# PM3-13

## **Proposed Change as Submitted**

Proponent: Rebecca Morley, representing National Center for Healthy Housing

Revise as follows:

#### SECTION 202 DEFINITIONS

**INFESTATION.** The presence, within or contiguous to, a structure or premises of: insects <u>including</u> <u>cockroaches</u>, <u>fleas</u>, <u>and bedbugs</u>; <u>pest rodents including</u> rats <u>and mice</u>; vermin; or other pests. <u>Visible</u> <u>pest residue or debris constitutes an infestation unless there is clear evidence that the pest is no longer present.</u>

**Reason:** The current definition of infestation would appear to exclude rodents other than rats. However, rodents carry disease and, in the case of mice, may trigger an asthma attack. The proposal applies the term to all rodents.

Cockroaches, fleas and bedbugs are public health problems; the proposal specifies these insects to make clear that they are included.

The proposal clarifies that visible evidence of pest residues is a sufficient basis for action by a code official. The code official does not have to see a live pest. Many of the pests of most concern are nocturnal and their residue is the only evidence available during daylight.

Cost Impact: The proposal will not increase the cost of maintenance since this is a definition not a requirement.

202-INFESTATION-PM-MORLEY

# **Committee Action Hearing Results**

Committee Action: Disapproved

**Committee Reason:** The committee felt the proposed revisions to the definition were ambiguous, in that the list of insects was incomplete. Further, they agreed that "visible" residue or debris did not necessarily indicate an infestation.

Assembly Action: None

#### Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Jane Malone, National Center for Healthy Housing, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

INFESTATION. The presence, within or contiguous to, a structure or premises of insects, rodents rats, vermin, or other pests.

Commenter's Reason: The current definition of infestation appears to exclude rodents other than rats. However, rodents other than rats carry disease and, in the case of mice, may trigger an asthma attack. Mouse allergen has long been recognized as an important cause of occupational allergy and asthma, but only recently has it been implicated in asthma and allergic diseases in community settings. Recent studies have established that mouse allergen is detectable in most US homes, with strikingly high levels in some inner cities. In addition, about 25% of inner city children with asthma have evidence of IgE sensitization to mouse. Several studies have shown that the combination of sensitization and exposure to higher levels of mouse allergen is associated with substantial asthma morbidity, including hospitalizations.

(source: Matsui EC, Role of mouse allergens in allergic disease, Current Allergy Reports, 2009 Sep;9(5):370-5. http://www.ncbi.nlm.nih.gov/pubmed/19671380)

By approving this modest word change, the code official will be able to apply the term "infestation" to all pest rodents.

#### Public Comment 2:

# Jane Malone, National Center for Healthy Housing, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

**INFESTATION.** The presence, within or contiguous to, a structure or premises of insects, rats, vermin, or other pests; and the appearance of fresh pest droppings, residue or debris after pest elimination and cleaning have occurred.

**Commenter's Reason:** The comment clarifies that new evidence of pest residues is a sufficient basis for action by a code official. The code official does not have to see a live pest. Many of the pests of most concern are nocturnal and their residue is the only evidence available during daylight.

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PM3-13 Final Action:	AS	AM	AMPC	D	

#### PM6-13

304.2.1 (New), 305.3.1 (New), Chapter 8

### Proposed Change as Submitted

**Proponent:** Rebecca Morley, representing National Center for Healthy Housing

#### Add new text as follows:

<u>304.2.1 Disturbance of existing painted surfaces.</u> In any Group E, I-4, R-2, R-3, R-4 occupancies completed prior to 1978, where repairs disturb painted surfaces, the work shall comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations.

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a)(1) or (2) that proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

<u>305.3.1 Disturbance of existing painted surfaces.</u> In any Group E, I-4, R-2, R-3, R-4 occupancies completed prior to 1978, where repairs disturb painted surfaces, the work shall comply with the information distribution, certification and work practice requirements of 40 CFR 745 for renovations.

Exception: Where documentation is provided from an approved test in accordance with 40 CFR 745.82(a)(1) or (2) that proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

#### Add new standard to Chapter 8 as follows:

#### EPA U.S. Environmental Protection Agency

#### 40 CFR 745- July 1, 2012 Lead-Based Paint Poisoning Prevention in Certain Residential Structures

**Reason:** The purpose of this proposed code language for the surfaces of the structure is to incorporate measures that reflect current knowledge about working with paint that may contain lead-based paint and thereby prevent lead poisoning. The code already requires repair of paint in poor condition. This new subsection would further require compliance with federal regulations to promote the safe repair of deteriorated paint that is likely to contain lead. These regulations have been in effect since April 2010. This change would only affect structures likely to contain lead-based paint.

Multiple studies have demonstrated that lead dust, which is caused by deteriorated lead-based paint and some methods of paint repair, is the major source of lead exposure for young children. The dangers associated with exposure to lead based paint hazards are well-known: lead is associated with a range of serious health effects on children, including detrimental effects on cognitive and behavioral development with serious personal and social consequences that may persist throughout their lifetime. More than 36 million pre-1978 US housing units contain lead-based paint.

Sections 304.2 and 305.3 fail to specifically require, on older structures that are likely to contain lead-based paint, the use of precautionary practices in order to prevent the dispersal of lead before, during, and after the repair work, in the course of complying with the code requirement to repair peeling, flaking and chipping paint. The proposal improves the current Code by adding to each section a health-protective requirement to perform the repair safely around lead-based paint, a subject currently acknowledged in the Commentary but not in the Code. The addition of the proposed new language will protect children from lead poisoning by specifying the use of federally – or state - approved lead safe work practices in making the required repairs. The lead-safe work practices are required by EPA effective April 22, 2010, for most renovation, repair and painting work in all pre-1978 homes. The federal renovation rule and this proposal are based on a rebuttable presumption of lead's presence, which allows the property owner to demonstrate that lead is not present to be exempt from the requirements. The proposed new language includes these exceptions: structures built after lead was banned from paint used in residential structures (1977 US; earlier in some US cities; 1909 France, Belgium, Austria), and structures where the deteriorated paint has been documented to not contain lead (such as by a lead-based paint inspection or risk assessment, by the use of a test kit by a certified renovator, or through completion of another government-approved test method or ANSI standard).

The EPA 40 CFR 745 standard is available at http://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol32/xml/CFR-2012-title40-vol32-part745.xml.

Cost Impact: This change will not increase the cost of maintenance since these federal and state requirements are already in place.

Staff analysis: A review of the standard proposed for inclusion in the code, EPA 40 CFR 745 with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 1, 2013.

304.2.1 (NEW)-PM-MORLEY

# Committee Action Hearing Results

For staff analysis of the content of EPA 40 CFR745 relative to CP#28, Section 3.6, please visit: <a href="http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/Proposed-B/00-CompleteGroupB-MonographUpdates.pdf">http://www.iccsafe.org/cs/codes/Documents/2012-2014Cycle/Proposed-B/00-CompleteGroupB-MonographUpdates.pdf</a>

Committee Action: Disapproved

**Committee Reason:** The committee was concerned that code officials would not have the qualifications or certifications to determine compliance with these lead based paint work practices. Further, as written the proposal expands the scope of the proposed CFR standard in that the standard excludes schools and adult day care facilities. The committee suggests aligning the proposed code text with the standard scope. Lastly, there was some concern that the standard was not promulgated using a consensus process.

Assembly Action: None

### **Individual Consideration Agenda**

This item is on the agenda for individual consideration because a public comment was submitted.

#### Public Comment:

Jane Malone, National Center for Healthy Housing, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

304.2.1 Disturbance of existing painted surfaces in buildings constructed before 1978. In Group E day care, Group I-4 child day care, Group R-2, R-3, R-4 occupancies, there shall not be visible dust, debris or residue remaining in the work area after completion of repairs that disturb painted surfaces.

**Exception:** Where documentation from an approved test in accordance with 40 CFR 745.82(a) proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

305.3.1 Disturbance of existing painted surfaces in buildings constructed before 1978. In Group E day care, Group I-4 child day care, Group R-2, R-3, R-4 occupancies, there shall not be visible dust, debris or residue remaining in the work area after completion of repairs that disturb painted surfaces.

**Exception:** Where documentation from an approved test in accordance with 40 CFR 745.82(a) proves that the disturbed paint contains lead levels below specified levels, the work is not required to comply with this section.

#### Add new standard to Chapter 8 as follows:

#### **EPA** U.S. Environmental Protection Agency

40 CFR 745- July 1, 2012 Lead-Based Paint Poisoning Prevention in Certain Residential Structures

Commenter's Reason: Based on the Committee decision, we have reduced this code change from a requirement for full compliance with the federal regulation to the essential but simple performance standard that will protect the occupant's and worker's children from exposure to harmful lead. It is consistent with the federal regulation in that clean-up is required at the end of renovation work. This requirement can be enforced by the code official with a visual inspection: no testing or special information is needed.

We have also clarified the Group I and E occupancies.

The exemption applies if the project meets one of these standards at 40 CFR 745.82(a):

- 1. a written determination has been made by a certified inspector or risk assessor that the components affected by the renovation are free of paint or other surface coatings that contain lead;
- 2. a certified renovator, using an EPA recognized test kit, has tested each component affected by the renovation and determined that the components are free of paint or other surface coatings that contain lead;
- a certified renovator has collected a paint chip sample from each painted component affected by the renovation and a laboratory recognized by EPA has determined that the samples are free of paint or other surface coatings that contain lead.

**Cost Impact:** This change will not increase the cost of maintenance since federal and state renovation programs require a visual check for dust, debris or residue.

PM6-13				
Final Action:	AS	AM	AMPC	D

# PM9-13

## Proposed Change as Submitted

Proponent: Rebecca Morley, representing National Center for Healthy Housing

#### Revise as follows:

**305.3 Interior surfaces.** All interior surfaces, including windows and doors, shall be maintained in good, clean and sanitary condition. Peeling, chipping, flaking or abraded paint shall be repaired, removed or covered. Cracked or loose plaster, decayed wood and other defective surface conditions shall be corrected. Surfaces such as but not limited to wood, textiles, paint, cellulose insulation, and paper, including paper-faced gypsum board, shall have no signs of chronic or persistent excessive moisture. Material discolored or deteriorated by mold or mildew shall be cleaned, dried and repaired and the underlying cause shall be corrected. If the material has decayed or failed beyond repair, it shall be removed and replaced and the underlying cause shall be corrected.

**Exception:** Porous materials that do not contain organic material, such as clean unpainted bricks and concrete.

**Reason:** Mold typically grows in buildings affected by water damage. According to the Institute of Medicine of the National Academies' *Damp Indoor Spaces and Health* (2004), mold and damp indoor environments are associated with asthma symptoms in sensitized persons, coughing, wheezing, and upper respiratory tract symptoms. *See www.nap.edu/books/0309091934/html/* 

In December 2007, the National Center for Healthy Housing (NCHH) and the U.S. Centers for Disease Control and Prevention (CDC) convened an Expert Panel consistent with National Institute of Health guidelines to assess the effectiveness of various interventions to make homes healthier and safer. NCHH and CDC published the report of the experts in January 2009. See www.nchh.org/LinkClick.aspx?fileticket=2lvaEDNBIdU%3d&tabid=229 for the full report.

The Expert Panel reviewed five peer-reviewed research studies on the issue of mold and allergens and concluded that "when implemented together, eliminating moisture intrusion and leaks and removal of moldy items were found to be effective in reducing asthma triggers and reducing exposures." Other provisions of the IPMC address eliminating moisture intrusion. But no provisions require action on building materials with chronic moisture issues including those materials that have failed beyond repair.

This proposal implements the Expert Panel's recommendation while providing flexibility in response to actual conditions – repair for reparable material, replacement for failed material. To ensure the health of the building's occupants, mitigation of moisture problems must be a part of the code.

Cost Impact: This code change proposal will increase the cost of maintenance.

305.3-PM-MORLEY

# **Committee Action Hearing Results**

Committee Action: Disapproved

**Committee Reason:** The committee disapproved this proposal for the following reasons; no benchmarks were provided for a code official to determine excessive levels of moisture, discoloration, decay, mold, mildew, etc.; test methods should be provided that determine these levels; the code official should not be responsible for making these determinations.

Assembly Action: None

## Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Jane Malone, National Center for Healthy Housing, requests Approval as Modified by this Public Comment.

Replace the proposal as follows:

**305.3 Interior surfaces.** All interior surfaces, including windows and doors, shall be maintained in good, clean and sanitary condition. Peeling, chipping, flaking or abraded paint shall be repaired, removed or covered. Cracked or loose plaster, decayed wood and other defective surface conditions shall be corrected. <u>Carpet, paper-faced gypsum board, and other porous material that is discolored or deteriorated by persistent moisture shall be cleaned, dried and repaired, and the underlying cause of the moisture shall be corrected. If deteriorated material has decayed or failed beyond repair, it shall be removed and replaced.</u>

**Commenter's Reason:** Visual evidence of a moisture problem does not require special testing. To ensure the health of the building's occupants, mitigation of moisture problems must be a part of the code.

PM9-13           Final Action:         AS         AM         AMPC         D	3 ,					
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#### PM10-13

202, 306.1, 306.1.2 New

### Proposed Change as Submitted

**Proponent:** Meg Waltner, representing National Resource Defense Council, Andrew Burr, representing Institute for Market Transformation and Eric Makela, representing Britt Makela Group, Inc.

#### Add new definition as follows:

# **SECTION 202 DEFINITIONS**

**RETRO-COMMISSIONING.** A systematic process for optimizing the energy efficiency of existing base building systems through the identification and correction of deficiencies in such systems, including but not limited to repairs of defects, cleaning, adjustments of valves, sensors, controls or programmed settings, and/or changes in operational practices.

#### Revise as follows:

# SECTION 306 COMPONENT SERVICEABILITY

- **306.1 General.** The components of a structure and equipment therein shall be maintained in good repair and operation, structurally sound and in a sanitary condition.
- **306.1.1 Unsafe conditions.** (no change to current text)
- **306.1.2 Retro-commissioning.** *Retro-commissioning* shall be performed on the base building systems for buildings 25,000 ft<sup>2</sup> or greater starting 5 years after issuance of the certificate of occupancy and continuing every 5 years for the life of the building. The building owner shall provide evidence that *retro-commissioning* has been performed and the evidence shall document that sufficient analysis, corrections and testing have been done so indicating that the base building systems meet items 1 through 4 below.

**Exception:** Retro-commissioning is not required for *let for occupancy* spaces of buildings.

- Operating protocols, calibration, and sequencing for HVAC and service water heating systems:
  - 1.1. HVAC temperature and humidity set points and setbacks are appropriate and operating schedules reflect major space occupancy patterns and the current facility requirements;
  - 1.2. HVAC sensors are properly calibrated;
  - 1.3. HVAC controls are functioning and control sequences are appropriate for the current facility requirements;
  - 1.4. Loads are distributed equally across equipment when appropriate, such as for fans, boilers and pumps that operate in parallel;
  - 1.5. Ventilation rates are appropriate for the current facility requirements;
  - 1.6. System automatic reset functions are functioning appropriately, if applicable;
  - 1.7. Adjustments have been made to compensate for oversized or undersized equipment so that it is functioning as efficiently as possible;
  - 1.8. Simultaneous heating and cooling does not occur unless intended;
  - 1.9. HVAC system economizer controls are properly functioning, if applicable;
  - 1.10. The HVAC distribution systems, both air and water side, are balanced;

- 1.11 Domestic hot water systems have been checked to ensure proper temperature settings.
- 1.12. Water pumps are functioning as designed;
- 1.13. System water leaks have been identified and repaired;
- 1.14. HVAC equipment, such as vents, ducts, coils, valves and soot bins, is clean;
- 1.15. Filters are clean and protocols are in place to replace, as appropriate.
- 2. Operating protocols, calibration, and sequencing for lighting systems:
  - 2.1. Light levels are appropriate to the task;
  - 2.2. Lighting sensors and controls are functioning properly according to occupancy, schedule, and/or available daylight, where applicable;
- 3. Cleaning and repair:
  - 3.1. Motors, fans, and pumps, including components such as belts, pulleys, and bearings, are in good operating condition;
  - 3.2. Steam traps have been replaced as required to maintain efficient operation, if applicable;
  - 3.3. Manual overrides on existing equipment have been remediated;
  - 3.4. Boilers have been tuned for optimal efficiency, if applicable;
  - 3.5. Exposed hot and chilled water and steam pipes three (3) inches or greater in diameter with associated control valves are insulated in accordance with the International Energy Conservation Code;
  - 3.6 In all easily accessible locations, sealants and weather stripping are installed where appropriate and are in good condition.
- 4. Documentation:
  - 4.1. Permits for all HVAC, electrical and plumbing equipment are in order;
  - 4.2. Operational and maintenance record keeping procedures, such as log books and computer maintenance records, have been implemented;
  - 4.3. The operations and maintenance manuals, if such manuals are still available from the manufacturer, the maintenance contracts, and the most recent retro-commissioning report is on site and accessible.

**Reason:** A critical aspect of building maintenance is ensuring that the energy systems of a building are maintained in a state of good repair and are functioning efficiently. It has been found that, over time, due to system breakdowns and uncoordinated repairs and renovations, building energy systems drift out of proper performance -- sometimes quite dramatically. Sensors and controls can be reset so that building systems are running 24/7 rather than only when necessary, repairs can be made that solve an immediate problem but result in heating and cooling systems running simultaneously, etc. The result of these problems is a poorly performing building that can waste considerable energy while often being uncomfortable or even unhealthy.

For other equipment, such as automobiles, a regular tune-up to ensure safe and efficient operation is considered standard practice. This is becoming standard in buildings, also, through retro-commissioning. Retro-commissioning (RCx) is a process that has been developed in recent decades to ensure that building energy systems are essentially tuned up -- that they are running efficiently and that they are in a state of good repair. Retro-commissioning takes a careful look at the systems that are in place, analyzes how they could be repaired to run more efficiently, and then performs those repairs.

Several U.S. cities recently adopted RCx requirements for large buildings. In 2009, New York City passed an ordinance, Local Law 87, that requires nonresidential and multifamily housing properties over 50,000 square feet to perform RCx once every 10 years. In 2011, San Francisco passed an ordinance requiring energy audits or RCx once every 5 years.

**Cost Impact:** In 2009, Lawrence Berkeley National Laboratory published a study of building commissioning costs and benefits, looking at 643 buildings with a cumulative square footage of 100 million square feet. RCx was found to cost an average of \$0.30 per square foot. The RCx resulted in a 16% whole-building median energy savings with an average payback of 1.1 years.

306.1-PM-BURR-MAKELA-WALTNER.DOC

# **Committee Action Hearing Results**

Committee Action: Disapproved

**Committee Reason:** The committee felt that the proposed commissioning requirements were too broad and would be difficult for the code official to determine compliance. Further, these provisions do not belong in a maintenance code. A more appropriate location for these would be either the IECC or the IgCC.

Assembly Action: None

## Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

#### Public Comment:

Eric Makela, representing Britt/Makela Group, Inc., requests Approval as Submitted.

Commenter's Reason: For other equipment, such as automobiles, a regular tune-up to ensure safe and efficient operation is considered standard practice. This is becoming standard in buildings, also, through retro-commissioning. Retro-commissioning (RCx) is a process that has been developed in recent decades to ensure that building energy systems are essentially tuned up -- that they are running efficiently and that they are in a state of good repair. Retro-commissioning takes a careful look at the systems that are in place, analyzes how they could be repaired to run more efficiently, and then performs those repairs.

Retro-commissioning for existing buildings on average cost \$0.27/ft², has an average energy savings of 15% and resulting in a

Retro-commissioning for existing buildings on average cost \$0.27/ft², has an average energy savings of 15% and resulting in a 0.7 year payback. Based on a study the end result is saving anywhere from \$11/ft² to \$0.72/ft². The retro-commissioning requirement would only apply to building 25,000 ft² or greater and would not apply to the let for occupancy spaces in buildings. This would limit the requirement to tenant owned buildings and not include small retail, office or other smaller buildings. Additional information on the benefits of retro-commissioning can be found in a white paper published on the Britt/Makela Group website (www.BrittMakela.com)

The retro-commissioning requirements are applied to a building starting 5 years after the issuance of certificate of occupancy. In some cases this will mean that older buildings will be required to retro-commissioned after the jurisdiction has adopted the code. For newer buildings, the requirement will not take effect until a few years after the code is adopted.

The retro-commissioning requirements fit well into the Property Maintenance Code because it is one of the few codes that requires the building to be maintained after issuance of the Certificate of Occupancy. There is no precedent in other codes (e.g. IECC) for ensuring that the building functions as built after certificate of occupancy. The requirements for retro-commissioning are very specific on what features must be commissioned for the HVAC, water heating and lighting systems of the building. Those performing retro-commissioning must also verify that all permits for work conducted on an energy feature of the building be present.

Several U.S. cities recently adopted RCx requirements for large buildings. In 2009, New York City passed an ordinance, Local Law 87, that requires nonresidential and multifamily housing properties over 50,000 square feet to perform RCx once every 10 years. In 2011, San Francisco passed an ordinance requiring energy audits or RCx once every 5 years.

PM10-13				
Final Action:	AS	AM	AMPC	D

# **PM13-13** [F] 702.4 (IFC 1030.7)

### Proposed Change as Submitted

THIS CHANGE WILL BE HEARD BY THE IFC COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEE.

**Proponent:** Charles S. Bajnai, Chesterfield County, VA, ICC Building Code Action Committee (BajnaiC@chesterfield.gov)

#### Revise as follows:

**[F] 702.4 (IFC 1030.7) Emergency escape** and rescue openings. Required emergency escape and rescue openings shall be maintained in accordance with the code in effect at the time of construction, and the following. Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where new bars, grilles, grates or similar devices, are installed in existing buildings where none presently exist, smoke alarms shall be installed in accordance with Section 907.2.11 of the *International Building Code*.

Reason: This proposal is submitted by the ICC Building Code Action Committee (BCAC) The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 6 open meetings and numerous workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

This code proposal is attempting to clarify the requirements for existing openings that have previously approved bars, grilles, grates and similar devices on them, vs. existing or new openings that will be installing such devices on them.

The existing IBC Code Section 1029.4 states:

1029.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with Section 1029.2 and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, grates or similar devices are installed in existing buildings, smoke alarms shall be installed in accordance with Section 907.2.11 regardless of the valuation of the alteration.

Existing IPMC Section 702.4's last sentence was revised to clearly state that it is only applicable to existing openings that have previously approved bars, grilles, grates and similar devices on them.

The new proposed last sentence in this code proposal is attempting to correlate the requirement of IBC Section 1029.4 with the IPMC Section 702.4. If a new opening is provided, or an existing opening is going to be provided, with bars, grilles, grates and similar devices, then the smoke alarm requirements of IBC Section 907.2.11 are applicable to the affected residential unit. If previously approved bars, grilles, grates and similar devices are only being repaired or replaced on an existing opening then the smoke alarm requirement of IBC Section 907.2.11 would still not be applicable.

The title and first sentence were revised to indicate "rescue" openings to be consistent with other I-code language.

Cost Impact: This proposal will not increase the cost of construction.

[F] 702.4-PM-BAJNAI-BCAC.DOC

# **Committee Action Hearing Results**

This code change was heard by the IFC code development committee.

Committee Action: Disapproved

**Committee Reason:** The disapproval was based on the committee's concerns that the proposal would not require that the net clear opening size of the emergency escape and rescue opening be maintained, that smoke alarms are only required in residential dwelling or sleeping units and that it was unclear whether emergency escape and rescue openings could be covered with bars or grilles.

Assembly Action: None

## Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

#### Public Comment:

# Charles S. Bajnai, Chesterfield County, VA, ICC Building Code Action Committee requests Approval as Submitted.

**Commenter's Reason:** The ICC Building Code Action Committee (BCAC) is submitting this proposal for **As Submitted** as a necessary life safety correlation between the Property Maintenance Code and IBC Section 1029.4 which states:

"Where such bars, grilles, grates or similar devices are installed in existing buildings, smoke alarms shall be installed in accordance with Section 907.2.11 regardless of the valuation of the alteration."

Based upon the code development committee's reason statement they appear to have misunderstood the application of the new sentence as well as the current requirements of IPMC Section 702.4. / IFC 1030.7.

1. The code development committee indicated concern about the net clear opening. This code change has nothing to do with the opening size – it is about smoke alarms, and when they need to be added. But to answer their question, the opening size is already covered in the current language of IPMC Section 702.4/IFC 1030.7:

"Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction ..."

This proposal does not change that language so the net clear opening in existence at time of construction is the minimum allowed.

- The code development committee expressed concern that smoke alarms were only being required for dwelling or sleeping units, however, the section involved applies to "Emergency Escape Openings" that are only required for dwelling or sleeping units. This proposal does not change that application.
- 3. And lastly, the code development committee expressed a concern that it was unclear whether bars and grills could be installed over emergency escape and rescue openings. IBC/IFC Section 1029.4, IFC Section 1030.7 and PMC Section 704.4 all specifically allow the installation of the bars and grills over emergency and escape rescue openings.

PM13-13				
Final Action:	AS	AM	AMPC	D

# PM16-13 705 (New)

## **Proposed Change as Submitted**

Proponent: Rebecca Morley, representing National Center for Healthy Housing

Add new text as follows:

# SECTION 705 CARBON MONOXIDE ALARMS

**705.1 General.** Carbon monoxide alarms shall be installed in accordance with Section 1103.9 of the *International Fire Code* in Group R occupancies and in dwellings not regulated as Group R occupancies.

**Reason:** Carbon monoxide (CO) is an odorless, tasteless, invisible gas that kills more than 300 people in homes each year. Thousands more are admitted to the hospital with carbon monoxide poisoning. This is a serious issue that affects people nationwide is all regions of the country.

The International Residential Code requires CO alarms for residences with fuel-fired appliances or attached garages. This change would make the IPMC consistent with the IRC.

This proposal expands on the requirement to specifically include portable fuel burning space heaters since these devices may not be considered an appliance, since these devices may be introduced by the property owner after construction.

The following states have required CO alarms in existing residences: Alaska, California, Colorado, Illinois, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, North Carolina, Oklahoma, Oregon, Rhode Island, Vermont and Wisconsin. Deaths from CO are spread throughout the country as residents unwittingly use dangerous methods to stay warm in unusually cold weather.

**Cost Impact:** Yes, this code change proposal will increase the cost of property maintenance. A carbon monoxide alarm typically costs approximately \$25.

705 (NEW)-PM-MORLEY

# Committee Action Hearing Results

Committee Action: Disapproved

**Committee Reason:** The committee felt that this mandate would be too broad as it would affect a large majority of existing buildings. The expense for building owners and the enforceability requirements for code officials would be too great.

Assembly Action: None

### Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Jane Malone, National Center for Healthy Housing, requests Approval as Modified by this Public Comment.

Modify the proposal as follows:

**705.1 General.** Carbon monoxide alarms shall be installed in accordance with Section 1103.9 of the *International Fire Code* in Group R occupancies.

Commenter's Reason: While not needed in jurisdictions that have adopted the International Fire Code, the requirement is needed where the IFC is not in effect.

PM16-13

Final Action: AS AM AMPC\_\_\_\_ D