

APRIL 2017

BACKGROUND – 2018 ICC MODEL CODES

Summary of Important Changes

Updating of the 2015 International Code Council (ICC) model codes to the 2018 model codes was completed in 2016. The revised and updated codes will be published and available for adoption at the state and local level in the fall of 2017. This document summarizes the significant changes made between the 2015 and 2018 codes that affect apartments (Residential R-2) occupancies.

Importantly, this summary does not include all of the changes impacting apartments and changes for mixed use occupancies that include other occupancy classifications. It also does not include changes in the International Residential Code (IRC) which do not normally impact apartment design and construction. Designers and developers need to consult the codes for the specific wording of a change and for other changes that may impact a specific design.

For each change, the tables indicate the cost impact (higher, lower, or no change). Two tables are included. The first table includes items 1- 53 that were approved. The second table includes items 54-73 which were disapproved, but important to the apartment industry. Approved changes are listed by code and code section number so they can be easily related to a specific code section. They have also been identified by Item Number for ease of reference during the discussion of a specific change.

Although the changes do include items that will raise the cost of construction (Red identification), they also include many items that benefit the apartment industry (Green identification). More important are the items concerning fires in apartments (Orange identification).

The most beneficial changes are Items 16, 17, and 18. Item 16 clarifies the requirements for building separation and the code requirements for independent means of egress and other items association with structures that include buildings separation by fire walls. Item 17 increased the allowable mezzanine from 1/3 to 1/2 the area of the floor below. Item 18 adds a new provision allowing a vertical offset in the pedestal portion of a building constructed using the pedestal provisions in the code.

Other important changes include items 47, 52, 53, 55, 56, 57, 59, 60, 63, 64, 65, and 66 which deal with the issue of fires in apartments. Item 47 being the most important and because of it

the remaining proposals (55, 56, 57, 59, 60, 63, 64, 65, and 66) were disapproved. Knowing that fires in apartments was going to be a big issue during the code hearings for the 2018 codes NMHC with input from members, architects involved in design of apartments, and code officials (building and fire) develop a proposal to specifically address the problem associated with recent fires. The fires specifically involving pedestal buildings and the spreading of the fire in the attic. Unlike the other changes listed above, which would have applied to all apartment type construction, the NMHC change is limited to pedestal type construction in buildings of Type III, IV or V construction if the roof assembly is located more than 55 feet above the lowest level of fire department vehicle access. In these specific buildings, the attic will have to include one of the following:

- Sprinkler protection in the attic,
- Attic built of non-combustible construction,
- Attic to be built of fire-retardant treated wood, or
- Attic filled with non-combustible insulation.

With the passage of Item 47 the other proposal concerning fires in apartments were disapproved. If they had been approved provisions would have been added to the codes to:

- Limit the height and size of apartment buildings,
- Require 50-foot separation from lot lines or other buildings,
- Increased fire rating of exterior walls,
- Require more fire department access roads with access to all sides of the building,
- Provision to make sure fire department access roads are not blocked, and
- Sprinkler systems be installed and activated when the building height exceeded 40 feet.

Other important changes that were disapproved were:

- Item 54 – Updating of the ANSI A117.7 to the latest requirements which increase the turning circle from 60” to 65” and the clear floor space from 32”x48” to 32”x52”,
- Item 67 – Requiring whole building air-leakage testing,
- Item 68 – Requiring air-barrier commissioning,
- Item 69 – Requiring mechanical ventilation in all dwelling units,
- Item 70 – Requiring benchmarking recording and reporting of building energy usage,
- Item 71 – Requiring conduits for future installation of car charging stations,
- Item 72 – Increases in the building energy efficiency, and
- Item 73 – Moving all of the R-2 energy requirements in the International Energy Conservation Code to a new section which in effect increased the stringency of the code.