BUILDING INSPECTION COMMISSION (BIC)

Department of Building Inspection **Voice (628) 652 -3510**
49 South Van Ness Avenue, 5th Floor San Francisco, California 94103

May 19, 2022

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Mayor

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Director

Ms. Angela Calvillo
Clerk of the Board
Board of Supervisors, City Hall
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102-4694

Dear Ms. Calvillo:

RE: File No. 220038

Ordinance amending the Fire Code to require automatic sprinkler systems in existing high-rise buildings; and affirming the Planning Department's determination under the California Environmental Quality Act.

The Building Inspection Commission ("Commission") met and held a public hearing on April 20, 2022 regarding File No. 220038 on the proposed amendment to the Fire Code referenced above. The Commissioners voted unanimously to **recommend approval** of the proposed Ordinance.

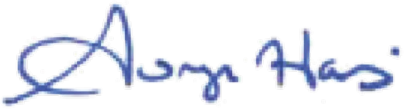
The Commission also voted unanimously to **recommend** the attached draft substitute ordinance that includes proposed edits to the Existing Building Code to harmonize the Fire and Existing Building Codes. Please see the attached draft substitute ordinance for the recommended amendments to the Existing Building Code on page 7.

The Commission also requested future updates when a cost study and tenant displacement plan are ready as well as an implementation and enforcement timeline.

President Bito	Yes	Vice-President Tam	Yes
Commissioner Eppler	Yes	Commissioner Neumann	Yes
Commissioner Sommer	Yes		
Commissioner Alexander-Tut	Absent		

Should you have any questions, please do not hesitate to call me at (628) 652-3510.

Sincerely,



Sonya Harris
Commission Secretary

cc: Patrick O'Riordan, Director
Mayor London N. Breed
Supervisor Aaron Peskin
Supervisor Connie Chan
Supervisor Rafael Mandelman
Board of Supervisors

[San Francisco Fire and Existing Building Codes - Automatic Sprinkler Requirements for Existing High-Rise Buildings]

Ordinance amending the San Francisco Fire and Existing Building Codes to require automatic sprinkler systems in existing high-rise buildings; and affirming the Planning Department's determination under the California Environmental Quality Act.

NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
Additions to Codes are in *single-underline italics Times New Roman font*.
Deletions to Codes are in ~~*strikethrough italics Times New Roman font*~~.
Board amendment additions are in double-underlined Arial font.
Board amendment deletions are in ~~strikethrough Arial font~~.
Asterisks (* * * *) indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

Section 1. Environmental Findings.

The Planning Department has determined that the actions contemplated in this ordinance comply with the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.). Said determination is on file with the Clerk of the Board of Supervisors in File No. ___ and is incorporated herein by reference. The Board affirms this determination.

Section 2. Findings.

(a) Over the last decade, fires in high-rise residential buildings in San Francisco have resulted in property damage, loss of housing, and in some instances, loss of life. Since 2011, there have been 145 incidents of fires in the 130 high-rise residential buildings that are currently not subject to the sprinkler requirement. The recurrence of such fires and the risks that they pose highlight the need to re-examine the City's fire safety policies in residential high-rise buildings that are currently not subject to the City's automatic sprinkler requirements.

(b) Automatic sprinkler systems aid in the control of fires and protect against injury and

loss of life in the event of a fire. Presently, the San Francisco Fire and Building Codes require the installation of sprinkler systems in new and renovated apartment buildings and specific locations in existing apartment buildings. Ordinance No. 377-93, enacted in 1993, required that all high-rise buildings in the City install sprinkler systems within a 12-year period, by February 15, 2006. But, while that ordinance required sprinkler systems to be installed in tourist hotels and mixed-use occupancy buildings where occupancy is temporary, but existing apartment buildings were exempt from the requirement. Qualified historical buildings were also not required to install sprinklers. Excepting these categories of buildings from the automatic sprinkler requirement has left them vulnerable to fires, posing risks to property, housing, and lives.

(c) The amendment to San Francisco Fire Code Section 1103.5.2, through a phased implementation, eliminates by 2028 the provisions that excepted Residential Group R-2 (classified as R-1 prior to 2008) occupancy buildings, including apartment houses, condominiums, and mixed-use buildings containing a Residential Group R-2 occupancy, from the automatic sprinkler requirement.

(d) Because the sprinkler requirements for existing high-rise buildings will be added to the Fire Code, the current requirements will be deleted from Existing Building Code section 314.27 and a reference to Fire Code Sections 1103.5.2 will be added.

Section 3. Chapter 11 of the San Francisco Fire Code is hereby amended by revising Section 1103.5.2 and adding Sections 1103.5.2.1, 1103.5.2.2, 1103.5.2.3, 1103.5.2.3.1, 1103.5.2.4, 1103.5.2.5, 1103.5.2.5.1, 1103.5.2.5.2, 1103.5.2.5.3, and 1103.5.2.5.4, to read as follows:

1103.5.2. [For SF] Automatic Sprinkler System for Existing High-Rise Buildings.

All existing high-rise buildings shall maintain an automatic sprinkler ~~*systems installed to comply with San Francisco Ordinance 377-93*~~ *system conforming to NFPA 13, and in order to comply with San Francisco Building Code Section 314.27.*

Existing high-rise buildings that are also qualified historical buildings as defined in California Health and Safety Code Section 18950 shall be provided with an approved automatic fire sprinkler system when and as required by the State Historical Building Code.

Exceptions:

~~*1. Qualified historical buildings as defined in the California Health and Safety Code Section 18950.*~~

~~*2.*~~*1.* Apartment houses, condominiums, or other ~~*R-2 Occupancies*~~ *Residential Group R-2 Occupancies (classified as R-1 prior to 2008), until January 1, 2028, when this exception expires*.

~~*3.*~~*2.* A mixed-use occupancy building containing ~~*an R-2 Occupancy*~~ *a Residential Group R-2 Occupancy (classified as R-1 prior to 2008), until January 1, 2028, when this exception expires*.

Any existing high-rise not exempted from this section that does not provide an automatic sprinkler system throughout the residential occupancy is out of compliance and subject to immediate code enforcement action. The owner shall maintain the sprinkler system in accordance with Title 19 of the California Code of Regulations.

1103.5.2.1. Additional Requirements.

The following additional requirements shall apply:

1. Valves and devices. *A sprinkler control valve and a waterflow detecting device shall be provided at the lateral connection to the riser for each floor.*

2. Monitoring*. A supervisory signal shall be provided to indicate a condition that will impair the satisfactory operation of the sprinkler system. This shall include, but not be limited to, monitoring*

control valves, fire pump power supplies, and pump running conditions. Such signals shall be monitored in accordance with California Fire Code Section 903.4.1 and NFPA 72.

3. Water supply. *The minimum water supply requirement for the sprinkler shall be determined without regard to inside hose stream demand.*

4. Standpipe conversion. *Existing standpipes may be converted to sprinkler risers, provided that they are hydrostatically tested for two hours at not less than 50 psi (345 Pa) in excess of the maximum pressure to be maintained in the system. Standpipe hose connection(s) shall be provided per NFPA 14.*

5. Supports. *Additional hangers, braces, restraints, or other attachments for support of existing standpipes (which have been converted) shall be provided if they are necessary to meet the requirements of NFPA 13. The installation of additional flexible fittings in such risers is not required.*

1105.5.2.2. Permissible Omissions.

The following features required in new high-rise buildings are not required in systems installed under the provisions of this section:

1. Redundant fire pump;

2. Two-hour rated fire pump room;

3. Secondary on-site supply of water;

4. Water supply from two underground water lines;

5. Connection of the system to two risers on each floor. Hydraulic calculations may consider all risers in service.

See California Fire Code Section 903.3.1.1.1 for additional permissible sprinkler omissions.

1103.5.2.3. Notification.

Not later than 120 days following the effective date of these requirements, the Fire Official shall notify in writing by certified mail the owner of each building within the scope of this section. The notice shall contain a copy of this section and a commentary on it.

1103.5.2.3.1. Deferred Notice.

If a building within the scope of this section is not discovered by the Fire Official until after the deadline for notification, the building owner shall be notified within 30 days of such discovery.

Failure to receive notification does not exempt a building owner from compliance with this section.

1103.5.2.4. Authority of Fire Official.

The Fire Marshal may approve modifications and alternate methods and materials when it is clearly evident that a reasonable degree of fire safety is provided. In such cases, the Fire Marshal may:

1. Consider alternative protection based on nationally recognized standards, principles, and tests, and generally recognized and well-established methods of fire protection;

2. Waive specific individual requirements if it can be shown that such requirements are not physically possible, require disproportionate effort, or pose an undue hardship with little increase in life safety and that a practical alternate cannot be provided; and

3. Grant necessary extensions of time when it can be shown that the specific time periods are not physically practical or pose an undue hardship. The granting of an extension of time for compliance may be approved by the Fire Marshal based on the showing of good cause and on approval of an acceptable, systematic, progressive plan of correction.

1103.5.2.5. Implementation.

The requirements stated in Section 1103.5.2 shall be accomplished by the following steps. Failure to complete any step within the required time frame is a violation of this code, and the Fire Official shall have the power in such a case to abate the building in accordance with San Francisco Fire Code Section 110.4-110.4.5.

1103.5.2.5.1. Step 1. Permit Application.

The owner shall submit professionally designed sprinkler system drawings and a permit application to the Department of Building Inspection not later than two years after the effective date of this requirement.

1103.5.2.5.2. Step 2. Water supply.

The owner shall install the system riser, including floor-control valves, and shall connect it to the approved automatic water supply not later than four years after the effective date of these requirements. For purposes of this section, an automatic water supply shall consist of a connection to the public water system and, if required by hydraulic analysis, installation of a fire pump. Owner shall also provide a Fire Department Connection.

1103.5.2.5.3. Step 3. Piping, sprinklers, and monitoring.

The owner shall complete the sprinkler system, including required electrical monitoring, not later than six years after the effective date of these requirements.

1103.5.2.5.4. Fire Alarm Requirements.

The installation of all fire alarm equipment shall be in accordance with the San Francisco Fire Code, San Francisco Electrical Code, and NFPA 72.

Section 4. The Existing Building Code is hereby amended by revising Section 314.27, to read as follows:

314.27 Automatic sprinkler system – Existing high-rise buildings.

Regardless of any other provisions of these regulations, every existing high-rise building of Type II-B, Type III-B or Type V-B construction shall be provided with an approved automatic sprinkler system conforming to NFPA 13.

314.27.1 General. ~~*Regardless of any other provisions of this code, every*~~ *Every* existing high-rise building as defined in San Francisco Building Code Chapter 2*, including buildings of types other than Type II-B, Type III-B, or Type V-B,* shall be provided with an approved automatic fire sprinkler system conforming to NFPA 13~~.~~*, and as set forth in San Francisco Fire Code Section 1103.5.2 through 1103.5.2.5.4*.

Existing high-rise buildings that are also qualified historical buildings as defined in California Health and Safety Code Section 18950 shall be provided with an approved automatic fire sprinkler system when and as required by the State Historical Building Code.

~~***EXCEPTIONS*:**~~

~~*1. An apartment house, condominium or other building used as a Group R, Division 2 Occupancy as defined in this code excluding tourist hotels as defined in Section 41.4 of the San Francisco Administrative Code.*~~

~~*2. A mixed-use occupancy building containing a Group R, Division 1 or Group R, Division 2 Occupancy.*~~

~~***314.27.2 Additional requirements.** The following additional requirements shall also apply:*~~

~~***314.27.2.1 Valves and devices.*** *A sprinkler control valve and a waterflow detecting device shall be provided at the lateral connection to the riser for each floor.*~~

~~***314.27.2.2 Signals****. A separate and distinct supervisory signal shall be provided to indicate a condition that will impair the satisfactory operation of the sprinkler system. This shall include, but not be limited to, monitoring control valves, fire pump power supplies and pump running conditions. Such supervisory signals shall be annunciated at a constantly attended building security control center; when that location is not under constant supervision by qualified personnel, the signals shall be transmitted to a remote monitoring station in accordance with NFPA 72.*~~

~~***314.27.2.3 Water supply.*** *The minimum water supply requirement for the sprinkler shall be determined without regard to inside hose stream demand.*~~

~~***314.27.2.4 Standpipe conversion****. Existing standpipes may be converted to sprinkler risers, provided that they are hydrostatically tested for two hours at not less than 50 psi (345 Pa) in excess of the maximum pressure to be maintained in the system.*~~

~~***314.27.2.5 Supports.*** *Additional hangers, braces or other attachments for support of existing standpipes which have been converted in accordance with Section 314.27.2.4 shall be provided if they are necessary to meet the requirements of NFPA 13. The installation of additional flexible fittings in such risers is not required.*~~

~~***314.27.2.6 Pipe material****. Any type pipe which has been listed by an approved testing agency for use in automatic sprinkler installations may be used when installed in accordance with its listing limitations.*~~

~~***314.27.3 Permissible omissions.*** *The following features required in new high-rise buildings are not required in systems installed under the provisions of this section:*~~

~~*1. Redundant fire pump;*~~

~~*2. Secondary on-site supply of water;*~~

~~*3. More than one fire department connection;*~~

~~*4. Connection of the system to two risers on each floor. Hydraulic calculations may consider all risers in service;*~~

~~*5. In a Group R, Division 1 or R-2 Occupancy building, sprinklers in bathrooms and closets.*~~

~~*See San Francisco Building Code Section 903.3.1.1.1 for additional permissible sprinkler omissions.*~~

~~***314.27.4 Effective date.*** *The effective date of these requirements shall be January 01, 2008.*~~

~~***314.27.5 Notification.*** *Not later than 60 days following the effective date of these requirements, the Building Official shall notify in writing by certified mail the owner of each building within the scope of this section. The notice shall contain a copy of this section, a commentary on it and a notice of intent form. The notice of intent shall be designed to elicit information regarding proposed water supply connections, pumps, risers and existing partial sprinkler systems. The notice of intent shall include a tentative schedule for phasing the installation of the complete sprinkler system.*~~

~~***314.27.5.1 Deferred notice.*** *If a building within the scope of this section is not discovered by the Building Official until after the deadline for notification, the building owner shall be notified within 30 days of such discovery.*~~

~~*Failure to receive notification does not exempt a building owner from compliance with this section.*~~

~~***314.27.6 Authority of Building Official.*** *The Building Official, in consultation with the San Francisco Fire Marshal, may approve modifications and alternate methods and materials when it is clearly evident that a reasonable degree of fire safety is provided. In such cases, the Building Official may:*~~

~~*1. Consider alternative protection based on nationally recognized standards, principles and tests, and generally recognized and well-established methods of fire protection;*~~

~~*2. Waive specific individual requirements if it can be shown that such requirements are not physically possible, require disproportionate effort or pose an undue hardship with little increase in life safety and that a practical alternate cannot be provided; and*~~

~~*3. Grant necessary extensions of time when it can be shown that the specific time periods are not physically practical or pose an undue hardship. The granting of an extension of time for compliance may be approved by the Building Official based on the showing of good cause and on approval of an acceptable, systematic, progressive plan of correction.*~~

~~***314.27.7 Appeal of high-rise sprinkler requirements.*** *Application may be made to the Board of Examiners in accordance with San Francisco Building Code Section 105A.1 for approval of alternate methods, materials or types of construction or for variances from the provisions of this section.*~~

~~***314.27.8 Implementation.*** *The requirements stated in Section 314.27.2 shall be accomplished by the following steps. Failure to complete any step within the required time frame is a violation of this code, and the Building Official shall have the power to abate the building in accordance with San Francisco Building Code Section 102A.*~~

~~***314.27.8.1 Step 1. Notice of intent.*** *The owner shall submit a properly completed Department-provided notice of intent to the Building Official not later than three years after the effective date of this requirement.*~~

~~***EXCEPTION:*** *No notice of intent is required if an approved sprinkler system is completed prior to the deadline above.*~~

~~***314.27.8.2 Step 2. Water supply.*** *The owner shall install the system riser, including floor-control valves, and shall connect it to the approved automatic water supply not later than five years after the effective date of these requirements. For purposes of this section, an automatic water supply shall consist of a connection to the public water works system and, if required by hydraulic analysis, installation of a fire pump.*~~

~~***314.27.8.3 Step 3. Piping and sprinklers.*** *The owner shall complete the sprinkler system, including required electrical monitoring, not later than 12 years after the effective date of these requirements.*~~

~~***314.27.8.4 Installation.*** *The installation of all fire alarm equipment shall be in accordance with the San Francisco Electrical Code and the California Fire Code.*~~

Section 5. Effective Date. This ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance.

Section 6. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors intends to amend only those words, phrases, paragraphs, subsections, sections, articles, numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal Code that are explicitly shown in this ordinance as additions, deletions, Board amendment additions, and Board amendment deletions in accordance with the "Note" that appears under the official title of the ordinance.

Section 7. Undertaking for the General Welfare. In enacting and implementing this ordinance, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

APPROVED AS TO FORM:
DAVID CHIU, City Attorney

By: _____
ZACHARY PORIANDA
Deputy City Attorney

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