



BACKGROUND | JUNE 2018

# 2021 ICC National Model Codes: Group A Development Update

The International Code Council (ICC) publishes more than a dozen national model building codes and standards. Those codes are updated every three years and are divided into two groups (Group A and Group B) to stagger the code development process.

Work began on the Group A codes in January 2018, and ICC recently completed the Code Development Hearings on the covered codes. This document summarizes the most prominent issues of concern for the apartment industry during this code cycle.

Final Action Code Hearings will be held in October 2018 and will determine what is included in the 2021 code editions, which are published in 2020.

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NMHC/NAA Joint Legislative Program

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# About NMHC

Based in Washington, DC, the National Multifamily Housing Council (NMHC) is a national association representing the interests of the larger and most prominent apartment firms in the U.S. NMHC's members are the principal officers of firms engaged in all aspects of the apartment industry, including ownership, development, management and financing. NMHC advocates on behalf of rental housing, conducts apartment related research, encourages the exchange of strategic business information and promotes the desirability of apartment living. Nearly one-third of Americans rent their housing, and almost 15 percent live in an apartment (buildings with five or more units). For more information, contact NMHC at 202/974-2300, e-mail the Council at [info@nmhc.org](mailto:info@nmhc.org), or visit NMHC's Web site at [www.nmhc.org](http://www.nmhc.org).

# About NAA

The National Apartment Association (NAA) serves as the leading voice and preeminent resource through advocacy, education and collaboration on behalf of the rental housing industry. As a federation of nearly 160 affiliates, NAA encompasses over 75,000 members representing more than 9.25 million apartment homes globally. NAA believes that rental housing is a valuable partner in every community that emphasizes integrity, accountability, collaboration, community responsibility, inclusivity and innovation. To learn more, visit [www.naahq.org](http://www.naahq.org).

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# Overview

The International Code Council (ICC) family of codes and standards provide minimum requirements for all facets of multifamily construction, including structural and mechanical systems, energy efficiency, plumbing, fire safety, accessibility and sustainability, and often serve as the basis for code requirements adopted at the state and local levels. Updated every three years, development of the 2021 ICC national model building codes began in early 2018. NMHC and NAA actively participate in the code development process, where we work to improve existing code provisions and oppose unnecessary escalations in costs or impractical technical provisions.

ICC divides its' code development into two groups—Group A and Group B—and considers changes on a staggered basis. ICC is currently focused on Group A and has completed the first major phase of this cycle—the Code Development Hearings. Actions taken during these hearings forms the basis of the Final Code Action Hearings in October 2018. Those hearings will determine the items included in the 2021 code editions, which are published in 2020. The codes of greatest significance for multifamily construction during the Group A cycle include: the International Building Code (IBC) – Egress, Fire Safety, General Portions; the International Fire Code (IFC); and the International Mechanical Code (IMC). More information on the ICC code development process, including the timeline for Group B codes, can be found at <https://bit.ly/2sxLRyn>.

This document summarizes the most prominent issues of concern to the apartment industry during this code cycle and indicates areas of continuing interest. Significant proposals and those of particularized interest for multifamily properties are detailed in the tables below. Importantly, these provisions will continue to evolve throughout the code cycle and should not be considered final until the new code editions are published. Also, this document does not capture all the changes impacting apartment construction. Building professionals and property owners should consult the final codes directly for a full explanation of relevant code requirements.

## Fire Protection and Safety Requirements

A series of catastrophic fires in multifamily development projects has spurred questions of fire safety in apartment design and construction. Despite an overall history of improved fire safety in apartments, code officials, policymakers, fire safety professionals and various industry groups nationwide have responded with proposals calling for sometimes significant changes to multifamily code requirements.

These proposals can generally be categorized as: 1) limitations on building materials or products used in multifamily construction; 2) new or increased construction site requirements; 3) new or increased requirements for buildings during occupancy; 4) changes to sprinkler systems;

and 5) fire testing/increased fire ratings for building components or products. Taken together, these proposals would significantly impact the overall design and construction of multifamily properties.

As fire safety measures are considered, NMHC/NAA promote and reinforce several priority positions:

- Emphasize the positive fire safety history of finished multifamily buildings with existing, code-required fire protection systems and distinguish from construction phase fire events.
- Consider and support proven, cost-effective methods, technologies and products that foster construction site fire safety and security.
- Support the use of 13R sprinkler systems, which provide effective and cost-effective sprinkler protection in apartments.
- Strongly oppose proposals that unduly restrict building material choices or design options that have a proven track record of safety, notably wood-framed construction. In particular, oppose proposals motivated to promote specific products or industry interests, instead of unbiased and appropriately-verified fire protection concerns.

NMHC/NAA strongly opposed a number of onerous and impractical fire proposals and worked with code representatives and our industry partners to advance technically-feasible and cost-beneficial measures. Several problematic and costly proposals were disapproved including proposals attacking wood-framed construction and wood products generally, increasing thermal protection requirements, unnecessarily increasing fire testing, increasing fire separations and reducing allowable building heights for certain purposes. Passage of these proposals would have been both costly and forced significant design or product changes in typical multifamily construction.

Additionally, a broad range of other fire safety proposals were disapproved that would have either impacted apartment building construction and operation to a lesser extent or those that were not well-supported. These issues are worth noting, as they could be areas ripe for future consideration.

- Limits on Landscaping (F-8)(F-92)
- Smoking Prohibition (F-13)
- Emergency Responder Radio Requirements (F-47 to 56)
- Increased Sprinkler Placement Requirements (F-111)
- Additional Smoke Alarm Requirements (F-142)(F-145)(F-150 to 152)
- Additional Protection of Construction Areas and Materials (F-267)(F-270)
- Increased Testing of Composite Materials (FS-4)(FS-138), Exterior Wall Components (FS-95), Wall Systems (FS-142-143), Roofing (FS-156)
- Additional Fire-Resistive Rating Requirements (FS-9)(FS-21)(FS-25)

- Increased Fire Separation and Labeling Requirements (FS-11)(FS-12)(FS-46).

Despite these successes, some apartment industry-opposed proposals were advanced to the next phase of code development. In particular, there are significant cost and design impacts related to a proposal limiting commonly used fire sprinkler systems in apartment properties depending on building height. Two proposals also introduce increased requirements for construction-phase security and fire watch measures.

## Egress and Accessibility Provisions

As in other sections, numerous egress-related proposals target fire safety and fire protection. Other proposals with potentially significant multifamily impacts involved additional accessibility requirements and window-fall protections.

Several well-balanced proposals moved forward related to proper calculation and treatment of roofs and other building areas for egress purposes and bolstering fire resistance ratings for exit areas (E-11, E-18 and E-102). Meanwhile, a slate of more onerous proposals were disapproved involving: mandatory grab bars (E-1); mandatory slip-resistant surfaces (E-2); establishment of minimum separation distances between accessible exits (E-31); separate elevator egress (E-32); requirements for two-way communication systems (E-35); stairway signage requirements (E-100); and increased accessible parking requirements (E-116-118). Two proposals that would have significantly impacted window openings and fall protection were also disapproved (E-81 and E-82).

## General Code and Mechanical Provisions

Within the IBC-General provisions, NMHC/NAA again focused on fire safety. Several major proposals were disapproved that would have increased separation wall requirements (G-54) and constrained use of fire-retardant wood (G-107). Both the IBC-General and IMC also raised questions of building ventilation requirements. The apartment industry has strongly opposed efforts to force the use of mechanical ventilation in multifamily properties in favor of a more flexible ventilation approach. While more extensive deliberation of this issue is expected during the Group B - IECC development effort, a number of proposals were halted during this stage that would have either limited ventilation options or introduced new system requirements.

## Notable Disapproved items

**F-267 - Protection of combustible construction** – For construction four or more stories in height: required thermal barrier (1/2" gypsum) on interior and exterior wood-frame walls both below 40' in height and above 40' in height as construction progresses. Impractical and cost-prohibitive.

**F-270 - Completion during construction** – For construction 4 or more stories in height: once construction is 40' above grade plane, required sprinkler systems to be installed on lower floors. As construction progressed, sprinkler systems would have had to extend to within one floor of construction. Not practical.

**FS-34 – Separation** – Significantly increases fire separation requirements and specifies 2-hour fire separation for construction more than 2 stories in height or that have dwelling or sleeping units more than 25' above grade plane. Cost-prohibitive.

**FS-35 - Fire resistance rating** - Fire partitions used to separate dwelling units and sleeping units would have needed fire resistance ratings not less than 2 hours. Other fire partitions not less than 1 hour. Cost-prohibitive.

**FS-95 - Exterior wall envelope** - Required exterior walls more than 40' above grade that contain combustible materials to be tested in accord with NFPA 285. Unnecessary cost.

**FS-99 – Fire testing** – Would have expanded fire testing for exterior walls and change NFPA 285 procedures. Unnecessary cost.

**E-81 - Window openings** – Increased the number of windows where fall protection is required: less than 36" above the finished floor and more than 72" above finished grade. Unnecessary cost.

**E-96 - Interior exit stairway and ramp enclosures** - Removed exception for interior exit stairways in atriums. Impractical design change.

**G-54 – Separation walls** – Requires new fire separation within buildings. Unnecessary cost.

**G-76 – Allowable building height** – Increased allowable building height by promoting an unsubstantiated bias against wood-framed construction. Reinforced a negative view of wood-framed construction.

**G-79 – Number of stories** – Categorizes an occupied roof as a story, which would restrict its use for amenity space. Negative design change.

**G-107 – Wall construction** – Limits use of fire-retardant wood. Unnecessary cost.

## Notable Approved Items

**FS-8 - Secondary (non-structural) attachments to structural members** - Requires equivalent fire protection for secondary non-structural tubular steel members extending 12" from primary and secondary structural steel members. Will require cost increase or design change.

**F-117 – NFPA 13R sprinklers** - For NFPA 13R sprinkler systems to be allowed, Group R buildings must be 4 stories or less in height measured from grade plane, and no more than 30' above or 30' below lowest fire department vehicle access. Cost and/or design change for alternate sprinkler systems.

**F-182 – Valet trash service** - Provides new permit and fire-rating requirements for valet trash containers used in R-2 corridors and egress pathways. Impact to industry's ability to utilize valet trash management services.

**F-263 - Owners responsibility for fire protection** - Requires owner to have fire protection superintendent perform daily inspections; inspections shall be documented; superintendent trained and qualified; inspection and verification of hot work contractors. Partially an industry and insurance best practice, limits owner flexibility.

**F-264 - Fire watch, site safety plan** – Adds more detailed, specific requirements for fire watch, documentation and record keeping, training, site safety plan requirements, fire watch personnel and site safety director. Partially an industry and insurance best practice, but limits owner flexibility.

**F-268 - Water protection for construction** - Provides more detailed requirements for on-site water supply when combustible structural elements are delivered to the site, when vertical construction begins, installation of standpipe system. This may not always be possible per local practice – it will require working with individual jurisdictions on water hook-ups.

# 2021 Code Proposals

## Multifamily Priority Proposals

<b>Favorable</b>	Items of Benefit for Apartment Construction
<b>Neutral</b>	Items of Interest for Apartment Construction
<b>Moderate</b>	Unfavorable Item for Apartment Construction
<b>Significant</b>	Item with Significant Cost or Design Impacts for Apartment Construction

### International Fire Code

#### Approved Proposals

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
F-42	508.1.1, IBC	Location and Access (Fire Command Center)	Revision	Possible Cost Increase	Neutral	Fire command centers in high-rise buildings (more than 75' tall) are provided with access from fire apparatus access roads and direct access from exterior at lowest level of fire department access.
F-110	903.2.10, 903.2.11.3, IBC	Group S-2 Parking Garage	Revision and Removes Exception	Cost Increase	Moderate	Requires sprinklers in open parking garages greater than 12,000 feet, where enclosed parking garage is below other groups; deletes exception for sprinkler requirements for open parking garages for buildings with occupant load of more than 30 on any floor more than 55' above fire department access.
F-117	903.3.1.2, IBC	NFPA 13R Sprinkler Systems	Major Revision with New Provision	Cost Increase	Significant	NFPA 13R sprinkler systems are not allowed unless Group R buildings are 4 stories or less in height measured from grade plane, and no more than 30' above or 30' below lowest fire department vehicle access. This reduces allowable building height from 60' above grade plane and includes podium in measurement of stories. The use of alternate

						sprinkler system will result in new costs and/or building design changes.
F-119	903.3.1.2.3, IBC	Corridors and Balconies in the Means of Egress	Revision and New Provision	Cost Increase	Significant	Sprinkler protection must be provided in corridors and balconies in means of egress where any of following apply: 1) corridors have combustibile walls or floor; 2) corridors have interior change of direction > 45 degrees; 3) corridors less than 50% open to outdoors at ends; 4) open-ended corridors; or 5) egress balconies do not comply with 1021.2 and 1021.3 (dealing with separation between egress balcony and corridor and openness of egress balcony).
F-120	903.3.1.2.3, IBC	Attics	Revision	Non-specific Cost Impact	Neutral	Type III, IV, and V construction: Attics not used for storage or living are not required to have sprinklers. Instead, provision allows for a choice of compliance alternatives, one of which must be met where roof assembly is more than 55' above lowest level of required fire department vehicle access needed to meet provisions in Section 503.
F-182	1031.11	Valet Trash Col- lection	New Provi- sions	Cost Increase or Operational Limitation	Significant	Provides new permit and fire-rating requirements for valet trash containers used in R-2 corridors and egress pathways. Could significantly impact industry ability to utilize valet trash management services.
F-263	3303	Owners Respon- sibility for Fire Protection	New Provi- sion	Cost Increase or Change of Business Practice	Significant	Imposes new construction site requirements including: daily fire protection superintendent inspections; inspection documentation; superintendent training and qualification requirements; inspection and verification of hot work contractors.
F-264	3304.5	Fire Watch, Site Safety Plan	Revisions and New Provisions	Cost Increase or Change of Business Practice	Moderate	Changes construction site requirements including: increased fire watch provisions; documentation and record keeping; fire safety training; and site safety plan requirements.

F-265	3304.9	Separation Between Construction Areas	New Provision	Cost Increase	Moderate	Provides for additional separation requirements between construction areas and occupied areas in Type I and II construction.
F-268	3312, IBC	Water Protection for Construction	New Provisions	Cost Increase	Moderate	Provides more detailed requirements for on-site water supply when combustibles structural elements are delivered to the site, when vertical construction begins, installation of standpipe system.

### Disapproved and Withdrawn Proposals

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
F-44	508.1.6, 911.1.6-IBC	Required Features (Fire Command Center)	New Provision	Cost Increase	Moderate	Requires UL listed, locking, storage cabinet for documents containing important building information.
F-46	510, IBC	Emergency Responder Radio Coverage	New Definition and Revision	Cost Decrease	Favorable	Clarifies requirements for emergency responder radio communication systems in high-rise and large buildings.
F-111	903.2.11, 903.903.2.11.7, IBC	Exposure Protection	New Provision	Cost Increase	Significant	Requires exposure sprinklers for new Type III, IV, and V buildings in “High” or “Extreme” wildfire areas.
F-115	903.1.1.1, IBC	Exempt Locations	New Provision	No Change	Neutral	Fire sprinklers not required in concealed locations if protected by automatic fire detection system.
F-116	903.1.1.1, IBC	Exempt Locations	Revision	Cost Increase	Moderate	Requires a suppression system with a compatible, alternative fire suppression agent.

F-118	903.1.2, IBC	NFPA 13R Sprinkler Systems	Revision	Cost Increase	Significant	Preserves use of NFPA 13R sprinklers in buildings up to 60', but measures maximum building height from grade rather than building separation. This would include podium or pedestal in height calculation and limit use of 13R sprinklers.
F-121	903.3.1.2.3, IBC	Attics	Revision	Cost Increase	Significant	Measures building height from grade plane (not from pedestal) in Type III, IV, and V construction. (Reference to proposal F-172 from 2018 cycle).
F-142	907.2.10, IBC	Fire Alarm and Detection Systems: Group R-2, R-3, R-4, I-1	New Provision	Cost Increase	Moderate	Requires smoke alarms in attics above sleeping units.
F-173	913.2.2, IBC	Circuits Supplying Fire Pumps	Revision and New Provision	Cost Increase	Moderate	Requires increased protection of cables supplying fire pumps from 1-hour to 2-hour or encased in concrete.
F-177, IBC	915.7	Mechanical System Connection	New Provision	Cost Increase	Moderate	Requires that carbon monoxide detection systems be inter-connected with air handler to allow for shut-down.
F-267	3318, IBC	Protection of Combustible Construction	New Provisions	Cost Increase	Significant	For Type III and Type V construction four or more stories in height: requires thermal barrier (1/2" gypsum) on interior and exterior wood-frame walls both below 40' in height and above 40' in height as construction progresses.
F-270	3313.3, IBC	Completion During Construction	New Provision	Cost Increase	Significant	Requires sprinkler installation once construction is 40' above grade plane, and installation must progress with construction.

## International Building Code – Fire Safety

### Approved

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
FS-8	704.6.1	Secondary (Non-Structural) Attachments to Structural Members	New Provision	Cost Increase	Significant	Requires equivalent fire protection for secondary non-structural tubular steel members extending 12" from primary and secondary structural steel members.
FS-14	Table 705.2	Minimum Distance Projection	Revision	Cost Decrease	Favorable	Simplifies calculation and reduces stringency of requirement for minimum distance of projections from line to determine FSD category for FSD 3' to < 5'.
FS-27	707.5	Continuity	New Exception	Cost Decrease	Favorable	Adds exception allowing for exit passageway to be enclosed at top with same fire-resistance rating as walls. Does not need to extend to underside of roof sheathing.
FS-59	Table 716.1(2)	Double Fire Walls	New Addition to Table	Cost Decrease	Favorable	Provides flexibility by adding double fire wall construction to table for 2-, 3- and 4-hour assemblies where each wall has 1-, 2- or 3-hour rating respectively.
FS-67	717.5.2	Fire Barriers	New Exceptions	Cost Decrease	Favorable	Allows for non-metal flex connections to air handling unit and between overhead metal duct and ceiling diffuser in same room.
FS-105	1402.5	Vertical and Lateral Flame Propagation	New Exception	Cost Decrease	Favorable	Offers additional option for exempted water-resistive barrier.
FS-139	1406.1	Types I, II, III, IV Construction	Revision	No Change	Favorable	For MCM installations on buildings over 40' in height (Type I, II, III, IV), MCMs must be tested to comply with NFPA 285. Simplification of provisions.

## Disapproved and Withdrawn Proposals

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
FS-9	Table 601	Fire-Resistive Rating Requirements for Building Elements	Revision	Cost Increase	Significant	Adds fire-resistive rating for building elements that support primary and secondary structural frame members.
FS-17	705.2.5	Protected Soffit	New Provision	Cost Increase	Moderate	Requires protected soffit or fire blocking above doors in Group R buildings of Type V construction. Protected soffit must extend 5' horizontally on either side of doorway. Exception: non-combustible cladding extends at least 10' above grade.
FS-34	708.3.1	Group I-1, R-1, and R-2 Buildings	New Provision	Cost Increase	Significant	Problematic for typical multifamily, wood-framed construction. Increases fire separation for Type III, IV and V construction more than 2 stories in height or that have dwelling or sleeping units more than 25' above grade plane from 1-hour to 2-hour. Increases fire separation in Type IIB, IIIB and VB construction from half-hour to 1-hour and requires fire sprinklers.
FS-34	711.2.3	Supporting Construction	Revision	Cost Increase	Significant	Problematic for typical multifamily, wood-framed construction. Supporting construction of 1-hour horizontal assemblies at separation of dwelling units not required to have fire-resistance rating.
FS-34	711.2.4.1.1	Group I-1, R-1, and R-2 Buildings	New Provision	Cost Increase	Significant	Problematic for typical multifamily, wood-framed construction. Requires horizontal assemblies separating dwelling units and sleeping units to have 2-hour fire separation for Type III, IV, and V construction more than 2 stories in height or that have dwelling or sleeping units more than 25' above grade plane.
FS-34	711.2.4.3	Dwelling Units and Sleeping Units	New Provision	Cost Increase	Significant	Problematic for typical multifamily, wood-framed construction. Requires horizontal assemblies separating dwelling units or sleeping units not be less than 1 hour.

FS-34	711.2.4.3.1	Group I-1, R-1, and R-2 Buildings	New Provision	Cost Increase	Significant	Problematic for typical multifamily, wood-framed construction. Requires horizontal assemblies separating dwelling units and sleeping units to have 2-hour fire separation for Type III, IV and V construction more than 2 stories in height or that have dwelling or sleeping units more than 25' above grade plane.
FS-35	708.3	Fire Resistance Rating	Revision	Cost Increase	Significant	Fire partitions used to separate dwelling units and sleeping units shall have fire resistance ratings not less than 2 hours. Other fire partitions not less than 1 hour.
FS-91	1402.2	Weather Protection	Revision	May Increase Cost	Neutral	Introduces IECC references for air barrier requirements. Could introduce new requirements if jurisdiction has not adopted both the IBC and IECC.
FS-93	Definition, 1402.2	Wind-Driven Rain Index and Weather Protection	New Definition, Table and Revision	Cost Increase	Moderate	Introduces wind-driven rain index and new requirements for drainage where sheathing is wood or gypsum.
FS-94	1402.3	Fenestration	New Provision	May Increase Cost	Neutral	Introduces IECC references for fenestration energy-efficiency requirements. Could introduce new requirements if jurisdiction has not adopted both the IBC and IECC.
FS-95	1402.5	Exterior Wall Envelope	New Provision	Cost Increase	Significant	Requires NFPA 285 testing for exterior walls of Type I, II, III or IV construction more than 40' above grade that contain combustible materials.
FS-96	1402.6	Flame Spread of Wall and Attic Protection	New Provision	May Increase Cost	Significant	Links new energy code requirements for greater insulation levels with increased flammability and possibility of flame spread in a fire event, and specifies acceptable exterior wall assemblies and cladding materials.
FS-97	1402.5	Exterior Wall Envelope	New Provision	Cost Increase	Significant	Similar to FS-95 above, but also requires testing to include actual projections and/or inside corners.

FS-99	1402.5	Fire Testing of Exterior Walls for Flame Propagation	Revision and New Provision	May Increase Cost	Significant	Revises NFPA 285 via new code language including projections and inside corners in exterior walls greater than 40' in height of Type I, II, III, IV construction containing combustible materials.
FS-111	1403.12	Polypropylene Siding	Revision	May Increase Cost	Moderate	Limits polypropylene siding to Type VB construction.
FS-112	1403.12	Polypropylene Siding	Revision	May Increase Cost	Moderate	For buildings with polypropylene siding, reduces fire separation distance from 10' to 5'.
FS-135	1405.11	Types I, II, III, IV Construction	Revision	Cost Increase	Significant	Adds language that requires fire-retardant treated wood wall coverings to comply with 1402.5, e.g., be tested to NFPA 285.
FS-138	1406.9	Fire Testing	Revision and New Provision	Cost Increase	Moderate	More stringent fire test requirements for Metal Composite Materials.

## International Building Code - Egress and Accessibility

### Approved Proposals

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	Impact	ANALYSIS
E-11	1006.2.1, IFC	Egress Based on Occupant Load and Common Path of Egress Travel Distance	New Exception	Cost Decrease	Favorable	Excepts unoccupied mechanical rooms and penthouses from egress travel measurements.
E-18	1006.3.1	Egress from Stories or Occupied Roof	New Provision	No change	Neutral	Clarification that occupant load or each story or occupied roof shall be used when calculating required number of exits.

<b>E-34</b>	1009.6.3, 3008.6.4	Size (Area of Refuge, Eleva- tor Lobby)	Revision	May Increase Cost	Neutral	Increases size of size of these areas to accommodate wheelchair from 30"x 48" to 30" x52"(Aligns with ICC A117.1 2017). Deletes 1109.2.1.6 which specifies required clear floor space of bathroom where door swings into room.
<b>E-119</b>	1106.7	Parking Meters and Pay Sta- tions	New Provi- sion	Cost Increase	Neutral	Requires accessible parking meters and pay stations where they serve accessible parking.
<b>E-121</b>	1107.2	Electric Vehicle Charging Sta- tions	New Provi- sion	Decrease in cost for R-2	Favorable	Exempts Group R-2, R-3, and R-4 from making 5% of charging stations accessible and size of van accessible parking spaces and adjacent access aisle.

## Disapproved and Withdrawn

PRO- POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
<b>E-22</b>	Table 1006.3.2, Ta- ble 1006.3.3(1)	Minimum Num- ber of Exits	New Provi- sion	May Increase Cost	Moderate	Adds occupied roofs to minimum number of exits table. For R-2 buildings, adds occupied roof over 1st, 2nd, or 3rd story and specifies maximum egress travel distance at 125 ft.
<b>E-81</b>	1015.8	Window Open- ings	Revision	Cost Increase	Significant	Increases number of windows where fall protection is required: less than 36" above the finished floor and more than 72" above finished grade.
<b>E-82</b>	1015.8	Window Open- ings	Revision	Cost Increase	Significant	Fall protection: Deletes Option 1 for window fall prevention devices that comply with ASTM F2006. Adds options related to corrosion resistant screen capable of withstanding minimum force of 60 pounds and/or barriers that will not allow passage of sphere 4" in diameter.

<b>E-96</b>	1023.2	Interior Exit Stairway and Ramp Enclosures	Revision	Cost Increase	Moderate	Removes exception for interior exit stairways in atriums.
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## International Building Code - General

### Approved Proposals

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
<b>G-75</b>	<b>Table 504.3</b>	Allowable building height	New Provision	Neutral	Favorable	Adds maximum height requirements for Type IV A, B, and C construction.
<b>G-128</b>	<b>1207.4</b>	Efficiency Dwelling Units	Revision	Neutral	Favorable	Deletes language requiring an additional 100 sf for the living room where occupancy is greater than 2 people.
<b>G-129</b>	<b>1207.4</b>	Efficiency Dwelling Units	Revision	Neutral	Favorable	Reduces required living room area from 220 sf to 190 sf.
<b>G-131</b>	<b>202 Definitions</b>	Efficiency Dwelling Units	New Definition	Neutral	Neutral	Adds definition of "dwelling unit, efficiency".
<b>G-136</b>	<b>503.1.4, 1510.2.2</b>	Occupied Roofs	Revision	Neutral	Favorable	Clarifies that occupied roofs are not a separate story as long as they comply with Section 1510. Adds following uses to penthouses: stairways, assembly, ancillary spaces to access elevators and stairways.

## Disapproved and Withdrawn

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
G-54	420.2, 705.3	Separation Walls	Revision	Cost Increase	Significant	Increases separation requirements and deletes current exception related to dwelling or sleeping unit separation.
G-76	Table 504.3, Table 504.4	Allowable Building Height and Number of Stories	Revision	Neutral	Moderate	Advances a bias against wood or combustible construction types. Increases allowable height of Group R Type IIA construction: Unsprinklered – 80'; Sprinklered – 100' (Increase of 15'). Increase number of stories of Group R-2 Type IIA construction: Sprinklered – 6 stories.
G-79	504.4	Number of Stories	New Provision	May Increase Cost	Moderate	Occupied roof shall be considered a story above grade unless specified as a portion of story below, which could restrict use of this space for an amenity area.
G-107	602.3, 602.4.1, 602.4.2	Type III Construction	Revision	Cost Increase	Significant	Specifies that fire-retardant wood is only allowable in non-bearing walls.
G-116	1202.1, 1202.1.1, 1202.1.2, IMC 402	General (Ventilation for Dwelling Units)	Revision and New Provision	May Increase Cost	Moderate	Deletes reference to blower door test results <5 ACH50 as trigger for mechanical ventilation in dwelling units. Allows for either natural ventilation at a minimum of 5 ACH50 as tested by blower door or mechanical ventilation in accord with Section 403 of IMC.
G-117	1202.1	General (Ventilation for Dwelling Units)	Revision and New Language	May Increase Cost	Significant	Deletes reference to blower door testing and would require mechanical ventilation in all dwelling units.
G-154	New Appendix P	Material Emissions	New Appendix	May Increase Cost	Moderate	Adds new provisions regarding VOC emissions for adhesives, coatings, interior finishes. May be of concern if creation of Appendix is 1st step to code introduction.

## International Mechanical Code

### Approved Proposals

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
M-16, M-17	401.4	Intake Opening Location	Revision	Neutral	Neutral	Separation not required for supply air openings and living space exhaust openings. Allows for use of factory-built combination intake/exhaust termination instead of absolute separation requirement.
M-33	403.3	Outdoor Air and Local Exhaust Airflow Rates	Revision	Neutral	Neutral	This proposed modification would provide ventilation system designers/specifiers of low-rise dwelling units with the option of using ASHRAE Standard 62.2 in addition to Section 403.3.2 to comply with the ventilation requirements of the IMC.
M-25	Table 401.3.1.1	Minimum Ventilation Rates	Revision	Cost Increase	Moderate	Increases ventilation rate in living areas of dwelling units from 25/100 to 50/100 cfm/sf.
M-64	601.5	Return Air Openings	New Exception	Cost Decrease	Favorable	Allows return air ducts in dwelling units to be located in kitchen at least 5' from cooking appliance where kitchen and living are a single room.
M-73, M-75	602.2.1.7	Plastic Plumbing	Revision	May Increase Cost	Neutral	Requires that flame spread and smoke development tests of plastic piping be performed without water in pipe. May impact type or cost of plastic piping materials currently used.
M-74	604.3	Coverings and Linings of Ducts	New Exception	Cost Decrease	Favorable	New exception allows for specific test methods and compliance for polyurethane foam that is spray applied to ducts in attics and crawlspaces. Allows greater flexibility.

### Disapproved and Withdrawn

PRO-POSAL #	SECTION #	PROVISION	TYPE OF CHANGE	COST IMPACT	IMPACT	ANALYSIS
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<b>M-13</b>	403.3.1, 403.3.2, 403.3.2.1	403.3.2 Group R-2, R-3, and R- 4 Occupancies - Ventilation	New Defini- tion and Major Change	Cost Increase	1	Adds definition for balanced ventilation: both supply and exhaust where flows are within 10% of one another. Balanced ventilation required for all R-2 occupancies
<b>M-15</b>	401.2	Ventilation Re- quired	Revision	Cost Increase	1	Deletes language, "where infiltration rate of dwelling unit is less than 5 air changes per hour..." Requires Group R buildings to be ventilated in accord with 403.3. If changes to 403.3 approved, balanced ventila- tion would be required in Group-R.