



LAKE HAVASU CITY
DEVELOPMENT SERVICES DEPARTMENT

◆ BUILDING ◆ CODE ENFORCEMENT ◆ PLANNING AND ZONING ◆

June 22, 2021

To: General Contractors
Architects
Designers/Draftsman
Engineers
Pool Contractors
Framing Contractors
Plumbing Contractors
Mechanical Contractors
Electrical Contractors
Masonry Contractors
Roofing Contractors
Fire Sprinkler Contractors
Garage Door Installers
Testing Agencies
Steel Fabricators
Truss Manufacturers
Electrical Suppliers
Colorado River Homebuilders Association

Re: Adoption of the 2018 International Codes and 2017 NEC

To keep current with national standards, the City adopted the 2018 International Building Code, 2018 International Residential Code, 2018 International Plumbing Code, 2018 International Mechanical Code, 2018 International Fuel Gas Code, 2018 International Property Maintenance Code, 2018 International Fire Code, and 2017 National Electrical Code, which will become effective on **September 1, 2021**.

Following is a partial list of changes between the 2012 International Codes and the newly adopted 2018 International Codes, as well as the changes between the 2011 National Electrical Code and the newly adopted 2017 National Electrical Code:

2018 International Residential Code (IRC):

- **R1005.8 Insulation shield.** Where factory-built chimneys pass through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.00187 inch (0.4712 mm) (No. 26 gage) shall be installed to provide clearance between the chimney and the insulation material. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches (51 mm) above the insulation materials and shall be secured in place to prevent displacement. Insulation shields provided as part of a listed chimney system shall be installed in accordance with the manufacturer's installation instructions. (*Note: New requirement*)

- **M1502.3.1 Exhaust termination outlet and passageway size.** The passageway of dryer exhaust duct terminals shall be undiminished in size and shall provide an open area of not less than 12.5 square inches (8065 mm²). *(Note: New requirement)*
- **M1502.4.2 Duct installation.** Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation. *(Note: Dryer ducts shall be no less than 4 inches in diameter; therefore, they shall be installed in a wall space greater than 4 inches in width.)*
- **M1502.4.6 Length identification.** Where the exhaust duct equivalent length exceeds 35 feet (10 668 mm), the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located within 6 feet of the exhaust duct connection. *(Note: Duct labeling is no longer required unless the equivalent duct length exceeds 35 feet as allowed by M1502.4.5.2 & M1502.4.5.3.)*
- **M1503.6 Makeup air required.** Where one or more gas, liquid, or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust rate. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2. *(Note: Make-up air for exhaust systems in excess of 400 CFM is no longer required unless natural draft appliances are provided in the residence.)*
- **E3703.5 Garage branch circuits.** Not less than one 120-volt, 20-ampere branch circuit shall be installed to supply receptacle outlets in attached garages and in detached garages with electric power. This circuit shall not have other outlets. *(Note: New requirement)*
 - **EXCEPTION:** This circuit shall be permitted to supply readily accessible outdoor receptacle outlets.
- **E3902.8 Bathtub or shower stall receptacles.** 125-volt, single-phase, 15- and 20-ampere receptacles that are located within 6'-0" (1829 mm) of the outside edge of a bathtub or shower stall shall have ground-fault circuit-interrupter protection for personnel. *(Note: New requirement)*
- **E3902.9 Laundry areas.** 125-volt, single-phase, 15- and 20-ampere receptacles installed in laundry areas shall have ground-fault circuit-interrupter protection for personnel. *(Note: New requirement)*
- **E3902.10 Kitchen dishwasher branch circuit.** Ground-fault circuit-interrupter protection shall be provided for outlets that supply dishwashers in dwelling unit locations. *(Note: New requirement)*
- **E3902.16 Arc-fault circuit-interrupter protection.** Branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, and similar rooms or areas shall be protected by any of the following: See code for listing. *(Note: Arc-fault protection is now required for circuits in kitchens and laundry areas.)*

2018 International Building Code (IBC):

- **Table 1004.1.2 – Maximum Floor Area Allowances per Occupant.**
 - Mercantile: 60 gross
 - Business areas: 150 gross
 - Concentrated business use areas: See Section 1004.8
(*Note: this is a change from 30 gross and 100 gross*)
- **1008.2.3 Exit discharge.** Illumination shall be provided along the path of travel for the exit discharge from each exit to the public way. (*Note: New requirement*)
- **1010.1.9.4 Locks and latches. 2.2.** A readily visible, durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. (*Note: Change in verbiage*)
- **1705.17.** In 3-or-more-story buildings or in buildings assigned to Risk Category III or IV, special inspections for through-penetrations, membrane penetration firestops, fire-resistant joint systems, and perimeter fire barrier systems that are tested and listed in accordance with Sections 714.4.1.2, 714.5.1.2, 715.3 and 715.4 shall be in accordance with Section 1705.17.1 or 1705.17.2. (*Note: New requirement*)

2018 International Plumbing Code (IPC):

- **308.10 Thermal expansion tanks.** A thermal expansion tank shall be supported in accordance with the manufacturer's instructions. Thermal expansion tanks shall not be supported by the piping that connects to such tanks. (*Note: New requirement*)
- **403.1.2 Single-user toilet facility and bathing room fixtures.** Single-user toilet facilities and bathing rooms and family or assisted-use toilet facilities and bathing rooms shall be identified for use by either sex. (*Note: Single-user facilities shall now be provided with unisex signage.*)
- **403.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.
 - **EXCEPTION: 4.** Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer. (*Note: This is a change from 15 or fewer.*)
- **403.3 Employee and public toilet facilities.** For structures and tenant spaces intended for public utilization, customers, patrons, and visitors shall be provided with public toilet facilities.
 - **EXCEPTION: 2.** Structures and tenant spaces intended for quick transactions (i.e., takeout, pickup, drop-off), having a public access area less than or equal to 300 square feet. (*Note: Public toilet facilities are no longer required in spaces as describe in exception 2.*)

2018 International Mechanical Code (IMC):

- **307.2.4.1 Ductless mini-split system traps.** Ductless mini-split equipment that produces condensate shall be provided with an inline check valve located in the drain line, or a trap. (*Note: New Requirement*)

2017 National Electrical Code (NEC):

- **210.12 (C) Guest rooms and guest suites arc-fault circuit-interrupter protection.** All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets and devices installed in guest rooms and guest suites of hotels and motels shall be protected by any of the means described in 210.12(A)(1) through (6). *(Note: This a new requirement for guest rooms and suites.)*
- **406.12 Tamper-resistant receptacles.** All 15- and 20-ampere, 125- and 250-volt non-locking-type receptacles in the areas specified in 406.129(1) – (7) shall be listed tamper-resistant receptacles.
 - (1) Dwelling units in all areas specified in 210.52 and 550.13
 - (2) Guest rooms and guest suites of hotels and motels
 - (3) Child care facilities
 - (4) Preschools and elementary education facilities
 - (5) Business offices, corridors, waiting rooms, and the like in clinics, medical and dental offices, and outpatient facilities
 - (6) Subset of assembly occupancies described in 518.2, to include places of waiting transportation, gymnasiums, skating rinks, and auditoriums
 - (7) Dormitories*(Note: Items 4 through 7 are new requirements for tamper-resistant receptacles.)*

The changes between the current codes and the proposed codes are very minor. If you are using a registrant not located in Lake Havasu City, please forward this information to them. Copies of Lake Havasu City amendments to the codes can be obtained at the Development Services Department front counter or Lake Havasu City's website. (www.lhcaz.gov)

For the Code implementation process, please see Lake Havasu City's *2018 Building Code Implementation Standards*. This document is available at the Development Services Department front counter or Lake Havasu City's website. (www.lhcaz.gov)

If you have any questions or need additional information please contact me at (928) 854-0716.

Respectfully,

Jeff Thuneman
LHC Building Official