



# **City of San Marcos City Council Work Session**

## **Building & Fire Codes**

January 3, 2023



# Overview

- History of Code Updates
- What Codes are we discussing?
- Receive **Council direction** on Notable Amendments
  - Building
  - Fire
- Discuss 4 additional Fire amendments and receive **Council direction**
- Next Steps



# History of Code Updates:

- Typically, the City adopts the ICC (International Code Council) Family of Codes every other code cycle, about every 6 years
- Currently adopted (as of July 7, 2015 (Ord. 2015-21))
  - 2015 ICC Family of Codes
  - 2014 NEC (National Electric Code)
  - City Code Amendments (Chapter 14 & 38)
- Additional amendments were made to the Fire Prevention & Protection Chapter 38 of the City Code
  - May 2019 (Ord. 2019-11) & March 2020 (Ord. 2020-13)



# What Codes are we discussing?

- 2021 IRC (International Residential Code)
- 2021 IBC (International Building Code)
- 2021 IFC (International Fire Code)
- 2020 NEC (National Electric Code)
- 2021 IPMC (International Property Maintenance Code)
- 2021 IMC (International Mechanical Code)
- 2021 IPC (International Plumbing Code)
- 2021 IFGC (International Fuel Gas Code)
- 2021 IECC (International Energy Conservation Code)
- 2021 IEBC (International Existing Building Code)
- 2021 ISPSC (International Swimming Pool & Spa Code)



# Building Code Amendments of note:

- 2020 National Electric Code as adopted by the State language
- Adoption of 2021 International Energy Conservation Code (IECC)
- Adoption of the full 2021 International Existing Building Code (IEBC)
- Adoption of the full 2021 International Property Maintenance Code (IPMC)



# Building Code Amendments of note:

- Adoption of additional appendices
  - International Building Code (IBC)
    - Agriculture (C), Rodent Proofing (F), Patio Covers (I)
  - International Residential Code (IRC)
    - Patio Covers (AH), Tiny Houses (AQ), Light Straw Clay Construction (AR), Cob Construction (AU), Strawbale Construction (AS), 3D-printed Building Construction (AW)
- Overall less local amendments adopted than in previous years
  - = Lower construction costs and Industry standardization
  - Electrical & Plumbing amendments of note



# Building Code Amendments of note:

- Licensing changes
  - Prohibited acts
  - Notice of Violations
- Commercial Foundation exemption
- No permit required for Re-Roofs with no structural changes
- Removed a new material requirement when using stucco
  - Material doesn't provide additional quality, adds expense and may discourage stucco from being used



# Council Direction Requested on Notable Building Code Amendments

Staff recommendations on previous 3 slides





# The City of San Marcos Fire Code Amendments are largely based on the North Central Texas Council of Government (NCTCOG) amendments.

- NCTCOG's [Regional Codes Coordinating Committee \(RCCC\)](#) and its five advisory boards conducted multiple meetings to review the latest editions of the model codes and develop regional amendments. Their review and recommendations are endorsed by NCTCOG's Executive Board.
- The CAPCOG region has no such consortium which is why the NCTCOG is used as the backbone for local amendments.



# Fire Code Amendments of note:

- Adoption of Appendix L: Fire Fighter Air Replenishment Systems (FARS)
  - The FARS technology in Appendix L exists to address the issue of Fire Fighters having to carry oxygen tanks up many floors or across long distances by using in-building air supply systems. This adoption would apply to the following buildings:
    - Any new building 5 or more stories in height.
    - Any new building with 2 or more floors below grade.
    - Any new building 500,000 square feet or more in size.



# Fire Code Amendments of note:

- Class A wiring requirement for Notification Appliance Circuits
  - This amendment only applies to R2 (apartment) type occupancies
  - Class A wiring improves reliability of fire alarm devices and systems.
  - Class A Notification Appliance Circuit (NAC) requirements are meant to prevent apartment residents from disabling horn/strobes in their dwelling



# Council Direction Requested on Notable Fire Code Amendments

Staff recommendations on previous 2 slides



# Implementation of The Compliance Engine

- The Compliance Engine, by Brycer LLC, is an internet-based tool that keeps track of all Inspection, Testing, and Maintenance events in all known fire protection systems within the City of San Marcos.
  - In addition to tracking these events, the program sends out notices to responsible parties regarding when the fire protection systems are due for inspection, usually on an annual basis.
  - Each report that is submitted costs \$100. The submitting contractor pays The Compliance Engine directly. \$17.00 goes to the program, \$83 will come back to the City.
    - Example, a business with 3 systems, automatic sprinkler, fire alarm and kitchen hood suppression(inspected every 6 months) would pay \$400.00/year.



# Council Direction Requested

## Staff Recommendation:

- *109.3 Recordkeeping.* A record of periodic inspections, tests, servicing and other operations and maintenance shall be maintained on the premises or other *approved* locations for not less than three years, or a different period of time where specified in this code ~~or~~, referenced standards, or as prescribed by state law. Records shall be made available for inspection by the *fire code official*, and a copy of the records shall be provided to the *fire code official* on request.
- The fire code official is authorized to prescribe the form and format of such recordkeeping. The form and format of such recordkeeping shall include the use of third-party services, including those provided by, but not limited to, Brycer LLC. Any and all fees charged by the third-party are to be paid by the submitting entity. The fire code official is authorized to require that certain required records be filed with the fire code official.



# Retroactive Sprinkler Systems

- Installation of Sprinkler Systems in certain A-2 Occupancies, new and existing, within 2 years of notification
  - Examples of A-2 Occupancies are banquet halls, casinos, night clubs, restaurants, taverns and bars.
  - Some examples of San Marcos businesses that will likely be affected include:
    - The VFW Hall (on Hunter)
    - Cuauhtemoc Hall (on Patton)
    - Nephews Bar (on Guadalupe)
    - Anchor Bar (old Mamacita's on Aquarena) would have been affected had a remodel not just occurred and sprinkler system been installed.



# Council Direction Requested

## Staff Recommendation:

- 1103.5 Sprinkler Systems.
  - An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 1103.5.1 through 1103.5.5.
  - 1103.5.1 Group A-2. Where alcoholic beverages are consumed in a Group A-2 occupancy having an occupant load of 300 or more, the fire area containing the Group A-2 occupancy shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
  - Fire sprinkler system installation shall be completed within 24 months from date of notification by the fire code official.





# Infrared Gate Opener System

- Installation of an infrared gate opener system at all properties, new and existing, with a motorized gate(s) crossing a fire lane(s), within 1 year of notification
  - Recommendation that notifications do not start until the first Opticom infrared sending unit is installed on a City of San Marcos emergency response vehicle.



# Council Direction Requested

## Staff Recommendation:

- 503.6.2 Infrared Gate Operation. New and existing motorized gates crossing fire lanes shall be equipped with an approved infrared detector system, as approved by the San Marcos Fire Department.
- 7. Existing gate operating systems not in compliance with the approved infrared system shall be updated to the current requirements at the time of application for a new Certificate of Occupancy or no later than two years of being notified of this ordinance. Notifications regarding this ordinance will not be sent until the first City of San Marcos emergency response vehicle is equipped with an infrared sending unit.



# Sprinklers for Spray Booths/Rooms

- Installation of a sprinkler system on all existing spray booths and rooms, within 2 years after notification
  - Approximately 15% of fires that occur in industrial settings involve the ignition of flammable or combustible liquids.
  - This amendment aligns existing facilities with the requirements in Chapter 24 of the 2021 International Fire Code.



# Council Direction Requested

## Staff Recommendation:

- 1103.5.6 Spray Booths and Rooms. Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404. The approved automatic fire-extinguishing system installation shall be completed within 24 months from date of notification by the fire code official.



# Next Steps:

Council to consider adoption of 2021 ICC Family of Codes, 2020 National Electric Code and City Code Amendments for Chapters 14 & 38

- First reading January 17<sup>th</sup>, 2023
- Final reading February 7<sup>th</sup>, 2023
- Effective date of April 1<sup>st</sup>, 2023