

CITY OF LONG BEACH

DEPARTMENT OF DEVELOPMENT SERVICES

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GOVERNING CODES:

- All work shall comply with the following codes:
 - 2019 California Residential Code (CRC);
 - 2019 California Building Code (CBC);
 - 2019 California Electrical Code (CEC);
 - 2019 California Mechanical Code (CMC);
 - 2019 California Plumbing Code (CPC);
 - 2019 California Energy Efficiency Standards (CEES);
 - 2019 California Green Building Stds. (CG);
 - Long Beach Municipal Code (LBMC) amendments; and,
 - Long Beach Information Bulletins (IB).

GENERAL:

- The items listed here are the minimum regulations applicable to additions and/or remodeling work for one-story, 1 or 2 family dwellings.
- These requirements shall NOT supersede more restrictive specifications on the approved plans or as required by applicable codes and/or other regulations.
- All construction shall comply with IB BU-010 "Wood Frame Prescriptive Provisions for Residential Construction", unless otherwise detailed on the approved plans and stamped by the city.
- Approved pressure-preservative treated (PT) or naturally durable wood shall be used in the following locations: (CRC R317.1 & R317.1.2)
 - Joists less than 18 inches or girders less than 12 inches from exposed ground in area located within the building foundation.
 - All framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from exposed ground.
 - Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.
 - The ends of girders entering exterior masonry or concrete walls having clearances of less than 1/2 inch on tops, sides and ends.
 - Siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches from the ground or less than 2 inches from concrete steps or slabs, or similar horizontal surfaces exposed to the weather.
 - All wood in contact with the ground, embedded in concrete in direct contact with the ground or embedded in concrete exposed to the weather.
- All wood posts to be of approved natural decay resistant or pressure-preservative treated, unless supported on a metal pedestal 1 inch above a concrete floor or surface (CRC R317.1.4)
- All exterior wall assemblies shall include a weep screed and water-resistant barrier as follows: (CRC R703.1.1, R703.7.2.1 & R703.7.3)
 - Weep Screed:
 - A minimum 0.019 inch (No. 26 galvanized sheet gage) corrosion-resistant with a minimum 3 1/2 inch vertical attachment flange;
 - Installed with the weep openings a minimum 1 inch below foundation plate line; and, 4 inches above finish grade or 2 inches above paved areas;
 - Water-Resistive Barrier:
 - 2 layers of Grade D paper applied over wood-based sheathing; and, overlapping the weep screed attachment flange.

SMOKE & CARBON MONOXIDE ALARMS:

- Smoke alarms complying with UL 217 shall be installed in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedrooms, and at each floor or basement level. (CRC R314.1)
- Carbon monoxide alarms complying with UL 2034 shall be installed in each sleeping room containing a fuel burning appliance, outside each sleeping area and on every story of dwelling units that have an attached garage or fuel burning appliances. (CRC R315.1)
- See IB BU-028 "Smoke and Carbon Monoxide Alarms in R-3 Occupancies" for additional requirements.

DOORS & EGRESS WINDOWS:

- At least one egress door shall be provided for each dwelling unit. (CRC R311.2)
- The required egress door shall be side hinged, with minimum dimensions of 36 inches wide by 78 inches high, and be openable from inside the dwelling without the use of a key or special knowledge or effort.

- Exterior doors shall have level landings at each side of door. Landings shall be at least as wide as the door served and measure 36 inches minimum perpendicular to the door. (CRC R311.3)
- At required egress doors both landings shall be maximum 1 1/2 inches below the top of the threshold. Except, the exterior landing may be up to 7.75 inches below the top of the threshold where the door does not swing over the landing. (CRC R311.3.1)
- Every sleeping room, basement and habitable attic shall have at least one operable emergency escape and rescue opening. (CRC R310.1)
- All emergency escape and rescue openings shall have a minimum clear opening of 5.7 square feet, with a minimum net clear opening height of 24 inches and width of 20 inches. The bottom of the clear opening shall be a maximum of 44 inches above the floor. (CRC R310.2 & IB BU-006)

GARAGES & CARPORTS:

- Garages and carports shall be completely separated from the dwelling and attic areas, and protected by a minimum of 1/2 inch gypsum board or equivalent applied to the garage side of separating walls and ceilings. (CRC R302.6 & Table R302.6)
- Doors between the garage and residence shall be not less than 1 3/4 inches thick of solid wood or steel, or 20 minute fire-rated door assemblies, and equipped with a self-closing and self-latching device. (CRC R302.5.1)
- Garage floors shall be sloped toward area drains or the main vehicle entry doorway. (R309.1)

UNDERFLOOR & ATTIC AREAS:

- Underfloor spaces shall be provided with ventilation openings through foundation walls or exterior walls. One ventilation opening shall be within 3 feet of each corner of the building. (CRC R408.1)
- Underfloor areas shall have access openings as follows: (CRC R408.4 & CMC 304.4)
 - Through wall access openings shall be at least 16 by 24 inches;
 - Through floor access openings shall be at least 18 by 24 inches.
 - Where an appliance is installed openings and passageway shall be not less than the largest component of the appliance, and at least 22 by 30 inches.
- Where any portion of a through wall access opening is below grade, an areaway not less than 16 by 24 inches shall be provided. The bottom of the areaway shall be below the threshold of the access opening. (CRC R408.4)
- Areaways shall be protected from site drainage by curbs or similar devices. (CRC R408.6)
- Attic access openings shall be provided into each attic area that has a vertical height of 30 inches or greater over an area of 30 square feet or more; or in which an appliance is installed. (CRC R807.1 & CMC 304.4)
- Attic access shall meet the following: (CRC R807.1 & CMC 304.4)
 - Minimum 22 by 30 inches or the size of the largest component of any appliance installed in the attic;
 - Located in a hallway or other readily accessible location;
 - Shall not open directly into any sleeping room;
 - Minimum unobstructed headroom of 30 inches at some point above the access measured vertically from the bottom of ceiling framing members.
- Appliances in attics and underfloor spaces shall be accessible as follows: (CMC 304.4)
 - Through an access opening not less than 22 by 30 inches or the size of the largest component of any appliance installed in the space;
 - 20 feet maximum passageway from the access opening to the appliance, measured along the centerline of the passageway;
 - The passageway shall have solid flooring at least 24 inches wide and shall be unobstructed;
 - A level working platform at least 30 by 30 inches in front of the service side of the appliance.
 - A permanent 120V receptacle outlet and a lighting fixture shall be installed near the appliance. (CEC 210.70(A)(3))
 - The switch controlling the lighting fixture shall be located at the access opening.

MINIMUM CONSTRUCTION REQUIREMENTS

for ADDITION & REMODELING to ONE-STORY, 1 or 2 FAMILY DWELLINGS

MECHANICAL:

- All mechanical equipment shall be installed per the manufacturer's installation instructions. (CMC 303.1)
- Exhaust ducts shall terminate not less than 3 feet from a property line or opening into a building, 10 feet from a forced air inlet, and shall not discharge onto a public walkway. (CMC 502.2.1)
- Supply and return air ducts to be insulated as required on the CF-1R report or the "2019 Energy Efficiency Standards" handout.
- All kitchen areas shall be provided with a hood exhaust and ventilation system that meets or exceeds the following: (CEES 150.0(o), CMC 403.7 & ASHRAE 62.2)
 - Minimum exhaust rate of 100 cfm;
 - Maximum sound rating of 3 sones;
 - Vented directly to the building exterior; and,
 - Vent ducts to have a smooth metallic interior surface.
- Rooms containing bathtubs, showers, spas and similar fixtures shall have mechanical ventilation complying with the following: (CRC R303.3.1, CEES 150.0(o), CG 4.506.1, CMC 403.7 & ASHRAE 62.2)
 - Minimum exhaust rate of 50 cfm;
 - Maximum sound rating of 3 sones;
 - Have manual or automatic adjustable humidity controls;
 - Humidity control may be a separate component from the exhaust fan;
 - Vented directly to the building exterior;
 - ENERGY STAR compliant; and,
 - Lighting integral to exhaust fans shall comply with the CEES.
- Clothes dryers shall have exhaust ducts as follows: (CMC 504.4.2)
 - Constructed of rigid metal with smooth interior surfaces and terminate to the outside of the building;
 - Minimum diameter 4 inches nominal, and not less than 0.016 inch wall thickness;
 - Maximum 14 feet combined run length (horizontal and vertical), including up to two 90 degree elbows.

PLUMBING:

- All Plumbing fixtures and fittings shall comply with the following maximum flowrates: (CG 4.303.1)

FIXTURE TYPE	MAXIMUM FLOW RATE
Water Closets	1.28 gallons/flush
Showerheads – single	1.8 gpm @ 80 psi
Showerheads – multiple	1.8 gpm @ 80 psi combined
Lavatory faucets	1.2 gpm @ 60 psi
Kitchen faucets	1.5 gpm @ 60 psi
- A minimum 24 by 30 inch clear area shall be provided in front of each water closet, lavatory or similar fixture. No water closet shall be set closer than 15 inches from its center to a side wall or obstruction. (CPC 402.5)
- The finished interior area of each shower compartment, regardless of shape, shall meet the following:
 - a minimum diameter of 30 inches; and,
 - total area of 1024 square inches or more. (CPC 408.6)
- The shower compartment clear dimensions shall be maintained to a point 70 inches above the shower drain outlet with no protrusions other than the fixture valve or valves, showerheads, soap dishes, shelves, and safety grab bars, or rails. (CPC 408.6)
- When located in a garage, appliances and water heater shall be installed so that burners and burner ignition devices are located not less than 18 inches above the garage floor. (CPC 507.13)
- Water heaters, gas meters and other gas appliances installed in garages, along driveways or other areas subject to vehicle damage shall be protected by one or more 4 inch diameter, concrete filled, steel pipes, having minimum 12 inch diameter by 18 inch deep concrete footings and extending at least 36 inches above the vehicle surface. (CMC 305.11, CPC 507.13.1 & CBC 1807.3.2)
- Water heaters to be strapped at top and bottom with 1 1/2 inch x 16 gauge strap, with a 3/8 inch diameter by 3 inch lag bolt at each end. (CPC 507.2)
- Hot water pipes 3/4 inch or larger shall be insulated. (CEES150.0(j)(2))
- Roof and deck drain systems inside the building are required to be installed with directional DWV drainage fittings. (CPC 1101.3 & 706.0)
- Cleanouts are required within 2 feet of the connection between the interior roof and deck drain piping system, and the exterior onsite storm drain system. (CPC 1101.12)

- A nonremovable backflow preventer or vacuum breaker shall be installed on the discharge side of each hose bibb not less than 6 inches above the highest point of usage. (CPC 603.5.7)
- No more than 3 water closets shall be installed on a 3 inch horizontal drainage system line. No more than 4 water closets shall be installed on a 3 inch vertical drainage system line. (CPC Table 703.2)

ELECTRICAL:

- Edison Company approval is required for electric meter location and/or relocation prior to meter installation.
- Field inspectors to review and approve underground services prior to concrete placement.
- Service equipment and subpanels to have a minimum 30 by 36 inch clear work space on a level surface with 78 inch clear height. (CEC 110.26(A))
- Subpanels are not allowed to be located in bathrooms or clothes closets. (CEC 240.24(D) & (E))
- Circuits sharing a grounded conductor (neutral) with two ungrounded (hot) conductors must use a two pole circuit breaker or an identified handle tie. (CEC 200.4(B))
- Group non-cable circuits in panel (CEC 210.4(D))
- Ground fault circuit interrupter (GFCI) protection shall be provided at all receptacle outlets in bathrooms, crawl spaces, garages, rooftops, outdoor outlets, and above kitchen countertops, or within 6 feet of a wet bar or laundry sink. (CEC 210.8)
- Combination type Arc Fault Circuit Interrupter (AFCI) circuit breakers are required for all 120V single phase 15A/20A branch circuits. Except where GFCI circuits are provided. (CEC 210.12(B))
- A minimum of 2 dedicated 20-ampere circuits are required for all receptacle outlets in the kitchen, dining room, breakfast area, pantry or similar areas. (CEC 210.11(C)(1) & 210.52(B))
- Kitchen countertops 12 inches or wider must have receptacle outlets installed so no point along the counter wall is more than 24 inches from a receptacle. (CEC 210.52(C))
- Kitchen island and peninsular countertops must have at least one receptacle. (CEC 210.52(C))
- A minimum of one dedicated 20 ampere circuit is required for each bathroom and laundry room. (CEC 210.11(C)(2)&(3))
- In Bathrooms, a GFCI protected receptacle outlet is required within 3 feet of the edge of each sink. (CEC 210.52(D))
- Receptacle outlets are not allowed within or over a bathtub or shower stall. (CEC 406.9(C))
- General receptacle outlets must be located so that no point on any wall, fixed glass, or cabinets is over 6 feet from a receptacle outlet. (CEC 210.52(A)(1))
- Hallways 10 feet or longer must have at least one receptacle outlet. (CEC 210.52(H))
- All receptacle outlets are required to be listed tamper resistant receptacles. (CEC 406.12)

LIGHTING:

- All lighting shall comply with the "Low-Rise Residential Mandatory Measures Summary". (CEES 150.0)
- All new or relocated, permanently installed light fixtures shall be classified as high efficacy. (CEES 150.0(k)1A & Table 150.0-A)
- At least one wall switch controlled lighting fixture shall be permanently installed in each habitable room, kitchen, bathroom, utility room, and private garage. (CEC 210.70(A))
- Ceiling or wall electrical boxes that do not contain a luminaire or other device must be served by a dimmer, vacancy sensor control, or fan speed control. (CEES 150.0(k)1B)

ENERGY EFFICIENCY:

- All work shall comply with the California Energy Efficiency Standards (CEES) requirements as listed on:
 - The "2019 Low-Rise Residential Mandatory Measures"; and,
 - The project specific CF-1R report; or,
 - The "2019 Energy Efficiency Standards" handout for the climate zone (CZ) in which the project is located.