertaking of the sale, installation or service of a fire protection sprinkler system or any part thereof, or who actually installs or services a fire protection sprinkler system, provided that an owner of real property on which a fire protection sprinkler system is located, or a full-time employee of the owner of real property on which a fire protection sprinkler system is located, may perform simple maintenance of the fire protection sprinkler system, such as replacing a sprinkler head. Source: T.C.A. Section 62, Chapter 32.

HAZARD CLASSIFICATIONS:

Light Hazard Occupancies -- Occupancies or portions of other occupancies where the quantity and/or combustibility of contents is low and fires with relatively low rates of heat release are expected.

Ordinary Hazard Occupancies –

- Ordinary Hazard (Group 1). Occupancies or portions of other occupancies where combustibility is low, quantity of combustibles is moderate, stockpiles of combustibles do not exceed 8 ft (2.4 m), and fires with moderate rates of heat release are expected.

- Ordinary Hazard (Group 2). Occupancies or portions of other occupancies where the quantity and combustibility of contents are moderate to high, where stockpiles of contents with moderate rates of heat release do not exceed 12 ft (3.7 m), and stockpiles of contents with high rates of heat release do not exceed 8 ft (2.4 m).

Extra Hazard Occupancies --

- Extra Hazard (Group 1). Occupancies or portions of other occupancies where the quantity and combustibility of contents are very high and dust, lint, or other materials are present, introducing the probability of rapidly developing fires with high rates of heat release but with little or no combustible or flammable liquids.

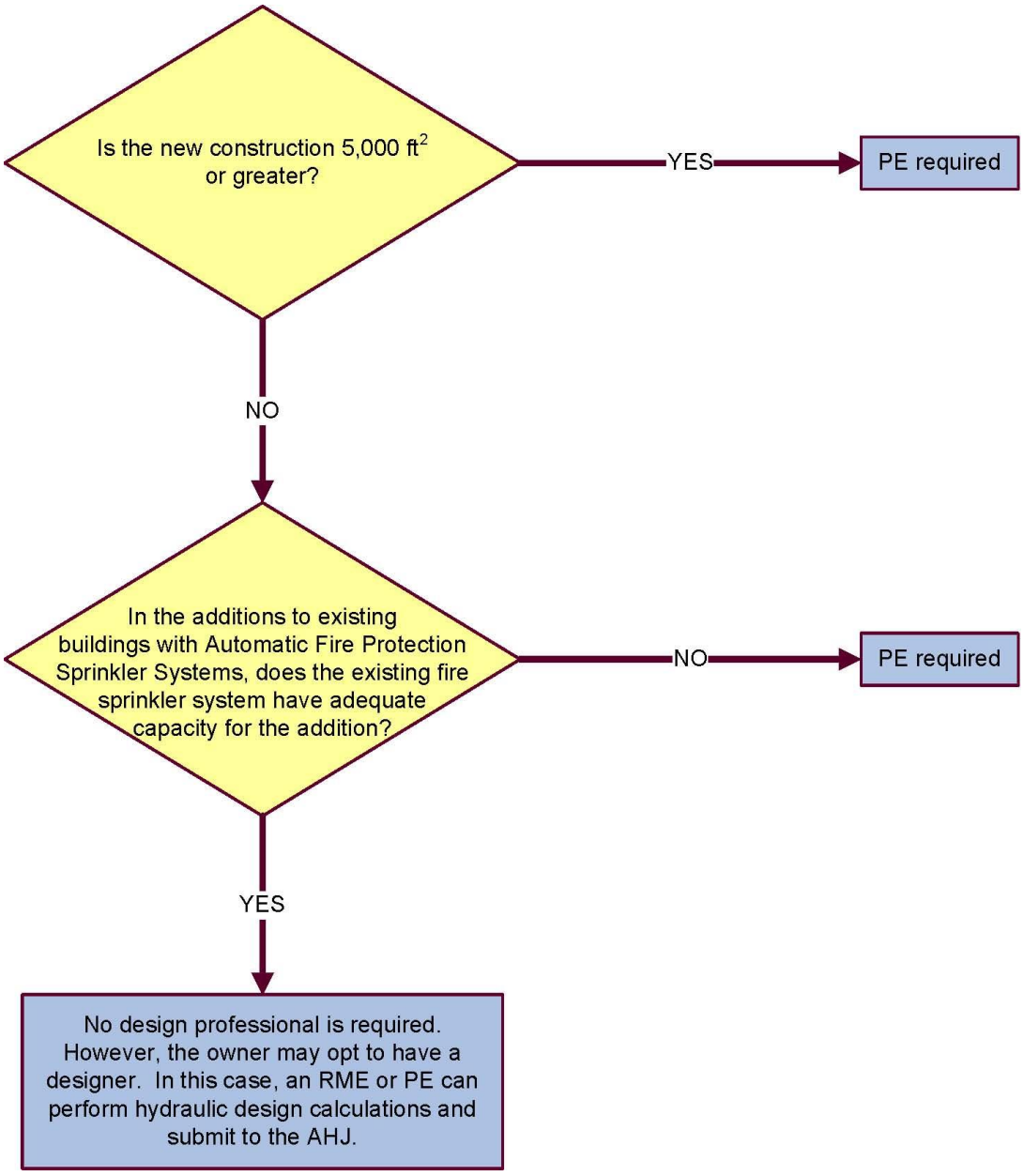
• Extra Hazard (Group 2). Occupancies or portions of other occupancies with moderate to substantial amounts of flammable or combustible liquids or occupancies where shielding of combustibles is extensive. High-Piled Storage -- Solid-piled, palletized, rack storage, bin box, and shelf storage in excess of 12 ft (3.7 m) in height. Source: NFPA 13.
OCCUPANCY CLASSIFICATION. The purpose for which a building or portion thereof is used or intended to be used. Source: Life Safety Code (NFPA 101).
PE (PROFESSIONAL ENGINEER). An individual who is registered to practice engineering by the Board of Architectural and Engineering Examiners.
RENOVATION. The act of improving by renewing and restoring. Source: Model building code and sprinkler standards (defined in accordance with the latest adopted by the Tennessee State Fire Marshal's Office).
RME (RESPONSIBLE MANAGING EMPLOYEE). An individual who is, or is designated to be, in active and responsible charge of the work of a fire protection sprinkler system contractor. Source: T.C.A. Section 62, Chapter 32.
STANDARD SPRINKLER HEAD. A standard, fast, or quick response fire sprinkler head that does not include an extended coverage head as defined by NFPA 13.
STRUCTURE. That which is built or constructed. Source: Life Safety Code (NFPA 101).
UPGRADE (upgraded, upgrading, upgrades). To raise to a higher grade or standard. Source: Model building code and sprinkler standards (defined in accordance with the latest adopted by the Tennessee State Fire Marshal's Office).

Adopted 8-25-05
Revised and adopted 12-4-15

Engineering Exemption Policy for Fire Sprinkler Design Decision Trees

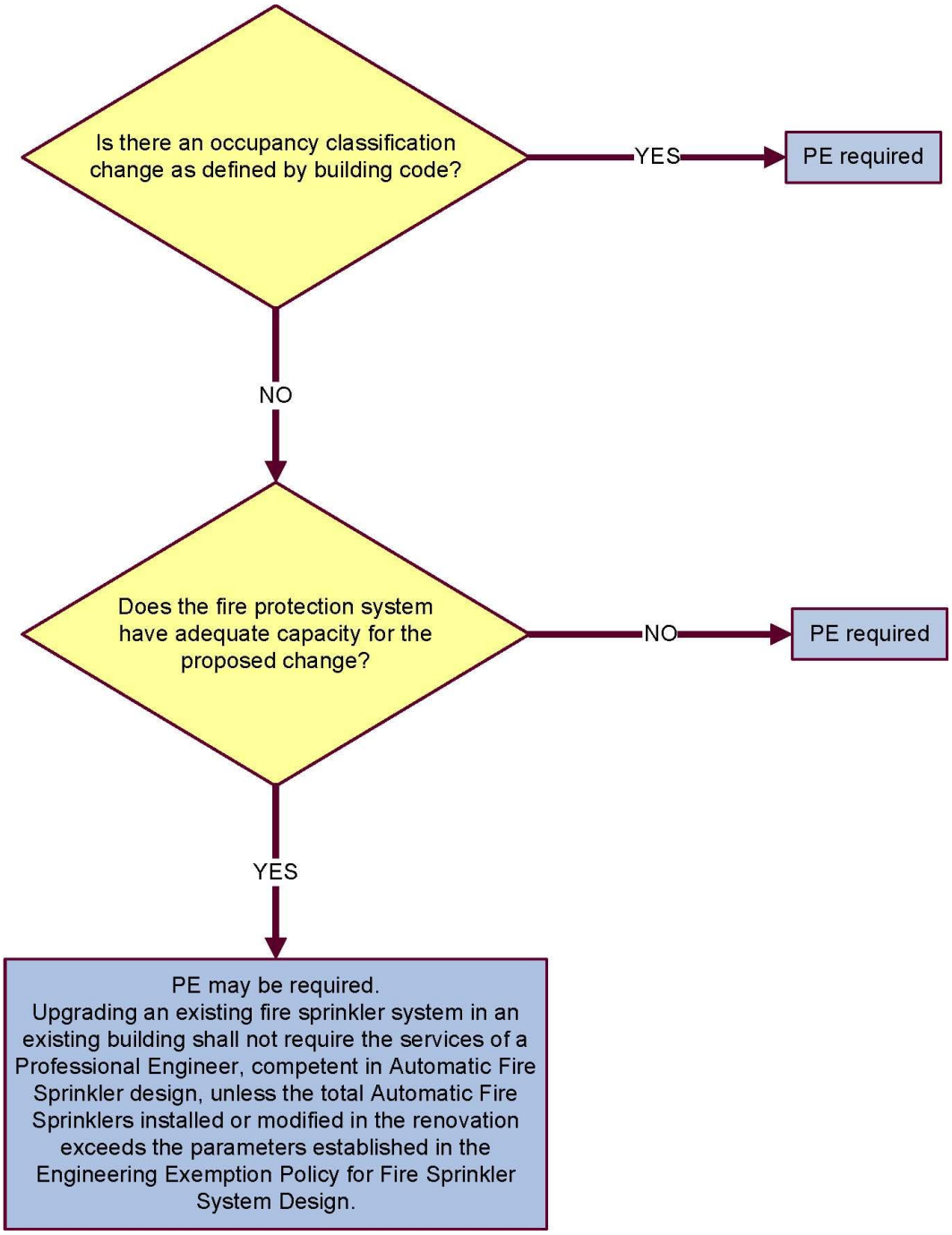
Engineering Exemption Policy for Fire Sprinkler Design Decision Tree

Fire Sprinkler System – New Construction Including Additions



This Decision Tree is the companion document to the Engineering Exemption Policy for Fire Sprinkler System Design.

Fire Sprinkler System – Renovation/Upgrade (no occupancy change)



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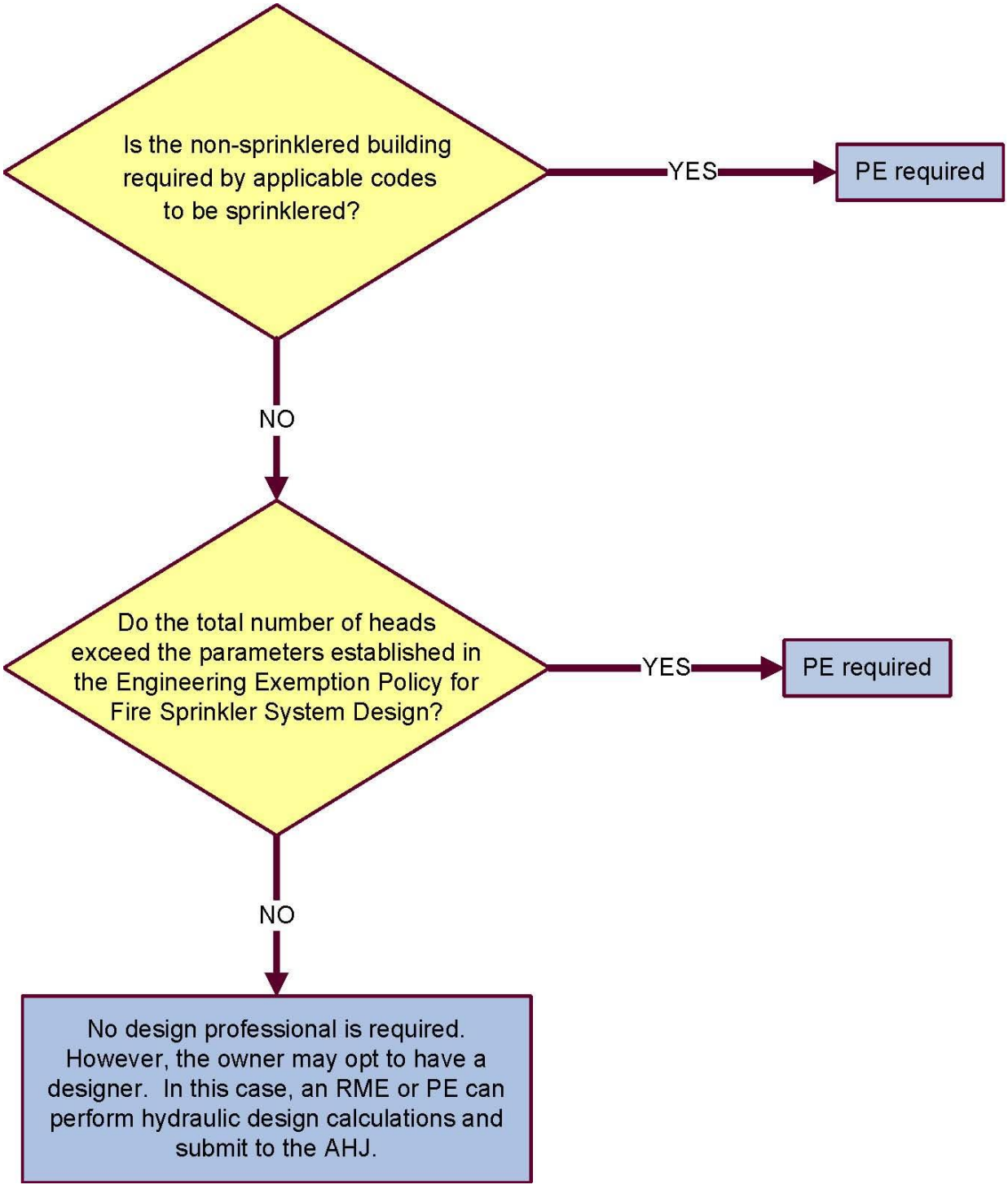
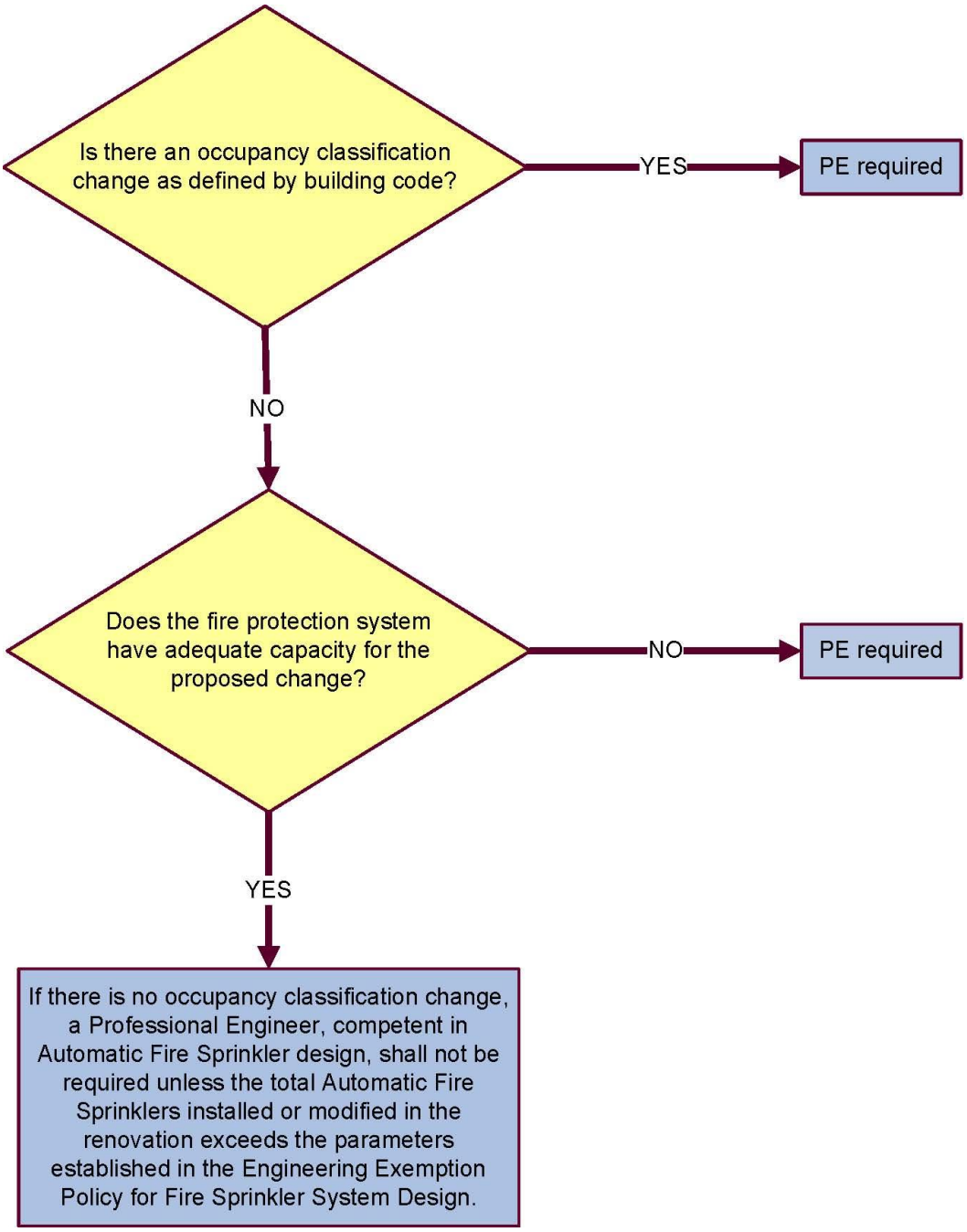
Fire Sprinkler System – Existing Non-Sprinklered Building



Fire Sprinkler System – Occupancy Classification Change



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