



**City of Auburn**  
Home of Auburn University

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**DATE: December 1, 2022**

**TO: All Contractors**

**FROM: John R. Hoar  
Inspections Services Director/Building Official**

**RE: Updated Building Codes Effective Date January 1, 2022**

On January 1, 2022, the City of Auburn will place into effect the latest edition of the International Code Council updated code changes. The new code standards which will be followed are the 2021 Residential, Building, Plumbing Mechanical, Gas, and Fire Codes. We have also adopted the 2020 NEC (National Electrical Code) and 2017 ICC A117.1 Accessibility Code. Any residential permits submitted on or after January 1, 2022 will fall under the 2021 Residential Code.

The following are some of the significant changes associated with the adoption of the 2021 Residential Code. The International Residential Code applies to 1 and 2 family dwellings. We hope to make this an easy transition for everyone by giving you information on some of these significant changes.

### **International Residential Code Changes**

- **Townhouses** - Common walls separating townhouses are permitted to terminate at the inside of exterior walls where the prescribed fire blocking is provided.
- **Fire Protection of Floors above Crawl Spaces**- Fire-resistant membrane protection is now required for the applicable floor framing materials above crawl spaces containing fuel-fired or electric-powered heating appliances.
- **Ceiling Height**- The minimum ceiling height is reduced to 6 feet 6 inches under beams spaced at least 36 inches apart.

- **Glazing adjacent to Doors-** Glazing within 24 inches of the hinge side of an in-swinging door now requires safety glazing where the glazing is at an angle less than 180 degrees from the plane of the door.
- **Glazing in Guards and Railings** - Unless the laminated glass is used, structural glass baluster panels in guards now require an attached top rail or handrail.
- **Emergency Escape and Rescue Opening** - Emergency escape openings under decks, porches, and cantilevers require a path not less than 36 inches wide. Opening dimensions have been clarified.
- **Maximum Stair Rise Between Landings-** The maximum rise of a flight of stairs has increased by 4 inches, from 147 to 151 inches.
- **Stairway and Landing Walking Surface-** A new exception allows for steeper slopes for exterior landings that also serve to drain surface water away from the building.
- **Alternating Tread Devices and Ships Ladders** - Alternating tread devices and ships ladders are now permitted as a means of egress for serving lofts that do not exceed 200 square feet in area.
- **Window Fall Protection** -The revised language clarifies that measurements for determining the need for fall protection are taken to the bottom of the clear opening of the window.
- **Smoke Alarms-** The exemption for interconnection of alarms during alterations based on feasibility has been removed from the code.
- **Carbon Monoxide Alarms** - Repairs to an existing fuel-fired mechanical system now trigger the retroactive requirements for carbon monoxide alarms.
- **Unvented Crawl Space** - Ventilation of the under-floor space is not required when an adequately-sized dehumidifier is provided.
- **Vapor Retarder in Crawlspace** - Were exposed to grade in a crawl space, a Class I or II vapor retarder is required on exposed air-permeable insulation between floor joists in Climate Zones 1A, 2A and 3A.
- **Vapor Retarders Under Concrete Slabs** - Thicker vapor retarders are now required below slabs-on-grade.
- **Garage Doors** - All garage doors must have a permanent label identifying wind pressure ratings among other information.
- **Minimum Vent Area** - The minimum vent area exception is clarified, stating that net free ventilation may be less than 1/150 only if both re-queried conditions are met. Lower vents must be located in the bottom third of the attic space.
- **Chimney Insulation Shield** - Factory-built chimneys, which have been required to maintain a minimum clearance to insulation, are now required to have an insulation shield to provide the clearance.
- **Prohibited Locations for Appliances-** A gas-fired clothes dryer is now allowed to be installed in a bathroom or toilet room where a permanent opening communicates with other permitted spaces.
- **Electrical Bonding of CSST-** The existing provisions for electrical bonding applied to CSST without an arc-resistant jacket or coating and a new section addresses electrical continuity and bonding of arc-resistant CSST.
- **Schedule 10 Steel Gas piping** - The code now allows Schedule 10 steel pipe to be used for fuel-gas piping.

- **Fittings in Concealed Locations-** Plugs and caps have been added to the list of threaded fittings approved for concealed locations.
- **Shutoff Valve Location-** Shutoff valves located behind movable appliances are considered as meeting the requirement for access.
- **Drain, Waste, and Vent Systems Testing-** The head pressure for a water test of the drain, waste, and vent (DWV) systems has increased from 5 feet to 10 feet. Air vacuum testing is now permitted for plastic piping DWV systems.
- **Air Testing of PEX Piping-** Compressed-air testing of PEX water-supply piping is now allowed when testing is per the manufacturer's instructions.
- **Bathtub Overflow-** Overflow outlets are no longer required for bathtubs.
- **Plastic Pan for Gas-Fired Water Heaters-** Plastic safety pans are now allowed under gas water heaters provided the material falls within the prescribed flame spread and smoke-developed indices.
- **Water Hammer Arrestors-** A water hammer arrestor is now required where quick-closing valves are used in the water distribution system.
- **Length of Hot Water Piping to Fixtures-** The code now limits the length of hot water piping serving fixtures to 100 feet.
- **Saddle Tap Fittings on Water Distribution Piping-** Saddle tap fittings are no longer permitted on water distribution system piping.
- **Combination Waste and Vent System-** Food waste disposers are now permitted to connect to a combination waste and vent system.
- **Prohibited Installations for Air Admittance Valves-** An air admittance valve cannot be used to resolve the problem of an open vent terminal that is too close to a building air intake.
- **Emergency Service Disconnect-** An emergency service disconnect is required in a readily accessible outdoor location.
- **Service Surge- Protective Device-** A surge-protective device (SPD) is now required at the service panel.
- **Bathroom Branch Circuits-** Only the required bathroom receptacle outlets or those serving a countertop need to be on the dedicated 20-amp bathroom circuit.
- **Garage Branch Circuits-** Only the required receptacle outlets must be on the 20-amp dedicated circuit for garages.
- **Garage Branch Circuits-** A separate 20-ampere branch circuit is now required to serve receptacle outlets of attached garages and detached garages with electric power.
- **Wall Space for receptacle distribution-** Cabinets with countertops are now considered wall space in determining required locations for general-purpose receptacle outlets.
- **Appliances on 15 amp Circuits-** An individual 15-ampere branch circuit is permitted to serve any specific kitchen appliance.
- **Kitchen Countertop and Work Surface Receptacles-** The number of receptacle outlets required for peninsular and island countertops in kitchens is determined by the area of the countertop surface.
- **Garage receptacle outlet Location-** A receptacle outlet must be located in each vehicle bay in a garage.

- **GFCI Protection for 250-Volt Receptacles-** Ground-fault circuit-interrupter (GFCI) protection is required for up to 250-volt receptacles in the areas previously identified as requiring GFCI protection for 125- volt receptacles. The 20-amp limitation has been removed.
- **GFCI Protection for Crawl Space Lighting Outlets-** Ground-fault circuit-interrupter (GFCI) protection is now required for lighting outlets of crawl spaces.
- **GFCI Protection for Basement Receptacles-** The requirement for GFCI protection in unfinished basement areas has been expanded to include all basement areas.
- **Nonmetallic - Sheathed Cable and Metal Boxes-** Where entering a metal box, the nonmetallic sheathed cable must extend into the box at least  $\frac{1}{4}$  inch and extend past the cable clamp.
- **GFCI Protection for Indoor Damp and Wet Locations-** GFCI protection is now required for indoor damp and wet locations not included in the other specific locations requiring GFCI protection.
- **Cord-and-plug- Connected appliances-** The maximum cord lengths for range hoods and built-in dishwashers have increased, and the code clarifies that the receptacle outlet for the dishwasher has to be in the space adjacent to the appliance.