Review of changes in the 2022 California Building Standards Code

The following provides a review of the Building Code Adoption process and a summary of significant changes in the 2022 edition of the California Building Standards Code (Title 24, California Code of Regulations) compared to the existing code affecting permits in the City of La Mesa.

Adoption process

State Law requires that the City of La Mesa adopt the same edition of the model technical codes as adopted and amended by the State. The California Building Standards Code incorporating the latest edition of the model technical codes applies in all parts of California. Failure to adopt the codes within 180 days of State adoption results in the codes being enforced by the City by default. The California Building Standards Commission has published and adopted the 2022 Edition of the California Building Standards Code that incorporates the 2021 International Building Code, the 2021 International Residential Code, the 2021 Uniform Plumbing Code, the 2021 Uniform Mechanical Code and the 2022 California Existing Building Code, based on 2021 International Existing Building Code.

Section 18947.5 of the State Health and Safety Code provides that local amendments to the State's Building Standard for all occupancies are limited to those amendments required to address local climatic, geological or topographical conditions.

Summary

The following is a summary of the Building Codes that staff has identified as relevant to future design and development within the City of La Mesa. The Residential Code brings important updates to "Aging in place" design to contribute towards California's housing goals. The 2022 Energy Code encourages the state's clean energy goals with efficient electric heat pumps and electric-ready requirements for new homes. It expands on solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. The 2022 California Green Code brings progressive changes related to electric vehicle (EV) charging that account for the Governor's Executive Orders to achieve over 1.5 million zero emission vehicles (ZEV's) on California roadways in 2025. Furthermore, the Building, Residential, Plumbing and Mechanical codes all officially changed permit expirations from 180 days to 12 months, in agreement with La Mesa's existing Municipal Code.

2022 California Building Code (2021 International Building Code) CCR Title 24 Part 2

CBC 105.5.1 Permit expiration

New section changed permit expiration from 180 days to 12 months.

CBC 310.3 Residential Group R-2

Amended definition for Group R-2 to meet requirements of SB 234, Small and large family child care in apartment houses can operate in R-2 occupancies when they comply with Health and Safety Codes.

CBC 508 Mixed Use and Occupancy

Amendment permitting the consideration of some uses as accessory occupancies, mainly in medical and long-term care facility occupancy exterior entrances.

CBC 710A Accessory Buildings and Misc Structures

Clarifies that Group U occupancy accessory buildings shall conform to this section. Amendment and subsections that are organized by categories of distances from applicable buildings and mandate enforcement for buildings greater than 120 sq feet.

CBC 903.3.1.1.3 Solar Photovoltaic power systems

Amendment to delete requirement for the installation of smoke detectors in outdoor locations as a substitute for sprinkler protection.

<u>CBC 11B 108 Maintenance of Accessible Features</u> Added requirements to include facilities regulated by Ch 11B.

2022 California Residential Code(2021 International Residential Code) CCR Title 24 Part 2.5

<u>CRC 105 Permit expiration</u> New section changed permit expiration from 180 days to 12 months.

CRC 326 Habitable Attics

New section that states a habitable attic shall be considered a story above grade plane.

CRC 327 Aging in place design and fall protection

Sets infrastructure in new residential construction for grab bars, electrical control height, and door sizing for at least one bedroom and one bath on the entry level.

2022 California Electrical Code (2020 National Electrical Code) CCR Title 24 Part3

Article 404.4 Damp or Wet Locations. (C)

Switches in Tub or Shower Spaces Amendment to reduce the restriction distance for the installation of receptacles from five feet to three feet horizontally.

2022 California Mechanical Code (2020 Uniform Mechanical Code) CCR Title 24 Part 4

<u>CMC 104.4.3.1 Permit Expiration</u> New section changed permit expiration from 180 days to 12 months.

2022 California Plumbing Code (2020 Uniform Plumbing Code) CCR Title 24 Part 5

CPC 105.5.1 Permit Expiration

New section changed permit expiration from 180 days to 12 months.

2022 California Energy Code (2019 California Energy Code) CCR Title 24 Part 6

A) <u>Residential</u>

<u>Section §150.1(c)6</u> Space heating equipment must be a heat pump in climate zones 3, 4, 13, and 14. In other climate zones it can be either a heat pump or a gas heating system.

<u>Section §150.1(c)8</u> Water heating equipment must be a HPWH meeting certain criteria or solar water heating system with electric backup.

<u>Section §150.0(s)</u> New energy storage system (ESS) ready requirements, including interconnection equipment or a dedicated raceway, a minimum of four branch circuits, a minimum busbar rating of 225 amps, and space for future installation of a system isolation equipment or transfer switch.

<u>Section \$150.0(t)-(v)</u> New electric ready requirements for space heating, cooking, and clothes dryers when gas equipment is installed. Electrical infrastructure must be provided and reserved to the equipment location for the future installation of electrical appliances.

Section §150.1(c)14 No PV system required when size is less than 1.8 kWdc.

B) Non Residential

<u>Section §140.10</u> New prescriptive requirements added for PV and battery storage systems for specific building types.

<u>Section §140.1(b)</u> Energy Commission-approved shared solar PV, other renewable electric generation system, or ESS may be used to meet PV or ESS requirements using the performance method.

2022 California Green Building Standards Code CCR Title 24 Part 11

A) <u>Residential</u>

4.106.4 and subsections. EV charging for new construction

Expanded EV charging requirements to installation of EV charging receptacles and EV chargers (EVSE). Modified Exception 1 to address situations in which there is no local utility power supply or when the local utility is unable to supply adequate power. Repealed references to specific dollar amounts for exceptions due to variations in utility costs based upon locations. Included an exception related to adverse impact to construction cost of a project, similar to the provision for nonresidential EV charging.

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities

New regulation to clarify that calculations for EV spaces are to be rounded up to the

nearest whole number and EV spaces to be counted as parking spaces only for the purposes of meeting parking space requirements at the local level (Vehicle Code Section 22511.2).

4.106.4.2.1 Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms

New regulation requiring that ten percent of the total number of parking spaces on a building site support future Level 2 EVSE, the installation of EV ready spaces for twenty-five percent (25%) of the total number of parking spaces equipped with low power Level 2 EV charging receptacles, and clarification that no more than one receptacle must be installed per dwelling unit.

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms

New regulations requiring that ten percent (10%) of the total number of parking spaces on site support future Level 2 EVSE; the installation of EV-ready spaces for twenty-five percent (25%) of the total number of parking spaces equipped with low power Level 2 EV charging receptacles; and five percent (5%) of the total number of parking spaces shall be equipped with Level 2 EVSE. The use of an ALMS is allowed when low-power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS)

Added requirements for space location and dimensions, with a reference to the California Building Code to address accessibility.

4.106.4.2.3 EV space requirements

Amended requirements for single and multiple EV spaces, and added a requirement for EV-ready space signage.

<u>4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings</u>

Expanded EV charging infrastructure for additions and alterations triggered when new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered, and the work requires a building permit. The new regulation requires that 10 percent (10%) of the total number of parking spaces being added or altered be EV capable to support future Level 2 EVSE.

B) Non-Residential

5.106.5.2 Designated parking for clean air vehicles

Repealed the mandatory requirement for designated parking for clean air vehicles.

5.106.5.3 Electric vehicle (EV) charging and subsections

Amended to increase the EV capable space percentages and add a new requirement for installed Level 2 or DCFC chargers.

5.106.5.4 Electric vehicle (EV) charging: medium-duty and heavy-duty and subsections

Added new regulations for electric vehicle charging readiness requirements for new construction of warehouses, grocery stores and retail stores with planned off-street loading spaces.