



City of Auburn
Home of Auburn University

DATE: February 25, 2015

TO: All General Contractors

FROM: Andrew Meeks
Building Official

RE: *Updating Codes*

We plan to submit at a future City Council meeting a consideration to amend the city code to adopt the latest edition of the International Building, Fire, Plumbing, Mechanical, Fuel Gas, and Existing Building Code. We are not including in this proposal to make any updates to the International Residential and Energy codes adopted by the State of Alabama. The council has typically adopted the latest edition of these codes once they have been reviewed and recommended by Public Safety.

If you have any concerns about the adoption of these codes please let us know.

The following are some of the Major Changes

Important Changes to the 2015 IBC			
<i>Section(s) and Issue(s)</i>	<i>Type of Change</i>	<i>Cost Implication</i>	<i>Comment</i>
IBC 101.4.7 "Existing Buildings," Previous 2012 IBC Chapter 34 "Existing Buildings"	Deleted 2012 IBC Chapter 34	None	The requirements (Chapter 34) for existing structures have been removed from the 2015 IBC. All existing construction requirements are now in the 2015 International Existing Building Code (IEBC).
IBC 104.11 "Alternative Materials, Design, and Methods of Construction and Equipment"	Revision	None	Last sentence was added that requires the code official to provide in writing the reasons why the alternative was not approved if he/she rejects the application for an alternative design under this section of the Code.

IBC 111.1 "Use and Occupancy"	Revision	None	A change in a building use, or portion thereof, with no change in its occupancy classification will now require a new Certificate of Occupancy.
IBC 202 Definition of "Private Garage," 406.3.1 Classification," 406.3.2 "Clear Height"	Major Change	Decrease	Private garages are no longer limited to a maximum of 3,000 sq. ft. in a building. Multiple private garages, each a maximum of 1,000 sq. ft., each separated by one-hour fire barriers or horizontal assemblies are now permitted based on their U occupancy classification. Also, a minimum of 7' clear height will be required in private garages.
IBC 202 Definition of "Fire Retardant Treated Wood"	Major Change	Decrease	Revised definition to permit other treatment methods by other than the pressure process. See also IBC Sections 2303.2.2 and 2303.2.3 for further explanation.
IBC 202 Definition of "Corridor Damper,"	New Provision	Unknown	New design option protecting the ceiling membrane's HVAC penetrations for a fire-rated exit access corridor where the ceiling of the corridor is constructed using a fire-rated corridor wall assembly placed horizontally.
IBC 510.2 "Horizontal Building Separation" (i.e., Podium/Pedestal Structures)	Major Change	Decrease	2012 IBC Section 510.2(2) that limited the Type IA portion of the podium/pedestal building below the horizontal separation to a maximum of one story above grade plane has been deleted in the 2015 IBC allowing the podium portion of the building to be of any height without any restriction on the number of floors. Also, 2015 IBC Section 510.2(5) permits any occupancy, except Group H, below the horizontal separation. (See also the table entry under IBC Section 903.3.1.2 for further information on podium design)
IBC 602.4 Cross-Laminated Timber Use in Construction Type IV	New Provision	Unknown	Revisions allow the use of fire-retardant-treated lumber, cross-laminated timber and glued-laminated plank in specific applications.
IBC 703.2.4 Fire-Resistance Ratings and Fire Tests:	New Provision	Unknown	When a listed fire resistance assembly is modified, sufficient data shall be made available to the code official to show that the required fire resistance rating is not reduced.
IBC 705.2 "Projections," 705.2.3 "Combustible Projections"	Major Change	Unknown	Table 705.2, "Minimum Distance of Projections," was modified and simplified and now requires an increase in the separation required between the leading edge of a building's projection and the property line (or fire separation distance line). Section 705.2.3 was simplified and requires added protection where a combustible projection is within 5' of a property line (or FSD).
IBC 705.3 Exception #2 "Buildings on the Same Lot"	New Provision	Decrease	Permits a parking garage of Construction Type I or IIA to abut a Group R-2 building with 1½- hour- protected openings (fire doors) in the abutting exterior wall of the garage and no required opening protective(s) in the abutting wall of a sprinklered R-2 building. Previous editions of the Code did not permit any openings in these abutting exterior walls that are at a "0" fire separation distance apart and required a fire wall design between such buildings to be permitted to have openings between the abutting buildings.

IBC 705.6 “Exterior Wall-Structural Stability”	Major Change	Decrease	Exterior fire-rated walls that are braced by floor or roof assemblies that have a lesser fire resistance rating are now permitted. Previous editions of the IBC Code required Construction Type III buildings with two-hour fire-rated exterior walls to have floors that support the two-hour fire-rated exterior walls to be upgraded to the two-hour fire rating. This is a major cost since apartment buildings built of Construction Type III under the legacy codes only required one-hour floor and roof assemblies to support the two-hour fire-rated exterior walls.
IBC 707.5 Exception 2 “Fire Barriers–Continuity”	New: Clarification	Decrease	Clarifies that the walls of an interior exit stairway do not need to extend through the attic space to the underside of the roof deck if the ceiling of the stairway terminates with a fire-rated top enclosure complying with Section 713.12.
IBC 714.4.2 Exception 7 “Membrane Penetration”	Revision	Decrease	This exception was new in the 2012 IBC (Section 714.4.1.2 Exception #7) and allowed for a practical application of the code in circumstances where wood-framed walls extend up to and attach directly to the underside of joist/trusses floor and roof fire-rated assemblies. It was further modified to permit the wood framed walls to be sheathed solely with Type X gypsum wallboard in lieu of being a fire resistance rated wall assembly.
IBC 716.5.8.4 “Opening Protectives–Safety Glazing”	Revision	Increase	Previous editions of the Code only required safety glazing for “fire protection-rated” glazing in fire door assemblies, now it will be required also for “fire resistance-rated” glazing in fire door assemblies. Note that Section 716.5.8.1.1 provides the locations where “fire resistance-rated” glazing in fire door assemblies can be used, and Section 716.5.8.1.2 provides the requirements where “fire protection-rated” glazing in fire door assemblies can be used.
IBC 717.1.1 “Ducts and Air Transfer Openings”	New Provision	Decrease	Duct will be allowed to leave a fire-rated shaft enclosure, transition horizontally, and then enter another fire-rated shaft if the duct penetrations on each side of the shafts are protected with fire dampers. Note that this is not permitted for clothes dryer exhaust ducts or any other ducts that the I Codes require to be continuous and uninterrupted.
IBC 903.2.1.6 “Assembly Occupancies on Roof”	New Provision	Decrease	Code now addresses how to deal with assembly occupancies on the roof of a building. When the occupant load > 100 for Group A-2 (i.e., restaurant), or > 300 for other Group A (i.e., meeting rooms, swimming pools) all floors to, and including, level of exit discharge are required to be sprinklered per NFPA 13 or NFPA 13R, as applicable. Since all new Group R occupancies are already required to be sprinklered, this new requirement is a good clarification of the Code for such common assembly occupancies that are to be located on the roofs of new apartment projects. Note that there is an exception to this sprinkler requirement for open parking garages of Construction Type I or Type II.
IBC 903.2.11.3 “Automatic Sprinkler Systems – Where Required-Buildings 55’ or More in Height”	Revision	Decrease	This revision clarified that the 55’ is measured from the lowest level of fire department vehicle access to the finished floor level of the highest floor with an occupant load of ≥ 30. Exceptions are provided for open parking garages and F-2 occupancies.

903.3.1.1.2 Exception “NFPA 13 Exempt Bathroom Sprinklers”	New Provision	Decrease	The 2015 IBC references the 2013 NFPA 13. In the 2013 NFPA 13 Section 8.15.8.1 the small bathroom (≤ 55 sq. ft.) sprinkler exception was deleted for apartment dwelling units. Since the NFPA 13 Committee deleted this reasonable, long-standing, sprinkler exception out of its Code, the NFPA 101 Committee, as well as the ICC Membership, decided to place it back into the 2015 NFPA 101 and 2015 IBC. The NFPA 13 Committee is in the process of attempting to place the bathroom exception for dwelling units back into its 2015 edition of NFPA 13.
903.3.1.2 “Installation Requirements NFPA 13R Sprinkler Systems”	Clarification	Decrease	Section was revised to correlate with the scope of the 2013 NFPA 13R Standard. This should help prevent any misapplication of the sprinkler standards that apply to “...Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet in height above grade plane...”. The new second paragraph in this section clarifies that the number of stories of Group R occupancies above a podium or pedestal designed structure (see Section 510.4) is measured from the fire-rated horizontal separation that creates separate buildings. This new second paragraph under the NFPA 13R requirements is also applicable to the number of stories of Group R occupancies above a podium structure when the entire structure is sprinklered per NFPA 13. For example, an R-2 occupancy of Construction Type IIIA, sprinklered per NFPA 13, can be five stories above the Type IA pedestal below as long as the overall building height from grade plane does not exceed 85 feet (IBC Table 504.3)
903.3.1.2.2 “Open-Ended Corridors”	New Provision – Correlation	None	This new section was added to the sprinkler requirements just to clarify that when applying the open-ended corridor (i.e., open breezeway) sprinkler requirements of Section 1027.6 Exception 3.1 to a building sprinklered in accordance with NFPA 13R, it is the intent of the IBC Code to also require the open-ended corridors and its associated exterior stairs to be sprinklered when using Exception 3 of Section 1027.6.
903.3.8 “Limited Area Sprinkler Systems”	Major Revisions	Increase	In existing, non-sprinklered apartment buildings, limited area sprinkler systems were mostly provided in basements where storage rooms, boiler rooms and similar spaces were located. Revisions reduced the number of sprinklers from 20 to six that can be used on a “limited area sprinkler system” in any single fire area. In addition, it now requires hydraulic calculations to be done to show that these sprinklers that are piped off the domestic water supply can control a fire.
903.3.5 “Water Supplies”	Revision	None	New last sentence in section was added to clarify that the fire flow test for the design of the sprinkler system needs to be adjusted for seasonal and daily pressure fluctuations.
IBC 907.2.9.3 “Alarm Systems Group R-2 College and University Buildings”	Clarification	Increase	In the previous edition of the IBC, the alarm requirements of this section appeared to apply to buildings that are owned by a college or university. For the 2015 IBC it was clarified that this requirement was for Group R-2 occupancies that are “...operated by a college or university for student or staff housing...” Requires an automatic smoke detection system in the common corridors/spaces, laundry, mechanical equipment and storage rooms. It also requires the smoke alarms in the dwelling/sleeping units to be interconnected with the fire alarm system

IBC 907.2.11.3 and 907.2.11.4 "Single and Multiple-Station Smoke Alarms Near Cooking Appliances"	New Provision - Correlation	None	These new sections were added to the alarm requirements to correlate with the requirements in NFPA 72 on the placement of smoke alarms. When ionization smoke alarms are to be installed they shall be placed a minimum of 20 feet from cooking devices, or a minimum of 10 feet if they have an alarm-silencing switch. If photoelectric smoke alarms are to be installed they shall be placed a minimum of six feet from cooking devices.
907.2.11.7 "Smoke Detection System"	New Provision	Unknown	Clarifies that an acceptable alternative to providing single and multiple-station smoke alarms is to use smoke detectors, listed per UL 268, that are part of the building's fire alarm system.
913.2.2 "Circuits Supplying Fire Pumps"	New Provision	Unknown	New section requires that the power supply cables shall be listed and installed in accordance with UL 2196.
IBC Section 915 "Carbon Monoxide (CO) Detection"	Relocated to its Own Section in Chapter 9, Reformatted and Revised	None	The CO alarm requirements that were new in the 2012 IBC and located in Section 908.7 have been relocated and extensively revised and clarified in the 2015 IBC. A CO alarm is to be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in R-2 occupancies that have fuel-burning appliances/fireplaces and/or attached private garages. Buildings with open parking garages complying with Section 406.5 or enclosed parking garages complying with Section 406.6 are not considered private garages.
Chapter 10 "Means of Egress"	Major Revisions, Relocations and Clarifications	Unknown	2012 IBC Sections 1015 and 1021 requirements were relocated and revised into the general provisions of Sections 1006 and 1007. All the section numbers that were in the 2012 IBC have been changed in the 2015 IBC because of the extensive reorganization and revisions during this code cycle. Users of the Code are cautioned to do an extensive review of Chapter 10 before designing a project under this new edition of the Code.
IBC Table 1006.2.1 "Spaces with One Exit or Exit Access Doorway"	New Provision	None	Combined 2012 IBC Tables 1014.3 and 1015.1 into a single table for user-friendliness. Note that Table 1006.2.1 covers the maximum common path of egress travel distance to that point where the occupants have separate access to two exits (or are already outside the building), whereas Table 1017.2 covers the total exit access travel distance to an exit.
IBC 1006.2.1, Exception 1, Table 1006.3.2(1) and 1006.3.2 Single Exits in Buildings	Revised	None	It is permitted for multiple dwelling units, in groups of four units or less per floor, to have access to a single means of egress. The change also reflects the revised travel distance for single exit design allowing a maximum common path of egress travel distance of 125 feet.
IBC 1007 "Exit and Exit Access Doorway Configuration"	New Provision	Unknown	New section with specific requirements on how to measure the separation distance between exits, exit access doorways/stairways and ramps.
IBC 1010.1.7, Exception #2 "Thresholds at Doorways"	New Provision	None	In Type B dwelling units that permit a four inch elevation change at the door, the threshold height on the exterior side of the door shall not exceed 4¾" in height above the exterior deck, patio or balcony for sliding doors and not more than 4½" for other doors.
IBC 1015.8 "Window Opening Guard Protection"	New Provision	Increase	Window openings more than 72" above grade that are less than 36" above the floor must be protected with guards or fixed openings that will not allow the passage of a four-inch-diameter sphere.

IBC 1016.2(1) "Egress through Intervening Spaces," 3006.4 Means of Egress"	New Provision	Decrease	Exit access is permitted through an enclosed elevator lobby that leads to at least one of the required exits. Exit access to not less than one of the other required exits shall be provided without travel through the enclosed elevator lobby.
IBC 1019 Exception 3, "Exit Access Stairways and Ramps"	New Provision	Decrease	New exception for exit access stairways and ramps, allowed to be open in R-3 Congregate living facilities and R-4.
IBC 1023.3.1 Exception 2 "Interior Exit Stairway Extension"	New Provision	Decrease	An exit stairway does not require a door at the stairway opening into an exit passageway if the exit passageway has no other openings into it from the building.
IBC 1107.4 Exceptions 3 and 4 "Accessible Route"	Clarification	None	Exceptions added to clarify, accessible route not required to stories, and mezzanines without accessible units or public areas, in buildings with Group R-2 units or dormitories if accessibility is provided to all common facilities.
IBC 1107.6.2.1 "Live/Work Units"	New Provision	Increase	The non-residential portion of a live/work unit is required to be accessible. The entire live/work unit is required to be accessible if the residential portion of the live/work unit is required to be a Type B dwelling unit.
IBC 1107.7.2 Multistory Type B Dwelling Units	New Provision	Increase	The primary entry level in a multistory Type B dwelling unit that is served by an elevator must have a living area, kitchen and toilet facility.
IBC 1110.2.2 and 1110.2.3	New Provision	Increase	New requirement that R-4 properties comply with ANSI A117.1 recreational facility requirements.
IBC 1110.4.13 Exception 3	New exception	Decrease	Accessible means of entry into a swimming pool, spa or similar water feature is not required in R-2, R-3 and R-4 occupancies.
IBC 1203.2 "Attic Ventilation"	New Provision	Increase	The ventilation requirements for attics have been upgraded to reflect the new code requirements for energy conservation. Specific requirements have been added for enclosed attics and a new section (IBC 1203.3) has been added for unvented attic and unvented enclosed rated assemblies.
IBC 1210.2.3 "Shower Compartments"	Revised	None	The height of the required nonabsorbent surface has been raised from 70 inches to 72 inches.
IBC 1405.3 "Vapor Retarders"	Revised	None	Requirements for vapor retarders have been modified. In Climate Zones 1 and 2, Class I and II vapor retarders are not permitted on the interior side of frame walls. In Climate Zones 3 and 4, Class I vapor retarders are not permitted on the interior of frame walls. Class III vapor retarders are required in specific locations.
IBC Chapter 17 "Special Inspections and Tests"	New Provision and Revised	Increase	New requirements for special testing have been added detailing specific requirements that must be complied with when special inspection is required. Requirements for inspection of specific materials have been modified or added.
IBC 2406.4.7 "Safety Glazing Adjacent to the Bottom Stairway Landing"	Revision	Unknown	Requires safety glazing if glazing is located < 60" above the bottom of a stair, or within a 60" horizontal arc if < 180 degrees from the bottom tread nosing.

Previous 2012 IBC Section 3004 "Hoistway Venting"	Deleted	Decrease	The hoistway venting requirements have been deleted from the 2015 IBC since they were antiquated and wasted building energy. Only Section 3004.3.1, "Plumbing and Mechanical Systems," was retained, and it was relocated to Section 3002.9
IBC Section 3006 "Elevator Lobbies and Hoistway Opening Protection"	New Section with Relocated Requirements	None	The elevator lobby requirements that were located in 2012 IBC Section 713.14.1 were reformatted and relocated into newly created Sections 3006.2 and 3006.3 in the 2015 IBC.
Important Changes to the 2015 IFC	Type of Change	Cost Implication	Comment
Section(s) and Issue(s)			
IFC Appendix B B105 "Fire Flow Requirements for Buildings"	Revisions	Decrease	A jurisdiction that has adopted the IFC and made Appendix B mandatory in the adopting ordinance, then fire flows for townhouses and other buildings can be reduced based on the construction type and sprinkler system installed (NFPA 13, NFPA 13R or NFPA 13D).
IFC Appendix C "Fire Hydrant Locations and Distribution"	Revisions	Decrease	A jurisdiction that has adopted the IFC and made Appendix C mandatory in the adopting ordinance, then the revisions to Sections C103.2 Exception and C104.1 provide increased spacing for existing fire hydrants and credit for existing fire hydrants on adjacent properties that can be used. Also new footnotes "f" and "g" permit fire hydrant spacing increases based on the type of sprinkler system installed in the building.
Important Changes to the 2015 IEBC	Type of Change	Cost Implication	Comment
Section(s) and Issue(s)			
IEBC 406.3 "Replacement Window Emergency Escape and Rescue Openings"	New Provision	Decrease	Under the Prescriptive Compliance Method or Level 1 Alterations, the replacement window must be the largest standard size that will fit within the existing frame.
IEBC 406.2 and Replacement Window Fall Protection	New Provision	Increase	Under the Prescriptive Compliance Method or Level 1 Alterations, requirements for limits on window openings, similar to those for new construction, are required for replacement windows. Window openings more than 72 inches above the exterior grade and less than 36 inches above the finished floor are required to have control devices that limit the opening so that a four-inch sphere will not pass.
Important Changes to the 2015 IFGC			
Section(s) and Issue(s)			
IFGC 307.6 and IPC 307.6 A/C Condensation Pumps	New Provision	Increase	Condensation pumps located in attics, crawl spaces and other uninhabited spaces must have controls that shut down the appliance upon failure of the pumping system.

IFGC 404.7 "Protection Against Physical Damage"	New Provision	Increase	Provisions added to protect concealed piping from penetration by nails, screws and other fasteners.
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