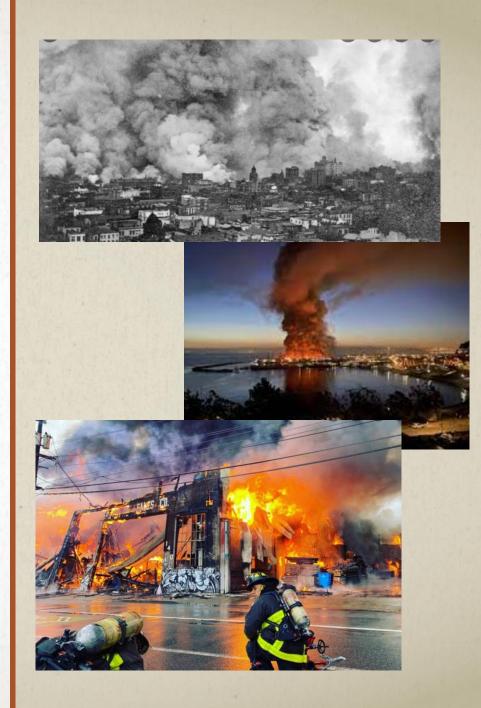


# **2022 SAN FRANCISCO FIRE CODE**

**TRIENNIAL CYCLE** 

## HOW IS THE FIRE CODE DEVELOPED?

# **EVERY THREE YEARS, REALLY ?**

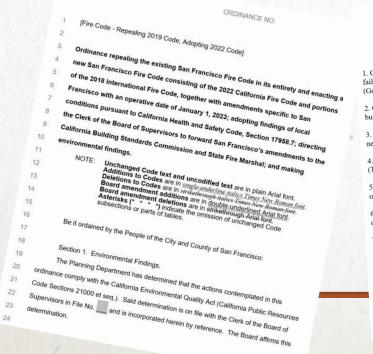


### **REPEAL AND REPLACEMENT OF THE 2019 SAN FRANCISCO FIRE CODE**

- Proposed SF Board of Supervisors Ordinance- 2022 SFFC
- Legislative Digest (summary)

FILE NO

Exhibit A- Standard Findings of the 2022 Amendments



#### EXHIBIT A STANDARD FINDINGS FOR 2022 SAN FRANCISCO FIRE CODE AMENDMENTS:

1. Certain buildings/occupancies in San Francisco are at increased risk for earthquake-induced structural failure and consequent fire due to local hazardous micro zones, slide areas, and local liquefaction hazards.

2. Certain buildings/occupancies in San Francisco are at increased risk of fire due to high density of buildings on very small lots, with many buildings built up to the property lines. (Topography)

3. Topography of San Francisco has led to development of a high density of buildings on small lots, necessitating special provisions for exiting, fire separation, or fire-resistive construction. (Topography)

4. Many buildings are built on steep hills and narrow streets, requiring special safety considerations.

5. Additional fire, structural and other protection is required due to high building density and crowded

6. The City is experiencing a surge in high-rise and super-high-rise development, requiring special safet occupancy. (Topography)

considerations. (Topography)

Not a building standard; no local findings required.

#### LEGISLATIVE DIGEST

### [Fire Code - Repealing 2019 Code, Adopting 2022 Code]

Ordinance repealing the existing San Francisco Fire Code in its entirety and enacting a new San Francisco Fire Code consisting of the 2022 California Fire Code and portions of the 2018 International Fire Code, together with amendments specific to San or the 20 to international the code, together with amendments specific to bain Francisco with an operative date of January 1, 2023; adopting findings of local conditions pursuant to California Health and Safety Code, Section 17958.7; directing the Clerk of the Board of Supervisors to forward San Francisco's amendments to the California Building Standards Commission and State Fire Marshal; and making

Existing Law

The San Francisco Fire Code is designed to safeguard life and property from fire and End San Francisco File Code is designed to sanguard me and property norm me and explosions hazards arising from the storage, handling and use of hazardous substances, expressions materials answig from the storage, framining and use of material double storage, framining and use of materials and devices, and from conditions hazardous to life or property in the occupancy of materials and devices, and from conditions hazardous to life or property in the occupancy of the storage of the st materials and devices, and from conditions nazaroous to life or property in the occupation of buildings and premises; and to provide for the issuance of permits, inspections and other Fire Department services, and to provide for the issuance of permits, inspections and other nite Department services, and the assessment and collection of fees for those permits, inspections and services. The current San Francisco Fire Code (the "2019 San Francisco Fire Code") and services. The current San Francisco Fire Code (the 2019 San Francisco File Co incorporates by reference the 2019 California Fire Code (Title 24, California Code of Regulations, Part 9), those portions of the 2018 International Fire Code not incorporated in the 2019 California Fire Code, and local amendments adopted by San Francisco.

Amendments to Current Law

The 2022 San Francisco Fire Code enacted by this ordinance (the "2022 San Francisco Fire The 2022 San Francisco Fire Code enacted by this ordinance (the 2022 San Francisco Fire Code") incorporates by reference the 2022 California Fire Code (Title 24, California Code of Code / incorporates by relieve use 2022 California Fire Code (Title 24, California Code of Regulations, Part 9) (the "2022 California Fire Code"), including appendices adopted by the Regulations, Fart 5) (the 2022 Galifornia File Code ), including appendices adopted to State, except as expressly deleted, modified, or amended. In addition, the 2022 San State, except as expressing optieted, mounted, or amenued. In addition, the 2022 san Francisco Fire Code incorporates by reference those portions of the 2021 International Fire Code that were not adopted by the California Building Standards Commission in the 2022 California Fire Code. It also includes local provisions specific to San Francisco. California File Code, it also indicates local provisions specific to Calif Filenciaco. In general, the 2022 San Francisco Fire Code carries forward the 2019 San Francisco Fire Code with some modifications. Significant changes and new requirements are described

Section 105 of the 2022 San Francisco Fire Code adds three additional operational permits to Section 103 of the 2022 Sall Francisco Fire Code auds timee additional operational permission the list of regulated activities, and these include: Mobile Food Vendor Carts, Mobile Fueling Locations, and Emergency Responder Radio Communications Coverage Systems. Operational permits cause a license to be issued by the Tax Collector's Office and triggers an

### **REPEAL OF THE ENTIRE 2019 SAN FRANCISCO FIRE CODE**

**2018 INTERNATIONAL FIRE CODE (ICC)** 

**2019 CALIFORNIA FIRE CODE (CFC)** 

**2019 SAN FRANCISCO FIRE CODE (SFFC)** 



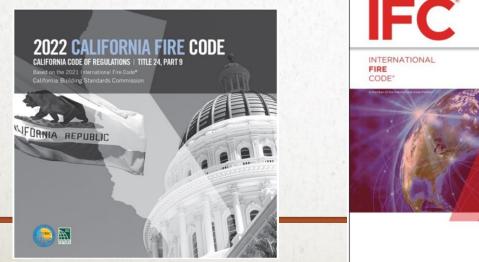
### **2022 SAN FRANCISCO FIRE CODE**

202

HICC

### ADOPTS THE 2022 CALIFORNIA FIRE CODE (CFC)- AS AMENDED

- CA Building Standards Commission (BSC) prints the <u>entire</u> International Fire Code (IFC) in the published 2022 California Fire Code.
- BSC adopts portions of the 2021 IFC which are not amended.
- BSC also makes amendments to certain sections of the IFC, adopts those revised sections, and prints the amended sections in the CFC.



#### ADOPTS 2021 INTERNATIONAL FIRE CODE (IFC)- PORTIONS

- IFC establishes minimum regulations for fire prevention and fire protection systems using prescriptive and performance-related provisions.
- International Code Council (ICC) is a private U.S.-based membership organization that writes the IFC.
- The International Fire Code (IFC) is in use or adopted in 42 states, the District of Columbia, New York City, Guam and Puerto Rico.
- As a model code, the IFC is intended to be adopted in accordance with the laws and procedures of a governmental jurisdiction. Some jurisdictions amend the code in the process to reflect local practices and laws.

- The 2022 San Francisco Fire Code incorporates by reference the 2022 California Fire Code (Title 24, California Code of Regulations, Part 9), including appendices adopted by the State, <u>except as expressly</u> <u>deleted, modified, or amended.</u>
- In addition, the 2022 San Francisco Fire Code incorporates by reference those portions of the 2021 International Fire Code that were not adopted by the California Building Standards Commission in the 2022 California Fire Code. It also includes local provisions specific to San Francisco.
- A city, county, or a city and county may establish <u>more</u> <u>restrictive</u> building standards reasonably necessary because of local climatic, geological or topographical conditions.
- Findings of the local conditions and the adopted local building standards must generally be filed with the CA Building Standards Commission to become effective... (see Appendix A)

2022 SAN FRANCISCO FIRE CODE AMENDMENTS

Topography Geography Geology

### SIGNIFICANT CHANGES FROM THE 2019 TO THE 2022 SAN FRANCISCO FIRE CODE

- New Additional Operational Permits (3)
- Safety Requirements for Food Vendor Carts (e.g., mini hot dog carts)
- Requirements for locked roof doors/hatches at top of stairs
- UL Certification for Emergency Responder Radio Communication Systems
- Installation of sprinkler systems in existing high-rise buildings
- Safety requirement for temporary fire alarm during construction of wood-frame buildings

## **OPERATIONAL PERMITS**

- Mobile food vendor carts
  - Annual safety inspection of each cart
- Mobile Fueling Location
  - In conjunction with Mobile Fueling permit
- Emergency Responder Communication Coverage System
  - Annual inspection verifying 3<sup>rd</sup> party testing and functionality



- Mobile food vendor carts that are equipped with appliances that produce heat to prepare or warm food with the use of charcoal, LP-Gas, butane, or any other flammable liquid, solid, or gas, shall comply with this section:
  - Fire extinguishers
  - Maximum amount of fuel
  - Used appliances in a safe manner
  - Protection of fuel container(s)
  - Gas shut-off valves and knobs



### MOBILE FOOD VENDOR CARTS

### ACCESS TO ROOFS WITH DOORS AND HATCHES

- Only for buildings with four or more stories with access to roof
- <u>Requirements:</u>
  - Remote unlock switch (On-site security desk or remote station monitoring)
  - Unlock with loss of power
  - Upon fire alarm activation
  - Provide two-way communication call box connected to a 24-hr staffed location
  - Emergency unlock button within 5-feet of door with sign



- Emergency Responder Communication Coverage System Certification (ERRCS) Required for New <u>and</u> Existing systems
- UL Certificates shall be mounted at the ERRCS annunciator panel
  - New systems UL certification required for sign-off
  - Existing systems must be certificated by:
    - All high-rise buildings by June 1, 2023
    - All other non-high-rise buildings with ERRCS by September 1, 2023

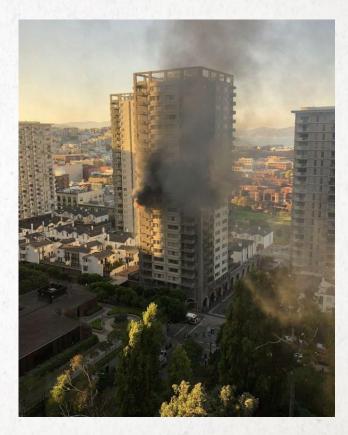


EMERGENCY RESPONDER RADIO COMMUNICATION SYSTEM (ERRCS)

**UL Certification** 

### **SPRINKLERS FOR EXISTING HIGH-RISE BUILDINGS (PRE-1975)**

- Required for all non-fully sprinklered buildings that are:
  - Over 120 feet ( $\approx$  10+ stories)
  - Between 75-120 feet ( $\approx$  8-10 stories) without:
    - Two (2) rated interior stairwells, and
    - Fire alarm system with smoke detection in the following locations:
      - Electrical Room
      - Mechanical Room
      - Telephone Room
      - Corridors
      - Elevator Lobbies
      - Doors at Stairwells



### **HIGH RISE SPRINKLERS CONT'D**

#### 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.

### HIGH-RISE SPRINKLER IMPLEMENTATION SCHEDULE

- 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 three (3) years** after the effective date of this requirement.
- 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 six (6) 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.
- Step 3. Piping, sprinklers, and monitoring.
- The owner shall complete the sprinkler system, including required electrical monitoring, **not later than ten (10) years** after the effective date of these requirements.

- Wood-frame buildings in compliance with San Francisco Department of Building Inspection's Bulletin FS-04 shall be provided with an approved temporary wireless detection and notification system.
- DBI's FS-04 Bulletin Requires Basic Fire Protection:
  - All weather access road
  - Fire hydrants, standpipes, fire extinguishers to be in place as per code during construction
  - Auxiliary Water Supply System in place, as agreed upon by the SFFD
  - Signage in place for the location of all Fire Department Connections (FDC), Temporary FDC, and Floor/Roof Truss Joist I-beam construction (TJI Triangles)



TEMPORARY WIRELESS DETECTION AND NOTIFICATION SYSTEM

Fire Safety for Buildings Under Construction

### **SFFD ADMINISTRATIVE BULLETINS**

- The Fire Department is authorized to issue Administrative Bulletins that **establish** <u>or</u> **clarify** requirements under this code, provide interpretations of this code, and set policies and procedures of the Bureau of Fire Prevention.
- When the fire code official determines that it is appropriate to develop or revise an Administrative Bulletin ("Bulletin"), the Fire Department shall
  - Post the proposed new or revised Bulletin on its website for 30 days, and
  - Provide notice of that Bulletin to parties who have registered to receive notice on the Department's website.
  - The fire code official shall conduct a public hearing on the proposed Bulletin, to obtain public comment.
    - The hearing shall be held after the 30-day posting period.
  - The Fire Commission shall approve any proposed new or revised Bulletin at a noticed meeting.
- A Bulletin shall not be effective until approved by the Fire Commission.