

1 [San Francisco Fire Code - Automatic Sprinkler Requirements for Existing High-Rise
2 Buildings]

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

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

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

14 Section 1. Environmental Findings.

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

20 Section 2. Findings.

21 (a) Over the last decade, fires in high-rise residential buildings in San Francisco have
22 resulted in property damage, loss of housing, and in some instances, loss of life. Since 2011,
23 there have been 145 incidents of fires in the 130 high-rise residential buildings that are
24 currently not subject to the sprinkler requirement. The recurrence of such fires and the risks
25 that they pose highlight the need to re-examine the City's fire safety policies in residential
26 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

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

11 (c) This amendment to San Francisco Fire Code Section 1103.5.2, through a phased
12 implementation, eliminates by 2028 the provisions that excepted Residential Group R-2
13 occupancy buildings, including apartment houses, condominiums, and mixed-use buildings
14 containing a Residential Group R-2 occupancy, from the automatic sprinkler requirement.
15 The amendment also incorporates provisions from existing San Francisco Building Code
16 Section 314.27.

17

18 Section 3. Chapter 11 of the San Francisco Fire Code is hereby amended by revising
19 Section 1103.5.2 and adding Sections 1103.5.2.1, 1103.5.2.2, 1103.5.2.3, 1103.5.2.3.1,
20 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
21 follows:

22

23 **1103.5.2. [For SF] Automatic Sprinkler System for Existing High-Rise Buildings.**

24

25

1 All existing high-rise buildings shall maintain an automatic sprinkler ~~systems installed to~~
2 ~~comply with San Francisco Ordinance 377-93~~ system conforming to NFPA 13, and in order to comply
3 with San Francisco Building Code Section 314.27 and San Francisco Ordinance No. 377-93.

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

7 Exceptions:

8 ~~1. Qualified historical buildings as defined in the California Health and Safety Code Section~~
9 ~~18950.~~

10 2.1. Apartment houses, condominiums, or other ~~R-2 Occupancies~~ Residential Group R-2
11 Occupancies, until January 1, 2028, when this exception expires.

12 3.2. A mixed-use occupancy building containing ~~an R-2 Occupancy~~ a Residential Group
13 R-2 Occupancy, until January 1, 2028, when this exception expires.

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

18
19 **1103.5.2.1. Additional Requirements.**

20 The following additional requirements shall apply:

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

23 2. Monitoring. A supervisory signal shall be provided to indicate a condition that will impair
24 the satisfactory operation of the sprinkler system. This shall include, but not be limited to, monitoring
25

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

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

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

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

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13 **1105.5.2.2. Permissible Omissions.**

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

- 16 1. Redundant fire pump;
- 17 2. Two-hour rated fire pump room;
- 18 3. Secondary on-site supply of water;
- 19 4. Water supply from two underground water lines;
- 20 5. Connection of the system to two risers on each floor. Hydraulic calculations may consider
21 all risers in service.

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

23
24 **1103.5.2.3. Notification.**

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

4
5 **1103.5.2.3.1. Deferred Notice.**

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

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

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11 **1103.5.2.4. Authority of Fire Official.**

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

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

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

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

23
24 **1103.5.2.5. Implementation.**

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

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6 **1103.5.2.5.1. Step 1. Permit Application.**

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

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11 **1103.5.2.5.2. Step 2. Water supply.**

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

17
18 **1103.5.2.5.3. Step 3. Piping, sprinklers, and monitoring.**

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

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22 **1103.5.2.5.4. Fire Alarm Requirements.**

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

1 Section 4. Effective Date. This ordinance shall become effective 30 days after
2 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the
3 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board
4 of Supervisors overrides the Mayor's veto of the ordinance.

5
6 Section 5. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors
7 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,
8 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal
9 Code that are explicitly shown in this ordinance as additions, deletions, Board amendment
10 additions, and Board amendment deletions in accordance with the "Note" that appears under
11 the official title of the ordinance.

12
13 Section 6. Undertaking for the General Welfare. In enacting and implementing this
14 ordinance, the City is assuming an undertaking only to promote the general welfare. It is not
15 assuming, nor is it imposing on its officers and employees, an obligation for breach of which it
16 is liable in money damages to any person who claims that such breach proximately caused
17 injury.

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19 APPROVED AS TO FORM:
20 DAVID CHIU, City Attorney

21 By: /s/ Zachary Porianda
22 ZACHARY PORIANDA
23 Deputy City Attorney

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